

The Dominion of Nature: Environmental Histories of the Confederation Era workshop, Charlottetown, PEI, 31 July – 1 Aug



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- ✿ Wendy Cameron (Independent researcher), “Nature Ignored: Promoting Agricultural Settlement in the Ottawa Huron Tract of Canada West / Ontario”
- ✿ William Knight (Canada Science & Tech Museum), “Administering Fish”
- ✿ Andrew Smith (Liverpool), “A Bloomington School Perspective on the Dominion Fisheries Act of 1868”
- ✿ Brian J Payne (Bridgewater State), “The Best Fishing Station: Prince Edward Island and the Gulf of St. Lawrence Mackerel Fishery in the Era of Reciprocal Trade and Confederation Politics, 1854-1873”
- ✿ Dawn Hooegeveen (UBC), “Gold, Nature, and Confederation: Mining Laws in British Columbia in the wake of 1858”
- ✿ Darcy Ingram (Ottawa), “No Country for Animals? National Aspirations and Governance Networks in Canada’s Animal Welfare Movement”
- ✿ Randy Boswell (Carleton), “The ‘Sawdust Question’ and the River Doctor: Battling pollution and cholera in Canada’s new capital on the cusp of Confederation”
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- ✿ Gabrielle Zezulka (Independent researcher), “Confederating Alberta’s Resources: Survey, Catalogue, Control”
- ✿ JI Little (Simon Fraser), “Picturing a National Landscape: Images of Nature in *Picturesque Canada*”

NATURE IGNORED:

*PROMOTING AGRICULTURAL SETTLEMENT IN THE OTTAWA HURON TRACT OF CANADA WEST/ONTARIO IN THE CONFEDERATION ERA*¹

[one map; spaces for other illustrations left intact]

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Current project: Receiving Newcomers: A History of the Inland Immigration Service of Upper Canada/Canada West, 1830-1867

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This district is the farmland of Al Purdy's poem "The Country North of Belleville"...the country of our defeat...where picnicking glaciers have left strewn with centuries' rubble." Purdy writes of flashes of beauty in a landscape of abandoned farms and tries to inhabit what held a generation to "a country where the young leave quickly."² The Ottawa Huron tract in Canada West, the former Upper Canada, was some 18,000 square miles in size. As initially defined it stretched from the Ottawa River valley to Georgian Bay, and it was bounded on the south by a first tier of settlement on the St Lawrence River and Lake Ontario.³ Optimistic promoters of the tract were inspired by the rapid settlement of American mid western states such as Illinois, Ohio, Wisconsin, and Michigan that attracted record numbers of immigrants in the 1850s. Despite results far short of their hopes, the Ottawa and Huron country was peopled in the nineteenth century and

¹ Research for this paper was supported by a grant from Father Edward Jackman and the Jackman Foundation of Toronto.

² Permission for publication not yet requested.

³ Library and Archives Canada [hereafter LAC], RG 17, Department of Agriculture, Vol. 1491, 97- 105, Report to the Executive Council, 12 September 1853, 101.

farmers played their part. Clearing the forest cover for farm land too often exposed pre-Cambrian rock formations and swamps or a thin top soil where new stones surfaced after each year's frosts. After Confederation, more settlers came as railways fostered short term development in a way that roads had not. Yet many farms did not last longer than the lumber operation or mine that had kept them going until the resource was exhausted.⁴ Today this land is valued for recreational and cottage. Not far from these cottages, nature is taking back old orchards and unused fields still bounded by stone fences. Walking the abandoned farms of Purdy's poem, the inescapable question is why did farmers try? Why here? Some farmers, immigrants especially, came because of propaganda spread by government agents using materials produced and officially endorsed by the Canadian Bureau of Agriculture and Statistics (elevated to a Department in 1862). This paper will take a step away from farm and farmer to look at government's part in promoting marginal land to agriculturalists in Great Britain and on the continent. Why did the politicians behind this attempt to grow the country not take more account of the nature of the terrain? A case study is the more interesting for parallels with other ventures where political urgency outpaced evaluation of the land to be farmed.

The scene was set for a project to bring farmers to Ottawa Huron tract by legislation passed in 1853 to permit government financing of roads into territory on the fringes of the Canadian Shield in both Canada West and Canada East.⁵ In recognition of the difficulty of access, the government used dedicated funds to open "colonization roads" into newly surveyed lands.⁶ In the tract,

⁴ Brian S. Osborne, "Frontier Settlement in Eastern Ontario in the Nineteenth Century: A Study in Changing Perception of Land and Opportunity" in David Harry Miller and Jerome O. Steffan eds, *The Frontier: Comparative Studies* (Norman, Oklahoma: University of Oklahoma Press 1977), for settlement of Kingston's hinterland in the context of "the nature of the land."

⁵ Florence B. Murray, ed., *Muskoka and Haliburton: a Collection of Documents* (Toronto: Champlain Society for the Government of Ontario, University of Toronto Press 1963), lxxx and 235, extracts from "An Act to amend the law for the sale and settlement of public lands," Canada, Statutes 1853-3, 16 Vic., c. 159.

⁶ Marilyn G. Miller, *Straight Lines in Curved Space: Colonization Roads in Eastern Ontario* ([Toronto] Ontario Ministry of Culture and Recreation 1978); Florence B. Murray, "Agricultural Settlement on the Canadian Shield: Ottawa River to Georgian Bay" in Edith G. Firth ed. *Profiles of a Province: Studies in the History of Ontario* (Toronto: Ontario Historical Society 1967); Cole Harris, *The Reluctant Land: Society, Space, and Environment in Canada before Confederation* (Vancouver: UBC Press 2008), 277-86 (Canada East), 366-9 (Canada West), and Map, 8.10



“Colonizing the fringe of the Canadian Shield,” Serge Courville, *Quebec: A Historical Geography* (Vancouver: UBC Press 2008, translated by Richard Howard) ch. 8.

⁷ Miller, *Straight Lines*, 21, lists seven running north south and six east and west. Settlers also built branch roads with assistance from an improvement fund. George W. Spragge, "Colonization Roads in Canada West," *Ontario History* (1957, No. 4) 1957; Keith A. Parker, "Colonization Roads and Commercial Policy," *Ontario History* (1975, No 1), 31-38.

served as a temporary northern boundary for surveyed townships.⁸ In the first stage of promotion in 1856 and 1857, the Bureau of Agriculture and Statistics distributed pamphlets abroad through agents other than their own. The Bureau printed pamphlets in the thousands in English for distribution in Britain and, translated into German, Norwegian and French, in somewhat fewer thousands for the continent.⁹ In the second stage, government agents appointed in Canada were sent abroad between 1859 and 1863 in a joint venture of the Bureau and the Department of Crown Lands. Their job was to oversee all the ways of spreading information and to reach emigrants with the advantages of Canada before they decided on a destination.

This project went forward until 1862 under the umbrella of a liberal conservative administration led in Canada West by John A. Macdonald. Two politicians stood out. Philip Vankoughnet won election to the Legislative Council in 1856 with a call for the annexation of the North West.¹⁰ When the Hudson Bay Company successfully parried efforts to gain the North West for the province, he and other expansionists turned their attention to land within provincial boundaries. As minister of agriculture until 1858, and as commissioner of crown lands from 1858 to 1862, he took the lead in the Executive Council on developing the Ottawa Huron tract. Thomas D'Arcy McGee, best known as a Father of Confederation and its eloquent spokesman, honed his case for federation by promoting immigration as the only way to build population at the rate required to fill vast new and future surveys.¹¹ His forum was as chair of four successive select

⁸ Brian S. Osborne and Donald Swainson, *Kingston: Building on the Past* (Westport, ON: Butternut Press 1988); Gerald Boyce, *Historic Hastings, 1867-1967* (Belleville: Hastings County Council 1867); and Joan Finnigan, *Life along the Opeongo Line* (Newcastle ON: Penumbra Press 2004).

⁹ Canada. Province, Journal of the Legislative Assembly [JLA], Appendix 54, Annual Report of the Minister of Agriculture for 1856, records 12,00 copies in English, 6,000 in German, 5,000 in Norwegian, and 4,000 in French.

¹⁰ W.L. Morton, "Philip Matthew Scott Vankoughnet," *DCB*, Vol. 9, accessed 30 May 2014, http://www.biographi.ca/en/bio/vankoughnet_philip_michael_matthew_scott.

¹¹ David Wilson, *Thomas D'Arcy McGee*, Vol. 1, *Passion, Reason, and Politics, 1825-1857* and Vol. 2, *The Extreme Moderate, 1857-1868* (Montreal: McGill-Queen's University Press 2008 and 2011); Robin B. Burns, "McGee, Thomas D'Arcy," in *Dictionary of Canadian Biography*, vol. 9, http://www.biographi.ca/en/bio/mcgee_thomas_d_arcy, accessed 18 February 2014.

committees on emigration and colonization in the House of Assembly between 1859 and 1862.¹² Although a recent immigrant to Canada, in opposition, and representing Montreal, he used his powers of persuasion to influence government with his agenda for an immigration policy closely allied to the interests of Canada West and of expansionists such as Vankoughnet. As they extended the Ottawa Huron tract, and tried to move into the Eastern Townships and Gaspé peninsula of Canada East, English-speaking expansionist colonizers had to share government attention and funding with a second, very different vision for colonization roads. In Canada East, French Canadian nationalists and Roman Catholic priests advocated eloquently for opening roads to access new farm land to stem the exodus to the United States from settled rural communities “literally overflowing” with people.¹³ Their marginal land was in the Laurentian and Appalachian uplands of Canada East, land north of Montreal and east along the St Lawrence River to the Sagueney, and their numerous, relatively short roads radiated out from existing communities. Despite very different goals, the supporters of these two schemes had in common that they worked in a tradition of promoting settlement for political and social reasons on the basis of broad assumptions about the land.¹⁴

The historian W.L. Morton credits the lumber industry of the Ottawa valley with incubating

¹² Reports of the select committee on Emigration and Colonization signed by McGee as chair: JLA1859, App. 19, Report, 30 April 1859; JLA 1860, App. 4, Report, 23 April 1860; JLA 1861, App. 1, First Report, 10 April 1861, Second Report, n.d. but presented to the Assembly on 14 May 1861; JLA, 1862, App. No. 1, Reports 8 May and 17 May 1862. As the committee was reappointed anew each year, long titles varied annually to reflect specific subjects of reference.

¹³ Serge Courville and Normand Séguin, *Rural Life in Nineteenth-Century Quebec* (Ottawa: Canadian Historical Association 1989), 15, 334, 336-7; Bruno Ramirez, “The Crossroad Province: Quebec’s Place in International Migrations, 1870-1915,” in Rudolph J. Vecoli and Suzanne M. Sinke, *A Century of European Migrations 1830-1930* (Urbana: University of Chicago Press 1991), 243-60, . Yves Roby, *The Franco-Americans of New England: Dreams and Realities* (Sillery, Que.: Septentrion, Eng ed. 2004, 1st Fr. ed 2000); J.I. Little, *Nationalism, Capitalism, and Colonization in Nineteenth-Century Quebec: the Upper St Francis District* (Kingston: McGill-Queen’s 1989).

¹⁴ Serge Courville *Immigration, Colonisation et Propagande: du rêve américain au rêve colonial* (Sainte-Foy, Québec: Éditions MultiMondes 2002); and “The Colonial Dream: Empire, Quebec and Colonial Discourse in the Nineteenth Century,” in Iain S. Black and Robin A. Butlin eds, *Place, Culture and Identity: Essays in honour of Alan R.H. Baker* (Québec: Les Presses de l’Université Laval 2001), 289-309.

the expansive spirit that led the Province of Canada to look outward and support Confederation. Prominent lumber barons with very good political connections lobbied hard when they wanted a colonization road to serve their ever larger operations pushing north and west into new stands of timber.¹⁵ Opening the Shield country at mid nineteenth century was a work in progress with the scientists of the Geological Survey, government surveyors, lumbermen, and others pursuing explorations begun much earlier by British army engineers.¹⁶ In the session of 1854-5, a select committee of the House of Assembly on the management of public lands raised, and discussed without resolution, the question of how much land in the Ottawa Huron tract should be designated for agriculture and how much was best left to lumbermen. As part of his extensive testimony, Andrew Russell, the head of surveys for the Crown Lands Department, took issue with the “much too sanguine” estimate made by engineer Thomas Coltrin Keefer of the land fit for cultivation in the valley of the Ottawa River above Bytown. Russell argued for incremental development as good land was identified: “by far the greater part of the timber country is land that a settler could not thrive upon.”¹⁷ His department followed up with a clear headed overview in its annual report for 1856. The crown had sold off the last of public land in the western peninsula. Although the many thousands of acres remaining to the crown included land that might yield the industrious settler a good living, these lands at best were “not equal in climate nor in general fitness for cultivation” to the peninsula. In addition most immigrants, and a large and increasing number of current settlers, preferred prairie lands as easier to cultivate. In this scenario losses of people travelling through, and from, the province to the United States must continue.¹⁸ That same year, Vankoughnet laid out an

¹⁵ Lilian F. Gates, *After the Rebellion: The Later Years of William Lyon Mackenzie* (Toronto: Dundurn 1996) 283, attribute John A. Macdonald’s support for colonization roads in the back country of his Kingston constituents to concerns of political balance between east and west in Upper Canada.

¹⁶ Miller, *Straight Lines*; A.R.M. Lower, *Settlement and the Forest Frontier in Eastern Canada* (Toronto: Macmillan 1936); Claire Elizabeth Campbell, *Shaped by the West Wind: Nature and History in Georgian Bay* (Vancouver: UBC Press 2005). Harris, *Reluctant Land*, 366-9, and for “the Shield Fringe” in the former Lower Canada, 277-86.

¹⁷ *Report of the Select Committee appointed to enquire and report upon the present system of management of the public lands* (Quebec 1855), 172. Also in JLA 1855, App. MM.

¹⁸ JLA 1857, App. 25, Report of the Department of Crown Lands. The argument is taken up at various points in an unpagged document.

aggressive settlement policy for the roads.¹⁹ He represented the Ottawa Valley. His secretary, William Hutton, summarized the height of his ambitions for a corridor to the west. Railroads had opened the way, colonization roads were a good “second,” an “Ottawa canal” – the planned but never built Georgian Bay Ship Canal – would follow, and “possibly in a few years a Railway to the Pacific.”²⁰ Vankoughnet revived the emigrant agency at Ottawa and appointed an agent. Alexander Carlisle Buchanan, the chief emigrant agent at Quebec, understood that arriving immigrants should be encouraged to go to him to take up land on either side of the river.²¹

William Hutton, Vankoughnet’s secretary and second in command, directed the publicity campaign for the Ottawa Huron tract until he was incapacitated by sudden illness in the spring of 1861 and died that summer.²² Vankoughnet and Hutton exercised tight control in an attempt to present reliable information amidst all the false propaganda in circulation for and against their country. Competition for the settler emigrant was fierce, and Canada as an official entity was a late entry to the propaganda wars. Everything that had the Bureau’s stamp was either suggested by Vankoughnet or written or approved – often written – by Hutton. Hutton as well as his minister was new to his job in a Bureau created by combining the boards of Agriculture and Statistics in 1855. Before entering the civil service, he had spent years near Belleville as a gentlemanly but struggling immigrant farmer and local administrator. In the emigrant guide he published in England in 1854, he put his difficulties aside to write of a bright future for Canadian agriculture.²³ In 1856, his first

¹⁹ JLA 1857, Appendix MM, Annual Report of the Minister of Agriculture for 1856.

²⁰ LAC, RG 17, A-1-2, 1492, Hutton to Sir Cusach Roney, 5 January 1857, Hutton to A. Holmann, 28 August 1857, Doug Owsram, *Promise of Eden: The Canadian Expansionist Movement and the Idea of the West 1856-1900* (Toronto, University of Toronto Press, 1992 reprint.), 46.

²¹ JLA 1859, App. 19, Report of the Select Committee on Emigration, Hawke, question 9.

²² Gerald E. Boyce, *Hutton of Hastings: The Life and Letters of William Hutton, 1801-1861* (Belleville: Hastings County Council 1972); Wesley B. Turner, “Hutton, William,” in *DCB*, vol. 9, http://www.biographi.ca/en/bio/hutton_william_9E.html (accessed 14 April 2014); Bruce Curtis, *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840-1875* (Toronto: University of Toronto Press 2001), 145-7.

²³ William Hutton, *Canada: Its Present Condition, Prospects, and Resources....* (London: Stanford’s Emigrants’ Guides 1854, 2nd ed., 1857).

pieces of official promotion for the Bureau were written in the same context of the heady confidence that accompanied a railway boom and the brief prosperity it brought to the province. Where there had been none before 1852, pre-Confederation railway companies built over 1,400 miles of track in Canada West by 1859, the greater part between 1853 and 1856.²⁴ A self-described optimist, Hutton was ready to embrace the hope in a policy characterized in hindsight as seeing “the image of the agrarian south” in the Ottawa-Huron region.²⁵ He tapped into Victorian certainties of moral and material progress. He never questioned Canadian certainties that the future lay in expanding agricultural.²⁶ He also bought into dubious science – clearing the forest would hasten favourable climate change allowing settlement in the back country to follow the same arc from backwoods clearing to established farm that had formed the countryside he saw around him.²⁷

In 1856, Vankoughnet signed off on a lengthy advertisement, “To Emigrants and others seeking lands for settlement.”²⁸ First settlers were offered free 100 acre lots adjoining the roads on conditions of occupation that included keeping their section of the road open. Large tracts adjoining the roads were for sale at prices well below those of more settled areas. Over the next few year, these prices and terms were adjusted frequently to make a purchase more attractive.

Illustration 2. “To Emigrants and Others Seeing Lands for Settlement”

The Opening of the Notice written by Hutton for Vankoughnet’s signature, 1856

²⁴ Douglas McCalla, “Railways and the Development of Canada West, 1850-1870,” in Alan Greer and Ian Radforth, eds, *Colonial Leviathan: State Formation in Mid-Nineteenth-Century Canada* (Toronto: University of Toronto Press 1992), 197-8 and 210, Table 7.1.

²⁵ Miller, *Straight Lines*, 20-21; Boyce, *Hutton of Hastings*, 11, 47; LAC, MG 30, E96, William Nisbet Ponton Fond, vol. 6, Hutton Family Correspondence, Hutton to his daughter Anna, Sunday, 3 October [1852?].

²⁶ *Canada: Its Present Condition*, 3; Doug Owsram, “Progress, Science, and Religion: Exploring Victorian Thought in Canada,” in Gerald Friesen and Doug Owsram, *Thinkers and Dreamers: Historical Essays in Honour of Carl Berger* (Toronto: University of Toronto Press 2011). J. David Wood, *Making Ontario: Agricultural Colonization and Landscape Re-creation before the Railway* (Montreal: McGill-Queen’s University Press 2000) discusses “progress” and progress in transforming the land as Hutton would have understood it.

²⁷ *Canada: Its Present Condition* (1857), 3.

²⁸ JLA 1857, Appendix MM, Minister of Agriculture for 1856, To Emigrants....

credit: JLA 1857, App.54, Report of the Minister of Agriculture for 1856

“Natives and sons of old settlers” and others in the know hastened to take up the free lots they judged best in terms of land and location.²⁹ They must have read right past broad claims that the tract contained “an abundance of the very best land for farming purposes” to get to the details of the offer. Once this advertisement became the first notice of the land in the Ottawa-Huron tract to be widely circulated abroad in English, German, and Norwegian, it had a different cast.³⁰ Hutton’s easy assumption of progress met two problematic sources, the optimistic reports of crown lands surveyors and agents with a vested interest in the success of their area and the undigested evidence of the select committee on the management of government lands. The notice described the Opeongo, Addington, and Hastings roads, how to reach them, and the terms of settlement – and suggested that the rapid progress of Canada West over the last ten years might be replicated in sections of country that at their full extent reached to the shores of Lake Huron and Lake Nipissing. It drew particular attention to the Ottawa Country said – in Hutton’s worst example of careless cherry picking – to be capable of sustaining a population of eight million. His source was Andrew Russell of Crown Lands. Asked a speculative question about population density in committee, Russell had referenced Scotland (eight million) and the State of New Hampshire (3 million) as of similar size before he returned to present reality and an estimate of a potential population of 346,200 souls with space for “future increase and filling up.”³¹ Hutton was quick to recognize a need for more general information for his emigrant audience. He found a better stride in 1857 writing of the Canada he knew in his flagship pamphlet *Canada: A Brief Outline*.³² The

²⁹ AO, RG 11, 1-0-5, 7, Hawke to Buchanan, 2 September 1856.

³⁰ Jonathan Wagner, *A History of Migration from Germany to Canada, 1850-1939* (Vancouver: UBC Press 2006), 41, cites notices in the German emigrant press in July 1856. Lars Erik Larson, *Norwegian Emigration to Canada 1850-1874* (Whitewater, Wisconsin, revised 2010), accessed online 24 August 2013, 14, found the Norwegian translation in the Christiania newspaper *Morgenbladet*, 2 November 1856. A French translation was probably made first for home consumption.

³¹ *Report of the select committee on the management of public lands*, A[ndrew] J. Russell, 175-6. Donna E. Williams, *Hardscrabble: The High Cost of Free Land*, (Toronto: Dundurn 2013), 138-41, cites a similarly misleading comparison used for Muskoka and Parry Sound in 1879.

³² *Canada: a Brief Outline of her Geographical Position, Productions, Climate, Capabilities, Educational and*

Outline was an overview of the whole province in which he used agricultural statistics collected in the Bureau as evidence of present success and future prosperity. The 1856 notice and his early pamphlets on the roads, however, remained in circulation and continued to be used for the simplicity of their message.

Illustration 3. [William Hutton], *Emigration to Canada*. Canada: A brief Outline of her geographical Position, productions, climate, capabilities.... Quebec 1860 (Cover)

Anthony Bawden Hawke was chief emigrant agent for Upper Canada and Canada West from 1833 until 1864. He did not believe that the Ottawa tract held opportunities for newcomer farmers. The main theme of his recommendations to potential emigrants was to buy partially cleared farms, choosing a place close to an established market or in a newer area as their means allowed. Hutton had only to channel his own experience as a farmer and as a school inspector visiting backwoods settlers in the country behind Belleville to be won over by Hawke. He had the gift of interpreting the ideas of those around him, and he supplied the words for their message in correspondence written in advance of the 1857 emigrant season. A “very large proportion” of new immigrants were “ill adapted” for “the difficulties of a bush life.” The best pioneers were the sons of old settlers. “Emigrants *without capital* are best employed in supplying their places, whilst those *having capital* are wiser to purchase clearances.”³³ As for the free lots, they were “a comparatively narrow strip” intended as “channels” to lead the stream of settlement inland.³⁴ Immigrants arrived after the best lots were taken. They were left with the choices of poor land, travelling inland far from any support, buying in the area, or leaving. No official was prevented from giving personal opinions to individuals, but selling crown lands to immigrants was government policy. A Hawke or a Hutton reconciled their dilemma by having recourse to divided jurisdiction between their Bureau and the Department of Crown Lands which was responsible for surveys, sales, and locating settlers. Hutton’s publications gave his message first and then identified and passed on information on colonization roads supplied by Crown Lands. Hawke

Municipal Institutions, &c., &c., &c (Canada: Bureau of Agriculture and Statistics 1857, enlarged editions in 1860 and 1861). The title varies and may be prefixed with *Emigration to Canada*.

³³ LAC, RG 17, A-1-2, vol. 1492, Hutton to C.P. Roney, 29 September 1856. (emphasis Hutton’s).

³⁴ *Ibid.*, Hutton to Roney, 25 February 1857.

supplied information with the warning to potential settlers that they must come to Canada to see the land and judge for themselves. His assistant explained that “no one in this office has been on the different tracts,” and so the Toronto office relied on the same information that they sent out in answer to enquiries.³⁵ The Bureau’s emigrant agents in Canada West directed prospective settlers to their chosen settlement with introductions to Crown Lands and road agents for detailed information.

This first round of promotion was cut off in the latter part of 1857 by a severe recession suffered “in common with the rest of the commercial world.”³⁶ In Canada railway borrowing came home to roost, business was at standstill in towns, and farmers stopped hiring in the country. Unemployment spiked and immigration numbers fell. Good harvests were the harbingers of a modest economic recovery that began in 1859, but immigrant numbers in the 1860s never came back to the high of 1856. Canada continued to bleed new immigrants and native inhabitants to the United States.³⁷ Hawke was sent to England in 1859-60 on a first experimental mission to turn this trend around, and a plan to send agents abroad to promote in emigrants’ home countries took shape. Turmoil in the United States, followed by the outbreak of civil war in 1861, made the moment seem opportune. Yet limited opportunities for employment in Canada in the years 1860-63 were reflected in instructions to emigrant agents sent abroad.³⁸ Vankoughnet and his cabinet colleagues were but a decade away from the debacle of the Irish Famine immigration in 1847. They wanted selective immigration, and they were concerned that publicity might attract people looking for assistance. Agents sent abroad had orders to target their message to “agriculturalists, and all those who may be desirous of acquiring land.” They must do nothing to give emigrants room to expect that government aid in Canada might flow from responding to official promotion.³⁹ Canada’s past

³⁵ AO, RG 11, 1-0-5, 365, Hawke to J. Gilchrist, 11 February 1862; 374, William J. McKay to W. East, 28 March 1862.

³⁶ JLA 1859, App. 19, A.C. Buchanan, Annual Report of the Chief Emigrant Agent for 1858.

³⁷ *Historical Atlas of Canada*, Vol. II, *The Land Transformed 1800-1891*, Plate 31, “The Exodus: Migrations 1860-1900,” deals with entry, exodus, and internal migration.

³⁸ Canada. Province. Sessional Papers [SP] 1862, No. 21, Return of instructions, reports, spending of emigrant agents abroad, sent and received between January 1860 to July 1862.

³⁹ SP 1860, No. 4, Select Committee on Emigration, Hutton, 46-7, copy filed of Buchanan, instructions to agent in

history of assisted emigration, and a present practice of assisted travel for the poorest immigrants, made this policy a hard sell. From a government perspective, correct information about the land on offer became an important component of a message tempered to the times.

McGee supplied the breadth of vision that carried the second stage of this project as far as it went.⁴⁰ His starting point was emigrant-sending countries and the full sweep of migration from Europe to the new world. He injected a conviction that Canada could hold its own and win its share of these people for a grand future. While still based in New York in 1856, he has been part of a failed scheme to redeem the poor Irishmen of eastern city slums by sending them west to pioneer new settlements on either side of the border.⁴¹ He did not return to this theme in Canada. Once elected to the Assembly, his ambition was nothing less than to introduce a new “system” for immigration to Canada. Through the emigration committees he analysed the current situation with a journalist’s eye for key points, and he brought forward underlying issues in Canadian immigration such as American domination of the shipping routes travelled by immigrants. His recommendations were predicably confident but marred by lack of Canadian experience. He relied too heavily on what he knew of immigration to the United States since coming there as a Young Irelander in 1848, and he paid too little attention to what was politically possible in his new home. His reports, however, commanded respect and the administration used them to justify actions such as sending emigrant agents abroad. McGee would have sent them as civil servants and armed them with land script to tie emigrants to a settlement before departure. The government was too cautious for permanent appointments, and land script had a bad record in Canada. Hawke’s experimental mission in 1859 was the first of several temporary assignments. As part of the venture, the Bureau revised the literature it supplied to agents.

Alexander Carlisle Buchanan, the chief emigrant agent at Quebec who followed Hawke to

Germany, 30 January 1860.

⁴⁰ David Wilson, *Thomas D’Arcy McGee*, Vol. 1 *Passion, Reason, and Politics, 1825-1857* and Vol. 2 *Thomas D’Arcy McGee: The Extreme Moderate, 1857-1868* (Montreal: McGill-Queen’s University Press 2008 and 2011); Robin B. Burns, “McGee, Thomas D’Arcy,” in *DCB*, vol. 9, accessed 18 February 2014, http://www.biographi.ca/en/bio/mcgee_thomas_d_arcy_9E.html

⁴¹ Wilson, *McGee*, Vol. 1, 154-6, 341-53.

Liverpool in 1861 and 1863, based a critique of past writing on Canada on his long experience in his job. He pinpointed the failure to address different classes of emigrant. He found the existing literature adequate in quantity and if “sometimes exaggerated” generally favourable. The weakness of the travel narratives and guides of the previous half century was that they were narrowly written, reflecting the class biases of educated, middle class authors and audience.⁴² He did not point a finger, but Hutton was of this school of writing for emigrants.⁴³ His solution was to talk. In lectures and conversation information could be tailored to “the several points of view which are suitable to the capacity of the several classes of potential emigrants.” A potential farmer might be satisfied by giving “direct answers to a very few questions, put in his own way.”⁴⁴ He did not engage with particularizing the immigrant experience after reaching the new settlements the same way. A romanticized view of what could be achieved with “strong arms and a willing heart” lingered in the second and third edition of Hutton’s major pamphlet. The Bureau did venture into the woods with a reprint of Catharine Parr Traill’s *The Canadian Settlers’ Guide* which Hutton praised for the “singular and particular merit” of being useful to both sexes.⁴⁵

Illustration 4. “The Canadian Settler’s First Home in the Backwoods.”“The book
illustrator’s backwoods, 1860 credit: Catharine Parr Trail, *The Canadian Settler’s Guide*,
10th ed., London, 1860

Traill left it to her sister to convey the isolation, loneliness, and “hardships that would kill a

⁴² LAC, RG 17, A-1-2, Vol. 1493, A.C. Buchanan, “Scheme for the establishment and regulation of the Canadian Government Reference Office,” Memorandum, 20 November 1860 (filed under January 1861).

⁴³ Courville, *Quebec A Historical Geography*, 158, extended this criticism to all the Anglophone settlement colonies and also to Quebec and pamphlets published there for an audience of “colonizing intermediaries and the educated class.”

⁴⁴ LAC, RG 17, A-1-2, Vol. 1493, A.C. Buchanan, “Scheme,” 20 November 1860.

⁴⁵ LAC, RG 17, 1491, 369, Hutton, Memo for Sir Alan McNab (the minister of agriculture), 26 April 1855. *Catharine Parr Traill, The Canadian Settlers’ Guide* (Toronto 1855, 1st published 1854); London: Stanford 10th ed. enlarged with Vol 2, a compilation of additional material supplied or sanctioned by Hutton.

domestic animal at home.”⁴⁶ Susanna Moodie wrote *Roughing It in the Bush* to deter families like her own, half pay officers deluded by dreams of becoming a landowner in Canada on a scale that brought wealth and position in England.⁴⁷ In the 1860's, Hutton's concern was for a different class of immigrants hoping to use a small capital to establish themselves on a hundred acres. He reacted with dismay in 1861 to the marketing decision to rebrand colonization roads as free grant roads. The “free grant mania” he feared did not materialize, but he was justified in his concern for “old country people ... totally unfit and unable.” Would they understand that the deep woods were for lumber companies and the “overflowing population of Canadian families,” settlers “with the patience to endure some extra suffering ... from which new settlements are never free?”⁴⁸ Not understanding, some immigrants as he anticipated wrote home in anger.

In addition to Buchanan, five other sub agents travelled back and forth between 1860 and 1862. John Andrew Donaldson and Edward John Carlton were sent to Ireland – Scotland was covered between Liverpool and Ireland – William Wagner to Germany, and Christopher Closter to Norway. Ambrose J. Verret, sent to recruit French speaking emigrants in France, Belgium, or Switzerland, travelled without preparation and with no discernable result. Sub agents had temporary appointments with a knowledge requirement similar to that of the Bureau's agents in Canada. In Ireland, Charlton was a Quebec City merchant and broker. Donaldson, the second Irish agent, was from the village of Weston near Toronto and had gained his 25 years of agricultural and mercantile experience in well-settled communities in Canada West. Although he acknowledged the need to see the new grants for himself, he did not manage to fit in a visit before he left.⁴⁹ Closter had briefly toured small settlements of Norwegians in Canada, and Wagner had worked for a few years as a surveyor. These agents struggled to penetrate areas where the United

⁴⁶ Susanna Moodie, *Roughing It in the Bush or Life in Canada* (ed. By Carl Ballstadt, Ottawa: Carleton University Press 1990, 1st published 1852), 514.

⁴⁷ Frederick de la Fosse, *English Bloods in the Backwoods of Muskoka*, 1878 new edition ed. by Scott D. Shipman, Toronto: Natural Heritage Books 2004, 1st pub. pseud. Roger Varden, Ottawa 1930) wrote of the disillusioned would-be gentlemen farmers of his generation.

⁴⁸ LAC, RG 17, A-1-2, 1493, 256-7, Hutton to Buchanan, 28 February 1861.

⁴⁹ SP 1862, No. 21, Return of instructions and reports, Donaldson to Vankoughnet, 27 June 1861; *The Belfast News-Letter*, 7 February 1862 (<http://ied.dippam.ac.uk/records.41218>, consulted 30 October 2013).

States cast a very long shadow even as their superiors put them on watch that their continued employment was contingent on results in the form of immigrant settlers.⁵⁰ For many potential emigrants “America” was the States, or as Wagner reported, New York and the western states.⁵¹ Americans outstripped Canadians in inviting chain migrants to follow them and in sending remittances as strong persuasion. Then there were the Australasian colonies in the news since the 1850s for discoveries of gold and attracting emigrants with incentives such as assisted passages and bonuses.⁵² Canadian agents headlined free grants because the free land on colonization roads was all they had to attract the attention of agriculturalists amid the cacophony of advertising for other destinations.

Illustration “Canada, Government Emigration Office. Free Grants of Land.

Caption: Free grants of land in Canada; *The Irish Evangelist*, May 1, 1862, p.256.

credit (<http://ied.dippam.ac.uk/records>, consulted 30 October 2013. CMSIED 2006242

Hutton responded to the new emphasis in promotion by expanding his material to include recent information specific to the new settlements. As propagandists went, he scored well on intention. Yet his deceptively simple requirement that agents going abroad promote Canada with “entire truthfulness” missed the mark..⁵³ Not only his readers but also his informants filtered information on the new settlements through different kinds of experience. As early travellers, British army engineers had justified their time and expenses by stressing alien aspects of a landscape of rocks and forests owned by mosquitos. In the 1860s, Crown Lands Department surveyors and road agents stretched too hard to find the familiar. The maps and language of description used for the Ottawa Huron tract reflected ways of thinking and methods of evaluation

⁵⁰ SP 1862, No. 21, Return, Vankoughnet to Donaldson, 15 February 1861.

⁵¹ SP 1862, No. 21, Return... instructions, reports etc.. Wagner to Hutton, Bromberg, 29 May 1860, and Berlin, 27 October 1860.

⁵² James Jupp, ed. *The Australian People: and Encyclopedia of the Nation, Its People and their Origins* (Cambridge: Cambridge University Press 2001), 42-4; Jock Phillips. “History of immigration - Settlement in the provinces: 1853 to 1870,” in *Te Ara - the Encyclopedia of New Zealand*, updated 21-Aug-13. (<http://www.TeAra.govt.nz/en/history-of-immigration/page-5-9>)

⁵³ SP 1862, No 21, Return, Instructions

devised for settled landscapes. Surveyors worked to impose the order of European concepts of space on this unruly countryside and by 1861 had the prototype of a map showing detail of the tract surveyed at the level of the township.⁵⁴ Hutton was able to include a fold out map of the province in the third edition of his principal pamphlet which showed in red the tracts set aside for sale on special terms.⁵⁵ McGee's recommendation in 1860 for production of "an adequate number" of lithograph maps of each new survey as it was completed "showing the physical features and natural productions of the land" was too problematic to implement.⁵⁶ Contemporaries in any case threw doubts on how useful newcomers would find the township maps that were available in land offices. Russell, now assistant commissioner of Crown Lands, had warned in his testimony to McGee's committee that no experienced purchaser trusted the notes the surveyor recorded for one line without investigating the rest of the lot.⁵⁷ An immigrant on the ground admitted that his guided walk along a single concession line had imparted mostly a fear of getting lost. To an inexperienced eye "all the bush looked alike to us."⁵⁸

How else to convey possibility? A list costing necessities for the settlers' first year stood apart from the contingencies of backwoods life.⁵⁹ What if the pig died or the axe broke – events far less serious than the accidents and illnesses to which new settlers were prone. McGee's 1860 report for his Emigration and Colonization committee revealed that he did not understand the status of location tickets given to immigrants when they first chose a lot or the fluid population these tickets

⁵⁴ John C. Walsh, "Upper Canada and the Mapping of Settler Space," Academia.edu (consulted 30/03/2014), a paper presented to the 2011 Annual Meeting of the Canadian Historical Association; and the earlier unpublished paper, CHA, 2000, "Property, Surveyors, and State Formation: Spatial Histories of Canada West."

⁵⁵ Hutton, *Emigration to Canada: Canada, a brief outline...* (1861).

⁵⁶ JLA 1860, App. 4, Select Committee on Emigration, Report, 11, Recommendations.

⁵⁷ JLA 1860, App. 4, Select Committee on Emigration, Russell, 29 March 1860. McIlwraith, *Looking for Old Ontario*, 56, "the instructions commonly given to surveyors were to lay out straight lines and not to enclose spaces."

⁵⁸ Walsh, "The Mapping of Settler Space," (not paged), quoting a memoir by Seymour Penson of viewing land near Bracebridge ON in the early 1860s.

⁵⁹ [Buchanan], *Canada 1862: For the Information of Emigrants*, Government Emigration Office, Quebec, February 1862, 5-6, "Capital required by intending Settler." Buchanan, and his uncle before him, had published "Information" pamphlets since 1831.

represented. Settlers came and went, leaving in the best case to find work and return but in other instances never settling on their lot or staying for too short a time to complete their settlement duties. He took the high road when he concluded that the 639 lots “granted or sold” on the 54 miles opened on the Opeongo road by 1860 meant that “not less than 3,195 souls ... have obtained homes mainly through the instrumentality of this road.” His prediction of “similar cheering results” on some 20 other roads was nothing more than a cheering thought.⁶⁰ In communities where small populations of widely scattered settlers struggled to create subsistence farms, the Department of Crown Lands required precise details in the annual reports of road agents. In addition to accounting for locations and settlers, they listed fixed assets and livestock and put a dollar value on everything produced by settlers in their charge from crops to shingles to “bush ash.” They gathered information for valuations as best they could around their other duties, and they did not detail their sources for the single prices attached to each commodity.⁶¹ If officials in the department had a longer report as a context for these statistics, they were too easily extracted for immigrants who took them at face value as evidence of steady progress. Arriving immigrants had their first taste of hardships to come on roads leading into the new settlements.

What were Europeans to make of McGee’s “great roads,” sometimes trunk roads in English, *des grands chemins* in French? A modern historian used “highways” in translating a German pamphlet listing the colonization roads in 1860.⁶² Roads were the more crucial to settlement in a tract where miles of rocks and hills might separated the intervals suitable to farm.⁶³ The standard set for construction was a wagon track.⁶⁴ Even if they did their job well, nature began to take back as soon as the construction crew moved on. The annual reports of the Crown Lands Department summarized reports from road agents filled with complaints of fallen bridges,

⁶⁰ SP 1861, No 14, Annual Report of the Minister of Agriculture, App. 1, Second Report of the Select Committee on Emigration, 1, Upper Canada, Colonization Roads.

⁶¹ SP 1862, No 32, Report of the Minister of Agriculture for 1861, Apps. 1-6.

⁶² Jonathan Wagner, *A History of Migration from Germany to Canada, 1850-1930* (Vancouver: UBC Press 2006), 51.

⁶³ SP 1863, No. 5, Report of the Commissioner of Crown Lands for 1862, App. 33, M.P. Hayes, report on the Hastings Road.

⁶⁴ Miller, *Straight Lines*, 22-4.

washed out roads, and obstacles never overcome. Much of the money granted for road building was swallowed up in repairs and rebuilding. In more remote areas, miles of road, or of connecting roads within the grid, were a winter road, a sometimes impassible summer track, or a line on a map. Hutton's successors in the Bureau of Agriculture did not have his commitment to immigrants. Late in 1861, they sent a circular with a list of queries to agents and road agents. They asked questions that might yield a standard description of an established rural area but not one on the state of local roads.⁶⁵ The official 1862 "*For the Information of Emigrants*," a 32 pages pamphlet devoted mainly to the crown lands of Canada West and East, had the same striking omission.⁶⁶ In 1861, Hutton estimated that in his county of Hastings a settler must travel 50 or 60 miles to find a good free lot. A year later, M.P. Hayes, the agent for the Hastings road, supplied an example of a clear correlation between the land on offer and new immigrants' decisions to settle elsewhere. He travelled personally with some of the 600 families, largely German or English immigrants, who came to his agency. He also hired "an intelligent German to act as guide and interpreter," but nothing he did could persuade them to go far enough inland to cross the height of land and see better country. He blamed "unpromising crops" in the first township they encountered and the horrible state of the road. At the end of the season only seven families remained of all who had come to look.⁶⁷ Although a small nucleus of a future German speaking community in Renfrew County remained at the end of year three, most of this cluster of German emigrants abandoned their farms after a seemingly promising beginning. In their search for a better life, many left on another long journey to the western states. Vankoughnet resigned in March 1862 to become a judge ahead of a pending change of administration. On a final mission to England in 1863, Buchanan did not use the 1862 pamphlet and so voted silently against giving so much attention to the new settlements. He delayed his publicity campaign until he had compiled and had printed 15,000 copies of his own pamphlet of 46 "closely printed" pages containing all that the emigrant needed to

⁶⁵ LAC, RG 17, A-1-2, 368, May, acting secretary, Circular, 21 November 1861.

⁶⁶ [Buchanan,] *Canada, 1862. For the Information of Emigrants*.

⁶⁷ SP 1863, No. 5, App. 33, Hayes on the Hastings Road.

know.⁶⁸ It was, he wrote, a stopgap until the province produced a handbook suitable to put up against the official publications of other destinations.

McGee paid his aspirations forward. In 1862 in a major speech to the Assembly on colonization, he featured the St Maurice region behind Three Rivers as capable of sustaining a population of three million and cited Scotland. His reach was still large, but he had become more cautious in other respects. He conceded problems with current immigration that he blamed on poor management, and he offered as realistic a goal of a family for every \$100.00 spent by government on all aspects of survey and settlement. On these grounds, he believed progress in Canada West between the Ottawa [River] and Lake Huron sufficient to make the case for settling “granite country.” In Canada East, he called on French Canadians to justify their claims to equal representation by abandoning parochialism and opening the door to immigrants. His final message was for all of Canada. In order to stay independent of the Americans the country must grow its narrow strip of population wider from south to north as well as longer to the east and west.⁶⁹ Minister of Agriculture in John A. Macdonald’s Liberal Conservative administration in 1863, and in the Great Coalition of 1864, McGee laid the groundwork for his successors to pass a Homestead Act for Canada. The Department of Crown Lands, in charge of the colonization roads of Canada West since 1862, directed funds for new construction to the north and west, to the Muskoka and Parry Sound districts and the Algoma district at the western extremity of the province. Such departmental business was on the back burner as the attention of government focussed ever more tightly on Confederation.

Illustration 6. Charlottetown 1864. McGee standing between George-Étienne Cartier and John A. Macdonald

http://thecanadasite.com/images/cansite/pics_bw/charlottown_confdelegates1864.jpg
(viewed May 2014)

⁶⁸ SP 1864, No.32, Minister of Agriculture for 1863, Appendix V, “Report of Mr Buchanan’s mission to England in the spring of 1863.”

⁶⁹ Thomas D’Arcy McGee, *Speeches and Addresses chiefly on the subject of British-American Union* (London 1865), Part 2, “Speeches in Canadian Parliament,” 210-31, “Emigration and Colonization,” and also 206-9, “Representation by Population.”

If either Vankoughnet or McGee had had any interest in the endgame of making an individual farm, they might have come at least to the point of Hutton's caution on behalf of new immigrants. They did not. In the matter of promotion, they left no legacy of lessons learnt. For settlers in the Ottawa Huron tract, the titles of some of the many books on the region convey the assessments of hindsight: *Straight Lines Curved Space* on laying out colonization roads, *Harvest of Stones* on Renfrew County, *Hardscrabble*, *the High Price of Free Land* on placing poor settlers on poor land in Muskoka.⁷⁰ Immediately after Confederation, the Ontario government's promotion of the Muskoka and Parry Sound districts was fuelled by the passing of Ontario's first Homestead Act in 1868. New ministers and new civil servants intent on expanding the boundaries of settlement went down a familiar path. Doug O'ram in *Promise of Eden* reported echoes of these policy decisions in post Confederation years in the North West and Manitoba. He used another of McGee's over optimistic predictions in his conclusion, a population of 10 million in ten years. "If the great strength of the expansionists was their ability to evoke an image of the future" he wrote, "their great failure was their inability to maintain any sort of relationship between the myth and the much harsher and more prosaic reality of frontier life."⁷¹ Influential politicians who tapped into a grand scheme to grow the country and individuals hungry for farm land to improve their prospects and those of their children were a heady mix. In the Ottawa Huron tract nature as a personification of the land they adopted was a third, very important partner in how settlers fared as farmers. The lives that Purdy lamented were the lives of individuals who paid a price for a collective failure to properly evaluate the environmental forces stacked against them.

Illustration 7. Abandoned fence line, Rob Roy, Ontario.

credit: Wendy Cameron

⁷⁰ Miller, *Straight Lines*, Brenda Lee-Whiting, *Harvest of Stones: The German Settlement in Renfrew County* (Toronto: University of Toronto Press 1985); Williams, *Hardscrabble*.

⁷¹ O'ram, *Promise of Eden*, 217-8.

Administering Fish

[Ch.2 of “Modeling Authority at the Canadian Fisheries Museum, 1884-1918”]

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This paper is the second chapter of my completed dissertation, “Modeling Authority at the Canadian Fisheries Museum, 1884-1918.” It served to provide the back-story of the Fisheries Museum, grounding it in the history of Canadian fisheries administration from the 1850s onward. This paper speaks to the theme “the dominion of nature” because it proposes that “fisheries” is a cultural, political, and legal construction that gained traction after Confederation in 1867. I apologize for its length—and hope you can help me trim the fat in this paper and reduce it by at least a third if not more. My own idea is to cut much of the material about the London exhibition and concentrate the narrative on Perley, Fortin, and Wilmot. I could leave a brief description of the exhibition and highlight it as a culminating moment when the work of my three “bourgeois radicals” was put on display. You may have other ideas, but ultimately I want to convince the reader that “fisheries” is not a natural ‘given’ object, but was something fashioned by nineteenth-century men with a particular idea of how fish and fishing should be organized.

When the Great International Fisheries Exhibition opened in London on May 12, 1883, the *Illustrated London News* devoted its front page to the event. A full-page engraving portrayed the Prince of Wales standing at attention as uniformed buglers sounded the exhibition’s official opening. “The International Fisheries Exhibition at South Kensington,” the periodical claimed, “promises to be the most striking novelty of the London season, and a formidable rival of the art galleries.”¹ Beyond the glittering

¹ *Illustrated London News*, May 19, 1883, 486.

royal pageantry, the *News* also recognized the exhibition's focus on the emerging role of science in fisheries administration. "Scientific fisheries" were in their infancy, the *News* reported, and the exhibition would bring them to maturity by solving a paradoxical problem: making productive the "practically inexhaustible" fisheries². The 1883 fisheries exhibition has been widely cited as a critical moment in western fisheries as it marked the public emergence of science as an administrative tool in the fisheries. Joseph Taylor describes fisheries exhibits as "didactic dioramas of the power of science and technology." In vast exhibition spaces, Taylor writes, "[o]rganizers arrayed aquaria, fishing devices, scale models, and fish culture tools to create a sense of technical proficiency." Exhibitions were more than emblems of progress, however; they were also political representations that made fisheries visible as a conceptual domain, an administrative object of political and scientific calculation.³

In arranging nature's bounty—cod, salmon, lobster—among the weirs, nets, and traps that materialized these creatures into marketable commodities, fisheries exhibits also arranged visitors' perceptions about nature and their relation to it—particularly of the nation's role in governing seas, the fish in them, and the people who worked upon them. As a large-scale material and conceptual model of the fisheries, the London fisheries exhibition thus posed questions and proposed answers about the proper relationship between nation and nature: What constituted the fisheries? Who and what belonged under this rubric? How were these elements to be managed and made productive? How was science to be applied to the fisheries?⁴

² *Illustrated London News*, May 19, 1883, 486; An exhibit of Whistler's etchings was on view in 1883 at London's Fine Art Society. "Exhibition Details," *Exhibition Culture in London 1878-1908* <http://www.exhibitionculture.arts.gla.ac.uk/exhibition.php?eid=13>. Accessed 10 January 2013.

³ Callum Roberts, *The Unnatural History of the Sea* (Washington: Island Press/Shearwater Books, 2007) 142-44; Tim D. Smith, *Scaling Fisheries: the Science of Measuring the Effects of Fishing, 1855-1955* (Cambridge: Cambridge University Press, 1994) 38; Joseph E. Taylor III, *Making Salmon: An Environmental History of the Northwest Fisheries Crisis* (Seattle: University of Washington Press, 1999) 95.

⁴ Thomas Henry Huxley, "Address by Professor Huxley, F.R.S." *Papers of the Conferences held in connection with the Great International Fisheries Exhibition* (London: William Clowes and Sons, 1883) 10.

These were questions that the Canadian Court, as Canada's display in London was known as, attempted to answer. It was first Canadian display in a fisheries-specific exhibition, and the Canadian Fisheries Museum's material and conceptual foundation. When the London exhibition closed in late 1883, the Canadian exhibit was returned to Canada and re-organized as a public exhibit in Ottawa in 1884. A history of the museum must therefore begin not just with the London exhibition, but also with the emergence of Canadian fisheries administration in the mid-nineteenth century. I frame this emergence in terms of Philip Corrigan and Derek Sayer's state formation approach, which defined English state formation as a liberal cultural revolution that consolidated male bourgeois rule and privilege.

This analytical approach is also useful in the Canadian context as English reforms in governance and administration were implanted in colonial British North America in the 1840s. In this chapter I consider fisher state formation through colonial fisheries inspection, and the work of two key inspectors, Moses Perley and Pierre Fortin, who exemplified the male bourgeois articulation of state power as they modeled fisheries into a political object. Their work provided a foundation for fisheries administration after Confederation, which was further intensified and extended by another middle-class "revolutionary," Samuel Wilmot. Wilmot elaborated fish culture in Canada from a private enterprise into a state one; he also exploited fish culture's exhibitionary potential, which led to his role in organizing Canada's display in London. The chapter concludes with the Canadian exhibit itself, assembled and shaped by Wilmot, and bearing the visible traces of Perley and Fortin. I argue that the fisheries exhibition constituted fisheries as a legible object in which male prerogative was exhibited in seen and unseen ways: in plain view, in the exhibition's exclusion of women and denigration of native fisheries and more subtly in the exhibition's constitution of fisheries as a rational, state-administered enterprise.

2.1 Canadian fisheries administration

Observers were surprised by the scope of Canadian fisheries at the London exhibition. "That Canada, with its grand coast-line, its magnificent lakes and rivers, must possess very valuable fisheries is patent to all," remarked Frederick Whympers in *The*

Fisheries of the World, his exhaustive visual and textual survey of the 1883 London fisheries exhibition. “But her foremost position in the practical working of the same was none the less a surprise.”⁵ By the time of the London exhibition, however, Canada’s federal Department of Marine and Fisheries was a large and growing bureaucracy. Established in 1868, and the first federal fisheries administration in North America, the department had an annual budget of \$114,000 and a staff of more than 650 inspectors and officers. The department was responsible for freshwater and marine fisheries, and policed Canadian waters in the Great Lakes and on both coasts with a fleet of fisheries patrol vessels. The department also maintained eleven fish hatcheries that annually produced millions of fish for stocking in Canadian lakes and rivers. American fisheries and museum administrator George Brown Goode heaped praise on Canada’s fisheries administration, calling the Department of Marine and Fisheries “one of the most valuable organizations in the world.”⁶

This administrative system was the historical product of the British colonization of North America and can be traced to the imposition of English forms of government, law, and property in the late eighteenth century. English common law established a legal order that facilitated and governed possessive individualism in colonial fishing. Common law’s basic assumption was that fish were a free resource, available to all for capture. The right to fish on non-navigable waters, however, was determined by property ownership; a landowner controlled access to fishing and could also sell or lease that right. In navigable or public waters, the right to fish was guaranteed, a principle applied to tidal waters in England, but which in British North America came to include non-tidal waters. On the seas, fishing was not subject to such property considerations; fishing was theoretically free to territorial subjects who chose to fish. Land tenure, however, affected the siting of shore-based processing while community and kin relations shaped entry into fishing

⁵ Frederick Whympers, *The Fisheries of the World: An Illustrated and Descriptive Record of the International Fisheries Exhibition, 1883* (London: Cassell & Company, 1884) 273.

⁶ Canada, “Report on the Fisheries of Canada for the year 1883,” *Sixteenth Annual Report of the Department of Marine and Fisheries* (Ottawa: Queen’s Printer, 1884) lxxv; Quoted in Samuel Wilmot, *Canada at the Great International Fisheries Exhibition, London, 1883* (Ottawa: A.S. Woodburn, 1884) 34-35.

employment.⁷

English common law enabled a fundamental re-allocation of fishing rights in the colonial period. Drawing on the right of public fishing, settlers ignored native fishing property and regulation, based on usufruct and kinship, and enacted what legal historian Douglas Harris called, in the context of nineteenth-century British Columbia, the “capture” of native fisheries.⁸ This process accelerated as land surrenders and treaties opened native territories to settler fishing. The institution of English law and government also established a framework for settler laws, which, in the late eighteenth and early nineteenth centuries, mainly consisted of local responses to increases in the scale and intensity of fishing that colonization inaugurated. The regulation of fishing across colonial territories varied and responded to local circumstances and traditions, and reflected an intensifying if uneven liberal order as fish and fisheries were differentiated. In Nova Scotia, legislation focused on supporting cod export fisheries with bounty payments for fishing vessels and cured fish, and regulations on fish quality and shipping. In Upper Canada, the increasing exploitation of Lake Ontario salmon initiated discussion of regulatory measures in the late 1790s, with the first law passed in 1807. Typical of colonial fisheries legislation, “An Act for the Preservation of Salmon” was locally focused, banning the use of nets, weirs “or other engines” at river mouths in two districts of the colony. Sea-run salmon in Lower Canada, New Brunswick, and Nova Scotia were subject to similar types of regulation. Regulatory enforcement was weak, however, and when prosecutions proceeded, local magistrates and juries were reluctant to prosecute their peers.⁹

Under British colonial rule, fishing was culturally and geographically varied. Working for subsistence and domestic and export trades, settlers pursued different fish in different environments. Over time, settlers developed vernacular fisheries with

⁷ Mark D. Walters, “Aboriginal Rights, Magna Carta and Exclusive Rights to Fisheries in the Waters of Upper Canada,” *Queen’s Law Journal* 23 (1998): 301-368; Douglas C. Harris, *Fish, Law, and Colonialism. The Legal Capture of Salmon in British Columbia* (Toronto: University of Toronto Press, 2001).

⁸ Douglas C. Harris, *Fish, Law, and Colonialism: The Legal Capture of Salmon in British Columbia* (Toronto: University of Toronto Press, 2001) 15-17.

⁹ Gough, *Managing Canada's Fisheries*, 24-38.

characteristic types of boats, gear, and preparation methods, though they also shared similar techniques, such as spearing, net fishing, and salt curing, and sometimes the same fish species. In Upper Canada, fishing was limited to freshwater fish: colonists took landlocked Atlantic salmon, whitefish, and lake trout from shore-based fishing stations and salted fish in barrels for domestic consumption and export. In Lower Canada, fisheries developed around a different set of fish available in the St. Lawrence valley, including tom-cod, eels, sea-run Atlantic salmon, and further east, cod, and marine mammals such as seals and beluga whales. On the east coast, fishing was already shaped by centuries of seasonal cod fishing on the offshore banks and shore-based processing of the catch. With colonization, maritime fishing became fixed around port communities and intensified with fishermen capturing a range of species that shifted over time to include such species as haddock, herring, halibut, mackerel, shad and others.¹⁰

In the nineteenth century, the English “governmental revolution” invested British North America after representative government was granted in the 1840s.¹¹ As in England, colonial state formation in British North America was characterized by, and enacted in, increasingly centralized forms of administration—the “apparently mundane, routine, workaday facets of state activity.”¹² Administration regularized the legal and legislative valorization of bourgeois norms, concretizing them in “laws, judicial decisions...registers, census returns, licenses, charters, tax forms” that also authorized, as Corrigan and Sayer argue, “what is to count as reality.”¹³ The act of inspection was key

¹⁰ Margaret Beattie Bogue, *Fishing the Great Lakes: An Environmental History, 1783-1933* (Madison: University of Wisconsin Press, 2000) 23-24; Darin Kinsey, “Fashioning a Freshwater Eden: Elite Anglers, Fish Culture, and State Development of Quebec's 'Sport' Fishery,” (Ph.D., Université du Québec à Trois-Rivières, 2008) 86. Joseph Gough, *Managing Canada's Fisheries: From Early Days to the Year 2000* (Sillery: Septentrion, 2005) 24-38.

¹¹ Oliver MacDonagh, “The Nineteenth-Century Revolution in Government: A Reappraisal.” *The Historical Journal* 1, no. 1 (1958): 53; Bruce Curtis, “Class Culture and Administration: Educational Inspection in Canada West,” in *Colonial Leviathan: State Formation in Mid-Nineteenth Century Canada*, edited by Alan Greer and Ian Radforth (Toronto: University of Toronto Press, 1992) 109.

¹² Philip Corrigan and Derek Sayer, *The Great Arch: English State Formation As Cultural Revolution* (Oxford: Basil Blackwell, 1985) 187.

¹³ *Ibid.* 197.

to administration because it made political territory and subjects legible as objects of rule that state administrators could grasp and regulate. Inspectors gathered intelligence about local conditions that enabled central authorities, as Bruce Curtis notes, “to monitor local provision, identify centers of opposition and resistance to its policy, and intervene to resolve menacing disputes or contain threatening practices.”¹⁴ Moreover this was a “masculine enterprise,” as Curtis describes it, “an expansion of the sphere of political action of men of property and the collapse of the political will of society into the disciplined will of these men.”¹⁵

Inspection in the Canadas established regular connections “between centre and locality” which were absent in the 1840s. Casual commissioners and overseers had initially provided some intelligence, but they did not travel and their activities lacked routine. “This limited the capacity of central government,” argues Curtis in respect to the inspection function, “to form a general view of the comparative development of local improvements, or to implement colony-wide policy.” Inspection in fisheries began in the late 1840s, when colonial legislatures appointed traveling inspectors and commissioners to gather intelligence about fish and fishermen. As in other fields of government such as education, respectable middle-class, propertied men were chosen to conduct tours to collect “standardized information about different localities:” these men were the exemplars of the emerging liberal social order and thus had the correct disposition to determine inefficiencies, judge conduct, and propose solutions.¹⁶ The centralization of public power through administration consolidated male domination: state formation is thus also fundamentally gendered.

In colonial British North America, this work fell to men such as Moses Perley and Pierre Fortin, the vanguard of Canada’s fisheries inspectorate. Perley was a lawyer who served New Brunswick’s colonial government in various capacities: as emigrant agent; as commissioner of Indian affairs who helped draft New Brunswick’s Indian Act of 1844;

¹⁴ Bruce Curtis, “Representation and State Formation in the Canadas, 1790-1850,” *Studies in Political Economy* 28 (1989): 80.

¹⁵ Bruce Curtis, “Representation and State Formation in the Canadas, 1790-1850,” *Studies in Political Economy* 28 (1989): 62.

¹⁶ E.P. Hennock quoted in Corrigan and Derek Sayer, *The Great Arch*, 124.

and as a fishery commissioner. Fortin was a doctor and stipendiary magistrate, and was appointed in 1852 to patrol and protect fisheries in the Gulf of St Lawrence; he later served as a member in the Quebec legislative assembly and in the federal House of Commons. Both men traveled through their respective colonies and produced detailed reports about fishing communities, fishing activities, and fish, compiling among the first faunal surveys produced by settlers. In addition to making fish and fisheries legible for government action, Perley and Fortin also articulated a critique of fishing, accusing fishers, especially native ones, of wasteful and inefficient practices which prevented the fisheries from realizing their true value. “Inspection was,” as Curtis notes, “an instrument of governance whereby respectable men of property sought the cultural, moral, and political reformation of the population.”¹⁷

2.2 Moses Perley

Born in New Brunswick in 1804, Perley was trained as a lawyer whose recruitment into the colonial inspectorate began in 1837 when he was appointed as New Brunswick’s Indian Commissioner. His first report—the 1842 *Reports on Indian Settlement*—exemplifies the moral regulation that characterizes nineteenth-century state inspection. Appointed to resolve conflicts about white squatters on native reserves, Perley recommended in his report that the native Maliseet residents be relocated to two reserves and adopt a settled agricultural life. Their children would be placed into white schools, the costs of which would be met by revenues from leases of land on native reserves and thus, as L.F.S. Upton put it, pay the cost of their own “civilization.”¹⁸

In 1848, Perley became a fisheries commissioner, the first such post in British North America. Traveling by canoe and schooner, Perley logged hundreds of miles on the water as he surveyed the colony’s fisheries from the Gulf of St. Lawrence in the north to the Bay of Fundy in the south. He produced three reports: *Report on the Fisheries of the Gulf of Saint Lawrence* (1849); *Report on the Sea and River Fisheries of New Brunswick, within the Gulf of Saint Lawrence and Bay of Chaleur* (1850); and *Report upon the*

¹⁷ Bruce Curtis, *True government by choice men?: inspection, education, and state formation in Canada West* (Toronto: University of Toronto Press, 1992) 189.

¹⁸ L. F. S. Upton, “Indian Affairs in Colonial New Brunswick,” *Acadiensis* 3, no. 2 (1974): 12-14.

Fisheries of the Bay of Fundy (1851). These inquiries combined descriptive accounts, letters, memos, statistical tables, and a faunal survey, gathering the colony's scattered local fishing endeavours into a singular synoptic view of New Brunswick's fisheries.¹⁹

Perley's reports also detailed inefficiencies in production and conduct that Perley claimed impaired the colony's productivity. Problems included a general disregard for fisheries regulations, American encroachment on the colony's waters, and failure by fishermen to properly cure their catch. Perley found widespread environmental problems as well: dams and sawdust harmed rivers, and prevented salmon, shad, and gaspereau from swimming upstream to spawn. Perley was most dismayed by settler fishing practices, which to him lacked industry and rigour. In several communities he found fishermen who lackadassically processed their catch and inadequately prepared fish for preservation. Perley took a particularly dim view of fishing practices on Grand Manan Island. "That the people of Grand Manan conduct the admirable fisheries in their vicinity very inefficiently, and with but little profit," Perley claimed, "is undeniable."²⁰

In Perley's view, New Brunswick fishermen lacked market discipline: their poor preservation methods, for example, prevented them from selling their catch in the lucrative Mediterranean markets. These lost opportunities wasted the colony's precious fishing resources "either from ignorance, neglect, or laziness, or all combined."²¹ Perley recommended several measures to make New Brunswick's fisheries more efficient and competitive. One set of recommendations focused on improving state supervision of the fisheries. Perley proposed "a general inspection law" that would establish inspectors in every New Brunswick county and a comprehensive "general law for protection of sea and river fisheries." His other recommendations focused on citizens and fitting them to the task of exploiting New Brunswick's resources. "The people of New Brunswick must be incited, and encouraged, to enter into the deep sea and coast Fisheries," urged Perley.

¹⁹ W.A. Spray, "Perley, Moses Henry" in *Dictionary of Canadian Biography Online*, edited John English and Réal Belanger, http://www.biographi.ca/009004-119.01-e.php?id_nbr=4652 accessed 15 January 2013; L.F.S. Upton, "Indian Affairs in Colonial New Brunswick," *Acadiensis* 3, no. 2 (1974): 12-13.

²⁰ Moses Perley, *Report upon the fisheries of the Bay of Fundy* (Fredericton: Queen's Printer, 1851) 22.

²¹ Moses Perley, *Reports on the Sea and River Fisheries of New Brunswick*, 2nd edition (Fredericton: Queen's Printer, 1852) 166.

“[I]f the people were better taught and possessed greater knowledge of the world, they would readily perceive the numerous advantages of their position, and quickly avail themselves of the profits to be derived from it.” Perley thus recommended the establishment of a fisheries school to train fishermen as self-actualized producers, and the building of improved housing for fishing families and fishing infrastructure such as piers and harbours.²²

Perley’s focus on increased productivity underlay what was to become one of his most important recommendations, which was to lease the colony’s salmon rivers which ran through Crown lands. An angler himself, Perley lauded salmon angling, which was already popular with British officers stationed in New Brunswick.²³ In his role as Indian Commissioner Perley had earlier scrutinized native fisheries and criticized them as inefficient—indeed as lacking “industry” altogether. Perley, for example, described the native salmon fishery in the Maliseet community of Tobique, as a form of idle sport:

it struck me that they prized much more highly the dash and excitement of the sport in taking the fish, than the profit arising from the sale of them...the day was spent by the Indians in almost listless idleness; but so soon as night fell, the torch was lit, the Spear lifted, the canoe launched, and all became life, bustle and activity. The sport was pursued the whole night, and day-light exhibited heaps of glittering Salmon on the bank, and the Indians languidly creeping off, to sleep away another day of total idleness.²⁴

Corrigan and Sayer have argued that “[e]ssential relations of bourgeois order are experienced and expressed as personal inadequacy.”²⁵ This is clear in Perley’s description of fishing in Tobique. Like other settler-observers of native salmon spearing, some of whom viewed spearing as a picturesque diversion, Perley was unable to credit this type of fishing as work. In the case of Tobique—where the Maliseet were protesting the construction of a milldam that threatened to block salmon runs—Perley suggested

²² Perley, *Sea and River Fisheries*, 85 and 89.

²³ Peter Thomas, *Lost Land of Moses: The Age of Discovery on New Brunswick's Salmon Rivers* (Fredericton: Goose Lane Editions, 2001) 14.

²⁴ Moses Perley, *Reports on Indian Settlements, &c: Extracts* (Fredericton: J. Simpson, 1842) 2.

²⁵ Corrigan and Sayer, *Great Arch*, 199.

that blocked runs would force the natives into occupations such as farming that fit settler conceptions of economic production. “The destruction of the Salmon Fishery,” Perley argued, “would perhaps induce the Indians to adopt more settled habits of industry, and pay more attention to the cultivation of the soil than they do at present.”²⁶ These views shaped Perley’s recommendation in 1850 that the colony’s salmon rivers on Crown lands be leased to sport fishermen. This arrangement he argued would “protect” salmon from native fishers, whose fishing was “wasteful and reckless.” Under leases to elite anglers, the salmon would be “rendered profitable.”²⁷

Angling, or sport fishing, was a class-differentiated sport with an elaborate literary pedigree rooted in seventeenth-century English writer Izaak Walton. Walton’s *The Compleat Angler* (1653) established a pastoral discourse about angling as a genteel and spiritual past-time. In the nineteenth century, this discourse shifted to emphasize angling, and especially fly-fishing, as a distinctive bourgeois sport that buttressed gendered, classed and racial identities. Anglers claimed that their sport was a higher and better use of fish and lobbied for tighter regulation of game fish, particularly Atlantic salmon and trout. Anglers—and officials such as Perley who enjoyed angling—have been credited as being among the first conservationists as they recognized and protested against declines in fish, but their advocacy privileged their exploitation over other forms of fishing.²⁸

Bill Parenteau’s work on eastern Canadian salmon fisheries has documented the impact of conservation and leased salmon fisheries, which were first introduced in Quebec in 1858 and in New Brunswick in 1863. As Parenteau has shown, native fishers in eastern Canada were deemed to be inefficient commodity producers who threatened the growing sport-fishing industry through spearing. The leasing of salmon rivers on Crown land enclosed salmon for elite anglers who instituted close policing of their rivers, in the name of conservation, to prevent natives and settlers from salmon fishing. Native men were then reincorporated in the new economy of angling as waged fishing guides.

²⁶ Ibid.

²⁷ Perley, *Sea and River Fisheries*, 89.

²⁸ William Washabaugh and Catherine Washabaugh, *Deep Trout: Angling in Popular Culture* (Oxford: Berg, 2000) 29; William Knight, “‘Our Sentimental Fisheries’: Angling and State Fisheries Administration in 19th century Ontario,” (MA thesis, Trent University, 2006) 19-24.

For elite anglers who wrote about their fishing experiences, the presence of native guides also authenticated the experience as romantic and primitive—a new version of the picturesque that replaced the old one of native men spearing salmon by torch light. The implementation of leasing opened public lands to private development and converted the public right to fishing into a private privilege.²⁹

In addition to his fisheries reports Perley also surveyed the fish and compiled a catalogue of the fish of New Brunswick and Nova Scotia. Appended to Perley's Bay of Fundy report, the "Descriptive Catalogue of the Fishes of New Brunswick and Nova Scotia" was the first ichthyological catalogue published in British North America. The faunal catalogue was an authoritative bibliographic form developed in Europe; produced during imperial explorations, catalogues plotted animals to territory and made organisms legible in the registers of scientific classification and commercial resource.³⁰ Although Perley denied being a naturalist—he was, he claimed, "simply an occasional observer of nature"—the catalogue shows a deep investment and attention to natural history, a practice associated with other forms of Victorian self- and social improvement and thus worthy of a bourgeois man.³¹ Natural history exercised discrimination and classification, skills that Perley demonstrated in his catalogue which described 55 species of fish, listed in order following French ichthyologist Georges Cuvier's taxonomic method. The catalogue also reflected Perley's angling interests: the description of Atlantic salmon and trout were among the longest in the catalogue.

Perley hoped his catalogue would inculcate in fishermen "a more perfect knowledge of the habits, haunts, and seasons of the Fishes of our waters," which would

²⁹ Bill Parenteau, "'Care, Control and Supervision': Native People in the Canadian Atlantic Salmon Fishery, 1867-1900," *Canadian Historical Review* 79 (1998): 1-35; "A 'Very Determined Opposition to the Law: Conservation, Angling Leases, and Social Conflict in the Canadian Atlantic Salmon Fishery, 1867-1914," *Environmental History* 9 (2004): 436-463.

³⁰ John V. Pickstone, "Museological Science? The Place of the Analytical/Comparative in Nineteenth-Century Science, Technology and Medicine," *History of science; an annual review of literature, research and teaching* 32, no. 2 (1994): 115-16; Curtis, "Class Culture and Administration, 106.

³¹ Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto: University of Toronto Press, 1983) 10.

make them more efficient exploiters of the colony's fish resources.³² Faunal surveys thus supported Perley's project to make New Brunswick's fisheries legible and more productive, objectives articulated in his reports and taken up in centralizing projects such as legislation. Perley's recommendations for the fisheries, for example, were taken up in New Brunswick's fishery acts of 1851 and 1852, although his recommendation to lease public rivers was not instituted until 1863. When it was, however, it left a lasting impact as Parenteau and, more recently, Darcy Ingram have shown. River leasing privileged upper-class anglers—including their wives—over native and local settlers and created "a state-administered privately regulated system of conservation."³³ Intended to make fisheries more efficient and profitable, and generate revenue from Crown lands, leasing solidified elite white privilege in salmon fisheries and became a foundational element of Canadian fisheries administration after confederation. Perley's efforts were instrumental, as Bill Parenteau has argued, in hastening "the development of a modern administrative apparatus," one dedicated to the values of masculine possessive individualism.

2.3 Pierre Fortin

Pierre Fortin, like Moses Perley, was a middle-class member of British North America's fisheries inspectorate. Fortin was a nineteenth-century citizen who exemplified bourgeois attainment: he was a doctor, a magistrate, a geographer, a politician, and a founder of the Geological Society of Quebec. Fortin was also interested in policing and social order: in 1849 he raised a mounted police unit to help suppress riots in Montreal after passage of the Rebellion Losses Bill. In 1852 Fortin was appointed a stipendiary magistrate, a position established in French Lower Canada after the 1837 rebellion and which Allan Greer has linked to the establishment of a paternalistic liberal order in Lower Canada.³⁴

³² Perley, *Bay of Fundy*, iv.

³³ Darcy Ingram, *Wildlife, Conservation, and Conflict in Quebec 1840-1914* (Vancouver: UBC Press, 2013) 18.

³⁴ Irene Bilas, "Fortin, Pierre Etienne" in *Dictionary of Canadian Biography Online*, edited John English and Réal Belanger, http://www.biographi.ca/009004-119.01-e.php?id_nbr=4652 accessed 15 January 2013; Allan Greer, *Patriots and the People: the Rebellion of 1837 in Rural Lower Canada* (Toronto: University of Toronto Press, 1993) 93-96 and Greer, "The Birth of the Police in Canada." in *Colonial Leviathan: State Formation in Mid-Nineteenth Century Canada*, edited by Allan Greer and Ian Radforth (Toronto:

Between 1852 and 1865, Fortin patrolled the Gulf of St. Lawrence aboard the armed schooner, “La Canadienne,” as an agent of the United Provinces of Canada, embodying the state in multiple roles as customs inspector, police officer, stipendiary magistrate, and coroner. Fortin also surveyed fishing communities, compiled statistics, made natural history observations and collections, and—after 1857—enforced a new comprehensive fisheries act. Canadian administrative historian J.E. Hodgetts considered Fortin to be a model official, whose reports, Hodgetts declared, “would form a notable addition to the literature of our country’s development.”³⁵

They also form a notable record of the state formation in the United Province of Canada, the 1840 union of Upper and Lower Canada that Lord Durham had recommended in 1836. The report and the act sought to ‘modernize’ Lower Canada—with its semi-feudal social organization—and extinguish French influences that retarded the colony’s progress as a capitalist, market society. This effort was complex, proceeded along many fronts, and met with much resistance. The Fishery Act of 1857 and its subsequent amendments were one element of this project. Like acts in other fields, including education, the Fishery Act consolidated and concentrated state functions, including vesting responsibility for fisheries administration in the Crown Lands department. The act also consolidated piecemeal, local laws into a single text that generalized fisheries regulations across the territory. This shifted enforcement of fisheries regulation from local justices of the peace, who were often reluctant to prosecute neighbours over infractions, to central authorities.³⁶ Praised by another twentieth-century administrative historian as providing “uniformity of practice”—an apt description of its centralizing objective—the act instituted multiple differentiations and partitions that

University of Toronto Press, 1992) 31-33.

³⁵ W. Brian Stewart, *A Life on the Line: Commander Pierre-Étienne Fortin and His Times* (Ottawa: Carleton University Press, 1997) 115; J.E. Hodgetts, *Pioneer Public Service: An Administrative History of the United Canadas, 1841-1867* (Toronto: University of Toronto Press, 1955) 148.

³⁶ Brian Young, “Positive Law, Positive State: Class Re-Alignment and the Transformation of Lower Canada, 1815-1866,” in *Colonial Leviathan: State Formation in Mid-Nineteenth Century Canada*, edited by Alan Greer and Ian Radforth (Toronto: University of Toronto Press, 1992) 50-51; Ian Radforth, “Sydenham and Utilitarian Reform,” in *Colonial Leviathan: State Formation in Mid-Nineteenth Century Canada*, edited by Alan Greer and Ian Radforth (Toronto: University of Toronto Press, 1992) 92.

served to valorize bourgeois fisheries interests, including recreational ones. The act, for example, enclosed game fish in seasonal and gear-specific boundaries that marginalized both Aboriginal and settler subsistence fishers in favour of sportsmen. Atlantic salmon in particular were more strictly protected; the act forbade the traditional Aboriginal technique of spear-fishing by torchlight, reserving salmon for sport fishermen.³⁷

Subsequent amendments increased the Fishery Act's power as an instrument of social regulation. In 1858, the licensing and leasing of exclusive fisheries on Crown lands was introduced. Moses Perley had proposed such measures in New Brunswick in 1850, but they were first instituted in the United Provinces of Canada. In Ontario, or Canada West, these measures advantaged commercial fishermen who acquired fishing stations on the Great Lakes, including those on traditional native fishing territories. In Quebec, or Canada East, licensing and leasing regulated access to salmon rivers on public lands: licensed commercial fishing stations were permitted at river mouths, while upstream the rivers were reserved for anglers and made available to them through exclusive lease-hold. Elite sportsmen, alone and in clubs, acquired these which led, as Darcy Ingram has shown, to a distinctive regime of "patrician" sporting preserves that transformed public lands into private estates for elite male hunters and anglers. Native and subsistence fishers bore the brunt as they were excluded from traditional and local public resources.³⁸

The 1858 Act also established the position of Fishery Overseer, a local inspector position that broadened and intensified surveillance in Canadian fisheries. W.F. Whitcher, the clerk in charge of the Crown Land's fisheries branch, believed that direct fishery supervision was the best means "to ensure the law being carried into effect in all parts of the Province." The Fishery Act of 1865 was needed, however, to clarify the Overseer's role and define his powers. Every Fishery Overseer was vested with magistrate powers that included rights to search and seizure; Overseers also swore an oath to "faithfully, honestly and impartially fulfil, execute and perform the office and duty of such Overseer, according to the true intent and meaning of the Fisheries Act."

³⁷ Hansen, "Treaty Fishing Rights," 5-6; Richard S. Lambert & Paul Pross, *Renewing Nature's Wealth* (Toronto: Ontario Department of Lands & Forests, 1967) 113.

³⁸ "The Fishery Act," *Statutes of the Province of Canada*, 1858, 22 Victoria, c. 86; Gough, *Managing Canada's Fisheries*, 74-76; Ingram, *Wildlife, Conservation, and Conflict in Quebec*, 61-2.

The ranks of Overseers came to include men such as John Kerr—figures of middle-class substance—who diligently patrolled their assigned territories, administering the act. As Bruce Curtis has shown, inspection proceeded unevenly in the colonial Canadas as it lacked routine and standardization. The flow of intelligence between locality and centre was imperfect. John Kerr, for example, patrolled western Lake Ontario, and directed a constant flow of information concerning southern Ontario's fisheries to department headquarters in Ottawa; he learned of regulatory changes, however, by reading of them in Toronto newspapers. Overseers also included men such as Frederick Fraser, who was continually sanctioned for ignoring his duties, such as failing to collect fishing licence fees from a prominent Lake Huron fish dealer.³⁹

Fortin, however, was a diligent agent of this new administrative order as evidenced in his reports. These reveal Fortin conducting a census in which he enumerated humans and non-humans—fishing places, boats, crews, navigation hazards, and fish—at the same time as he policed them. Structured loosely as a diary of his expeditions, the reports combine log entries detailing sailing itineraries and passage times, longer descriptive texts of places and people visited, and quantitative material arranged in lists and tables. Fortin usually left Quebec in May and made the rounds of the Gaspé peninsula, the Bay of Chaleurs, the Magdalen Islands, Anticosti Island, and the North Shore of the St. Lawrence. Physically robust and imposing, Fortin enforced the Fishery Act in his person and in literal displays of the letter of the law. In one restless community, Fortin claimed that “my presence in the place was the means of restoring order and tranquility for the remainder of the season.” In 1858, at River St. John, he boarded an American schooner, “and showed the captain the Fishery Act.” This episode and others support Curtis's observation that inspection connected centre to locality through the distribution of publications and “propaganda at the local site.”⁴⁰

³⁹ John W. Kerr, 8 September 1865, *Journals 1865-1870*, 4 volumes in microfiche, collection of Dr. Tom Whillans Trent University, Peterborough, Ontario; Nancy B. Bouchier and Ken Cruikshank, “‘Sportsmen and Pothunters’: Environment, Conservation, and Class in the Fishery of Hamilton Harbour, 1858-1914,” *Sport History Review* 28 (1997): 1-18; John Tilton to Frederick Fraser, April 17 1884, F 1034, Frederick George Mackenzie Fraser fonds, Ontario Archives, Toronto.

⁴⁰ Pierre Fortin, *Annual Report of Pierre Fortin, Esquire, Magistrate* (Toronto: John Lovell, 1858) 9-15; Bruce Curtis, “Representation and State Formation in the Canadas, 1790-1850,” *Studies in Political*

In 1861, Fortin undertook the most active and productive of his expeditions. Fortin biographer W. B. Stewart calculated that Fortin covered 6,000 nautical miles and stopped at 300 fishing stations, issuing 264 salmon fishing licenses over the course of the 186-day patrol.⁴¹ The expedition began with a visit to a native village at Godbout River to enforce its closure to public fishing after it was leased to Ottawa timber merchant Allan Gilmour.⁴² Fortin's report of the incident evidences the tone of moral regulation and instruction that inhered in fisheries enforcement:

I assembled the few Indian families then at Godbout, and after giving them communication of the principal clauses of the Fisheries Act, which I required them to observe, I showed them that they ought to be more interested in the preservation of salmon and trout than any one else, since these fish during the season of trapping in the interior, become one of their principal means of subsistence.⁴³

Increasing supervision was accompanied by increasing enumeration, although it, like inspection, lacked standardization. In 1859, Fortin inspected salmon-fishing stations in the Gaspé where he collected license fees and gathered data about fishing. For one station, he represented his findings in a table with columns for the occupant of the station, the number of men employed, and the number of boats. At another, Fortin collected information on each vessel's home harbour, its master, the size of crew, the number of boats it carried, and the size of its cargo of cod.⁴⁴ In his 1862 report, Fortin provided more standardized tables that covered the entire Gulf region, and which registered vessel type, ownership, tonnage, and cargo capacity for each type of fish. A column for "observations" also permitted notes to capture export information. For the barque "Nameless," for example, Fortin made this note: "Transporte de la morue sechee en Italie, Brezil, etc."⁴⁵

Economy 28 (1989): 80.

⁴¹ Stewart, *A Life on the Line*, 53.

⁴² Ingram, *Wildlife, Conservation, and Conflict in Quebec*, 50-51

⁴³ Pierre Fortin, *Annual Reports of Pierre Fortin, Esq. 1861 and 1862* (Quebec: Hunter, Rose & Lemieux, 1863) 1.

⁴⁴ Pierre Fortin, *Annual Report of Pierre Fortin Esq. 1859* (Quebec: Queen's Printer, 1860), 107-110.

⁴⁵ Pierre Fortin, *Rapports Annuels de Pierre Fortin, Ecr., 1861 et 1862* (Quebec: Hunter, Rose et Lemieux,

Enumeration also involved surveying nature. Fortin, like Perley, made faunal surveys of the territories under his eye and his 1861-62 report includes a description of the Gulf of St. Lawrence's marine fauna. This faunal list appears in the appendix immediately following a series of tables enumerating Gaspé's merchants: their contiguity creates a conceptual unity with the other census information. Unlike Perley's "Descriptive List," which followed Cuvier's systematic division of fish, Fortin described only commercially valuable species. Beginning with marine mammals—whales and seals—and moving through the Gulf's commercially valuable fish starting with cod, Fortin commented briefly on each animal's geographical distribution and their value to economic production.⁴⁶ While Fortin's enumeration and reportage were not part of the census in the Canadas, his work was homologous to their construction of "authoritative representations" that permitted central authorities to register and rule distant localities.

Like Perley, Fortin helped make fisheries legible as an object of rule by identifying opportunities for regulation and education, which increased "the possibilities for intensive administration."⁴⁷ As Stephane Castonguay points out "the extension of administrative capacities" allowed the state to fashion "new social relationships to nature."⁴⁸ Inspecting and policing constituted "the fisheries" as an object of rule and were thus characteristic of "the unprecedented expansion of state institutions" in nineteenth century British North America.⁴⁹

2.4 Samuel Wilmot and fish culture

The constitution of fisheries administration under the paternalist supervision of middle-class men continued after Canada's confederation in 1867. Fisheries administration

1863) 82-83.

⁴⁶ Fortin, *Annual Report 1859*, 113-128.

⁴⁷ Bruce Curtis, *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840-1875* (Toronto: University of Toronto Press, 2001) 3-5.

⁴⁸ Stephane Castonguay and Darin Kinsey, "The Nature of the Liberal Order: State Formation, Conservation, and the Government of Non-Humans in Canada" in *Liberalism and Hegemony: Debating the Canadian Liberal Revolution* (Toronto: University of Toronto Press, 2009) 225.

⁴⁹ Allan Greer & Ian Radforth, eds. *Colonial Leviathan: State Formation in Mid-Nineteenth Century Canada* (Toronto: University of Toronto Press, 1992) 13.

consolidated under a federal fisheries administration, the Department of Marine and Fisheries of Canada, the first national fisheries administration in North America. The department was responsible for a federal fisheries act, passed in 1868, that reiterated the fishery act already in force in the United Canadas. Measures introduced during colonial rule—inspection, fishery overseers, leasing and licensing—were applied across the new federal territory.⁵⁰ The federal system sought to promote and protect capitalist expansion: fisheries administration, wrote one official, “systematizes the fishing business...promotes investment of capital, and gives permanence and security to fishing industries, enhancing the value of fishing privileges to both individual fishermen and the public.”⁵¹

It was, however, a regime with uneven power and jurisdiction. On the seas, Canada’s fisheries rule was limited by its constrained sovereignty. Confederation conferred incomplete autonomy from Great Britain, which retained responsibility for external or diplomatic relations, including the negotiation and ratification of fisheries treaties. Fisheries administration after confederation was also complicated by intensifying commercial and recreational fisheries, declines in fish populations, increasing environmental degradation of fish habitats, and internal jurisdictional disputes over inland waters. In the late 1860s, a promising technology appeared that promised to mitigate if not solve such problems: fish culture.

Fish culture was developed in France in the 1840s. There, experimenters developed techniques for reproducing fish, particularly salmon and trout, under closed or contained conditions. While raising fish in ponds was an ancient practice, nineteenth-century fish culture was a new approach that assumed control over reproduction. It involved capturing fish during the spawning season, stripping them of eggs and sperm, which were then mixed to begin fertilization. Fish culturists then used a variety of apparatus to reproduce the natural conditions necessary for egg development. Once fish were hatched, they were raised in hatchery buildings until ready for release. In 1852, the French government under Napoleon III established the first government fish hatchery, a huge complex in Alsace that was called a “piscifatoire” or fish factory. Fish culture was hailed as an improvement over nature because it increased the rate of egg hatching by eliminating

⁵⁰ Gough, *Managing Canada's Fisheries*, 86-87.

⁵¹ Quoted in Gough, *Managing Canada's Fisheries*, 93.

several risks for mortality, including predation. Disseminated through books, periodicals, and personal contacts, fish culture was quickly adopted in North America with the first fish hatcheries established in the United States as private enterprises in the 1850s.⁵²

North American governments took notice of the practice as well. In the United States, state fisheries commissions—established to inquire into and settle conflicts among fishermen over diminishing fish runs—adopted the practice in the mid 1860s. In 1868, the Canada fisheries department was the first to adopt fish culture at the federal scale with the United States following in 1871. State fish hatcheries—described as “machines for increasing the supply of food-fishes”—produced millions of fish for stocking in lakes, rivers, and tidal waters for both commercial and recreational fisheries.⁵³ State fish culturists also facilitated the importation and exchange of exotic species; they introduced non-native species of fish into new waters, refashioning aquatic ecosystems throughout North America, and around the world, to suit both commercial and recreational fishers. By the end of the nineteenth century, fish culture was the technological and institutional keystone of North American fisheries administration. These interventions required interlocking networks of hatcheries—operations of a complexity and scale that only state administrations could facilitate.⁵⁴

Fish culture can be counted among the forms “of experimental and engineering practice” that Patrick Carroll argued characterizes modern state formation. Carroll argues that the incorporation of scientific and technological expertise into government in the nineteenth century helped states extend their rule over people, territory, and environments, and invigorate capitalist development.⁵⁵ As a technology adopted by the state, fish culture shared similarities with other government measures designed to maximize exploitation of natural resources under nineteenth-century liberal modes of

⁵² Darin Kinsey, “‘Seeding the Water As the Earth:’ the Epicenter and Peripheries of a Western Aquacultural Revolution.” *Environmental History* 11 (2006): 535-36.

⁵³ “The American Exhibit at the London Fisheries Exhibition” *Science* 1, no. 15 (May 18, 1883): 418.

⁵⁴ Stephen Bocking, “Stocking the Great Lakes: Fish Culture in the 19th Century,” *Inland Seas* 57, no. 1 (2001): 64-74; Jerry C. Towle, “Authored Ecosystems. Livingston Stone and the Transformation of California Fisheries,” *Environmental History* 5: 1 (2000) 54-74.

⁵⁵ Patrick Carroll, *Science, Culture, and Modern State Formation* (Berkeley: University of California Press, 2006) 13-25

government: as H.V. Nelles has shown in the case of Ontario, the state was a client for capitalist interests, managing public lands and resources for private exploitation by corporations. In forestry, for example, the provincial government subsidized capitalist timber operations through favorable licensing and taxation schemes. Fish culture aimed to support commercial fisheries, but it was harder to determine its economic impact—or indeed if it helped at all. In the absence of proof, but yet enjoying full support from most fisheries constituencies, fish hatcheries served rather as an ideological subsidy. Fish culture was a warrant for expanding capitalist fisheries “without interrupting existing patterns,” as Arthur McEvoy has argued, as increasing exploitation and environmental degradation threatened fish stocks. “It was more politic to give than to deny,” McEvoy noted in regard to American fish culture, “to subsidize rather than police.”⁵⁶

The adoption of fish culture in Canada—and its articulation as a state technology—also evidences the class and gender dimensions that characterized the emergence of fisheries inspection. Fish culture was dominated by men, especially upper- and middle-class men with income to dispose on a practice that required access to land, water, and specialized equipment. Some men were drawn to fish culture as a business opportunity: American Seth Green, for example, established a thriving private fish hatchery in New York that sold, at profitable rates, eggs and fish. Some were drawn to fish culture because it offered to sustain their angling, a primarily masculine sport that became popular in the nineteenth century. Fish culture also attracted supporters of acclimatization, an interest that intersected with natural history. The acclimatization movement began in France in the 1850s and included aristocrats and prominent naturalists interested in exchanging and naturalizing exotic organisms, a form of ecological imperialism.⁵⁷ Their goals were economic—varying “our supplies of food,” as one supporter put it—and recreational, and publicized them at lavish dinners at which exotic animals were consumed in elaborate meals. Whatever their individual interests these men also agreed that fish culture would

⁵⁶ Arthur F. McEvoy, *The Fisherman's Problem: Ecology and Law in the California Fisheries, 1850-1980* (Cambridge: Cambridge University Press, 1986) 106-08.

⁵⁷ Greg Gillespie, *Hunting for Empire: Narratives of Sport in Rupert's Land, 1840-70* (Vancouver: UBC Press, 2007) 75-77; Michael A. Osborne, “Acclimatizing the World: A History of the Paradigmatic Colonial Science,” *Osiris* 15 (2000): 135-151.

create “cheap and wholesome food, as well as individual and general wealth.”⁵⁸ Fish culture thus had a bourgeois constituency, one that shared interests in masculine pursuits such as business, recreation, and natural science—and in man’s ability to control and dominate nature for economic purposes.

This constituency was also responsible for fish culture’s integration into state fisheries administrations. Such was the case with Samuel Wilmot, an enterprising Ontario resident who became the administrative head of Canada’s nineteenth-century fish-culture system. Wilmot, like Moses Perley and Pierre Fortin, was part of an emerging middle-class colonial elite in British North America. Born in 1822 in Upper Canada, Wilmot was the son of a Loyalist land-surveyor who had emigrated from New Brunswick. Wilmot was educated at Toronto’s Upper Canada College—a training ground for the colony’s elite—and inherited the family farm near Newcastle, east of Toronto. Wilmot was active in commerce and municipal government, serving in various offices including county reeve, warden, and justice of the peace. He also defended the colony’s political and social order, reportedly taking part in the suppression of the 1837 rebellion in Upper Canada.⁵⁹

In the 1860s, Wilmot became interested in fish culture and experimented with the propagation of Lake Ontario salmon at his farm. Lake Ontario then contained a population of landlocked Atlantic salmon; these fish had been a staple of native and settler fisheries, but by the 1850s were in decline because of changes in land use including agriculture, dam-building, and deforestation. In 1867, Wilmot built a hatchery on the stream that flowed through his property. Characterizing his project as a “private enterprise commenced by...an amateur for experiment and amusement,” Wilmot dammed the stream in several places to create holding ponds; he also constructed a “Reception House,” a building that controlled the flow of salmon into the hatchery and which provided space to hatch fertilized fish eggs. The entire facility cost more than \$2,000—a substantial sum in 1867—and allowed Wilmot to capture and retain salmon as they journeyed upstream from Lake Ontario to spawn.⁶⁰

⁵⁸ Samuel Wilmot, “Aquaculture and Fish Protection,” *Transactions of the American Fisheries Society* 4 (1875): 23.

⁵⁹ “Mr. S. Wilmot dead,” *The Globe*, May 19, 1899, 10.

⁶⁰ Bogue, *Fishing the Great Lakes*, 19-27; Canada, *Report of Fish-Breeding in the Dominion of Canada for*

In 1868, Wilmot's efforts attracted the interest of the federal fisheries department. Fisheries officers visited Newcastle and enthused about its potential to create a "cheap and immediate increase, capable of almost indefinite extension, in the supply of [fish] to our markets." On their recommendation, Wilmot was appointed a salaried federal fisheries officer and granted state funds to continue his fish-culture work.⁶¹ The hatchery property, however, remained in Wilmot's hands which gave him leverage over a nascent federal fish-culture system. Wilmot was technically and administratively adept. He developed patented devices that automated the tedious labour of egg sorting and cleaning, and devised propagation techniques for other species of fish, including whitefish and lake trout, the two most valuable fish in the Great Lakes fisheries. In 1876, Wilmot was promoted to superintendent of fish culture and in that post developed a network of government hatcheries that stretched across Canada, and which annually produced millions of fish for stocking. In 1881, Wilmot was elected to the executive committee of the American Fish Cultural Association, an association of private and state fish culturists, and the precursor to the American Fisheries Society. By the time of the London fisheries exhibition in 1883, the fisheries department apportioned from one third to one quarter of its annual budget to Wilmot's office.⁶²

Wilmot's rise to this position and power depended in part on his bourgeois status as a landed proprietor and his relative wealth. Indeed, fundamental to fish culture's capture of piscine natural reproduction were two key elements of the liberal order: private property and the individualistic pursuit of profit. Wilmot recognized this feature of fish culture and noted that it was a potentially lucrative enterprise based on private control of water resources: "much profit," he wrote, "has been realized by utilizing springs and

the year 1879 (Ottawa: Queen's Printer, 1880) 6.

⁶¹ Canada, "Special Report of Messrs. Whitcher and Venning, On Fish Breeding at Newcastle, Ontario," Appendix 3, "Seventh Report of the Select Committee on Fisheries Navigation," *Journals of the House of Commons* (Ottawa: 1869) 3; Order-in-Council Number 1868-0538, 27 May 1868, RG2, Privy Council Office, Series A-1-a, Library and Archives Canada, Ottawa; Bogue reference here.

⁶² "Samuel Wilmot," *Dictionary of Canadian Biography*, (Toronto: University of Toronto Press, 1990) 1106-1107; "Fish Culture," *Forest and Stream* 16 no. 10 (1881): 192; Canada, "Report on the Fisheries of Canada for the year 1883," *Sixteenth Annual Report of the Department of Marine and Fisheries* (Ottawa: 1884) xv.

small streams of water on private properties.”⁶³ Federal fisheries officers recognized this as well. When they first considered sponsoring Wilmot’s work, the government also contemplated another arrangement which would grant Wilmot an exclusive license to catch the salmon he produced. The blurring of private and state interests in Wilmot’s hatchery generated considerable friction and resistance in the local area—an indication that the liberal order was resisted and required constant labor to maintain and extend. The Newcastle hatchery was attacked twice in its first years of operation on the suspicion that Wilmot was attempting to engross Lake Ontario’s remaining Atlantic salmon for private gain. In the last incident in 1871, a party of “fifteen vagabonds, with blackened faces and otherwise disguised,” attempted to set fire to the hatchery. They failed, but succeeded in slaughtering all the salmon in the holding ponds.⁶⁴ Attacks occurred elsewhere too for other reasons. People vandalized and torched fish hatcheries in eastern Canada and New England, fearing that hatcheries would create an over-supply of fish and reduce fish prices.⁶⁵

Fisheries officials also began to question fish culture when it became apparent that it did not boost fish populations as promised. In the 1870s, W.F. Whitcher, the fisheries official who had recommended that Wilmot receive state support, cautioned that fish culture could not overcome the environmental impacts of settlement. Throughout North America fish habitats had “undergone a total change,” Whitcher observed, and it was “very doubtful whether, under these altered circumstances, they can ever be restored, even were the costly experiment of restocking them by artificial culture tried.”⁶⁶ Wilmot himself recognized the limits of fish culture under changed environmental conditions. By 1879, salmon numbers in Wilmot Creek had declined; in 1881 only half a dozen adult

⁶³ Samuel Wilmot, “Aquaculture and Fish Protection,” *Transactions of the American Fisheries Society* 4 (1875): 23.

⁶⁴ Samuel Wilmot, “Appendix H to the Report of the Department of Marine and Fisheries,” *Canada Sessional Papers*. 8 (1873) 65. Margaret Beattie Bogue remarks that “nowhere on the Great Lakes...did local residents so clearly show their contempt for fishery regulation and hatchery policies than at Wilmot’s hatchery sites.” Bogue, *Fishing the Great Lakes*, 211.

⁶⁵ Richard W. Judd, *Common Lands, Common Peoples: The Origins of Conservation in Northern New England* (Cambridge: Harvard University Press, 1997) 158.

⁶⁶ Quoted in Gough, *Managing Canada’s Fisheries*, 96.

fish returned despite Wilmot's efforts. "I confess I have little or no faith," admitted Wilmot, "for I fear that the time is now gone by for the production and growth in the frontier streams of Ontario of the salmon."⁶⁷

Despite this setback, Wilmot stoutly defended fish culture. Continuing to contend that fish hatcheries "may be made to produce inexhaustible supplies of food and riches,"⁶⁸ Wilmot developed the Newcastle hatchery into an exhibitionary site that did not just promote fish culture: it also promoted the fusion of his expertise with the state's, and their combined power to construct, and reconstruct, fish populations to sustain economic development. At Newcastle, Wilmot showcased fish culture and his power as a practical bourgeois male—endowed with land, technical acumen, and entrepreneurial energy—that validated the state's involvement in fish culture.

2.5 Exhibiting Fish Culture

It is not known when Wilmot started welcoming visitors to the Newcastle hatchery, but by 1877 it had the appearance of a picturesque public attraction. Easily accessible by railway from Toronto, the hatchery had landscaped grounds through which visitors could wander and observe adult salmon in the holding ponds, "dotted here and there with miniature islands." The hatchery's "Reception House"—where eggs were developed and hatched—was also open to public inspection and showed Wilmot's fish cultural apparatus at work. A natural history museum, located on the Reception House's top floor, rounded out the hatchery's exhibitionary charms. "It is doubtful, indeed," Wilmot boasted, "whether in any other part of the world a more wonderful or pleasing exhibition can be enjoyed at one sight, of such number of large salmon as were enclosed within this small space."⁶⁹

As Darin Kinsey has pointed out, fish culture and exhibitions emerged in the same decade in the nineteenth century. This congruence was fortuitous: fish culture displays

⁶⁷ Samuel Wilmot, "Introduction of California salmon into Ontario," *Bulletin of the United States Fish Commission 1881* (Washington: Government Printing Office, 1882) 3

⁶⁸ Samuel Wilmot, "Aquaculture and Fish Protection," *Transactions of the American Fisheries Society* 4 (1875): 23.

⁶⁹ Canada, *Report of the Commissioner of Fisheries* (Ottawa: Queen's Printer, 1878) 24-25.

became a regular feature of international exhibitions, making a natural fit with their celebration of technological “progress” afforded by capitalist development in nation-states. Fish-culture exhibits, according to Kinsey, “fueled more extensive state participation in fish culture” as well as increasing interest “in fish keeping and breeding as a hobby for the wealthy.”⁷⁰ As such fish culture displays showcased the merging of interests between the state and its bourgeois supporters, reflecting interests in economic development, natural history, and fisheries administration. If, as Joseph Taylor argued in *Making Salmon* (1999), fish culture exhibits were “didactic dioramas of the power of science and technology to improve society and nature,” they were also representations of bourgeois investment in those goals.⁷¹

The representational power of fish culture exhibits is evident in a contemporary of Wilmot’s, English fish-culture supporter Frank Buckland. Buckland’s career parallels Wilmots, including their exploitation of fish culture’s exhibitionary potential. Buckland, the Oxford-educated son of cleric, geologist, and *Bridgewater Treatise* author William Buckland, became interested in acclimatization and began experimenting with fish culture. Buckland quickly achieved a reputation as a fish culture expert and used fish-cultural techniques to conduct long-distance introductions, including trout to Australia. Like Wilmot, Buckland’s private expertise in fish culture led to a state appointment as a fisheries official with Buckland charged with investigating England’s declining salmon fisheries. While he never ran a state hatchery system as Wilmot did, Buckland promoted and popularized fish culture in books, the periodical press, and through live demonstrations of fish culture apparatus at public events.⁷²

In 1865, Buckland received permission from the South Kensington Museum to install a fish culture exhibit. Buckland’s personal collection, which he called the “Museum of Economic Fish Culture,” included plaster casts of fish and a working fish

⁷⁰ Kinsey, “Epicenter,” 539.

⁷¹ Joseph E. Taylor III, *Making Salmon: An Environmental History of the Northwest Fisheries Crisis* (Seattle: University of Washington Press, 1999) 95.

⁷² George C. Bompas, *Life of Frank Buckland* (London: Smith, Elder, & Co., 1885) 103-4; Roy M. MacLeod, “Government and Resource Conservation: The Salmon Acts Administration, 1860-1886” *Journal of British Studies* 7, no. 2 (1968): 126-30; Michael A. Osborne, “Acclimatizing the World: A History of the Paradigmatic Colonial Science,” *Osiris* 15 (2000): 146-48.

hatchery. These provided both instruction and entertainment. As Buckland had earlier discovered, fish culture displays that included live fish—“pretty silver-coated little creatures”—drew throngs of curious observers. A fish culture exhibit at a dog show in London “afforded pleasure and amusement to many thousands of people,” reported Buckland, “who have certainly never seen a salmon alive before.”⁷³ In the museum, Buckland’s display took class instruction as its goal and shifted attention to fish as a cheap food for labourers. His displays were gendered and emphasized fish as a source of masculine bodily strength and labour power. “One pound of whiting [a popular English fish], if digested and oxidized in the body,” noted the collection’s catalogue, “will produce a force equal to 491 tons raised one foot high.” And while fish were not as digestible or productive as “butcher’s meat,” fish nevertheless contained muscle-building compounds, which led Buckland to urge that fish “be introduced into all dietaries.”⁷⁴

Buckland’s paternalistic approach to fish as food exemplifies how nineteenth-century museums undertook the public education of the lower classes. This goal was, as Tony Bennett argues, an attempt to reform their morals and habits and make them more self-governing—and productive—within liberal capitalist society. The Newcastle hatchery likewise framed fish as “cheap and wholesome food.”⁷⁵ In Ontario, which was undergoing increasing urbanization and immigration, the production of fish by artificial means offered to meet the food needs of a growing population and industrial workforce. As I have argued elsewhere, Wilmot viewed fish culture as primarily a support for commercial fisheries. This was particularly evident in Ontario where Wilmot focused on the production of the two most commercially valuable fish species, whitefish and lake trout. These fish were under increasing pressure in the Great Lakes during 1870s with catches growing every year. In 1871 Wilmot began producing whitefish at the Newcastle hatchery and lake trout in 1872; in 1875 he supervised the construction of a whitefish

⁷³ Bompas, *Frank Buckland.*, 1885) 127.

⁷⁴ *Inventory of the Food Collection Arranged in Alphabetical Order*, Science and Art Department of the Committee of Council on Education. (London: Her Majesty’s Stationery Office, 1869) 4.

⁷⁵ Samuel Wilmot, “Aquaculture and Fish Protection,” *Transactions of the American Fisheries Society* 4 (1875): 23.

hatchery on the Detroit River at Sandwich, Ontario.⁷⁶

At Newcastle, however, Wilmot's exhibitionary focus was less on fish culture's quantitative contributions than its qualitative values. The hatchery was laid as a site of bourgeois "rational recreation," a hybrid of zoological garden and industrial exhibition that provided instruction and entertainment. A set of eleven illustrations, which Wilmot commissioned for the fisheries department's annual report, showed the hatchery from a variety of perspectives. Several views emphasized Wilmot's technological innovations with views of fish-breeding equipment and a schematic drawing of his patented "Self-picking and cleaning apparatus." Other views brought the park and the hatchery ponds into closer focus as a genteel setting for respectably dressed men, women and children to view salmon and observe their previously hidden reproductive cycle. A view depicting the museum showed similarly decorous visitors inspecting Wilmot's collection of mounted fish and mammals. Two large illustration completed the set. One was a bird's-eye view revealed the hatchery's rational layout, while an oblique aerial view showed Wilmot's large residence looming over the hatchery.⁷⁷ (See figure 1).

These views no doubt idealized the hatchery. A contemporary newspaper account, however, supports the general impression of the Newcastle hatchery as an efficient technological operation and public attraction. A Toronto *Globe* reporter visited the hatchery and found both entertainment, education, and proof of Wilmot's entrepreneurial skill at what the reporter called the "model school of the continent." The reporter found several impressive displays: the fish-hatching apparatus, for example, demonstrated Wilmot's skill in industrializing fish culture. His patented egg-cleaning apparatus reduced labour: what had once taken "forty little boys and girls to do can be attended by one."⁷⁸ Displays of apparatus however could also be enjoyed in their own right as displays of technical ingenuity or mechanical aptitude apart from their economic or

⁷⁶ William Knight, "Samuel Wilmot, Fish Culture, and Recreational Fisheries in late 19th century Ontario." *Scientia Canadensis* 30 (2007): 81-82.

⁷⁷ Canada, *Report of Fish-Breeding in the Dominion of Canada 1877* (Ottawa: MacLean, Roger & Co., 1878) 24-26.

⁷⁸ *The Globe*, Thursday, 15 December 1881, 5.

scientific utility.⁷⁹ Aquarium exhibits provided similar possibilities for education and entertainment. Wilmot set up aquarium tanks to educate visitors about fish species and behaviour: several tanks displayed commonly mis-identified fish species to clear up confusion, while another was kept purposely cold to demonstrate the torpidity of fish during winter. To the reporter, this behaviour had more of a mesmerizing than educational effect. “There is a bass, and during the writer’s stay, two hours, that fish never moved a fin,” the correspondent reported.⁸⁰

The museum collection provided a similar experience. The collection was eclectic: it included spectacular specimens of fish and animals, including a 600-pound tuna, a ten-foot long Greenland shark, “an immense moose,” and the “Pickering Ox,” a mounted local prize-bull—none of which had any connection to fish culture. These specimens, however, offered the lure of the gigantic and exotic, forms of spectacle that both museums and popular side-shows exploited. The collection also marked Wilmot as a natural history collector, a role associated with male bourgeois distinction. The *Globe* noted Wilmot’s central role, describing him as a wide-ranging connoisseur of natural history. “Besides having a special taste for ichthyology,” the correspondent reported, “he is likewise on a general scale a naturalist, and a taxidermist as well.”⁸¹

Indeed Newcastle demonstrated Wilmot’s mastery several different forms of contemporary natural history display, including the zoological garden, the museum, and the aquarium. All of these became popular in the nineteenth century and have been associated with bourgeois “rational recreation,” the distinctive form of Victorian middle-class self-improvement.⁸² Zoological gardens, museums, and aquariums instructed and delighted, offering a moral, enlightened form of amusement. Displays of dead and live animals suggested bourgeois self-confidence in “taming the natural order”—and

⁷⁹ Martin Hewitt, “Science As Spectacle: Popular Scientific Culture in Saint John, New Brunswick, 1830–1850,” *Acadiensis* 18 (1988): 106.

⁸⁰ Canada, *Report of the Commissioner of Fisheries* (Ottawa: Queen’s Printer, 1878) 24–25; *The Globe*, Thursday, 15 December 1881, 5.

⁸¹ “The Fish Nursery,” *The Globe*, Thursday, 15 December 1881, 5.

⁸² Peter Bailey, *Leisure and Class in Victorian England: Rational Recreation and the Contest for Control 1830–1885* (Toronto: University of Toronto Press, 1978).

regulating the human one.⁸³ Museums and exhibitions inculcated norms for respectable public behaviour and citizenship, as well as faith in national progress and capitalism. An impresario of these bourgeois modes of cultural schooling, Wilmot demonstrated facility as he built his public profile, and attracted support for fish culture's integration into Canadian fisheries administration. Representations of the hatchery blurred the distinction between Wilmot the private bourgeois entrepreneur and Wilmot the state fisheries official, something that Wilmot himself cultivated. On one hand the hatchery's "handsome and commanding appearance" helped demonstrate that fish culture was, according to Wilmot, a "national enterprise." At the same time, the exhibition was a testament to Wilmot's own abilities, "proof throughout," he argued, "of the exercise of practical ingenuity and personal industry."⁸⁴

Wilmot's capacity for self-promotion was large. In the journal of the American Fish Culturists' Association, Wilmot wrote with blithe self-importance about his work: "Reference being made here to the Newcastle fish breeding works in Ontario, it will not be taken in the light of self-laudation for me, the sole originator of that institution, to state that from it has sprung all of the national and State fish breeding establishments on this continent."⁸⁵ Promoting himself, Wilmot also promoted the political and social order that sustained his hatchery and which fish culture proposed to support with endless supplies of fish. Fish culture was an ideological technology: developed and disseminated in male bourgeois milieu, it aimed to sustain capitalist fisheries and produce cheap food for the working classes without clear proof it accomplished either goal and against some resistance. Wilmot elaborated a private hatchery into an extensive state fish-culture system that materialized and extended fisheries administration as technological infrastructure. At Newcastle, the hatchery and Wilmot's mastery of technology and nature, became the exhibition.

Wilmot's self-promotional and exhibitionary skills came to have wider

⁸³ David Blackburn quoted in Nigel Rothfels, *Savages and Beasts: The Birth of the Modern Zoo* (Baltimore: The John Hopkins University Press, 2002) 22.

⁸⁴ Canada, *Report of the Commissioner*, 25.

⁸⁵ Samuel Wilmot, "Aquaculture and Fish Protection," *Transactions of the American Fisheries Society* 4 (1875): 25.

application in 1882. That year the Canadian government received an invitation to participate in the London fisheries exhibition in 1883 and turned to Wilmot for advice. Wilmot became the chief organizer of Canada's display, which marked the Canadian fisheries department's first appearance at an international fisheries exhibition. Wilmot's skills, developed at Newcastle, helped the department mount a large-scale model of Canadian fisheries administration. Fish culture was front and center, given Wilmot's role, but so too were regulation and protection. Canada's display at the London Fisheries Exhibition became an index to the bourgeois constitution of fisheries as a male-dominated, state-administered object. In the following sections I turn to the London fisheries exhibition and its conceptual ordering of fisheries and, in turn, Samuel Wilmot's material modeling of Canadian fisheries administration.

2.6 The “systematics of fisheries”

The London fisheries exhibition, self-styled the “Great International Fisheries Exhibition,” was the latest in a series of fisheries-specific exhibitions. Between 1861 and 1883, fisheries exhibitions were staged in the Netherlands, France, Norway, Germany, and Italy—countries (with the exception of Italy) that were engaged in the intensifying fisheries of the northeast Atlantic Ocean. Industry-specific exhibitions were similar to “universal” fairs, which celebrated progress in displays of consumer goods, industrial wares, and cultural productions. Canadians had been regular participants in exhibitions since before Confederation, most notably at the 1851 Crystal Palace exhibition where Geological Survey director William Logan had won awards and accolades for his display of minerals. These exhibitions, as Elizabeth Heamen argues, “helped establish a discourse about Canada which praised its economic resources and its bustling, practical populace, and claimed a place for it in the ‘confederacy of nations.’”⁸⁶ While universal exhibitions enrolled visitors in a multi-sensory celebration of capitalism and the nation-state, industry-specific fairs—which have not received much attention from scholars—invited observers to scrutinize one aspect of modern production within capitalism.⁸⁷

⁸⁶ E.A. Heamen, *The Inglorious Arts of Peace: Exhibitions in Canadian Society during the Nineteenth Century* (Toronto: University of Toronto Press, 1999) 180.

⁸⁷ Paul Greenhalgh, “Education, Entertainment and Politics: Lessons From the Great International

Fisheries exhibitions modeled fisheries at the scales of the nation and capitalism, exhibiting the “productive and co-ordinating powers of capital and the state” and projecting the rightness of both as organizing principles.⁸⁸ In the last half of the nineteenth century, European and North American fisheries underwent profound change as state administration, scientific investigation, and capital investment intensified. Capitalism invested fisheries with steam technology, which extended the range and catching capacity of fishing fleets. Fishing gear also changed: larger trawl nets, adapted for steam vessels, could capture more fish. State administration, as I have shown for Canada, expanded through inspection, statistical investigation, fish culture, and commissions which investigated specific problems, including the impact of steam trawlers. States also dealt with international conflicts which heightened as fishing fleets scouted for fish farther abroad. Governments supported scientific expeditions and established marine biological stations to investigate the dynamics of ocean life and the causes of sudden collapses in fishing stocks. New questions were posed: what factors determined marine productivity and fluctuations in catches? How could catches be maintained as fishing effort increased? In 1883, the London fisheries exhibition provided a nexus, a “centre of calculation,” where new question and new technologies could be revealed and tested.⁸⁹

Before any nation could be solicited to participate, or any object sent to exhibit, however, the exhibition required a conceptual framework, an exhibitionary order, that would render the fisheries into a coherent object for public consumption. At the London Fisheries Exhibition, this was the work of the exhibition catalogue. Exhibition catalogues have received little attention from scholars who have focused on people and exhibits. Catalogues, in contrast, are bulky ephemera that appear dull and lifeless. Robert

Exhibitions,” in *The New Museology*, edited by Peter Vergo (London: Reaktion books, 1989) 75; Paul Greenhalgh, *Ephemeral Vistas: The Expositions Universelles, Great Exhibitions and World's Fairs, 1851-1939* (Manchester: Manchester University Press, 1988) 77.

⁸⁸ Bennett, *Birth of the Museum*, 81.

⁸⁹ Callum Roberts, *The Unnatural History of the Sea* (Washington: Island Press/Shearwater Books, 2007) 147; W. Jeffrey Bolster, *The Mortal Sea: Fishing the Atlantic in the Age of Sail* (Cambridge: Harvard University Press, 2012) 165-67; Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Milton Keynes, UK: Open University Press, 1987) 237.

Harbison, however, contends that catalogues are the “intellectual superior of the exhibition.” “A catalogue’s largest function,” Harbison proposes, “is to create subjects, to give names, or to put topics in touch with a supply of particulars, to bring data to a generalization.”⁹⁰ Catalogues call exhibitions to order and shape their physical manifestation. And once the exhibition is installed, the catalogue offers a synoptic view unavailable to the observer strolling among its displays.

American fisheries and museum administrator George Brown Goode recognized this dual value. Classifications and catalogues served “as guides for forming as well as for viewing the collections.” Goode, who had experience assembling both catalogues and classifications, also acknowledged the contingency of classifications. No rules governed their arrangement and no system could “ever be fully satisfactory to all.” But it was nevertheless necessary to establish categories that provided “a certain logical sequence of ideas,” as Goode put it, which illuminated relationships and similarities. This was the practice of systematics, the identification and description of biological life according to observable similarities, which was the core of eighteenth and nineteenth-century natural history. Exhibition classifiers like Goode—who were also natural historians—sought to likewise systematically organize industries.⁹¹

The fisheries exhibition classification consisted of six classes: “Fishing;” “Economic Condition of Fishermen;” “Commercial and Economic;” “Fish Culture;” “Natural History;” and “History and Literature of Fishing—Fishery Laws—Fish Commerce.” These identified the ideas and objects called to the exhibition; they also validated the network of actors which produced them, which were primarily national governments and those with interests in capitalist fisheries. The classification was also important for what it excluded, particularly women. As gender historians have recognized, the absence of women was crucial to structuring male power. The

⁹⁰ Robert Harbison, “Contracted World: Museums and Catalogues,” in *Eccentric Spaces*, edited by Robert Harbison (New York: Alfred Knopf, 1977) 157.

⁹¹ *The Smithsonian Institution 1846-1896. The History of Its First Half-Century*, edited by George Brown Goode (Washington: Government Printing Office, 1897) 727; George Brown Goode, *First draft of a system of classification for the World’s Columbian Exposition* (Washington: Government Printing Office, 1893) 649.

classification constructed the fisheries as a male enterprise that was carried on without female participation, although they were critical to shore-based processing and marketing. Women appeared only once in the catalogue with a reference to “fish wife,” a term that only hinted at those important roles women played. Class II, “Economic Condition of Fishermen,” for example, focused on the gendered material and textual boundaries of a fisherman’s life in categories such as “Apparel and Personal Equipment” and “Contracts of Partnerships, Insurances of Life.”⁹²

It is also notable how the classification dealt with fish, the material basis of fisheries. The classification, for example, did not recognize fish until Class III—“Commercial and Economic,” a category that defined fish as a variety of commodity. This category preceded the classification’s later recognition of them as live animals in Class V, “Natural History. It was only in Division 51 of this class—“FISH OF ALL KINDS”—that were fish accorded a separate if emphatic category to themselves. Even this category, however, was not exclusive to fish as it also contained creatures whose inclusion in the fisheries was predicated on the harm they posed. This included birds “hostile to fish or fishing” and mammals, like otters, that were “detrimental to fish.” The classification was thus not a neutral representation. It was a political representation of fisheries, which modeled the domain within certain limits defined by governmental, economic, and scientific interests. As a “systematics of fisheries,” this pattern of classification reflected the interests of bourgeois men including Moses Perley, Pierre Fortin, and Samuel Wilmot.

2.7 Canada at the London Fisheries Exhibition

In June of 1882 the Canadian government received its invitation to participate in the London fisheries exhibition. Prime Minister John A. Macdonald forwarded it to his fisheries minister A.W. McLelan with a scrawled request for an “immediate report.”⁹³ McLelan turned to Samuel Wilmot who, on the strength of his exhibitionary work at

⁹² Kathryn M. McPherson, Nancy M. Forestell, Cecilia Louise Morgan, eds. *Gendered Pasts: Historical Essays in Femininity and Masculinity in Canada* (Toronto: University of Toronto Press, 2003) 3.

⁹³ “Circular,” 6 May 1882, Order-in-Council #1882-0896 E, RG2, Privy Council Office, Series A-1-a, Library and Archives Canada, Ottawa.

Newcastle, was appointed to examine the scope and costs of Canada's participation. Wilmot warned that a considerable sum would be required to mount an exhibit that met "the legitimate scope of the exhibition." The major obstacle was that Canada did not possess a fisheries collection such as the United States possessed at the Smithsonian. While the United States could draw on that institution's "inexhaustible resources," "much labour" and significant funds would be needed for Canada to participate in the London fisheries exhibition.⁹⁴

Factoring in shipping costs and expenses for managing the exhibition in London, Wilmot estimated that \$35,000 would be needed to mount a display. Fisheries minister McLelan was unabashed by the sum, which amounted to more than a third of the fisheries department's annual budget. McLelan argued the cost was trifling in comparison to the annual value of Canada's fisheries, which he estimated at \$20-million. An exhibition would also serve other purposes: it would attract migrants and assert Canada's stake in "any question of International Fishery relations that may arise."⁹⁵ McLelan recommended to Macdonald that the government participate in the London exhibition; Macdonald agreed and appointed Samuel Wilmot "to prepare with all diligence and with proper economy for an exhibit that will do justice to the fishery of Canada."⁹⁶

Although he complained that he was not given enough time to prepare a proper display, Wilmot began gathering objects. Wilmot drew on several masculine networks, including the fisheries department's corps of inspectors and overseers, to assemble the Canadian collection. This included past members, notably Pierre Fortin, who supplied specimens of deep-sea fish and a Gaspé fishing dory. Wilmot also solicited collections from Canadian natural historians, including Dr. David Honeyman, curator of Nova Scotia's provincial museum; McGill University president George Mercer Dawson; and notable entomologist William Saunders, who lent a collection of insects "harmful to

⁹⁴ A.W. McLelan, memorandum, 22 July 1882, Order-in-Council #1882-0896 E, RG2, Privy Council Office, Series A-1-a, Library and Archives Canada, Ottawa.

⁹⁵ A.W. McLelan, memorandum, 22 July 1882, Order-in-Council #1882-0896 E, RG2, Privy Council Office, Series A-1-a, Library and Archives Canada, Ottawa.

⁹⁶ John A. Macdonald, memorandum, 26 July 1882, Order-in-Council Number 1882-0896 E, RG2, Privy Council Office, Series A-1-a, Library and Archives Canada, Ottawa.

fish.” Sportsmen also donated objects: a former military officer loaned a model of a beaver lodge model and oil paintings of Indians spearing fish. Wilmot, who also collected specimens, assembled a large collection and, in April 1883, shipped its 500-ton bulk to London aboard the fisheries steamer “Newfield.” Wilmot accompanied the collection and supervised its installation in a 10,000-square-foot rectangular gallery on the fisheries exhibition’s grounds.

When the Great International Fisheries Exhibition opened in London on May 12, 1883, the *Illustrated London News* devoted its front page to the event. “The International Fisheries Exhibition at South Kensington,” the periodical claimed, “promises to be the most striking novelty of the London season, and a formidable rival of the art galleries.”⁹⁷ The fisheries exhibition proved indeed popular, attracting more than three million visitors to its 22-acre grounds over the course of six months. Inside the pavilions, visitors could browse displays of fish and fishing technologies from 37 nations or attend a fisheries congress where fisheries officials debated regulation and fish culture. Outside, on the exhibition grounds, visitors could inspect a phosphorescent whale skeleton or gather around a pond to watch a diver who “worked under water daily with a telephone attached to his helmet.”⁹⁸

Exhibitions were masculine affairs. Although women attended fairs, their participation as exhibitors was limited until the latter part of the nineteenth century. At the fisheries exhibition, women were relegated to the margins, reinforcing that the fisheries were a male domain. Women appeared in domestic roles or as decorative objects; in the latter role, young women dressed in national folkloric costumes appeared at the exhibition’s opening ceremonies. They served as allegorical representations of the nations in attendance and were, the *Illustrated London News* remarked, “the observed of all observers.” Such displays emphasized that, as Elizabeth Heamen argues, “the power and privilege of vision was vested in men.”⁹⁹ Women were also present in the exhibition restaurant: it offered fair-goers fish dinners prepared under the supervision of the “Lady

⁹⁷ *Illustrated London News*, May 19, 1883, 486.

⁹⁸ *The Great International Fisheries Exhibition of 1883*, edited by Arthur Trendell (London: William Clowes and Sons, 1883) xlix.

⁹⁹ Heaman, *Inglorious Arts*, 263; *Illustrated London News*, May 19, 1883, 486.

Superintendent” of the National School of Cookery.¹⁰⁰ Women in this case were present in their rightful sphere, the domestic space of food preparation and serving. Men prepared the exhibits and in the conference debated and discussed the importance of fisheries and their management of them.

The Canadian exhibit—known as the Canadian Court—was dominated by representations that emphasized the male-dominated world of production and administration. The Canadian Court was captured in London by a photographic company that produced a souvenir album, a copy of which was presented to a fisheries official upon his retirement in 1894 and which is now in Canada’s national archives. The album contains 12 images taken from several different perspectives that, along with a diagram of the display’s arrangement, enable us to see what objects were displayed and how. Positioned prominently at the front of the Court stood Wilmot’s working model of a fish hatchery. Beyond this were long rows of specimens of dead fish, mounted in individual cases. Large specimens of sturgeon, shark, and halibut, and marine mammals were scattered around the exhibit, displayed on the floor or mounted on poles.¹⁰¹ Fish were also presented in commodity form: frozen, dried, salted, and tinned. In addition, the Canadian display contained numerous models of fishing boats and dioramas of fishing villages, along with full-size objects, including a Gaspé fishing dory fully rigged with its sails. In an exterior passage, the Ontario Canoe Company displayed its canoes propped up against the court’s exterior wall. Between the canoes were display cases exhibiting fisheries-related texts. The Canadian exhibit also extended outside to exhibition pond where Maliseet fishing guide Gabriel Auquin demonstrated fishing and canoe-paddling techniques, demonstrating “the rude appliances for the capture of fish, as used by the Indians in this country.”¹⁰²

As George Brown Goode later noted “[a] *unit of classification* is not necessarily a *unit of installation*.”¹⁰³ Lacking the clear order of the classification, the spatial corralling

¹⁰⁰ *The Great International Fisheries Exhibition of 1883*, edited by Arthur Trendell (London: William Clowes and Sons, 1883) xlix and xxxix.

¹⁰¹ *Illustrated London News*, May 19, 1883, 509.

¹⁰² *Ibid.*, xxii.

¹⁰³ Goode, *First draft of a system of classification*, 650.

of exhibits required visual and textual cues that reinforced Canada as the administrative unit responsible for the collection. At the south end of the hall, the words “Dominion of Canada” stretched across the wall above a gigantic map of Canada that measured 15 by 30 feet. Flags hanging from the rafters also marked the display as Canadian. If visitors missed these cues, paper signs reading “The Dominion of Canada” were affixed to cases and sometimes directly on exhibits throughout the court. And while marking objects seem clear and common-sensical, Samuel Wilmot noted that the American exhibit lacked signage that unified the objects under a national rubric. There was no mistaking the national import in the Canadian Court: “[t]he whole of the exhibits in the Canadian court were entered and shown in the name of the “Dominion of Canada,” thus presenting to the exhibition visitors and jurors, “but one name, or one exhibitor from Canada.”¹⁰⁴

In the center of the Canadian Court stood the exhibit’s spectacular focal point: the trophy, a 54-foot-high pyramid of tinned fish, fishing gear, and nets, surmounted with the flags of Canada, and topped by a stuffed 50-pound beaver (figure 2.5). A trope of Victorian exhibition and retail display, the trophy marked Canada as an exporter and symbolized the state’s power to organize and administer the fisheries. In Susan Stewart’s conception, the gigantic is a mode suited to public history, a symbolic form that serves to buttress state authority. Supplementing this trophy was a smaller “scientific trophy,” which presented a variety of alcohol-preserved fish and marine animals. These specimens demonstrated Canadian ability to identify its fish fauna and understand fish as objects of science as well as commerce. Commerce, however, was never far off. Surrounding the scientific trophy were barrels of dried salt cod, open for inspection. Both represented Canadian ability to differentiate and standardize fish according to scientific and commercial rationales, as the exhibition classification demanded.¹⁰⁵

Miniatures and dioramas also played a role in representing the administrative modeling of Canadian fisheries. The Canadian Court contained numerous scale models, including ship models and dioramas of fishing villages. Dioramas are scale-model scenes,

¹⁰⁴ Canada, “Canada at the Great International Fisheries Exhibition, London,” xxxii.

¹⁰⁵ “Fisheries Exhibition,” *The Globe*, May 24, 1883, 5; Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection*, paperback ed. (Durham: Duke University Press, 1993) 71.

often of historical human activities. Marzia Varutti argues that dioramas reduce not just size but complexity: they enable viewers to look down on scenes from a position of “comfort and control.” Such miniatures can also be used to support “national narratives of unity, harmony and progress.”¹⁰⁶ These exhibits miniaturized Canadian fisheries into a form that was at once quaint and graspable, arranging them for close inspection much as Perley and Fortin had earlier presented fisheries in textual form. Ship models also showed that Canadians were able to adapt ship design to meet the specific requirements of different fisheries. A model of a Lake Ontario steam tug, for example, demonstrated that capital-intensive technology was being applied Canada’s inland fisheries. Dioramas of villages, hatcheries, and processing plants pointed to infrastructural organization and suggested to viewers that Canadians had rationally ordered their landscapes to support large-scale production of fish.¹⁰⁷

The pride of place in the Canadian Court, however, was reserved for Samuel Wilmot’s miniaturized working fish hatchery (figure 2). The display was prominently situated near the Court’s south entrance and drew such crowds that one official claimed that it made the Canadian Court “impassable.” The model hatchery consisted of a scaled-down presentation of the fish culture apparatus Wilmot had invented and installed in his Newcastle hatchery. It included of a trough containing 50,000 salmon eggs that were washed by a continuous stream of running water. Beside it stood Wilmot’s patented “Self-Picking and Self-Cleaning Canadian Fish Egg Incubator,” an series of tall glass vases that automated the tedious labour of hand-sorting and cleaning fish eggs. Beside the miniature hatchery apparatus stood a scale-model of Wilmot’s “reception house,” the structure that contained the hatchery operation and Wilmot’s natural history museum. The model house resembled a doll’s house and duplicated in exquisite detail the building’s board-and-batten siding and decorative gingerbread gables.¹⁰⁸ The display,

¹⁰⁶ Marzia Varutti, “Miniatures of the Nation: Ethnic Minority Figurines, Mannequins and Dioramas in Chinese Museums,” *Museum and Society* 9, no. 1 (2011): 3, 12.

¹⁰⁷ For a recent discussion on fishing infrastructure see Michael J. Chiarappa, “Dockside Landings and Threshold Spaces: Reckoning Architecture’s Place in Maritime Environmental History,” *Environmental History* 18 no. 1 (January 2013): 16.

¹⁰⁸ Canada, “Canada at the Great International Fisheries Exhibition, London,” xxix.

which won a gold medal for the “Best and most complete fish-breeding establishment in the Exhibition,” represented Canada’s ability to biologically control its fish. Within the Canadian model of fisheries—one shared by many western nations—nature could be supplanted by a machine that more efficiently conducted the task of reproduction.¹⁰⁹

Canada’s model of fisheries was not just articulated through material objects. Samuel Wilmot actively participated in the fisheries exhibition’s conference—a masculine arena where Wilmot and other men engaged in debates about the material model of fisheries proposed in the exhibition and in the Canadian Court. In an address to the conference in July 1883, Wilmot offered a progressive history of Canadian fisheries administration, emphasizing the benefits of centralization and inspection, the work that Perley and Fortin had pioneered:

At the time of the Confederation...when the seven Provinces were brought together, it was deemed so important that the fisheries should receive protection that a Cabinet was formed for the purpose which had been of vast service in bringing about many tidings which otherwise would not have been accomplished. Statistics were obtained from the fishermen, the fishery officers, and various other resources, which were collected and submitted to Parliament annually, and Parliament legislated on any improvement which might be required for the purpose of advancing the general interests of the fisheries or the fishermen.¹¹⁰

Other congress delegates recognized Canada’s preeminence in fisheries administration and saw it embodied in the presence of Canada’s fisheries minister, A.W. McLelan, at the exhibition. To Sir Francis Philip Cunliffe-Owen, member of the exhibition committee, McLelan “shed lustre on the Exhibition by his presence and active assistance, [and] was, he believed, the only Minister of Fisheries throughout the civilized world.”¹¹¹

Although praise for Canadian fisheries administration appeared universal, Wilmot found it necessary to defend it against criticism. During the fisheries conference Wilmot confronted the imminent British scientist Thomas Henry Huxley on the question of

¹⁰⁹ Ibid., 43-44; Taylor, *Making Salmon*, 91-92.

¹¹⁰ Samuel Wilmot, *Canada at the Great International Fisheries Exhibition, London, 1883* (Ottawa: A.S. Woodburn, 1884) 51-52.

¹¹¹ Wilmot, *Canada at the Great International Fisheries Exhibition*, 34-35.

fisheries regulation. Huxley, who had proclaimed the inexhaustibility of ocean fisheries, argued a corollary idea: that fisheries did not require legislative protection because fishing's impact was negligible compared to natural predation. "The multitude of these fishes is so inconceivably great," Huxley explained in the exhibition's inaugural address, "that the number we catch is relatively insignificant; and secondly, that the magnitude of the destructive agencies at work upon them is so prodigious, that the destruction effected by the fisherman cannot sensibly increase the death rate."¹¹² Styling himself as a "practical man," Wilmot claimed that Huxley's ideas contained "too much theory and too much science without practical knowledge at the bottom of it."¹¹³

Although Huxley had qualified his claim about the ocean's inexhaustibility and was not in fact attacking fish culture—he replied that fish culture was better than "inefficient protection"—Wilmot was defensive because of increasing attacks on fish culture in Canada. In London, Wilmot had to refute the criticism of fellow Canadian fisheries official W.F. Whitcher. Whitcher had raised doubts about fish culture in the 1870s and continued his attack just as the exhibition opened. Whitcher, writing in the American publication *Forest and Stream*, did not doubt that fish culture produced fish far exceeding "the produce of natural operations;" he doubted, however, that hatched fish survived and "re-appeared in commercial and industrial channels as a commodity of trade and an article of supply." Whitcher compared hatchery production to commercial landings and concluded that fish culture had made no impact. He noted that fish culturists were then gathered at the London exhibition and hoped they would "give assurance to the public tax-payer that we are reaping or shall sooner or later reap the fruits of so much zealous and expensive labor."¹¹⁴ Whitcher went so far as to prepare and distribute an off-print of the article, a "circular" that was much discussed by fish culturists present at the exhibition, including George Brown Goode, the prominent American fisheries administrator who noted during the exhibition "that certain documents had been

¹¹² Thomas Henry Huxley, "Address by Professor Huxley, F.R.S." *The Fisheries Exhibition Literature*, vol. 4 (London: William Clowes and Sons, 1884) 14.

¹¹³ Wilmot, *Canada at the Great International Fisheries Exhibition*, 38-39.

¹¹⁴ W.F. Whitcher, "Practical Results of Fish Culture in the Dominion of Canada," *Forest and Stream* 20 (1883): 408.

distributed from Canada” that cast doubt on fish culture.

Wilmot attempted to deflect the attack by calling Whitcher a “well-known official grumbler in Canada.” With Whitcher attacking propagation with “under the belt” attacks on one hand, and Huxley undermining protection on the other, Wilmot rallied to defend Canadian fisheries administration in London.¹¹⁵ He received support from another Canadian delegate, Louis-Zéphirin Joncas. Joncas was a Gaspé lawyer, politician, journalist, and fishing-company manager and—like Perley, Fortin, and Wilmot—a member of the middle-class vanguard.¹¹⁶ In his address, Joncas extolled Canada’s strict regulatory regime and hearkened back to its foundation by recognizing Fortin’s contributions. Joncas had previously served as Fortin’s personal secretary and succeeded him in the House of Commons; Joncas borrowed long passages from Fortin’s work in his address as he questioned, as Wilmot had done, Huxley’s inexhaustibility thesis. Both freshwater and marine fishes required protection “specially when they come near to the coast for the purpose of spawning.” Canada, however, had already recognized the value fisheries and protected them. “[O]ur legislators have acted very wisely, I think, in subjecting them to strict regulations,” Joncas declared. Joncas praised Fortin’s role in bringing administrative order to Canada’s fisheries, citing his “energetic efforts” to establish measures such as a national maritime telegraph service—represented in the Canadian Court by a map and sample telegraph bulletin—that connected the federal fisheries department with fishing ports to relay “immediate information given of the appearance of fish at any locality.”¹¹⁷

In recalling Fortin, Joncas also re-circulated Fortin’s ideas and recalled his formative role in fostering the fisheries inspectorate. Fortin was also embodied in the Canadian Court exhibit in several material models. In addition to the full-size Gaspé fishing dory, Fortin contributed specimens of aquatic creatures that he collected during his inspectorate expeditions in 1860s. Also on display was a model of “La Canadienne,”

¹¹⁵ Wilmot, *Canada at the Great International Fisheries Exhibition*, 47.

¹¹⁶ Marc Desjardins, “Joncas, Louis-Zéphirin” in *Dictionary of Canadian Biography Online*, edited John English and Réal Belanger, http://www.biographi.ca/009004-119.01-e.php?id_nbr=4652 accessed 15 January 2013.

¹¹⁷ L. Z. Joncas, *The Fisheries of Canada* (London: William Clowes and Sons, 1883) 31-44.

the patrol vessel that afforded Fortin's supervision of the St. Lawrence's fisheries. These material objects materialized Fortin and his role in articulating fisheries as an administrative domain in colonial Canada in the 1850s and 1860s. In London they were conceptual resources—and material testaments—that rallied to sustain Wilmot's defense of Canadian fisheries administration.

Moses Perley was also present in London. It is not clear whether his reports for New Brunswick figured among the Canadian Court's exhibit of fisheries texts—Division 55 of the classification—which appeared amid the canoe display. Perley was implicated, however, through a native fishing display. “An Indian chief, Gabe Acquin, in full costume, fresh from the Dominion of Canada, who has his birch-bark wigwam in the grounds,” reported exhibition observer Frederick Whymper, “illustrates daily, in his birch-bark canoe, over eighteen feet in length, the aboriginal modes of spearing and catching fish.”¹¹⁸ Ethnographic displays at international exhibitions, as Robert Rydell and Paige Raibmon have pointed out, demonstrated to fair-goers “the distance between the modern and the traditional—an opposition rooted in racial difference.”¹¹⁹ Live performances of primitive cultures “served to illustrate the political and moral necessity of government policies such as removal, reservation, religious conversion and assimilation through education.”¹²⁰ At the fisheries exhibition, Acquin's performance materialized in an indirect way the partitioning of New Brunswick's salmon fisheries that Moses Perley had helped institute.

Gabriel Acquin was a Maliseet man who lived in a native community opposite to Fredericton on the St. John River in New Brunswick. There he gained a reputation as a hunting and fishing guide among the British military garrison. His presence in Fredericton and his work as a guide can be traced to Perley's work as an Indian and fisheries inspector. In 1841, Moses Perley recommended that Maliseet people be moved from their traditional settlements and consolidated in one reserve; this displacement

¹¹⁸ Whymper, *Fisheries of the World*, 98.

¹¹⁹ Paige Raibmon, *Authentic Indians: Episodes of Encounter from the Late 19th Century Northwest Coast* (Durham: Duke University Press, 2005) 3.

¹²⁰ *Ibid.*, 36.

resulted in Acquin's settlement in St. Mary's, across the river from Fredericton.¹²¹ Perley also shaped Acquin's career as a guide. As British North America's first fisheries commissioner, Perley recommended leasing the colony's salmon rivers to sportsmen. Instituted into law in 1862, this measure effectively excluded native fishermen from their former fishing places in favor of elite white anglers. Salmon rivers in New Brunswick became a refuge for white urban elites, who built rustic lodges along their wooded banks and instituted strict supervision over their leased angling waters. Perley also supported a ban on salmon spearing, an Aboriginal fishing technique. Within this new moral economy of sport, based on the enclosure of salmon rivers, native men such as Gabriel Acquin were reincorporated as waged fishing guides.¹²²

Acquin's performances at the London fisheries exhibition thus played out the capture of Aboriginal fisheries that Perley had helped institutionalize. The performance also illuminated what Bill Parenteau calls the "contradiction between the code of the sportsman and the cult of wilderness" generated when European sportsmen fished under native guidance.¹²³ The *Illustrated London News* presented two engravings that depicted Acquin at the exhibition: one represented Acquin paddling his canoe, a salmon spear beside him, in a pond before an audience of top-hatted men and gowned women. The other image depicted Acquin standing beside his wig-wam in a grove of trees, holding a bow and arrows with salmon spears at rest nearby.¹²⁴ The display conformed to previous European representations of spearing fish as a picturesque, primitive spectacle. H.B. Small, author of *The Canadian Handbook and Tourist's Guide* (1865) called spearing fish "a romantic and exciting sport" likening it to a work of art. "The wild shores of a dark lake," Small wrote, "with the broad glare of the torch...form a contrast of light and

¹²¹ Karen Perley, *Gabe*, New Brunswick Manuscripts in Archaeology 41 (Fredericton: New Brunswick Culture and Sport Secretariat, 2005) 9-10. See also Andrea Bear Nicholas, "Acquin, Gabriel" in *Dictionary of Canadian Biography Online*, eds. John English and Réal Belanger, http://www.biographi.ca/009004-119.01-e.php?id_nbr=4652 accessed 15 January 2013.

¹²² Bill Parenteau, "'Care, Control and Supervision': Native People in the Canadian Atlantic Salmon Fishery, 1867-1900," *Canadian Historical Review* 79 (1998): 9-10; Perley, *Gabe*, 9-10.

¹²³ Parenteau, "Care, Control and Supervision," 34.

¹²⁴ "The International Fisheries Exhibition," *Illustrated London News*, June 2, 1883, 571.

shade that Rembrandt might have envied.”¹²⁵

To sportsmen who owned leases on salmon rivers, however, spearing threatened their angling sport. As I showed earlier, Perley considered spearing an “idle” form of production that discouraged native people from pursuing agriculture. Acquin’s performance of spearing thus juxtaposed contradictory European views of native fisheries as picturesque and romantic and as morally and economically suspect. Anglers, who denigrated spearing, however, also valorized their sporting experiences with native guides as an authentic encounter with the primitive. New Brunswick lieutenant-governor Arthur Gordon, who hired Acquin as a guide during his tenure, described Acquin as “the pet guide and huntsman of the garrison” in his 1864 book, *Wilderness Journeys in New Brunswick*. In this account and others like it, native guides appeared to have just stepped out of James Fenimore Cooper’s fiction. In the late nineteenth century an encounter with the primitive wilderness promised to recover masculine vitality and self-possession through strenuous outdoor experience—a counter to the effeminizing effects of bourgeois, urban life. This experience was heightened—and made possible—through contact with native guides such as Acquin.¹²⁶

Acquin’s agency, however, cannot be discounted. His decision to perform in London can be viewed as a continuation of his guiding career, itself a product of the choices available to Acquin under colonial rule.¹²⁷ Guiding was an occupational strategy that staked out a position in the salmon fisheries for people excluded from them as harvesters. In London, Acquin renewed personal acquaintances made while guiding, and was feted by his former military clients who “took him to their ancestral estates and did everything they could to show their great pleasure in meeting again their former companion and guide in the New Brunswick wilderness.”¹²⁸ Acquin’s presence in London thus embodied a set of complex historical relations. His performances

¹²⁵ Henry Beaumont Small, *The Animals of North America. Series II. Fresh-water Fish* (Montreal: M. Longmoore, 1865) 136.

¹²⁶ Arthur Gordon, *Wilderness Journeys in New Brunswick, in 1862–3* (Saint John: J. & A. M’Millan, 1864) 464; Raibmon, *Authentic Indians*, 9.

¹²⁷ Raibmon, *Authentic Indians*, 3.

¹²⁸ Quoted in Perley, *Gabe*, 15-16.

theatricalized the exclusion in salmon fisheries that Moses Perley had helped institute and Acquin's approach to negotiating that exclusion. Observers watching Acquin demonstrate salmon-spearing fish may not have been aware of its connection to colonialism or to the Canadian Court display. But of all the displays staged in Canada's name, Acquin's was perhaps the one that best outlined the contours of Canadian fisheries administration: a domain inaugurated through colonialism and articulated by a vanguard of bourgeois men intent on observation, supervision, and regulation.

2.8 Conclusion

In 1884, Pierre Fortin—long retired from his fisheries inspector position and sitting as a member of Canada's parliament—stood in the House of Commons to praise the London international fisheries exhibition just then concluded. It was, he said,

worthy of the object for which it was got up, which was to put in a central place, where they could be seen and studied by persons who are in the fishing business, and by commissioners and representatives of different governments, articles of all kinds relating to the fisheries...and all that with a view to advance the fishing interest, or, in other words, to render fishing prosperous and abundant.¹²⁹

The London fisheries exhibition had indeed been a central place, a "centre of accumulation" as Bruno Latour would put it. The exhibition's displays and debates had articulated a "systematics of fisheries," a model that the Canadian Court buttressed in detail and in depth with gigantic displays of mounted fish and miniature models of fish hatcheries. This display, called forth by the exhibition's classification, was the product of more than 30 years of effort to consolidate and centralize fisheries as a state practice, one dominated by bourgeois men.

Moses Perley, Pierre Fortin, and Samuel Wilmot—men of the middle-class vanguard—had been instrumental in establishing the fisheries as an administrative object: Perley and Fortin as inspectors and Wilmot as fish culture practitioner and administrator. Their work pioneered fisheries administration in Canada and in doing so actively contributed to the process of state formation in Canada. The work of Perley and Fortin was not unique: in the United States, a similar arc from fisheries inquiries to

¹²⁹ Canada, *House of Commons Debates*, 31 January 1884 (Pierre Fortin) 80-82.

administrative formation is apparent in Richard Judd's study of mid-nineteenth century New England.¹³⁰ As Corrigan and Sayer have noted, state formation was also cultural revolution and in fisheries administration that revealed itself in critiques of "unproductive" fishermen, Aboriginal and settler alike. It was the task of fisheries administration to guide conduct and reform practices so that fishermen could better suit themselves to capitalist production and efficiency. In the nationally themed spaces of the London fisheries exhibition, Canada's exhibit naturalized the state's administrative assumption of fisheries, drawing a link between nation and the nature it managed.

¹³⁰ Richard W. Judd, *Common Lands, Common Peoples: The Origins of Conservation in Northern New England*. (Cambridge, MA: Harvard University Press, 199) 147.

A Bloomington School Perspective on the Dominion Fisheries Act of 1868

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The British North America Act 1867 assigned jurisdiction over fisheries to the federal government. In its very first session, the Dominion parliament passed an ambitious statute that imposed a centralized system of fisheries management on the new country. As the standard works on Confederation make clear, there was widespread opposition to Confederation in the Maritimes, particularly in Nova Scotia (Waite, 1962; Morton, 1964; Creighton, 1964). In Newfoundland, Anti-Confederation sentiment was so pronounced that the colony remained outside of Confederation until the twentieth century (Mayo, 1948; Hiller, 1980). As the following pages will show, the passage of the British North America Act changed the lived experience of fishing people in the Maritimes. By vesting the power to regulate their livelihoods in a legislative body on the banks of the Ottawa, Confederation created unnecessary bureaucratic nuisances for these fishers. Prior to Confederation, inland fisheries in the Maritimes had been regulated at the municipal level. The imposition of the Dominion Fisheries Act of 1868 thus marked a dramatic change in the prevailing regime from rule-making by local individuals to administrative diktats issued by Ottawa. This paper will suggest that dislike of Ottawa's bureaucratic approach to fisheries regulation contributed to Anti-Confederation sentiment in the Maritimes and Newfoundland. It will also suggest that the federal government did a poor job of managing fisheries in the generation after Confederation. Canadians continue to debate what is the ideal balance of power between the various levels of government. The cautionary tale presented in this paper illustrates some of the dangers inherent in any system of centralized environmental regulation.

As Ged Martin (1990) and Phil Buckner (1990) have noted, the existing English-language historiography of Confederation displays a subtle but persistent pro-Confederation bias. The works of the "Centennial synthesis" tend to attribute opposition to Confederation to factors that includes the personal ambition of the leading Anti-Confederates, a parochial mindset, and simple resistance to change of any type. In other words, historians such as Waite, Creighton, and Morton implied that the Anti-Confederates were "wrong" because they could not see that large political units were the wave of the future. This assumption, which

arguably reflected the celebratory national mood surrounding the 1967 Centennial, is no longer tenable. It is high time we explored the motivations of the Anti-Confederates in a more balanced fashion. We also need to integrate the environmental history into the political history of Confederation. Today, opposition to Confederation is often associated or even equated with a single individual, Joseph Howe. Howe has been condemned, with considerable justification, as a simple opportunist (Beck, 1983, 257-60). Howe switched sides in January 1869, going overnight from cash-strapped opponent of Confederation to membership in Macdonald's Cabinet at a salary of \$5,000 per annum. However, the Anti-Confederation movement was about far more than Howe's manoeuvring for a salaried job. Although Howe's defection weakened the Anti-Confederate movement, opposition to Confederation persisted after January 1869 because it was grounded in legitimate concerns, some of which related to fisheries regulation. To paraphrase E.P. Thompson, I am attempting to rescue the Anti-Confederates from the enormous condescension of posterity.

It should be stressed that central Canada's bureaucratic approach to fisheries regulation was only one of several grievances Anti-Confederates had with the nascent federal government. As I have shown elsewhere (Smith, 2008a), many Anti-Confederates were motivated by a low-tax, classical liberal ideology that believed that the federation of the colonies would lead to the creation of a bureaucratic, interventionist, tax-and-spend government. In other cases, anti-militarism and the prospect of being conscripted to serve in a future Canadian army informed opposition to Confederation. The issue of the tariff was also crucial. Prior to Confederation, the Province of Canada's tariff had been relatively high and many in the Maritimes and Newfoundland feared that their provinces' extensive overseas trade networks would be strangled by protectionist tariffs designed to nurture the manufacturing sector of central Canada.

In 1868, the overwhelmingly majority of Nova Scotia's MPs and MLAs signed a petition condemning the province's incorporation into the federal union with Canada. The petition complained that the British North America Act had stripped Nova Scotia of important powers, namely the "regulation of her Trade, of her Fishing System and Savings Banks, Seacoast and Inland Fisheries, Militia, and of her Courts and Criminal Law." The petition also said that Confederation "subjects them to enormous cost and great inconvenience, by compelling them to transact business in a city eight hundred miles away" whereas previously this business could be conducted in Halifax, which was "within easy reach of the whole population." Joseph Howe declared that the Dominion parliament had

done terrible to mischief to Nova Scotia during its first session, the results of which had “far exceeded the worst anticipations” of Nova Scotians. Central Canada had used its majority in the House of Commons to protect “their own manufactures” against foreign competition, thereby increasing Nova Scotia’s “ad valorem duties from 10 to 15 per cent.” The Canadians had also “protected their bread stuffs against those of the United States, largely used in the Maritime Provinces, by duties on flour, corn, and corn-meal. They laid on stamp and new newspaper taxes” which had previously been unknown in Nova Scotia and had imposed taxes on Nova Scotia’s banks that immediately raised interest rates from 6 to 7 percent (Howe and Annand, 1868, 2). It is clear from the remarks I have quoted that fisheries regulation was just one of the grievances of the Anti-Confederates. However, it was an important grievance.

This paper is focused on regulation of the freshwater, tidal, and, inshore fisheries, which is where there was the greatest disagreement between central Canadians and people in Nova Scotia and New Brunswick. On the issue of whether sea fisheries should be protected from American encroachment, there was virtually unanimity among the provinces of British North America: they were opposed to fishermen from the Boston States taking “our” fish and hoped that the Imperial government would use its considerable diplomatic and naval resources to prevent this from happening. The regulation of sea fisheries, which was connected to several thorny diplomatic issues stemming from the assistance that many British subjects had given to the South during the American Civil War, was a major irritant in Anglo-American relations in the period from 1865 to 1871. U.S. fishermen had enjoyed the right to fish in British North American waters under the terms of the 1854 Reciprocity Treaty. The end of Reciprocity in 1866 had resulted in the exclusion of American fishermen from these waters, which angered the fishing communities of New England. The fisheries question remained a major irritant in Anglo-American relations until the Treaty of Washington in 1871. This treaty sacrificed the perceived interests of Canadian and Newfoundland sea fishermen so as to achieve a comprehensive solution to the various outstanding disputes between Britain and the United States (Messamore, 2004).

Historiography

The author has published on Confederation in other contexts. These publications documented how Confederation was an exercise in centralization and was opposed by many classical liberals (Smith, 2008a, 2008b). This paper will focus on the ambitious plan for regulation embodied in the Dominion Fisheries Act of 1868. The emergence of centralized environmental regulation was part of the so-called “control revolution” (Beniger, 1986). The

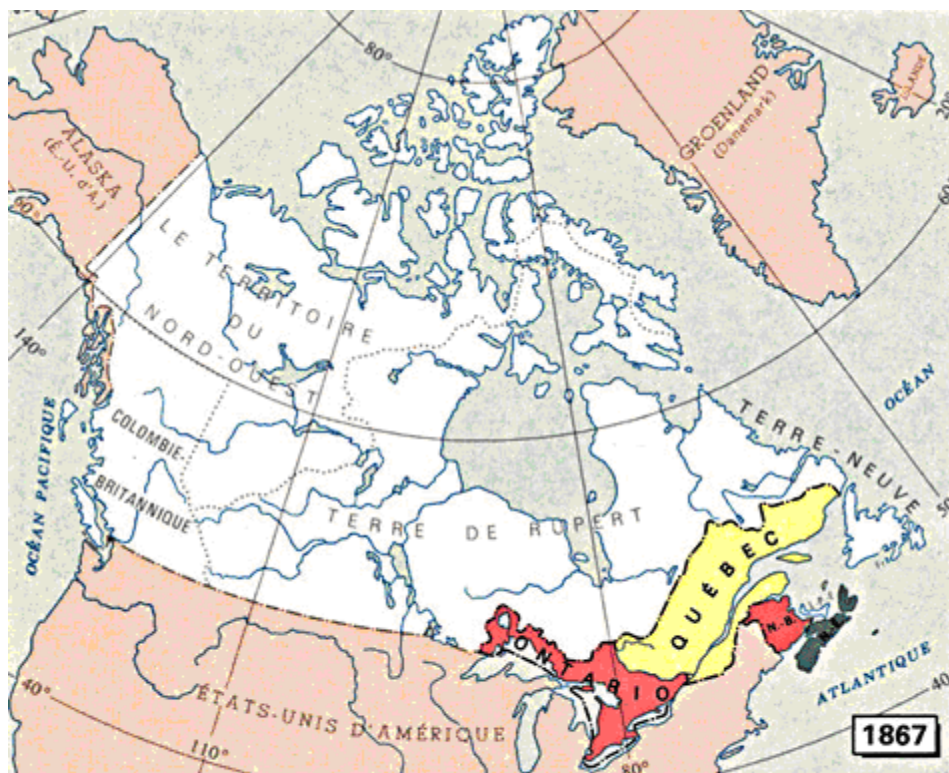
middle of the nineteenth century saw increasing efforts by governments throughout the Western world to monitor and manage a particular type of common-pool resource, fish stocks. Not coincidentally, this period saw the birth of the science of “ecology,” a term coined in 1866 by Ernst Haeckel (Barnett, 2013) and the origins of modern aquaculture (Nash, 2010). In the France of the Second Empire, which was a global leader in implementing the bureaucratic management of fisheries, efforts by state officials to understand and control fisheries were broadly consistent with the centralized approach that was then becoming a pronounced feature of the French mode of governance (see below). The British government also began to devote resources to the study of fisheries, although in that case a political culture that was committed to *laissez-faire* prevented the growth of a large regulatory apparatus. The British government’s royal commissions on fisheries (Jardine et al., 1861; Huxley et al., 1866; Roberts, 2008, 144), were, however, part of the emergence of modern professional bureaucracies in the Victorian era (Parris, 1960). In the 1850s, U.S. states began to establish fisheries services, inspired, in part, by George Perkins Marsh’s writings. Massachusetts was an industrial state whose spawning grounds had been disrupted by extensive water-mill development associated with the growth of textile manufacturing (Steinberg, 2004 190-3). It is not surprising, therefore, that Massachusetts took the lead in the United States. In 1865, the General Court of Massachusetts created a bureaucracy for regulating inland fisheries. In 1871, the Grant Administration established the U.S. Commission of Fish and Fisheries as a federally-funded research body, although it should be stressed that US states were responsible for virtually all fisheries regulation until the twentieth century (Sigler and Sigler, 1990, 131).

In contrast to the United States, where fisheries regulation occurred primarily at the state level, the Canadian constitution of 1867 gave the federal government exclusive jurisdiction over all “sea coast and inland fisheries.” The allocation of fisheries regulation to the Canadian central government reflected the belief among much of the Canadian political class that the creators of the US constitution of 1787 had erred in allocating substantial powers to the state governments (Smith, 2008a). Unlike its US counterpart, the Canadian constitution of 1867 was a “quasi-federation” rather than a true federation (Stevenson, 2004).

It is worth reviewing the constitutional history of Canada in this period. The Canadian constitution came into force on 1 July 1867 and the Canadian federal government began to function. At first, the federation had just four provinces. (See Map 1). Their populations of were, as of 1871: Ontario, 1,620,851; Quebec, 1,191,516 ; Nova Scotia, 387,800; New

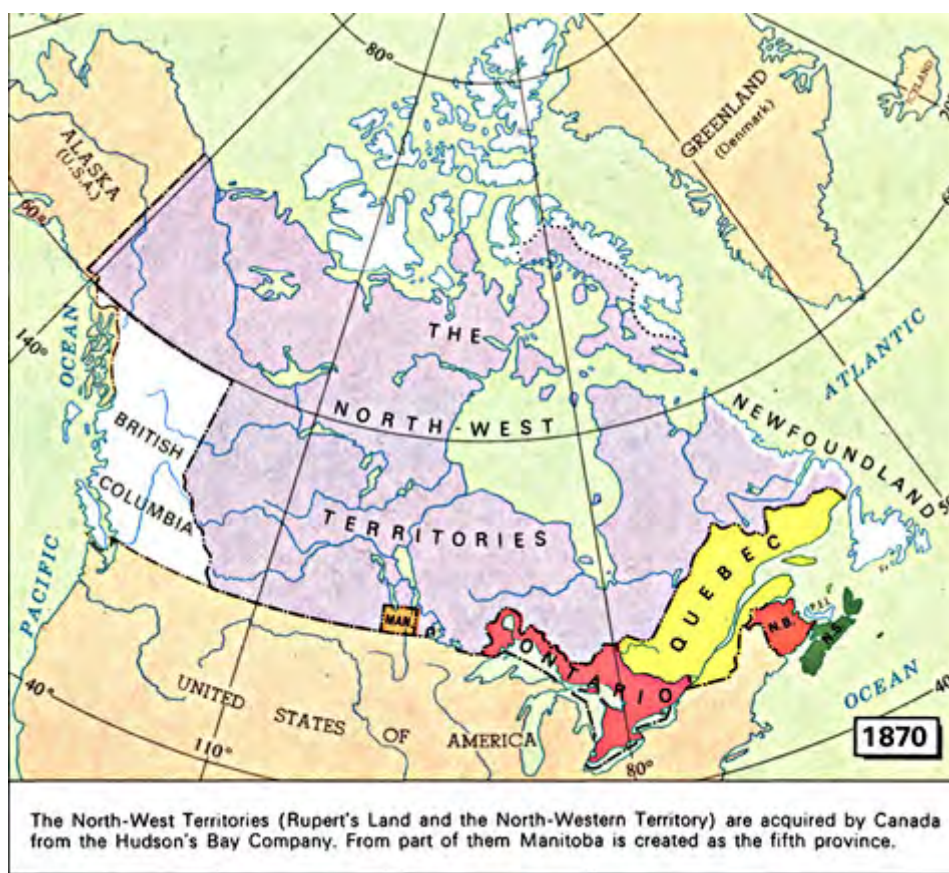
Brunswick, 285,594. By 1871, the population of these provinces was overwhelmingly of European ancestry (98.5%), with aboriginals representing just 0.6% of the recorded total (Historical Statistics of Canada, 1983, Table A125-163). Sir John A. Macdonald was appointed Canada's first Prime Minister. Elections for the first national parliament were held in late August and early September 1867. In 1869-70, the Canadian federation expanded dramatically when it acquired Rupert's Land from the Hudson's Bay Company (Map 2). In 1869, the federal government agreed to purchase Rupert's Land from the company for £300,000. The inhabitants of the region, who were predominantly First Nations and Métis, were not consulted about this sale. Opposition to this transaction on the part of people living around Red River led to the creation of the Province of Manitoba, which had limited powers of self-government, in 1870 (Stanley and Bond, 1961; Stunden Bower, 2012, 50-51). In 1871 and 1873, British Columbia and then Prince Edward Island joined the federation. Newfoundland was the only British colony in North America to remain outside of the federation. As a result of its unique constitutional status, Newfoundland retained the ability to regulate its own fisheries, a power that was lost by the other provinces and which was not reclaimed until the 1890s.

Map 1: The Dominion of Canada in 1867



Le Nouveau-Brunswick, la Nouvelle-Écosse et le Canada s'unissent pour former un État fédéral, le Dominion du Canada (Acte de l'Amérique britannique du Nord, 1^{er} juillet, 1867). La Province du Canada est divisée en Québec et Ontario. Les États-Unis d'Amérique proclament avoir acquis l'Alaska de la Russie (20 juin).

Map 2: The Dominion of Canada in 1870



The Dominion Fisheries Act in 1868 was intended to bring the nation's fisheries under the control of federal officials. As historians have recently noted, the enforcement of the Act often generated conflict with working-class rural people (Ingram, 2009, 2013). Parenteau (2004) has studied fisheries regulation after 1868 mainly through the lens of social class. Others have examined attempts by white officials to impose fisheries and other conservation regulations on First Nations peoples with a view to understanding colonialism and resistance (Harris, 2001). In such accounts, environmental regulation in this period privileged the interests of upper-class individuals and business interests over those of working-class whites and the First Nations. The Marxian approach to the history of environmental regulation that was pioneered by Thompson (1975) and Reiger (1975) is largely congruent with the approach taken in this paper, as is the "high-modernism" paradigm developed by Scott (1998). However, this paper does not view the history of fisheries regulation through the lens of class or ethnic conflict. Instead, the author analyses Confederation-era fisheries policy as an example of the problems associated with the dispersal of knowledge in society.

Theoretical Perspective

This paper takes as its starting point F.A. Hayek's seminal 1945 paper "The Uses of Knowledge in Society." Hayek's ideas are highly relevant to this paper because the dispersed and often tacit nature of knowledge often frustrates attempts to solve social problems with bureaucratic mechanisms. Hayek and his followers argue that such efforts involve a degree of hubris on the part of policymakers, namely, an unwarranted confidence in their ability to measure, understand, and then manage "emerged systems." Emerged systems include the economy, languages, and ecosystems. Hayek (1988) called this hubris "the fatal conceit." Hayek also wrote: "The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design" (1988, 76).

The Dominion Fisheries Act of 1868 was a product of the Hayek labelled "the fatal conceit." The 1868 Fisheries Act entrusted the regulation of fisheries across a vast territory to a bureaucracy controlled by a Minister and Deputy Minister in offices in Ottawa. The centralized and bureaucratic approach to fisheries represented by the 1868 Fisheries Act and equivalent laws in other countries is only one of several ways of managing access to common-pool resources and preventing tragedies of the commons of the type discussed by Hardin (1968). The other available mechanisms include: customary restrictions of the type used in many tribal societies (Larmour, 2013); common-law remedies (Hodas, 1988; Meiners and Yandle, 1998); regulation by clubs, leaseholders' associations, or other voluntary bodies (Bate et al., 2000); regulation by local or sub-national governments (Anderson and Watson, 2011).

Hayek wrote an extensive intellectual/cultural history of the "fatal conceit," which he traced back to Plato, who proposed a society ruled by "philosopher kings." Hayek argued that the assumptions underpinning the fatal conceit were reinforced by the philosopher and mathematician René Descartes. According to Hayek, "Cartesian rationalism" influenced thinkers in all Western countries, but particularly in France, where it came to pervade the political culture, especially after 1789. Hayek argued that Cartesian thinkers were disrespectful of evolved institutions. Such thinkers felt that the substitution of planned orders for emergent orders would promote the general welfare. In order to facilitate this substitution, political power should be centralized in the hands of officials at the national level. Hayek notes that while some French-speaking intellectuals, most notably Montesquieu, Constant and Tocqueville opposed this style of thought, many other French intellectuals, most notably Saint-Simon and the Positivists supported it. He argues that this intellectual tradition

legitimized the French government's tradition of centralizing political power in Versailles and, after 1789, the elected government in Paris (Hayek, 1952).

Hayek said comparatively little about the relationship between human beings and the environment. Vincent and Elinor Ostrom and other academics associated with the Bloomington School of Political Economy rectified this oversight by extending Hayek's analysis by examining governments attempts to replace traditional, community-based methods of managing commons with hierarchical, bureaucratic approaches (Mitchell, 1988; Aligica and Boettke, 2009, Pennington, 2013). The Bloomington School shows that the solutions to the Tragedy of the Commons typically supported by both the political right and the political left are actually quite similar, and problematic. Elinor Ostrom notes on the centre-left of the political spectrum, the traditional response to the Tragedy of the Commons is to call for greater government regulation of common-pool natural resources. Ostrom notes that people on the right, who are sceptical of state bureaucracies, tend to see the creation of individual property rights as the best way to ensure the preservation of scarce resources such as fish stocks. In her viewpoint, both of these proposed solutions to the Tragedy of the Commons are alike in that they involve officials in senior levels of government attempting to study local ecosystems and then designing some sort of solution. Following Hayek, Bloomington School scholars note that officials in distant national capitals often lack the detailed local knowledge needed to handle these issues. Elinor Ostrom provides a number of examples from around the world in which local communities have evolved highly effective informal mechanisms, such as social or spiritual sanctioning, to preserve scarce resources without recourse to either bureaucratic controls or the creation of private property rights. In her critique of Hardin, Ostrom prefers to speak of the "Drama of Commons" rather than the "Tragedy of Commons," as in her view it is not a foregone conclusion that common-pool resources will be overexploited in the absence of restrictions imposed by a sovereign (Ostrom et al., 2002; Dolšák and Ostrom, 2003).

The members of the Bloomington School do not dispute that centralization is occasionally useful. There are sometimes valid arguments in favour of vesting jurisdiction over particular environmental matters in a very senior level of government, particularly if the problems to be addresses cross the boundaries of local or sub-national governments. Given that the regulation of ocean fisheries was connected to Canada's external relations, one can see the British North America Act assigned jurisdiction over "sea fisheries" to the federal government. One could similarly argue that the federal government ought to regulate fish in

waters that straddle provincial boundaries or the Canada-US border. What is striking, however, is that the British North America Act assigned the power to regulate *all* fisheries to the federal government. In contrast, the power to regulate transportation infrastructure was split between the provincial and federal governments. Section 92 of the British North America Act gave the provinces control over railways and other public works that were entirely within the boundaries of the province, while Ottawa was given jurisdiction over “lines of steam or other ships, railways, canals, telegraphs, and other works and undertakings connecting the province with any other or others of the provinces, or extending beyond the limits of the province.” In contrast, there was no attempt to split jurisdiction over fisheries. Here, Ottawa was given total control.

The British North America Act of 1867 emerged out of a lengthy process that began with the Charlottetown and Quebec City conferences in 1864 and which was not completed until the spring of 1867, when it passed through the imperial parliament. Throughout this process, John A. Macdonald and supportive British officials worked to strengthen the power of the future federal government at the expense of the future provincial governments. The result was a constitution that was nominally federal but which gave the central government most of the power. In a private letter written in late 1864 to reassure a friend who favoured the creation of unitary state for all of British North America, John A. Macdonald expressed his hope that the provinces would have an only transitory existence and that the new federation would soon evolve into a unitary state like Britain. Macdonald told Malcolm Cameron of Toronto that if he lived to “the ordinary age of man”, he would “see both Local Parliaments & Governments absorbed in the General power”. Macdonald also said that “of course it does not do to adopt that point of view in discussing the subject in Lower Canada.” In his public statements, Macdonald professed to be very happy with federal constitution designed by the Quebec Conference (Macdonald to Cameron, 19 December 1864, quoted in Martin, 2007, 91). This agenda of centralization or a unitary state by stealth likely informed the decision to vest control over fisheries with the federal government. Unfortunately, we cannot be entirely certain about this because Hewitt Bernard’s minutes of the Quebec Conference do not provide a verbatim transcript of the discussions and instead merely summarize the main conclusions.

Figure 1: Conference at Québec in 1864, to settle the basics of a union of the British North American Provinces. Copy of a painting by Robert Harris, 1885.

Source: Library and Archives Canada. Online MIKAN no. 3194982



The delegates at the Charlottetown Conference (1-9 September 1864) agreed that some sort of political union of British North America should be formed. They also established that the details of this union would be worked out a conference to be held in Quebec City. At the Quebec Conference (9-27 October 1864), a detailed plan for a federal constitution was written. At the Quebec Conference, at least some of the delegates had favoured a provincial role in fisheries regulation. Speaking at an *in camera* session on 24 October 1864, Oliver Mowat, a future premier of Ontario, had proposed to assign only “sea coast fisheries” to the federal government, granting “inland fisheries” to the provinces. The minutes taken by Hewitt Bernard suggest that Mowat’s proposal was accepted by all of the delegates (Pope, 1895, 27). On the next day, however, the delegates voted unanimously in favour of giving jurisdiction over “sea coast and inland fisheries” to the provinces (Pope, 1895, 29). The final resolutions of the conference, which became known as the Seventy Two Resolution or simply the “Quebec Plan of Union”, assigned jurisdiction over “sea coast and inland fisheries” to both levels of government (compare resolutions 29 and 43). Under such an arrangement, the provincial statutes would be valid unless they conflicted with the paramount authority of a federal law.

After its publication in December 1864, the Seventy-Two Resolutions were extensively debated by British North Americans. The debate revolved around two issues.

First, was a political union of the colonies actually desirable? Second, was the draft constitution that had emerged out of the Charlottetown and Quebec Conferences the best framework for such a union? These discussions were followed by another constitutional convention held in London's Westminster Palace Hotel in November and December 1866. On 4 December 1866, delegates from the Province of Canada, Nova Scotia, and New Brunswick passed a series of resolutions describing the type of constitution they wanted for the new federation. This plan modified the Quebec Resolutions so as to strengthen the power of federal government relative to the provinces even further (Stevenson, 1993, 3-19).

Figure 2: The London Conference.

Source: Library and Archives Canada, MIKAN no. 3000888.



Library and Archives Canada / Bibliothèque et Archives Canada
www.collectionscanada.gc.ca

Among the changes made in London, jurisdiction over all “sea coast and inland fisheries” was assigned to the future federal government. These last minute changes to the Canadian constitution were due, in part, to encouragement by Britain's Colonial Secretary,

Lord Carnarvon. Carnarvon wished to increase the power of the federal government as much as possible. Indeed, even after the resolutions were formally approved on 4 December, Carnarvon continued to try to persuade the delegates to move further in the direction of a unitary state. It appears that these efforts were blocked by the French Canadian delegates in London. When Carnarvon met Cartier and Langevin in January 1867, he found them unwilling to accept any further reductions in provincial power (Carnarvon Diary, 28 January 1867).

Fisheries Regulation in British North America Prior to Confederation

This section of the paper will examine the history of fisheries regulation in British North America before Confederation. It will suggest that the 1850s were an inflection point in which policy shifted away from the more decentralized approaches that had previously been used.

Present-day Canada had a number of legal regimes governing the taking of fish. Many of these legal systems provided for the decentralized regulation of fisheries. In the more remote territories still under effective native control in 1860, First Nations peoples had their own customary systems for managing fish, game, and other common-pool resources. While the effectiveness of First Nations governance systems in preventing tragedies of the commons has been debated extensively by historians, it is clear that they worked at least some of the time (Krech, 2000; Harkin and Lewis, 2007). Land cessions from First Nations to the Crown, which were supposed to precede white settlement, were governed under principles laid out in the Royal Proclamation of 1763 (Parenteau, 2012). Under some of the land cession treaties, First Nations had retained certain rights to fish. Such rights were provided for in agreements such as the Robinson Superior Treaty of 1850 (Canada, 1964). In the regions of eastern British North America in which aboriginal title had been extinguished, there were three main zones of law governing inland and coastal fisheries: feudal or seigneurial; English common law; and the territories of the Hudson's Bay Company. These regimes were based on the legal systems that had been brought to North America by European settlers.

In "le Canada seigneurial," the parts of Lower Canada in which land was held according a form of feudal tenure, the rights of the seigneur to fish were governed by the legal system known as the *Coutume de Paris*. Since the Conquest of 1760, the environmental regulations embodied in this ancient legal system had been modified by the Judicial

Committee of the Privy Council and other courts (Schorr, 2014). In 1866, Lower Canada's laws were codified (Young, 1994; Fyson 2014). Exclusive rights to fish in waters adjoining a feudal estate had been incorporated into all seigneurial land grants made after 1680. The operating principle was that only the censitaires, or inhabitants of a given seigneurie could fish in the water in front of it. They would then owe their seigneur a specified share of the catch. In 1854, the Canadian legislature passed a law to provide for the gradual and compensated abolition of the seigneurial system. Historians have debated whether the 1854 legislation was passed to advance the interest of the seigneurs, the habitants, or some other interest group (Baillargeon, 1968; Wallot, 1969; Grenier, 2012). The process of converting feudal to freehold tenure was very gradual and not completed until the 1930s (Quebec Government, 1940). In the meantime, the seigneurs continued to attempt to use the courts to enforce their property rights to fish. In the 1859 case of *Boswell v. Denis*, the seigneur of Jacques Cartier, Joseph Boswell won a courtroom victory against the poachers who threatened his aquaculture experiment.

Outside of "le Canada seigneurial" land had been granted under English land tenure. Outside of the Province of Lower Canada, English common law applied. Where land had been granted under the form of land tenure known as free and common socage, landowners had riparian rights over non-tidal, non-navigable waters adjoining their properties. This means that they normally owned all organisms *usque ad filum aquae* (*Legal News*, 11 December 1880; Moore and Moore, 1903). Before the 1850s, colonial legislature passed special or *ad hoc* statutes designed to address threats to fish stocks in particular waterways. For instance, in 1843, residents of the village of Stanstead, which was located in the Eastern Townships, petitioned for more effective protection of the fish called "lunge" or "maskinongé" in Lake Memphremagog. The legislature responded with the statute that banned fishing for this species from August to December by any means except for "single hook" (Colonial Office, 1856, 12). An 1845 statute of the Canadian legislature afforded special protection to fish in Twenty-Mile Pond in the Township of Louth, which was in the Niagara Peninsula. Fishing in this pond was banned, unless it was by "spear, hook, or line" (Colonial Office, 1856, 14).

In the Maritimes, legislation empowered local governments to devise and enforce fisheries regulations. In the New Brunswick city of St. John, the 1785 charter had vested ownership and management of local fisheries in the "freemen and inhabitants of the city" (Colonial Office, 1856, 20). In other localities in the Maritimes, Justices of the Peace meeting

in quarter sessions frequently made regulations for local fisheries. Justices of the Peace were unelected officials appointed by the Crown and selected from the propertied elite of each community. In addition to making local regulations, JPs would act as judges in minor civil and criminal matters (Crawford, 1964, 17-26). Reliance on JPs appears to have compensated for the absence of a general fisheries law and enforcement bureaucracy at the provincial level.

The Nova Scotia town of Annapolis gives us an example of municipal fisheries regulation at work. In 1852, JPs meeting in quarter sessions ordered that the owners of land on the non-tidal sections of the river set no more than one net for taking salmon. The quarter session also gave non-landowners the right to fish on the river, but only in a stretch from “the Big Eddy” to a spot “within a quarter of a mile of McKown’s Mill.” Their nets, however, could extend no more than a third of the way across the river (Colonial Office, 1856, 39). In 1855, the JPs in Yarmouth addressed a local problem, namely, a mill that was blocking the passage of spawning fish on the River Abuptic. They ruled that sluice gates of the mill be kept open from 25 April to 16 June “and that a sluice be built on the said dam so as to allow the fish to pass down” in a satisfactory manner. Failure to comply would cost the mill owner “three pounds for each offence,” which was presumably more than the costs of compliance with the regulation (Colonial Office, 1856, 40). The regulation did not name the owner of the mill, but it was clearly targeted at a single individual. To provide another example: in the New Brunswick county of Westmorland, the assembled justices of the peace formulated a plan to deal with problem of nets being placed in close proximity. It appears that this practice had caused tensions within the fishing community in the past. In December 1854, the justices ordered “that no person be permitted to set a net on any of the flats bare at low water within the county to a greater extent in any one place than one hundred fathoms in length.” They also prohibited individuals from putting “down any net on any of the said flats adjoining any net previously set by any other person nearer than fifty rods to the net so previously set.” Penalties of up to £5 for each contravention were established (Colonial Office, 1856, 26).

As Sean Cadigan (1999) has shown, Newfoundland communities had developed an informal system of fisheries regulation by the early nineteenth century. Newfoundlanders in the 1850s and 1860s confronted a potential tragedy of the commons situation in the inshore cod fishery: the introduction of seine nets and other capital-intensive fishing technologies had led to overfishing in some localities. In 1863, Newfoundland’s legislature investigated the problem, taking evidence for a large variety of witnesses and compiling a lengthy report. An omnibus bill containing many fisheries regulations was defeated in the legislature in part

because some legislators were sceptical of the ability of the government to enforce the proposed regulations in the absence of a regulatory bureaucracy. As Jonathan Luedee has noted, the defeat of the 1863 bill forced local communities to develop their own mechanisms for preventing tragedies of these commons. These remedies, which appear to have been effective in the cultural context of the outports such as Bay Bulls, relied on prevailing conceptions of fairness. He observes that “access of common-property fisheries, while guaranteed to all fishers under common law, was a right imbued with moral responsibilities akin to the notion of common right and moral economy.” Luedee uses his case study to undermine Hardin’s belief that open access in fisheries will inevitably lead to “overexploitation and marine resource depletion” (Luedee, 2013, 82).

Newfoundland sent delegates to the Quebec conference and some Newfoundlanders, most notably Ambrose and E.D. Shea, felt that Confederation would benefit the colony. However, after the extent of popular opposition to Confederation became clear in 1865, the government of which the Sheas were a part decided to shelve the issue rather than present Confederation at a time when it was certain to be rejected. The debate on Confederation resumed in 1869, when Newfoundland’s government announced that it had negotiated improved terms of union with the Macdonald government (Mayo, 1948). The November 1869 election was essentially a referendum on whether the colony should join Confederation. The *St. John’s Morning Chronicle* ran a series of hysterical articles by Thomas Talbot outlining what would result from Confederation: conscription into the (non-existent) Canadian army, the return of naval press gangs, more expensive food, and of course, Ottawa officials controlling the fisheries. Talbot’s articles suggest that his readers would have been aware of that the Dominion Fisheries Act had been imposed on fishermen in Nova Scotia (*St. John’s Morning Chronicle*, 22 September 1869, 28 September 1869). The skilful exploitation of popular fears of state power allowed the Anti-Confederates to win the 1869 election (Hiller, 1980, 78).

The decentralized systems of fisheries regulation in place in Newfoundland and the Maritimes contrast markedly with the top-down hierarchy imposed on Nova Scotia and New Brunswick after 1868. To be fair, the pre-1868 use of Justices of the Peace in each community to make fisheries regulations was not entirely unproblematic. After all, empowering local residents to make regulations created potential for conflicts of interest. Moreover, Justices of the Peace were unelected officials. As such, their views might not have been representative of the general population. The charter of St. John, which appears to have

been unique in the region, addressed some of these problems by giving control over the fisheries to elected Aldermen. The city charter combined democratic governance with a decentralized approach that allowed for the incorporation of local tacit knowledge into the process of designing regulations. The Municipal Act for Lower Canada of 1855 introduced the principle of local regulation of fisheries into the Province of Canada. This law gave County Councils, which were elected bodies, the power to regulate “fisheries carried on either upon the sea-shore or upon any waters adjacent to or passing through the county” (Colonial Office, 1856, 17). It should be noted that the legislature imposed a far more centralized and bureaucratic regime two years later (see below).

The legal regime governing fish in the territories under the control of the Hudson’s Bay Company was anything but decentralized. The HBC claimed exclusive rights to a vast territory under its 1670 royal charter. This document, which has been issued by King Charles II, conveyed exclusive rights to fish as well as hunt for fur-bearing animals to the firm. The HBC also acquired exclusive rights to fish on the north shore of the Saint Lawrence via a lease of the King’s Posts from the Canadian government. The HBC’s headquarters were located in London, which is where its Court of Directors and shareholders met. The company’s chief executive in Canada before 1860, Sir George Simpson, was based in Montreal. He managed the firm’s continent-wide assets using a system of detailed reports and frequent visits to trading posts. In his prime, Simpson covered thousands of miles annually in a canoe rowed by a crack team of paddlers (Sprakman and Margret, 2005). In 1863, the HBC was purchased by a London-based investment syndicate called the International Financial Society (Smith, 2008b, 86-7).

The new owners did not, at first, introduce substantial changes in how the company was run, which meant that the fishing operations of the HBC were largely unaffected by the hostile takeover. The HBC’s track record in managing fisheries was mixed. Around the King’s Posts on the North Shore of the Saint Lawrence, where the HBC had exclusive rights to fish in rivers and streams, employees of the firm had harvested salmon using standing barrier nets, which indiscriminately killed all fish. Writing in 1857, Richard Nettle observed “that the Hudson’s Bay Company set little value on these fisheries, and maintain them merely as an accident appertaining to the fur trade.” However, he also said that the Company’s exclusive rights to fish in the area had helped to protect local fish stocks from the overfishing that had destroyed fish populations in many other parts of Canada. “Unproductive and wasteful as their mode of fishing is, the protection the Hudson’s Bay Company affords is the

only present safeguard for the existence of Salmon in Canada.” Nettle opined that the end of the HBC fishing monopoly would result in the destruction of the local salmon population within a single summer.

The Rise of the Bureaucratic Approach in the Province of Canada

The 1850s were a crucial turning point in the history of fisheries management in eastern British North America, as this decade saw the emergence of the idea of scientific management of fisheries by state officials in the Province of Canada, New Brunswick, and Nova Scotia. Although this development was essentially simultaneous in the three provinces, officials in New Brunswick appears to have been the first to advocate the management of fisheries by state bureaucracies. Sir Edmund Head, who served as Lieutenant-Governor of New Brunswick 1848-54 and then Governor-General of the Province of Canada (1854-1861) and who was a keen angler appears to have encouraged these efforts to protect stocks of fish, particularly salmon, a fish that had long been prized by aristocratic anglers in Britain (Adamson and Alexander, 1860, 324). In the late 1840s, a New Brunswick civil servant named Moses Henry Perley began amassing data regarding the fisheries of the province and the Gulf of the Saint Lawrence. His lengthy reports contained detailed descriptions of the fish in each region, much of it in tabular form. In his final report, which was published in 1852, Perley called for the government to formulate and enforce a comprehensive plan for the province’s fisheries.

In the Province of Canada, the idea of fisheries management was promoted by a small group of promoters in the 1850s. In the past, there had been sporadic efforts by the legislature to deal with fisheries specific to particular localities. What was new, however, were efforts to construct a comprehensive system of fisheries management for the entire province.. In 1857, the Canadian legislature passed a comprehensive fisheries act that became the template for the 1868 Dominion Fisheries Act. Richard Nettle, who had earlier championed the idea of state management of fisheries, was appointed Superintendent of Fisheries for Lower Canada, a position within the Crown Lands Department. Under the terms of the 1857 law, Nettle supervised ten “overseers,” or fisheries officers in Lower Canada. He held this office until 1867, at which point he was dismissed by the new Dominion government (Macdonald, 1868). During this period, Nettle established North America’s first government-funded fish hatchery in Quebec City (Prince, 1921). Nettle’s hatchery built on the aforementioned effort by the owner the Seigneurie of Jacques Cartier.

Nettle called for a more rational approach to the Province's fisheries. Nettle depicted what proper management could do for Canada's fisheries in almost utopian terms, reporting that in the "well regulated salmon fisheries in Europe" the fish were "almost as much under the control of the managers as the sheep on their farms or the fowl in their poultry-yard." Through the construction of weirs and other infrastructure, human beings had achieved mastery over the fish: "They can send such of them as they please to market, permit the fittest for the purpose to pass on to propagate their kind, allow the young to enjoy life till they become mature, and suffer the sick and unhealthy to return to their invigorating pastures in the depths of the ocean." The lawless state of America's rivers had prevented such wonders from being achieved in the New World. Unless checked, American and local fishermen would destroy Canada's fish stocks (Nettle, 1857, 110). Here, Nettle was drawing on a common trope in nineteenth-century Canadian political discourse, namely the notion that the United States was a chaotic and ungovernable society because it had been founded on republicanism (Wise et al., 1967). Nettle suggested that Canada had the chance to avoid the fate of the American fisheries by using the authority of the Crown to create a system of effective management on the European model.

Nettle's belief that Canada's inland fisheries ought to be scientifically regulated was likely informed by the recent development of fish culture programs in his native England. Nettle also referred to Sir William Jardine, a British natural historian known for his expertise in the management of fish stocks. However, the fish management system that received the highest praise in Nettle's 1857 book was that developed in France during the Second Empire under the supervision of Jacques Marie Cyprien Victor Coste (Nettle, 1857, 17-20). In the early 1840s, two anglers and amateur scientists in the Vosges, Joseph Remy and Antoine Géhin, had rediscovered artificial pisciculture. Learning that these men had established a fish hatchery and were releasing eggs into the river, Coste studied their technique and then wrote a report advocating a national system of fish restocking and management. The Emperor, Napoleon III, was favourable impressed and authorized the financial support for Coste's plan. Coste used large pools at the Collège de France to cultivate fish eggs that were then released into the Rhone and other French rivers. In 1855, he successfully restocked the lake and river in the Bois de Boulogne. In 1862, he was appointed Inspecteur général de la pêche maritime et fluviale (Coste, 1861; Bouchon-Brandely, 1876, Nash, 2010, 56-58).

The Making of the Dominion Fisheries Act of 1868

The Dominion Fisheries Act of 1868 was made in a context that included a vocal secessionist movement in Nova Scotia and ongoing efforts by the federal government to encourage Newfoundland to join Confederation. This political context helps to explain why a provision of the law, the ban on net fishing on the Sabbath, was effectively repealed after it became clear that it was massively unpopular in fishing communities on tidal waters. In the September 1867 federal election, members of Sir John A. Macdonald's Liberal-Conservative party won a clear majority of the seats in the Dominion parliament. However, eighteen of the nineteen MPs elected in Nova Scotia were Anti-Confederates who were pledged to work for the province's escape from the federation. These Anti-Confederate MPs took their seats, and their salaries, in Ottawa, but did so on the understanding that they would return to Nova Scotia once the province had been freed from Canadian rule. There were also five Anti-Confederate MPs from New Brunswick. Nova Scotians also elected an Anti-Confederate provincial government. The Anti-Confederation movement was a broad coalition of groups, some of which inclined to republicanism or support for Annexation to the United States. Others, such as Joseph Howe, who was the son of a United Empire Loyalist, were as loyal to the British Crown as Sir John A. Macdonald and his supporters (Pryke, 1979, 70-1, 106-7). In the 1865 debates on Confederation in the PEI legislature, "no member, not even the most violent anti-Confederate, would admit that he did not desire to continue to live under monarchical institutions and the glorious flag of old England" (Bolger, 1964, 116-117).

The Anti-Confederates were clearly divided in their attitudes towards Britain. They were also divided on the issue of whether the authority of the imperial parliament was limited by the Empire's unwritten constitution. Some believed that while the imperial parliament had made a mistake in passing the British North America Act, it had not exceeded its legitimate powers, which were unlimited. Others rejected the doctrine of imperial parliamentary supremacy in favour of a theory of colonial popular sovereignty that held that the imperial parliament did not have the right to alter colonial constitutions without the express consent of the local population. In other words, they argued that the British North America was not a valid law and that Nova Scotians were not bound to obey orders issued by officials appointed under the authority provided for by this legislation. This theory implied clearly undermined the moral authority of fisheries overseers and other federally-appointed officers. It should be pointed out that this theory of colonial popular sovereignty, which was similar to arguments

people in the Thirteen Colonies had used prior to the American Revolution (Bilder, 2004, 37; Greene, 2011, 90-93), flew in the face of the Colonial Laws Validity Act of 1865, which had explicitly affirmed parliamentary supremacy over the colonies. Parliamentary supremacy means that the British parliament had the right to pass any law it so wished and that British subjects in the colonies had a duty to obey such laws (Swinfen, 1970, 167-176).

The chief exponent of the latter theory was Martin Wilkins QC, Nova Scotia's Attorney General between 1867 and 1871. Wilkins argued that the British North America Act violated the inalienable rights of Nova Scotians and was thus legally invalid: "The British North America Act is unconstitutional and void and until it is ratified by a Provincial Statute, in no matter binds Nova Scotia" (Wilkins, 1867, 5). In early 1868, Wilkins adopted a pose of ostentatious loyalty by stressing his fealty to Queen Victoria, who had been betrayed by her wicked advisors. However, Wilkins also said that if the British government refused to repeal the British North America Act, Nova Scotians would be absolved of their duty to obey the Crown. "Will we rebel against the Queen of England? No, but when the Queen rebels against us and abdicates her authority over Nova Scotia by refusing to invest us with our rights, she will discharge us from our allegiance" (Wilkins, 1868a, 21). By the autumn of that year, Wilkins's tone had become more radical, for he then argued that resistance to Confederation would be possible since Britain would never "draw the sword" on Nova Scotia and the province could always appeal for "the aid of other free nations." (Wilkins, 1868b, 276).¹

Howe distanced himself from Wilkins's theory of local popular sovereignty and said that Nova Scotians should focus their energies on persuading the imperial parliament to repeal the British North America Act rather than fighting the legislation in court. Howe's main British ally in this campaign was John Bright, an "advanced Liberal" MP. Bright analogized self-governing colonies to British municipalities when he argued that Parliament would not change the boundaries of a town in England without ascertaining the opinion of the people in the affected area and that it should show a similar consideration to Nova Scotia. Bright said that while the Nova Scotians were loyal to the Crown, they "have ideas which Englishmen have not. The tie that binds them to this House, though strong, is very much less strong than the ties which bind our English counties." Forcing Nova Scotia into a hasty union

¹ When a freelance military adventurer in Philadelphia wrote to Wilkins with an offer of assistance in the event of Anti-Confederate uprising against British and Canadian rule, Wilkins did not reply and promptly turned the letter over to Sir Charles Hastings Doyle, the British Army officer who was then the province's Lieutenant-Governor Harvey (1934).

with another British colony might push its people into rebellion, said Bright (Speech by Bright, 16 June 1868).

Despite Bright's support for the Repeal of the British North America Act, the imperial government refused to consider this option. London barristers told him that it would be pointless to try to challenge the constitutionality of the statute in an English court. In November 1868, an anguished Howe reported to Macdonald that there were "whole districts" of Nova Scotia in which loyalty to the Crown was dead (Howe to Macdonald, 16 November 1868). When Enos Collins, a ship-owner in Yarmouth, spoke of resisting Confederation with a "rifle", Howe became positively alarmed (Howe to Dalrymple-Hay, 12 November 1867). The radicalization and republicanization of the Anti-Confederation movement helps to explain why Howe abandoned it and began negotiating for "Better Terms" for Nova Scotia within Confederation. British observers firmly distinguished Howe from the more radical Anti-Confederates by noting that he was loyal to the Crown and unwilling to endorse use extra-legal measures (*Lloyd's Weekly Newspaper*, 23 August 1868). Auberon Herbert, the brother of Lord Carnarvon, the Colonial Secretary, said that a man as loyal to the Crown as Howe "must have felt somewhat ashamed of his bed-fellows", since "every Annexationist in the whole of British North America" had also opposed Confederation (Herbert, 1867, 481). In January 1869, Howe joined Macdonald's Cabinet. Although Howe's defection weakened the Anti-Confederate movement in Nova Scotia, it did not destroy it immediately. Indeed, it appears to have radicalized the rhetoric of the remaining Anti-Confederates. As Nova's Scotia's Anti-Confederate League began to talk more openly about making the province part of the United States (Pryke, 1979, 106-7), it alienated those Anti-Confederates who were loyal the Crown.

The fact many in Nova Scotia regarded the very existence of the Canadian federation as illegitimate did not dissuade the Macdonald government from using the powers given to it by the British North America Act to pass a law that intruded into the working lives of the fishing people of the Maritimes. In early 1868, the new Dominion parliament passed a comprehensive Fisheries Act. It also passed an equally controversial law that established the Department of Marine and Fisheries. The Fisheries Act introduced a range of new regulations with the view to creating a single national fisheries law modelled on the statutes of the old Province of Canada. This law authorized the creation of a federal system of fisheries leases. Departing from a principle that had emerged in post-Magna Charta English law, namely, that the Crown could grant exclusive rights to fish only in non-tidal waters (Moore and Moore,

1903, 55), the statute declared that exclusive property rights to fish could be granted “wheresoever” fishing was carried on. The Minister was authorized to create leases of up to nine years on his own authority. Fishery leases with longer terms could be created, but only with an Order in Council. The hunting of sea mammals with rockets was banned and made punishable with up to six months’ imprisonment. Fisheries Officers were given the right to adjudicate disputes between fishers. The act also established closed seasons for salmon and lake trout. The meshes of nets used to catch salmon could no smaller than five inches. The owners of dams and timber slides were required to build fishways, should the Minister deem one was necessary for spawning fish. The Minister was also authorised to cover half of the costs of constructing such fishways. The statute listed rare fish species and banned their killing, except by Indians who had prior authorization from the Minister to fish for food. The dumping of offal, sawdust, lime, drugs, and mill rubbish into streams was made illegal, unless an exemption was obtained from the Minister. The statute also banned all fishing on land with nets and seines on the Sabbath. In addition to these general rules, the statute also included highly specific rules that applied to specific areas. The law also authorized the federal government to create additional regulations through Orders in Council (Fisheries Act, 1868).

Unfortunately, only some of the parliamentary debates about this bill were recorded by newspaper reporters. (The publication of the official *Hansard* record of debates had not begun in this era). The House of Commons went into a Committee of the Whole to discuss the most intricate details of the bill. None of the speeches delivered when the House was in committee were transcribed. However, some of the speeches delivered in other stages of the bill are available to us. Supporters of the bill declared that it was designed to extend the excellent fisheries regulation system of the late Province of Canada to Nova Scotia and New Brunswick. Critics of the bill questioned the wisdom of this practice. Luther Holton, a classical liberal from Montreal who had previously opposed Confederation, said that it was “extraordinary that that the system which prevailed in Quebec and Ontario, where fishing was only a minor interest, should be extended” to the Lower Provinces, where fishing was more important and which had, in his view, “a more efficient system for the protection of their interests than had been in use in Quebec and Ontario” (May 5, 1868). Holton did not explain why he thought the systems of Nova Scotia and New Brunswick were more efficient.

The Liberal opposition, which then consisted primarily of classical liberals from Ontario and Quebec’s *parti rouge*, charged that the Department of Marine and Fisheries was

an unnecessary expense. They felt that any paperwork related to marine and fisheries matters could be completed by the Minister himself, perhaps with the assistance of one of the underworked clerks of the Treasury Board office. Alexander Mackenzie, the future Prime Minister, suggested that the Minister of Marine and Fisheries had little to do as it was: “Nothing could be more ridiculous than the extraordinary attempt which had been made to find duties for that officer” (Speech in parliament, 3 April 1868).

Such criticisms of the proposal to create this Department reinforced the Opposition’s narrative that the Macdonald government was engaged in extravagant spending and the coddling of lazy civil servants. Tatalovich (2012) has noted that while the Macdonald Conservatives believed that deficit spending would ultimately pay for itself, the doctrinaire advocates of *laissez-faire* in the Liberal Party were determined to reduce government spending to the absolute minimum. Sir John A. Macdonald said that the creation of a new Department and the hiring of clerks was necessary because of the “multifarious duties” that had devolved onto the Minister. Macdonald invoked Adam Smith’s notion that the division of labour increases productivity. Luther Holton, an Opposition MP who opposed the creation of this Department, then quipped that he had doubts “not to the value of subdivision of labour, but as to the efficiency of the Treasury Board.” He also observed that the current Minister had taken an extravagant six-week vacation, implying that he could discharge all of his functions without support staff were he in Ottawa more frequently (Speech in parliament, 3 April 1868).

At least one of the supporters of the Fisheries Act, Moïse Fortin, was aware of the problems that would be involved in attempting to gain the information needed to manage the fisheries of a country that included different ecosystems, languages, religions, and political cultures. Fortin was a merchant, a Liberal, and the MP for Yamaska, a constituency in the Montérégie region of Quebec. Pointing out that the Dominion was a “new nation,” he said that MPs from different regions “should make themselves acquainted with each other’s remarks” on the subject of the fisheries. Addressing his fellow parliamentarians, he asked “whether at present the gentlemen from New Brunswick and Nova Scotia were acquainted with the fisheries of the upper lakes, their extent and productiveness, and the trade to which they gave rise between Ontario and the United States.” At the same time, he asked the “gentlemen from Ontario, even the Province of Quebec, whether they were well acquainted with the fisheries of New Brunswick and Nova Scotia, and even the fisheries of Quebec in the Gulf and lower part of the St. Lawrence.” He suggested that the MPs needed to learn

about “the number of men employed” and other facts related to the fisheries of each region before making a single plan suitable for the Dominion as a whole. Pooling information in this way, he said, would allow for a comparison of “the present state of the fisheries with what it was five or ten years ago, so as to see whether they had advanced or receded” (Speech by Fortin, 26 March 1868).

To his credit, Fortin was aware that knowledge of the fisheries was geographically dispersed and required integration. In his view, the ideal mechanism for the synthesis of local environmental knowledge from different regions was parliament. Parliamentarians would share knowledge about their home regions, negotiate a compromise set of regulations, and then pass a detailed law that embodied their collective wisdom. This law would then be implemented by a hierarchy of officials that would extend down from the Deputy Minister in Ottawa to outside staff across the Dominion. Fortin’s view of how environmental regulation would take place was, thus, a fundamentally top-down one, although it should be pointed out the people at the apex of the hierarchy were parliamentarians elected by, and theoretically responsive too, various groups of resource users. Fortin does not appear to have thought about other mechanisms for exchanging and processing environmental information from different regions of the country. For instance, he did not acknowledge the possibility that information from the outside staff might pass up the chain of command to the Deputy Minister. Similarly, it does not appear to have occurred to Fortin that the Deputy Minister and the Minister might have to travel in person to different regions of the country to gain the requisite knowledge to regulate their fisheries. Indeed, it should be noted that the budgets of the Department in the 1870s and 1880s does not contain any indications, such as mileage allowances, that either the Deputy Minister or the Minister undertook such fact-finding missions. Most importantly, the idea that traditional or customary fishery practices might themselves embody knowledge that had been accumulated over time was not referenced by Fortin. Fortin certainly did not discuss the pre-Confederation Maritime practice of allowing fisheries regulation to take place at the municipal level.

Modification of the Dominion Fisheries Act in 1869

Federal officials soon discovered that the top-down approach embodied in the Dominion Fisheries Act was problematic. In 1869, the House of Commons discussed some of the problems that had become apparent during the Act’s first year of operation. In particular, they focused on the ban on Sabbath fishing. The 1868 Act had banned fishing with nets from Saturday evening to Monday morning. This section of the legislation required fishermen to

raise and lower seines and nets once a week, a laborious process. The regulation was particularly annoying to two groups of fishermen: those who permanently placed nets near river mouths to catch spawning fish and those who sited nets on the foreshore to catch sea creatures when the tide went out. Fishermen in New Brunswick and Nova Scotia objected to the requirement, which was new to them, as did some fishermen in Quebec, where a similar rule had been in place since the passage of the 1857 Fisheries Act.

Speaking in the House of Commons in June 1869, Pierre Fortin of the Gaspé Peninsula said that the current regulations “imposed a great deal of labour” on fishermen and should be repealed immediately. Théodore Robitaille, who represented the riding of Bonaventure, said the salmon fishermen in his riding “had done all they could for years to comply with the law, but the hardship” had become too great. Men who had been unable to lift their nets on time had been fined between \$16 and \$20 and had had their nets confiscated, resulting in the loss of an entire season’s earnings. Alluding to the Protestant belief that the sanctity of the Sabbath should be preserved through legislative action, Robitaille acknowledged that many of his parliamentary colleagues were “sensitive as to working on Sunday.” Robitaille said that while his constituents were religious men who thanked God for His fish, the existing burdens were intolerable. He suggested that the regulation might continue in Ontario but not in Quebec and the Lower Provinces. Robitaille’s comments here anticipate the subsequent tension between Quebec and the predominantly Protestant provinces over the interpretation of the Lord’s Day Act of 1906 (Strange and Loo, 1997, 59-62).

Isaac Le Vesconte, a fishing entrepreneur who was a Nova Scotia MP and fierce opponent of Confederation, said that if the regulation currently on the statute book was enforced in his province, Nova Scotians “would have to give up at least their mackerel fisheries.” Two former opponents of Confederation, Timothy Warren Anlin and Joseph Howe, described the regulation as “exceedingly injurious to the public interest.” Luther Holton, who had previously opposed Confederation, also objected to the ban on the use of nets on the Sabbath. As there were no tidal waters in his Montreal constituency, his support for the repeal of the ban was likely a function of his classical-liberal worldview and general dislike of government regulation of any sort rather than pressure from a group of voters.

The regulation had some defenders. John Hamilton Gray of New Brunswick said that “fish as well as other animals should have some chance for their lives.” Repealing the regulation would decimate fish stocks, in his view. For Hector-Louis Langevin, the issue was

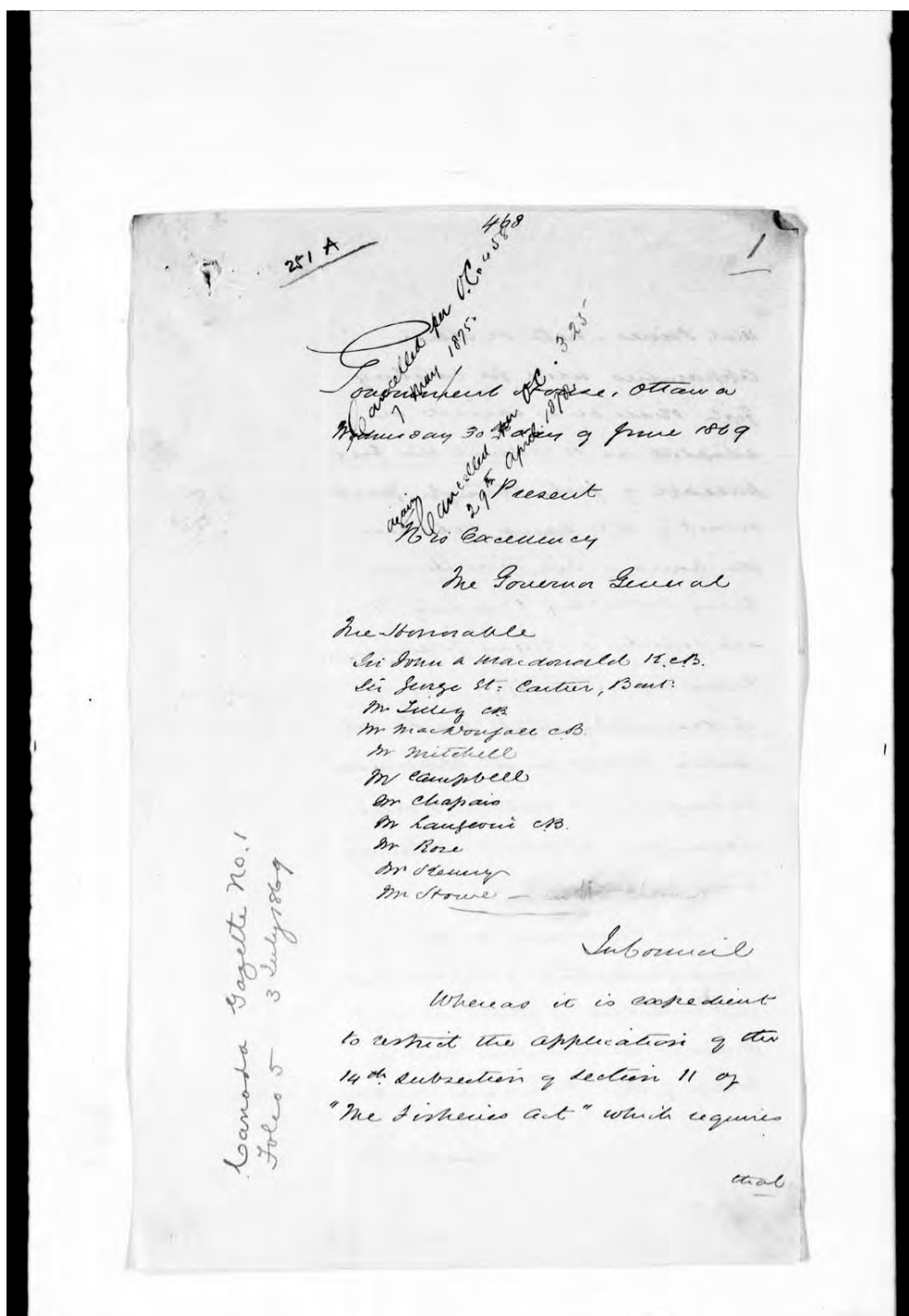
a simple law-and-order question: by repealing a regulation that had been broken by many fishermen, parliament would be condoning criminal activity. “He thought it would be better to leave the Fisheries Department to investigate the facts and take such action as it decided the public interest required.” Sir George-Etienne Cartier, the Minister of Militia, disagreed with Langevin’s view and said that repealing a section of one statute was not the same as setting aside the rule of law itself (Speeches in parliament, 19 June 1869).

Five days after the issue was discussed in parliament, a member of Macdonald’s cabinet proposed that the requirement that all nets and seines be raised between Saturday evening and Monday morning be modified. We do not know which cabinet minister proposed this change, although the fact the handwritten documents presented to Cabinet were drafted by Howe (see Figure 7) strongly suggests he was the driving force behind this change. Howe proposed an Order in Council in which the operation of the relevant section of the Fisheries Act would be suspended except insofar as it related to nets and other apparatus used for catching salmon in certain areas. On 30 June, the Cabinet met with the Governor General and approved the modified regulation, which henceforth applied only to salmon-catching nets located within three miles of the mouth of a river or stream. The revised regulation was published in the *Canada Gazette* on 3 July 1869 and appears to have settled the issue, as the regulation was no longer discussed in parliament (Howe, 1869).

Figure 7: Record of Cabinet Meeting About Fisheries Regulations, 30 June 1869.

Note that Cartier, Langevin, Howe, and Mitchell were all present.

Source: Library and Archives Canada, RG2, Privy Council Office, Series A-1-a, For Order in Council see volume 268, Reel C-3291.



The Operation of the Dominion Fisheries Act, 1869-1896

The Fisheries Protection Service of the Department of Marine and Fisheries faced two major challenges in attempting to impose the very detailed master plan contained in the 1868 Fisheries Act. First, the resources of the Service were extremely limited, as were those of the Department of which it was part. Given that the opposition charged that the entire Department was superfluous, the ability of the Macdonald to increase its funding was limited. In FY 1869-70, when the federal government spent \$554,985 on civil service salaries, just \$12,250 went to paying the Ottawa staff of the Department of Marine and Fisheries. In 1870-1, the federal government paid \$515,609 to all civil servants in Ottawa, with \$14,210 going to the Department. The headquarters of the Department of Marine and Fisheries, which was initially in the West Block on Parliament Hill, employed just eleven members of staff in 1869. (By the 1890s, the Department had moved to the building depicted in Image 4. The staff included the Deputy Minister, who was paid \$2,600 per annum, three First-Class Clerks at \$1,500 per annum each, five Clerks with rankings ranging from upper Second-Class to Third-Class, and two messenger boys. One of the First-Class clerks was responsible for correspondence related to the Fisheries Protection Service, whereas the others dealt with the other responsibilities of the Department, which included harbours, immigrant quarantine, lighthouses, pilot certification, and steamship inspections.

Figure 3: Department of Marine and Fisheries: Headquarters Staff, 1869.

Image Source: *Sessional papers of the Dominion of Canada* : volume V, second session of the first Parliament, session 1869. Ottawa : Hunter, Rose, 1869.

| THEORETICAL ORGANIZATION. | | | |
|--------------------------------------|-------------------|----------|----------|
| RANK. | SALARY. | | |
| | Minimum. | Maximum. | Average. |
| | \$ | \$ | \$ |
| Deputy of Minister..... | 2,600 | 2,600 | 2,600 |
| 1 1st Class Clerk, Fisheries..... | 1,200 | 1,800 | 1,500 |
| 1 do general business..... | 1,200 | 1,800 | 1,500 |
| 1 do book-keeper..... | 1,200 | 1,800 | 1,500 |
| Allowance to one as Chief Clerk..... | 400 | 200 | 300 |
| 1 senior 2nd..... | 1,100 | 1,400 | 1,250 |
| 4 3rd or junior 2nd..... | 1,600 | 4,000 | 2,800 |
| 2 Messengers..... | 600 | 1,000 | 800 |
| Total Staff..... 11 | 9,900 | 14,600 | 12,250 |
| Staff, July 1..... 12 | Present cost..... | | 11,630 |

Figure 4: Department of Marine and Fisheries, Headquarters Staff, 1888.

Image Source: *The Civil Service List of Canada*, 1889, 133.

| DEPARTMENT OF MARINE.—INSIDE SERVICE. | | | | | |
|---------------------------------------|------------------------------------|-------------|-----------------|----------------|----------------------------|
| Name and P. O. Address. | Present Rank. | Date. | Present Salary. | Date of Birth. | Date of First Appointment. |
| | | | \$ cts. | | |
| Smith, William..... | Deputy Minister..... | 11 Nov. '67 | 3,200 00 | 12 June '21 | '42 |
| Hardie, John..... | Chief Clerk..... | 1 July '80 | 2,400 00 | 25 Aug. '33 | 11 Nov. '67 |
| Chipman, Clarence Campbell. | Chief Clerk and Private Secretary. | 1 July '88 | 2,350 00 | 24 May '56 | '67 |
| Gourdeau, François Frédéric. | Chief Clerk and Accountant. | 1 July '85 | 2,000 00 | 20 Oct. '44 | 13 May '70 |
| Anderson, William Patrick..... | Chief Clerk and Engineer. | 1 July '87 | 1,900 00 | 4 Sept. '51 | 1 May '75 |
| Magee, William Loftus..... | 1st Class Clerk..... | 1 July '73 | 1,800 00 | 18 Sept. '40 | 11 Feb. '70 |
| Alexander, William Hewitson. | 2nd Class Clerk..... | 15 June '82 | 1,400 00 | 5 Mar. '47 | 11 Nov. '67 |
| McElhinney, Mark Patton..... | do..... | 1 Aug. '82 | 1,400 00 | 18 Mar. '37 | 1 Aug. '82 |
| Owen, Alfred Wallace..... | do..... | 31 Oct. '85 | 1,250 00 | 19 Apr. '43 | 29 Oct. '82 |
| Orley, James Macdonald..... | do..... | 1 July '86 | 1,250 00 | 22 Oct. '55 | 17 Apr. '83 |
| Halkett, James Brooke..... | do..... | 1 July '88 | 1,150 00 | 24 Sept. '45 | 7 Nov. '73 |
| Carleton, William Byron..... | 3rd Class Clerk..... | 23 Nov. '71 | 1,000 00 | 31 Oct. '49 | 23 Nov. '71 |
| Stumbles, William W..... | do..... | 1 July '80 | 1,000 00 | 20 Mar. '46 | 1 July '80 |
| Nicholson, Moses Vernon C. | do..... | 10 July '79 | 1,000 00 | 10 July '46 | 10 July '79 |
| Steele, Henry Vivian..... | do..... | 1 May '84 | 1,000 00 | 18 July '47 | 1 May '84 |
| Halkett, Andrew..... | do..... | 1 July '79 | 900 00 | 28 Oct. '54 | 1 July '79 |
| McClenaghan, James Edward | do..... | 1 July '83 | 750 00 | 21 Jan. '62 | 1 July '83 |
| Grant, Mary..... | do..... | 16 May '89 | 730 00 | | 19 Aug. '82 |
| Guion, Alonzo Herrett..... | do..... | 4 Apr. '87 | 450 00 | 30 Dec. '66 | 4 Apr. '87 |
| Morin, Jules..... | Messenger..... | 7 Oct. '72 | 500 00 | 1 Jan. '42 | 7 Oct. '72 |
| Robertson, James Alexander. | do..... | 6 June '74 | 500 00 | 25 Jan. '60 | 6 June '74 |

Figure 5: Salary Costs of Federal Government Departments, Ottawa Offices

Image Source: Sessional papers of the Dominion of Canada : volume VI, third session of the first Parliament, session 1870. Ottawa : I.B. Taylor, 52-5.

33 Victoria. Sessional Papers (No. 52.) A. 1870

II.—CIVIL GOVERNMENT.

To be voted per Statement (A).....\$515,509 16.

| No. of Vote. | Details | 1870-71. | Voted for 1869-70. |
|--------------|---|--------------|--------------------|
| | (A) ESTIMATE OF EXPENDITURE FOR WHICH VOTES OF PARLIAMENT ARE REQUIRED. | \$ cts. | \$ cts. |
| 1 | The Salaries of the Staff of the several Departments at Ottawa, viz.:- | | |
| 2 | Governor General's Secretary's Office..... | 6,635 00 | 8,955 00 |
| 3 | The Department of the Privy Council..... | 12,833 33 | 10,500 00 |
| 4 | The Department of Justice..... | 8,122 50 | 7,000 00 |
| 5 | The Department of Militia and Defence..... | 25,580 00 | 15,000 00 |
| 6 | The Department of the Secretary of State..... | 21,587 50 | 25,200 00 |
| 7 | The Department of the Secretary of State for the Provinces..... | 15,670 00 | 5,200 00 |
| 8 | The Department of the Receiver General..... | 15,700 00 | 15,850 00 |
| 9 | The Finance Department..... | 38,535 83 | 31,800 00 |
| 10 | The Customs Department..... | 20,549 00 | 23,400 00 |
| 11 | The Inland Revenue Department..... | 18,550 00 | 13,250 00 |
| 12 | The Department of Public Works..... | 37,740 00 | 40,190 00 |
| 13 | The Post Office Department..... | 49,940 00 | 57,650 00 |
| 14 | The Department of Agriculture..... | 19,728 00 | 16,550 00 |
| 15 | The Department of Marine and Fisheries..... | 14,210 00 | 12,250 00 |
| 16 | The Treasury Board Office..... | 3,000 00 | |
| 17 | The Finance Office, Nova Scotia and New Brunswick..... | 10,000 00 | 11,000 00 |
| 18 | Do, New Brunswick..... | 4,000 00 | 4,000 00 |
| 19 | Departmental Contingencies..... | 150,000 00 | 216,500 00 |
| 20 | Stationery Office for Stationery..... | 15,000 00 | |
| 21 | To meet the possible amount beyond the average salaries voted, which may be required to cover the sums payable in each individual case, after the final re-organization of the Civil Service, or any extension of the staff or other change which such re-organization may require..... | | 40,000 00 |
| 22 | To meet the possible amount for increases under the Civil Service Act, or for possible new appointments required by any extension of the staff, or other change..... | 25,000 00 | |
| | Total Civil Government, to be voted..... | \$515,509 16 | \$554,985 00 |
| | (B) EXPENDITURE AUTHORIZED BY STATUTE. | 1870-71. | 1869-70. |
| | The salary of the Governor General..... | 48,666 66 | 48,666 66 |
| | The salary of the Lieutenant Governor of the Province of Ontario..... | 8,000 00 | 8,000 00 |
| | The salary of the Lieutenant Governor of the Province of Quebec..... | 8,000 00 | 8,000 00 |
| | The salary of the Lieutenant Governor of the Province of Nova Scotia..... | 7,000 00 | 7,000 00 |
| | The salary of the Lieutenant Governor of the Province of New Brunswick..... | 7,000 00 | 7,000 00 |
| | The salaries of thirteen Ministers, at \$5,000 each..... | 65,000 00 | 65,000 00 |
| | The salary of the Governor General's Secretary..... | 2,400 00 | 2,400 00 |
| | Total Civil Government, authorized..... | \$148,066 66 | \$148,066 66 |

SUMMARY.

| | 1870-71. | 1869-70. |
|----------------------------|--------------|--------------|
| To be voted..... | \$515,509 16 | \$554,985 00 |
| Authorized by Statute..... | 148,066 66 | 148,066 66 |
| Total..... | \$663,575 82 | \$703,051 66 |

N.B.—In the Estimates for 1869-70, the salary of the Governor General's Secretary although authorized by Statute, was also placed in the Estimates for which votes of Parliament are required. It is to be observed in comparing the Estimates of 1869-70 and 1870-71, that several transfers have been made of particular branches from one Department to another.

Table 1: Administrative and Clerical Functions Performed by the Fisheries Branch of the Department of Marine and Fisheries, Calendar Year 1870

Source: Department of Marine and Fisheries, *Annual Report*, 1870, Appendix A.

| Administrative Actions Performed | 1869 | 1870 |
|--|-------------|-------------|
| Letters received, acknowledged, examined, entered, indexed, or otherwise disposed of | 3,392 | 2,984 |
| Letters written, entered, indexed. and despatched | 2,467 | 1,628 |
| Reports to Council, written, entered, indexed and carried out | 52 | 39 |
| Orders in Council, received, registered, copied and carried out | 51 | 33 |
| Quarterly Accounts, examined and checked | 227 | 182 |
| Special statements, and memoranda for Minister | 69 | 24 |
| Requisitions for cheques | 533 | 420 |
| Miscellaneous documents prepared and copied | 2,914 | 2,186 |
| Licenses made-out and delivered | 637 | 592 |
| Circulars written to Overseers and others | 1,193 | 419 |
| Total | 11,535 | 8,507 |

Figure 6: Headquarters of the Department of Marine and Fisheries, Queen and O'Connor Streets, 1890s. Library and Archives Canada, MIKAN no. 4161379.



The second, and more profound issue, was that the Headquarters' knowledge of the country's waterways and fish stocks was necessarily quite limited. This issue is connected to the question of the use of knowledge in society that was highlighted by Hayek and the Bloomington School.

The Problem of Resources

Table 2. Fisheries Service Outside Staff, Fiscal Year Ended 30 June 1882

Source: Department of Marine and Fisheries, *Annual Report*, 1882, page xlv.

| | |
|---|-----|
| Ontario (Fishery Overseers and Guardians) | 90 |
| Quebec (Fishery Overseers and Guardians) | 98 |
| Nova Scotia (Fishery Officers and Wardens) | 241 |
| New Brunswick (Fishery Officers and Wardens) | 109 |
| Prince Edward Island (Fishery Officers and Wardens) | 46 |
| British Columbia | 2 |
| Gulf of St Lawrence (Commander and crew of the Fisheries Steamer <i>La Canadienne</i>) | 30 |
| Fish Hatcheries (Superintendent, Assistants, and others) | 25 |
| Total | 641 |

In the fiscal year 1881-1882, the total budget of the fisheries service was \$92,700.71. Of this, \$31,223.93 was expended on fish culture: the government's eleven hatchery stations claimed to have released precisely 58,162,000 fish eggs in that year. The costs of the hatcheries meant that just \$61,477 was available to cover the expenses of creating, monitoring, and enforcing property rights to fish. Fisheries overseers, guardians, and wardens typically worked alone, with each man being charged with the supervision of a particular territory or stretch of river. The territory for which an individual was responsible varied enormously. The data presented in Table 2 shows that Ontario's fisheries were the most closely monitored in the Dominion. In settled areas near Ontario's major cities, each overseer was responsible for a relatively small area. However, these areas were nevertheless quite large when one considers that the responsible officers would not have had access to motorized vehicles. For instance, Captain James G. Wilcox, who resided in Port Credit west of Toronto, was responsible for the River Credit from the mouth up to the village of Norval, a

distance of 29km. Andrew Hughson of Orangeville was then responsible for the section of the river between Norval and Church's Mills Cataract, together with the minor waterways in the townships of Mono, Allarant Luther, East Gamfraxa, Albion, Caledon. Each of these townships comprised 36 square miles. Both men were paid \$50 per annum for these services, which strongly suggests that this was a part-time job for them. We know from census data that Wilcox was 64 years of age in 1882. In 1873, he had described his occupation as sailor, which suggests that he spent much of his time on the Great Lakes (Directory of the County of Peel for 1873-4, 110). Given Wilcox's age, the size of the territory for which he was responsible, and the part-time nature of his job, it would have been ambitious to have expected him to enforce fisheries regulations consistently.

On the West Coast, the situation was close to absurd, as there were just two fisheries officers for all of British Columbia: Alexander C. Anderson, who lived in Victoria, was paid a salary of \$600 per annum to monitor the fisheries around Vancouver Island, while George Pettendreich of New Westminster on the mainland was paid \$500. Neither man was compensated for travelling or other out of pocket expenses, which suggests that they were expected to cover these costs out of their salaries. It is unclear how much they travelled each year.

Table 3. Density of Fisheries Regulatory Apparatus, By Province, Fiscal Year Ended 30 June 1882. Note: data taken from Department of Marine and Fisheries, *Annual Report*, 1882; *Historical Statistics of Canada*, Table N38-48 "Number of persons engaged in primary fishing operations, by province, 1878 to 1975"

| Jurisdiction | Number of Fisheries Protection Officers | Number of Commercial Fishermen | Fishermen Per Protection Officer |
|----------------------|---|--------------------------------|----------------------------------|
| Ontario | 90 | 3,382 | 37.6 |
| New Brunswick | 109 | 8,712 | 79.9 |
| Canada (Average) | 199 | 61,283 | 308.0 |
| Nova Scotia | 241 | 26,527 | 110.1 |
| Prince Edward Island | 46 | 5,206 | 113.2 |
| Quebec | 98 | 14,706 | 150.1 |
| British Columbia | 2 | 2,804 | 1402.0 |

Ontario, which had a relatively small population of commercial fishermen had one fisheries officer for each 37.6 fishermen in 1882. Ontario's fisheries were thus the most policed in the Dominion. Ontario happened to be the location of the national government. In the provinces with the largest populations of commercial fishermen, Nova Scotia and Quebec, the ratio was 110.1 and 150.1. In British Columbia, which had been part of the Dominion for less than a decade, there were just two officers for 2,804 recorded commercial fishermen. (It is uncertain whether the figures for British Columbia included First Nations fishermen).

The annual reports of the Department of Marine and Fisheries do not record the ages of overseers. However, the reports suggest that many of them were elderly. Writing of the difficulties in enforcing the closed season, Christopher Parker, an Overseer along New Brunswick's Miramichi River said enforcement work "in the darkness of night" by "men whose limbs are stiffened by age and whose sight is dim from the same cause" is not "calculated to catch the poachers of the present day." Enforcement, he wrote that it "requires activity as well as courage and determination to go among a dozen men with their faces blackened and yelling like fiends not knowing at what moment a stone may be thrown at your head from some hidden hand." Parker, who was paid \$160 per annum, said he believed that "a few suitable men, properly plaid, would be more effective in preventing illegal fishing than the present large number of Warders paid insignificant salaries" (Department of Marine and Fisheries, *Annual Report*, 1882, 54).

Despite such criticisms of the use of part-time overseers, the Department shifted towards greater reliance on the part-time enforcement staff. In 1892, the Inspector A. C. Bertram, the ranking fishery officer in Nova Scotia, defended the increasing casualization of the workforce, opining that "there is no doubt but the present system of employing guardians to patrol certain districts, who devote a portion of their time to this purpose and give the result of their work each week" was better than the "old system" of employing full-time wardens. He claimed that the change had been "commented on favourably by visitors to our rivers as well as by those of our own people who desire to see the fish protected" (Department of Marine and Fisheries, *Annual Report*, 1892, 178).

The senior officials of the Department of Marine and Fisheries had limited knowledge of the localities they were supposed to regulate. Moreover, the inadequate financial resources at their disposal constrained their ability to add to their stock of information. The officials in Ottawa were reliant on whatever letters and telegrams were sent by outside staff, publications

available in the Library of Parliament in the Centre Block, and their own personal knowledge of fishing, which was likely based on conditions on the Ottawa River.

Table 4: Ministers of Marine and Fisheries, 1867-1900

Source: Canadian Parliamentary Library Parliamentarian File.

| Dates | Name | Home Province |
|-----------|----------------------------|----------------------|
| 1867-1873 | Peter Mitchell | New Brunswick |
| 1873-1878 | Sir Albert James Smith | New Brunswick |
| 1878-1882 | J.C. Pope | Prince Edward Island |
| 1882-1885 | Archibald McLelan | Nova Scotia |
| 1885-1888 | George Foster | Ontario |
| 1888-1894 | Sir Charles Hibbert Tupper | Nova Scotia |
| 1894-1896 | John Costigan | New Brunswick |
| 1896-1901 | Sir Louis Henry Davies | Prince Edward Island |

It was only in 1889 that a Fisheries Intelligence Bureau tasked with interpreting incoming data was established. The main function of the grandly-named Intelligence Bureau, which was based in Halifax, appears to have been to track the movements of fish school. The Bureau received daily telegraphic reports from 52 stations which it used to track fish movements in real time. Estimates of the current location of fish schools were then relayed by telegraph to fisheries protection vessels such as *La Canadienne* and to commercial fishermen (Department of Marine and Fisheries, *Annual Report*, 1891, xxi). Although it had an impressive name, the Bureau appears to have had only a single employee in its early years. In 1890-1, the analysis of incoming data and the compilation of reports was performed by one Alexander Fraser, B.A. When Fraser left for a more lucrative position in the United States, he was replaced by William Hutchins of Halifax, who was not described as having an academic qualification. The total cost of the bureau for 1892 was projected as \$2,500 (Department of Marine and Fisheries, *Annual Report*, 1891, 21-22), which roughly corresponds to the costs of a couple of clerks and stationary.

Problems with the Centralized Approach

Finances constrained the ability of the Ottawa headquarters to learn about conditions across the country. Successful regulation of the fisheries would have required the bureaucracy to have access to the following types of environmental information: tolerably

accurate maps of inland waterways; knowledge of the location of different fish stocks; knowledge of the location and behaviour of various human populations; knowledge of pre-existing property rights in fish. All of these resources were in short supply at this time. The Geological Survey of Canada's progress in mapping the country's inland waterways was slow, since its priority in the 1870s was on mapping the route for the transcontinental railway (Zaslow, 1975, 110-125). The government's knowledge of the country's human inhabitants was also limited. Nineteenth-century Canadian censuses contained very suspect data (Curtis, 1994). The first nation-wide census was taken in 1871, but it took several years for the results to be processed into formats useful to bureaucrats. Moreover, census data for Native-majority regions were uneven, with population figures being merely rough estimates before the 1890s (Hamilton, 2008). In 1878, the Department began to record and publish data regarding the number of persons employed in the commercial fishery. These numbers were unreliable as the definitions of who was a commercial fisherman were inconsistent between jurisdictions (Morse, 1983).

Fisheries protection officers in the field were acutely aware the Minister, Deputy Minister, and other personnel in the Ottawa headquarters lacked knowledge of many of the localities over which they had jurisdiction. James Cooper of Victoria, British Columbia discussed his superiors' ignorance in a letter to the Deputy Minister. Somewhat surprisingly, this candid letter was printed in the Department's *Annual Report* for 1873. Cooper concluded his letter by stating that "I am cognizant that my personal intimate knowledge of all the localities and their various requirements in this Province, may lead me unintentionally in some cases to render my remarks obscure to those at a distance who are not acquainted with the locality." He continued: "I venture respectfully to suggest the Hon. The Minister of Marine and Fisheries, or one of his officers, should visit this Province for the purposes of inspecting various matters." Such a visit might, he said, render future reports and letters more clear and would make "the value of my suggestions more easily apparent to the Department at Head Quarters" (Department of Marine and Fisheries, *Annual Report*, 1973, 92).

Fisheries officers also acknowledged their own ignorance of parts of the territories for which they were responsible. For instance, one officer called for a survey of streams in the part of the Labrador east of Natashquan, frankly admitting that neither he nor anyone else in the Department knew much about this part area. He said that the costs of such a survey, \$300 or \$400, could be recouped through the leasing for angling privileges in the area. Without a survey, leases could not be safely granted (Department of Marine and Fisheries, *Annual*

Report, 1873, 70). There are no references to expenditure on such a survey in the Annual Report for the subsequent year, which suggests the Minister did not act on his suggestion.

In the 1890s, Professor E.E. Prince repeatedly acknowledged that officials in Ottawa had very limited knowledge of the “fishes and other living organisms” they were supposed to manage. In a report he wrote shortly after his appointment as Fisheries Commissioner in 1893, Prince “laid stress on the scattered and limited amount of knowledge we possessed on such subjects as the spawning periods and breeding areas of valuable food-fishes.” In 1900, he wrote that while biological research in Canadian waters had been carried out by Canadian and foreign “scientific men” for nearly seventy years, but the useful knowledge that had been derived from “the work of such authorities as the late Sir William Dawson, Dr. J. F. Whiteaves, Professor Ganong, and certain eminent United States biologists, had a far less direct bearing upon” the regulation of fishing industries than was to be desired. The result of such ignorance has led to “the great loss of valuable fishery resources resulting annually” and a check to the creation of potentially valuable “fishing enterprises” (Department of Marine and Fisheries, *Annual Report*, 1900, 223).

The fact that the Fisheries Department had extremely limited information at its disposal did not deter successive Ministers of Marine and Fisheries from granting leases conferring exclusive property rights in fish in remote bodies of water. Such leases created the potential for constitutional conflict with the provincial governments, which were also in the business of granting overlapping property rights. The first of these cases came before the Supreme Court in 1882. Acting under the authority conferred by the 1868 Fisheries Act, Minister Albert J. Smith had granted an individual named Robertson an exclusive right to fish for salmon on a section of the North West Miramichi River in New Brunswick in January 1874. Unbeknownst to the Fisheries Department, the exclusive right to fish in the non-tidal portions of this river had already been granted, along with 580,000 acres of land, to the Nova Scotia and New Brunswick Land Company (NSNBLC) in 1835. This company, which had its head office in the United Kingdom, operated between 1835 and 1885 (*London Morning Post*, 11 November 1885).

Two men known only as J.S. and E.H. obtained the right to fish for salmon during the summer of 1875 from the local office of the NSNBLC. When Robertson discovered J.S. and E.H. fly-fishing on his section of the river, he prevented them to continuing. J.S. and E.H. successfully sued Robertson for damages. Robertson then sued the federal government for having erroneously sold him the fishing lease. In its 1880 decision in the case of *Robertson v.*

the Queen, the Supreme Court ruled the federal government was in the wrong. It did so on a number of grounds. First, the 1868 Fisheries Act did not authorize the federal government to override pre-existing property rights. Second, Ottawa could not grant exclusive rights to fish in non-tidal rivers, since the creation of such leases would undermine provincial jurisdiction over property and civil rights. The court also ruled that the creation of leases on tidal bodies of water by any level of government would be illegal, since this practice had been banned by the Magna Charta (*Legal News*, 11 December 1880).

Thereafter, litigation over which level of government had the right to regulate fisheries continued. These disputes became connected to the broader question of provincial autonomy, an issue that was pushed by the Ontario government of Sir Oliver Mowat, which was hoping to decentralize Confederation (Saywell, 2003, 62). In 1898, the question of which level of government had jurisdiction over fisheries came before the Judicial Committee of the Privy Council, the British Empire's highest court of appeal. By 1898, the JCPC had developed a reputation for siding with Canada's provinces in their disputes with Ottawa. In this particular case, the JCPC's pro-decentralization agenda was constrained by the manifest wording of section 91 of the British North America Act, which had awarded jurisdiction over all fisheries to Ottawa. The JCPC confirmed the federal parliament's exclusive authority to legislate in the area of fisheries, provided such regulations did not affect property or civil rights. In other words, the JCPC established that both levels of government had a role to play in making fisheries regulations, which failed to resolve the jurisdictional conflict (Judicial Committee of the Privy Council, 1898).

Fisheries Devolution Under Laurier

In 1896, the Liberals under Laurier won the federal election. It was now their job to deal with the constitutional question of who ought to regulate inland fisheries. As a young man in the 1860s, Laurier had opposed the creation of the Canadian federation. Although he had long since accepted that the Canadian federation was here to stay, he was nevertheless sympathetic to those who favoured a degree of decentralization (Bélanger, 1986, 37-65). The Laurier government responded to the constitutional quagmire of fisheries regulation by evading the increasingly theoretical question of which level of government had ultimate sovereignty over fish in the water by developing a pragmatic *modus vivendi* with the provinces. It began transferred *de facto* control over non-tidal fisheries to provinces. In 1899, the federal government devolved jurisdiction over fisheries to the Ontario government, which became responsible for issuing fishing licences and regulations. In Quebec, the provincial

government assumed responsibility for the management of inland fisheries, although the federal Department of Fisheries remained responsible for managing fisheries in the outer Gulf of Saint Lawrence. In 1899, control over inland fisheries in the three Maritime provinces was devolved to the provincial governments (Parsons, 1993, 19-21).

The transition to provincial control certainly created some problems. Inspector O. B. Sheppard, who resided in Toronto, said that the changeover resulted in the failure to hire enforcement officers in time for the 1899 fishing season. The result had been overfishing and the depletion of some fish stocks in the subsequent year. He was, however “pleased to state that a great deal more attention has been given this branch of our fisheries this year by the provincial authorities, with whom I have had many interviews on the matter, and I confidently look forward to a decided improvement in the near future” (Department of Marine and Fisheries, *Annual Report*, 1900, xxxvi).

One benefit that came from the devolution of fisheries enforcement to the provinces was that it allowed forestry wardens and other provincial officials to integrate fisheries protection into their duties, allowing for a more holistic approach. In 1900, A. H. Belliveau, the federal Inspector in charge of the western district of Quebec, praised the practical results of the change from federal to provincial responsibility, writing “that the provincial authorities seem disposed to exercise a more efficient protection” than their federal predecessors. “In future all their game-keepers and even forest and fire rangers will be clothed with the powers of fishery officers. These, with the assistance of the different clubs dispersed over the extensive inland areas, will no doubt achieve better results” (Department of Marine and Fisheries, *Annual Report*, 1900, 191). Devolution also resulted in more frequent meetings between federal and provincial fisheries officials, which allowed for the sharing of environmental knowledge in both directions. Describing his meetings with provincial officials in 1899, Belliveau said that he had had the opportunity to acquire “practical knowledge re habits of certain species, or the make up of different fishing gear.” He admitted that he had spent the previous twenty years issuing licences “for fishing implements with which I was not familiar” and said that he been very interested in seeing the fishermen in actual operation (Department of Marine and Fisheries, *Annual Report*, 1899, 39).

Conclusion and Legacies for the Present

As we have seen, the rather extreme form of centralization represented by the Dominion Fisheries Act of 1868 was eventually replaced by a more flexible system in which the provinces were accorded a greater role. Hayek's theory of knowledge would suggest decentralization under Laurier was a positive development that helped Canadians to reconcile the goals of economic development and the protection of the environment. Decentralizing environmental regulation to local communities is beneficial from a Hayekian viewpoint because it allows for the use of dispersed knowledge that may not be available to bureaucratic decision-makers in a distant capital city. Hayek's theory suggests that continued movement in the direction of decentralisation would be beneficial. In other words, control over environmental policy should be devolved downwards to the levels of government closest to the communities that are impacted by business activities (Anderson and Watson, 2011). These levels of government would include Euro-Canadian municipal governments and First Nations communities. The governments of the least populous provinces, some of which have smaller populations than many Ontario municipalities, might also be suitably sized jurisdictions for the making of environmental policy. The principles of subsidiarity (Marshall, 2008; Plummer and Fitzgibbon, 2004) and community-based management (Armitage et al., 2011) should guide us in selecting which level of government is the most appropriate regulator for fisheries and other common-pool resources.

The management of fisheries is a pressing issue around the world (Grescoe, 2011). Since the closure of the Newfoundland cod fishery in 1992, Canadians have debated whether an alternative to bureaucratic management would have produced a superior outcome. This debate has inspired critical studies of fisheries management in post-war Canada (Murray, 2005; Bavington, 2011). Classical liberals, such as those associated with the Fraser Institute and the Atlantic Institute for Market Studies, have promoted an alternative to regulation by state bureaucracies, namely, the creation of property rights to fish stocks (Crowley, 2003). This market-based approach, it is claimed, produces superior outcomes because it addresses the "tragedy of the commons" problem more efficiently. At its core, free-market environmentalism suggests that the privatization of common resources, be they fish stocks, open-range grasslands, or the atmosphere would allow us to rely on self-interested individuals to protect nature (Brubaker, 1995; Pennington, 1999; Kratz and Block, 2013; Anderson and Parker, 2013). Under such a regime, government micromanagement of matters

such as fishing techniques, cattle herd sizes, and vehicle CO₂ emissions becomes superfluous, as price signals direct individuals to conserve resources.

There are a number of serious problems with the market-based approach to environmental protection (Adler, 2012; Appleby, 2013). For our immediate purposes, the most important of these problems relate to knowledge. When seen from a Hayekian paradigm, the differences between the bureaucratic and the so-called market-based approaches are less substantial than would first appear. Both approaches rely on sovereign power (Banzhaf et al., 2013). Moreover, they make similar assumptions about the ability to public servants to gather environmental knowledge. For either of these twin approaches to work, bureaucrats must have sufficient information about the people and ecosystems they are attempting to control. The costs of acquiring such knowledge increase with distance between the regulators and the regulated. The research presented in this paper has suggested that regardless of which mix of solutions we use to deal with environmental problems, we must acknowledge the dispersed knowledge problem identified by Hayek and the Bloomington School.

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The Best Fishing Station:

*Prince Edward Island and the Gulf of St. Lawrence Mackerel Fishery
in the Era of Reciprocal Trade and Confederation Politics, 1854-1873*

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Prince Edward Island is, without doubt, the best fishing station within the Gulf of St. Lawrence; but the habits and feelings of the inhabitants are so decidedly agricultural that the fisheries have not received from our own people the attention which they deserve, and are now mainly carried on with United States capital.

Lieutenant Governor William Robinson, 1870.¹

The greatest impact that Confederation had on the environment of the Gulf of St. Lawrence did not derive from the union of the Canadas, New Brunswick, and Nova Scotia, but the noticeable absence of Prince Edward Island from that union. The Island's geographic location in the heart of one of the world's most profitable mackerel fisheries made it an ideal location for local bases of operations. Yet, the Island's agrarian culture limited the level of engagement that Islanders themselves had with the rich fisheries immediately off their coast. Americans quickly filled the void. By delaying their union with the Dominion of Canada until 1873, Prince Edward Island provided the American fishing fleet an opportunity to transfer their local bases of operations from Nova Scotia, which, of course did join Confederation in 1869, to

¹ William Robinson, "Report to Accommodate the Blue Book of Prince Edward Island For the Year 1870," RG 1, Vol. 50 (1870), Public Archives and Records Office, Prince Edward Island.

Prince Edward Island. The Islanders' unwillingness to follow the more stringent policies of Canada regarding American fishing activities in the Gulf of St. Lawrence allowed those Americans to use Island ports to strengthen their control over the marine environment and its resources; specifically the rich mackerel fishery of the inshore and near-shore waters of the Gulf. Moreover, this combined American-Island utilization of the environment actually depended upon Prince Edward Island remaining outside of the political borders of the new Dominion of Canada; at least until after the signing of the Treaty of Washington in 1871.

When the American fishing fleet entered the waters around Prince Edward Island and used the Island's ports to maximize their control over the mackerel fisheries of the Gulf of St. Lawrence they crossed over a number of conflicting borders and through a diverse collection of borderlands. Historians of Atlantic Canada and New England have long played with the meaning of borders and the existence of borderlands. Victor Konrad best defined a borderland many years ago when he wrote;

The borderlands of the United States and Canada are distinctive regions of mitigating landscape fading from the common edge of the boundary. Borderlands evolve from border regions, or contiguous zones in which exchange between nation-states takes place. ...In the Canada-United States context particularly, borderlands are regions that have a tempering effect on the central tendencies of each society, and these regions reveal the ways in which the nation-states blend into each other.²

Since then historians have developed and critiqued a number of competing definitions of borders in the northeast, yet, for the most part, the debate remained closely tied to political and social connections or divisions across this space.³ These historians have not yet fully embraced the potential of competing environmental boundaries. Given the depth of borderlands historiography it is likewise surprising how segregated the environmental histories of New England are from the

² Victor Konrad, *Borderlands: Essays in Canadian-American Relations* (Toronto: E.C.W. Press, 1991), p. viii.

³ Konrad's theory built upon the existence of a rich literature on North American continentalism including, Garth Stevenson, "Canadian Regionalism in Continental Perspective," *Journal of Canadian Studies* 15 no. 2 (Summer 1980): 17; C. Vann Woodward, *The Comparative Approach to American History* (New York: Basic Books, 1968).

environmental histories of Atlantic Canada.⁴ The Gulf of St. Lawrence mackerel fishery and the combined utilization of that environment by Yankee fishermen and Island merchants provides but one of many potential subjects that expands our understanding of borders and environment. The years between 1854 and 1873, and especially 1870, was a period of intense political discourse between the United States, Great Britain, Canada, and Prince Edward Island, which provides historians the essential documentation needed to come to terms with the competing definitions of borders and the use of an environment that straddles so many different border regions.

With the creation of the new Dominion of Canada in 1869 a new political border emerged in the Gulf of St. Lawrence. When Canada sought to aggressively enforce this political border in 1870 they clashed with a fleet of American mackerel fishing schooners who had become accustomed to using the environment as their own; with the help of Island merchants. As such, the American fleet found itself crossing a new boundary that divided an environmental space that they, and apparently Prince Edward Islanders as well, had previously understood to be whole. Because of Canadian confederation then, American fishermen had to construct new methods to cross jurisdictional lines in order to continue to act as they had in what they perceived to be a singular environmental space.

The Americans crossed these various borders and took control of the Gulf's mackerel fisheries via three distinct methods. Fishing schooners owned and operated out of New England ports could simply break the law and fish within the three-mile limit of Prince Edward Island hoping that Canadian and British forces would not invade the colony's local jurisdiction. Alternatively, individual American fishermen could relocate to Prince Edward Island, establish residency, integrate themselves into the Island community, and fish from Island ports as Island residents. The third, and most common method, was for American fishing operations to use the steamship line that connected Charlottetown with Boston to transship fish caught in the Gulf of St. Lawrence more quickly to the American marketplace. Eventually American capitalists would also invest in Island-based fishing operations, hire local managers and laborers, and extend their

⁴ Recent environmental historiography of the regions suggests a continued focus on either Atlantic Canada or New England with little crossover. For example see Richard Judd, *Second Nature: An Environmental History of New England* (Amherst: University of Massachusetts Press, 2014) and Claire Campbell and Robert Summerby-Murray, eds. *Land and Sea: Environmental History in Atlantic Canada* (Fredericton: Acadensis Press, 2013).

financial reach deeper into the Gulf of St. Lawrence, but this trend did not really develop until the early twentieth century and is not directly related to the economic and political context of 1854-1873. The other three methods of American control of the environment of the Gulf of St. Lawrence were of questionable legality and first immersed during the period between the signing of the Reciprocity Treaty of 1854 and Prince Edward Island's union with Canada in 1873. As such, there is a close connection between the geo-political history of US-British relations and Canadian Confederation and the environmental history of the Gulf of St. Lawrence. In the end, the political interests of Prince Edward Island, Canada, Great Britain, and the United States profoundly shaped how these competing societies understood and used the environment of the Gulf of St. Lawrence, and the impact that that utilization had on that environment. The end result was the extension of American economic control over the environment of the Gulf of St. Lawrence via the ports of Prince Edward Island.⁵

Prince Edward Island historians do not often consider the Island's place within the Gulf of St. Lawrence or the extent to which Canadian Confederation affected or was affected by that marine environment. The environmental histories of Prince Edward Island are most shaped by its rich red soil and the Island's history is most often displayed as an agrarian society despite that fact that this island sits in the heart of one of the world's richest and most diverse fisheries.

Add PEI environmental historiography noting Wells as exception

Because Island historians rightly noted that few Islanders engaged in fishing during the nineteenth century they thus concluded that the Island had no fisheries history. With this conclusion one could then assume that Islanders, despite Prince Edward Island's central location,

⁵ The historiography of the underdevelopment of Atlantic Canada's fisheries and the extent to which Americans control and profited most from that fishery is especially rich. For the best examples of this see, Sean Cadigan, *Hope and Deception in Conception Bay: Merchant-Settler Relations in Newfoundland, 1785-1855* (Toronto: University of Toronto Press, 1995); Stephen J. Hornsby, *British Atlantic, American Frontier: Space of Power in Early Modern British America* (Hanover, NH: University of New England Press, 2005); Harold Innis, *The Cod Fisheries: The History of An International Economy* (New Haven, CT: Yale University Press, 1940); Wayne O'Leary, *Maine Sea Fisheries: The Rise and Fall of a Native Industry* (Boston: Northeastern University, 1996); Rosemary Ommer, *From Outpost to Outpost: A Structural Analysis of the Jersey-Gaspé Cod Fishery, 1767-1886* (Montreal: McGill-Queen's University Press, 1991); Peter Pope, *Fish Into Wine: The Newfoundland Plantation in the Seventeenth Century* (Chapel Hill: University of North Carolina Press, 2004); Daniel Vickers, *Farmers and Fishermen: Two Centuries of Work in Essex County, Massachusetts, 1630-1850* (Chapel Hill: University of North Carolina Press, 1994).

actually had very little impact on the marine environment of the Gulf of St. Lawrence, and that that environment had a very limited impact on Island life.

This agrarian focus to the Island's history is also manifested in the interpretations concerning the Island's politics during the Confederation era, 1865-1873. Political historians of Prince Edward Island overwhelmingly focus on the land question and schooling as the principal issues. **Insert historiography on PEI and Confederation**

These dominant themes in the history of Prince Edward Island leave little room for understanding the relationship between Islanders and the Gulf of St. Lawrence and the extent to which Confederation politics called into question that relationship. Despite the overwhelming agrarian focus to the Island's history, Prince Edward Island did, in fact, have a close relationship with the Gulf of St. Lawrence, and the fisheries resources of that marine environment were deeply affected by Island policy. Yet, it was the fisheries and fishery markets of the United States, not Canada, that most shaped the Island's utilization of the resources of the Gulf and thus forced Islanders to question the economic impact of the political boundaries established by Confederation. Islanders interested in the marine resources of the Gulf of St. Lawrence could not allow these new political boundaries to supersede the environmental boundaries and the economic tie between the United States and Prince Edward Island that centered on the mackerel of Gulf.

The Reciprocity Era (1854-1866) and Canadian Confederation

Prior to Confederation, and largely as a result of the Reciprocity Treaty of 1854-1866, fishermen from the United States transferred many of their auxiliary economics to ports that were closer to the fisheries of the Gulf of St. Lawrence and the Grand Banks. Located predominately in Nova Scotia, especially around the Gut of Canso, Americans used these local ports to purchase bait and other supplies, obtain wood and water, repair vessels, sails, and lines, and hire crew. Not only were most of the necessary fishing articles cheaper in Nova Scotia than in New England, but by placing their supportive economies closer to the fishing grounds Americans found it much easier, faster, and cheaper to resupply and repair in midseason. This enabled the American fleet to stay at sea longer and to focus more precisely on the profitable market fish, such as codfish, haddock, halibut, herring, and mackerel, and leave the less profitable fishery economic units in the hands of British North Americans. These local fishermen also, for the most part, found the arrangement to their liking as they increased their

customer base and enable small outfitters to reap some financial rewards from what was becoming an increasingly highly-capitalized industry with little room for small start-ups.⁶

The tandem effect of the repeal of the Reciprocity Treaty in 1866 and Canadian Confederation in 1869 changed all of this. The repeal of the Reciprocity Treaty reestablished the legal parameters of the Convention of 1818, which was the de facto rule of fishing in the borderseas of the North Atlantic. The Convention of 1818 limited Americans' utilization of inshore waters, within three marine miles of the coast, to seeking shelter, repairing damages, and obtaining wood and water. The so-called "wood and water" policy curtailed the level of activity that American fishermen had become accustomed to under the era of the Reciprocity Treaty. British and Canadian officials immediately sought to reestablish reciprocal trade with the United States in 1866. The pressing issue of the *Alabama* claims and the boisterous annexationist rhetoric of Americans such as Benjamin Butler, limited the effectiveness of polite diplomatic exchanges. Initially the British colonies of the North Atlantic issued annual licenses to American fishing vessels that allowed them to continue their Reciprocity Era activities upon the payment of a nominal fee. Although some Americans did take the trouble to purchase the licenses in 1867 and 1868, by 1869 few Americans bothered with such protocol and simply did as they had done during the Reciprocity Era despite the changing legality of those activities.⁷

After Confederation the new Dominion government assumed a certain level of authority to protect the waters around Nova Scotia, New Brunswick, and Quebec's Gaspé Peninsula. Thus, in 1869 the Gulf of St. Lawrence became a rather difficult place to fish as multiple states claimed at least some jurisdictional authority. By 1869 John Macdonald had grown tired of American violations of the Convention of 1818 and the failure of the United States government to reenter negotiations for a reciprocity agreement. In order to force the Americans' hand Macdonald, and his Minister of Fisheries Peter Mitchell, decided to enforce a literal interpretation

⁶ For a more detailed analysis of the American involvement in the local fisheries of Britain's Atlantic colonies, more particularly of Nova Scotia, see Brian Payne, *Fishing a Borderless Sea: Environmental Territorialism in the North Atlantic, 1818-1910* (East Lansing: Michigan State University Press, 2010).

⁷ Payne, *Fishing a Borderless Sea*.

of the 1818 agreement by prohibiting all American fishing activities in Canadian ports with the exception of shelter, repair, wood, and water.⁸

Mitchell directed his small navy of a half-dozen cruisers to seize American fishing schooners without incorporating the Royal Navy's longstanding practice of giving one warning before seizing any fishing vessel. In contrast to this aggressive policy, British officials instructed the Admiralty to relax the naval protection of the North Atlantic fisheries. In 1870 Lord Granville ordered the Secretary of the Admiralty to "inform their Lordships to instruct the officers of Her Majesty's ships employed in the protection of the Fisheries that they are not to seize any vessel unless it is evident and can be clearly proved that the offense of fishing has been committed, and the vessel itself captured, within three miles of land."⁹ Thus, British authorities only sought to enforce a prohibition of fishing and to allow Americans to continue the auxiliary economic activities in British colonies in the Atlantic, namely, Prince Edward Island.

The Admiralty forwarded these instructions to Vice-Admiral Wellesley, the commanding officer of the British Atlantic fleet. The Lords of the Admiralty also reminded Wellesley of "the extreme importance of commanding officers of the ships selected to protect the fisheries, exercising the utmost discretion in carrying out their instructions."¹⁰ From these instructions it became clear to both Americans and Prince Edward Islanders that the Royal Navy would not enthusiastically support Canada's literal interpretation of the 1818 treaty. Mitchell strongly protested the Admiralty's decision not to capture any American vessels outside the three-mile limit. Mitchell's report to Macdonald stated that this policy meant that "trespassers may present the anomaly of escaping from the Marine Police of Canada to the quasi-protection of Imperial

⁸ "Report of Peter Mitchell, Annual Report of the Department of Marine and Fisheries for the Fiscal Year Ended 30th June, 1869," *Sessional Papers*, 1870, no. 11.

⁹ "Letter, From Foreign Office to Secretary of the Admiralty, 30 April 1870, included in North Atlantic Coast Fisheries," Vol. 2, *Part I of the Appendix to the Case of the United States*, p. 143.

¹⁰ "Letter from the Lords of Admiralty to Vice-Admiral Wellesley, 5 May 1870, included in North Atlantic Coast Fisheries," *The Case of the United States*, vol. 1 of *Proceedings in the North Atlantic Coast Fisheries Arbitration Before The Permanent Court of Arbitration at The Hague* (Washington, DC: Government Printing Office, 1912), p. 143.

authorities.”¹¹ He concluded the report by recommending a more aggressive campaign that would include seizures of any suspected vessel regardless of its immediate location or actions. The British Government, however, ordered Canada to restrain from such an aggressive policy of exclusion; it responded with orders “to confine the action of the British and Canadian Authorities for the present to waters with respect to which no possible controversy can arise.”¹² Clearly, imperial authority proceeded down a moderate path of appeasement. Tempers of the Canadian officials continued to push for more direct intervention, however, and collision with the Americans seemed inevitable. Those in Prince Edward Island found themselves in a unique position between the political jurisdiction of the Dominion and the Empire and the economic interests of the United States.

From the beginning of this more strict enforcement suggested by the Canadian authorities, it remained doubtful as to the extent to which Prince Edward Island would follow suit. By 1870 Americans had successfully transferred their local bases of operations from Nova Scotia to Prince Edward Island to take advantage of the Island’s political position within the British Empire and outside the bounds of the new Dominion of Canada and its ardent defenders of Canada’s territorial authority. They did so via the three methods earlier referred to. American fishing schooners could simply break the law and fish within the three-mile limit, individual Americans could relocate to Prince Edward Island and fish as Island residents, or American operations could transship their catch via Island merchants to Boston. Each of these methods were of questionable legality and thus all three ended up before judicial tribunals and within the colonial correspondences between Prince Edward Island and Great Britain, thus providing a good detailed account of the activities.

Illegal Fishing

During the late afternoon of Friday, September 13, 1870 John Thomas Gawne, gunner of the H.M.S. *Plover* observed a fishing schooner hove to with her head sails down off Long Point on the North Coast of Prince Edward Island about a mile distant from the coast. With the aid of a telescope Gawne observed men fishing from the side rail. The captain of the *Plover*, James

¹¹ “Memorandum of Peter Mitchell, Ottawa, 31 May 1870, in Report of the Minister for the Forth Annual Report of the Department of Marine and Fisheries for the Year 1871,” *Sessional Papers*, 1872, no. 5, p. 60.

¹² “Letter from Granville to Young, Colonial Office, 30 June 1870”, in Bernard Bayard, *Selected Cases of Male Treatment of American Vessels* (Washington, DC: Government Printing Office, 1887).

Augustus Poland, also observed the crew of the schooner fishing and ordered sub-lieutenant and navigator William Barton to take the cross bearings of the *Plover* and the unidentified vessel, from which Barton concluded that the vessel was within one mile of the shore. Poland set his course to intercept the unidentified vessel, upon which, according to Poland's testimony, the vessel "endeavored to escape."¹³ Poland ordered first one shot of a blank charge to be fired, and then, when the vessel failed to anchor, ordered a second blank shot fired, upon which the vessel anchored. Poland then ordered sub-lieutenant Ernest Chamberlain Hobkirk to board the vessel. Along with Gawne, Hobkirk boarded the vessel, and found it to be the *Clara F. Friend* out of Gloucester, Massachusetts. Both Hobkirk and Gawne later testified that they observed wet fishing lines and "a quantity of Mackerel unopened and unsplit which from their Appearance...had then just been caught."¹⁴ A subsequent boarding party of six men then seized the *Clara F. Friend* for violation of the Convention of 1818. It would appear from the evidence presented by the officers of the Royal Navy that this American vessel was clearly in violation of fishing within the territorial waters of Prince Edward Island and was thus subject to seizure even within the more limited interpretations of the treaty provided by the Admiralty.

The crew had a slightly different interpretation of the events of September 13, 1870. The captain of the *Clara F. Friend*, Thomas Grady, testified that they had caught about a hundred barrels of mackerel earlier in the morning while at least six miles from the coast, but had not caught any that afternoon.¹⁵ Crew member John L. Howe of Gloucester explained to the Court that what Gawne and Poland saw through the telescope was the "Boys fooling with the dead fish as to take a rise out of the crew." Howe stated that it was common practice to put, "dead fish on the hook and hauling them in [so as] to draw a crowd to the rail. I have often done this myself."

¹³ "Testimony of James Augustus Poland, Captain of H.M.S. *Plover*, Oct. 6, 1870," in Case File of *Queen v. Schooner Clara F. Friend*, Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

¹⁴ "Testimony of Ernest Chamberlain Hobkirk, Acting Sub Lieutenant of H.M.S. *Plover*, Oct. 6, 1870," in Case File of *Queen v. Schooner Clara F. Friend*, Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

¹⁵ "Testimony of Thomas Grady, of Gloucester, Massachusetts, Master Mariner of Schooner *Clara F. Friend*, October 6, 1870," in Case File of *Queen v. Schooner Clara F. Friend*, Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

Howe further stated that the *Clara F. Friend* did not try to escape as suggested by Poland, but, believing they had done nothing wrong, assumed that the first shot from the *Plover* was merely indicating sunset.¹⁶

Captain Poland doubted the truth of Grady's or Howe's testimonies. Poland argued in front of the Court that Grady had assumed a sense of guilt;

He, the captain, did not actually say that he had been fishing within the limits but from what he said to me he implied as much...The captain of the vessel used the word forgive, the meaning of that being not to seize him. I am under the impression from the general tone of the conversation that the Captain knew that he had been fishing within the limits. Althou the Captain said he did not know he was within the bounds he said it in an undecided way as if [he] had to make some excuse.¹⁷

Poland also took the steps to interview some of the other vessels in the area, by all accounts there was a fleet of about sixty fishing schooner from various ports in the immediate area. William McKerney, of Deer Island, New Brunswick and John Walsh, St. Peter's Bay, Prince Edward Island testified that they saw the crew of the *Clara F. Friend* fishing within the three-mile limit.¹⁸ The evidence against the *Clara F. Friend* was rather strong and appeared as if the Court would certainly condemn the vessel. It was at this point that the owner and master of the vessel took matters into their own hands.

At about 11:00 on the night of November 24, 1870 John Thomas stood watch over the then seized vessel *Clara F. Friend* when a boat containing sixteen men rowed up along its side. Thomas called to his colleague Nicholas Farmer who was then below deck. Farmer called to the

¹⁶ "Testimony of John Howe, Fishermen, Gloucester, Massachusetts, Oct. 6, 1870," in Case File of *Queen v. Schooner Clara F. Friend*, Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

¹⁷ "Testimony with Cross Examination in the Vice Admiralty Court of Captain James Augustus Poland, RN, Captain of H.M.S. *Plover*," in Case File of *Queen v. Schooner Clara F. Friend*, Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

¹⁸ "Testimony of William McKerney, of Deer Island, New Brunswick," and "Testimony of John Walsh, St. Pelus Bay, Prince Edward Island," in in Case File of *Queen v. Schooner Clara F. Friend*, Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

boat asking them to identify themselves, at which point someone said that they were coming aboard for a drink of water. Farmer informed them that he could not permit that and pointed his rifle, affixed with a bayonet, at the crew that was then boarding the *Clara F. Friend*. Someone grabbed Farmer from behind and disarmed him. The boarding party then forced Farmer and Thomas below deck and got the schooner underway.¹⁹ Farmer and Thomas later testified that they recognized Thomas Grady, the former master of the fishing schooner, and John Howe and Michael McCarty, both former crew members of the schooner. They also testified that Charles Friend, the owner of the *Clara F. Friend*, was the leader of the boarding party and openly identified himself; even offering to take Farmer and Thomas to the United States with them if they so wanted. The party successfully got the *Clara F. Friend* out of Charlottetown harbor and then put Thomas and Farmer, who apparently declined Charles Friend's offer for a free passage to the States, in a boat and sent them on their way.²⁰

Lieutenant Governor William Robinson acted promptly. Although he had no police or military vessel at his disposal, he telegraphed several ports around Nova Scotia looking for Captain Poland and the H.M.S. *Plover* in the hope that he could intercept the *Clara F. Friend* before the fishing schooner made it past the Gut of Canso.²¹ He also wrote to the U.S. Consulate in Charlottetown protesting the theft and calling upon the United States to assist in the recapture. The U.S. consulate referred to the action as "equivalent to piracy," and immediately informed the U.S. Secretary of State.²² What could have turned into a major international crisis was discharged rather anti-climatically. Captain Plover happened to be in Hawkesbury, Nova Scotia

¹⁹ "Testimony of Thomas Farmer, Charlottetown, Before the Court of Vice Admiralty, Queen's County, Prince Edward Island," include in "Letter from William Robinson, Lt. Governor, Prince Edward Island to The Earl of Kimberley," November 25, 1870. Colonial Office Correspondences, Vols. 106-107 (1869-1870), CO 226, Public Archives and Records Office, Prince Edward Island.

²⁰ "The Clara F. Friend Case," *The Patriot* (Charlottetown) Dec 1, 1870, page 2.

²¹ "Letter from William Robinson, Lt. Governor, Prince Edward Island to The Earl of Kimberley," November 25, 1870. Colonial Office Correspondences, Vols. 106-107 (1869-1870), CO 226, Public Archives and Records Office, Prince Edward Island.

²² "Letter, US Consulate Office to Lt. Governor Robinson," in "Letter from William Robinson, Lt. Governor, Prince Edward Island to The Earl of Kimberley," November 25, 1870. Colonial Office Correspondences, Vols. 106-107 (1869-1870), CO 226, Public Archives and Records Office, Prince Edward Island.

and was able to rather easily trap the *Clara F. Friend* in the Gut of Canso. Upon capture, Poland reported, the crew “bolted on shore in the boat, the owner and three or four of the men were taken in the Schooner.”²³ Poland returned the *Clara F. Friend* to Charlottetown, where the Court quickly finished its arbitration and found it guilty of illegally fishing. In an effort to avoid further international controversy, the Court wisely gave Charles Friend, Thomas Grady, and the rest of the party rather insignificant bail amounts, and upon their release they quickly and quietly absconded back to Gloucester.

This episode could be written off as a rather daring, if ill-advised and poorly planned, escapade of a few American fishermen. The actions of these American fishermen, however, did play a role in the public discourse concerning Prince Edward Island and Confederation and the Island’s control, or lack thereof, of its marine environment. The Island’s leading anti-Confederation newspaper, the *Patriot*, covered the event with a sympathetic tone towards the Americans. In their coverage of the court testimony the *Patriot* noted that John Thomas, one of the guards onboard the *Clara F. Friend* when it was captured by its former crew, stated that he felt “it was a pity for any poor man to lose his property.”²⁴ The *Patriot* also published two letters to the editor that defended Charles Friend and Thomas Grady and strongly suggested that no Islander should bid on the schooner *Clara F. Friend* when it went to auction so as to allow its former owner to reclaim “his forfeited property, not only justly, but also as leniently as possible.”²⁵

For their part, the Island’s leading pro-Confederation paper, the *Islander*, rarely discussed the Island’s relationship with American fishermen. Whenever it did, it always supported reciprocity with the United States and praised both British and Canadian authorities for taking steps to negotiate with the rather uncooperative United States. When things did get heated in 1870, and especially after the Americans re-captured the *Clara F. Friend*, the newspaper noted that it was British authorities, not Canadian, that had seized and tried the American schooner.

²³ “Message from Cpt. Poland to Lt. Governor Robinson,” in “Letter from Lt. Gov. Robinson to The Earl of Kimberley,” November 26, 1870. Colonial Office Correspondences, Vols. 106-107 (1869-1870), CO 226, Public Archives and Records Office, Prince Edward Island.

²⁴ “The Clara F. Friend,” *The Patriot* (Charlottetown), December 1, 1807, page 2.

²⁵ Letter to editor, Signed “A,” “The Clara F. Friend,” *The Patriot* (Charlottetown), December 1, 1807, page 2.

The *Islander* stated that, “The British Government has thought proper to order that the treaty of 1818 be enforced, and has sent British ships of war to see that it be enforced; and it ill-becomes those who call themselves loyal subjects and good citizens to do all in their power to favor the violators of it.”²⁶ As such the newspaper questioned the *Patriot*’s loyalty to Britain rather than engage in a debate as to the impact union with Canada would have on the Island’s economic relationship with the United States.

As can be seen from this exchange between the *Patriot* and the *Islander* there was a close connection between the political debates concerning the Island’s entrance into Confederation and the environment of the Gulf of St. Lawrence. Even the pro-Confederation paper the *Islander* did not champion the exclusion policy of Canada. As such, this brief exchange provides some evidence that few Islanders, anti-Confederationists or Confederationist, sought to claim possession of the resources and environment of their inshore waters. Although anti-Confederationists warned that union with Canada would mean the loss of American customers, the Confederationists never countered those fears by suggesting that Islanders or Canadians replace those Americans in the Gulf fisheries. By delaying their union with Canada until 1873 Prince Edward Island allowed Americans to seek shelter from Canadian authorities throughout the Gulf of St. Lawrence by ducking into Island waters and ports. Although the crew of the *Clara F Friend* clearly did so via illegal acts of fishing, other Americans sought to work within the gray areas of the legal political boundaries by either relocating their fishing operations to the Island or using Island ports to transship their catch to the American market.

Fishing as Islanders

On July 31, 1870 the fishing schooner *SG Marshall* was about 800 yards from the shore of Prince Edward Island, somewhere between Cape Haldimand and McConnell’s Point when it was boarded by Lieutenant Dent of the H.M.S. *Valorous*. It was known by the officers of the H.M.S. *Valorous*, and later admitted by the master and crew of the *SG Marshall*, that the schooner had previously fished within three miles of the shore of Gaspé; Canadian waters. After a short questioning period Dent discovered that the master of the *SG Marshall*, Ebenezier Marshall, was born in the United States but then residing in Rustico, Prince Edward Island. The captain of the H.M.S. *Valorous*, Edward Hardinge, thus ordered the seizure of the *SG Marshall*

²⁶ Editorial, *The Islander*, December 9, 1870, page 2.

for violation of the Merchant Shipping Act of 1854 and 59 George III. Cap. 88, that latter of which established the enforcement mechanism of regulating the fisheries under the Convention of 1818. The debate that first began on board the *SG Marshall* that morning and continued before the Vice Admiralty Court in Charlottetown during the fall of 1870 reflect the second method by which Americans sought to transfer their operations to Prince Edward Island during the Confederation period and the legality of such actions. The story also reflects the competing interpretations of the environment of the Gulf of St. Lawrence. Whereas the Court limited its interpretation to the precise statutory language, those working the fisheries had a far more complex interpretation of the environment and any individual's right to access the resources of that environment. For the fishermen aboard the *SG Marshall* the political identities of American, Canadian, British, or colonial did not strictly confine the limits of the environment of the Gulf of St. Lawrence. Instead, what matter most to the Islanders working on the *SG Marshall* was that one of their own, Island resident Ebenezer Marshall, had used those resources for the benefit of the Island community; they did not seem to care much that Ebenezer happened to have been born in the United States.

What is known about this case is that Ebenezer Marshall, the master of the fishing schooner *SG Marshall*, was born in the United States and had moved to Rustico, Prince Edward Island in 1854, the very same year that the United States and Great Britain signed the Reciprocity Treaty. The vessel itself had been built by William O'Brien of Grand River, Prince Edward Island in 1868, and had previously been registered to one Ebenezer Heenan Marshall, the then ten-year-old son of the master Ebenezer Marshall. By 1870 Ebenezer Marshall had lived in Prince Edward Island for over fifteen years, had married a local woman named Eliza Buskirk and had two sons, the oldest being Ebenezer Heenan Marshall.²⁷ The most that is known about his youngest son is that his initials were S.G. Marshall, the name of the schooner. Beyond that, not much is known about the Marshall family. The father owned little to no property throughout his life, and although his death in 1902 warranted an obituary, largely on the account of his age, he apparently did not leave enough property to warrant a probate record.²⁸

²⁷ Marshall, Ebenezer, (w) Rustico, Eliza Buskirk, Rustico, marriage license granted, 21 Feb., 1865 by Rev Thomas Duncan.

²⁸ "Obituary, Marshall, Capt. Ebenezer, Rustico," *Morning Guardian*, 27 January 1902, p. 7.

He appeared in only two Prince Edward Island censuses throughout his entire life (1861 and 1891), and his son Ebenezer Heenan Marshall appeared in none.²⁹ In fact, the only documentation of the existence of Ebenezer Heenan Marshall, other than this court case, is a marriage license between him and Bessie Maude Pursey dated October 28, 1886, following which both Ebenezer Heenan and his new wife Bessie disappear from the historical record.³⁰ Ebenezer senior's 1902 obituary indicates that all of his children, which by then apparently included daughters as well, lived in the United States.

The question before the Vice Admiralty Court in 1870 was whether or not the *SG Marshall* was British or American. If owned by Ebenezer Heenan Marshall, the ten-year-old boy, who was born on Prince Edward Island to an Island-born mother, then the vessel was in fact British and thus had the right to fish in Canadian waters. However, if the Court denied that a ten-year-old boy could rightly own a schooner and instead concluded that Ebenezer Marshall senior was the true owner of the vessel then the schooner was not only American, but Marshall senior was personally guilty of illegally registering the schooner as a British vessel, unlawfully flying the British flag, and assuming a "British National Character." The answer to this question swung on the determination if Ebenezer Marshall senior was consciously seeking to deceive British authorities concerning his vessel's legal character. In other words, in order for the prosecution to prove that Ebenezer Marshall had illegally assumed a "British National Character," it would have to show that he purposefully relocate to Prince Edward Island to take advantage of the new Reciprocity Treaty of 1854, and subsequently consciously register his vessel under his son's name in 1868 because of the changing legal parameters of fishing as a result of the repeal of that treaty.

In the end, the Court did find Ebenezer Marshall senior guilty on all accounts and condemned his vessel to auction. The decision most certainly had a profound impact on Ebenezer Marshall and his family, a major financial loss from which Marshall was apparently unable to recover. More important to this paper, the decision of the Court reflected profoundly

²⁹ 1861 Census, Ebenezer Marshale book 2, page 21, lot 24 – origins PEI 1, Other 2; 1891 Census, family number 187, residence 24F1, Abeneza Marshall, M, 74, married, Baptist, Captain, married to Eliza, F, age 51, son Isaac, age 19, Fisherman, daughter Eliz age 15, and son Howard, age 5.

³⁰ Marriage License for Marshall, Ebenezer H. to Bessie Maude Pursey (s) by John Knox, j.p., 28 Oct. 1886 Witnesses Catherine Knox and Alfred Quirk.

different understandings of the relationship between people and the environment. While the Court took a rather literal reading of the law and bent the environment to meet that legal phraseology, the testimony of the actual crew of the *SG Marshall* and some of the members of the Rustico community challenged the strong differentiation the Court made between “American” and “British” people in the Gulf of St. Lawrence.

For its part the Court, in agreement with the prosecution, took more substance from the testimony of the officers of the H.M.S. *Valorous* and the past economic activities of Ebenezer Marshall. According to Lieutenant Dent, the *SG Marshall* did not immediately put up the British flag and failed to present any clearance papers from any Island port. Furthermore, Dent testified that when asked about the national character of the schooner the master Ebenezer Marshall proved evasive. Marshall claimed only to be the master of the schooner. When Dent asked who owned the vessel, Marshall pointed to his ten-year-old son and identified him as the owner. Dent assumed insult at what he thought was a prank on the part of the uncooperative crew of the *SG Marshall*. When Dent questioned Marshall senior concerning his national identity, Marshall first claimed to be a resident of Rustico. Dent returned to the *Valorous* for further instructions from Captain Hardinge. Upon his second trip to the schooner *Marshall*, Lieutenant Dent pressed Marshall regarding his nationality, and this time Marshall stated that he was a naturalized citizen of the United States. When Dent requested to see his naturalization papers, Marshall stated that he had none and that he was an alien.³¹ The Court concluded that such evasive tactics proved Marshall’s conscious effort to evade what the Court also saw as strict jurisdiction lines across the Gulf of St. Lawrence that carved that environment into distinct Canadian and international zones. The Court, in short, assumed clear national border in the Gulf and likewise assumed that Marshall also accepted these clear lines and then sought to consciously and illegally manipulate them.

The Court also condemned the *SG Marshall* partially on the past economic activities of Ebenezer Marshall. First, Ebenezer Marshall senior registered the vessel under the name “Ebenezer Marshall, junior,” not his son’s true name, Ebenezer Heenan Marshall. Marshall senior argued that this was a simple error on the part of the custom’s officer, but the Court

³¹ “Testimony of Francis Dent, Senior Lieutenant, H.M.S. *Valorous*,” in Case File of *Queen v. Schooner SG Marshall*,” Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

disagreed, concluding that it was one of the many steps Ebenezer Marshall senior used to blur the national character of the schooner. Claiming to be a citizen of the United States and major shareowner of the vessel, Marshall could enter fish caught by him aboard the vessel into the American markets duty-free, as he admitted to having done in both 1866 and 1869; after the repeal of the Reciprocity Treaty, which would have imposed a duty on any British-caught fish. But by placing his son's name on the registry he could also claim it to be a British-owned vessel so as to gain access to the more profitable British fishery, which he was in the process of doing when seized in 1870.³²

The crew of the *SG Marshall* and at least some of the residents of Rustico, however, had a rather different interpretation of the Marshall family and its schooner. William O'Brien, the master ship wright of Grand River who had built the *SG Marshall* in 1868, and apparently at least an aquatint if not a friend of Marshall, testified that he had been at the Marshall home just before the launching of the *SG Marshall*, and that Ebenezer senior and his wife Eliza were most concerned with the future well-being of their then two sons. O'Brien insisted that the only motives that Ebenezer Marshall senior had in registering the vessel under his son's name was to give the boy some equity and to ensure that both sons were to be "educated." According to O'Brien "the father thought very much of his two sons" and "that it was done all in an open and undisguised manner and no secret made of it." O'Brien "never thought the said schooner was anything else than a British vessel."³³

The crew of the *SG Marshall* shared this conclusion. Patrick Gaines and Charles McKay, both from Charlottetown, testified that "they joined her as a British vessel, sailing under the British flag and never knew or believed that she had any other national character."³⁴ Another crew member, John McDonald, of Grand River, who was on watch when Dent boarded the

³² The decision of the Vice Admiralty Court is quoted in its entirety in "Case of the Schooner *SG Marshall* – Vice Admiralty Court of PE Island," *Patriot* (Charlottetown), September 15, 1870.

³³ "Testimony of William O'Brien, Grand River, King's County, Master Ship Wright," in Case File of *Queen v. Schooner SG Marshall*," Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

³⁴ "Testimony of Patrick Gaines, Fisherman, Charlottetown," and "Testimony of Charles McKay, Fisherman, Charlottetown," in Case File of *Queen v. Schooner SG Marshall*," Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

vessel, also noted that he “never knew her to be anything but a British vessel, that he shipped in her as such and never once doubted her national character.” Macdonald was a long-time acquaint of Marshall and his family, and most likely a friend, as he had known him and worked with him for fifteen years. McDonald testified that he was, “well aware that the said Ebenezer H[eenan] Marshall was a British subject having been born on this Island” and was the owner of the vessel.³⁵ Likewise, Daniel McIntyre, the second mate of the *SG Marshall* testified that, “being on board a British registered vessel and sailing under the British flag [he] never questioned or suspected their right to fish at any place in the Gulf of St. Lawrence either within three miles of the shore or otherwise, [McIntyre] never heard the right once mentioned or spoke of on board by the owner, master or any of the crew.” It is also worth noting that McIntyre identified the master and owner as two different people; the former Ebenezer Marshall and the latter Ebenezer Heenan Marshall. In this regard, McIntyre also noted that while the *SG Marshall* was refitting in Rustico he was in charge of the vessel because the master, Ebenezer Marshall, was on shore, although the owner, Ebenezer Heenan Marshall, was still onboard. McIntyre further noted that the delay in presenting the British flag was due to McDonald inability to properly attach the flag to the correct line, and had to call upon McIntyre for assistance.³⁶ Furthermore, all the above mentioned witnesses swore that Ebenezer Marshall senior never once delayed in identifying himself as American-born and at no time implied any other national character when initially questioned by Lieutenant Dent.

In the end, the testimonies of the crew of the *SG Marshall* and that of the residents of Rustico did not influence the Court. Instead, the Court rested all of its decision on Dent’s testimony, taking it as the true representation of the events, and “more likely to be correct,” as proof that Marshall consciously sought to deceive legal authority. The judge also dismissed the idea that Marshall was merely providing for his family. The judge noted;

³⁵ “Testimony of John McDonald, Grand River, King’s County, Farmer,” in Case File of *Queen v. Schooner SG Marshall*,” Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

³⁶ “Testimony of Daniel McIntyre, Master Mariner, Charlottetown,” in Case File of *Queen v. Schooner SG Marshall*,” Court of Vice Admiralty of Charlottetown, Prince Edward Island, RG 6.4, Public Archives and Records Office, Prince Edward Island.

I attach no importance to his statement, the he did it to educate his boys. No doubt, like all parents, he was anxious to discharge his duty to them in this respect; but he could have done this as well with a vessel in his own name as in his son's unless a vessel with the privilege of a British ship was necessary to accomplish his purpose. If so, the securing this privilege, not the education of his boys, was his primary object, and the desire to educate only the cause for entertaining it.³⁷

The judge continually dismissed the evidence provided by O'Brien and the others concerning Marshall's stated intent. The judge dismissed those testimonies that sought to establish a commitment to family; stating, "Declarations accompanying act may be faithful exponents of a man's intentions, or they may be used as a cloak for very different designs. To be free from suspicion, they should appear to be naturally elicited."³⁸ The rhetoric of the judge's entire decision implies a belief in the deceptive conduct of Marshall, who consciously sought to violate the true legal perimeters overlaid upon the environment of the Gulf of St. Lawrence.

The Court's decision reflected the limits of legal phraseology in interpreting the parameters of a contested environment. Traditions and jurisdiction forced the Court to interpret the contested environment according to statute and treaty. As such, there were clear lines drawn all across the Gulf of St. Lawrence dividing the environment along distinct Canadian, British, and international jurisdictions. An American, Ebenezer Marshall, had crossed that line, and furthermore, did so via a conscious and deceptive assumption of a "British National Character." What the Court failed to see, and was unable to understand, was the far more complex social divisions of that environment. The lived reality of fishermen, and the environmental reality of fish, forced people like Marshall to move more freely over those contested lines. Where fish went, so did fishermen. The social layering of that environment, was thus far more complex than the political layering; even if the Court could not see it.

Transshipping Fish

³⁷ "Case of the Schooner SG Marshall – Vice Admiralty Court of PE Island," *Patriot* (Charlottetown), September 15, 1870.

³⁸ "Case of the Schooner SG Marshall – Vice Admiralty Court of PE Island," *Patriot* (Charlottetown), September 15, 1870.

Beyond both the political layering of the environment by the Government of Canada and the Vice Admiralty Court of Great Britain, and the social layering established by the mobile fishermen who worked that environment, was also an economic layer that saw additional connections between and over the boundaries of the Gulf of St. Lawrence and the unique geographic place that Prince Edward Island had within that environment. The simple economic fact of the Gulf fisheries was that the best market for fish caught there was in the United States. Thus, the economic imperative was to get fish from the Gulf of St. Lawrence to the American market as quickly as possible. To do so, American merchants found that transshipping fish from American fishing schooner to the steamer that connected Charlottetown to Boston far quicker, and therefore more profitable, than having those fishing schooners deliver the fish themselves. The trade link began when the steamer line was first established in 1865, but the repeal of the Reciprocity Treaty in 1866 called into question the legality of this transshipment. If that treaty excluded American fishermen from the inshore waters of British colonies in North America, and later Canada, except for the purposes of shelter and repair and to obtain wood and water, then they certainly could not go into those waters to transship fish or conduct any economic activity other than buying wood. However, American merchant vessels were permitted, under a separate statute, to enter the ports of British North America, and later Canada, to conduct trade upon their clearance at the customs house and their taking out a license to do so. As such, if an American fishing schooner could at once be both a fisher and a trader then they could hold a dual identity and thus transship their catch in Charlottetown. The practice began with the Reciprocity Treaty of 1854, but grew substantially after the steamship line began operations in 1865. With Nova Scotia's entry into the Dominion of Canada in 1869 even more New England fish dealers turned their attention to Charlottetown. By 1870 the dual identity as both fisher and trader had become standard practice among the American fishing vessels working the Gulf of St. Lawrence, but was one that the government in Canada hoped to curtail in their effort to force the United States to renegotiate reciprocity. Yet, by 1870 Prince Edward Island merchants had learned to profit from this transshipment and were thus not too eager to see Canada or Great Britain bring it to an end in order to force new trade terms with the United States. A clash of interest seemed inevitable in Charlottetown in 1870.

On Saturday, August 14, 1870 the Gloucester fishing schooner, turned trader, *Clara B. Chapman* arrived in the port of Charlottetown. There it rendezvoused with the American

steamer *Alhambra* of Boston in order to transship its catch of mackerel back to the American market. Two days later the master of the *Chapman* reported to the Customs Officer, William Clark, to inquire as to the legality of this transshipment. Clark then turned to the lieutenant governor's office for advice and was instructed to "act in the usual way, and allow the fish to be sent to Boston."³⁹ As such the crew of the *Chapman* unloaded 100 barrels of freshly caught mackerel onto the docks and proceeded to return to the fishing grounds of the Gulf of St. Lawrence, leaving the dockworkers of Charlottetown to load the barrels of mackerel onto the *Alhambra*. The next day, August 17, the H.M.S. *Valorous* steamed into the harbor of Charlottetown in order set guards aboard the recently seized fishing schooner *SG Marshall*. Captain Edward Hardinge of the *Valorous* was surprised to see the *Chapman* leaving port and sent his Lieutenant John Harrison to the Customs Office to inquire into the matter. There Harrison learned that the customs officer William Clark had allowed the transshipment of American fish in a British port. Harrison pointed out that such business violated the Island Act 6 Vic. Cap. 14, to which Clark reportedly said he "had other things to do than spend his time looking through the Statutes," and that despite what those statutes might say, Clark considered stopping the transshipment to be "an unneighborly act."⁴⁰

The unwillingness of Clark to enforce the Canadian-reading of the law reflected the more general attitude of Island residents. Island merchants gained hefty profits in their dealings with American schooners looking for ports to resupply and offload fish catches. By 1870, however, this transshipment business in Charlottetown was not limited to just American fishermen. Peter Mitchell reported in June of 1871 that it was even the habit of many fishing vessels from Nova Scotia, New Brunswick, and Quebec to go to Prince Edward Island where they could sell their catch to American steamers and thus into the American market. As such, the infrastructural development of an Island fishery economy, mainly through the steamship line and Charlottetown wharves, further extended the reach of the American market into the environment of the Gulf of St. Lawrence, not just the waters immediately adjacent to Prince

³⁹ "Mr. Collector Clark to Sir R. Hodgson, August 25, 1870," in *Correspondences between Vice-Admiral Wellesly, Captain Hardinge, Commander Poland, and Sir Robert Hodgson, relative to the violation of the Fishery Treaty and laws*, No. 2 of *Correspondences on the Subject of Admitting United States fishing vessels to entry in the ports of Prince Edward Island*, Appendix K of the Journal of the House of Assembly, Prince Edward Island, 1871.

⁴⁰ "Captain Hardinge to Sir R. Hodgson, relative to Schooner *Clara B. Chapman*, August 20, 1870," *ibid*.

Edward Island. The question that emerged for both contemporary observers and historians; was, to what extent did Island residents profit or benefit from the American control of the resources of the Gulf? Mitchell argued that the fisheries of Prince Edward Island was chiefly the work of American merchants, and provided few benefits for the local population; “Most of the fishing trade of that Island is carried on by United States citizens, or with American capital; and large quantities of the fish marketed and shipped there, are taken by Provincial and foreign fishermen in the waters of Canada.”⁴¹ Mitchell thus supported the dominant theme among both contemporary observers and historians that Prince Edward Island had no real fishery economy. The import/export data, however, calls this conclusion into question.

The Reciprocity Treaty provided all merchants in the British Atlantic colonies an opportunity to expand their dealings with the American markets. In 1853, the year prior to the signing of the Reciprocity Treaty, Prince Edward Island’s total exported fish products amounted to just over £9,559 sterling. Only 3 percent of the colonies total exports valued at over £244,673. Of their total fish exports just under half, £4,467 went to “foreign states;” although none of it to the United States, the only foreign state specifically referred to in the Island’s annual report to the Colonial Office in London; known as the Blue Book. More than half of the Island’s fish exports, £5,185, went to British North America. By 1860, just four years into Reciprocity, the trend had reversed itself. Prince Edward Island exported over £21,883 worth of fish products (about 11% of their total exports), the majority of which (68%, or £14,813) went to the United States while only a third (£7,070, or 32%) went to Britain’s North American colonies, all of that to Nova Scotia and New Brunswick.

The Blue Book reports provide little insight on the extent to which these exports were the product of Island fishermen. In nearly every report, it simply states “No Returns” under its fisheries heading, suggesting that the Island had no real fisheries of its own. Between 1861 and 1865 the Island’s Blue Book recorded the exact same numbers for total fishing boats in registry, total quintals of codfish caught, total barrels of herring caught, and total barrels of mackerel caught. Given the huge fluctuations in catch rate that were typical in every other fishery it is doubtful that these numbers are accurate. Between 1865 and 1870 the Blue Book simply record “No Returns since 1861” under its fisheries heading. It is likely therefore that the numbers

⁴¹ “Fourth Annual Report of the Department of Marine and Fisheries, Being for the Fiscal Year Ended 30th, June, 1871,” *Sessional Papers*, No. 5, 1872, p. 60.

recorded between 1861 and 1865 were most likely the accurate count from 1861 and simply transferred to subsequent years because no data was collected. This inaccurate reporting apparently stopped in 1865. The next set of accurate data for Island fish production does not appear until 1870. In that year Lieutenant Governor William Robinson made a direct comparison between the Island's fishery production in 1860 and 1870 in his accompanying report for the Blue Book. Thus historians' ability to analysis the Island's own fisheries is limited to 1860, 1861, and 1870. Yet, the Island's total fishery economy was certainly not limited to its own production because Americans used the Island's resources to support the American fisheries. Thus, by analyzing the export value of fish historians can get a better sense of the total value of the Island's relationship to the Gulf of St. Lawrence environment.

In 1861 the Blue Book reported that the Island's 1,232 boats (it listed no ships) produced 7,169 barrels of mackerel, 22,416 barrels of herring, and 27,854 quintals of codfish. During those early years of Reciprocity the Island's fish exports remained relatively low. The annual average value of all fish exported to the United States during the Reciprocity Era (1855-1866) was £13,358. There was some growth during this period. The annual average value of fish exported to the United States during the first five years of Reciprocity (1855-1859) was £8,081, which grew to an annual average of £11,727 during the second five years of Reciprocity (1860-1864). In the final full year of Reciprocity, 1865, the Island exported £35,877 value of fish to the United States, a significant growth since the first full year of Reciprocity, 1855, when it exported only £5,221 value of fish to the United States. It would thus appear as if free trade significantly increased the Island's fishery economy. This data, however, is misleading, as free trade was not the only factor that increased commerce between Prince Edward Island and the United States. In 1865, New England merchants connected Charlottetown to Boston via a regular steamship line. The average annual value of fish exported to the United States during the Reciprocity Era but before the introduction of the steamship line, 1855 to 1864, was just £9,904. With the introduction of the steamship line the export of fish to the United States jumped from just £10,087 in 1864 to £35,877 in 1865. The large value of fish exported to the United States continued even after the repeal of the Reciprocity Treaty in 1866. The value dropped to £18,474 in 1866, but quickly rebounded to £25,578 in 1867 and £36,565 in 1868; all without the advantage of free trade. The average annual value of fish exported to the United States following the introduction of the steamship line, 1865 to 1872, was £29,831. It would thus

appear that the real factor in the Island's export of fish from the Gulf of St. Lawrence was not free trade or British policy, but the connection of the Island's chief port with the primary market for fish in the United States via a steamship line.⁴²

The export data shows that the Island's relationship to the Gulf fisheries was mainly shaped by the export of American-caught fish to American markets. In order to further assess the impact this infrastructural development had on the environment and resources of the Gulf of St. Lawrence the analysis needs to focus specifically on the fish species most caught by Americans in the Gulf and transshipped to the United States in Charlottetown. Americans relied upon Prince Edward Island predominately to export mackerel; and only mackerel, the fish species most common in the inshore and near-inshore waters of the Gulf of St. Lawrence. The American cod fishery plied the deeper waters of the Grand Banks and George's Banks, and thus did not depend on Prince Edward Island ports for transshipment. As such, the steamship line to Boston most affected the mackerel of the Gulf of St. Lawrence. Exports of mackerel to the United States in 1864, before that steamship line began operations, amounted to only 6,583 barrels, valued at £8,555. The following year the Island ports exported 13,254 barrels of mackerel; almost all of it, 13,055 barrels, or 98% of the total, went to the United States, valued at £30,930. The second most valuable fish exported to the United States in 1865 was preserved salmon; valued at only £1,807. No other exported fish product comes anywhere close to the value of mackerel exported to the United States. The most valuable exported fish product to any non-United States destination in 1865 was scale fish exported to the United Kingdom, valued at just £783.

Mackerel was the largest piece of the Island's fishery economy and thus the vast majority of its fishery export went to the United States. Nearly all of the £38,332 worth of fish exported from Prince Edward Island in 1865 went to the United States; that country alone receiving £35,877 worth of fish; or 94% of the Island's total exported fish. Yet, of the total 13,055 barrels of mackerel that Prince Edward Island exported to the United States, nearly all of it, 12,775

⁴² This data comes from a statistical analysis of the Blue Books of Prince Edward Island from 1852 to 1872. It should be noted, however, that no data is available for 1850, 1851, 1859, or 1863. The Blue Books recorded value in British pounds sterling up until 1872. In that year they recorded value in dollars. The 1872 Blue Book listed the exchange rate "A bill of exchange payable in Great Britain at Sixty days for 100.0.0 sterling is 150 pounds sterling or \$486 ³/₄." This exchange rate was used to recalculate the 1872 figures so as to be comparable with the other data.

barrels, went to the American market onboard British ships. Island shippers thus controlled 98% of the trade. Thus, despite Peter Mitchell's statement that the Island's fishery was totally in the hands of American capital, it would appear that Island vessels did the vast majority of shipping. Although Prince Edward Island might not have had a lively fishery, it certainly did have a fishery economy; one dependent upon Americans to actually catch the fish but one that allowed Island merchants to profit from the shipping of fish from Island ports to the United States.⁴³ It was also an economy that depended on Prince Edward Island remaining outside the political boundary of Canada so as to avoid the stringent enforcement of the Treaty of 1818 advocated by Macdonald and Mitchell.

If we examine the place fish exports to the United States held within context of total exports to the United States we can also see that the Island's fishery export economy coming to dominate all exports to the United States. Throughout the period of the Reciprocity Treaty exports to the United States grew steadily, with a sharp increase in 1865 on account of the steamship line that connected Charlottetown to Boston. Following the repeal of the Reciprocity Treaty in 1866; however, total exports to the United States drop sharply even as exports of fish, and more particularly of mackerel, remain relatively consistent. The total value of all exports to the United States during this period (1854-1873) peaked in 1865 at £120,928; of which fish constituted £35,877; or, 30% of the total exported value. By 1868 the total value of all exports to the United States had dropped to only £48,031, of which fish constituted a very large share; £36,565, or 76% of the total exported value. Mackerel exported to the United States in 1868 alone amounted to £32,367; 89% of all fish exported and 67% of all exports to the United States. As such, even as the Island's economic tie to the United States strengthened between 1854 and 1873 that connection increasingly became defined by the shipment of mackerel from the Gulf of St. Lawrence to the United States.⁴⁴

This Island's fishery economy's dependency on the United States continued during the particularly heated year of 1870, despite the repeal of the Reciprocity Treaty and the aggressive exclusionary policies of Canada. In that year, Prince Edward Island's Lieutenant Governor

⁴³ This data comes from a statistical analysis of the Blue Books of Prince Edward Island from 1852 to 1872. It should be noted, however, that no data is available for 1850, 1851, 1859, or 1863.

⁴⁴ This data comes from a statistical analysis of the Blue Books of Prince Edward Island from 1852 to 1872. It should be noted, however, that no data is available for 1850, 1851, 1859, or 1863.

William Robinson reported that the Island produced 16,047 barrels of mackerel. Although Robinson also noted the Island's production of codfish, herring, alewives, hake, and haddock; mackerel remained the Island's largest fish export.⁴⁵ In 1870 the total value of exported fish to all destination rose sharply to £51,346; of which mackerel dominated at a value of £35,595 (69% of all fish exported); the second highest valued fish species exported was oysters at meager value of just £3,043 (5% of all fish exported). While exports of mackerel to the United States still dominated the total fishery economy of Prince Edward Island, it would appear as if Island fishermen began to assume some control over their mackerel fisheries. Robinson noted that Island fishermen had produced 16,047 barrels of mackerel in 1870; up from 7,169 barrels in 1860. The total quantity of mackerel exported from Island ports stood at only 14,095 barrels. Of that number exported, 13,915 barrels went to the United States, most; 12,325 barrels went in British ships. Since Island fishermen produced more mackerel than the Island exported it can be suggested that Island fishermen, by 1870, had taken some control over the production of the product. Yet, even as the Island's fishery economy continued to grow and diversify, it did so closely tied to the American marketplace. Throughout the period between 1854 and 1873 the United States remained the most dominant market for fish exports from Prince Edward Island even as the United States became a less dominant market for all exports from the Island. Throughout the Reciprocity Era the United States was the number one destination of all exports from the Island, closely followed by the United Kingdom, Nova Scotia, and New Brunswick. But beginning in 1866 the United States fell to third in value of general exports; behind the United Kingdom and Nova Scotia, and occasionally fourth behind New Brunswick. Despite this general decline in exports to the United States after 1866, Prince Edward Island still sent the majority of its fish exports to the United States; never dropping below fifty percent after 1856.⁴⁶ The economic relationship between Prince Edward Island and the United States increasingly became one defined by fish, specifically mackerel caught in the Gulf of St. Lawrence, especially after the steamship line connected Charlottetown to Boston.

⁴⁵ William Robinson, "Report to Accommodate the Blue Book of Prince Edward Island For the Year 1870," RG 1, Vol. 50 (1870), Public Archives and Records Office, Prince Edward Island.

⁴⁶ This data comes from a statistical analysis of the Blue Books of Prince Edward Island from 1852 to 1872. It should be noted, however, that no data is available for 1850, 1851, 1859, or 1863.

It would appear that free trade and improved transportation lines with the United States not only benefited Island merchants, but also facilitated a growth in the Island's own fishery economy. Despite this analysis of the data, most contemporary observers saw the situation a bit more simplistically. The presence of a large American mackerel fleet in and near Prince Edward Island's waters, even if there was a comparable growth in the Island's own production of mackerel, and the Americans' regular use of island ports to transship their fish to the American market, even if such transshipment was conducted by Island merchants, appeared to many as evidence of Prince Edward Island abdicating their ideal position within this profitable environment to American interests.

The Montreal *Herald*, a newspaper strongly opposed to Macdonald's government, was eager to note the impracticality of the Dominion's aggressive policy of exclusion in 1870 because American fishermen were able to carry on business as usual by going to Prince Edward Island "were more liberal views prevailed." While the Montreal *Herald* criticized the Island population, who had "thrown their fisheries open to foreign, which in their case means American, fishermen," the paper realized the simple practicality of the Islanders' actions, noting that "the people of the Island are making money fast." The paper worried that any attempt by Macdonald to force the termination of the business would not only be unsuccessful but would alienate the Island population from ever joining Canada in Confederation "if they are to be deprived of a lucrative business which they at least do not regard as a hardship."⁴⁷

Although the government of Prince Edward Island quickly denied the *Herald's* accusation that they had "thrown the fisheries open" to American fishermen, they did not deny the profitable business of transshipment that emerged following the Reciprocity Treaty of 1854. Sir Robert Hodgson, the Administrator of the Government of Prince Edward Island, insisted that his government had always acted in unison with Canada in issues related to the fisheries; they adopted the licensing system along the same lines and with the same fees as Canada, and they repealed it, against their own better judgment, when Canada repealed it.⁴⁸

⁴⁷ *Montreal Herald*, as quoted in the *Canadian News*, April 14, 1870.

⁴⁸ "R. Hodgson to Right Hon. Earl Granville, K.G., Secretary of State for the Colonies, June 1, 1870," in *Correspondences Between the Lieutenant Governor and Her Majesty's Principal Secretary of State for the Colonies, on the Subject of the Fisheries*, No. 3 of *Correspondences on the Subject of Admitting United States fishing vessels*

The Executive Council of Prince Edward Island placed the blame for the trouble squarely on the Dominion's shoulders and further stated that the aggressive policy of the Minister of Fisheries "tends to seriously estrange a friendly but proud and sensitive nation (the United States)." The Council argued that they had followed Canada's example of strict exclusion despite the fact that this excluded "from their harbors of their best customers;" customers who benefited many sectors of the Island's economy from fishing to manufacturing. The Council felt "bound to protest" the new policy that was "inapplicable at the present day" and directly counter to the expressed British policy of free trade and "the principles of common sense." Not only did the Council doubt that the United States could be "coerced into compliance by the pressure," but further warned against "pressing an odious system upon an unwilling people;" concluding that the new policy of non-intercourse "does not obtain the moral support of the people for whose supposed benefit it is undertaken."⁴⁹

The Council, as well as the lieutenant governor, objected to the non-intercourse policy adopted by Canada because it hurt the Island economy. The Council turned to Edward Palmer, Q.C., to provide legal phraseology that countered Hardinge and Mitchell's claim that the 1818 treaty prohibited American fishermen from transshipping their cargoes in British ports. Palmer agreed that the 1818 treaty prohibited American fishermen from fishing or preparing to fish within British jurisdiction, and would thus likewise prohibit the transshipment of fish in British ports that were caught illegally within British jurisdiction. Palmer doubted, however, that fish caught legally in the open seas could not be transshipped. He stated that the "no other purpose whatever" clause of the 1818 treaty really meant any "purposes which are really injurious or prejudicial to the trade of the Colony, or to the interests of its inhabitants." The transshipment of mackerel from American schooners to American steamers while in Island ports was clearly not prejudicial to the interests of the Island population because this trade facilitated the growth of the colonial economy through the fees collected for such transshipments, the purchase by American

to entry in the ports of Prince Edward Island, Appendix K of the Journal of the House of Assembly, Prince Edward Island, 1871.

⁴⁹ "Council Chamber to His Honor Sir Robert Hodgson, Knight, Administrator of the Government of Prince Edward Island, in Council, September 2, 1870," in No. 1 of *Correspondences on the Subject of Admitting United States fishing vessels to entry in the ports of Prince Edward Island*, Appendix K of the Journal of the House of Assembly, Prince Edward Island, 1871.

fishermen of Island produce, supplies, and bait, and the hiring of local Islanders as crew and shore laborers. As such the literal interpretation constructed by Canada was unjustifiable, Palmer concluded, because the transshipment of American-caught fish benefited the local Island economy as much as it benefited the American fishermen.

Prince Edward Islanders were happy with their commercial relations with the American fishing fleet. Although the Island's own fishery had grown since 1854, it did not depend upon its fisheries to the extent of Nova Scotia and as a result did not feel the competitive pinch as much as those fishermen in Nova Scotia. Prince Edward Island's fishery economy was largely one of supplying other fishermen with bait and agricultural goods. This commerce is clearly illustrated in the case of the *E. Houghton*, also seized by Captain Edward Hardinge of the H.M.S. *Valorous*. On August 20, 1870 Lieutenant Fraser and Assistant Paymaster John Patterson boarded the *E. Houghton* and learned from its master JD Lavie that the vessel had last cleared from Charlottetown and had recently returned from the Magdalen Islands and Anticosti where it traded goods with foreign and domestic fishermen and received codfish and mackerel in exchange. Despite that this trade occurred "chiefly at sea" Captain Hardinge interpreted the business as an act of illegal trade in violation of 17 Vic., Cap. 107. Hardinge argued that when Levie "transshipped goods at sea" he committed an act of smuggling just as if he did such acts within the shores of British territory.⁵⁰ Upon visiting the Collector of Custom, Hardinge further learned that Master Levie had cleared from that office as a ship from Souris while his ship's paperwork indicated that the vessel was of Charlottetown, and so Hardinge added charges of falsified documentation to the seizing report.

Collector William Clark; however, doubted the legality of the seizure and suggested that the *Houghton* had no dutiable goods because "it had not been the practice for vessels to take a clearance from one port to another on this Island."⁵¹ This incident exploded in a sharp personal conflict between Captain Hardinge and Collector Clark that mirrored the larger argument between the Island government and Canadian and British authority in the North Atlantic. Clark ignored Hardinge order to seize the vessel, stating that Hardinge "spake authoritatively" to him even though Clark insisted he "was not accountable in my official capacity to any others than the

⁵⁰ "Captain Hardinge to Sir R. Hodgson, August 20, 1870."

⁵¹ "Mr. Collector Clark to Sir R. Hodgson, August 25, 1870,"

Administrator and his Government.” Captain Hardinge proclaimed that, “it seems impossible to cooperate with this officer.”⁵² Hardinge’s attacks on both American and domestic fishing vessels, his zealous enforcement of the 1818 treaty, and his exceptionally precise and even tedious interpretation of domestic customs laws quickly alienated him from the local Island population.

Captain Hardinge was concerned about the contradiction in the *Houghton*’s port registry because he believed it to be one example of the “ruse” employed by Island fishermen and merchants to circumvent the prohibition of trade with American fishing operations. Throughout the fishing season of 1870 Hardinge continually boarded domestic vessels to insist that they properly identify their vessels both on their sterns and in their paperwork. Throughout the summer he harassed local merchants, fishermen, and the custom’s officer. In addition to the seizures mentioned above, Hardinge seized the Nova Scotia schooner *Albert* of Yarmouth on August 31, 1870 for possessing an inaccurate Certificate of Registry.⁵³ In several letters to his commanders, Hardinge complained that the lack of proper identification for Island vessels, both in their paperwork and on the vessels themselves, indicated that the Island population was conspiring in mass against him and British authority.⁵⁴ In opposition to Hardinge, Collector Clark reported that he was “not aware of illicit trade being carried on by either Foreigners, or British Subjects, within the harbors, or around the shores of this Island.” By September of 1870 the Attorney General of the Island had released most of the vessels seized by Hardinge because there was no “sufficient evidence” that any of the vessels had been engaged in illicit trade or smuggling.⁵⁵ The Executive Council further supported Collector Clark in his on-going dispute with Captain Hardinge and found Clark to have acted in full justice of his office.⁵⁶ The Island’s

⁵² “Mr. Collector Clark to Sir R. Hodgson, August 25, 1870,” and “Captain Hardinge to Sir R. Hodgson, August 20, 1870,”

⁵³ “Mr. Collector Clark to Sir R. Hodgson, August 31, 1870,”

⁵⁴ “Captain Hardinge to Sir R. Hodgen, reporting irregularity in Charlottetown Harbor on the part of the Steamer ‘Georgia,’ August 27, 1870,”

⁵⁵ Extracts from the Minutes of the Executive Council of Prince Edward Island, September 2, 1870,”

⁵⁶ Extracts from the Minutes of the Executive Council of Prince Edward Island, September 2, 1870,” “Assistant Colonial Secretary to Captain Hardinge, August 31, 1870,”

leading anti-Confederation paper, the *Patriot*, was quick to attack Hardinge. In one article it noted;

To be sure Capt. Hardinge is not idle, as the following account of his naval exploits will show. Yesterday morning he favored the citizens with a sort of sham boat fight, after which he announced the important discovery that there was a crazy little coaster in the harbor without her name painted on the stern. Another day a small schooner is coming up the harbor, but seeing the *Valorous*, she puts right about, and makes for sea. Two guns are fired and disregarded. The pinnace is manned, and, with all sail set, the 'boarding officer' commences to give chase, blazing away as he goes. By and by the schooner reaches the Blockhouse, hoists the stars and stripes, and bid her pursuer a long farewell... Three cheers for the gallant Capt. Hardinge, a brave man who delights in noble deeds!!! Think of *Camperdown*, *St. Vincent*, and the *Nile*, and don't forget the *Valorous* and the fish story. *Vive la bagatelle!* Shades of Nelson and Collingwood!⁵⁷

Perhaps the officers in charge of protecting the fisheries of the Gulf of St. Lawrence were right in their assumption that the Islanders mocked their every action.

As much as Islanders may have disliked Hardinge's actions they did come from orders issued to him by the Admiralty. Back in August of 1870 Earl Kimberley, the Secretary of State for the Colonies, instructed the government of Prince Edward Island to stop the transshipments. The Charlottetown *Patriot* believed that decision was pressed forward by Canada's "arbitrary and one-sided interpretation" of the Convention of 1818. Many on the Island, especially the anti-Confederation faction, strongly opposed the policy not only because a "large business had sprung up in connection with the landing and transshipment of mackerel in Colonial ports," but also they felt it was the Dominion authorities, not the imperial government that pressed for this new policy, which would certainly "be as injurious to Her Majesty's subjects as it will be to their American neighbors." The Dominion's "wood and water" policy, the *Patriot* proclaimed was "heartless and extreme," and that the Dominion's "monstrous" interpretation of the 1818 treaty

⁵⁷ "The Fishery Business Again," *Patriot*, August 27, 1870, page 2.

“is contrary to the enlightenment and progress of this commercial age...calculated to greatly inconvenience the fishermen, and do them a cruel wrong”⁵⁸

The *Patriot* was always eager to point out the limited values of the Dominion of Canada. While the newspapers proclaimed that the Island maintained its own right to protect its fisheries and conduct its own fisheries business, it argued that “to exclude men from Colonial harbors, who come in to buy supplies, and reship mackerel in bond, is a stupid policy, which, we are happy to say, finds no favor among the people in any part of the Dominion.” Even if Islander’s wished to follow a course of non-intercourse, the *Patriot* argued, it could do so without the interference of Canadian influence and more efficiently than the increasingly unpopular Captain Edward Hardinge, who seemed to do no more than harass local fishermen concerning their identification, “while scores of American schooners are seen every day fishing away on the North Shore.”⁵⁹

Prince Edward Island’s Executive Council likewise protested London’s closure of the Island’s ports to American fishermen.⁶⁰ After some exchange between the Executive Council, the Lieutenant Governor’s office, and the Colonial Office in London, the British government eventually reversed its early decision. In an October 20 note to Prince Edward Island’s Executive Council, Earl Kimberley wrote, “I do not understand that the proceedings now in question [the transshipment of fish in Charlottetown] are prohibited by any Imperial or Local law” because “the transshipment of fish and obtaining supplies by American fishing vessels cannot be regarded as a ‘substantial invasion of British rights’ such as contemplated by those instructions...[and]...he [Admiral Wellesley] is not to prevent United States fishermen from entering British bays for such purposes.”⁶¹ With this order, British authorities sided with Prince Edward Island over Canada and allowed Americans the means by which they could secure a more complete control of the environment of the Gulf of St. Lawrence and its resources.

⁵⁸ “The Fishery Business Again,” *Patriot*, August 27, 1870, page 2; November 10, 1870.

⁵⁹ Ibid.

⁶⁰ “Minutes from Council, dated Sept 2, 1870,” CO 226: Colonial Office Correspondence, Vol. 105-106. 1869-1870.

⁶¹ “Letter from Kimberley to Hogden, Oct 20, 1870,” CO 226: Colonial Office Correspondence, Vol. 105-106. 1869-1870.

By 1871 the British government had fully reversed their course and abandoned Canada's call for a more stringent enforcement of the 1818 treaty. In March of 1871 Earl Kimberley defended the British authority over this matter by arguing that the real issue was not Canadian territorial rights but international agreement. In a letter to Lord Lisgar, the Governor General of Canada, Kimberley stated,

I think it right, however, to add that the responsibility of determining what is the true construction of a treaty made by Her Majesty with any foreign power must remain with Her Majesty's Government, and that the degree to which this country would make itself a party to the strict enforcement of treaty rights may depend not only on the liberal construction of that treaty, but on the moderation of reasonableness with which these rights are asserted.⁶²

Earl Kimberley continued with his instructions to Lord Lisgar that so stringent an enforcement as that proposed by Dominion authorities did not reflect the general policy of the Empire towards the United States. Kimberley stated that while Canadian authorities were correct in their interpretation of the wording of the international agreement and the Dominion and Imperial legislation,

Her Majesty's Government feels bound to state that it seems to them an extreme measure, inconsistent with the general policy of the Empire, and they are disposed to concede this point to the United States Government, under such restrictions as may be necessary to prevent smuggling and to guard against any substantial invasion of the exclusive rights of fishing which may be reserved to British subjects.⁶³

The economic reality of the environmental resources of the Gulf of St. Lawrence superseded the new nationalism of the young Dominion government. By 1871, even before the new Treaty of Washington was signed, British authorities conclusively stated that Americans would have

⁶² "Letter from Kimberley to Lisgar, 17 March 1871," in Bernard Bayard, *Selected Cases of Male Treatment of American Vessels*.

⁶³ Letter from Kimberley to Lisgar, 17 March 1871," in Bernard Bayard, *Selected Cases of Male Treatment of American Vessels*.

access to Prince Edward Island ports and thus further their economic dominance of the Gulf fisheries.

Conclusion

American utilization of Prince Edward Island ports as local bases of operations between 1869 and 1873 allowed that Island to generate a fishery economy. Although that economy did not revolve around the actual catching of fish their engagement with American fishing schooners via trade and transshipment provided Islanders the types of auxiliary economies that Americans had previously based in Nova Scotia. It is rather clear from the historical documents that Island residents, and their political and imperial representatives, had no real objection to American utilization of their ports or even their fisheries. There is even some evidence to suggest that free intercourse with American fishermen facilitated the growth, albeit a limited growth, of a local fishery. What became Prince Edward Island's more profitable fisheries of the twentieth century may have in part emerged because of American involvement in Prince Edward Island during the nineteenth century.

When Americans transferred their local bases of operations from Nova Scotia, and particularly the Gut of Canso, to Prince Edward Island they essentially moved a fairly large amount of capital investment from the new Dominion of Canada to the British Atlantic colony. Contemporary observers noted this transfer and wondered what impact it might have on courting Prince Edward Island to join the Dominion government. If American fishermen moved this capital largely to avoid the more stringent policies of the Dominion government, then Prince Edward Island's union with Canada would force those Americans to find some other regional base for their transshipment and resupply. The Treaty of Washington of 1871 dismissed this concern by allowing American fishermen to utilize Canadian ports much in the same manner as they had British ports in Prince Edward Island. As such, the Island's joining of Confederation in 1873 did not force the American fishing fleet to find an alternative location. By then; however, the American fleet had successfully established an efficient infrastructure in Prince Edward Island and had no real compelling reason to go back to Nova Scotia. As such, the Yankees stayed in Prince Edward Island and continued to dominate the Island's fishery economy well into the twentieth century. By then, this infrastructural support went beyond cooperative Island merchants and a steamship line to include processing facilities such as those of the J.H. McIntyre firm or the Portland Packing Company.

The long-term implications of the transfer of capital from Nova Scotia to Prince Edward Island between 1869 and 1873 were thus rather profound for the Island and the Gulf of St. Lawrence. Because the Island had no significant fishing labor or fish merchants, unlike Nova Scotia, the Island developed a fishery economy that was largely based on the transfer of resources from the rich environment of the Gulf of St. Lawrence to the more profitable American markets. The American fishing industry strengthened its economic control of the environment in the Gulf and even within the communities that surrounded the Gulf. The Island did develop a fishery economy, but it was one of only an auxiliary nature. As is true for nearly every resource economy, the real profits come from the processing, distribution, and sale of the commodity rather than the extraction of the resource. By extending their capital to Prince Edward Island American fishing firms provide a seed for the growth of an Island fishery, but by retaining the most lucrative elements of the fishery economy those Americans ensured that that Island fishery would never rival the one in New England despite the better geographic location of Prince Edward Island.

Gold, Nature, and Confederation:

Mining laws in British Columbia in the wake of 1858

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British Columbia joined confederation in 1871, just over a decade after the region's acclaimed settler gold rush began in 1858. One crucial reason the history of the gold rush is relevant to settlement, is because of the legal mechanisms that were enshrined at this time. These mechanisms continue to cause conflict over mineral resources between Indigenous peoples, mining companies, and the state. Traditional legal emphasis on state formation, that pre-dates confederation in the Canadian west, relies on i) the surveying of colonial territory and ii) treaty making. In British Columbia the Treaty of Oregon (1846) asserted western British expansion. Yet the fundamental sovereign claims to gold that were written into resource law during British Columbia's colonial era (1858-1871) are still, by extension, applied to hard rock minerals today.

In what follows I show how claims to Canadian nation building and claims to gold come together through mining law. This chapter provides an historical analysis of mining laws that, in part, instigated British and later British Columbian sovereign control over gold and hard rock minerals. I argue that settler colonialism is ongoing and state sovereignty is tied to the maintenance of Canada's Dominion of nature through the fundamental claims to resources made in early mining laws; In the instance of mining laws, Canada's Dominion of nature is constituted by and through the maintenance of settler colonialism. Part of settler colonial state formation took place through the 'claims' miners brought with them. Historian Patrick Wolfe writes, settlers come to stay *or* "the colonizer comes to stay - invasion is a structure not an event" (Wolfe, 1999, p. 2). Settlers embody claims to sovereignty and carry this with them.

The terra nullius notion of British Columbia being empty prior to the advent of miner's involves a racial hierarchy, based on a legal erasure of Indigenous claims to

territory. Settler gold rush narratives are premised on the idea that mining claims were superimposed on wilderness. The erasure of Indigenous subjects and subjectivities in favour of Western law is evident in an analysis of how mining law was written during the gold rush. Even if the influx of gold miners did not represent settlement in the same way later waves of settlers who preempted land, the gold rush played a key role in the establishment of law and order (Loo, 1994, p. 78). The specificities of how British Columbian gold came to be governed by the Queen of England is continually explained, in high school history text books for example (See Furniss 1997) through the Eurocentric narrative, with little emphasis on the very acts of the writing of mining law.

I show how British sovereignty was presumed legitimate, through the exercise of staking a mineral claim or getting a Free Miner's license. I situate gold and subsequent gold rush legacies, as written into the settler history of British Columbia, adjacent to British claims to sovereignty that materialized through the historic writing of mining laws. This contributes to wider debates that concern how the formation of Canada was based on an understanding of nature, and in this case, gold. My aim is not to be over-deterministic about the power of mining law, but rather to illuminate how the legal mechanisms that facilitate the dispossession of Indigenous lands are bound to gold economies and legal principles distilled in the gold rush era – including in other settler colonial countries such as Australia and the United States, particularly in California. Claims to gold were (and continue to be) an active part of Canadian nation building in both a territorial and material sense. I do not mean to conflate the wave of miners who arrived in the late 1850s and 1860s with the Imperial settlement project, that historians may argue was mostly consummated after the gold rush and British Columbia's entry into confederation. Later colonial settlement drew on some elements from the early gold rush years, like the mining law. But settler historians may suggest that later settlement was in many ways quite a different exercise from the violent human wave that washed over the Fraser River and then mostly disappeared. Nevertheless, the violence against Indigenous peoples via gold rush culture and subsequent resource allocation laws did not disappear. The advent of mining laws participated in a material nature that allowed for the consolidation of Canadian lands and the formation of the Dominion of Canada.

Sovereignty in tension

The concept of sovereignty helps explain the contestation over lands between Indigenous people, mining companies, and the state instigated through mineral claim staking. *The Dictionary of Human Geography* defines sovereignty as “a claim to final and ultimate authority over a community” (Eds. Gregory et.al., 2009, p. 709). However sovereignty is not a monolithic force, and claims to what constitutes a community are in conflict in settler colonial states. Taiaiake Alfred is well cited in his suggestion that sovereignty is not an Indigenous term (Alfred, 2002). But sovereignty is a concept Indigenous Nations are using to reclaim territory today. In British Columbia Indigenous Nations, settlers, the province and the Canadian state remain in conflict over property. This conflict is in part rooted in the settlement of Canada and British Columbia’s entrance into confederation. Conflicting claims are made to land and community and claims to territory, land and community are in tension.

Sovereignty is well-analyzed terrain. Useful to my discussion is the work of Emel, Huber, & Makene (2011) who outline how sovereignty is often “couched in opposition to foreign capital.” They argue for recognition of the forms of sovereignty that are necessary for mining investments and highlight how capital configures sovereignty in Tanzania. According to these authors, sovereignty is much more than control over territory, and is tied to mineral investments. This delineates a form of sovereign power based on economic markets and the monetization of gold resources- or the monetization of nature - that runs through the state. Emel et. al’s intervention that sovereignty is tied to markets through the value of natural resources. This differs from emphasis on terra nullius understandings of sovereignty and the claiming of colonial assumptions over empty lands, in that the material nature of gold, and gold’s commoditization is crucial.

Patricia Seed’s historicization of sovereignty is also useful. She writes that sovereignty is based on taking possession and traces property claims in the ‘new world’ to differences in ceremony, particularly when Britain and Spain declared rights to their colonies (Seed, 1995). For Seed, claims to sovereignty are based upon very powerful fictions. Drawing on Seed’s notion of “ceremonies of possession,” Cole Harris (2002, p. 48) traces claims to sovereignty further back than the gold mining I focus on, to the

major historical and political Treaties and proclamations that shaped the Canada-US border. He does this in order to make a case for how *Native Space* was forged through the British Columbian Native reserve system. The Royal Proclamation (1763) and Treaty of Oregon (1846) asserted British sovereignty and established the formal political context for the further dispossession of land from Indigenous peoples. British claims to land were consolidated with the formation of Canada, and British Columbia's entrance into confederation in 1871. However, this history cannot be divorced from the legal nature of gold that preceded this entrance into the Dominion.

Dispossession, loosely conceived, is explained through the Royal Proclamation and the formation of the western segment of the U.S. – Canada border. This border was formed with the signing of the Treaty of Oregon. The claiming of vast amounts of territory allowed the logics of Imperial power to be set upon what is now referred to, in settler colonial terms, as Canada. Though these are important legal and historical moments in relations between the Crown and the dispossession of Indigenous lands, I bracket these Treaties in my discussion of mining law. I suggest that mining law is as integral to the formation of the Canadian state in the west. The Royal Proclamation and Treaty of Oregon are significant to legal regional histories, however the everyday material act of staking a mineral claim reproduces these politics of conquest on a less theatrical but equally contestable day-to-day way. The day-to-day enactment of mining laws that were forged during British Columbia's pre-confederation era, allowed for the consolidation of state sovereignty through the newly forged Dominion of nature. This Dominion was over gold and remains predicated on the settler colonial dispossession of Indigenous lands.

I illuminate how material claims to gold, as made through mineral staking laws, are embedded within settler colonial conditions, though the Treaty of Oregon, created a treaty relationship between American and British interests. How Indigenous peoples factored into this relationship is significant as the mining laws, and particularly the *Gold Fields Act* or the contemporary *Mineral Tenure Act* continue to be a central mechanism in the authorization of the material dispossession of resources. Mining laws and resource regulation actively shape the Canadian state. The legal mechanisms that governed the

environment, as enshrined during a series of gold rushes beginning in 1858, forged British sovereignty that was transferred to federal authority in 1871.

‘The Preservation of Peace and Order’

In 1858 miners traveled from California and further abroad, from Britain and Australia. Miners made their way to the Fraser River in search of gold. In 1858 approximately 30 000 people passed through Victoria on Vancouver Island. At the very beginnings of gold regulations the advent of miner’s licenses were written into colonial correspondence. On December 29, 1857 Governor James Douglas sent a letter about his proclamation – the *BC Gold Fields Act* - that declared a system for mining licenses. In this letter he writes that he took the necessary, preparatory step of proclaiming the mining licenses for the “preservation of peace and order.” He:

“issued a proclamation declaring the rights of the crown in respect to gold found in its natural place of deposit within the limits of Fraser’s River and Thompson’s River Districts, within which are situated the Couteau Mines, and forbidding all persons to dig or disturb the soil in search of Gold until authorized on that behalf by Her Majesty’s Colonial Government.”¹

People were thus forbidden to look for gold and “disturb the soil” until authorized by Britain. This indicates, the gold rush was certainly perceived by settler authorities, such as Governor James Douglas as a threat to the status quo. Thus the apparent crisis of the influx of people in search of gold instrumented the extension of formal colonial status to the mainland. In 1858 James Douglas wrote to England requesting support from the British Crown in ruling his quickly expanding colony. In response, Judge Matthew Begbie was sent to Victoria from Britain. Begbie traveled to Fort Langley and declared the new colony of ‘British Columbia’ subject to the Queen. The following year in 1859 Begbie drafted the *B.C. Gold Fields Act*, which was among the colony’s first laws that outlined mineral staking principles. The drafting of the *B.C. Gold Fields Act* in 1859, in light of contemporary mining politics and the formation of a settler society, is built on the premise of dispossession of land from Indigenous Peoples and the maintenance of British

¹ The Couteau Mines were the colloquial phrase that described the mining region, before the settler population more frequently referenced the region as the Fraser River goldfields.

authority. This, according to Douglas, was necessary to the preservation of peace and authority, as noted above.

Settler Imperialism: the consolidation of sovereignty over nature

Different Imperial ties were at work during the founding of British Columbia. In settler terms the gold rush was at once an opportunity for gold seekers as well as a risk to British control over what became the Canadian Pacific coast. Claims to gold encouraged Governor Sir James Douglas to very quickly assert lands as subject to the Queen of England, in fear of losing the area to American interests. The Oregon boundary dispute and territorial contestations between America and Britain were at the fore of regional politics during British Columbia's gold rush era. But on a smaller scale, the details of resource laws, such as the mining laws, that governed staking principles represent everyday enactments of British sovereignty. I argue that this is a site where dominion over nature was, and continues to be, materially realized. Mining laws - grounded in a Dominion of nature - relate to both how moments or ceremonies of possession are materially enacted and how sovereign claims to territory, to build on Emel et al., have always been couched in natural resource investments. In other words, it is the confluence of capital resource flows and the celebration of Imperial power that has allowed for contemporary possession of nature, and particularly gold, by the Crown. However the foundations of these claims are rooted in Imperial systems and were transferred from Britain to the Canadian settler state in 1871, though the newly formed province continued to provide jurisdictional authority over gold assets.

Central to these Imperial sovereign claims to land and mineral resources was a legal divorce of Indigenous peoples from their historic land base. Though this legal divorce has taken place in Canada, Indigenous resistance to dispossession is ongoing. This legal divorce is scalar, in multiple ways. The scalar politics of sovereignty in Canada are noteworthy because the province manages resources that are vested in the Crown, so Indigenous Nations are faced with competing claims and regulations imposed on their territory from the province and the federal government.² This jurisdictional

² Differences between the Provincial Crown and Federal Crown have figured prominently in the history of Canadian state relations with Indigenous peoples.

sever can be traced to the advent of gold mining in the region and subsequent joining of confederation.

The ideologies that governed mining essentially came from the British system, similar to other claim staking regimes established in Australia, based on the tenets of British mineral staking. This is of concern in explaining how resources, or nature, comes to be owned and governed by the state and legally alienated from Indigenous title claims today through legal systems.³ The gold rush of 1858 is integral to the formation of British Columbian sovereignty and represents a pinnacle moment in the structural beginnings of provincial resource allocation laws.⁴ The era prior to 1871 and British Columbia's entrance into confederation, the aptly named colonial period, housed two regions: 1) that of New Caledonia, on the mainland, that was loosely under Hudson Bay Company control and became the colony of British Columbia in 1858 and 2) the colony of Vancouver Island. These two colonies were joined in 1866 to form the sole colony of British Columbia.

The *BC Gold Fields Act* was among the province's first laws put in place by newly appointed Judge Matthew Begbie on August 31st, 1859. Prior to this gold mining laws were local, customary law, though there was a colonial miner's license system in place. The gold rush of 1858 provided a climate whereby British claims to territorial sovereignty over nature and Indigenous people were accelerated.

Departing from Seed and the idea that ceremonies of possession are based on fiction, my concern is the structural context that Seed's 'fiction' of sovereignty creates, especially in terms of the material dispossession of land. Though sovereignty can be understood as a fiction, the material dispossession of land that British claims to sovereignty facilitated continues to be 'real' – or at very least presents a dual fiction and

³ Contemporary dispossession in Tsilhqot'in territory and the Prosperity mine is my concern in my broader work in British Columbia. Current academic writing on the gold rush in B.C. focuses primarily on the Fraser River Basin. The Fraser River gold rush is important in contextualizing the Cariboo gold rush that took place in Tsilhqot'in territory as the rush moved north. This chapter is part of my larger project examining settler colonial continuity in the region from B.C.'s first gold rush and the contemporary rush for gold taking place.

⁴ The historic gold mining laws, reliant on racial hierarchies, can be related to Agamben's concept of the state of exception. For Agamben who draws on the work of Carl Schmidt, sovereignty is directly related to "power over life." Mining laws can be understood as a mechanism of dispossession and demonstrate a paradox comparable to the concept of bare life as constituted in homosacer's relation to what is sovereign, as sovereignty and state power reside simultaneously on the inside and outside of the newly forged colony and later province of British Columbia

competing origin story to the land historically governed by an Indigenous populations. Yet Seed's idea of ceremony and the ways in which colonists made things up as they went resonates well, particularly in light of moves made by Governor Sir James Douglas. With this in mind, I turn to British Columbia in 1858, the heart of the history of Canada's Western resource extraction laws that continue to contribute to Canada's Dominion of nature.

Gold mining laws, settler colonialism, and racial structuring

In previous research I have done on mining laws, miners involved in mineral regulation in Canada's territorial north eagerly explained to me how mineral claims legally came to be staked. This included a critical spatiality, as mining law travels. It is, in part, this previous work and conversations with settler miners that sparked my interest in the origins of mineral staking in Canada. The *BC Gold Fields Act* was a common referent in discussions. It was the first mining legislation formally recorded and legally enshrined in the Canadian west. The *Gold Fields Act* was signed on August 31st 1859, over a year after the colloquial laws were recorded in James Douglas' journal to the goldfields in May 1858 (see Appendix 1).

The list of Proclamations between 1858 – 1865 that concern gold include the following:

Gold Fields Act 1859, August 31st;

Rules and Regulations Under the Gold Fields Act, September 7th 1859;

Rules and Regulations Under the Gold Fields Act, February 24th 1863;

Gold Fields Act 1863;

Gold Fields Act 1864

The writing of these laws demonstrates that gold mining law was actively being forged in British Columbia's pre-confederation era. As this chronology demonstrates, the *BC Gold Fields Act* was amended in 1863 and again in 1864 and there were also *Rules and Regulations Under the Gold Fields Act* that were enshrined on September 7th 1859 and re-recorded again on February 24th, 1863. One key reason the writing of the *Gold Fields Act* is relevant is because the claim staking regime that is by and large still in place was instigated at this time. Miners were to apply for a Free Miner's Certificate, or license, that allowed for the staking of mineral claims or essentially for mining activity to take place. The *BC Gold Fields Act* is based on the presumed neutrality of the "Free

Miner” and the “Gold Commissioner” referenced frequently throughout the *Gold Fields Act*. In the initial BC Gold Fields Act of 1859, a free miner “shall mean a person named in and lawfully possessed of an existing valid Free Miner’s Certificate.” This system of granting a mining license was then by and large copied throughout northern Canada. Barry Barton has written extensively about Canadian mining law and the trajectory of free-entry mineral staking throughout Canada (Barton, 1993). This context - by and through which claims to gold became legally governed - is relevant to my discussion of sovereignty and is a topic written about in terms of liberal ideologies and the settler colonial claiming of property (Hoogeveen, 2014).

Apart from the role of the “free miner” another major player established in this act was that of the Gold Commissioner. The Gold Commissioner’s power extended well beyond governing gold and commissioners were also charged with water licensing, for example. Further duties gold commissioners assumed was the role of Indian Agent. The description of the government record for the Cariboo Government agency describes Governor Musgrave’s definition of gold commissioners as “not only Justices of the Peace, but County Court Judges, Indian Agents, Assistant Commissioners of Land and Works, Collectors of Revenue in the different Departments of the Public Services at the several stations hundreds of miles apart and in very extensive Districts” (BC Archives, GR-0216; for more on Musgrave and his role in confederation see Bescoby, 1980). It was not until after confederation that the gold commissioner’s duties were restricted to those established in mining legislation and the role of “government agent” was stratified. Gold Commissioner is a post still held today in British Columbia. Similarly ‘Free Miner’s Certificates’ are also legislated under the current *Mineral Tenure Act* though the terms of what constitutes a free miner have changed quite dramatically, in that in British Columbia mineral tenure is now staked through an online interface, referred to as *Mineral Tenure Online*. Provincial territorial claims remain relatively the same with their roots in British mining and property law.

In Douglas’ “journal of a visit to the gold fields”, in May of 1858, he recorded a list of the local rules that governed one particular gold bar, Hill’s Bar, located on the Fraser River. During settler colonial gold rushes, gold laws were at first developed locally by men working in mining camps. This customary law precedes legally enshrined

British law, yet is part of the larger precedents that instigated Canada's Dominion of nature in terms of rights to gold reserves. The material dispossession of Indigenous resource sovereignty through mining and mineral claims was colloquially asserted in customary law by settler miners. This was also the practice in Australia and California, and legal scholar Barry Barton has traced this practice to the historic Stannery tin mining district in Britain (Barton, 1993; Hoogeveen, 2014).

Gold mining laws were historically racially structured, prior to the writing of the *BC Gold Fields Act*. The Hill's bar resource laws detailed in James Douglas' journal were not formally or legally enshrined (see Appendix 1) yet they detail racial structuring at the time. The Hill's bar mining laws relate to the *Gold Fields Act* because both the informal and formal laws, including the actual Proclamation of the *Gold Fields Act* precluded Indigenous resource sovereignty in significant ways. They both made assertions over Indigenous traditional territory and were bound to Western ways of thinking Western legal orders; gold is alienated and Indigenous sovereignty dismissed, or not considered at all.⁵ In considering the racial ordering present in the writing of mining laws, Sharene Razack is helpful. "Mythologies or national stories are about a nation's origins and history. They enable citizens to think of themselves as part of a community, defining who belongs and who does not belong to the nation. The story of the land as shared and as developed by enterprising settlers is manifestly a racial story" (Razack, 2002, p. 2). The racial elements of the writing of gold mining laws enable settlers to think of themselves as part of a community and the foundation of the provincial and federal state.

Governor Douglas' trip to the gold fields made him nervous on behalf of England. In Douglas' journal on May 24th, 1858, he wrote of concerns about miners squatting and suggested, "we ought immediately to commence sales" in order to gain legal authority and grant pre-emptions. In terms of the racial configuration, he wrote the following:

Indians are getting plenty of gold and trade with the Americans. Indian wages are from 3 to 4 dollars a day. Miners working 2 miles below Fort Yale who are making on an average one and a half ounces a day

⁵ Relevant to my larger project is how the racial structuring is left out of accumulation by dispossession narratives, yet is central to contemporary laws that I argue are predicated on resource dispossession.

each man. The place is named Hill's bar and employs 80 Indians and 30 whitemen.

In this account, the ratio of Indigenous peoples to white men was 8:3. Yet mainstream narratives of gold continue to celebrate white settler histories and bracket Indigenous relations (Forsythe & Dickson, 2007). The scarce accounts of the history of settler colonial mining law participate in this erasure as well, in the assumption that lands were nearly unpopulated: "The true test of sovereignty over mining lands came during the Fraser River Gold Rush of 1858 and the subsequent Cariboo Gold Rush. The thousands of would-be miners who moved into *the nearly unpopulated* mainland of British Columbia were familiar with the rude democracy of the American Frontier" (Howarth in Hovis 1992: 89 emphasis my own). These terra nullius attitudes that prevail in frontier histories are well documented. In Forsyth and Dixon's book, for example, Indigenous histories are sidelined alongside the settler colonial narrative, yet as Daniel Marshall notes, "the narrative is clearly revisionist in its tone and in its attempt to provide a more inclusive story" (Marshall, 2008). Whereas, in the 1958 publication of *The Cariboo Story* by F.W. Lindsay, though sympathetic, provides a chapter on the "Hostile Indians." Forsyth and Dixon may have come relatively far in terms of including gendered and Indigenous histories, however the settler colonial narrative remains squarely in the centre.

Gold throughout the Americas: how colonial economies establish settler cultural economies

British Columbia's gold rush in 1858 is temporally situated within the production of a particular geo-historical moment of gold exploration and extraction throughout the Americas. Colonial gold exploration and conquest traveled throughout South and Central America before reaching British Columbia. History suggests that resource laws traveled. This is significant in an examination of how gold rush regulations made the way up the Pacific coast, participating in the settlement of state law and resource governance. Daviken Studnicki-Gizbert traces the history of the gold rush on a much longer time scale than I do here. He begins his analysis during the Spanish conquest of the Fifteenth and Sixteenth Centuries (Studnicki-Gizbert, Daviken, 2012). This was one major marker of the beginning of Eurocentric narratives in the Americas that concern conquest and travel.

Travel to the Americas was in part instigated in search for *El Dorado* and this colonial European search for gold continued from South America through Mexico and later, up the Pacific coast to British Columbia.

El Dorado was indeed a concept used in British Columbia in 1858, as is well outlined by Marshall (2000). The racial configuration of the colonies of Vancouver Island and British Columbia changed during the population influx in the gold rush era. Marshall writes about this time as a period in which there was a clash of worlds. He points out that the native world was “not defined by the 49th parallel” and discusses the violence towards natives that crossed the border when the California gold rush traveled north. He writes the “worlds in collision” included three colonial ideologies: that of the fur trade, California miners and British authority. Though the settler authority may have been at odds with the miners, who had little interest in the Imperial settlement project, they nevertheless carried with them Western ideologies as lived through the colloquial mining laws written at Hill’s Bar, for example. The miners may have come looking for gold, as opposed to land, but this search for nature constituted violent and active wave that preceded and participated in the larger settlement project, including joining of confederation. Marshall significantly addresses the violent histories of the gold rush including the brutal alliances settlers formed in committing acts of violence against Indigenous nations. This, coupled with the British enforcement of mining laws at the time participated in British Columbia’s entrance into confederation 1871. The era from 1858-1871 was one of legal legitimacy closely connected to gold rush economies and politics.

Romancing the frontier: British Columbia’s gold rush history

Elizabeth Furniss writes about this frontier history in William’s Lake, a region in British Columbia. She implies that the “images of cattle, cowboys and the historical Cariboo gold rush [that took place in the 1860s] promote the Canadian wild west.” For Furniss, this imaginary geography of the Canadian west rests on a dichotomy between whites and natives. She discusses this specifically in light of high school history textbooks in British Columbia and the practice of marginalizing native history in Canada. She argues that, “high-school textbooks remain the most conservative and archaic of the official nationalist histories in the public domain” (Furniss, 1997). The writing and

rewriting of British Columbia's frontier history and the celebration of gold mining in popular literature provides a mainstream account of the founding of the province (see Sterne, 1998 for example). During the pre-confederation colonial era, not only did Gold Commissioners record mining claims, as noted above they were also charged with law enforcement and mediating Indian-settler conflicts (Sterne, 1998, p. 34). The Gold Commissioner during British Columbia's colonial era was delegated with a disproportionate amount of sovereign power, power over people and territory that was vested in the state. This is the case despite the frontier drama presented in historic renditions of the past the human geography of the region did experience a dramatic shift in 1858, when the gold rush began. At the time the Fraser River area was known in settler colonialist geographies as New Caledonia (both the Fraser River and New Caledonia named by Simon Fraser, the latter after his Scottish heritage), though Mainland British Colombia became the Colony of British Columbia in 1858.

Prior to Judge Begbie's arrival and his territorial proclamation on May 8th 1858, James Douglas announced that no one would be allowed on the Fraser without a five-dollar miner's license issued by the colony of Vancouver Island. Little has been written on the original mining licenses issued in 1858, but it is certain that this license was issued in the name of the Queen and affirmed British Sovereignty (Stern, 13). Thus, gold played a central role in the settler economy of BC. In the BC archives there are books and books of the stubs from the original "Free Miner's Licenses" that were initially issued on a monthly basis for one pound each (five dollars). The regional gold commissioner signed each license. The culmination of Imperial power was exercised very clearly through gold. There is also an active discourse in the colonial archive around the lobbying to have the monthly license amended. For example, Richard Hicks wrote to Britain to amend the granting of mining licenses.

"Your Excellency stated that alterations were in contemplation with respect to the collection of miners' licenses. I would most respectfully suggest that a quarterly license of five dollars be collected instead of monthly, which will realize a larger revenue because we can then make all pay, rich and poor claims; as it is now, the great bulk of the claims do not pay over two dollars per day to the man. The taxation of claims in Australia was compelled to be given up in consequence of

the miners not being able to pay it; and should Your Excellency adopt this course I now propose, I assure you will stand higher still in the estimation of all classes.....”

Richard Hicks writing to Governor Douglas, October 17, 1858

This demonstrates the British governance of settler migrants at the time, the assertion of sovereignty through mining licenses as well as the racial and class formation being forged at this time. The gold rush era was one in which smallpox devastated Indigenous peoples. Population shifts resulted from disease throughout the settlement of British Columbia small pox visited all Indigenous groups in area and some several times. In 1862, the year of the Cariboo gold rush, the worst recorded outbreak of small pox took place. Disease had significantly affected native populations prior to the gold rush era. Harris concludes smallpox first reached the Strait of Georgia 1782 and he maps the approximate distribution of smallpox at this time (Harris, 1997, p. 19). Harris questions the white (colonial) misunderstanding of the spread of disease in BC. He asks why settler society has chosen not to understand what he refers to as the “decimation of native society” by small pox prior to the arrival of Vancouver and Galiano. Harris’ work is of interest not just due to the rich (re)telling of regional history, but also because of his autobiographical and reflexive writing. For example, in “Industry and the Good Life around Idaho Peak” Harris writes: “my proposition that no Native people had ever lived near Idaho Peak is absurd, and grows out of the common assumption, with which I grew up, that a mining rush had been superimposed on wilderness.” This sentiment echoes the work of Marshall on how romantic notions of the gold rush marginalize, and I would further extend this to how settler colonial histories marginalizes Indigenous histories. This is part of a larger work troubles the ongoing assumption that mining law is neutral or superimposed only on wilderness. My aim in providing a shift in the settler mainstream gold rush narratives is to make visible the active integration of ‘wilderness’, nature and particularly gold. Ideologies of wilderness underwrite mining law and silences Indigenous histories in white settler colonial discourse about the gold rush historically and today. Ideologies of wilderness and claims to gold continue to participate in the project of Canadian nation building.

Conclusion

In this chapter I have focused on one particular time in the active writing of sovereign claims to mineral property, that I deem significant to Canada's Dominion of nature via resource laws today. Research is based on the legal history of mining laws in British Columbia, focusing particularly on 1858-9 when the province's first mining laws were written. The central idea put forth is that gold mining and the first mining laws shaped the political geography of the region through the distinct racialized marginalization of Indigenous claims to land and subsequent claims to Indigenous resource sovereignty by and through settler ideologies. These ideologies were exercised both inside and outside the writing of mining law. A critical part of the early gold rush was the ways in which mining law, and the governance of nature, participated in the formation of the Canadian state.

Power over resources was garnered through the regulation of gold and the rush for gold that took place in British Columbia's pre-confederation era remains celebrated in mainstream accounts of the province. The state and the mining industry assume mining laws are neutral and celebratory gold rush narratives are part of this assumption. This is significant because the mineral staking regime in contemporary British Columbia is a structure that is currently being contested by a number of environmental and First Nations organizations including the Fair Mining Collaborative, West Coast Environmental Law and First Nation Women Advocating Responsible Mining. These organizations point out that mining laws are archaic, a common critique of the dated mineral staking principles that maintain settler colonial dispossession, by allowing miner's to stake a claim without Indigenous consent.⁶ Mining laws are in fact not archaic, in that they are routinely updated, as seen even as early as the 1860s. However, mining laws can be traced to the governance of nature and a structuring that denies Indigenous territorial claims based on racist ideologies of white superiority.

A legal divorce of Indigenous peoples from their historic land base is central to the mechanisms that allow material claims to be made over gold and nature. It is notably

⁶ The province of British Columbia might argue that free-entry does not exist, in that they have established a system whereby after a mineral claim is filed, no work can be done before a Notice of Work has been issued.

through this legal divorce that dispossession was and continues to be steeped in settler colonial logic and claims to state based resource sovereignty. These are actively and continually being resisted, including through the courts.⁷ What do critics mean when they argue that mineral staking regimes are archaic? What they mean is that the principles of allowing relatively easy access are unjust.⁸ This is part of what drives this research and makes the arguments put forth in this chapter, regarding the maintenance of the Canadian state through the governance of gold and nature, relevant today. To examine the legal injustices of the past is to interrogate how they have carried forward into the present. These legal injustices are a large part of what continues to form the Canadian state.

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⁷ This has been demonstrated, for example, in the 2012 Yukon Ross River Dena free-entry case over the duty to consult and accommodate.

⁸ Regardless of Notice of Work requirements that technically allow for consultation efforts with Indigenous Peoples, Indigenous consent and meaningful consultation remains absent from mineral claim staking.

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Appendix 1

1. No claim on this bar to exceed 25 feet front to each man.
2. Each man can hold 2 claims viz. one by preemption and one by purchase.
Provided he works both.
3. Bar claims can be held during absence by partners representing claimant.
4. When workable every claim must have one day's work in every three put on it, except in case of sickness.
5. Any Whiteman caught stealing on this bar shall be punished as a Committee appointed by the mines shall direct, and shall if he belongs to the Bar forfeit all his right, title and interest on it.
6. Any white man molesting the Indians whilst in a state of intoxication or otherwise shall be dealt with as a committee of the miners shall direct.
7. No liquor shall be sold or given to the Indians, nor exposed publicly for sale on this bar. Any one violating this law shall be fined \$100 for the first offence and for the second be sent from the forfeiting all his right title or interest in it.

For Mutual Safety

1. There shall be elected a captain and 2 Lieutenants who shall have entire control in case of danger or attack, or whenever they may have reason to apprehend any.
Any on disobeying the orders of either shall be subject to a sever penalty.

Geo. W. Tennent Secty.

P.H. Furness. Presdt.

No Country for Animals?

National Aspirations and Governance Networks in Canada's Animal Welfare Movement

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Introduction:

On 17 February 1859, there appeared in Quebec City's *Morning Chronicle* newspaper the following advertisement:

On Tuesday next.... TWO CARIBOUS will be on the Ice, opposite the City – tied with a rope about 25 or 30 fathoms long – and shot at by persons paying one dollar each shot, and at a distance of 500 yards. A subscription list will be taken round for subscribers. For further information apply to GOSSELIN & LARUE, 17, Palace Street.¹

Sensational, entertainment-based activities involving animals were nothing new in British North America. By this time, Andrew Downs had been working on his zoological garden in Halifax for a decade, Montreal's Guilbault Gardens had long been drawing crowds to view its collection of wild and exotic animals, and local papers across Britain's North American colonies routinely whetted popular appetites with announcements of circuses, fairs, and traveling exhibitions.² In most cases the animals at the centre of these spectacles survived – miserably, no doubt – from one viewing to the next. But this was not a given, and in cases such as that of the caribou above, the addition of violence and death did much to underscore tensions between popular culture and that of the colonies' growing number of respectable middle-class inhabitants. This too was nothing new. When for example a hotel owner in Niagara Falls staged a publicity stunt in 1827 involving a mock pirate schooner, a buffalo, two bears, two foxes, a raccoon, a dog, a cat, and four geese, critics' views jostled alongside those of an audience of ten thousand who turned out

¹ "Sporting Intelligence," *Quebec Morning Chronicle* 17 February 1859, 2.

² Susan Buggey, "Andrew Downs," *Dictionary of Canadian Biography*.

to witness the animals' watery descent.³ Less sensational but equally problematic for such critics were countless acts of commonplace cruelty, from cockfighting and carters beating horses on city streets to the living, working, and slaughter conditions of cattle and other livestock. Inevitably, these and other acts of cruelty would continue to occur long after Gosselin and Larue set their plan in place. But changes were nevertheless coming. From this point on, British North America and, soon, Canada, would see the development of state policy and civil society frameworks aimed directly at preventing these and other forms of cruelty and maltreatment.⁴

Challenging the cruel treatment of animals was the stuff of the animal welfare movement, one of the oldest and in some regards most successful social movements of the modern era. In Canada, that movement took shape in the 1860s, via the efforts of upper- and middle-class men and women who formed in cities across the continent various animal welfare NGOs, who participated in the development of state policy, and who otherwise advocated for the amelioration of animals' lives. Underpinning that work was an understanding throughout the latter decades of the century that the protection of animals was at some level a national project – that, to borrow from Gandhi long before he made the now cliché comment now found on bumper stickers, T-shirts, and animal welfare and rights websites worldwide, one could judge a society

³ Accounts of the animals' descent of the Falls vary; for this version see the *Cleveland Weekly Herald*, 14 September 1827, 3, available at <http://images.maritimehistoryofthegreatlakes.ca/50735/data>

⁴ On the animal welfare movement in Canada see Darcy Ingram, "Beastly Measures: Animal Welfare, Civil Society, and State Policy in Victorian Canada," *Journal of Canadian Studies / Revue d'études canadiennes* 47 1 (2013): 221-52. For a broader discussion of the place of animals in Canada see Stéphane Castonguay and Darin Kinsey, "State Formation, Conservation, and the Government of Non-Humans," in Jean-François Constant and Michel Ducharme, eds, *Liberalism and Hegemony: Debating the Canadian Liberal Revolution*, Toronto: University of Toronto Press, 2009: 221-45. Key works on the movement generally include James Turner, *Reckoning with the Beast: Animals, Pain, and Humanity in the Victorian Mind*, Baltimore: Johns Hopkins University Press, 1980; Brian Harrison, "Animals and the State in Nineteenth-century England," *Peaceable Kingdom: Stability and Change in Modern Britain*, Oxford: Clarendon Press, 1982, 82-122; Harriet Ritvo, *The Animal Estate: The English and Other Creatures in the Victorian Age*, Cambridge: Harvard University Press, 1987; Hilda Kean, *Animal Rights: Political and Social Change in Britain since 1800*, London: Reaktion Books, 1998; Diane L. Beers, *For the Prevention of Cruelty: The History and Legacy of Animal Rights Activism in the United States*, Athens, Ohio: Swallow Press / Ohio University Press, 2006; Susan J. Pearson, *The Rights of the Defenseless: Protecting Animals and Children in Gilded Age America*, Chicago and London: University of Chicago Press, 2011.

by the way it treated its animals. As a contribution to this collection's effort to trace the relationship of Confederation to the Canadian environment, this chapter explores one aspect of that relationship – the animal welfare movement – from the formation in the 1860s of the first animal welfare NGO that aspired to a pan-colonial identity to the effort and ultimately the failure during the 1890s of animal welfare advocates to establish a national organization that would bring together dozens of animal welfare NGOs scattered in urban centres across the nation. Through an analysis of legislation, parliamentary records, and published and archival NGO materials, I argue that the national and imperial dimensions that underpinned Confederation were key to the establishment of the animal welfare movement in Canada, both in terms of federal policy and state formation as well as its civil society contexts. But they were not enough to push that movement successfully toward the formal nation-wide status that many other social movements had attained by the end of the century. Beset by funding difficulties, internal tensions, varied regional and local contexts, and a multi-faceted character that was in many other regards a source of strength, supporters struggled and failed repeatedly during the latter decades of the nineteenth century to institutionalize their movement at the national level. Given their overwhelming focus on the pragmatics of their societies' day-to-day operations in the urban environment, they gave enthusiastic but sporadic attention to developing an institution that would unite the many NGOs operating in cities across the country, while those who attempted to push federal policy beyond the parameters established at Confederation met with opposition in political circles. The result, this chapter demonstrates, was a movement with national aspirations that remained unable to transcend in formal terms its local and regional contexts. Important in the context of Confederation and nation building during the nineteenth century, this failure speaks in turn to the beginnings of an ongoing struggle in Canada to build effective governance frameworks for animal welfare and rights.

Next section

It did not take long for the respectable citizens of Quebec City to respond to Gosselin and Larue's plans. Newspaper readers were outraged. "I was shocked and disgusted," wrote one, "and my whole soul boiled up within me."⁵ "Is this cold-blooded deliberate act of butchery,"

⁵ 'Mercy,' "Sporting Intelligence. To the Editor of the *Morning Chronicle*," *Quebec Morning Chronicle* 21 February 1859, 2.

wrote another, “really intended to take place on the 22nd inst., opposite the city of Quebec, and is this to be called ‘sport.’ Surely, this must be a joke, it is too incredible to suppose that Christians intend taking any part in the cruel wounding of even ‘two Caribous,’ tied with a rope.”⁶ Careful to end up of the right side of this debate, the *Morning Chronicle* itself soon weighed in on the controversy. “Such cold-blooded proposals,” it observed, “must always excite feelings of abhorrence in a civilized community, and will be put down by the public indignation, which they are calculated to arouse, even if the strong arm of the law cannot reach them.”⁷ Calls went out for Quebec City’s mayor to intervene, and in the end, the organizers decided to cancel the event.⁸

In more tangible terms, the uproar over the proposed caribou shoot was met by a dozen of Quebec City’s respectable elite, who with the help of a few likeminded men from cities across the colony established in 1862 an organization aimed at preventing such acts. Incorporated in 1864 “for the purpose of rewarding acts of bravery in successful or unsuccessful attempts to preserve human life, and bringing to punishment acts of cruelty to animals,” their Humane Society of Canada was modeled partly on England’s century-old Royal Humane Society, and drew support from the colony’s highest ranks.⁹ Leaders in business, politics, and society, these men knew well the importance of thinking big, and many were by virtue of their conviction, wealth, or political activity integral to the new nation as it took shape. Among them were society president and future Confederation Father Thomas Darcy McGee; seigneur, politician, and future Quebec Premier Henri-Gustave Joly, and the well-known Quebec City socialite, historian, and nature writer James MacPherson LeMoine.¹⁰ Aware of the weight his name would give the fledgling organization, the colony’s governor, Viscount Monk, stood as the society’s patron.

⁶ ‘Scandalized,’ “Sporting Intelligence. To the Editor of the *Morning Chronicle*,” *Quebec Morning Chronicle* 19 February 1859, 2.

⁷ Editorial, *Quebec Morning Chronicle*, 19 February 1859, 2.

⁸ ‘Enquirer,’ “Sporting Intelligence. To the Editor of the *Morning Chronicle*,” *Quebec Morning Chronicle* 19 February 1859, 2; Editorial, *Quebec Morning Chronicle*, 22 February 1859, 2.

⁹ “An Act to incorporate the Humane Society of Canada,” *Quebec Statutes of the Province of Canada*, 1864, 27-28 Victoria, Cap. 146; “The Fish and Game Protection Club,” *Quebec Morning Chronicle*, 4 February 1863, 2. See also the Royal Humane Society website: www.royalhumanesociety.org.uk

¹⁰ “An Act to incorporate the Humane Society of Canada.”

Albeit based in Quebec City, their society was aimed from the start to become something greater. Hoping their group would become the first of a number of branches, they intended their new organization to serve as a means of expressing these values not just locally, but across the colony.

They were not alone. In 1864, residents of Halifax saw a similar group of men join forces to establish what they anticipated would be the first chapter of the Society for the Prevention of Cruelty to Animals (SPCA) in North America. As in the case of the Humane Society of Canada, the Halifax group was looking beyond its immediate urban contexts to establish something more substantial – in this case, a society that represented the colony of Nova Scotia. A cross-section of the city’s political, legal, and spiritual leaders, it drew representation from judicial and religious circles in particular. Nova Scotia’s Anglican Bishop Hibbert Binney was among them, as were the colony’s Chief Justice William Young; its Solicitor General, John William Ritchie; and politician Charles Tupper, all leading figures in Nova Scotia’s entry into Confederation.¹¹

In terms of formal civil society institutions, this was the beginning of the animal welfare and rights movement in Canada. From it we learn at least two things. First, efforts in Quebec City and Halifax during the early 1860s indicate that in the lead-up to Confederation, there was already in place considerable interest in the treatment of animals within British North America. In this regard, it is clear from these efforts that the vision proffered by the movement’s supporters reached beyond their immediate local and urban contexts to encompass the larger political jurisdictions in which they moved. As such, animal welfare proponents were expressing even before Confederation the aim to bring the movement to the widest audience possible – in other words, to go big. Second, we learn that in both instances, the best these organizations did was to locate the movement’s aspirations, along with its broader political, economic, and social contexts. In Halifax, the combination of weak funding, the absence of effective legislation, and want of an agent to conduct the organization’s day-to-day operations soon led to the fledgling society’s dissolution. Similarly the Humane Society of Canada failed to evolve into the series of

¹¹ Nova Scotia SPC, *Ninth Annual Report*, Halifax: Morning Herald, 1885: 15; Nova Scotia Archives, MG 20 519 1 Scrapbook January 1877-November 1894: newspaper clipping, “The SPCA: Organization of a Ladies Auxiliary,” *Morning Herald*, 22 July 1879.

colony-wide branches that its founders envisioned, and before long their organization disappeared and was soon forgotten.¹²

For a successful effort during the 1860s, one has to turn to British North America's largest city, Montreal. There, efforts paralleled closely those of Halifax. In 1864, William Workman led a petition to incorporate in Montreal the Royal Canadian Society for the Prevention of Cruelty to Animals.¹³ A prominent figure soon to become the mayor of Montreal, Workman made his money via the hardware industry, railways, real estate, and banking. He was also a Unitarian long devoted to humanitarianism, and was active in local philanthropic circles including the Irish Protestant Benevolent Society, the Protestant House of Industry and Refuge, and the working-class oriented Montreal City and District Savings Bank.¹⁴ Following a series of petitions to the federal legislature, the Canadian Society for the Prevention of Cruelty to Animals (Canadian SPCA) was incorporated in April 1869.¹⁵ Organizers set out quickly to capitalize on this energy. Workman served as the society's first president, and he was joined by upwards of 150 supporters, most of whom were part of the city's powerful upper- and middle-class Protestant community.¹⁶

Albeit based in Montreal, this new organization saw itself from the outset as something more. In this regard, it was no accident that supporters chose to describe their organization as the "Canadian" SPCA. From Workman's first petition, signatories were working toward an organization that transcended their immediate urban contexts. Initially colony-wide and decidedly imperial in its scope (which included efforts in early petitions to obtain the title "Royal"), that ambition easily accommodated British North America's evolving political context. In this way, nationalism was readily embedded in the Montreal-based society's mindset. Located

¹² Nova Scotia SPC, *Ninth Annual Report*, 15; Nova Scotia Archives, MG 20 519 1 Scrapbook January 1877-November 1894: newspaper clipping, "The SPCA: Organization of a Ladies Auxiliary," *Morning Herald*, 22 July 1879.

¹³ *Journals of the Legislative Assembly of Canada*, 1864, 27 Victoria, 28 March 1864, p.131.

¹⁴ On Workman see Gerald Tulchinsky, "William Workman," *DCB online*.

¹⁵ *Journals of the House of Commons*, 1868, 31 Victoria, 16 April, p194; *Journals of the House of Commons*, 1869, 32 Victoria, 26 April 1869, p39.

¹⁶ Canadian SPCA, *The Canadian SPCA*, Montreal: John Lovell, 1870.

in the nation's largest city, the Canadian SPCA was in 1869 the only animal welfare NGO in Canada, and was among the first of its kind in North America.¹⁷ As such, it claimed immediately the status as well as the responsibility that went with this position. Its objective, as outlined in the society's constitution, was "to provide effective means for the prevention of cruelty to animals throughout the Dominion of Canada."¹⁸ As a start in this direction, it had within months of its incorporation expanded its operations throughout the region to Quebec, Trois Rivières, Sorel, Saint-Jean-sur-Richelieu, La Prairie, Joliette, Vaudreuil, and via one agent as far off as Woodstock, Ontario. Reflecting the colony-wide aspirations of the Nova Scotia SPCA and the Humane Society of Canada, the society's officers saw the Canadian SPCA as the first, and likely the headquarters, of a series of branch organizations to be established in cities across the new nation. With these objectives came no shortage of federal, provincial, and imperial patrons, notably the Prime Minister along with Confederation father George-Étienne Cartier, Canadian Governor General John Young, Quebec Premier Pierre-Joseph-Olivier Chauveau, and Narcisse-Fortunat Belleau, the province's lieutenant governor.¹⁹

These efforts paralleled major developments on the part of the new Canadian state. Indeed, it is little wonder, given the events that were unfolding at the federal level, that the Canadian SPCA was able to recruit as patrons men of such political stature. Within months of Confederation, federal parliamentarians had set to work on drafting anti-cruelty legislation for the new nation. Admittedly, this was not difficult. In 1857, the colony of Canada had passed "An Act to prevent the cruel and improper treatment of Cattle and other Animals" that served as the basis for the new laws.²⁰ Nevertheless, the Cruelty to Animals Act of 1869 was for the nation a landmark. In the minds of Macdonald and other influential political figures, federal animal welfare policy was essential to the establishment of a modern, progressive, respectable nation, and their direct support for the Act made this clear. Borrowing from England's own conflation of

¹⁷ SPCAs sprang up quickly in the United States during the late 1860s, beginning with the American SPCA in New York (1866), the Pennsylvania SPCA (1867), and the Massachusetts SPCA (1868). Turner 47-52.

¹⁸ Canadian SPCA, *The Canadian SPCA*, 7.

¹⁹ Canadian SPCA, *The Canadian SPCA*.

²⁰ "An Act to prevent the cruel and improper treatment of Cattle and other Animals, and to amend the Law relating to impounding the same," *Statutes of Canada*, 20 Victoria, 1857, Cap. 31.

animal welfare and national identity (in the 1840s, Queen Victoria threw her support behind London's Royal SPCA, by which point the nation had shed its formerly brutal reputation to become known for its widespread advocacy of animal welfare), Canada's animal welfare movement contained within it both imperial and national dimensions well suited to the ideological frameworks that underpinned the nation as it took shape.²¹ Under the guidance of Cartier and Macdonald the Act made its way smoothly through the House of Commons, and from there quickly became the movement's legal touchstone. As such, it reflected some pragmatic strategies that speak directly to patterns of governance that were unfolding in the new nation. Some years ago, the contributors to *Colonial Leviathan: State Formation in Mid-Nineteenth-Century Canada* contrasted the nineteenth century's laissez-faire reputation with the tremendous growth of the state in British North America and Canada.²² As a complement to that argument, this case underscores the degree to which the growing power of the state was matched by equally striking growth on the part of civil society, in particular with regard to non-governmental organizations dealing with a panoply of issues, be it poverty, labour, gender, science, education, the arts, the environment or, in this case, animals. By legislating that half of all fines levied in animal cruelty convictions along with costs be turned over to the prosecutor, the federal government encouraged from the outset the development of civil society institutions that would permeate the nation at the local level and conduct the necessary enforcement activities that the new state was reluctant if not unable to perform on its own. In doing so, it underscored the centrality of civil society to patterns of governance in the nation during the decades immediately following Confederation.

To make sense of the rationale behind these developments, it helps to examine the various motives at hand. As many studies have noted, the animal welfare movement was as much about regulating human behaviour – particularly that of the lower classes – as it was about preventing cruelty to animals.²³ Taken too far, however, that argument can become a distraction. At its base, the animal welfare movement was indeed about animals, and the view that its upper-

²¹ On this transformation in England see Ritvo, *The Animal Estate*, 125-30.

²² *Colonial Leviathan: State Formation in Mid-Nineteenth-Century Canada*. Toronto: University of Toronto Press. 1992.

²³ See Turner, *Reckoning with the Beast*; Harrison, "Animals and the State in Nineteenth-century England."

and middle-class supporters targeted patterns of cruelty among the working classes but not their own obscures some of the more basic motives that informed the movement. Most notably, it obscures the degree to which the animal welfare movement's activities had overwhelmingly positive effects when it came to the material links between animals and those within society's upper and middle ranks. To date, historiography regarding animal welfare has under-estimated the movement's broader economic dimensions. In this sense, interpretations of the movement as targeting working class activities involving animals but stopping at those involving the upper and middle classes plays convincingly on irony, but does not account for the material gains it offered to that segment of society. As a result, instrumentalism has typically been interpreted as a limitation upon the movement, rather than as one of the key motives that lay behind it.

A glance at the membership of the Canadian SPCA confirms this. Alongside humanitarian reformers such as Workman was a wide spectrum of Montreal's upper- and middle class, the material interests of whom included all varieties of industry, agriculture, medicine, and sport. In practically all of these areas, improving the treatment of animals offered direct benefits in terms of health, strength, longevity, and productivity, all of which made for sound economic as well as ethical incentives to support animal welfare. Considering the movement from this perspective helps to account for the presence not only of religiously-inspired reformers, but also of industrial magnates, railway and steamship company owners, cattle ranchers and timber barons, horse breeders, owners of carting agencies, veterinarians, foxhunters, military figures, and sportsmen.²⁴ And this, in turn, helps to account for the importance of the movement as perceived at Confederation. We do not need to revisit in detail here how realizing the vision of a northern transcontinental nation rivalling the United States entailed considerable attention to economic issues. We might, however, remind ourselves in the context of this paper just how central animals were to this process, be it with regard to the growth of the new nation's industrial and manufacturing sectors, its resource extraction activities, its agricultural economy, its transportation networks, or to population growth and settlement in general. In this way, the federal state's institutionalization of animal welfare principles at Confederation was about nation-building not only in terms of ethics and respectability, but in its most pragmatic sense.

²⁴ Ingram, "Beastly Measures."

Together the Canadian SPCA and the federal Cruelty to Animals Act initiated a round of animal welfare activities in the new nation. Within a year, residents in Quebec City including some of the founders of the now-defunct Humane Society of Canada had established a local branch of the SPCA, and others soon emerged in Ottawa, Toronto, and Halifax, often on the basis of advice and materials provided by the Canadian SPCA. As in Montreal, they drew the support of men prominent in the nation's political, economic, and social circles, including Governors General, the Prime Minister, and provincial leaders; many of the nation's key theologians, intellectuals, nationalists, and promoters of social reform; and individuals tied directly to industry, agriculture, resource extraction, sport, medicine, and the military.²⁵ They also claimed territory well beyond their immediate urban contexts, be it in regional terms or, in the case of the Nova Scotia and Ontario SPCAs, at the provincial level. All of them worked in areas of policy development, education, and infrastructure, but the activity in which they were most engaged was local law enforcement. In targeting acts of cruelty, these organizations inevitably set their sights on working class men and the animals with which they were most commonly associated: livestock and in particular horses. Displayed proudly in their annual reports, conviction lists comprised largely of carters charged for cruel treatment of horses speak immediately to the class and, in Montreal and Quebec in particular, to the ethnic dynamics that informed the movement. That such work was seen as essential posed problems, however, for law enforcement was by far their most expensive activity, consuming half or more of their annual budgets in inspectors' wages. In their attempts to maintain that vital aspect of their operations, all of the societies formed in the 1870s struggled, and apart from the Nova Scotia SPCA, which changed its name to the Nova Scotia Society for the Prevention of Cruelty (SPC) and expanded its operations to include women and children, only the Canadian SPCA remained fully operational during these years.²⁶

²⁵ Quebec SPCA, *Annual Report of the Quebec SPCA, 1874*, Quebec: Morning Chronicle, 1875; Metropolitan SPCA, *The Metropolitan SPCA*, Ottawa: A. S. Woodburn, 1872; Ontario SPCA, *First Annual Report of the Ontario SPCA*, Toronto: n.p., 1874; Nova Scotia SPCA, *First Annual Report*, Halifax: Daily Reporter and Times Steam Job Printing, 1878.

²⁶ Nova Scotia SPC, *Ninth Annual Report*, Halifax: Morning Herald, 1885: 16; Darcy Ingram, "Beastly Measures."

Despite its struggles during the 1870s, the movement nevertheless retained its national aspirations, and there soon took shape a series of efforts to establish a network to link the country's animal welfare NGOs. The first of these came from the Nova Scotia SPC. By the late 1870s, it and the Canadian SPCA had emerged as the most prominent animal welfare institutions in the nation, and both were in regular communications with each other, with their counterparts in the United States and Britain, and with fledgling institutions across the country. As part of its efforts to promote the movement, the Nova Scotia SPC had by 1879 put together a monthly journal, and the society was soon meeting requests from SPCAs in other provinces for copies. In light of this demand, the Halifax society quickly recognized the potential for its publication to promote the movement, perhaps even to become a national institution in its own right. In November 1880, the Nova Scotia SPC sent letters to its counterparts in Montreal, Quebec City, Ottawa, and Toronto suggesting that the country's SPCAs adopt the journal as formal, nation-wide means of communication.²⁷

That nothing came of this initial effort underscores both the ongoing determination of animal welfare advocates to take their movement to the national level and the movement's still relatively limited presence in Canada. Important developments related to the nation-building ethos that underpinned Confederation, however, soon gave the movement a greater purchase. Given the overwhelmingly urban identity of the movement, urbanization was an obvious factor in its growth, and the proliferation of the social purity and moral reform movements locally and nationally played a significant role within that context. But the objective at the heart of Confederation to build a transcontinental nation was also a key factor. In broad terms, that process entailed securing from Britain political jurisdiction over the vast territory of Rupert's land; wresting control over that territory via treaties and in some cases wars from its indigenous and Metis populations; and from there transforming it and the other geopolitical pieces of the Canadian puzzle via the migration of human and non-human biota into what Alfred Crosby has referred to as a Neo-Europe.²⁸ Seen from this perspective, the Cruelty to Animals Act of 1869

²⁷ Nova Scotia Archives, Nova Scotia SPC Fonds, MG20, Vol 516, NSSPCA letter books no. 1-4, Letter book no. 1, September 1877-April 1886, p110, 263, 270-73, 320.

²⁸ Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*. Cambridge: Cambridge University Press, 1986.

represented considerable foresight on the part of parliamentarians, as it provided at the outset an important framework for the new nation. To borrow from James Scott's discussion of high modernism, it formed part of the process by which northern North America was made "legible" for the kind of large-scale social and material transformation that was to follow.²⁹ By the end of the 1870s, the first stages of that process had either been accomplished or were well underway, and with indigenous populations subdued, treaties secured, land surveys unfolding, and a transcontinental transportation network on its way, animals came increasingly to the forefront. In this sense, the animal welfare movement fitted into a broader network of institutions that recognized the centrality to the nation of the health, welfare, and productivity of animals.

These institutions also began to take shape before Confederation. 1859 saw the establishment of an agricultural school at the College-de-Sainte-Anne-de-la-Pocatière in Quebec, and the following decades brought similar institutions. Among them were veterinary schools. In 1861, the Edinburgh-trained veterinary surgeon Andrew Smith emigrated to Toronto at the request of University of Toronto Agriculture Professor George Buckland and the Upper Canada Board of Trade's Adam Fergusson, where he established in 1864 the Upper Canada Veterinary School, later to become the Guelph-based Ontario Agricultural College.³⁰ Two years later, Smith's Edinburgh colleague Duncan McEachran established the Montreal Veterinary College. Integrated during the 1880s into McGill University as the Faculty of Comparative Medicine and Veterinary Science, it was also the catalyst for a number of French institutions in Quebec.³¹ By this time the federal government was weighing in on this component of the nation-building process with yet another large-scale intervention involving animals – in this case its establishment in 1886 of an Experimental Farms System comprising a central institution based in Ottawa and four others to be located in British Columbia, the Northwest Territories, Manitoba,

²⁹ James C. Scott, "Authoritarian High Modernism." In *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, New Haven and London: Yale University Press, 1998.

³⁰ Evans, A.M., "Andrew Smith," *Dictionary of Canadian Biography*.

³¹ Denis Goulet and Frédéric Jean, "Duncan McEachran," *Dictionary of Canadian Biography*; Chas. A. Mitchell, *A Note on the Early History of Veterinary Science in Canada*. Reprinted from the *Canadian Journal of Comparative Medicine*, Gardenvale QC, 1938-40.

and Atlantic Canada.³² Behind all of this was what amounted to nearly a doubling of the population of working animals and farm stock in Canada between 1871 and 1891.³³

The Cruelty to Animals Act did much to complement these institutions. Specifically, the Act established at the outset of Confederation parameters that bore directly on the treatment of livestock and horses, animals whose wide-ranging importance made the ubiquitous. Focused specifically on “any Horse, Mare, Gelding, Bull, Ox, Cow, Heifer, Steer, Calf, Mule, Ass, Sheep, Lamb, Pig, or other Cattle [cattle being a wide-ranging term at the time for these and other livestock], or any Poultry, or any Dog, or Domestic Animal or Bird,” it targeted activities and abuses associated directly with the nation’s agricultural and industrial sectors.³⁴ In 1875, the federal government established further legislation aimed specifically at the transportation of horses and livestock, setting in place a twenty-eight hour limit on the time such animals could travel before being unloaded to be rested, watered, and fed – all of which contributed not only to the animals’ health, safety, and well-being, but also to their value.³⁵ In this way, the nation’s anti-cruelty laws fitted neatly into a range of considerations centered on agriculture and other sectors deemed vital to the new nation’s economy. Finally, in ways that facilitated the movement’s broader efforts to address the health and welfare of animals, the Act’s empowerment of both the state and civil society to intervene in instances of cruelty meant that labourers who worked with animals did so under far more scrutiny than they would have experienced otherwise.

Among the best examples of the animal welfare movement’s wide-ranging links are Smith and McEachran. As co-founders of the animal welfare institutions in their respective cities and for decades those societies’ chief veterinarians, both were prominent fixtures within the movement. In addition, Smith and McEachran were avid horsemen who counted horsebreeding, foxhunting (McEachran was a member of the Montreal Hunt, and Smith served as the Toronto

³² Anstey, T. H. *One Hundred Harvests*. Ottawa: Canadian Government Publishing Centre, 1986: xiv, 4-9.

³³ Census data from 1871 and 1891 indicate that Canada’s horse population grew from 836,743 to 1,407,572, and its cattle population grew from 2,584,655 to 3,997,023. *Census of Canada, 1871. Census of Canada, 1891*.

³⁴ Cruelty to Animals Act, Statutes of Canada 1869, c. 27.

³⁵ “An Act to prevent Cruelty to animals while in transit by Railway or other means of conveyance within the Dominion of Canada,” *Statutes of Canada, 1875*, 38 Victoria, Cap. 42.

Hunt's Master for a decade) and in Smith's case horseracing among their pursuits.³⁶ Beyond that, McEachran in particular stands out. After developing a system of animal quarantine in the 1870s, he quickly rose to prominence as Canada's leading veterinary expert. That reputation led in 1885 to his appointment as the federal government's first Chief Veterinary Inspector, a position that saw him deal with everything from the management of contagious diseases to the development of federal research and inspection facilities. In turn, these activities complemented McEachran's extensive investment in Canada's nascent western ranching industry. As David Breen notes, the latter decades of the nineteenth century saw Montreal emerge as "the financial and political centre of the Canadian cattle kingdom," and McEachran's interests placed him at the center of these developments.³⁷ In 1881 he co-founded with the Eastern Townships' wealthy stock-breeder and Senator Matthew Cochrane the Cochrane Rancho Company, and in 1883 he helped found the British-based Walrond Rancho Company, of which he eventually served as president and general manager.³⁸ Around him were other Canadian SPCA supporters, among them industrialist and politician George Alexander Drummond (Cochrane Rancho Company) and shipping magnate Andrew Allan (co-owner with his brother Hugh of the North-West Cattle Company), both of whom spent three decades on the society's executive committee. Albeit always with an eye to the economics of livestock, McEachran's views were by no means confined to that perspective, and his active support for research into animal psychology and intelligence indicates clearly the diverse nature of his engagement with animals. Though more far-ranging than that of his counterparts, his varied involvement with animals is easily recognizable among the movement's supporters, many of whom were invested in agriculture and other activities involving animals.³⁹

³⁶ Evans, A.M., "Andrew Smith," *Dictionary of Canadian Biography*; Goulet and Jean, "Duncan McEachran;" Darcy Ingram, "Horses, Hedges and Hegemony: Foxhunting in the Montreal Countryside," in Stéphane Castonguay and Michèle Dagenais, eds, *Metropolitan Natures: Urban Environmental Histories of Montreal* (Pittsburgh: University of Pittsburgh Press, 2011): 211-27.

³⁷ David H. Breen, *The Canadian Prairie West and the Ranching Frontier, 1874-1924*, Toronto: University of Toronto Press, 1983: 93.

³⁸ Breen 26-30; Goulet and Jean, "Duncan McEachran," 6. See also A.B McCullough, "Eastern Capital, Government Purchases and the Development of Canadian Ranching," *Prairie Forum* 22 2 (1997): 213-35.

³⁹ McEachran, Duncan. *Opening Address. Society of Comparative Psychology*. Montreal: Gazette Printing Company, 1888.

Next section:

Together urbanization, the social purity and moral reform movements, and these broader economic links to animals helped transform the movement's fledgling identity of the 1860s and 1870s into something more tangible. And that had a direct impact on the movement's national aspirations. The next and most concerted effort to create a national animal welfare network took shape in Toronto. There, animal welfare advocates had been struggling since Confederation to establish a viable institution, but had failed to find the equation they needed. The answer came in the form of a broader institutional model: the Humane Society. Aimed simultaneously at addressing animals, children, and in some cases women, that model had experienced considerable success in the United States, where dozens of Humane Societies were already operating. And it fit the city well. By the mid-1880s, Toronto was emerging from its relatively minor status at Confederation. Between 1871 and 1891 its population more than tripled to reach 180,000, making it the country's second largest city and a potential rival to Montreal. It was also becoming widely reputed as a bastion of protestant morality – or as William Holmes Howland put it during his successful bid to become mayor in 1886, as “Toronto the Good.” Established in 1887, the Toronto Humane Society had behind it a solid support network of support including the new mayor, who served as its first president. Almost immediately it ranked with the Montreal and Halifax societies as one of the nation's most prominent animal welfare NGOs. As in the case of the Canadian SPCA nearly two decades before, the Toronto society's national aspirations were apparent from the start. Within months of its formation, the THS persuaded the American Humane Association to hold its 1888 annual meeting in the city, and members clearly saw their American counterpart as the model for a similar, nation-wide institution in Canada.

That AHA meeting was complemented by other work in this direction. In 1888, it published a lengthy book on the subject of animal welfare. A compilation of materials mainly from Britain, the United States, and Canada, *Aims and Objects of the Toronto Humane Society* was a both a multi-layered pedagogical tool and a comprehensive guide to the movement's history, its philosophy, its leaders, and the challenges it faced. Four years later the society followed up with *Work Accomplished by the Toronto Humane Society*, another lengthy

compilation that made reference to more than a dozen animal welfare NGOs in the nation— a clear indication that the movement had grown considerably during the preceding decade.

With these books came further efforts to bring together all of Canada's SPCAs and Humane Societies under a single national banner. In February 1891, THS co-founder and secretary John Joseph Kelso sent a circular to SPCAs and Humane Societies across Canada:

The need of a united Canadian Humane Association for the active prosecution of national work has suggested itself to our minds, as it probably has to yours, more than once. We believe that the time has come when a Dominion Association, composed of the various Humane Societies in Canada, should be organized, and an annual convention held, at which members could exchange views and modes of work, and arrangements made for assisting and encouraging the formation of Humane Societies in towns and cities where no work of this kind is at present in existence...⁴⁰

Noting the fifteen-year history of the American Humane Association, Kelso suggested that a convention be held in Toronto during the summer of 1891, at which delegates would discuss the formation of a similar association in Canada. That convention did not materialize, and issue was put to rest until the following spring, when the THS circulated another call requesting delegates to attend a meeting in Toronto on 21 June 1892. There, participants from Halifax, Montreal, and cities throughout Ontario resolved to establish a national organization in order to better promote their societies' objectives, and to push forward with plans to draft a constitution and to organize another meeting. But that meeting did not take place, and efforts stalled once more, until the THS picked up the pieces and in January 1894 called for yet another meeting. This time they succeeded: the Canadian Humane Association was formally established in Toronto on 16 May 1894, officers were elected, and by the association's next meeting in August a committee had secured permission to affix the title 'Royal' to its name.⁴¹

⁴⁰ Toronto Humane Society, Circular, 1 Feb 1891; in McCord Museum, Canadian SPCA Fonds, P661 / A01, Canadian SPCA Minutes, 1887-1900.

⁴¹ "To Protect the Weak," *The Globe*, 22 June 1892, 8; Royal Canadian Humane Association, *Annual Report for 1896*, Hamilton: Spectator Printing Company, 1896: 5-6; City of Toronto Archives, 1409, Toronto Humane Society Fonds, Minutes of the Toronto Humane Society 1887-1906, p 45, 14 January 1891; p69, 6 May 1892; McCord Museum, P661 / A01, Canadian SPCA Fonds, Canadian SPCA Minutes, 1887-1900, 1 June 1892.

Overall, though, the magic equation that made the Humane Society model successful in so many regards – the paired mandate to address child and animal welfare – proved problematic. Inasmuch as the THS and like-minded societies focused on children, they were by the 1890s but one of many organizational models across the country to do so, and most of these were more direct in their efforts. Indeed, the THS itself drew extensively on this network when it began its operations. By the early 1890s, co-founder and THS Secretary John Joseph Kelso had noted “the difficulty... of keeping the animals and children from clashing, the two having their separate and distinct friends,” and was already moving on to found the Children’s Aid Society and to develop the newly established Fresh Air Fund.⁴² Further to Kelso’s observations, many of the women who divided their time between local humane societies and other institutions dealing with children also devoted considerable effort to the women’s movement, in particular the Local and National Council of Women, the development of which paralleled that of the THS and other humane societies. All of this meant that supporters had much to choose from when making decisions about their political activities, and the Humane Society model was not necessarily the most obvious choice.

Meanwhile, the humane societies’ animal dossier impacted efforts in another way. For many of the movement’s supporters, the twin mandate of the proposed Canadian Humane Association did not match their exclusive interest in animals nearly as well as did the SPCA. In particular, that model appealed more directly to the likes of cattle ranchers, horse breeders, and carting agents, and the SPCAs tended as a result to have within them a strong, pragmatic voice that tempered the oftentimes more strident, idealistic views of these organizations’ social purity and moral reform advocates. Combined with the fact that the federal government had by the 1880s gone a long way toward addressing agricultural and industrial concerns, this tendency meant that the SPCAs were generally more conservative than the humane societies when it came to the development of further policy and legislation, and less likely to pursue objectives that fell outside their animal mandate.

⁴² LAC, J.J. Kelso Fonds, MG 30 C97, Vol 2, Diaries, File Folder: Diary 1885-1891: June 1891; John Bullen, “J.J. Kelso and the ‘New’ Child-Savers: The Genesis of the Children’s Aid Movement in Ontario,” *Ontario History* 82 2 (1990): 107-28, 112.

Given the impossibility of forming a representative national organization that did not draw on both the humane societies and the SPCAs, the THS faced considerable challenges. Perhaps the biggest blow to its efforts came when the Canadian SPCA, which was still the nation's most influential animal welfare organization, declined to participate in the new society. "On the ground that this society being a society purely for the protection of animals and the subscription money having been given solely for that object," the Canadian SPCA informed its Toronto counterpart in February 1894, "they would not be justified in devolving any portion of it to the promotion of societies formed of other objects, however worthy."⁴³ When it was finally established, the Royal Canadian Humane Association (RCHA) looked more like an Ontario-based organization than anything approaching a pan-Canadian identity. Nor did it become as pervasive as its founders hoped. Instead of representing the concerns of humanitarians across the nation, the new society ended up awarding acts of bravery and condemning the cruel treatment of animals, in much the same way as its short-lived predecessor had hoped to do three decades earlier. In this sense, its establishment marked more a nationalization of the activities of the Royal Humane Society, which had long awarded acts of bravery throughout the British Empire, as opposed to being a more sophisticated, far-reaching national humanitarian organization.

Conclusion

The failure of the Royal Canadian Humane Association to become what many of its founders envisioned underscored for everyone involved the weaknesses and the tensions inherent in Canada's animal welfare movement. While many new animal welfare NGOs were established during the 1890s, by the turn of the century the overall sense was still that of a movement struggling to find a foothold within the nation's urban centres, and failing to do so beyond them. Within a decade, of the establishment of the RCHA, the National Council of Women was calling for the formation of another Dominion Humane Society, and similar efforts continued to unfold in the decades that followed.⁴⁴ Not until the establishment of the Canadian Federation of Humane Societies in 1957 – nearly one hundred years after the first attempt at such an institution

⁴³ McCord Museum, P661 / A01, Canadian SPCA Fonds, Canadian SPCA Minutes, 1887-1900, 9 February 1894; 4 October 1894.

⁴⁴ "Council of Women Hold Convention. Proposed Organization of Dominion Humane Society," *Mail and Empire* 21 May 1903.

in Quebec City -- would the animal welfare movement in Canada succeed in developing a national framework.

By no means, though, does this struggle speak to a movement that was unpopular, or isolated from the corridors of power. On the evening of 13 March 1890, during one of many tense debates that unfolded during the latter decades of the century over proposed animal welfare legislation, an ailing John A. Macdonald left his office to address the House of Commons on the subject.⁴⁵ Few of the parliamentarians in attendance that night would have been present in the House two-and-a-half decades earlier, when in that freshly minted first government headed by a significantly younger and fitter Macdonald, their predecessors ushered in the framework they were currently being asked to amend. As then, Macdonald spoke in no uncertain terms of his support for the movement: “I voted for this Bill last Session, and also this Session, and if I live,” he continued, “I shall vote for it until it becomes law.”⁴⁶ Given the fact that as I write this chapter, Canada’s current Prime Minister hosts on his website a pet adoption program along with links to the nation’s animal welfare organizations (click on “Fun”), the longstanding capacity of this movement to draw the support of individuals of such power and authority is worth noting. In part, it underscores the difficulty that the animal welfare and now the animal rights movement has faced in translating what has long seemed to be widespread support into a progressive, nationwide governance network. National setbacks aside, however, it is clear that the animal welfare movement gained considerable ground in the decades following Confederation. When for example the owner of a hot air balloon advertised in June 1895 his intention to launch a cow into the air from Montreal’s Mount Royal Park, his plan was met by more than the few letters to the editor that Gosselin and Larue encountered in their foiled caribou scheme nearly four decades before. Instead, this nineteenth-century aeronaut was confronted by a well organized, fully institutionalized movement capable of drawing on state legislation, municipal police and Canadian SPCA inspectors – and perhaps most importantly, the moral authority that the

⁴⁵ On Macdonald’s health in the 1890s see Donald Chreighton, *John A. Macdonald: The Old Chieftain*. Toronto: Macmillan, 1955: 540-42.

⁴⁶ *Debates*, House of Commons, 13 March 1890.

movement had helped establish through its locally-based, day-to-day efforts to bring the values in promoted to the forefront in communities across the nation.⁴⁷

⁴⁷ McCord Museum, P661 / A01, Canadian SPCA Fonds, Canadian SPCA Minutes 1887-1900: 5 June 1895; 8 June 1895; 3 July 1895.



— William James Topley, Library and Archives Canada, Item No. 57196

19th-century sailing canoes and steamboats on the sawdust-choked Ottawa River, directly below Parliament Hill and just downstream from the Chaudière Falls sawmill complex

The ‘Sawdust Question’ and the River Doctor:

Battling pollution and cholera

in Canada’s new capital on the cusp of Confederation

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Introduction

As the British North American colonies moved towards Confederation in the mid-1860s, and then beyond the initial, four-province pact in the years that followed, Canada's capital city was at the centre of the emerging nation's key resource industry: the production of lumber. But the massive sawmill operations that dominated Ottawa's economy and landscape at the time sparked tension on the eve of Confederation between the promotion of rapid, export-driven material progress — deemed crucial to both the city's grand ambitions and the emergent nation's transcontinental destiny — and the protection of a livable, navigable riverine environment along the liquid boundary between French and English Canada.

An analysis of the ensuing conflict and the broader context in which the country's first major pollution controversy began to unfold offers insight into competing and evolving perspectives in Confederation-era Canada concerning the impact of human activity on the environment. In the face of sustained objections to sawmill pollution in the Ottawa River from 1866 to the early 1900s, and despite separate attempts to legislate or regulate an end to sawdust dumping in each of the last four decades of the 19th century, strict measures to stop this obvious environmental “evil,” as it was frequently called, were not fully enforced in the national capital region or elsewhere until 1903. Previous studies¹ have examined this agonizingly long period of industrial intransigence, political vacillation, regulatory laxity and environmental deterioration, chronicling how a glaringly obvious form of pollution was allowed to persist in large part because key decision makers tended to privilege immediate economic concerns over all other interests,² and to allow debates

¹ See R. Peter Gillis, “Rivers of Sawdust: The Battle over Industrial Pollution in Canada, 1866-1960,” a 1986 *Journal of Canadian Studies* article reprinted in *Canadian Environmental History*, ed. by David Freeland Duke, Toronto: Canadian Scholars' Press Inc., 2006, pp. 265-283; Jamie Benidickson, *The Culture of Flushing*, Vancouver: UBC Press, 2007, pp. 41-48; Benidickson, “Cleaning Up after the Log Drivers' Waltz: Finding the Ottawa River Watershed,” in *Les Cahiers de droit*, Vol. 51, 2010, pp. 729-748; John P.S. McLaren, “The Tribulations of Antoine Ratté: A Case Study of Environmental Regulation of the Canadian Lumbering Industry in the Nineteenth Century,” *U.N.B. Law Journal* 33 (1984), pp. 203-259.

² Such challenges persist in the 21st century, as recent comments from Prime Minister Stephen Harper make clear: “‘It's not that we don't seek to deal with climate change,’ said Harper. ‘But we seek to deal with it in

to focus on ambiguous navigational impacts of sawdust dumping rather than ecological, public health or other consequences.³ This paper focuses on the earliest phase of the sawdust controversy, the years 1866 and 1867, when concerns about the polluting of the Ottawa River were first coalescing and the implementation of firm measures to eliminate or seriously mitigate the problem seemed imminent.

The issues can be illuminated by examining the ideas and actions of various individuals in the period immediately before Confederation, but Ottawa naturalist and public health official Dr. Edward Van Cortlandt, who is credited with launching the controversy, affords a particularly useful lens. Through Van Cortlandt and other players involved in the genesis of the issue, the “sawdust question” that arose along the Ottawa River in 1866 can be linked to several concurrent concerns, in Ottawa and beyond, about disappearing forests and fish, as well as threats to human health. At the same time, the power of entrenched commercial interests and the widespread persistence of utilitarian conceptualizations of nature as a storehouse of natural resources — rather than a complex interlacing of life-sustaining natural systems — are shown to have seriously curbed the capacity of this post-pioneer society to adapt effectively to the challenges posed by urban growth, industrialization and economic prosperity.⁴

a way that will protect and enhance our ability to create jobs and growth.’ ” (“Jobs trump climate, like-minded leaders agree,” by Mark Kennedy, *Windsor Star*, June 10, 2014, p. A8)

³ The issue of maintaining clear navigation on the Ottawa was particularly significant because of an ambitious proposal, studied and debated throughout the Confederation era, to connect the St. Lawrence River to Georgian Bay via the Ottawa River “ship canal.” Many critics of sawdust dumping in the Ottawa were motivated principally by concerns that obstructions in the waterway could undermine a scheme that was viewed, like the transcontinental railway, as an infrastructure project crucial to the opening of the West and the eventual realization of a nation stretching from Atlantic to Pacific.

⁴ Various readings in Canadian environmental history underpin the analysis and approach in this paper. See, in particular, Graeme Wynn, “Approaching Environmental History,” and Alan MacEachern, “An Introduction in Theory and Practice,” in *Method and Meaning in Environmental History*, Alan MacEachern and William J. Turkel, eds., Toronto: Nelson, 2009; David Lee, *Lumber Kings and Shantymen: Logging and Lumbermen in the Ottawa Valley*, Toronto: James Lorimer, 2006; R. Peter Gillis and Thomas R. Roach, *Lost Initiatives*, Westport, CT: Forest History Society, 1986; Darcy Ingram, *Wildlife, Conservation*

This study recounts how Ottawa River sawdust pollution momentarily flared as an issue in the Confederation debates, and shows how even the ultimate symbol of Confederation — the newly erected Parliament Buildings situated just downstream from the Ottawa sawmills — can be implicated in the controversy. A relatively low-profile Father of Confederation from the Province of Canada, Crown Lands Commissioner Alexander Campbell, is shown to have been determined, initially, to end sawdust dumping in the Ottawa, before bowing to pressure not to push his proto-environmentalist agenda too far. Nevertheless, he can step forward from the crowd of 26 mutton-chopped and top-hatted men famously pictured on the steps of P.E.I.’s Government House at the Charlottetown Conference of 1864, emerging here as perhaps the “greenest” of the Dominion’s patriarchs.



Alexander Campbell, seated with legs crossed on the right side of the photo, and the other Fathers of Confederation at the Charlottetown Conference, September 1864, on the steps of P.E.I.’s Government House.

Most significantly, this paper also reveals a previously unidentified link between the emergence of the sawdust issue and the fear present throughout British North America in the spring of 1866 — precisely when the Ottawa River pollution debate was sparked — over the expected onset of a cholera epidemic. This newfound connection highlights an intriguing point of convergence in the early histories of the Canadian public health and

Canadian conservation movements — storylines that intersect in a “landmark” letter sent by Van Cortlandt to Campbell’s office on May 30, 1866.

The study presents other fresh documentation, including extensive newspaper coverage not captured in existing scholarship, to show how certain ideas circulating during this early phase of the sawdust controversy reflected a subtly shifting sense of humanity’s relationship with nature at the very moment when modern Canada was being created. The rise of the sawdust issue can be seen as part a dawning recognition in 1860s British North America of the fragility and exhaustibility of the land, the water and their respective resources, and of the concomitant vulnerability of human communities dependent on a healthy natural environment. This gathering awareness of ecological limits, though not understood in those terms at the time, can be traced even as the Fathers of Confederation were gaining inspiration from a Biblical passage about placing vast lands and waters under human control — “He shall have dominion also from sea to sea, and from the river unto the ends of the earth” — for the official name and expansionist vision of their new country.⁵

“A turbid river full of slabs and sawdust”

Surrounded by seemingly endless⁶ white pine forests, the city chosen by Queen Victoria in 1857 to become capital of the Province of Canada — a status transferred to the Dominion of Canada on the basis of an 1864 agreement among the Fathers of Confederation — was also blessed with a natural network of large rivers and tributaries

⁵ See C.M. Wallace, “Tilley, Sir Samuel Leonard,” in *Dictionary of Canadian Biography*, Vol. 12, UofT/Université Laval, 1990. “The non-occupation of the North-West Territory is a blot on our character,” Father of Confederation George Brown had claimed, urging Canadians to pursue an imperial path in which “the wealth of four hundred thousand square miles of territory will flow through our waters and be gathered by our merchants, manufacturers and agriculturalists. Our sons will occupy the chief places of this vast territory, we will form its institutions, supply its rules, teach its schools, fill its stores, run its mills, navigate its streams... We can beat the United States if we start at once.” (in Donald Creighton, *Dominion of the North*, Toronto: MacMillan, 1957, p. 291.)

⁶ The myth of the inexhaustible forest is explored by various writers cited at footnote 4, but also here: H.V. Nelles, *The Politics of Development: Forests, Mines and Hydro-Electric Power in Ontario, 1849-1941*, Toronto: Macmillan of Canada, 1974, pp. 183-4.

conducive to commerce. These waterways were ideally arrayed for the efficient annual transport, by the 1860s, of hundreds of thousands of toppled trees bound for processing at the famed Chaudière Falls milling complex in the heart of Ottawa-Hull.

But the transition in the mid-1800s from the square timber trade to the sawn lumber business as the region's principal economic activity initiated an era in which various forms of wood refuse — sawdust, slabs, bark, blocks, edgings and other kinds of “mill rubbish” amounting to about one-sixth of each tree trunk's original mass⁷ — were routinely dumped or allowed to drift into the Ottawa River once the Chaudière saws had cut the raw logs into construction-ready boards. The effects of this discarded “offal,” as it was sometimes called, included surface and subsurface debris that floated away from mill sites but eventually sank, bays that became clogged with wood waste, artificial shoals that formed from sunken slabs and sawdust compacted with silt, and dangerous (even fatal)⁸ methane explosions as stinking, rotting masses of submerged sawdust — potentially mixed with sewage that was also being discharged directly into the river — belched volatile clouds of gas that could overturn boats or blow up winter ice cover. It was only gradually accepted that fish populations and other aquatic life, while clearly affected by dams along rivers that blocked spawning runs and disturbed flow patterns, might also be harmed by mill waste suspended in the water or accumulated in smothering layers at breeding and feeding sites. Meanwhile, as mill rubbish joined with deposits of “night soil” (human excrement) and a wide range of other foul substances discarded daily from homes and businesses into the Ottawa, there were inevitable impacts on the capital's principal source of drinking water.

The battle over the fate of the Ottawa River was emblematic of similar struggles elsewhere in what became, after 1867, the provinces of Quebec and Ontario. Sawmill pollution was also a source of controversy in federation founders New Brunswick and Nova Scotia, as well as in Prince Edward Island.⁹

⁷ See Benidickson 2007, p. 42

⁸ *Ibid*, p. 45

⁹ See M.H. Perley, *Reports on The Sea and River Fisheries of New Brunswick*, Fredericton: Queen's Printer, 1852; Gilbert Allardyce, “The Vexed Question of Sawdust River Pollution in Nineteenth Century



**Father of Confederation
Thomas D'Arcy McGee, left,
and former Nova Scotia
premier Joseph Howe, who
spurred over the state of the
Ottawa River in 1866**

In the interval between the breakthrough Charlottetown Conference of September 1864 and the formal achievement of Confederation on July 1, 1867, the deteriorating state of the Ottawa River became an unlikely flashpoint in the rhetorical crossfire between two great adversaries battling over the proposed federal union: Nova Scotia's firebrand ex-premier Joseph Howe, the leading critic of the deal, and Thomas D'Arcy McGee, Confederation's most eloquent and combative proponent. "What can Ottawa ever be, but a shabby imitation of Washington?" Howe told a crowd in Barrington, N.S., in early June 1866. "Is Halifax ... so poor an outlook for an orator, that he must sigh for a turbid river full of slabs and sawdust?" (*Halifax Morning Chronicle*, June 9, 1866, p.2)¹⁰

New Brunswick," in *Consuming Canada: Readings in Environmental History*, ed. by Chad and Pam Gaffield, Toronto: Copp Clark, 1995, pp. 119-130; Heather L. MacLeod, "Past Nature: Public Accounts of Nova Scotia's Landscape, 1600-1900," M.A. Thesis, Saint Mary's University, 1995; Editorial, *The Islander*, Charlottetown, P.E.I., July 2, 1869, p. 2. The paper was calling on P.E.I.'s colonial government to extend new fisheries-protection legislation to the prohibition of sawmill pollution, while acknowledging it might be too late — not for the fish, but for the lumber supply: "The throwing of sawdust into the rivers is very improper and should have been prohibited years ago. Sawdust injures the fish, and moreover forms banks or shoals. But as the forests are now well nigh gone, it is perhaps not worth while for the Legislature to interfere."

¹⁰ Where newspaper references are cited in the text, they are not separately footnoted.

This depiction of the Ottawa River as a kind of lumber slag cesspool was perhaps the only explicitly environmental argument made during the Confederation debates, however incidental the issue was to Howe's chief concerns. And in a July 2, 1866 speech, McGee took direct aim at his Nova Scotian nemesis, the address (and the audience's reaction) captured verbatim in the next day's *Ottawa Citizen*: "Among other follies, [Howe] has fallen foul of Ottawa because it is not London, and has abused this glorious river as a muddy stream, filled with slabs and sawdust. (Laughter) There is no use answering him that our great river, unlike the St. John, is wholly our own; ... that its waters are everywhere so pure; that the heated raftsmen need only stoop and drink (Applause)." (*Ottawa Citizen*, July 3, 1866, p.2)

But the countless tonnes of mill refuse streaming daily into the stream below the Chaudière mills had already caught the attention of a prominent resident of Ottawa: the city's medical health officer and best-known naturalist, Dr. Edward Van Cortlandt,¹¹ who could not have honestly endorsed McGee's claims about the purity of the Ottawa. Just days before Howe's tirade against the murky river, Van Cortlandt himself had officially raised alarms — in terms comparable to those used by Nova Scotia's future lieutenant-governor — about the sawmills' befouling of the river.

A "landmark" letter sent to clean up the river

Previous studies have identified the May 1866 letter written by Van Cortlandt as the catalyst to what would become an almost 40-year controversy over sawdust pollution in the Ottawa.¹² In his missive to Campbell's Crown Lands department, overseer of the colony's forestry industry and fisheries, Van Cortlandt urged that "action be taken to

¹¹ A useful summary of Van Cortlandt's life can be found here: Courtney C.J. Bond, "Van Cortlandt, Edward," *Dictionary of Canadian Biography*, Vol. 10, UofT/Université Laval, 1972. The present writer is conducting research for a biography of Van Cortlandt, and has prepared a separate study on Van Cortlandt's archeological discoveries.

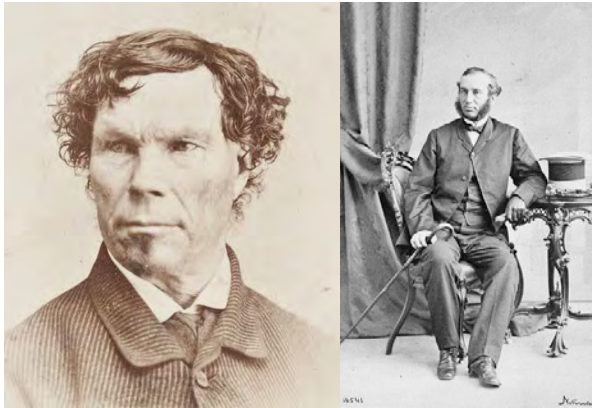
¹² See Gillis 2006, p. 267, and R. Peter Gillis, "Early Federal Regulatory Records as Potential Sources for the History of Science and Technology in Canada: The Case of the Sawdust Pollution Files, 1866-1902" in *Science, Technology and Canadian History*, ed. by R.A. Jarrell and N.R. Ball, Waterloo: Wilfrid Laurier University, 1980, p. 63. See also: Benidickson 2007, p. 43, McLaren 1984, p. 216.

restrain mill owners from throwing saw dust, bark, blocks, etc., into the Ottawa River, not only on account of the destruction to navigation and the fisheries, but also in a sanitary point of view.”¹³

This three-fold rationale for seeking an effective prohibition on the dumping of sawmill waste — to ensure unobstructed boat traffic, to protect fish habitat and to safeguard human health — has been described by forestry historian Peter Gillis and others as a watershed moment in the annals of Canadian environmental history. Here was “the first salvo in a battle which was to endure (for) the remainder of the 19th century,” Gillis stated in a 1980 paper documenting his discovery, at the national archives, of an 1894 summary or “digest” of early federal files on the sawdust issue, the originals of which had been lost in a fire.¹⁴ Gillis counted the Van Cortlandt letter — its contents known only from the 1894 digest — among the foundation documents of the “early conservationist impulse in Canada.” Van Cortlandt’s kickstarting of the sawdust battle, environmental historian Jamie Benidickson has also observed, constituted “a landmark early attempt to consolidate a range of community concerns over industrial interference with water quality.”

¹³ Fred H.D. Vieth, Department of Marine and Fisheries, “Report on the Departmental File of Correspondence ... on the subject of the Depositing by the Mill Owners of the Ottawa and its tributaries of Mill Offal and Sawdust... from 1866 to the present date (1894)...”, and “Digest of Papers between 1866 and 1880”, Library and Archives Canada, Record Group 23, Vol. 257, file 1669, parts 1 and 2.

¹⁴ McLaren 1984, p. 215; McLaren has also observed that the sawdust issue, as it played out during the post-Confederation years, “provides a microcosm of the steps which a new nation with a federal structure had to take to address the adverse realities of industrialization.” Ibid, p. 206.



Dr. Edward Van Cortlandt, left, a naturalist and the City of Ottawa's medical officer of health in 1866; and Father of Confederation Alexander Campbell, the Province of Canada's Commissioner of Crown Lands from 1864-1867.

The sawdust issue would, in fact, remain unresolved into the 20th century; it wasn't until 1903, when holdout Chaudière lumberman J.R. Booth finally complied with regulations prohibiting sawdust dumping in the Ottawa River, that the controversy could reasonably be described as laid to rest. While various published reports and Parliamentary transcripts from between 1866 and the early 1900s have provided important auxiliary evidence of how the sawdust controversy unfolded during those years, a close examination of newspaper articles, Ottawa city council minutes and other sources from the earliest days of the sawdust debate reveals an unexpected trigger for the issue: a mounting cholera panic in the spring of 1866 and the rush to impose emergency sanitary measures in Canada's new capital.

Cholera, sawdust and “the insalubrious effects on the water of the Ottawa”

As early as the fall of 1865, news that the world was in the midst of yet another of the numerous cholera epidemics it had suffered through in the 19th century — and that the mysterious, deadly plague was again poised to reach the shores of North America, as it had in 1832, 1834, 1849, 1851 and 1854 — prompted cities throughout British North America and the United States to begin planning precautionary measures against a disease only vaguely understood at that time to be caused by or spread through human contact with “filth”-ridden rubbish heaps, foul-smelling air (miasmatic “vapours” in the language of the day) or impure water, including contaminated drinking supplies, sewage

runoff, swamps and stagnant pools.¹⁵

In December 1865, for example, the Toronto *Globe*'s correspondent in the capital insisted that "sanitary reforms are needed in Ottawa... particularly at a time when the Province is threatened with the visitation of cholera during the ensuing summer." (*Globe*, "Gossip from Ottawa," Dec. 28, 1865, p.1)

Throughout the early months of 1866, Ottawa newspapers printed numerous articles, editorials and letters detailing cholera's mounting toll in Europe and the West Indies, predicting its imminent arrival on the mainland of the Americas, bemoaning the dismal state of sanitation in Ottawa and urging local officials to ready the capital for the coming medical crisis. "That the city is at present in an unhealthy condition is patent to every one. The correspondent of the *Globe* makes it a prominent subject in one of his recent letters," wrote Dr. Walter J. Henry in a letter published on New Year's Day, 1866, emphasizing the special sting of having the Toronto-based publication spotlighting Ottawa's sanitary problems. "A meeting of medical men should be held to consider the matter." (*The Daily Union*, "Correspondence," Jan. 1, 1866, p. 2)

City council's health committee convened a Feb. 20 meeting of Ottawa doctors (chaired by Van Cortlandt, with Henry as secretary) to begin planning the capital's response to the expected epidemic. On March 2, the special committee of "medical gentlemen" headed by Van Cortlandt outlined a sanitary strategy to be pursued in the city, including provisions that "the greatest care be observed in the removal of the night soil, so that it may not interfere with the water supply of the city," that the putrid By-wash creek running from the Rideau Canal to a spot near the confluence of the Rideau and Ottawa rivers be deepened, and its banks shored up to prevent leakage and "noxious exhalations," and that medical officers of health be appointed to oversee all sanitary measures until the cholera threat passed. ("Sanitary Measures," *Ottawa Times*, March 3, 1866, p. 2)

Meanwhile, the colonial government had been moving forward with its own, overarching

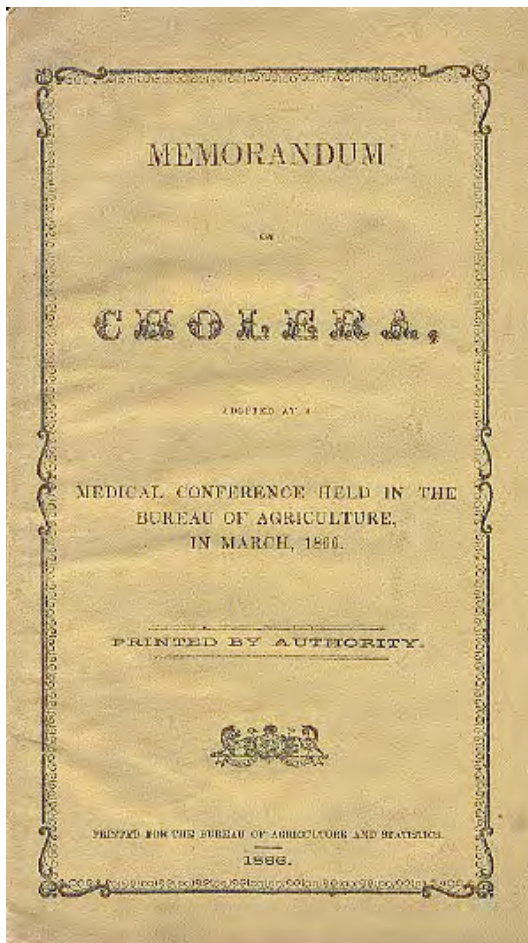
¹⁵ Geoffrey Bilson, *A Darkened House: Cholera in Nineteenth-Century Canada*, Toronto: UofT Press, 1980; Owen Whooley, *Knowledge in the Time of Cholera: The Struggle Over American Medicine in the Nineteenth Century*, Chicago: University of Chicago Press, 2013.

plan to defend Canada's towns and cities against the feared epidemic. Under the authority of the colony's agriculture minister, McGee, whose department was responsible for managing public health issues, nine of the province's leading physicians (Van Cortlandt the most senior amongst them) had been invited to a March 17-23 conference in Ottawa to produce a broader action plan for combatting cholera. Steps were also taken to appoint virtually the same group of physicians, including Van Cortlandt, to a temporary Central Board of Health that would meet periodically throughout the year, establish quarantine stations, advise local governments on sanitary measures and coordinate the overall public health strategy until the epidemic danger was over, presumably in the fall of 1866.

In April, the provincial committee's *Memorandum on Cholera* was issued, its precautionary provisions similar to but far more detailed than those identified on March 2 by the City of Ottawa doctors.¹⁶ The 30-page publication offered a detailed history of cholera epidemics in the Canadas since 1832 and synthesized the world's best available knowledge on the nature of the disease and its transmission. The report also urged an intensive program of scientific analysis and monitoring of local conditions "before, during and after" any anticipated epidemic to better inform future public health planning — including records for each locality on "the quality and distribution of its waters, rivers, lakes, marshes, etc.," and their proximity to neighbourhoods most or least affected by disease.¹⁷ The relationship between local bodies of water, their degree of degradation and the incidence of disease in adjacent communities was clearly on the minds of Van Cortlandt and the other authors of the document.

¹⁶ *Memorandum on Cholera, Adopted at a Medical Conference held in the Bureau of Agriculture, in March, 1866*, reporter Dr. J.C. Taché, 1878 printing, Ottawa: Bureau of Agriculture and Statistics, 1878.

¹⁷ *Ibid*, pp. 29-30



Van Cortlandt's work as the City of Ottawa's medical health officer and as a member of the Central Board of Health of the Province of Canada led him to link sawdust pollution on the Ottawa River to the potential spread of cholera in the spring and summer of 1866

Since contact with an infected person's waste — frequently through contaminated water — would later prove to be the key vector of infection, it is reasonable to assert that the sanitary measures ordered by the committee of Canadian physicians would have had a positive effect on communities confronting the 1866 cholera threat (which proved to have a negligible impact in British North America, though not in the U.S.). Furthermore, the efforts to organize and institutionalize the state's response to the cholera threat between 1832 and 1866, including the capstone publication of the *Memorandum*, have been seen by some historians as an important, embryonic phase in the emergence of Canada's public health system. As Canadian medical historian Geoffrey Bilson has observed: "Those early efforts at sanitary reform, crude as they were, resulted from the successive visits of the cholera. The later achievements in public health rested on that foundation."¹⁸

¹⁸ Bilson 1980, p. 142. For other views on the significance of the 1866 cholera scare and other 19th-century cholera epidemics in the founding of the Canadian public health system, see: Christopher Rutt and Sue C.

The City of Ottawa took further steps of its own to combat the coming cholera. On May 14, the city appointed Van Cortlandt and a French-speaking counterpart, Dr. Pierre St. Jean, as medical officers of health responsible for overseeing and enforcing all local disease-prevention measures. Within two weeks, Van Cortlandt had written his letter to the Crown Lands department urging it to take action to halt sawdust pollution in the Ottawa River.

That Van Cortlandt linked his concerns about sawmill waste to his simultaneous efforts to combat cholera is made clearer in the archived records of the Central Board of Health. The minutes of the board's June 1 meeting in Ottawa (from which Van Cortlandt was absent) indicate that Van Cortlandt and St. Jean either provided a copy of the May 30 letter they'd sent to Crown Lands or repeated its central message in a new letter: "A communication was received from the Health Officers of the City of Ottawa in reference to alledged (sic) nuisances arising from saw mills [and] whereupon it was resolved that the matter referred to appears to be purely of a local nature and remediable if necessary by the municipalities in whose jurisdiction such nuisances are found to exist."¹⁹ This handwritten entry in the board's official record is especially intriguing because of the insertion and emphatic underlining of the word "alledged" (sic) ahead of the word "nuisances." The prompt dismissal of the matter as being "purely of a local nature," and one that should be addressed only by municipal authorities "if necessary," underscored the challenge involved in raising environmental concerns in an era when — even to fellow health professionals — the pervasive presence of a pollutant evident to the naked eye might not, in fact, be seen as pollution, let alone a potential source of cholera.

Sullivan, *This is Public Health: A Canadian History*, Ottawa: Canadian Pubic Health Association, 2010, pp. viii-x; Bruce Curtis, "Social investment in medical forms: The 1866 cholera scare and beyond," *The Canadian Historical Review*, September 2000, pp. 347-379; Heather A. MacDougall, "Epidemics and the Environment: The Early Development of Public Health Activity in Toronto, 1832-1872," in *Critical Issues in the History of Canadian Science, Technology and Medicine*, eds. Richard Jarrell and Arnold Roos, Thornhill: HSTC Publications, 1983

¹⁹ Minutes of the Central Board of Health, manuscript record beginning April 28, 1866, Agriculture Dept. Quarantine and Public Health Branch, Library and Archives Canada, Record Group 17, 2431, p. 23

By November 1866, after the cholera threat had passed without inflicting significant harm anywhere in British North America, Van Cortlandt and St. Jean delivered a final report to city council on their work as health officers that year. “We reported to the proper authorities on the insalubrious effects on the water of the Ottawa resulting from sawdust and other recrements of sawmills, and as well to the Ordnance Land Agent regarding sundry nuisances in connection with the Rideau Canal [By-wash], all of which met with either prompt attention or satisfactory notice,” the Nov. 5 submission stated. The report appears to reflect the doctors’ confidence that the Crown Lands department was, in fact, intent on enforcing its rules against sawdust dumping in the Ottawa and to produce significant improvements in water quality.²⁰

Canadian environmental historian Graeme Wynn has described how cholera “was the ‘critical illness’ of the mid-nineteenth century, the key challenge to understanding in contemporary medical science, and debate about its causes forced both public officials and society at large to reconsider long-established attitudes toward waste and the environment.”²¹ Van Cortlandt, however rudimentary (or even mistaken) his comprehension of the links between cholera, rotting sawdust accumulations in the Ottawa River and the broader sanitation challenges faced by the city in which he lived, might now be viewed as a Canadian harbinger of this cholera-sparked, transatlantic evolution in thinking about the environment.²² He evidently believed that the Ottawa should not be

²⁰ Minutes of Ottawa City Council, Nov. 5, 1866, microfilm referenced Archives of Ontario, Ref (O) 325.071 384095a; and “Final Report of the Medical Health Officers,” *Ottawa Times*, Nov. 13, 1866, p. 2.

²¹ Graeme Wynn, “Foreword: Risk and Responsibility in a Waste-Full World,” in Benidickson 2007, op. cit., p. ix.

²² In his 1980 history of cholera in Canada, Bilson makes note of the fact that Ottawa’s “two health officers” raised concerns in 1866 about sawdust and sewage in the city’s water supply. But Bilson’s *Darkened House* (op. cit.) does not reference the sawdust controversy that erupted the same year. Similarly, Gillis’s trailblazing studies on the sawdust question don’t link the issue to the 1866 cholera scare. Benidickson captured the thrust of existing scholarship when he stated that the sawdust issue “was one major pollution question viewed as environmental rather than a public health matter,” though he also noted that sawmill waste was “on the agenda of the public health officials of Ontario almost as soon as the Provincial Health Board came into existence,” in 1882. See Benidickson, “Ontario Water Quality, Public Health and the Law,” in *Essays in the History of Canadian Law: In Honour of R.C.B. Risk*, ed. by G. Blaine

seen merely as a flushing mechanism for lumber-industry offal — and thus a potential source of disease or degraded drinking water downstream — but rather as a navigable waterway for commerce and travel, as a healthy habitat for fish and other aquatic life and as a community resource for safe drinking, sanitation and recreation.

“A guiding spirit” for Canadian conservation crosses paths with Ottawa’s “pioneer resident naturalist”

Van Cortlandt’s letter to Campbell’s office represented the intersection of two men who, in the 1860s, were being influenced by changing perspectives on the natural environment and were also contributing to that change. It would be overstating the case to suggest their attitudes amounted to anything like a robust “environmentalist” ethic; the lingering idea that colonial Canada’s forests, fisheries, waterways and other natural resources were essentially “inexhaustible” gifts from God, to be used (or abused) as necessary to support settlement and economic development, was still too large a part of British North American consciousness in the mid-19th century to permit a worldview in which nature’s limits might be fully appreciated. But it can be demonstrated that Campbell and Van Cortlandt were among the vanguard of Canadians who had recognized, by the time of Confederation, the need to work against the unchecked destruction of nature and to attempt some balance of competing interests — including economic development, human health and conservation — in resolving complex resource issues.

Campbell, in his role as superintendent of the Province of Canada’s natural resources between 1864 and 1867, has been recognized by Gillis for expressing “the first definite conservationist attitude in Canadian public policy”²³ when, in 1865, he urged the adoption of sustainable forestry practices, such as rotational cutting, pioneered in Scandinavia. Campbell, described elsewhere as “obviously conservation-minded”²⁴ and “a guiding spirit in securing early conservation measures,”²⁵ had also strengthened

Baker and Jim Phillips, Toronto: UofT Press, 1999, p. 140

²³ Gillis and Roach 1986, p. 30

²⁴ Lambert and Pross 1967, p. 157

²⁵ Gillis 2006, p. 268

fisheries regulations in 1865²⁶ to explicitly prohibit the dumping of “sawdust or mill rubbish” in “any stream frequented by salmon, trout, pickerel or bass” — the new restriction pointed to by Van Cortlandt the following year when he urged that the tough-sounding law be backed up by enforcement action against Ottawa’s mill owners.

AN ENUMERATION OF THE PRINCIPAL MAMMALS, BIRDS, REPTILES AND FISHES OF THE OTTAWA VALLEY.

BY EDWARD VAN CORTLAND, M. D.

Honorary Member of the Literary and Historical Society of Quebec, &c.

— MAMMALS.

| <i>Scientific Name.</i> | <i>English Synonym.</i> | <i>Remarks.</i> |
|----------------------------|-------------------------|-------------------|
| Cervus Virginianus. | Common Deer. | Abundant. |
| Cervus Canadensis. | Wapite. | Scarce. |
| Cervus Tarandus. | Caribou. | Scarce. |
| Alces Malchis. | Elk or Moose. | Scarce. |
| Ursus Americanus. | Black Deer. | Plentiful. |
| Ursus Lotor. | Raccoon. | Plentiful. |

The first page of Van Cortlandt’s 1859 inventory of Ottawa-area wildlife, published by the *Farmer’s Journal and Transactions of the Lower Canada Board of Agriculture*

For more than 30 years after his arrival in Bytown in 1832, Van Cortlandt had devoted a startling amount of his non-medical time to exploring, studying and documenting the Ottawa area’s natural environment. Like other outdoor enthusiasts of the era, Van Cortlandt developed an interest in many branches of “natural history” — geology, zoology, archeology, botany, paleontology. He published the earliest inventories of the

²⁶ *Debate on the Fisheries Bill of the Hon. Alex Campbell*, Commissioner of Crown Lands, Quebec: Daily News Printing Office, 1865

region's mammals, fish, reptiles and birds,²⁷ assembled one of the largest private museums in British North America and published pamphlets on the Ottawa area's mineral wealth, forest resources and building stones — his expertise in the latter subject recognized in 1859 when the contractors erecting the Parliament Buildings chose for their historic project a supply of Nepean sandstone identified by Van Cortlandt.²⁸ A founding figure in various Bytown/Ottawa scholarly associations, including the Ottawa Natural History Society, Van Cortlandt lectured on the plants, fish, insects and snakes of the region, and has been described as the earliest of Ottawa's three "pioneer resident naturalists," who were collectively responsible for "the only natural environment research" carried out in the Ottawa Valley prior to 1860.²⁹

By the 1860s, urban growth and industrialization in Ottawa and other parts of British North America — and beyond — were having impacts that were worrisome to part-time naturalists like Van Cortlandt. In 1864, George P. Marsh's *Man and Nature, or Physical Geography as Modified by Human Action* appeared in Canada³⁰, offering a prophetically conservationist perspective on, for example, the lumber industry's wanton destruction of forests and damaging of rivers. "The unparalleled facilities for internal navigation, afforded by the numerous rivers of the present and former British colonial possessions in North America, have proved very fatal to the forests of that continent," Marsh wrote in direct reference to the Ottawa Valley lumber trade.³¹ And with regards to fish populations in the rivers of lumbering regions, Marsh noted how "milldams impede their migrations,

²⁷ Edward Van Cortlandt, "An Enumeration of the Principal Mammals, Birds, Reptiles and Fishes of the Ottawa Valley," *The Farmer's Journal and Transactions of the Lower Canada Board of Agriculture*, September 1859, p. 198

²⁸ Edward Van Cortlandt, *Observations on the Building Stone of the Ottawa Country*, Ottawa: Ottawa Citizen, 1860, p. 13

²⁹ Daniel F. Brunton, "Origins and History of the Ottawa Field-Naturalists' Club," in *The Canadian Field-Naturalist*, Vol. 118, No. 1, Jan.-March 2004, p. 2.

³⁰ See, for example, "Just Published — Man & Nature," advertisement for Rollo & Adam Booksellers and Importers, Toronto *Globe*, May 3, 1864, p. 3.

³¹ George Perkins Marsh, *Man and Nature, or Physical Geography as Modified by Human Action*, New York: Charles Scribner, 1864, p. 271.

if they do not absolutely prevent them, the sawdust from lumber mills clog their gills, and the thousand deleterious mineral substances, discharged into rivers from metallurgical, chemical, and manufacturing establishments, poison them by shoals.”³²

Such ideas, deeply challenging as they might have been to many mid-Victorians in Canada, would have struck chords with those, like Van Cortlandt, whose experience as a physician and keen observer of nature made him more attuned to the detrimental changes occurring in the increasingly urbanized and industrialized Ottawa landscape. There were a number of indications, even in the short stretch of months when the sawdust issue was first making headlines in Canadian newspapers on the cusp of Confederation, that Van Cortlandt and others in the city were grappling with other “man and nature” conflicts of the kind Marsh had illuminated in his historic tome. In February 1867, for example, the man destined to become a Canadian pioneer in artificial fish breeding — the Toronto-area conservationist Samuel Wilmot — crossed paths with Van Cortlandt during a business trip to Ottawa to convince Campbell and his fisheries commissioner, W.F. Whitcher, to expand Wilmot’s local salmon hatchery into a Dominion-wide fish propagation program. Campbell’s Crown Lands department was described in one news article about Wilmot’s visit as being dedicated “to the restoration of the salmon to waters they formerly frequented, but it appears the progress of cultivation, the multiplication of mills, etc., have destroyed the natural spawning beds to a degree that was surely curtailing the supply of fish.” (*Ottawa Times*, Feb. 25, 1867, p. 2) Van Cortlandt and fellow members of the Ottawa Natural History Society — including Alexander Kirkwood, the future forest preservationist and founder of Algonquin Park — later hosted Wilmot, who presented Van Cortlandt with “some two dozen of the most beautiful and lively pinks from his collection,” as the grateful doctor wrote afterwards to the *Citizen*. (“Correspondence,” *Ottawa Citizen*, Feb. 27, 1867, p. 2) The fish, he added, “may be seen at my house by anybody curious on the subject, desporting most happily and healthily in a very small drawing-room Aquavivarium.” Van Cortlandt then alluded to plans to restore “this king of fresh water fishes” to “its original haunts” in the Ottawa Valley — a project he would personally pursue with support from Wilmot, Whitcher and

³² Ibid, p. 123

others in 1869 on the Salmon River, an Ottawa River tributary downstream of the capital.³³

Two months later, in April 1867, Van Cortlandt was engaged with Whitcher in another creative conservation effort that gained press coverage in Ottawa. As a test case to promote the protection of insect-eating songbirds, Whitcher arranged with a local hunter, Frederick Austin, to allow himself to be charged with “shooting snipe contrary to law.” While not specifically protected by game laws in Canada, the snipe, Whitcher contended, should be off-limits to hunters under provisions of the “Insectivorous Birds Bill,” which made it illegal to kill songbird species that consume insects — bird-friendly legislation that also served the interests of farmers keen to protect their crops from pests. Van Cortlandt was called to the stand to provide scholarly evidence that snipes do, indeed, eat insects. Point proven, the cooperative Austin was charged a token penalty of \$1 and the defendant, Whitcher and Van Cortlandt had achieved a legal precedent to make snipe-hunting illegal in Canada. (“Police Court,” *Ottawa Times*, April 30, 1867, p. 2)

In October 1866, the *Ottawa Times* editorialized that Canadians “have an interest in the preservation of our public timber land — our woods and forests — from undue destruction,” and congratulated Campbell for “calling attention to this important subject” in his 1865 Crown Lands report. (*Ottawa Times*, Oct. 31, 1866, p. 2) In a similar vein, in April 1866, Van Cortlandt’s fellow Ottawa Natural History Society member Thomas Austin lectured a local audience on “The Ulterior Effects of Clearing off the Forests and Draining the Country.”³⁴

³³ W.F. Whitcher, “Exploration of Salmon River, In the County of Ottawa,” July 28, 1871, *Report of the Commissioner of Fisheries, Appendix BB, Sessional Papers, Fifth Session of the First Parliament of the Dominion of Canada*, Vol. V, 1872, p. 185

³⁴ Brunton 2004, pp. 4-5; Even Prime Minister John A. Macdonald, a strong defender of lumber interests, was sensing the exhaustibility of the Ottawa Valley’s forest resources by 1871: “The sight of immense masses of timber passing my windows every morning constantly suggest to my mind the absolute necessity there is for looking at the future of this great trade. We are recklessly destroying the timber of Canada, and there is scarcely a possibility of replacing it.” Letter to Ontario Premier John Sandfield Macdonald, June 22, 1871, in *Correspondence of Sir John Macdonald*, ed. Sir Joseph Pope, Toronto: Doubleday, Page & Co., 1921, p. 147-8.

In short, Van Cortlandt was a prominent member — in fact, a leader — of a well-established community of avocational naturalists in 1860s Ottawa who shared interests in science, wildlife and conservation. Such pursuits would not likely have been viewed as incompatible with Van Cortlandt's other demonstrated interests in angling and hunting, resource discovery and exploitation and Ottawa's economic development. Nevertheless, it can be understood why a doctor evidently passionate about nature — and officially mandated to protect his community from an approaching plague with vaguely understood links to sanitation and water quality — might spark Canada's first industrial-pollution controversy with his letter to Campbell.

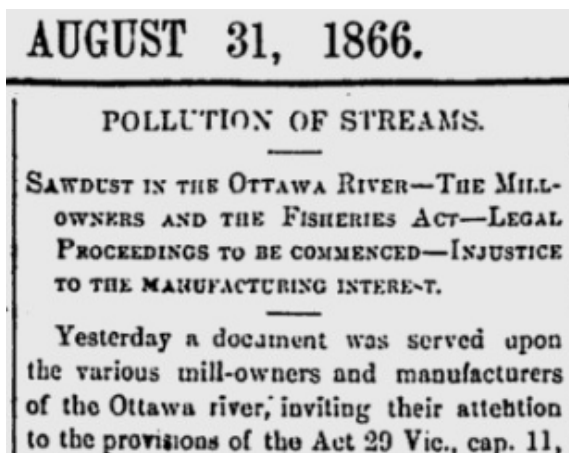
“Nearly everyone here is on the side of sawdust”

Campbell responded with haste and an apparent sense of resolve to address the concerns Van Cortlandt had raised in his May 1866 letter — an initial reaction that may explain the optimistic tone of Van Cortlandt and St. Jean's report to city council that November. On Aug. 25, 1866, a notice authorized by Campbell and signed by Whitcher was sent to all Ottawa-area mill owners reminding them that the sawdust prohibition had been in place for “the past twelve months” and “during which time, it appears that in a majority of instances, the proprietors and occupants of such establishments have not devised, nor attempted to devise, any means by which the law may be practically observed.” (*Ottawa Citizen*, “Pollution of Streams,” Aug. 31, 1866, p. 2) News of the planned pollution crackdown was conveyed by the *Ottawa Citizen* with a commingling of facts and editorial outrage under a sub-headline that bluntly described the government's planned actions as an “injustice to the manufacturing interest.”

The response from Ottawa-area lumber barons, emboldened no doubt by the views of the city's main newspaper, was swift and sure. Led by Joseph Merrill Currier, a prominent local sawmill owner and Ottawa's representative in the provincial legislature, they sent a Sept. 8 petition to Canada's governor-general, Lord Monck, objecting to the proposed enforcement of the law and lobbying “against any restriction” because “it is impossible” for them “to prevent sawdust from falling into the river.”³⁵ While the lumbermen

³⁵ Vieth 1894. The subsequent recounting of events is also drawn from this digest of early Fisheries files.

expressed a willingness “to apply any remedy to prevent injury to navigation from slabs and edgings” by grinding these larger pieces of wood refuse, being forced to keep sawdust out of the water “would cause them to abandon their businesses or erect steam mills elsewhere.” That threat led to a meeting between Currier and Campbell on Sept. 23, 1866, after which it was decided that any enforcement action against the Ottawa sawmills would be suspended pending a report on the sawdust situation by engineer Horace Merrill, the province’s superintendent of public works on the Ottawa River — and the man chiefly responsible for planning and building the Chaudière dams and slides that had become so crucial to the city’s lumber operations, and which were now at the heart of the pollution problem he’d been assigned to investigate. Merrill spent the next two months discussing the issue with local mill owners, most of whom he had worked with for years to improve the efficiency and productivity of Ottawa’s lumber industry. With Merrill on the case, indications were strong that the mill owners’ vocal lobbying would pay dividends.



The *Ottawa Citizen* reports on the planned enforcement of anti-pollution legislation and the “injustice to the manufacturing interest”

Meanwhile, voices from other cities weighed in on the sawdust problem in Ottawa and beyond. Pointing to the impressive provisions of the 1865 anti-pollution law, but noting that “it does not seem to have been anybody’s business to enforce them,” the *Montreal Gazette* argued on Sept. 8 that “most of the finest rivers in the country are now in the most deplorable condition. Their fish are choked with sawdust or poisoned with the refuse of factories. Their channels are encroached upon and their eddies crammed with slabs and other mill rubbish.” Urging authorities “not to be turned aside from their duties,” the *Gazette* concluded by stating that if the capital’s river could be better

protected, “in a very few years we shall be spared any more such reproaches as Mr. Howe levels at the Ottawa — ‘a turbid river full of slabs and sawdust.’ ” (*Montreal Gazette*, Sept. 8, 1866, p. 2)

The *Globe*’s correspondent in Ottawa added his viewpoint that obstructed navigation was “not the only evil the saw-dust is producing,” and that “the only conceivable cause” of rapidly declining fish populations in the Ottawa River was sawdust pollution. The *Globe* writer nevertheless observed that, “the people in the vicinity think more of lumber and pine logs than they do of fish, for the very natural reason that the former are deeply concerned with their pockets... Nearly everyone here is on the side of sawdust.” (“Affairs at Ottawa — The Saw-Dust Question,” *Globe*, Oct. 16, 1866, p. 1)

A month after Van Cortlandt and St. Jean made their final presentation to city council, Merrill delivered his report on the sawdust question to Whitcher and Campbell, on Dec. 12. Though not made public, the report’s essential conclusions were reported in Ottawa’s newspapers on Feb. 2, 1867, after they had obtained copies of an amended notice sent to sawmill owners. Recalling the “earnest controversy” of the previous autumn, the *Times* expressed satisfaction that the new directive “makes an important modification in favor of mill owners, excepting saw-dust from the operation of the Act. This step has doubtless been taken with a view to embarrass as little as possible the action of the millers, and at the same time to preserve as near as possible the purity of our streams.” (*Ottawa Times*, Feb. 2, 1867, p. 2) The notice sent to mill owners, signed by Campbell and published verbatim by local papers, stated: “I am of opinion that it is practicable to dispose of all mill rubbish, except sawdust, otherwise than by throwing or drifting the same into public streams. The mill owners will be required to erect machinery for grinding waste stuff (such as slabs and edgings) and that the same be constructed and put into actual use.” According to the *Citizen*, “the conclusion is doubtless fair and practical.” The outcome represented a clear victory for sawmill owners and for Merrill, whose primary duty was to support the success of the industry. An entrepreneurial public servant who also owned a local foundry (in partnership with Currier!),³⁶ Merrill promptly sought and received

³⁶ Sandra Gillis, “Merrill, Horace,” and Donald Swainson, “Currier, Joseph Merrill,” in *Dictionary of Canadian Biography*, Vol. 11, UofT/Université Laval, 1982

clearance from Campbell to design, manufacture and sell the slab grinders to be installed at the Chaudière mills. The aim was to reduce the number of large pieces of wood in the Ottawa River by turning them into sawdust before being dumped in the water — a mild improvement, theoretically, for boats no longer forced to navigate around masses of floating wood waste made up of slabs and other large pieces of discarded material. But exemptions were granted to many mills and there was also significant non-compliance with the slab-grinding order — most notably at the Chaudière operation owned by Booth, who was “recalcitrant about installing original grinders in 1867” and was found to have “constantly broken the regulations” in the years that followed.³⁷ In sum, then, the measures implemented in 1867 inevitably produced an *increase* in sawdust, the most pernicious pollutant coming from the Ottawa River mills, and later studies made clear that this waste product was continuing to accumulate in massive quantities in the waters below the falls.³⁸ While Campbell at first seemed resolved to address the problem, and Van Cortlandt appeared to remain optimistic by November 1866 that the Ottawa might soon be free of serious sawdust pollution, this potential early conservation initiative was effectively thwarted by business interests and then “lost in the debates and negotiations leading to Confederation in 1867.”³⁹ Early Canadian anti-pollution sentiment, it might be said, did gain a seedbed in Ottawa River sawdust. One generous interpretation of the issue’s trajectory argues that the “long struggle to control the lumber industry’s waste-disposal practices demonstrated a change in Canadian attitudes toward the depletion of

³⁷ Gillis 2006, p. 270

³⁸ Particularly powerful evidence of the enormous accumulation of sawdust waste in the Ottawa River was provided by engineers involved in 1898-1900 construction of the Alexandra Bridge between Ottawa and present-day Gatineau, which spans the river about one kilometre below the Chaudière Falls, adjacent to the entrance to the Rideau Canal. The bridge project was rendered extremely complicated “owing to the heavy deposit of sawdust, slabs, etc., at the bottom of the Ottawa River,” explained the chief engineer, describing how “the sawdust deposit ran from shore to shore, the greatest depth found being 60 ft., with 20 ft. of water above it.” See Guy Dunn, “Construction of the Superstructure of the Royal Alexandra (Interprovincial) Bridge at Ottawa, Canada,” *Transactions of the Canadian Society of Civil Engineers*, Vol. XV, part II, Oct.-Dec. 1901, p. 176

³⁹ Gillis and Roach 1986, p. 30

renewable resources,” and forged an eventual consensus among policymakers and the public that “lumber refuse was destroying other businesses, damaging the environment, and degrading water quality.”⁴⁰ But the conservation-mindedness exhibited by Van Cortlandt, Campbell and others at the outset of the controversy never really yielded the intended results — a relatively sawdust-free Ottawa River — until the heyday of the lumber industry was over in the early 20th century.

In 1869, after Van Cortlandt and two fellow members of the Ottawa Natural History Society returned from a trip to the Salmon River expressing confidence that its namesake fish could be restored to the Ottawa River tributary under Wilmot’s propagation program, the doctor and his friends still seemed optimistic that sawdust pollution would soon be halted. In publishing their upbeat report on restoring salmon to the Ottawa Valley, Van Cortlandt and his fellow authors stated: “We have not felt called upon to enter upon the more enlarged question of the defilement of the Ottawa, as we believe that subject to be now engaging the close attention of the Fisheries Department.”⁴¹

However, the “sawdust question” remained unresolved despite being raised over and over again in the years and decades that followed, with notable debates in Parliament taking place in 1871, 1878, 1888 and 1895. Extensive studies of the Ottawa River and other sawmill-polluted waterways were undertaken and reports produced in connection with each of the above spikes in political and public attention toward the issue.⁴² But the pattern set in 1866-67 was repeated each time: earnest concern, strong words and serious

⁴⁰ Laurel Sefton MacDowell, *An Environmental History of Canada*, Vancouver: UBC Press, 2012, p. 65-67

⁴¹ T.D. Phillips, Henry McLardy, Edward Van Cortlandt, “Report on Salmon Breeding Ground,” *Ottawa Citizen*, July 30, 1869, p. 2.

⁴² See, for example, H.H. Killaly, *Report on the Commission Appointed to Enquire into the Condition of Navigable Streams*, Ottawa: I.B. Taylor Printers, 1873; John Mather, *Inquiry Concerning Sawdust and Mill-Offals on the Lower Ottawa River and its Tributaries*, Ottawa: MacLean, Roger & Co., 1878; Sandford Fleming, “Report of Sandford Fleming, C.E.,” 1889, in *Statement and Documents Submitted by The Ottawa and Gatineau Sawmill Owners on the Subject of The Prohibitory Law as to the Putting of Sawdust into These Rivers*, from J.R. Booth and others, Ottawa: Thorburn & Co., 1895; Fred H.D. Vieth, Report to Minister (on Ottawa River sawdust question), 1894, Library and Archives Canada, RG 23, Vol. 257, file 1669, pt. 1

intention giving way, under industry pressure, to porous regulations, frequent exemptions and relentless pollution.

The House that Booth Built

Booth's well-documented reluctance to have his sawmills comply with anti-pollution rules meant that his Chaudière operation continued to dump sawdust, as well as larger pieces of wood waste, into the Ottawa River virtually unabated from the time the issue first arose in 1866 until the personal intervention of Sir Wilfrid Laurier, in 1902, finally forced Booth's grudging conformity to the rules the following year.⁴³ Over those nearly four decades, Booth appears to have been fined for sawdust-dumping violations on three occasions, the penalty amounting each time to \$20 — a pittance given the vast wealth the so-called "Monarch of the Ottawa Valley" accumulated in his remarkably long life.⁴⁴

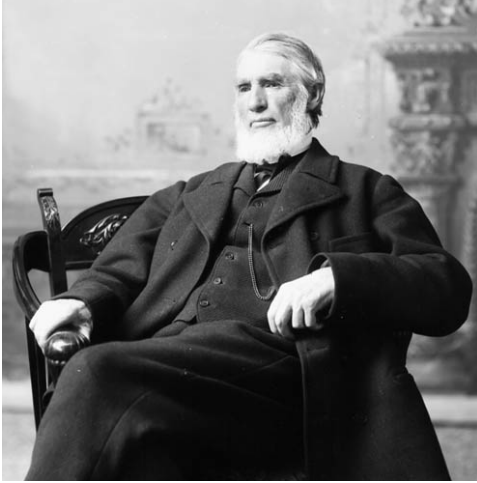
Like Van Cortlandt, Booth claims a notable place in the history of the Parliament Buildings. Before work began on the planned legislative precinct in 1860, the contract to supply lumber for the colossal structures was awarded to Booth, then a young entrepreneur in the Ottawa Valley forestry sector. Winning the job proved vital to Booth,⁴⁵ who went on to become the richest lumberman in the world and — a fact not mentioned in his obituaries — the single worst polluter of the Ottawa River, and perhaps the country, throughout the second half of the 19th century.⁴⁶

⁴³ Even then, there is evidence the Booth mills continuously or periodically flouted the law for many years. See, for example, "Still Dumping in Sawdust — Accusations against Chaudière Mills — Is it Booth's? — Early Morning Sight on Ottawa River Very Ugly," *Ottawa Citizen*, June 28, 1907. The story quotes a Booth employee describing how sawmill "refuse is drawn by the wagon load and dumped into the river" up to eight times a day.

⁴⁴ McLaren 1984, p. 250

⁴⁵ John L. Riley, *The Once and Future Great Lakes Country: An Ecological History*, Montreal: McGill-Queen's University Press, 2013, p. 182-83; Jamie Benidickson, "Booth, John Rudolphus," *Dictionary of Canadian Biography*, Vol. 15, UofT/Université Laval, 2005.

⁴⁶ For perspectives that do reference Booth's environmental toll, see Lee, *Lumber Kings*, op. cit.; and Randy Boswell, "Cull of the Wild," in *Fair Play and Daylight: The Ottawa Citizen Essays*, Ottawa: Citizen Publishing, 1995.



Lumber baron J.R. Booth, the so-called “Monarch of the Ottawa Valley” but also the Ottawa River’s principal polluter in the 19th century, was hailed upon his death in 1925 as one of Canada’s most important nation-builders by then-prime minister Mackenzie King

It was Booth’s saws at the Chaudière, in greater amounts and for more years than those of his competitors, that were sending slabs and sawdust into the water that flowed, just moments later, past Parliament Hill. Between the late 1860s and the first decade of the 1900s, as two generations of Canadian lawmakers sporadically sparred over the Ottawa River sawdust problem and did little to stop it, the assembled MPs and senators apparently drew no connection between the origins of the walls, floors and ceilings of their own debating chambers and the befouled waters at the foot of Parliament Hill.

Upon Booth’s death at age 99 in 1925, Prime Minister Mackenzie King eulogized the lumber baron warmly, stating that he “was indeed one of the fathers of Canada, and it is not too much to say that it is to men of such sterling worth and indomitable will as he possessed, more than aught else, that we owe the development of our Dominion.”⁴⁷ Such is the paradox posed by the “sawdust question” — arising as it did at a pivotal time and place for 19th-century Canadian nation-building — when examined in light of 21st-century perspectives about forsaken environments of the past.

⁴⁷ “Premier Voices Deep Sorrow,” *Winnipeg Evening Tribune*, Dec. 9, 1925, p. 2

A Cold Confederation: Urban Energy Linkages in Canada

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Abstract

In Canada, the transition to fossil fuels has been complicated in recent histories – the modern centrally-distributed fossil-fuel energy system took longer to create and proceeded at different rates in the countryside and in different regions. Also, its first incarnation was not based on fossil fuels but on biomass.

This paper presents a little-known role of early railways – biomass fuel supply – and argues that growing urban energy consumption was one driver in the railway building frenzy that followed Confederation. It suggests that the supply problem was not as significant as the transportation logistics and the closing price gap between biomass and its consistently priced and increasingly affordable replacement, coal. The diverging histories of fuel use in twentieth century Ontario and Quebec show one effect a coal-powered and coal-delivering rail network could have. The low cost and increasing importance of coal delivered by rail ultimately reduced the strain put on farm woodlots and crown land. The Confederation era railways were bound by law and charters to carry fuel for cities; they were promoted on these grounds and they were laid into country that contained a balance between agricultural and energy resources. Urban demand for reliable energy stocks shaped canals and railways, and therefore Confederation, and historians should consider these environmental factors when examining the Dominion.

Introduction

From fridges to freight trains, without energy nothing works. One sure way to make something like firewood an interesting topic is to turn off the electricity for a few days in the country's largest city. Another way is to dramatically increase the price of natural gas and furnace oil. Both of these events occurred in the winter of 2013-14, and recently more than once.

The price of fuel is one of the central components of the cost of living. Politicians know the power of fluctuations in the price of fuel (for example the 1973 OPEC crisis, the 2008 prices of gasoline, and the 2013 Ice Storm), and they typically respond with the language of crisis and

¹ Acknowledgements: SSHRC Postdoctoral Fellowship provided funding; Marcel Fortin and Byron Muldofsky provided data.

scarcity. Sharp crises threaten to rearrange economic relationships, often unequally or with detriment to the poor. But when larger historical trends are examined we see that periods of high prices are brief (energy is so volatile economists removed it from the core Consumer Price Index) and the language of crisis itself is cyclical. The clear image shown by the *Historical Statistics of Canada* table “Canadian utilization of coal, 1867 to 1976” is that Confederation occurred in an age of relatively stable fuel prices. For all historians’ descriptions of a transitional period, and contemporaries’ descriptions of high prices and crises, nineteenth century energy prices were much more stable than the twentieth century’s. This paper argues that Canadian consumption of biomass energy was more stable and persistent than historians have recognized and that the relatively new urban demand for reliable energy stocks shaped canals and railways, and played a critical role in shaping the new Dominion.

Canada is a world energy producer. Glancing across a recent Canadian Geographic map and teaching module it would be easy to think that the country’s energy history has been mainly about oil and gas. The group financing this interpretation, the Canadian Association of Petroleum Producers (CAPP), uses attractive websites and gymnasium-sized maps to teach students “Canada’s energy story.” The CAPP, which defines itself as “the voice of Canada’s upstream oil, oil sands and natural gas industry,” provides teachers with a breakdown of primary energy production in Canada where renewables such as biomass, wind, geothermal, and solar “make up less than 1% of all energy produced in Canada.” The forest is mainly a filler, and existing microgeneration is similarly ignored. With these possibilities dismissed, teachers may then conduct activities such as “The Pipeline Process,” where students are asked to imagine the best geographies for constructing new pipelines – a positive feedback for the fossil fuel energy system if ever there was one.²

But oil and gas is of course not the whole story, and it was not even a significant story for most of Canadian history. Energy historians would remind us about coal, which was both produced and imported in massive quantities. They would also press us to consider traditional energy carriers, which dominated and directed all movement, heat, transportation, and industry before fossil fuels. This was distributed generation powered by the sun, and nature’s solar energy batteries were its clouds, trees, and edible plants and animals. Energy was generated at the point

² Lesson quotes from the “Energy IQ” website <http://energyiq.canadiangeographic.ca/> accessed 20 June 2014;

of use or within a short haul from it. Transmission was limited by the shape of watersheds, the short shelf-life of food, and the difficulty of transporting trees over land.

The growth of cities began to change the distributed model, and a steady supply of these traditional carriers became critical to urban growth. Johann Heinrich von Thunen's theory of urban zones included an entire zone for urban fuel supplies. Historians emphasize the importance of firewood supplies to early modern cities, and then point to the depletion of those fuels and the transition to modern carriers as one of the primary catalysts of industrialization and the Great Divergence. In Canadian history, the Metropolitan-Hinterland and Staples Theses focused on the emergence of British and British North American cities as metropolises of resource extraction and development. Indeed "Canada's energy story," according to CAPP, is predominantly urban – transmission lines cross dark, empty rural spaces as they connect cities to oilsands, hydroelectric plants, offshore platforms, and other remote energy stores. But in reality, the fabric of energy consumers exist along the rural expanse as well. Microgeneration works well in some places, and much of the rural population continues to burn wood as supplementary heat.

Consumption estimates

At the time of Confederation, Canadians were kept warm, fed, and working through the energy produced by traditional carriers, and especially through wood. Firewood (a.k.a. cordwood) powered virtually all of Canada's stoves and steam engines at mid-century. As Figure 1 shows, Canadians harvested about 16 million cords of wood for heating and cooking in 1871, and much more when we consider all businesses, steam engines, and potash production.³

Several indicators suggest that Canada was one of the slower industrialized nations to adopt fossil fuel energy – the country had an abundance of wood, industry was slow to switch from water to steam engines, and even the first adopters of steam, rail and river transportation companies, were initially wedded to wood – yet the most authoritative historical geography of the subject applied an American model of energy history and argued that Canadians experienced

³ For more on potash production see Richard W. Unger and John Thistle, *Energy Consumption in Canada in the 19th and 20th Centuries: A Statistical Outline* (Consiglio Nazionale delle Ricerche: Istituto di Studi sulle Società del Mediterraneo, 2013), 32-33; Douglas McCalla, *Planting the province: the economic history of Upper Canada, 1784-1870* (Toronto: University of Toronto Press, 1993).

a transition from wood to coal in the late nineteenth century.⁴ Frankly when forest and economic historians considered the data on wood it supported this thesis. However, the question of slowness persisted, and recently, historians such as MacFadyen, McNnis, and Unger and Thistle have argued that Canada was relatively slow to adopt fossil fuels.⁵ MacFadyen argues that when we rebuild the data based on consumption rather than production, the reluctance to give up biomass energy is empirically sound. In terms of home heating, there was no transition to fossil fuels in the late nineteenth century, and in fact it did not occur until the mid-twentieth century. My first paper shows how this occurred across Eastern Canada, and this chapter suggests that even in cities fuel merchants and railway companies dealt extensively in wood. Neither were the nineteenth century urban energy grids completely traditional and decentralized – the distributed generation firewood economy was punctuated with urban “pipelines,” canals, roads, and railways transmitting energy to cities, similar to CAPP’s map today. However, those pipelines often carried carbon in the form of biomass.

⁴ Del Muise, Rosemary Langhout, and Ronald H. Walder, “From Firewood to Coal: Fuelling the Nation to 1891,” in *Historical Atlas of Canada* Vol. II, Plate 49; Ronald H. Walder, “The Utilization of Wood as an Energy Resource in Ontario,” Unpublished MA Thesis, Wilfrid Laurier University, 1982, 52.

⁵ Joshua MacFadyen, “Hewers of Wood: Wood Energy in Canada,” in Ruth Sandwell, ed., *Powering Up: Energy History in Canada* (McGill-Queen’s University Press [forthcoming]); Marvin McNnis, “Wood, Wind, and Water,” in *A Contrarian’s View of Canadian Economic History* (McGill-Queen’s University Press, [forthcoming]); Unger and Thistle, *Energy Consumption in Canada in the 19th and 20th Centuries*, 51.

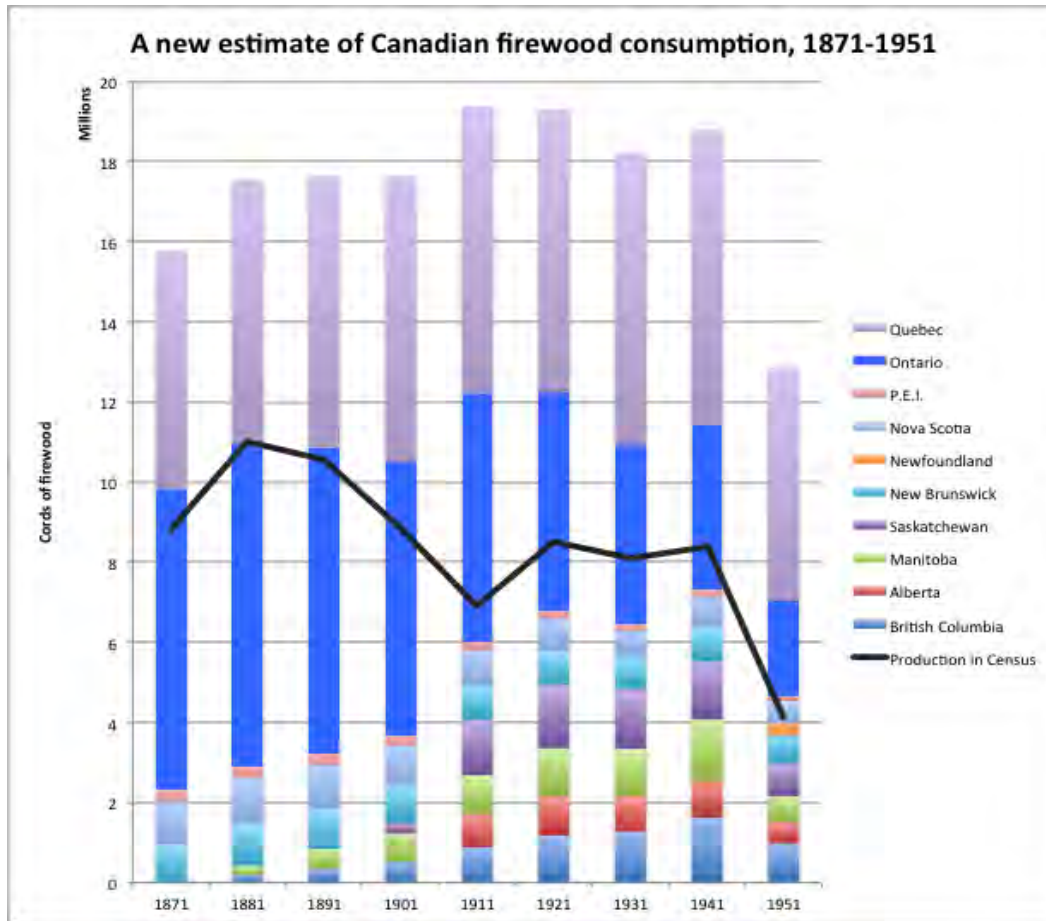


Figure 1: A new estimate of Canadian domestic biomass energy consumption, 1871-1951⁶

Most energy histories in Canada are about the development of new fuels, not the stability of existing systems. Canadian historians emphasized modern energy carriers – fossil fuels and hydroelectricity – and assumed that these technologies displaced biomass. Histories of new technologies often sell better than stories of things-in-use,⁷ and national historians seeking to understand Canada’s role in the second industrial revolution may have steered away from interpretations that presented Canadians as hewers of wood and drawers of water.

Canadian homes and businesses burned large quantities of firewood that went unrecorded, and they relied on the biomass equivalent of modern utility companies. Bringing energy to urban areas has always required elaborate supply chains. Everyone needed a relationship with a supplier, billing and payment systems, transportation grids and storage depots, burning

⁶ MacFadyen, “Hewers of Wood: Wood Energy in Canada.”

⁷ David Edgerton, *The shock of the old: Technology and global history since 1900* (Profile books, 2008), ix.

technologies and people to service them. Almost every town had “coal & wood” dealers, and in the 1870s, as Canada began its second wave of railway expansion, some lines were built, and partly subsidized, for the purpose of bringing rural firewood to urban markets.

Railways and steamships, those pinnacles of progress and instruments of expansion, were the first engines to abandon biomass fuels. Most Canadian railways had converted their locomotives to coal by the 1870s, and perhaps historians assumed that the rest of the country’s engines would simply follow suit. However, in some places, nature’s passageways carried wood burning steamboats past rich riparian forests; in other places, Canadians laid iron track into the settler frontier in order to capture fresh stocks of food and fuel for cities.

Cities

Before the development of hydroelectric and natural gas lines, urban Canadian stoves and steam engines were powered by fuels that occupied some of the largest and most valuable spaces in the city. Strangely, the spaces so conspicuous to urbanites in the nineteenth century are somewhat out of view in recent histories. William Cronon’s *Natures’ Metropolis: Chicago and the Great West*, examines almost every aspect of a city’s development and its influence on ecosystems across a massive rural and wildland catchment, but Cronon neglects to describe how the White City’s engines turned and how its homes were heated. This is a significant omission in a book that reexamines Johann Heinrich von Thunen’s idea of urban zones, including an entire zone for urban fuel supplies. Similarly, one might expect historian Richard White’s book *Railroaded* to discuss energy, yet there is no mention of the fuels transported by continental lines or used by engines, and only the occasional reference to company coal supplies.⁸ This paper is not meant to be a potshot at some of the best-read environmental histories, but it is interesting to note that energy can easily be overlooked. Canadian historians have done much work on energy in the twentieth century,⁹ and several recent studies discuss energy in the nineteenth century and in

⁸ William Cronon, *Nature's metropolis: Chicago and the Great West* (WW Norton & Company, 1991), 48-54; Richard White, *Railroaded: the Transcontinentals and the Making of Modern America* (WW Norton & Company, 2011), 39.

⁹ Christopher Armstrong and Henry Vivian Nelles, *Wilderness and waterpower: how Banff National Park became a hydroelectric storage reservoir* (University of Calgary Press, 2013); Alan MacEachern, *The Institute of Man &*

national overviews.¹⁰ Biomass energy more specifically is now the subject of finely detailed environmental histories in Europe and Latin America, and in one broad overview in the United States, but its role in cities is not well understood.¹¹ This paper identifies some important outcomes of nineteenth century public and private energy infrastructure projects in a well-known period of Canadian history, including Confederation.

The urban fuel supply business (which included biomass, coal, coal gas, petroleum and increasingly hydroelectric power) grew enormously in scale in the late nineteenth century. The solid-fuel supply business (coal and wood) was not enumerated, to my knowledge, and its growth is best determined through maps, directories, and qualitative sources. It grew rapidly as well, although always as private enterprise and with significant turnover. The spatial geography of the fuel supply industry was in constant flux as yards moved, closed down, and were replaced by start-ups. But generally, as this chapter demonstrates through the examples of London, Toronto, Montreal, and Charlottetown, fuel merchants were tied to the tracks and harbours. Virtually all fuel supply yards in Canadian cities were located at the edge of town. An inland city like London piled its fuel supplies along railroad tracks, Montreal along the river and canal. In Toronto, long before the Gardiner expressway separated the city from the waterfront, the view

Resources: An Environmental Fable (Island Studies Press, 2003); Henry Vivian Nelles, “Canadian Energy Policy, 1945-1980: A Federalist Perspective,” in R. Kenneth Carty et William Peter Ward, eds. *Entering the Eighties - Canada in Crisis* (Toronto, Oxford University Press, 1980): 91-117; Gerald Taylor Bloomfield, and Elizabeth Bloomfield, “Waterwheels and Steam Engines in Ontario: Industrial Power Reported in the 1871 Manuscript Census,” *Scientia Canadensis: Journal of the History of Canadian Science, Technology, and Medicine*, 13, 1 [Whole no. 36] (Spring 1989): 3-38.

¹⁰ Scott Prudham, Gunter Gad, and Richard Anderson, “Networks of Power: Toronto's Waterfront Energy Systems from 1840 to 1970,” in Desfor, Gene, and Jennefer Laidley, eds. *Reshaping Toronto's Waterfront*. University of Toronto Press, 2011; Ruth Sandwell, ed., *Powering Up: Energy History in Canada* (McGill-Queen's University Press [forthcoming]); Richard W. Unger and John Thistle, *Energy Consumption in Canada in the 19th and 20th Centuries: A Statistical Outline* (Consiglio Nazionale delle Ricerche: Istituto di Studi sulle Società del Mediterraneo, 2013), 51.

¹¹ Brooks C. Mendell and Amanda H. Lang in *Wood for Bioenergy: Forests as a Resource for Biomass and Biofuels* (Durham: Forest History Society, 2012); Helmut Haberl, Helga Weisz, Christof Amann, Alberte Bondeau, Nina Eisenmenger, Karl-Heinz Erb, Marina Fischer-Kowalski, and Fridolin Krausmann, “The Energetic Metabolism of the European Union and the United States: Decadal Energy Input Time-Series with an Emphasis on Biomass,” *Journal of Industrial Ecology* 10, no. 4 (2006): 151-171; Iñaki Iriarte-Goni, “Forests, Fuelwood, Pulpwood, and Lumber in Spain, 1860–2000: A Non-Declensionist Story,” *Environmental History* 18, no. 2 (2013): 333-359; Jan Kunnas, “Fire and Fuels: CO₂ and SO₂ Emissions in the Finnish Economy,” (PhD diss., European University Institute, 2009); Daviken Studnicki-Gizbert and David Schecter, “The environmental dynamics of a colonial fuel-rush: Silver mining and deforestation in New Spain, 1522 to 1810,” *Environmental History* 15, no. 1 (2010): 94-119.

was blocked, in several places by warehouses and piles filled with coal and wood. Almost every year in the late nineteenth century, fill was added to the lakeshore to create new yards and warehouses, many of them for fuel supplies.

Montreal

Montreal was Canada's wood furnace. Robert Sweeney demonstrates how the city's river and canal based cordwood supply chain was well established by the 1820s when 2,900 homes burned 22,600 thousand cords of wood from districts like Beauharnois & Chateauguay and Godmanchester & St-Regis.¹² The higher price of coal in Montreal and the vibrant Quebec firewood market meant that these urban residents favoured wood. Even as late as 1941, a surprising 25,000 homes continued burning wood as their main source of heat.

The St Lawrence River offered Montreal access to a very large catchment of firewood suppliers, but the city also faced competition from other centres such as Quebec City and Trois-Rivières. In the winter of 1861-62, Sir Henri-Gustave Joly de Lotbinière cut 1,000 cords of firewood for market (most likely in Quebec City), but sometime later he also entertained an offer to sell 10,000 cords to the Association des colons des Laurentides for the Montreal market.¹³ But relying on the river was unpredictable, especially in the highly variable nineteenth century climate, discussed below. Hauling cordwood over land was usually only possible in the winter, and hauling it from a river port to Montreal was only possible in open water. If either of these conditions failed, it caused problems all along the supply line.

Nineteenth-century Canadians were well aware of the risks of extreme cold weather, which ranged from the ancient belief that you could “catch your death of cold” to the fate that befell most of Napoleon's Grande Armée. Remarking on the latter's winter march from Moscow, Armand de Caulaincourt said “Bad luck to those who fell asleep by a campfire. ... Sleep comes inevitably, and to sleep is to die.”¹⁴

¹² Robert Sweeney and Goupe de recherche sur l'histoire des milieux d'affaires de Montreal. *Les Relations Ville/Campagne: Le Cas du Bois de Chauffage* (Montreal: Montreal Business History Group, 1988), lxxix.

¹³ J.I. Little, *Patrician Liberal: The Public and Private Life of Sir Henri-Gustave Joly de Lotbinière, 1829-1908* (University of Toronto Press, 2013), Chapter 3.

¹⁴ Armand-Augustin-Louis Caulaincourt, *With Napoleon in Russia* translated by Jean Hanoteau (New York, Morrow 1935).

That final slumber also came to many poor and homeless in Canada when fuel prices were high and temperatures very low. In January 1872, several people, including children, were found frozen to death in poor districts of Montreal, and social reformers jumped on the opportunity to illustrate the effects of urban poverty and alcoholism. The *Canadian Illustrated News* featured a graphic sketch of one scene discovered by the police; the officers likened the frozen babies to “lumps of marble” and a poet left the following summary:



Figure 2: Frozen to Death¹⁵

Only two babies, mere waifs of humanity,
Huddled together, half covered with rags;
A father and mother, half plunged in insanity
By the drink from the bottle they had drained to the dregs.

What of it? Their dwelling was merely a ‘den;’
Broken windows; no firewood; not even a bed.
Can we wonder, if, with the cold atmosphere when
The frost should have numbered these babes with the dead?¹⁶

Railway companies jumped on other opportunities. The Grand Trunk Railway responded to the Montreal “Wood Famine” by calling foul on the city’s fuel suppliers. For decades these

¹⁵ Printed in “Frozen to Death,” *The Canadian Illustrated News*, January 27, 1872, original in McCord Museum.

¹⁶ Alpha, “Frozen to Death,” *Canadian Illustrated News*, January 27, 1872, p. 50.

regulated merchants imported fuel on the St. Lawrence River, and naturally raised prices as the supplies dwindled.¹⁷ An early freeze in the Fall of 1872, meant that the price of fuel in January was about \$12 per cord, or about twice what it cost in July.

The *Illustrated News* felt this was unfair-market value, and another image shows the city's poor freezing to death while icy-fuel suppliers charged exorbitant amounts for firewood. As with many problems of this era, railways came to the rescue. Railways circumvented the seasonality of fuel supply, and it helped to have a disaster like the “Wood Famine” to promote new lines to wood markets.



Figure 3: The Wood Famine¹⁸

The railway magnate Asa B. Foster gave away 100 cords of firewood, and the GTR subsidized carloads of cordwood at an eighth of its market value. These trains arrived in the ice-locked city

¹⁷ Robert Sweeny and Goupe de recherche sur l'histoire des milieux d'affaires de Montreal. *Les Relations Ville/Campagne: Le Cas du Bois de Chauffage* (Montreal: Montreal Business History Group, 1988), cv.

¹⁸ Printed in “The Wood Famine,” *The Canadian Illustrated News*, January 27, 1872. Original in McCord Museum.

with banners flying overhead titled “wood for the poor.” Impoverished families then warmed themselves and cooked their food over the fuel, and the paper called this firewood “more precious than gold to them.”¹⁹

I’ve argued that fuel prices were more stable in the nineteenth century than they have been in recent decades, but the climate was not. New climate reconstructions of the St. Lawrence Valley has shown more dramatic fluctuations, and in particular more periods of prolonged cold, or cold spells. Winter temperatures were decidedly colder and newspapers carried many accounts of the effects of harsh cold spells.²⁰

Cold spells throughout the Little Ice Age have helped account for everything from agricultural hardship in colonial New Brunswick to more fiery depictions of hell during the Great Awakening.²¹ But tracking causation is never straightforward. We might assume for instance that some firewood supply railways built in the 1870s were encouraged by some of the seventeen cold spells in that decade, or that the rail-carried firewood drives in Toronto and Montreal in 1871 and 1872 were ushered along by cold spells in those years. But in reality the cold winters of the 1860s were likely more influential. Even though there were fewer cold spells, they all occurred in the early 1860s and particularly in 1865 and 1866 as new narrow gauge railways were being planned in Toronto.

¹⁹ “The Wood Famine,” *The Canadian Illustrated News*, January 27, 1872.

²⁰ Include examples from the *Globe*; Victoria Slonosky, paper delivered at *The Climate is History* workshop at the University of Western Ontario, May 2014.

²¹ Liza Piper, “Backward Seasons and Remarkable Cold: the Weather over Long Reach, New Brunswick, 1812-1821,” *Acadiensis* (2004): 31-55; Priscilla J. Brewer, *From fireplace to cookstove: Technology and the domestic ideal in America* (Syracuse: Syracuse University Press, 2000), 4.

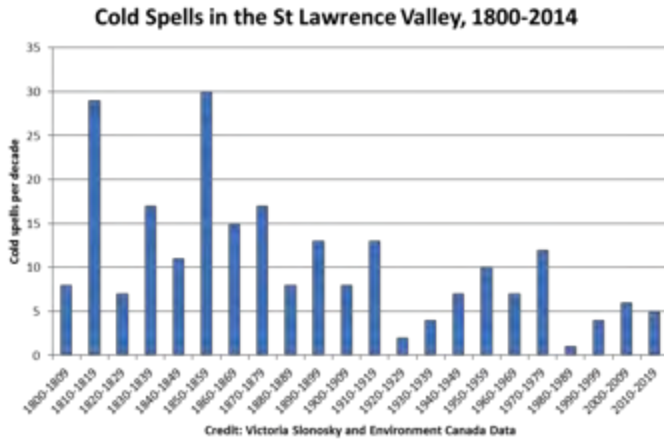
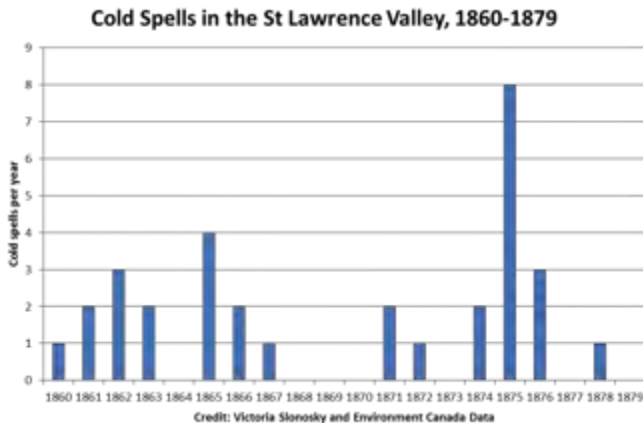


Figure 4: Cold Spells in the St Lawrence Valley, 1800-2014



Toronto

As cities like Toronto, Hamilton, and London enjoyed an increasing share of the province's strong economic growth in the nineteenth century, their combined energy footprints made Southern Ontario the new carbon capital of Canada. Untold millions of tons of coal and wood were hauled, piled, distributed and burned in their yards, and the province's expanding rail network both consumed the carbon and knit together a network of fuel suppliers. Although we commonly think of these cities as the driving force in Canadian industrialization and the transition to fossil fuels, they also continued consuming vast amounts of wood. Toronto imported

70,000 cords per year in 1860s (*Globe* 1868),²² and it increased its biomass energy consumption as the century progressed.

It is striking that Toronto, a city with such excellent access to American lake trade and trunk railways, continued to burn at least one hundred thousand cords of firewood each year in the late nineteenth century.²³ The logistics of moving this amount of fuel through the city must have been dizzying. Merchants like Patrick Burns – his real name – set up on the north side of Front street where he had access to both the Grand Trunk and the newly built Toronto, Grey and Bruce (TG&B) Railways. A letter sent from Andrew Buell’s law firm in September 1871 would have been typical of a large order: “6 cords best quality 4-feet hardwood, exclusively oak, at \$6.50; 6 tons Brier Hill Coal at \$6.50; 4 tons Pittston Large Egg at \$6.75; 4 tons Pittston Small Egg coal at \$6.75 (Scranton will be received instead Pittston, if you have not Pittston of the size stated).”²⁴ By 1881 Burns had five offices throughout the city all connected by phone. In 1885, the city’s merchants typically carried about two cords of wood for every three tons of coal. Most of the wood was imported by rail. In 1891, it is likely that the city yards supplied over 150,000 cords, and even the Ontario Coal Company, whose 190,000 tons of coal amounted to 40 percent of the city’s fossil fuel, imported 50,000 cords of wood.²⁵

²² “Narrow-Gauge Railways: The Toronto, Grey and Bruce Line, Meeting at Mono Mills,” *Globe* 6 January 1868, p2.

²³ Estimated through Suppliers and Merchants: in 1885 the *History of Toronto and County of York, Ontario: Biographical notices*, described 15 of the city’s coal and wood merchants and the wood alone was 70,000 cords. The amounts did not include the largest merchant, Elias Rogers, who with three separate yards (and the amount of wood visible in the c1894 birds-eye photo) must have carried at least 35,000 cords. Many other fuel merchants were not listed here, and neither were suburban suppliers. The Lumber yards were also apparently large cordwood fuel suppliers in the 1860s (see *Globe* classifieds), and not listed as such in most directories.

²⁴ Archives of Ontario, A. N. Buell to P. Burns, 9 September, 1871.

²⁵ G. Mercer Adam, *Toronto, old and new: a memorial volume, historical, descriptive and pictorial, designed to mark the hundredth anniversary of the passing of the Constitutional act of 1791*, (1891) pp. 168-169.



Figure 5: Patrick Burns, “Coal Merchant,” Toronto, c1914²⁶

Elias Rogers, great uncle to Ted, built the original Rogers centre on the Toronto waterfront, but unlike the sports and entertainment industry this empire was founded on fuel. Eventually Elias ran for mayor of Toronto. His father Timothy Rogers was a New England Quaker who emigrated to Canada and settled in the aptly named Temperanceville, York County, near what is now Newmarket, Ontario.²⁷ James Rogers farmed on the other side of a small lake dammed to power John Ferguson’s saw mill. Elias was born in 1850, and the following year Timothy’s farm was fully intersected by the Northern Railway. Elias must have spent his young life hauling wood to the mill and the railway, and watching the railway haul loads of wood south to Toronto. When he left the farm he went into the lumber business and then started a fuel company of his own.

In the 1880s Elias Rogers was expanding and by 1889, he owned two large yards along the North side of The Esplanade, one on each side of Princess Street. Between Rogers and the lake, the

²⁶ c. 1914, Source: City of Toronto Archives

²⁷ Caroline Van Hasselt, *High Wire Act: Ted Rogers and the Empire that Debt Built* (John Wiley & Sons, 2010).

Esplanade carried wagon traffic and the Grand Trunk Railway could shunt 6 trains at once. By 1894, an overhead photo appearing in the *Toronto Daily Mail* suggests that cordwood occupied more outdoor space in the Rogers yards than coal did.²⁸

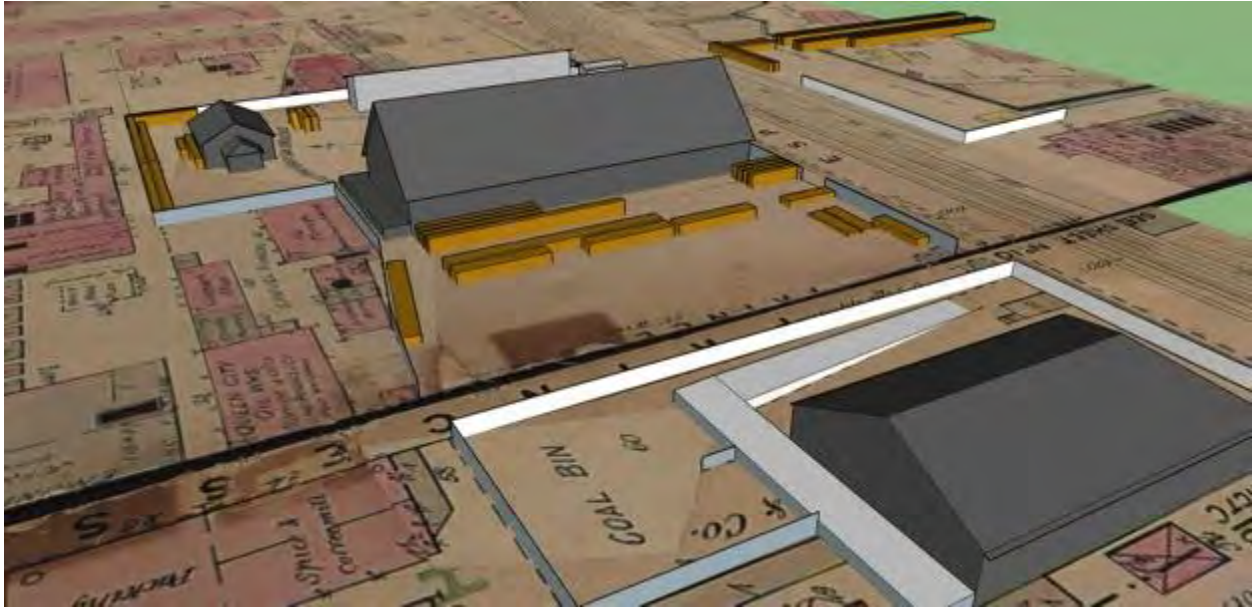


Figure 6: Model of Elias Rogers Coal and Wood Yards, 1891, Cordwood in Yellow.

By modeling the yards in 3D, using Trimble SketchUp and Fire Insurance Plans, we are able to rise above the yard's clean façade, recreate an aerial view of the facility, and see the mess and manipulation of the large carbon stores. Rough measurements suggest that the stocks present in July represented less than 1,000 cords. When full, the yards could potentially hold 6,000 cords, depending on how much of the harbour infill was available, but this is nowhere close to the amount sold in one year. Additional yards and a steady supply of wood by rail might have made it possible to reach the large amounts reported in the business directories. The Rogers complex channeled carbon at a scale not yet seen by Canadians, but the spatial limitations of even these large yards suggest that there was room for growth and plenty of business for smaller wood suppliers operating throughout the city.

²⁸ "Toronto Harbour, looking east along Esplanade E., Princess St. in foreground," Toronto Public Library, 1894, 971-12 Cab I.

Charlottetown/Summerside

Like those in most nineteenth century agricultural settlements, Prince Edward Island newspapers began to print alarming complaints about the shortage of firewood and the need among many homes and businesses to switch to coal. The province witnessed its first fuel shortages as early as the 1820s in Princetown Royalty, according to Walter Johnstone.²⁹ Yet, in 1861, the average PEI farmer lived on properties which were only about 38 percent “arable,” or cleared to the extent they could be cropped. If all lands, including the thirty percent of the colony not in farms, were taken into consideration then only about a quarter of the island had actually been deforested.³⁰ There was a great deal of woodland available for fuel, fencing, and wood pasturing, and farmers were still busily clearing their land for crops and pasture. These felled trees supplied lumber, fencing, and fuel. John MacEachern of Rice Point hauled loads of cordwood across the frozen Charlottetown Harbour in the winter months for urban consumers. His diary noted that he was clearing a small patch of land in the back half of his property “across the brook,” and presumably much of this wood went directly to his own hearth and to urban markets.³¹

By the 1860s, despite the three quarters of the province still in forest and the large amounts of wood cut every year for clearing, pockets of fuel shortage were beginning to develop. In 1860 the Land Commission tasked with establishing a value for Prince Edward Island’s absentee-owned lands, wrote that “hundreds of our oldest settlers find it exceedingly difficult to obtain firewood and many have already begun to purchase coal for fuel.”³² Others such as Greenvale PEI resident James Proudfoot mentioned woodlot depletion in correspondence. In 1862 he wrote

²⁹ Walter Johnstone qtd. In Douglas Sobey, *Early Descriptions of the Forests of Prince Edward Island: Vol II, Part A*, 77-78. There were also shortages in the Charlottetown gaol, according to eleven debtors who wrote the sheriff to complain about conditions, PARO Acc 2702 Smith, Alley Collection, Series 5 Sheriff, jails, criminal cases, legal opinions, Item 723.

³⁰ *Census of Prince Edward Island*, 1861; Clark, *Three Centuries*, 134, Table IX.

³¹ On 24 January, 1866 his son Doug went “to town with the first load of wood 8/6.” PARO, John MacEachern Diary, Acc 3192, Item 1.

³² Prince Edward Island. Land Commissioners' Court – 1862, *Abstract of the proceedings before the Land Commissioners' Court, held during the summer of 1860, to inquire into the differences relative to the rights of landowners and tenants in Prince Edward Island* (“The Protestant” Office, 1862), 121.

to family in Scotland, noting that “the wood in many of the settlements is gotten scarce for fuel and fenicin (fencing) ... [Charlottetown residents] git Coal from novascotia.”³³



Figure 7: Hauling Firewood, PEI (n.d.)

After the railway the firewood trade began slowly increasing, showing up in Railway Statistics and the Summerside blacksmith’s journal

[[I will flesh this section on PEI out somewhat]]

Prince Edward Island historians have traditionally made the PEI Railway, and the debt it incurred, a key part of the province’s decision to join Confederation in 1873. While this may be so, we should remember that this was not a line built to connect PEI to external markets through the Intercolonial or other mainland line. The project appeared completely in step with a narrow gauge building craze and the second major expansion in Canadian railways. Like the narrow gauge lines in Ontario, the primary purpose of the PEI Railway was to carry agricultural goods, and possibly firewood, to local and urban markets first.

³³ PARO, Letter dated 5 March, 1862, in “The Proudfoots of Loch Brawmuir and their descendants,” compiled by Betty Proudfoot (1973).

Railways and Confederation

The railway is the most commonly discussed technology of the Confederation period. It connected British North America's urban seats of power to the hinterlands of the North and Northwest, it facilitated trade and provided an extra measure of defense in a time of continental instability, and as Andrew Smith has recently argued it attracted critical British investment to Canada.³⁴ The most recent railway histories argue “how clearly new railways were linked with the Confederation ‘project’” in this period. “Communication, trade, and defence of the proposed Dominion in the east would be enhanced by the Intercolonial Railway.”³⁵

Certainly, by the late 1880s railway technology was widely praised as the best form of transportation and infrastructural growth if not always capital investment. The Federal government's rapid response to the Riel Rebellion in 1885 demonstrated how quickly troops could be transported across long lines like the Canadian Pacific Railway. This was convenient PR for the nearly bankrupt railway and gratifying for railway boosters everywhere. One of those boosters, George Laidlaw, was responsible for some 500 miles of railroad in Southern Ontario and must have watched with mixed emotion as the CPR brought his own son to fight the Rebellion.³⁶ However, twenty-five years earlier railways were by no means the universally accepted form of road-, or nation-, building in British North America. Early railway construction had been strong in the Canadas in the 1850s, but that ground to a halt with the commercial crisis of 1857-58. Even by Confederation, the transcontinental railways connecting the Canadas with the Maritimes (The Intercolonial Railway) and British Columbia and the Northwest (The Canadian Pacific Railway) were little more than promises. No significant building began until the 1870s, and over 70 percent of the rail laid between Confederation and 1926 occurred after 1900. Unlike the United States, Alan Green argued, “the railway era for Canada is clearly a twentieth century event.”³⁷

³⁴ Smith, *British Businessmen and Canadian Confederation*.

³⁵ Rod Clarke, *Narrow Gauge Through the Bush -- Ontario's Toronto Grey and Bruce Railway and Toronto and Nipissing Railway* (Streetsville: Rod Clarke, 2007), [p18.

³⁶ Trent University Archives, “Colonel George E. Laidlaw,” fonds level description. Available online <http://www.trentu.ca/admin/library/archives/74-011.htm> (accessed 22 June 2014).

³⁷ Alan Green, “Growth and Productivity Change in the Canadian Railway Sector, 1871-1926,” In *Long-Term Factors in American Economic Growth* (University of Chicago Press, 1986), pp. 779-818, 790.

The famous Confederation debates certainly helped the railway promoter's cause, but other factors were at work as well. Don Akenson notes that short haul paddle-wheelers on Lake Ontario spent over half of their earnings on fuel and many of the most inefficient companies were forced out of business in difficult 1850s. With the exception of heavy cargo trade, he argued, "by Confederation lake transport was in serious decline."³⁸ Canadian railways did not seamlessly fill the gap, however, and although the Great Western Railway operated profitably out of Hamilton, the larger Grand Trunk Railway struggled with mismanagement, bad contracts, and tragedies such as the Beloeil Bridge accident in 1864, the deadliest train accident in Canadian history. With steamboat transportation as the norm, the Grand Trunk deeply in debt, and naysayers in both the Maritime Assemblies and the Ontario Grits, a railway to any lightly settled area would have seemed unlikely. Thus when railway promoter George Laidlaw began his campaign for two new northern lines from Toronto in 1867 he had his work cut out for him.

Narrow gauge railways

George Laidlaw spent most of his life promoting railways, and is best known for coaxing the Toronto Grey and Bruce and the Toronto and Nipissing Railways into existence. An impetuous but articulate Scot who tried his hand at law school, the Mexican-American War of 1848, and then the California goldrush, Laidlaw immigrated to Toronto in 1855 and became well connected to both Toronto's manufacturers and the farmers in its hinterland and "bush" (the less densely settled counties toward Lake Huron and Georgian Bay).³⁹ Laidlaw started in Toronto as a grain dealer for Gooderham & Worts in 1855, and he began his own forwarding company in 1859 as a "produce dealer and wharfinger" located on the Church St Wharf. Like his friends William Gooderham and George Brown, Laidlaw opposed the Grand Trunk for its political affiliations and waste, and, like most Torontonians, he opposed the Great Western for its commitment to Hamilton. It was these connections in the grain trade and his distaste for trunk line shipping that convinced Laidlaw of the need to build better transportation to other areas of Ontario.

³⁸ Donald Harman Akenson, *The Irish in Ontario: A Study in Rural History* (McGill-Queen's University Press, 1984), 237.

³⁹ Thomas McIlwraith, "George Laidlaw," *Dictionary of Canadian Biography* http://www.biographi.ca/en/bio/laidlaw_george_11E.html (accessed 22 June 2014).



George Laidlaw (1828-1889)

Source: [Courtesy of Wikimedia Commons](#)

Laidlaw's battle cry was "the cheapest line to the best markets," and his technical solution to the excessive spending of the trunk lines was the narrow gauge system with rails spaced at 3'6" instead of the provincial gauge of 5'6". The narrow gauge required lighter engines and rolling stock, but it would also require smaller ties, beds, and rails, built for 60 percent of the cost, or roughly \$15,000 per mile. Laidlaw insisted that capital be raised locally so as to avoid the "perceived evils of absentee ownership" experienced by the GTR.⁴⁰ His strategy for raising this capital was to appeal to Toronto's rising energy demands, the hinterland's ability to supply firewood, and the railway charter's ability to enforce cheap transportation from one to the other. Thus, two of the new Dominion's first railways were not the typical trunk lines connecting populated centres, rather, they were "long distance narrow gauge lines into the 'bush'."⁴¹

Laidlaw's critics were many. In 1871, the Trout brothers' description of Canadian railways noted that the idea of narrow gauge was "entirely new," and that Laidlaw "excited a good deal of hostile criticism and not a little ridicule."⁴² Other opponents argued that if Torontonians listened

⁴⁰ Clarke, *Narrow Gauge Through the Bush*, 32.

⁴¹ Clarke, *Narrow Gauge Through the Bush*, 18.

⁴² Trout and Trout, *The Railways of Canada* (1871), 150.

to the narrow gauge promoters they would simply have an inferior line that could not connect to regular lines, and all for no good reason.

How did someone like George Laidlaw come to promote railways in this period, and why did he stake his name and reputation on the narrow gauge? National historians would likely point to the influence of Confederation, and transportation historians like Rod Clarke focus on narrow gauge technology and Laidlaw's networks of trade knowledge. Clarke's excellent history of the two narrow gauge lines demonstrates that Laidlaw's commitment to the 3'6" gauge was from his extensive international correspondence with engineers throughout the commonwealth.⁴³

However, an unexplored answer may be the one hidden in plain sight, plastered all over the primary sources. It was energy demand for Canada's growing cities and transportation networks. These railways were designed with energy in mind.

Selling the railway

The idea appears to have come from John Boyd, a New Brunswick (and later PEI Railway) civil engineer who met Laidlaw on a visit to Gooderham & Worts and the Toronto Board of Trade in early 1867. Boyd explained that the European and North American Railway had been shipping an average of 6,660 cords of firewood to St. John every year, in addition to 3,000 cords for the railway's own consumption. The company profited from the trade, and "none of this wood" he argued, "could have been brought to market without the railway." Boyd also alluded to one of the main differences between the St John River valley and Southern Ontario when he pointed out that much of the land the wood was harvested from was not suitable for farming. The railway encouraged clearing but not necessarily agricultural settlement. The New Brunswick wood sellers were not farmers with a range of commodities to sell, and this crucial difference was one of the problems that Ontario farmers would identify with the narrow gauge projects.⁴⁴

In the first of two pamphlets published in 1867, Laidlaw identified the Toronto firewood market as a potential source of wealth for Upper Canadian farmers. He argued that in Toronto "there is

⁴³ *Ibid.*; George Laidlaw, *Reports & letters on light narrow gauge railways by Sir Charles Fox and son, M.I.C.E.; John Edward Boyd, M.I.C.E.; C. Phil, M.I.C.E.; Major Adelskold, Swedish Royal Engineer, and Mr. Fitzgibbon, C.E.* (Toronto: Globe Publishing, 1867).

⁴⁴ J. Edward Boyd writing to James G. Worts, and the Toronto Board of Trade on "Light Railways and the Cordwood question" in Laidlaw 1867a, on p 41.

consumed annually about 350,000 dollars' worth of cordwood, and coals imported to the value of \$200,000; half these large amounts would find its way into the hands of the farmers, if the present and projected Railways were bound by law to afford the same facilities to the cordwood trade which is extended to the lumber business."⁴⁵ The problem, with "present" railways as Laidlaw saw it, was that lines like the Northern Railway to Collingwood should have been buying and selling products that were needed in the local economy, not shipping lumber out of the city, and the province, on the trunk lines.

In his second 1867 Pamphlet "Cheap Railways," Laidlaw promoted the narrow gauge TG&B and T&N railways to settlers arguing that because of the distance to markets they burned valuable wood and "your summer sky is darkened with the smoke of burning money."⁴⁶ While trees were being burned in remote corners of the province, he argued, Toronto residents were victims of monopolistic rates for firewood. Time and time again Laidlaw urged that new railway charters should prohibit excessive charges for the transport of firewood.

In June of that summer, *The Trade Review* picked up on Laidlaw's promoting and argued that "Torontonians have been suddenly let into one of the secrets by which, for years past, they have been heartlessly fleeced" paying 50%-75% "more for their firing than what they ought" – "the enormous profits ... going to unduly enrich one or two unscrupulous heartless speculators."⁴⁷

The result was evidenced by the previous year's fuel prices which hit \$8 per cord in parts of the city. "The misery that these prohibitory rates entailed on the poor, may be better imagined than described" the journal explained. "It was so great as to produce a public agitation. Then all at once railways became philanthropic corporations, became charitable, and a few hundred cords of wood were laid down in Toronto for the exclusive use of the poor at from \$4 to \$5 per cord. To get it at this rate however, a series of applications and certificates were necessary; in fact, it had

⁴⁵ George Laidlaw, *Reports & letters on light narrow gauge railways by Sir Charles Fox and son, M.I.C.E.; John Edward Boyd, M.I.C.E.; C. Phil, M.I.C.E.; Major Adelskold, Swedish Royal Engineer, and Mr. Fitzgibbon, C.E.* (Toronto: Globe Publishing, 1867).

⁴⁶ George Laidlaw, *Cheap railways: a letter to the people of Bruce and Grey, showing the advantages, practicability and cost of a cheap railway from Toronto through these counties: with an appendix addressed to the people of Ontario and Victoria* (Toronto: Globe Publishing, 1867), 4.

⁴⁷ "The Cordwood Question," *The Trade Review and Intercolonial Journal of Commerce* Vol. 3 No. 24 (June 28, 1867), 43.

to be sued for *in forma pauperis*, so that the bulk of the middling classes had to buy at \$7 or \$8 or freeze to death.”

Laidlaw’s finger then pointed at Fred Cumberland, Managing Director of the Northern Railway Company, arguing that the Railway was restricting the number of people who could ship or store firewood at the various northern stations. Cumberland replied in a pamphlet saying if there is a fuel monopoly The Northern Railway was not part of it. The high prices were the fault of mismanagement at the business level. “A short supply,” Cumberland retorted, “simply proves that the wood merchants under-estimated the demand, or had no capital with which to lay in sufficient stock during the season of navigation.”⁴⁸

Laidlaw and the *Trade Review* did not believe Cumberland and felt there should be a better system whereby a “citizen [could] buy his year’s fuel from a farmer delivered at a station on the Northern Railroad, and get it down like a car of lumber, timber or wheat.” He presented a letter dated 27 Dec 1866 and intercepted at a wood merchant’s office, that he believed proved the problem in the fuel supply business. The Northern Railway was marketing a large supply (4,000 cords) of cordwood which it would carry for an average freight rate of \$2.56 per cord. The supplier was a single outfit, and the city’s buyers were being asked to bid on the lots. The system Laidlaw imagined simply did not exist, and although the Northern and the fuel merchants were responsible for the unusually high prices in the winter of 1866-67, the fuel supply business was already too large to allow urban consumers to purchase directly from northern farmers.

Laidlaw then invoked nature and natural law in his proposal for a solution. In almost Creightonian prose he wrote, “commerce has always, in every country, sought first the channels formed by nature, as the easiest and cheapest high-ways from the interior to the seaboard.” Parliament’s job should thus be to encourage “the construction and extension of the means of communication which will *carry out the trees and carry in the people* to those places where their toil will reward their employers” [emph in original]. Narrow gauge railways, “*bound by law to carry cordwood*,” would in many instances remove” the barriers to settlement. Farmers would be able to clear land at a profit instead of a loss, and the settlement of Upper Canada’s northern bush would continue thanks to the new infrastructure.

⁴⁸ *Ibid.*

Railway historians such as Rod Clarke's *Narrow Gauge Through the Bush*, focus mainly on the technological aspects of the TGBR and the TNR, emphasizing the "narrow gauge" (the focus of most of its pages) at the expense of "the bush" which receives almost no attention. Partly what captivated railway enthusiasts, both then and now, was the technology's ability to regulate and circumvent natural forces. They were permanent fixtures in a temporal environment; constant communication in a world constrained by seasonality. But railways were of course shaped by nature and became themselves part of the built environment.

Laidlaw's early efforts were a success and the TG&B and T&N received provincial charters on 4 March, 1868. After establishing a narrow gauge method, Laidlaw then repeated it in different locations. His interest in the north increased in the 1870s, and he promoted more lines that would connect the Toronto & Nipissing to the north and to Ottawa. All of his projects followed the cordwood model and all of them tabled legislation for reduced fees on firewood. The wording of the cordwood clauses was usually very similar. The railway:

“Shall at all times, receive and carry cordwood or any wood for fuel at a rate not to exceed for dry wood 2.5 c per mile per cord or 3c for under 50 miles, in full car loads.”

Laidlaw did not become rich on narrow gauge projects, and although he remained the president of the Credit Valley Railway for ten years he left the operation of the other lines to people like Gooderham and Shedden. The TG&B eventually failed, and Laidlaw died on his property at the “end of the line” near the T&N station in Coboconk. The failure of the TG&B in 1883 is usually attributed to the lightness of the railway and the narrowness of the track itself, although Clarke demonstrates that the limits to its engines and rolling stock were minimal and the ultimate cause was overcapacity in the late 1870s.⁴⁹

The cordwood lines were quite different from the usual trunk lines connecting population centres. These long-line narrow gauge lines reaching deep into the bush were complementary projects, designed less for shuttling passengers, mail, and other information, and more for powering the Dominion's growing metropolises.

⁴⁹ Clarke, 274.

Burning wood

Canadian railways were very large consumers of firewood, but since the usual narrative is that they adopted coal almost immediately in the 1870s there is very little known about their use of wood. The occasional photograph of the earliest locomotives show that most were fuelled by wood in the 1860s. Some of the new lines built in the 1870s no doubt were outfitted directly for coal, but the trunk lines had sunk costs and not enough immediate reasons to adopt the fossil fuel. Other new lines burned wood from the beginning, including what became known as the “double headed monster” locomotives on the TG&B and T&N. These Fairlie double-header, engines had racks for wood and could store up to 1.5 cords (200 cubic ft).⁵⁰



Figure 8: The Shedden, Toronto & Nipissing Railway⁵¹

⁵⁰ Charles Cooper, *Narrow Gauge for Us: The Story of the Toronto and Nipissing Railway*, (1982), 20-21.

⁵¹ Clarke, *Narrow Gauge through the Bush*, and Wikimedia Commons, Toronto and Nipissing Fairlie 0-6-6-0 No. 9 Shedden built by the Avonside Engine Company, Bristol, England, 1871
<http://upload.wikimedia.org/wikipedia/commons/4/44/TNFairSCol.jpg>

Most wood burning engines however carried wood in their tender, such as this early GTR engine, Locomotive No 162.

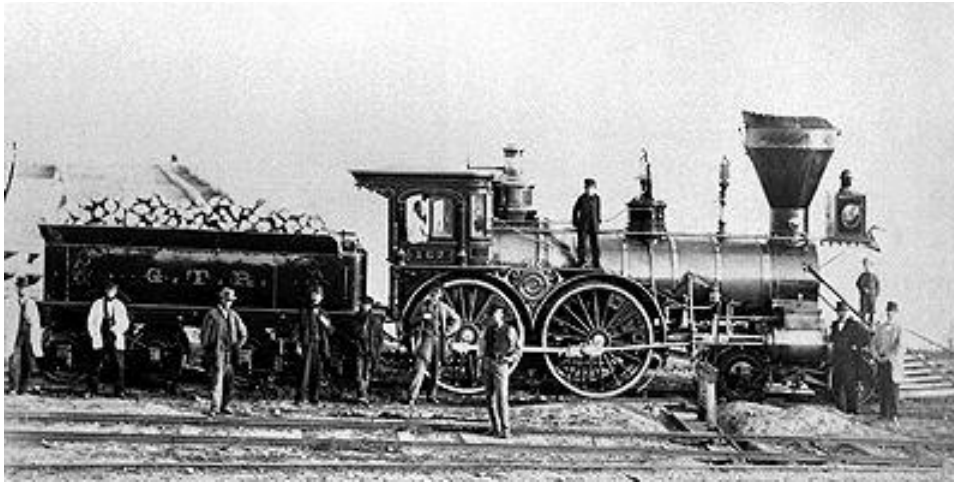


Figure 9: Locomotive No 162, Grand Trunk Railway, in an albumen print circa 1860 (courtesy NGC)⁵²

Many of the northern railways and lines running into the Canadian Shield burned wood longer than their mainline counterparts. George Adam, a Midland Railway brakeman in Lindsay, Ontario recalled the centrality of wood fuel on the northern lines. The engine could only run 10 or 15 miles on a load of wood, so a train southbound to Port Hope would stop at Omemee, Franklin, Millbrook and Garden Hill to “wood up.” Adam’s depiction of these stations included hundreds of cords of firewood and a station man in charge of keeping racks ready with one cord of blocked wood on each rack. Locomotive crews would load the rack and compete with each other to see which engines were running at best fuel efficiency. Adam recalled seeing particularly competitive crews stopped alongside farms so they could skim a little off a farmer’s woodpile and win the competition.⁵³

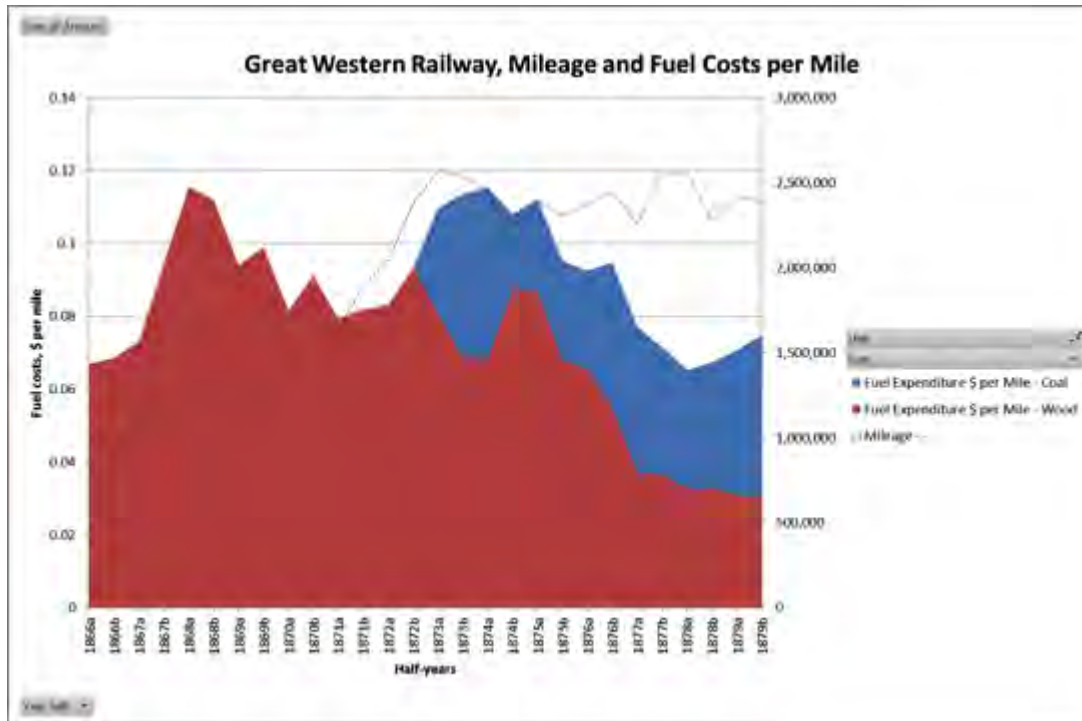
Certainly locomotives were some of the first engines to switch to coal, but their previous consumption of wood helps shed light on the larger, and much slower, Canadian energy transition. First of all, why would engines change to coal when their “workplace” ran through so many forests? There are a number of well-known reasons: coal has a higher energy density than

⁵² James Marsh, “Grand Trunk Railway of Canada,” *The Canadian Encyclopedia* (July 2006), <http://www.thecanadianencyclopedia.ca/en/article/grand-trunk-railway-of-canada/> (accessed 22 June 2014).

⁵³ *Evening Guide* (reprinted from the *Lindsay Post*) 1932. http://www.porthopehistory.com/woodburntrains/woodburning_trains.htm (accessed 22 July, 2014).

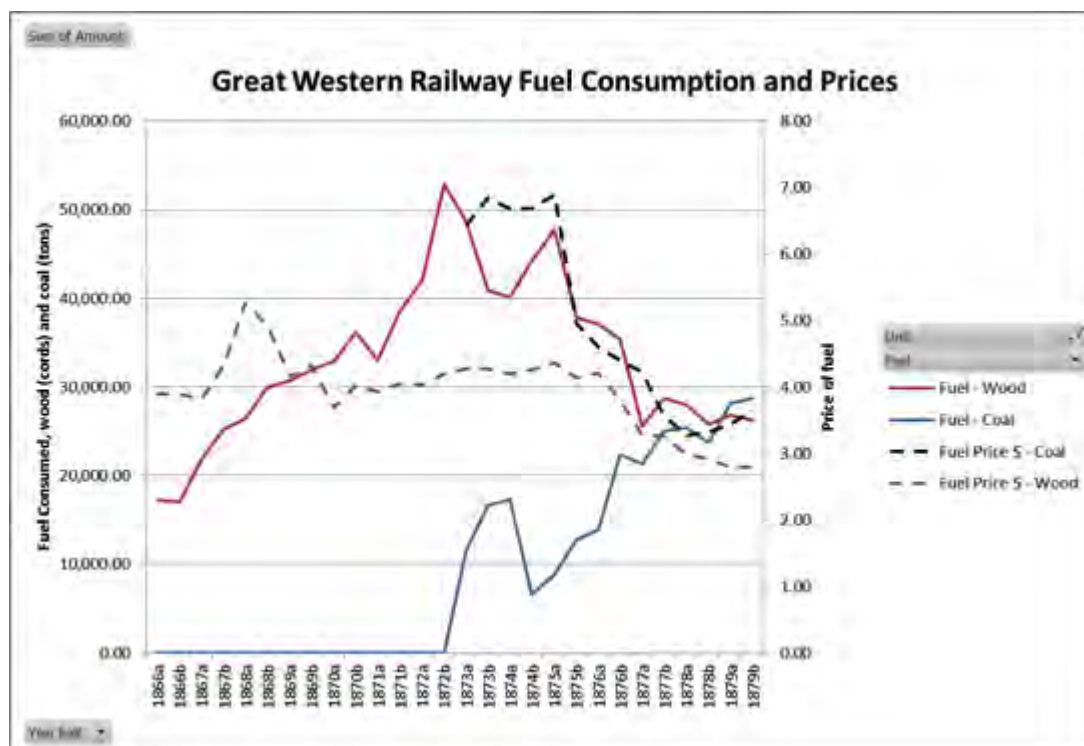
wood and it was easier to load into cars and feed into fireboxes (many coal cars, or tenders, contained a sloped floor in the fuel bunker to facilitate this). Wood fuel was cheap, but coal quickly approached that price as we will see below. One of the most significant reasons, however, was that wood fuel was found in the wrong location for railways. Coal arrived from a variety of sources to a single point of sale in cities, i.e. the place from whence trains departed mainly empty. Wood was provided at many points of sale, and all were rural, i.e. it could be transported between stations, but railways had more valuable cargo to haul from these sites. Logistically coal was a much easier fuel to manage from central urban stations.

The regular fuel costs of an interurban trunk line like the Great Western Railway is visible in its biannual Reports – available until 1880 at which point it began its merger with GTR.⁵⁴ In 1866, the railway consumed as much fuel as a small town, and as it doubled its mileage in the 7 years after Confederation its traffic, and therefore consumption, increased even more quickly. The cost of fuel as a percentage of all expenditures dropped significantly from 1867-1880, partly because the railway increased efficiencies, but also because it began to supplement its voracious appetite for wood.



⁵⁴ Western Archives, "Report of the directors of the Great Western Railway of Canada," Vol. 3 1871-76 and Vol. 4 1876-80.

1873 was a pivotal year for the Great Western's cost structuring, particularly in terms of its fuel consumption. That was the year it began using – or at least reporting – coal. At that point, it paid dearly for the fossil fuel. Each ton of coal cost the railway an average of \$6.71 in the first two and a half years, whereas the railway had been able to find firewood for a relatively stable cost of around \$4 per cord. In 1868 that jumped briefly to over \$5 per cord, but otherwise the company appeared relatively insulated from the prize squeeze faced by urban Canadians and the price of firewood trended slowly downward. Thus, as the railway added over a million miles to its lines in the late 1860s, it continued acquiring more firewood to fuel its engines, and wood represented over 60 percent of all annual expenditures from 1868. However, the adoption of coal appears to have been a way to reduce the enormous fuel costs of running this line. The Great Western's firewood consumption tripled in the seven years leading up to 1872, and it remained over 80,000 cords per year into the mid-1870s. From then until the line merged with the Grand Trunk its firewood consumption stabilized at around 60,000 cords per year, or roughly the amount consumed by a small city.



As the company's wood piles stabilized, its appetite for coal grew steadily. In part this was due to the expansion taking place in the 1870s. As firewood consumption tripled, the company also began buying coal, which together drove its fuel costs to \$570,000 in 1873. The average fuel cost

up to that point had been less than \$260,000 per year. It appears that this offset some of its wood consumption, and had it continued burning only wood the amount would have approached 75,000 cords or roughly the amount consumed in the City of Toronto each year. The amount burned *by* the railway each year helps put into perspective the relatively small amounts hauled *to* its customers for fuel.

Hauling wood

In the early 1870s the Federal government began requesting regular data from the country's railways, and the amount of firewood was singled out from the other rather general categories. It appears that the legal cordwood commitment on certain railway charters was significant enough to justify regular reporting. The data revealed that extensive amounts of wood were hauled by certain railways, including Toronto's narrow gauge lines, and at certain times on others like the Great Western and on the GTR (which for most years of *Railway Statistics* didn't specify freight hauled). Narrow gauge railways brought in between 20,000-30,000 cords each in the early 1870s. By then, the Northern Railway brought minimal amounts, but in the 1860s it shipped an average of 4,500 cords per year.⁵⁵ Then, amounts actually increased dramatically on the Quebec and Ottawa line, and increased somewhat on others such as the PEI Railway line.⁵⁶ Initially very few railways carried cordwood apart from those legally required to do so, but then in large firewood consuming areas like Quebec the amounts rose significantly. This suggests that the cordwood market was artificial on most lines – other commodities paid better rent for their space on the railway – but a range of factors could make it profitable over time.

[[Map x.x; Table x.x Firewood hauled on select Canadian Railways, 1874-1890.]]⁵⁷

The intent of promoters like Laidlaw was to encourage farmers to sell firewood on the narrow gauge, but in effect the rail access to the bush appears to have encouraged urban merchants like A & R Fleming to look north for their cordwood and to go cut it themselves. In 1887 the

⁵⁵ Canada, *Returns: Railway statistics of Canada, and capital, traffic and working... July to December 1875* (Ottawa: McLean Roger Co, 1876); "City Council," *The Globe* (Nov 13, 1866): p2.

⁵⁶ Interesting, considering coal was much cheaper than wood in Charlottetown in 1891; the firewood was likely destined elsewhere. For more on railway statistics see David A. Worton, *The Dominion Bureau of Statistics: a history of Canada's central statistical office and its antecedents, 1841-1972*, (MQUP 1998), p 73.

⁵⁷ Canada, *Sessional Papers - Railway Statistics 1875-1890*.

Fleming coal and wood yard in Toronto advertised for 100 men to cut cordwood in Wyeland (near Penetanguishene/Midland).⁵⁸ If they worked for even three weeks a crew this size would have produced well over 1,500 cords, and more if the trees were already cut.

Suspicious mines

Thanks to Fleming and Rogers, the coal and wood dealers may have been overrepresented among mayoral candidates, but these merchants were Toronto's favourite whipping boys. A staunch Quaker, Rogers ran for Mayor in 1887 on a temperance platform but was disgracefully beaten when one of his opponent's supporters began implicating him in a coal price-fixing ring.⁵⁹ In 1886, Patrick Burns, the owner of one of the oldest fuel supply companies in Toronto was arrested on charges of fraud for not delivering large shipments of paid coal to the city. It became a sensational case known as "The Coal Conspiracy Case," and continued for at least two years of his life.⁶⁰

Toronto had enough difficulty with the accurate measurement of wood that it hired officials to measure the woodpiles. However, merchants apparently sold several loads per day, more than the underresourced officials could hope to measure.⁶¹ In Robert J. Fleming's early years in the coal & wood business "an unhappy customer returned to complain that her bundle of wood contained only 99 pieces instead of 100, Fleming immediately took the initiative to retrieve for her the largest stick he could find in the yard. The customer was satisfied and the merchant rewarded Fleming's initiative with a pay raise."⁶²

Torontonians were deeply suspicious of fuel merchants and railway companies for fixing prices. These were the charges laid against Frederick Cumberland in 1867, and in 1872 and 1873 they were turned around and directed toward Laidlaw's own lines. Torontonians argued that since the railways were a public good they should carry commodities that were of use to urban consumers,

⁵⁸ "Wanted," *Globe* 26 Feb, 1887.

⁵⁹ Jamie Bradburn, "An Illustrated Business Quartet," *Torontoist* (Jan 23 2010).

⁶⁰ "Toronto has its scandal," *New York Times* Aug 13, 1886.

⁶¹ Taxpayer, "Measure the wood," *The Globe* (1844-1936); Jan 13, 1866 p2.

⁶² <http://torontoist.com/2013/11/historicist-cabbagetown-horatio-alger/>

not simply distant manufacturers. In 1866, the Northern Railway responded to critiques that it was not carrying enough cordwood to Toronto by publishing the reports of its shipping. It claimed that it was actually importing about 4,600 cords of wood per year. In the 1870s it hauled almost nothing.

In 1872, an Order in Council forced the Toronto Grey and Bruce Railway to publish a report listing its cordwood suppliers and customers, and in February 1873 John Shedden, the President of Toronto & Nipissing, began preparing the same. Similarly, in Hamilton, in 1888, “Owing to the complaint, made at the last meeting of the City Council, that the G. T. R. was not bringing cordwood into the city in sufficient quantities and that wood dealers and factories were suffering in consequence. Mayor Doran [began] making inquiries into the matter.”⁶³

Protest

A prolonged and animated debate over a “cordwood monopoly” broke out in 1873 and 1874. Perhaps the most vicious part of the protest occurred in February of 1873 at a public meeting in St. Lawrence Hall. The catalyst was of course the high price of firewood in Toronto markets, and the crowd was hot. Depending on who was on stage the *Globe* reported that there was spontaneous applause, booing, hissing, cheers, and “uproar lasting several minutes.” At one point, it simply wrote, “Sensation!” The protest was directed mainly against the railroad, and like the “Frozen to Death” incident in Montreal it used the poor as its justification.

The public’s main grievance was that William Somerville, a Markham wood dealer located near the Toronto & Nipissing line, had held a monopoly over the winter’s supply of wood, driving Toronto prices up unreasonably high. At the root of the meeting and the argument was that the public felt they had invested in the railway on the condition that it supply the city’s cordwood affordably. E. K. Dodds, the key agitator, had called the meeting and ensured that William Gooderham took the stage to explain Somerville’s relationship with the line. Gooderham was practically booed off the stage, and when George Laidlaw took his place the crowd cheered and waited on his every word. Laidlaw explained that he disagreed with the company’s management of this issue and believed that professional buyers like Somerville should be limited in order to free up rolling stock for other sellers. The company claimed that the problem was not preferential

⁶³ "Affairs in Hamilton: Complaints of Shortage in the Wood Supply," *Globe*, 2 Nov 1888.

treatment of Somerville but limited capacity on the line, and they agreed to perform an audit of their freight for the public.

Dodd would be part of the audit, and so the meeting ended with some sense of resolution. Dodd's primary occupation was as publisher of the *Sporting Times* and *Sun* newspapers. Yet, he was also a fuel consumer, and not completely arm's length from the wood trade. In 1873 he purchased 12 cords of wood, shipped from Wellington County on the Toronto, Grey, and Bruce Railway.⁶⁴ Dodds' closest neighbour on Bathurst Street, as recorded by the Toronto City Directory, was the newly established fuel merchant William McGill. McGill ordered 817 cords for his own clients from the Toronto, Grey, and Bruce.

Antimonopolism was a common language of the day, and it helps identify a different side of the reform movement.⁶⁵ In some cases it is a thinly veiled form of competition from new players, and Dodd's proximity to McGill may suggest that in this case. The urban poor were the poster children of reformers, and from seventeenth-century England to twenty-first century North America it has been common to argue that the poor are the people most at risk from high energy costs.⁶⁶ In her book on the adoption of wood stoves in the United States, Priscilla J. Brewer demonstrates how the price of firewood increased substantially in pre-Revolutionary Philadelphia causing new difficulties for the poor and a rash of wood thefts in the 1760s:

“Using a conservative estimate of firewood consumption (4.88 cords per year), Billy G. Smith has determined that a poor family in mid-eighteenth century Philadelphia spent a minimum of L.5.11.10 each year for fuel. At that price a labourer had to work nearly thirty days to pay for his family's annual firewood needs. Gary Nash suggests an even higher level of fuel consumption, estimating that the average American ‘laboring-class’ family in the late eighteenth century used between five and ten cords of firewood per year. According to his calculations, a 10s increase in the cost of firewood was equivalent to three to six weeks’ earnings.”

⁶⁴ <https://archive.org/stream/n02ontariosession07ontauoft#page/n29/mode/2up/search/cordwood>

⁶⁵ MacDougall, *The People's Network*, (2013), 10; Richard R. John, “Robber Barons Redux: Antimonopoly Reconsidered” (2012); Michael Bliss, *A Living Profit: Studies in the Social History of Canadian Business 1883-1911*.

⁶⁶ Priscilla J. Brewer, *From fireplace to cookstove: Technology and the domestic ideal in America* (Syracuse: Syracuse University Press, 2000), 2.

After discussing a range of solutions, Brewer argues that “philanthropy and price-controls were not the answer; the solution lay in the adoption of fuel-efficient heating devices.”⁶⁷

The fuel price increases in the 1870s were not as dramatic as eighteenth century Philadelphia, but a similar process was underway. The rapid increase in demand was occurring at the same time as a gradual reduction of supply. There was no sense in these debates that coal was a viable alternative to fuel, and indeed in a few years the introduction of affordable coal as a supplement and often a replacement for biomass energy effectively let cordwood suppliers off the hook.

This was fortunate for the narrow gauge railways, because they found themselves in a difficult situation. They were bound by law to transport a commodity at a loss in an increasingly competitive railway market. Other lines like the Wellington, Grey, and Bruce from Hamilton were cutting into the TG&B territory. It appears that every time the railways were asked for data showing cordwood they complied, although it is possible they fabricated some of the data.

The big restriction in the critical early years, when winters were harsh and prices were climbing, was getting the trains through. The nascent railways were still finishing sections of the line and still acquiring engines and cars, so there was both a limited supply and a very difficult job of managing what they had. Additionally, the new narrow gauge lines encountered some crippling snow in the North and as they approached the lakes. The mid nineteenth century climate behaved differently than ours, and a series of harsh winters both drove the demand for cheap fuel (cold conditions) and complicated the process of acquiring it (early Fall freeze ups, and winter snow fighting).

The protests and the 1872 Order in Council had the useful effect for us of producing detailed data on cordwood location and suppliers. Map x.x shows the routes followed by the TG&B line and the amount of wood shipped from each station in 1873. The largest firewood producers were in the Orangeville and Luther areas, but in general the farmers in and east of Orangeville were much more active. This may suggest that those stations were getting more traffic, but it also complies with supplementary research in the 1871 census along this line which shows that the

⁶⁷ Priscilla J. Brewer, *From fireplace to cookstove: Technology and the domestic ideal in America* (Syracuse: Syracuse University Press, 2000), 31-32.

largest firewood producers were likely professional wood dealers with strong connections to the railway and the Toronto merchants.

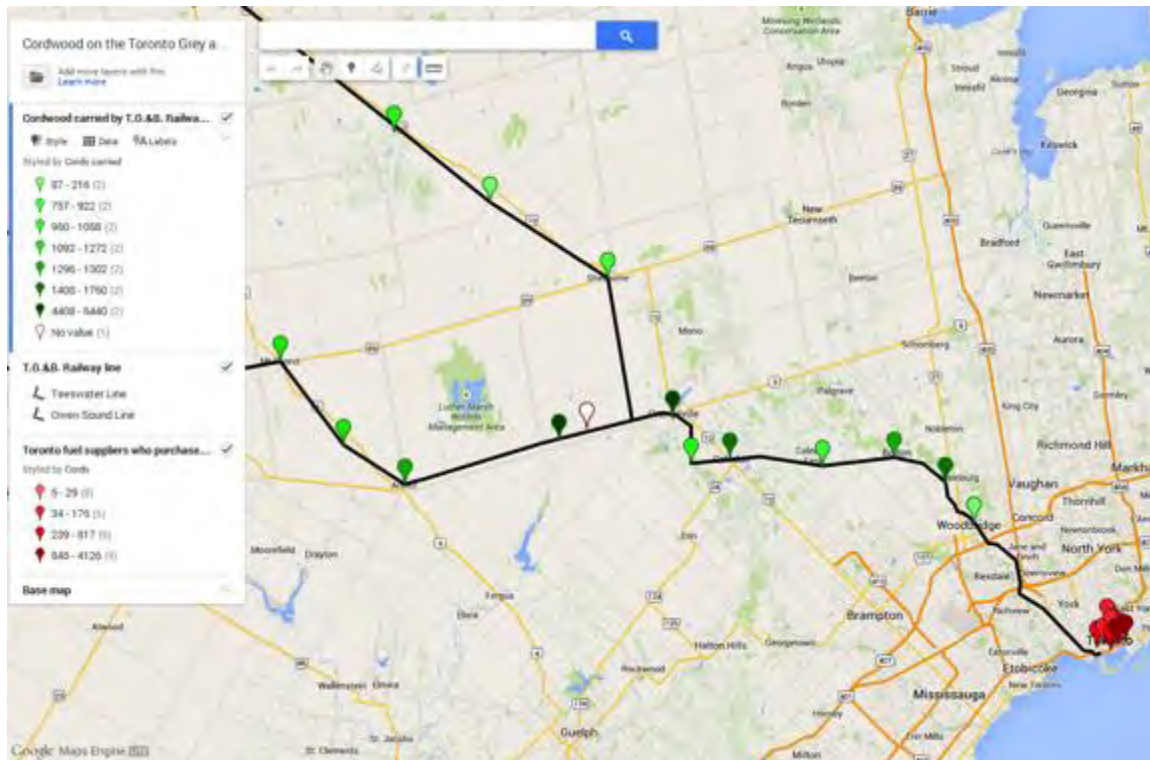


Figure 10: TG&B Line and Cordwood, 1873

Identifying the cordwood shippers was mostly fruitless using sources such as business directories and historical atlases. Over half of all the firewood consumed in Toronto came from stations between Orangeville and Arthur, but only 7 percent of the total shipments could be linked to farmers in a 10 Km band on either side of this line. Clearly many of the names on the 1873 list were simply not farmers.

[[There will be more to add from the research in the 1871 Census]]

Scarcity and conservation

Prudham, Gad, and Anderson argue that “Toronto’s first significant energy transition, that from wood to coal” was hastened by firewood shortages in the 1840s and 1860s, as well as access to American coal.⁶⁸ This scarcity narrative claiming that all action was prompted by rising prices

⁶⁸ Prudham, Gad, and Anderson, 180.

and fuel shortages is problematic when we see that cordwood production *increased* (both on farms and on rail) and the price was anything but an upward trajectory. The authors identify a renewed fuel-wood crisis in the 1880s, which is also likely too early. There was plenty of wood available just north of the city even in close proximity to rail lines (see Claire Denison's *Plan of wood lots for sale* below), and if anything the transition was precipitated by a narrowing wood-coal price margin, as well as the logistical challenges and matter of priorities on the railways.

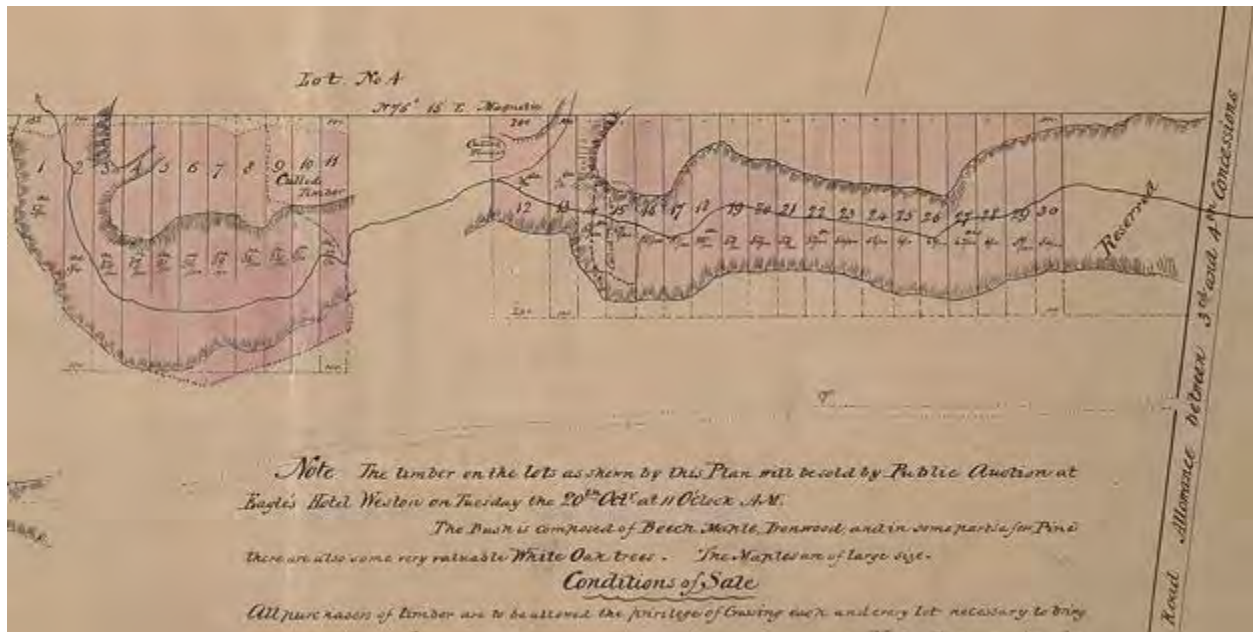


Figure 11: Plan of wood lots for sale laid out on the north east quarter of lot no. 111 in the 4th con. west of Yonge Street, York the property of C.T. Denison (detail).⁶⁹

⁶⁹ Toronto Public Library, "Plan of wood lots for sale laid out on the north east quarter of lot no. 111 in the 4th con. west of Yonge Street, York the property of C.T. Denison." <http://static.torontopubliclibrary.ca/da/images/LC/maps-r-108.jpg>



Figure 12: Ontario County Atlas for North York (detail)⁷⁰

An examination of the firewood data reported by farmers in the 1871 Census and a comparison with the amount of woodlot remaining in each census district helps reveal places where firewood shortages might have been occurring at the time of Confederation. Determining the maximum amount of firewood that can be produced from a hectare is always imprecise. Michael Williams, states: “It is difficult to convert cords into stands of trees, an exercise that demands an analysis of yield, and these vary enormously under different environmental conditions of soil, moisture, climate, the degree of destruction by fire and disease, and the species of tree.”⁷¹

However, using a very conservative estimate of maximum yield (>.35 cords per hectare), we see that in only a handful of counties along Lake Ontario and the fluvial section of the lower St. Lawrence (the Montreal Plain) were farmers producing anywhere close to an amount that would have required clear cut harvesting (Map x.x). The four districts that stood out as the highest producers per hectare of forest were Napierville, Beauharnois, and Soulanges just upriver from Montreal, and the Iles de la Madeleine in the Gulf of St. Lawrence. This record corresponds with testimony in the Morgan Forestry Commission, which in 1882 warned that there is a “large

⁷⁰ Ontario County Atlas for North York (detail), <http://digital.library.mcgill.ca/countyatlas/images/maps/townshipmaps/vor-m-york-n.jpg>

⁷¹ Michael Williams, *Americans and Their Forests*, p. 81

district of good agricultural land, south of Montreal, where the scarcity of firewood, which is a matter of life and death in a climate like ours, has compelled many a farmer” to leave.⁷²

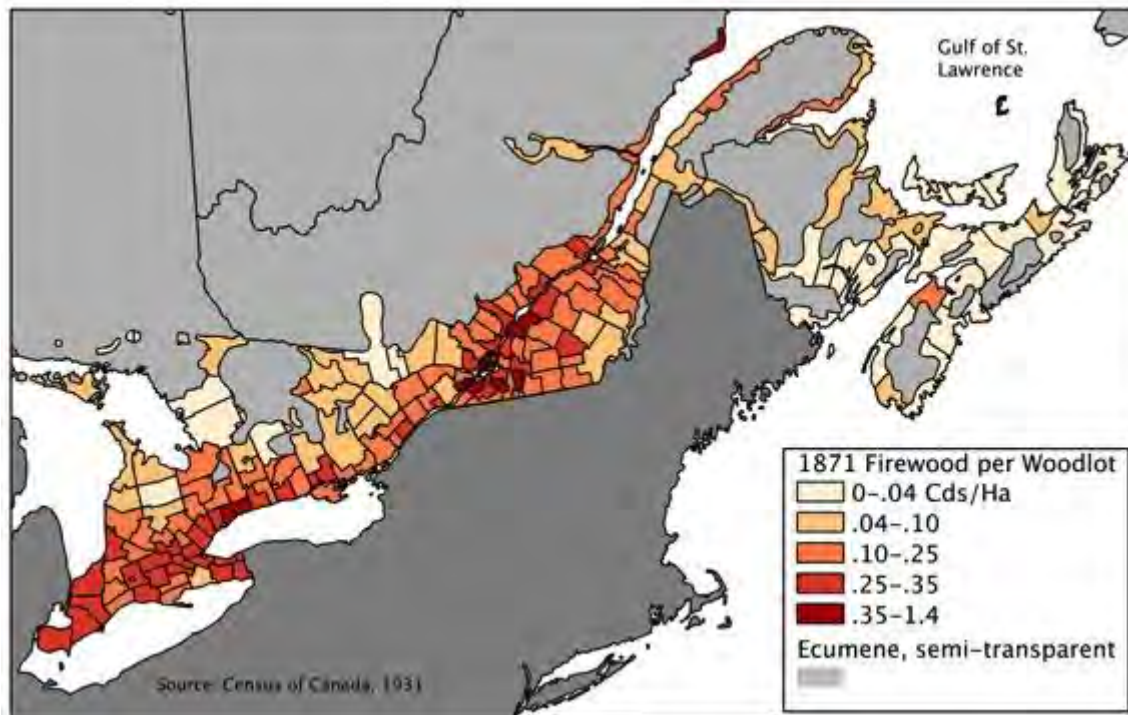


Figure 13: 1871 Firewood Production per Woodlot

Forest conservationist Sir Henri-Gustave Joly was acutely aware of the extensive firewood harvesting occurring throughout Quebec, a potential crisis that drove the new MLA to table a bill in 1865 setting “aside 5 to 10 percent of the land in each township as a forest reserve.” This bill failed, but Joly continued working on educational literature and legislation until the 1880s when a growing conservation movement and Joly’s own retirement from provincial politics allowed him to make much greater gains in forest protection.⁷³

⁷² “Forrestry Commission: Summary of Preliminary Report of Mr. J.H. Morgan,” Sessional Papers, 48 Vic (1885) Vol 7 No. 13., p6.

⁷³ J.I. Little, *Patrician Liberal: The Public and Private Life of Sir Henri-Gustave Joly de Lotbinière, 1829-1908* (University of Toronto Press, 2013), Chapter 7.

Conclusion

In 1870s it was not at all clear that the new urban fuel would be fossil-based. Just as today there is no consensus about the future of fossil fuels and renewable energy, it seemed anything could happen. People spoke of “peak biomass,” or at least of the dramatic shortages near large cities and transport routes. England’s urban biomass shortage was widely known and has since been credited as one of the catalysts of industrial revolution. In Canada, the transition to fossil fuels has been complicated in recent histories – the modern centrally-distributed fossil-fuel energy system took longer to create and proceeded at different rates in the countryside and in different regions. Also, its first incarnation was not based on fossil fuels but on biomass.

The first railway in Lac-Mégantic, the site of a horrific explosion in 2013 caused by an error in the centrally-transmitted fossil fuel system, hauled cordwood to Quebec City and ran on maple rails.⁷⁴ Several other lines in Ontario and Quebec were required to haul cordwood at reasonable rates, and the first large-scale, centrally-distributed energy system in Canada was based on biomass.

This paper presents a little-known role of early railways – biomass fuel supply – and argues that growing urban energy consumption was one driver in the railway building frenzy that followed Confederation. It suggests that the supply problem was not as significant as the transportation logistics and the closing price gap between biomass and its consistently priced and increasingly affordable replacement, coal. The diverging histories of fuel use in twentieth century Ontario and Quebec show one effect a coal-powered and coal-delivering rail network could have. The low cost and increasing importance of coal delivered by rail ultimately reduced the strain put on farm woodlots and crown land.

Most historians have focused on the roles railways played in bringing about Confederation in a reluctant land and an unwilling society; this paper explores the role energy and climate played in that expanding transportation grid. The Confederation era railways were bound by law and charters to carry fuel for cities; they were promoted on these grounds and they were laid into country that contained a balance between agricultural and energy resources. Urban demand for

⁷⁴ Trout and Trout, *The Railways of Canada* (1871), 161; Glazebrook, *A History of Transportation in Canada* (1964), 162.

reliable energy stocks shaped canals and railways, and therefore Confederation, and historians should consider these environmental factors when examining the Dominion. Railways, canals, and other infrastructure attracted British investment to Canada, but they also addressed the growing need for fuel thereby influencing both the forest and the problems of Confederation in a cold county.

**Viewing Canada:
The cultural implications of topographic photographs
in Confederation era Canada**

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Photography held an important and complex role in the era of Canadian Confederation. An era characterized by progress, unification, and a developing sense of Canadian-ness, the photographs taken as part of topographical and geological surveys during this period are ones that embody and reflect these qualities. These photographs are, foremost, scientific and documentary illustrations of progress, aiding in the construction of infrastructure like railroads and bridges that were to physically unify the nascent country. At the same time, the photographs reflect attitudes and sentiments towards progress, industry, and the newly unified and uniquely Canadian landscape. Survey photographs, then, are in the interesting position of being at once documents and cultural containers. Benjamin Baltzly (1835-1883) and Charles Horetzky (1838-1900) are two photographers who worked as part of survey teams mapping and planning the route for the Canadian Pacific Railway (CPR) producing photographs that teeter the line between document and expression: Baltzly with the Geological Survey of Canada (GSC); Horetzky with the Canadian Pacific Railway Survey. Both photographers, their outlooks towards their work, and the ways in which their photographs were used and disseminated are reflective of the dual scientific and cultural functions. Further, when examined along side one another, the two photographers and their work are wonderful foils: Baltzly, the photographer who was inspired by

patriotic sentiment and religious feeling that he found in landscape; and, Horetzky, the photographer who wanted more than anything to be taken seriously as an engineer.

Like the photography born from it, the historical moment of Canadian Confederation is ripe with subtleties and complexities. The politics and historical significance of the CPR and its construction are important foundations in which to situate this study of the photographs. Equally as significant is the notion that, while Baltzly and Horetzky were taking topographical and geological survey photographs, the principle subject of those photographs was *landscape*. And, not just any landscape, but a landscape that was saturated with traditions of topographical image making and with connections to an emerging sense of Canadian-ness. These foundations firmly in hand, the implications of the survey photographs made by Baltzly and Horetzky can be more closely examined, turning first to the criteria the photographs were to fulfil as outputs of the survey missions: what were the expectations of the survey leaders from their photographers; what did they hope to achieve; and, how did they use the photographs and to what ends? Next, to the unique perspectives and situations of the photographers within their respective contexts: what did Baltzly and Horetzky set out to accomplish; and, how did they experience the landscape they were photographing? Lastly, to how were the photographs used, if at all, beyond the context of the survey as a way to shed light on their role as cultural containers: how were the photographs disseminated and contextualized; and, how did the photographs reveal a specific type of visual interest in the landscape – both scientific and popular – that hinges on the idea of a never-before-seen Canadian landscape? Such questions work to elucidate the function of the photograph in the Confederation era, where surveyors and politicians were working to unite the nascent country physically with the railroad, using the photograph as a tool. This tool would help in the settlement of these interiors, the cultivation of its resources, and the establishment of its boundaries, while at the same time working to shape broader understandings of both Canada and Confederation through the landscape.

THE COLONY OF BRITISH COLUMBIA ENTERS CONFEDERATION

While Confederation and the British North America Act was being negotiated and drafted in the 1860s by Ontario, Quebec and the Maritime provinces on the east coast, on the western coast the colonies of British Columbia and of Vancouver Island were considering their own possible unification. Gold rushes like the Fraser Canyon Gold Rush in 1858 and the Cariboo

Gold Rush in 1862 had left the region's colonial administrations in a position of financial hardship as they struggled to keep up with the demand for infrastructure to support the booming gold mining industry. The merging of British Columbia and Vancouver Island in 1866 was hoped to ease the financial burden. But, debt continued to mount, compounded with the additional threat of annexation from America, which had just purchased Alaska in 1867. The Confederation League was founded that same year, a group that saw the Colony of British Columbia's confederation into Canada as the solution to its troubles. Debate around the conditions of Confederation resulted in the decision to begin official negotiations in 1870. Responsible government, alleviation of debt, and parliamentary representation were tabled along with the proposed construction of a railway between British Columbia and the eastern provinces. When the Colony of British Columbia finally did enter Confederation on July 20, 1871, the excitement was palatable – "Today the confederation of British Columbia, Vancouver Island and the Dominion of Canada goes into effect and everywhere we hear the people say "we are Canadian now." There seems to be a great deal of unanimity about it."¹

It was Prime Minister Sir John A. MacDonald that saw the railroad as an important physical link between the provinces of Canada, bringing raw resources into Ontario and Quebec from the west, and moving settlers westward. Despite popular excitement, the origin of the railway's construction was mired in suspect business dealings. Suffice it to say, the project's origins began with Montreal capitalist Sir Hugh Allan, a steamship magnate and extremely wealthy man, who with his Canada Pacific Railway Company, sought the contract for the railroad project. The problem lay in that Allan and Macdonald were in talks with American investments. Further, Allen, in his bid for construction, had made significant political donations to MacDonald.² Despite these events, now known as the Pacific Scandal, the move for construction pressed on through MacDonald's term to Prime Minister Alexander Mackenzie in 1873 and back to MacDonald in 1878 until its completion in 1885. With a 10-year time frame for

¹ Benjamin Baltzly, letterbook, 1871, N-1983.17, McCord Museum, Montreal (Wednesday July 19th), 36.

² There are many works of Canadian history that investigate the history of the CPR and explore the details of the Pacific Scandal. I have relied heavily here on Leonard Bertram Irwin's *Pacific Railways and Nationalism in the Canadian-American Northwest, 1845-1873* (New York: Greenwood press, 1963).

construction, the topographical and geological surveys for the railroad route began immediately in 1871, particularly the difficult work of mapping a pass through the Rocky Mountains.

In light of the scandal surrounding the railroad's construction, words became a powerful device in fostering public support for the endeavor. Take, for example, the May 4, 1872, issue of *Canadian Illustrated News*, in which the CPR is heralded as a key to success and to nationhood:

The Canadian Pacific Railway means Canadian national life. [...] It means, in time, that we are to be a separate people, and, we trust, "an acceptable nation," wherein the rights of all classes will be respected, wherein genius and enterprise will have free scope. [...] Canadians see in their progress, in their rapid march to wealth and national influence, but a new power."³

It is in these types of publications that sentiments of Canadian-ness were extolled, shining a positive light on the railroad and progress. It was also in these types of publications that the public came face to face with the first glimpses of the country. Engravings of drawings and photographs of distant locations were just as powerful as words. The images provided the first exciting glimpses into the previously unseen vistas of the new nation's interior, intended to capture public imagination. Images of the landscape, often those taken as part of scientific surveys, since they were some of the first images to be produced of the interior and Pacific coast, took on the same expression as the words that accompanied them. In this situation the photographs exceed their function as document – as objective mirrors of the landscape – to become cultural mirrors and capsules of attitudes and understandings of the landscape and the idea of Canada. Likewise, while confederation and the railroad physically and geographically unified Canada, it also conceptually and ideologically unified the country.

THE DOCUMENTARY, THE LANDSCAPE, AND THE PHOTOGRAPH

By 1871 photography was becoming commonplace in survey work like that taking place for the CPR. In Canada, photography was first used officially on the 1857-58 Assiniboine and Saskatchewan Exploring Expedition. The expedition's leader, Henry Youle Hind, was both a scientist and firm believer in industrial progress, serving as the first editor of *Canadian Journal: a Repertory of Industry, Science and Art* from 1852-1855, and contributing regularly to the

³ *The Canadian Illustrated News*, Montreal, Que.: G.E. Desbarats, Vol. 5, no. 18 (May 4, 1872): 278.

Canadian Almanac.⁴ A man on the cutting edge of scientific developments and progress, it comes as no surprise that he had initially allocated funds in his preliminary budget to purchase photographic equipment to use on the expedition himself.⁵ Already faced with such large responsibilities as survey leader, photographer Humphrey Lloyd Hime was brought to Hind's attention as suitably qualified for the position. Hind must have seen a benefit to the addition of a team member who was not only a photographer, but also a trained architectural draughtsman capable of contributing to the expedition's scientific assessments. For engineers, scientists, and politicians, Hime's photographs had the appeal of being able to depict a detailed rendering of the Canadian land as it stood in the second half of the nineteenth-century captured most truthfully and scientifically through the mechanisms of the camera.

Visual representation of this kind in scientific documentation has a lengthy history in Canada – schematic sketches, categorical drawings of plant and animal specimens, topographical watercolours. Art historian Dennis Reid's comprehensive studies of eighteenth-century military British-Canadian topographical watercolours examined this type of visual production as a crossover between documentation, artistic medium and an aesthetic outlook of the Picturesque. Reid writes of the topographical military watercolours that:

The topographical views of military officers were in fact simply one manifestation of the romantic inclination of English gentlemen of the later eighteenth century to delight in the splendours of natural scenery or in anything they found in their travels that was charmingly primitive, rough, quaint, or exotic – in a word, picturesque.⁶

Reid considers watercolourists like William Armstrong and George Heriot as establishing an early desire for realism in rendering the Canadian landscape that stems from military topography

⁴ Henry Youle Hind, ed., *The Canadian Journal: A Repertory of Industry, Science, and Art; and a Record of the Proceedings of the Canadian Institute* (Toronto: H. Scobie for the Council of the Canadian Institute, 1852-1855).

Henry Youle Hind, "The Future of Western Canada," in *Canadian Almanac and Repository of Knowledge* (Toronto: Maclear & Co., 1856), 33-36.

⁵ Library and Archives Canada, RG 5, C 1, Vol. 578-579, 1858 Red River Exploration, No. 690, "Estimate of the cost of the Red River Expedition for the year 1858."

⁶ Dennis Reid, *A Concise History of Canadian Painting* 2nd ed. (Toronto: Oxford University Press, 1988) 68.

– a realism that was loaded with natural splendours and Picturesque scenery nonetheless. Reid’s understanding provides an interesting intersection of topographical accuracy and of a landscape invested with meaning. So much so, it is no stretch of the imagination to consider that the turn to realism was the result of a landscape that needed no further embellishment to engage with artistic and Romantic notions like the Sublime, but that those qualities were already in the landscape just waiting to be put on canvas.

From its invention in 1839, the camera was understood as an objective tool, disassociated from the fallible work of the human hand that characterised watercolours and sketches – making it the best possible choice in scientific illustration. It was only a short time after its invention that photographic technologies became portable enough for land surveyors to take advantage of the photograph as an accurate documentary and illustrative tool. That a place was found for photography as a documentary tool on these topographical and geological surveys precisely during the period of Canadian confederation is serendipitous. Historian of Victorian culture and science in Canada, Susan Zeller, has suggested that during this moment in Canadian history, “Victorian Canadians, like Victorians elsewhere, marvelled at the technological signs of material progress and economic development – canals, railways, and electric telegraphs – and tended to identify these with science.”⁷ Photography was no less such a marvel, being both a new technology and the perfect medium to capture and communicate the coming of age of the new nation of Canada. Despite its objectivity, however, photography was no less disconnected from the ideas of natural splendours and picturesque scenery than the eighteenth-century watercolours of Reid’s study.

Indeed in Canada the excitement of an unexplored wilderness with vast and striking geographical features acted as the perfect seedbed for Romantic tenets like the Sublime, an intersection of awe and apprehension at the landscape, which came to fruition at a moment in Canadian history when the zeitgeist was one of excitement, anticipation, and bewilderment at the progress of exploration held together with the prospect of nationhood. Interestingly, the Picturesque can be defined, in short, the arrangement of the land to a particular end, and under

⁷ Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Montreal: McGill Queen University Press, 2009), 3-4.

this type of mediation, a direct connection can be made from the aesthetic to the topographical.⁸ Under the rubric of the Picturesque, topographic features of the land could be described as Picturesque simply because they could be painted. The usage of unique geographical features found in the land to compose a particular vision or landscape is indicative not only of the grey line between scientific observation and aesthetic observation, but also of the way they are forevermore linked to one another.

BENJAMIN BALTZLY AND THE GEOLOGICAL SURVEY OF CANADA PRELIMINARY EXPLORATION IN BRITISH COLUMBIA (1871-1872)

Photography was suited so very well to the nineteenth-century study of natural history – the collection, identification and categorization of all that is observable – and was understood as a way to possess and claim the Canadian landscape.⁹ For this reason, photography found a logical place in the work of the GSC. As a result of the Pacific Scandal, however, construction of the railroad was to be done as public enterprise overseen by accountable and objective parties with Sir Sandford Fleming was put to this task as engineer-in-chief of the Canadian Pacific. Geological information on British Columbia, collected in order to evaluate the resource-rich land of the newly confederate province, became important in the mapping of the route. As a way to share gathered information Fleming ordered his railway crews to provide assistance to Alfred R. C. Selwyn, Director of the GSC. In 1871, Selwyn's work with the GSC took him to British Columbia to evaluate its geological resources and also to contribute his findings to the engineers of the CPR in exploring possible options for the CPR route. In a correspondence from Joseph Howe, Secretary of State for the Provinces, Selwyn's objectives for the mission were set out along with the value a photographer might bring to accomplishing the task at hand:

“With a view to secure accurate illustrations of the physical features of the country and of other objects of interest which may be met with during the exploration, you are authorized to make arrangements with Mr. Notman, of Montreal, for a photographic artist to accompany the expedition, on the

⁸ To be precise in my use of language, it is important to note here that I use the term ‘land’ as meaning that actual physical earth – rocks, dirt, trees etc. The term ‘landscape’, conversely, is any human understanding, mediation, or construction of the land.

⁹ Zeller calls this the “possessive spirit” in her *Inventing Canada*, 9.

understanding that he is paid and equipped by Mr. Notman; his travelling expenses only being paid by the government. Of these, one half will in accordance with your arrangement with the Engineer-in-chief, Mr. Fleming, be made chargeable to the Pacific Railroad Exploration Fund, and the other to the appropriation for geological purposes in British Columbia. Considering the lengthened experience both of yourself and Mr. Richardson in explorations of the kind you are now undertaking, it is not thought necessary to instruct you more particularly as to the various subjects in addition to those appertaining especially to geology, to which your attention should be directed, such as the nature of the soil, the vegetation, the quality and kind of timber, the distribution of plants and animals, the character of the climate, &c., &c., on all of which interesting and valuable information may no doubt be gathered.”¹⁰

Selwyn must have favoured the idea of taking a photographer as he agreed to pay for a portion of the expenses. Collaboration here continues to be key. Like that between the CPR and the GSC, and between Fleming and Selwyn, the collaboration with Montreal photographer William Notman was one that provided benefits to all parties involved.

The decision to approach Notman specifically may have been based on the Notman Photographic Studio’s prolific reputation – Notman was, after all, self-touted as “Photographer to the Queen.” It may have also been based on Notman’s own network of acquaintances and involvement with various societies and associations. For example, Selwyn worked as an assistant to the Canadian Commissioners at the exhibitions in Philadelphia (1876), Paris (1878) and London (1886). Notman, president of the Centennial Photographic Company, was granted exclusive rights to photograph the Philadelphia exhibition, as well as being involved in the Paris and London exhibitions.¹¹ There was also Notman’s involvement with the Royal Society, of which Selwyn was elected as a fellow in 1874 and Notman created a publication about in 1891.¹²

¹⁰ Alfred R. C. Selwyn, “Journal and Report of Preliminary Explorations in British Columbia,” in *Geological Survey of Canada, Report of Progress for 1871-72* (Montreal: Dawson Bros., 1872), 17.

¹¹ Centennial Photographic Co. *Centennial Exhibition, Philadelphia. 1876*, (Philadelphia: Centennial Photographic Co., 1876).

¹² William Notman, *The Royal Society of Canada, 1891*, (Montreal: W. Notman & Son, 1891).

The most likely connection was through Sir William Logan who was succeeded by Selwyn as Director of the Geological Survey, and was also a founding member of the Art Association. In turn, Notman assigned two of his staff photographers from his Montreal location to accompany the survey: Benjamin Baltzly, and his assistant while on the expedition, John Hammond. Their assignment to the expedition was most likely made based on experience. Hammond had, in his youth, ventured to the gold fields of New Zealand in order to fund his art education in London. Having spent most of his money, he returned to Montreal in 1869 looking for employment. He found it painting miniatures at the Notman Studio.¹³ Baltzly also had what appeared to be an adventurous history. On May 13, 1864 Baltzly was drafted into the American Civil War.¹⁴ Baltzly was mustered in on the Union side as a Second Lieutenant to the E Company of the 169th Regiment of the Ohio National Guard Infantry.¹⁵ The regiment performed garrison duties, but was mustered out by September 4, 1864 due to the illness of many of its soldiers.¹⁶ Baltzly may not have been the hardened military outdoorsman Notman had foreseen.

This arrangement was one that worked well for Selwyn and Notman, but put photographer Baltzly in a double bind to meet the needs and demands of both employers. It would appear that Baltzly met the expectations of Selwyn, who in his *Report of Progress* wrote:

To the zeal and perseverance, often under the most unfavourable circumstances, of Messrs. Baltzly and Hammond, of Mr. Notman's staff, are due the very beautiful and interesting photographic illustrations of the route from Yale to the

¹³ John Hammond, private papers, 2004.12.6, Mount Allison University Archives, Sackville, New Brunswick.

¹⁴ Consolidated Lists of Civil War Draft Registration Records (Provost Marshal General's Bureau; Consolidated Enrollment Lists, 1863-1865), RG 110, National Archives and Records Administration, Washington, D.C. Collection Name: Consolidated Enrollment Lists, 1863-1865 (Civil War Union Draft Records); ARC Identifier: 4213514; Archive Volume Number: 1 of 3.

¹⁵ U.S. Civil War Soldiers, 1861-1865, National Park Service, U.S. Department of the Interior, Washington, D.C. M552 roll 4.

¹⁶ The Civil War – Regimental Details – Union Ohio Volunteers, National Park Service, U.S. Department of the Interior, Washington, D.C.: http://www.nps.gov/civilwar/search-regiments-detail.htm?regiment_id=UOH0169RIN (09/20/2013).

Leather Pass, a complete set of which, comprising 36 views 8 x 10 and 84 stereoscopic views, is transmitted herewith.¹⁷

Selwyn makes it clear that it was well worth the hassle to have a photographer attached to the team. In addition to being beautiful, the photographs were interesting, providing their own layer of depth to the final results of the expedition. He makes over 40 direct references to the photographs in his official reports used to provide a visual description of his written observations and assessments. For example, he writes that the photographs “afford an excellent idea of the general aspect of this elevated region” and “afford a good representation of one of these cedar forests.”¹⁸ Further, Selwyn gives credit to Baltzly for having contributed to the observations of the survey party. For example Baltzly’s photograph *Ice-grooved rocks, Victoria, BC* (Fig. 1) Selwyn writes that, “there are many fine examples of ice grooves and scratches on the rocky shores of the island, some of which, near Victoria, are well shown in the stereoscopic views taken by Mr. Baltzly during our stay there.”¹⁹ For Selwyn the photographs are used to reinforce scientific observations – acting as more than didactic illustrations, but also as visual documentary evidence. A successful photograph was one that was used to visually corroborate Selwyn’s observations as both real and correct. Interestingly, though Selwyn saw usefulness for the photographs in his scientific reports, when Baltzly proposed setting up an official photographic department for the surveys, he was rebuffed for financial reasons:

It would doubtless be... useful... but I have great doubts as regards its success in a financial point of view. It has already been tried here under Sir W.E. Logan’s direction and was found not to work satisfactorily.”²⁰

This indicates that though there are benefits to having a photographer accompany an expedition, it is not an integral part of the team. In other words, the photographs, though useful, are somewhat superfluous to the actual scientific data required.

¹⁷ Selwyn, 19.

¹⁸ Ibid., 70.

¹⁹ Ibid., 53.

²⁰ Library and Archives Canada, RG 45, Vol. 76, “A.R.C. Selwyn to B. Baltzly, Feb 28, 1873.”

That Baltzly was employed by Selwyn for the purposes of illustrations of scientific findings, and by Notman who wanted photographs to sell to consumers at his studio, meant that Baltzly's photographs were immediately disseminated in two different arenas, one of scientific recording and the other of visual consumption. This is not new. Early British-Canadian topographical watercolours are Reid's example of a seminal crossover between documentation, artistic medium and an aesthetic outlook of the Picturesque. Reid also explores this crossover in survey photographs in *Our Own Country Canada*, a seminal work in Canadian art history that sought to explore the unique progression of artistic ideas and works in Canada. In his chapter "Major Landscape Painters and photographers to 1873," Reid talks about the requirements placed on photographer by the survey expedition. Regarding Baltzly, he writes that:

The documentary intent is evident in Baltzly's photographs. He had accompanied the surveyors in order to record the geological features of the land, and to describe in panoramic views the general terrain of the proposed rail route. He also apparently understood that his role should include the chronicling of the journey, the collecting of full evidence of their struggle in the wilderness. The photographs he produced are works of art as well, still fresh with the dynamic force of that landscape he had come to know so intimately, being a part of it, as he was, for almost six months.²¹

Reid focuses on the mood of the photographs and in doing so implies that there is something about the photographs that exists outside the topographical. He suggests that in addition to documentary representation, it was also the photographer's job to capture impressions of the wilderness in their photographs. This, for Reid, places Baltzly's documentary photographs into a dialogue with painting.

The crossover, however, extends much more profoundly than just in connection to painting. Notman was firmly embedded in the artistic community of Montreal, being a founding member of the Art Association of Montreal, and employing many painters in his studio, but he was just as importantly a link in the broader dissemination of photographs to an eager public. In addition to his reputation, what made Notman so prolific in terms of sales of photographs from

²¹ Denis Reid, *Our Own Country Canada: Being an Account of the National Aspirations of the Principal Landscape Artists in Montreal and Toronto: 1860-1890* (Ottawa: National Gallery of Canada, 1978), 150.

his studio was his understanding of what consumers wanted to buy. Joan Schwartz theorizes what such a potential consumer would look for in purchasing the type of photographs Baltzly produced during the expedition, which were sold at the Notman studio upon his return from the expedition. Schwartz posits the idea of the “armchair traveler” writes that:

From the widely held maxims that “seeing is believing” and “the camera does not lie”, it was a short leap of the imagination that allowed armchair travelers to believe they could acquire knowledge through the visual immediacy of photographs. The act of virtual witnessing was made possible by the authority of visual “truth” derived in part from the photograph’s mechanical origins.²²

Developing Schwartz’s understanding of armchair travel in light of Suzanne Zeller’s ideas of natural science. The Canadian landscape during the nineteenth-century was not only caught up in centuries of European philosophical understandings, but also an emerging sense of endeavour, expansion, and identity. If we consider Zeller’s emphasis on the importance of natural science at the moment of Confederation in Canadian history as acts of inventorying and possession, then the notion of the armchair traveler as outlined by Schwartz taps into these acts. By viewing a location the armchair traveler can lay claim to knowledge of that place. Relying on the accuracy of the camera, the armchair traveler is able to identify and categorize the characteristics of that place. The profile of such a visitor, however, must have been quite broad, ranging from the merely curious to the amateur naturalist, and considering the purposes of the survey itself, the professional geologist. It is for these reasons that the photographs Baltzly produced were very important to Notman as a sellable commodity.

Take for example an album of 79 albumen prints held at the Archives of Ontario titled by the archive as “Collection of William Notman and Alexander Henderson photographs,” which nine Baltzly photographs from the expedition. (Fig. 2) The collection was donated to the archives by Mrs. Basil Eyre in October 1972, having been initially compiled by Mrs. Eyre’s mother during her visit to Canada from Dublin, Ireland. The titles written by Eyre correspond most

²² Joan M. Schwartz, “The Geography Lesson: Photographs and the Construction of Imaginative Geographies,” *Journal of Historical Geography* 22,1 (1996): 33.

closely with the titles in the Notman Picture Book.²³ For example, “View at Great Bend of Thompson R. Clear Water B.C.” (Fig. 3) to the Notman Picture Book title “View at the Great Bend of the N. Thompson River 21 mls Above Clear Water, B.C.” This indicates that the compiler would have most likely selected the photographs from the Picture Book at the Notman Studio during her visit to Montreal, and that the photographs she chose were based on their visual interest, like cascades and river bends, and on their intriguing scenes of a very new and strange place, like those of camps and canoe portages. Interestingly, Eyre left out the more technical elements of the titles like height and distance. As with Alan Trachtenberg’s study of the naming of Timothy O’Sullivan views, the naming of Baltzly views gives insight into the multiple functions of the photographs – sometimes reflecting the more technical, scientific usage, and at other times their renaming and simplification to views of scenery.²⁴

CHARLES HORETZKY AND THE CANADIAN PACIFIC RAILWAY SURVEYS

(1871-1879)

In June 1871, as Baltzly was beginning his expedition with the GSC, Charles Horetzky was recently out of work, having been dismissed for uncooperative behaviour and overdrawn accounts from his position as an accountant for the Hudson’s Bay Company. In search of work, Horetzky used personal connections to Sir Charles Tupper in appealing to Sir John A. Macdonald for the position of engineer-in-chief in the construction of the railway. Instead, he

²³ The Notman ledger is the filing and numbering system used for every image that belonged to the Notman Studio. The negative would be inscribed with a number, as would any prints, and that number recorded in the ledger, and the negative placed and stored in a numbered envelope – useful should a customer come in and demand a reprint of a particular photograph. The Notman Picture Books were arranged and captioned albums that Notman had on display in his studio with the idea that customers would peruse the Picture Book and purchase photographs that they saw there in. Baltzly’s work on the Geological Survey was arranged in such a picture book.

²⁴ Trachtenberg suggests that Timothy O’Sullivan’s photographs have been narrated in several ways. While O’Sullivan was trying to fit them into a survey style, Clarence King was using them in personal, scientific and commercial arrangements. Trachtenberg states that, “with a change of title or caption the survey photographs were freely adapted to sundry uses. This flexibility confounds the question of their precise role within the surveys. The fact is that they probably did not have a precise scientific role. They served purposes as varied as the subjects they depict.” Alan Trachtenberg, “Naming the View” in *Reading American Photographs: Images as History, Mathew Brady to Walker Evans* (New York, N.Y.: Hill and Wang, 1989), 127.

was attached to the survey as a photographer to a Canadian Pacific Railway Survey expedition party led by engineer Frank Moberly to examine a possible route for the railroad from Fort Garry through the Rockies. His job under Moberly was not only to assist in obtaining information about the possible passes through the Rockies, but also to take “views of objects of interest illustrative of the physical features of the country.”²⁵ This assignment was one that Horetzky felt was far below the qualifications of his training in the sciences, which was self taught through a voracious appetite for reading, and his skills with numbers, demonstrated in his rise through the ranks as an HBC accountant. Horetzky was seen as having contributed much value to the survey recordings with the photographs he produced, like *Camp at Elbow of the North Saskatchewan*, 1871, (Fig. 4) and was almost immediately commissioned upon his return by Fleming for his ongoing surveys for the CPR route through the Rocky Mountains.

Fleming, in both his moment and ours, is one of the most notable Canadian figures in nineteenth-century science. Along with his appointment as engineer-in-chief of the CPR from 1871, he was the engineer-in-chief of the Intercolonial Railway between 1867 and 1876; was a founding member of both the Royal Society of Canada and of the Royal Canadian Institute; and, left an enduring legacy of both standardized rail gauge and time zones. Despite his initial excitement of having a photographer attached to his 1872 survey, neither photography nor Horetzky were mentioned in any of Fleming’s *Report of Progress on the Explorations and Surveys* between 1872 and 1877. It wasn’t until his 1877 *Report on surveys and preliminary operations on the Canadian Pacific Railway to January* that Horetzky receives his first official mention. By 1877 the pressure was on to complete the railway in the promised ten years. With time running out, the expedition members were often broken into smaller divisions sent to explore a particular area or possible route. Fleming must have had some faith in Horetzky, having kept him on with the expedition for several years and also assigning him to head divisions. For example, in assigning teams to explore the region from the French River to the north shore of Lake Superior he writes that: “This was put into three divisions; Mr. T Ridout was

²⁵ Library and Archives Canada, MG 29, A 8, Vol. 64, 13 “Sandford Fleming to G.E. Cartier, June 12, 1871.”

placed in charge of the eastern division, Mr. Charles Horetzky of the central, and Mr. J.L.P. O'Hanly of the western division.”²⁶ This arrangement was again described in his 1880 report:

Judging from our observations on this occasion, and what we had previously seen of the Skeena Valley by looking north-eastwards up it from the Forks, there seemed to be a fair promise of a practical line being found by these valleys. Mr. Horetzky having been selected to make a detailed examination of this part of the country, we pushed on without delay.²⁷

This assignment of leadership roles means that Fleming had trust in Horetzky to do more than just photograph. Despite the fact that Horetzky lacked any formal scientific or engineering education, it was probably Horetzky's organizational abilities and experience managing Hudson's Bay Company outposts that Fleming saw as valuable.

In addition to these responsibilities, Horetzky was to continue with his primary function as photographer. He produced a series of photographs between 1872 and 1874 that, as a result of his meticulous work and attention to detail, were included as supplemental to the primary work of the survey engineers. However, the status of the topographical photograph, for all of its attachments to science, was not considered a science, nor were its practitioners scientists. It is here that Horetzky and Baltzly act as such insightful foils to one another. Though Horetzky's photographs are visually compelling, they are not infused with the Sublime or with beauty by the photographer in the way that Baltzly's were. What remains interesting, is that despite the scientific intentions of the photographer, the images Horetzky produced are no less visually captivating. Horetzky's frustration at being relegated to the role of photographer could not have outweighed his desire to do a fine job at the tasks he was assigned. Horetzky produced photographs of buildings, bridges, forts, landscapes, and local people with great technical command of perspective, composition and depth. His photographs also used very distinct visual strategies. Take for example, many of the photographs Horetzky produced in the Skeena area, that use a visual strategy of whiting out superfluous detail in the sky in order to show the crests

²⁶ Sandford Fleming, *Report on surveys and preliminary operations on the Canadian Pacific Railway to January 1877* (Ottawa: MacLean Roger & Co., 1877), 358

²⁷ Sandford Fleming, *Report and documents in reference to the Canadian Pacific Railway* (Ottawa: MacLean Roger & Co., 1880), 41

of the mountain range more clearly. (Fig. 5) This strategy is also seen in the work of American Timothy O'Sullivan. This type of visual strategy is one that was not used by Baltzly, who often did the opposite – inserting clouds into a hazy sky to create a more appealing photograph.

Former archivist at the National Photography Collection of the public Archives of Canada (now library and Archives Canada), Andrew Birrell, in his lengthy study of Horetzky and the events of his time on the CPR surveys, wrote “only Horetzky’s photography has saved him from oblivion since his death in 1900. This would doubtless have upset him had he known it.”²⁸ Indeed, Horetzky’s topographical work was discounted by Fleming and the other engineers of the CPR, though that did not stop Horetzky from publishing quite prolifically on his findings. In 1875, Horetzky submitted a report from one of the small expeditions that he had led, which contained an engineering opinion his supervisors, believed he was unqualified in giving. Marcus Smith, deputy engineer-in-chief and chief resident assistant for the CPR, edited the report and sent a rather scathing note to Fleming explaining his need to edit Horetzky’s report:

You will have to explain this to Mr. Horetzky, for he is such a crazy, conceited fellow, he will think (and publish) that his genius is being repressed, if he has not his say, although I may inform you that, except his photograph, his work is all together worthless and cannot be laid down on the general map.²⁹

It is apparent that Smith did not consider Horetzky’s engineering work as having value, but he also appeared to see no value in the contribution of the photograph to the scientific work of the survey party. In the 1877 report Smith describes Horetzky’s principle role as: “to take photographs of the canyons and other views of general interest.”³⁰ Perhaps Smith had some sway over Fleming, whose official reports contained no reproductions of photographs, much unlike his 1876 report on the Intercolonial Railroad, *The Intercolonial: A Historical Sketch of the Inception, Location, Construction and Completion of the Line of Railway Uniting the Inland and*

²⁸ Andrew Birrell, “Fortunes of a Misfit Charles Horetzky,” *Alberta Historical Review* vol. 19 no. 1 (Winter 1971): 25

²⁹ Library and Archives Canada, Fleming Papers, “S. Fleming, Letter to the Secretary of State, 24-25”

³⁰ Fleming (1877), 165

Atlantic Provinces of the Dominion, with Maps and Numerous Illustrations, which not only included photographs, but made use of them as visual, schematic diagrams.

By 1880 Horetzky took his ideas to the public, publishing a 76 page pamphlet titled *Some startling facts relating to the Canadian Pacific Railway and the North-West Lands, also a brief discussion regarding the route, the western terminus and the lands available for settlement*. The pamphlet was put together and disseminated publically in order to inform those who may have investment in the construction of the CPR, as well as the broader Canadian public, of an ulterior choice in the route across the Rocky Mountains. The pamphlet is a collection of excerpts from official survey reports and correspondence that Horetzky is using in order to compel readers to the value of the Pine Pass, which Horetzky saw as the best option, as opposed to the Yellowhead Pass, which was put forth by Sandford Fleming and was, at the time of this publication, accepted by the Mackenzie government. Horetzky refers to photography only once on page 49 referring to a photograph he took of Beacon Hill in order to illustrate that the high cliff would prevent attack. In lieu of containing any images or maps, the pamphlet is replete with calculations and statistics. Though Horetzky was assigned to the survey expedition as a photographer, he felt that his qualifications extended to that of engineer, stating in the prefatory remarks that “the writer claims a special practical knowledge of the British Columbian coast, from the Alaskan boundary line, southwards, and had, therefore, no hesitation in giving his views to the public.”³¹ Horetzky, in no subtle manner, takes digs at Fleming, suggesting that he has more knowledge and experience “than perhaps any Engineer on Mr. Fleming’s staff.”³² Horetzky was notoriously boisterous when it came to his opinion, not only inundating everyone from Fleming to the Prime Minister with correspondence, but also in his publication of pamphlets. His other pamphlets include: *The Northwest of Canada* (1873) and *Canada on the Pacific* (1874). In a somewhat inglorious victory, Fleming’s Yellowhead Pass was later rejected in favour of another route.

What is revealed by reading Horetzky’s pamphlet is the idea that not all photographers approach the medium as something that carries with it a personal imprint. Horetzky was

³¹ Charles Horetzky, *Some startling facts relating to the Candian Pacific Railway and the North-West Lands, also a brief discussion regarding the route, the western terminus and the lands available for settlement* (Ottawa, Ont.: The Office of the “Free Press,” Elgin Street, 1880), 4

³² Ibid.

untrained as an artist. His writing confirms his avoidance of any cultural connection. It is clear that Horetzky viewed himself as an able engineer. If he had the qualifications and education, which he did not, he may have been considered one. It was only through family connections and favours that he was able to gain a position on a survey, knowing he was capable of much more must have led to his frustration, the outcome of which was the production of his pamphlets. The pamphlet has been used by Birrell to describe Horetzky as a misfit. But, there is great value to be gained from Horetzky beyond his story as an eccentric, in that we gain a key example of the attitude of scientists and engineers towards the role and function photographs within those disciplines. The value of Horetzky's publications lay precisely in the relationship between Horetzky and Fleming their views on the status of the photographer – that the photographer was not considered to have the scientific abilities of an engineer whose observations were not taken seriously by the survey members. Such an idea throws a wrench into any argument that nineteenth-century photography was an objective science with all the training and privilege of the scientific disciplines

Photography, as other types of visual outputs throughout Canadian history, was used by the survey leaders in the rubric of their own requirements and agendas. Selwyn, for example, did see a level of scientific value and accuracy in the photographs. But, it is also apparent that those requirements were not purely scientific in motivation. In the Confederation era, photography took on an expressive quality about both progress and the landscape. In the case of Baltzly, the photographs exceeded their initial function as documentary not only because Baltzly himself felt compelled by the landscape, or that he felt the demands of Notman for sellable pictures, but also because of the demands placed upon him by the conditions of the survey, which required, to varying degrees, some additional texture to the photographs that could be used for popular publication and promotion of the projects. Further, the fidelity of the photograph to nature is a criteria that is not only scientific, but also a formal, aesthetic choice. People flipping through the *Canadian Illustrated News* and collecting photographs for personal albums wanted to see the oddities and magnificence of an unexplored nature and wilderness for all it really was. Painters wanted to capture the essence of this untouched wilderness as well and working from photographs was the way to gain access to these places.

Horetzky further complicates the role of photography. Making photographs not because of a connection to the wilderness, or with the motivations of encountering a spectacular view, but

because it was a requirement of his job with the survey. Fleming, who did not consider the photographs that Horetzky produced as integral scientific illustrations, instead saw photography more in line with the understandings of Notman, who turned photographs of the landscape into a sellable commodity. In this light, photography became a cultural mirror, reflecting of attitudes and understandings of the landscape and the idea of Canada itself. Created at a time when Canada was still in gestation and by photographers whose individuality and unique perspectives are rooted in coming to grips with the new nation, the photographs are a key peg in Canadian visual traditions linked to both history and to art history. This link exists not only in the photographs' relevance as topographical survey documents produced by the Canadian government, but also as markers of a specific type of visual interest in the landscape



(Fig. 1) Benjamin Baltzly, *Ice-grooved rocks, Victoria, BC*, 1871, 10 x 8 cm.

McCord Museum I-69912.1



(Fig. 2) Collection of William Notman and Alexander Henderson photographs,

Mrs. Eyre Album, page 12, Archives of Ontario F 4357



(Fig. 3) Benjamin Baltzly, *Great Bend, North Thompson River, near Clearwater, BC*,

1871, 10 x 8 cm. McCord Museum I-69960.1



(Fig. 4) Charles Horetzky, *Camp at Elbow of the North Saskatchewan*, 1871, 11.3 x 18.7 cm.

Library and Archives Canada PA-009176



(Fig. 5) Charles Horetzky, *Canadian Pacific Railway Survey. Forks of the Skeena, Rocher deboulé Canon, suspension bridge, and ranch*, 1872, 11.3 x 18.7 cm.

Library and Archives Canada PA-009161

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Confederating Alberta's Resources:*Survey, Catalogue, Control***Gabrielle Zezulka**

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Introduction

From the 1850s through to the creation of the Province of Alberta in 1905, both Rupert's Land and the North West Territories were considered a primary revenue source for the projects of Confederation. Railway construction, infrastructure, and campaigns to settle the West were all costly propositions, and the Interior lands were seen as the reserve bank that would fund all of the Dominion Government's plans. It was not until 1868 that Canada gained administrative and executive control over the territory in question, but within just a few years, the land's resources were surveyed, catalogued, divided up, and sold at subsidized rates to the would-be farmers, loggers, and miners who would build the Canadian nation and its export economy.

Prior to Canada's annexation and control of the Interior, there was a heated, decade-long debate in the British Houses of Parliament over the potential value of the territory. On the one hand, the Hudson's Bay Company, which had governed the lands for nearly 200 years, wanted the British government to renew its charter and fur trade monopoly, and its surveyors therefore reported in unequivocal terms that the lands were useful only for trapping and were unsuitable for Canadian settlement. On the other hand, Colonial agents and Canadian businessmen argued that the HBC's monopoly impeded fair trading practices and colonial expansion, and therefore tried to convince the British government that the prairies were hospitable, productive, and ideally-suited to settlement, farming, and resource extraction.

When the Interior lands were given to Canada a year after Confederation, the Dominion Government wasted no time in sending parties to physically lay out the grid of survey mounds that would literally and symbolically mark its administrative and executive control. Underlying the survey process was an economic motivation to define and catalogue the land's resources, evidenced by the land-use designations assigned according to each surveyed plot's most easily

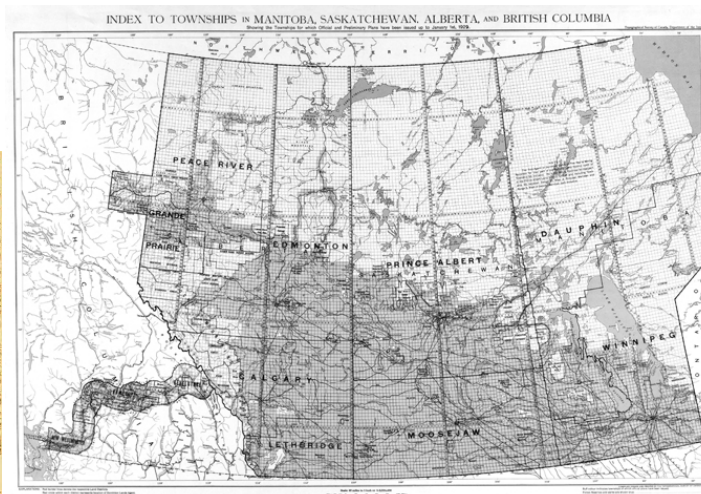
identifiable exploitable feature: nutrient-rich soils were set aside for settlement and agricultural land, forested areas were reserved for timber limits, mineral- and coal-bearing lands were slated for mines, and when a tract of land could not be easily turned to a profit—if it was deemed infertile, or if it consisted of forested mountain slopes that would be too expensive to harvest—it received the designation of waste land.

Just as Confederation led to the predominance of the economic valuation of land, the land's potential economic productivity informed the desire of the Canadian government to control the North West Territories and Rupert's Land. As American spur lines started bringing American settlers northward, potentially threatening British control over the gold fields of BC, the farm lands of the boundary country, and the fur-trading lands of the interior, the government recognized that these incursions could jeopardize the country's resource supply and ability to have an all-Canadian trade route. Long before any large-scale settlement occurred, the Dominion had made rough estimates of the potential revenues that could be generated and hoped that the lands would produce enough revenues to offset the costs of administering them. The government reserved for itself all economically productive lands and counted on them to finance its growing debts, including the £300,000 loan from the British government that was used to pay the HBC for the relinquishment of its rights annexed the land. It then asserted its ownership through the act of surveying, cataloguing, and subdividing, and began in earnest to work on the colonization and infrastructure for a new, confederated nation.

The Pre-Confederation Period: 1670- 1867

In 1670, a Royal Charter established the HBC's exclusive trading rights in Rupert's Land, encompassing all of the land within the Hudson Bay watershed. The Company enjoyed its monopoly on the fur trade relatively unhindered by competitors until the North West Company (NWC) began making westward trade missions, seeking productive lands accessible through waters that did not drain into Hudson Bay, in the 1770s. The competition stimulated a need for extensive geographic knowledge in the interior of Rupert's Land and the North-West Territories, particularly of river drainages, and thus began a flurry of map-making surveys by fur trade company surveyors and emissaries. Both the HBC's charter and the development of maps at the time offer an important counter-point to later boundary- and survey-marking practices, for while Rupert's Land was delimited by the natural contours of the watershed, and map-makers at the

time extended their geographic knowledge along major rivers and portage routes, the Dominion Land Surveys that would govern the administration of Canada were conducted in straight lines, with virtually no recognition or consideration for the geological features that impeded linear progress, acting as a metaphor for the government's desire to compartmentalize and inventory its resources according to rigid notions of utility.



- Aron Arrowsmith's 1795 map based on surveys conducted by Philip Turnor in 1790.
- Government of Canada's 1909 index to township surveys

In 1821, after several years of open conflict, the NWC merged with the HBC. In both 1821 and 1838, the British government extended the company's charter for 21 years, and expanded the land over which it had jurisdiction so that it included the Arctic, Pacific, and Hudson Bay drainages, encompassing land from the Atlantic to the Pacific coast. By the time the HBC applied for a third renewal of its charter in the late 1850s, the perception of North American lands had changed, and several interested parties challenged the HBC's claim to the territory. The discovery of gold in New Caledonia in 1857 prompted the British government to establish the Crown colony of British Columbia in 1858, to protect its interests in HBC territory. Meanwhile, in the Province of Canada, the seeds were being sown in periodicals and political papers for a formal Canadian Confederation, and businessmen interested in colonial expansion

began advocating for Rupert's Land to be given over to the Colonial administration.¹ In addition to these political pressures, in the early 1850s the Métis had begun lobbying for self-rule through emissaries to England, and parties interested in the fur trade levied accusations against the HBC for unfair business practices.

The Secretary of State for the Colonies, Henri Labouchere, noted the extent of the HBC's *de facto* rights and power—unchallenged administrative and executive control throughout a vast watershed—in 1857:

The Hudson's Bay Company claim . . . rights of proprietorship, exclusive trade, taxation, and government over all the regions under British dominion watered by streams flowing into Hudson's Bay. ... The Hudson's Bay Company also claim, and actually exercise rights of exclusive trade, although not the ownership of the soil, over all the territory [from Labrador to the Pacific coast] comprised in a certain license to trade. (Draper, sn)

As a major employer and builder of trading posts and small settlements, the HBC provided a form of inexpensive colonial administration of the vast land, which in principle served British interests. However, Canadians took issue with the HBC's right to print their own currency, collect taxes, and govern vast lands, with no accountability to the Colonial Office. This seemed unfair to the Province of Canada which had been granted a Legislative Assembly but no executive control over the lands it administered. The inequality in rights must have seemed especially egregious for those who had already begun to see the interior lands as central to the emerging nation's identity. Indeed, as noted by the Executive Council, the consensus among Canadians in 1857 was "that the western boundary of Canada extends to the Pacific Ocean" (Draper, n.pag).

¹In 1859, Canadians Alexander Tilloch Galt, George Etienne Cartier, and John Ross formally presented in the British Parliament their project for Confederation, but prior to this, in 1857, Étienne Paschal Taché began actively promoting the idea in a series of columns in the *Courrier du Canada*.



-Hudson's Bay Company currency: 5 Shilling Note

In an address to the Imperial Office in May of 1857, Andrew Freeport, a merchant whose arguments in favour of settlement were typical of those presented to the Houses of Parliament, described the HBC Charter as a “national evil,” and “an infringement of the rights of the people” that is “diametrically opposed to the interest of every British subject” (1). Making a similar argument with less dramatic language, Chief Justice Draper of Upper Canada recommended a protocol to settle the HBC charter question that might offer some protection to the Province’s interests:

I have suggested a reference to the Judicial Committee, because I think its opinion would command the ready acquiescence of the inhabitants of Canada as to their legal right, and because I believe they entertain a very strong opinion that a considerable portion of the territory occupied or claimed by the Hudson’s Bay Company will be found to lie within the proper limits of that Province. (Draper sn)

Underlying both comments is the premise that the settlers—by virtue of being British colonists—deserve the right to engage in trade throughout the land, if not also to form their own governments, taxation regimens, and land laws. While in itself not an extraordinary assumption, this stands in stark contrast to the ways in which Indigenous land rights are not recognized when the numbered treaties of the prairies are signed a decade later.

Freeport echoes Canadian Confederationists’ sentiments when he bemoans the HBC’s priorities; it was not developing resources or encouraging settlement or agriculture. Freeport argued that the HBC’s unique focus on the fur trade and its disinterest in making a concerted effort to encourage settlement, particularly amongst the indigenous population, made it a poor land manager for Britain:

Have the Company during the 180 years of their sway, formed any plan, or taken any steps to induce these wretched people, the instruments of their enormous gains, to adopt a more settled and comfortable mode of life? Have they sought to introduce some knowledge of agriculture, supplied seeds, tools, or animals? (4-5)

Of course, it was not in the interests of the HBC to encourage large-scale settlement or agriculture, for wherever trees were felled and land cleared, the HBC lost potentially fur-bearing lands.

What Freeport calls for as a remedy to the situation is “imperial policy which shall administer these vast regions for the best advantage of ourselves, *i.e.* of the nation at large, and of mankind in general [as opposed to the exclusive advantage of the HBC]” (6). Completely disregarding potential Indigenous claims to the land or its advantages, Freeport takes for granted that agricultural life is economically and ethically desirable for settlers and indigenous people alike. He also suggests that the HBC’s monopoly threatens Britain’s interests by blocking the “energy and capital of English colonists” which will result in untrapped “fur animals that may increase and multiply” until the Americans then settling Minnesota decided to “swarm over the boundary line, and without impediment occupy, and annex, the vacant domain at their pleasure” (6). Without a boundary line or survey markers on the landscape, he suggests, the land could be claimed by any settler; and without Canadian exploitation of the resources available, the resources would multiply and become too great a temptation to American neighbours. Agriculture and settlement would combat the threat of an American takeover, and would better secure the interests of British colonists.

This is not simply an argument for Canadian control of the land, but also an attempt by Freeport to discredit the HBC, whose “tone at present is to represent the country as being unfit for colonization [and] incapable of cultivation, and the climate such as no one would encounter who was not paid for it” (7) in order to secure the renewal of its charter in land that is good for trapping but is otherwise “useless.” The suspicion that the HBC was misrepresenting the land value is corroborated by a comparison of the company’s attitude in 1857 with that of the Governor of the HBC, Sir George Simpson, in 1847, when had published his *Journey Round the World*. In the latter, he “frequently breaks out in admiration of the splendid country through

which he passed” (Freeport 7), and describes the landscape as hospitable, beautiful, easily traversable, and so abundantly fertile that food waste was common.

In the light of the competing interests in Rupert’s Land, the British parliament struck a Select Committee of the House of Commons 1857 to investigate the HBC’s practices and to assess the land’s proper value. Captain John Palliser, a sportsman who had greatly enjoyed a hunting trip to Rupert’s Land a decade earlier, volunteered and was given a mandate to head up a survey party on behalf of the British government. The British Treasury financed Palliser’s expedition with the understanding that it “would not bear a political character, being mainly directed to scientific objects,” but the mandate given to Palliser was far more utilitarian than scientific in that it required him “to give a short sketch of the physical features of the country explored, with especial reference to its economic value” (Palliser 1865, 3), as well as “to ascertain whether one or more practicable passes exist over the Rocky Mountains within the British territory” (5). Regardless of the caveat the Treasury gave, Palliser’s reports were most definitely political and were integral in helping the British government to eventually decide that the HBC’s exclusive trade and proprietary rights would not be renewed.

Palliser’s explorations lasted for three seasons, from 1857-59, and his findings were presented to the British Houses of Parliament in 1859, 1860, 1863, and 1865. Although Palliser has since come to fame as the surveyor who felt the Alberta prairies were unsuitable to cultivation, he mostly gave favorable reports of the land’s economic value, including this rather enthusiastic view of the gold fields of British Columbia:

The whole of the country which I have travelled from the Columbia to the westward is auriferous; there was hardly a creek of any importance in which more or less gold cannot be washed. (Palliser 1865, 16)

Given his disposition to be generous in evaluating the land’s value, his opinions of the southern prairies as inhospitable and unsuitable for the railway are worth noting: “In the central part of the continent there is a region, desert, or semi-desert in character, which can never be expected to become occupied by settlers” (4). This desert is described further as “forming a triangle, having for its base the 49th parallel from longitude 100 to 114 W, with its apex reaching to the 52nd parallel of latitude” (7). This area, now known as Palliser’s Triangle, would become the subject

of heated debate a decade later, when John Macoun, an amateur botanist, saw the area after an unusually wet spring, and declared it a fertile and entirely appropriate route for the railway.

The utilitarian nature of the observations Palliser was to make take a curious turn in his observation of indigenous use of fire in the area north of the Triangle:

A large portion of fertile country, denuded of timber, separates the arid region from the forest lands to the north, and the habit which the Indian tribes have of burning the vegetation has, in fact, gradually improved the country for the purpose of settlement by clearing off the heavy timber, to remove which is generally the first and most arduous labour of the colonist. (7)

While this passage shows the utilitarian lens common to Palliser's other observations, namely his desire to see the land in terms of its habitability, he also considers the Indigenous people's land-use practices in terms of their effect on the potential site for the expansion of empire.

Overlooking the burning regimen as a deliberate management strategy for indigenous land use, he describes the practice as though the indigenous people are deliberately facilitating the settlement of colonists in their lands.

While the British Government awaited reports on Rupert's Land, the Legislative Assembly of the Province of Canada, anxious to exert some control over the lands it saw as key to its economic success, also struck a Select Committee and sent out a survey party, headed up by former HBC officer, George Gladman; John Arnot Fleming, the brother of Sir Sanford Fleming; and Henry Youle Hind, an amateur naturalist with a teaching appointment at the University of Toronto. The instructions for the party were given by Étienne Paschal Taché, the Commissioner of Crown Lands, and also a well-known promoter of Confederation. Taché's requests to the survey party were typical of those given to other survey parties:

You will note the kind and quality of the soil and its fitness for agriculture, the kinds of timber and their commercial value; the general nature of the face of the country, whether level, rolling, broken, hilly, or mountainous; the marshes, swamps, and meadows, the lakes, with a description of their banks, and whether their waters are deep or shallow, pure or stagnant, the courses, widths, and depths of the streams, with their rapids and falls, estimating the difference of level where an instrumental survey is not required; the

kind and localities of the fixed rocks ... and the dip and strike of the rock, if stratified.
(Eyre 12)

The focus here is primarily on the broad economic values of the land's agricultural, forestry, and mining potential, and on the general navigability of the watercourses and land routes. In other words, it was meant to be a preliminary scoping of the route for further settlement and development.

Hind, like Palliser, had volunteered for the job, and though he had no formal training as a geologist or surveyor, his vocal advocacy for the expansion of Canada into the Hudson Bay territory since the early 1850s earned him the position. His reporting, however, showed that the land he encountered, or perhaps the influence of his survey leader who had ties to the HBC, seriously dampened his optimism about the agricultural potential of the interior:

Terms [such] as 'open prairie' ... are not infrequently employed in describing ... the vast unpeopled wastes, —often beautiful and rich, often desolate and barren,—of the great North-West. [These] are sometimes both physically and geologically wrong, and serve to convey the impression that the large areas to which they are applied possess, if not a fertile, at least not an unkindly soil or an arid climate, rendering husbandry hopeless. Alluvial areas are usually the best and richest tracts, and while the term may with strict propriety be applied to the bottoms of the Assiniboine [sic] or parts of the Saskatchewan Valley, it would be wholly inapplicable to much of the country on their high prairie banks, and to nineteen-twentieths of the prairies or rather plains of Rupert's Land. (Hind 1859, 4)

As was conventional at the time, Hind uses the term “wastes” to designate any unsettled or “unpeopled” land, even if it appears “beautiful and rich,” implying that any land not explicitly contributing to the nation's coffers is a wasted opportunity. Clearly, in his view, the large majority of the interior lands are not worth trying to transform into something other than waste lands as they do not seem obviously suited to agriculture or other industry.

In the midst of the debates in the Houses of Parliament over survey reports and private petitions, the HBC started selling subscriptions for capital stock in the company. In 1863, the International Financial Society (IFS), a group of British and American investors led by Edward Watkin, a British railway magnate, acquired a controlling interest in the HBC. Knowing that the

British government was becoming convinced of the HBC's lands' value to Canada, the IFS expected to make substantial profits by selling the vast lands that were becoming central to the Dominion's expansion plans. Shareholders attempted to sell the HBC territories in 1866, but Britain had no interest in retaining jurisdiction over the land, and the United Province of Canada disputed the legality of the Company's land rights and did not have the means to pay, regardless. The matter was finally resolved during the negotiation of the 1867 British North America Act and the 1868 signing of the Rupert's Land Act, through which the HBC relinquished its rights to the British government in exchange for 1/20th of all lands surveyed in the interior lands, as well as financial compensation. The British then loaned Canada the funds to pay the HBC and signed over the administration of the lands to the newly-formed Dominion.

The Confederation Period: 1867-1905

The 1867 British North America (BNA) Act, based on the principles of "peace, order and good government," gave the Dominion the right to make land laws and to shape the legally proscribed relationships between Canadians and Canadian lands. Tellingly, only those who owned profitable property—and who thereby had an economic relationship to the land—were eligible to vote and participate in the process of creating this "good government."² In principle, the BNA Act also allowed for the extinguishment of Native title, subject to the conditions of the Royal Proclamation of 1763 which necessitated the negotiation of treaties before large-scale settlement could occur. The land laws that would soon be enacted ensured that only those settlers who "proved up," or farmed, the land would be granted continued ownership (otherwise their land rights were revoked), and thus the Dominion's electorate included only people who held their property under Lockean principles of ownership, based on Protestant work ethics and the belief in agricultural production as the pinnacle of land-use.³ There is a clear double-standard here in

² Though voting eligibility rules changed frequently, at the time of Confederation, an individual had to own his land, free of all duties and rents, and had to generate from this land a minimum annual revenue of 40 shillings, or £2 sterling.

³ In *Two Treatises of Government*, John Locke states that "[a]s much land as a man tills, plants, improves, cultivates, and can use the product of, so much is his property. He by his labour does, as it were, enclose it from the common" (118).

that though the Royal Proclamation recognized Indigenous land rights in principle, neither it nor the BNA Act recognized Indigenous peoples' rights to vote based on their relationships with the land, regardless of whether they made money through trapping on the land.

The Dominion Lands Act (1872) set up the legal framework for the division and allocation of crown lands to Canadian settlers and ensured that both government agencies and settlers would be able to identify the parcels of land upon which farms and homesteads were to be established. This is the first piece of legislation to address the government's intended uses for crown lands, and it clearly dictates the utilitarian value attached to the North West Territories. As the Act dictates that settlers must harvest a percentage of their land yearly, the primary usefulness, hence implicit value, of Dominion Lands in this legislation is their potential for agriculture. Furthermore, in Clause 33 of the Act, the phrases "proof of settlement and improvement" and "proof of settlement and cultivation" are used interchangeably to denote acceptable grounds for which a Dominion Lands Agent would grant a settler proprietorship ("Dominion" [1872] 60; 61). These phrases, by equating cultivation and improvement, suggest that cultivation, like all modern improvements, is desirable, natural, and inevitable. Clearly in line with the Lockean principle of establishing ownership of land through one's own labour, the Dominion Lands Act prescribes an extractive, utilitarian relationship between would-be settlers and the land they wish to possess. In contrast, the Act also dictates that dominion lands that hold lucrative resources, including any land that contains mineral deposits of value or large amounts of timber, are withdrawn from the jurisdiction of the Act and are held in trust by the government for "the purpose of the Dominion." The latter clause was used to retain total control over resource extraction and revenues until 1930, a quarter of a century after Alberta became a province, when finally the western provinces were given partial control over the resources in the lands they administered.

In 1872, on behalf of the Dominion Government, George Munro Grant and Sir Sanford Fleming surveyed potential routes for the transcontinental railway and proclaimed the project not only feasible, but entirely in line with the Dominion's expansionist goals:

We are satisfied that the rugged and hitherto unknown country ... is not, as has always been represented on maps ... impracticable for a Railway; but entirely the reverse; that those vast regions ... once pronounced worthless, are rich in minerals beyond

conception... and that for the development of all this wealth, only the construction of a Railway is necessary. (Grant 353)

Here, the understanding of the geological constitution of the country directly informs the author's extractive view; minerals exist to be mined, and only the railway, the construction of which is unquestionable necessary and appropriate, will allow for the land's full potential to be realized. Curiously, though Fleming concurred with Palliser's opinion of the area between Manitoba and the Rocky Mountains, along the American border, was "arid and unfavourable for agriculture" (1874, 8), when the Dominion started leaning towards the more southerly route, closer to the American border, but also far more expensive to build because of the steep grades through Roger's Pass, Fleming acceded that it was an acceptable route, too.

The Department of the Interior was created in 1873 by the Dominion Government to further resolve the question of how best to gather data on the North-West Territories, and to assert administrative control over their natural resources. The primary responsibility of the department was the "incorporation of the largely unsettled areas of Canada into John A. MacDonald's [sic] National Policy, which envisioned an integrated nation from sea to sea" ("Provision" n.pag.), and this integration was organized under extractive principles. Macdonald's National Policy aimed to develop the country's economy primarily through its tariff policies, but also, and more importantly for the discussion at hand, it aimed to encourage the development of the country's export resources, especially wheat and timber, through the construction of a transcontinental railway and through a massive immigration campaign that aimed to populate the interior lands with farmers.

The Department of the Interior was responsible for conducting the surveys that transformed the interior lands, previously considered "vast wastes" into profitable repositories of natural resources, or, as Sir John A. Macdonald phrased it, so that wastelands could be "brought into usefulness" (Debates 1887, 223). Concomitant with the cataloguing of resources came, in an administrative sense, control of the inventory it had surveyed. While most lands were slotted neatly into parcels for mining, agriculture, or forestry, the surveyed plots which lay in the inaccessible reaches of the Rocky Mountains remained useless in the government's eyes until the CPR was built and ushered in the first wave of the Western Canadian tourist industry. With the advent of the railway, Rocky Mountain waste lands discursively became "wilderness areas," and

even those lands which had been relatively unprofitable or inaccessible to natural resource developers grew in appeal for alpinists, amateur and professional naturalists, and adventurers.

The one surveyor who most shaped Dominion land policy was John Macoun, who as the staff naturalist for the Geological Survey of Canada, and was one of its assistant directors. He was never formally trained, but was an enthusiastic collector of natural specimens, and saw it as his duty to provide data that could be used to support the expansion of the Canadian nation. His reports, however well-intentioned, frequently contained “monstrous generalization” about the suitability of the North West Territories for wheat production, using meteorological data from one place to represent the vast territory (Hind 1883). Through numerous letters to the Minister of Interior and other government officers, he promoted the western prairies incessantly. Making his arguments align with Macdonald’s National Policy, Macoun emphasized the export power that could be wielded if only Canada would settle the interior: “England, in Canada, possesses a country that would make her independent of the world. We can, if need be, raise in the future all her hemp, flax, beef and wheat, and still have immense tracts of land untouched” (Macoun 1880, 4).

Many of Macoun’s contemporaries knew that his reports were unreliable. His superior, Lindsay Alexander Russell, deputy minister of the interior, called him “a good specialist and honest fool outside of that” (Waiser n.pag), and many others publicly challenged him, including Henry Youle Hind, who believed it was Macoun’s objective “to distort and magnify the physical features of Manitoba and the North-West Territory for the purpose of inducing immigration, or disposing of property in Land, or shares in Companies” (Hind 1883, 4). Hind also suggested that Macoun and others responsible for the publication of misleading information were doing so to convince settlers to do the hard work of clearing the land but then, when faced with the reality of a few seasons’ hardships, would give up their cleared land for a fraction of its original price, and after the initial work had been done (Hind 1883). The errors in Macoun’s reports were not only unethical, Hind argued, but also potentially criminal:

I have ascertained that Mr. Macoun has, in numerous other instances, introduced in to his work grossly misleading meteorological data ... [and these] transgressions far exceed the sins of a mere charlatan. Considering the widespread influence for harm to emigrants, investors, the public and myself his unchallenged false statements are liable to produce in

various ways, I am compelled to press the matter to a public and possibly legal issue.
(Hind 1883, 16)

Hind argues further that “to falsify scientific data relating to physical geography, suppress, distort and misapply information ... and unduly promote gigantic commercial speculations” is the most grievous crime a scientific man employed by the State can commit (Hind 1883, 36).

Citing a Department of Agriculture pamphlet in which Macoun’s data was used, and which added 24 degrees to the mean temperature in Winnipeg in February, Hind provided a list of settlers whose deaths or mutilations by freezing temperatures he saw as a direct result of the Department’s promotion of misleading information about the climate, to illustrate the dire consequences of the crime of falsifying data (Hind 1883, 4). Indeed, Macoun’s suggestions of the natural fertility of the land would ultimately undermine the Dominion’s homestead policy; trusting that the land would become productive with little or no effort, the government offered settlers little to no support in proving up the interior lands.

Macoun, for his part, disparages anyone who speaks ill of the North West, calling anyone who does a mercenary who wants to forward the interests of capitalist rail-and-land monopolies from the United States, or a man who doesn’t have the mettle of a true Canadian settler, who finds that “mosquitoes, mud and work are too much” (Macoun 1880, 5). It is somewhat curious that Macoun, who falsified data to make the weather seem milder in Canada, would rely upon a stereotype of a Canadian pioneer who connects to the land through the hardships associated with labour in an inhospitable climate in an attempt to embarrass or discredit his opponents.

Regardless of Hind’s strong cautions that “Manitoba and the North-West ... [are] fitted for present farming purposes *by a gradual process of cautious settlement, consistent with the extreme character of the climate and the very scanty fuel and water resources of the prairie portion of the country suitable for that purpose*” (Hind 1883, 36, italics in original), Macoun’s enthusiasm for the west swayed public policy and was an important factor in tipping the balance of opinions towards building the transcontinental railway line and its attendant farms and settlements through the far more expensive and impracticable southern route, through Palliser’s Triangle. According to Dominion officials, settlement along the southern route was justifiable “partly on the ground that settlers were already moving directly west from southern Manitoba and partly by the evidence of John Macoun, a recognized agricultural expert” (Thomas 6).

Before the railway could be built and settlers could be sent en masse to start farms on the prairies, the Dominion Government had to negotiate treaties in accordance with the Royal Proclamation. The 1876 Indian Act, which preceded the Alberta treaties, effectively made Indians wards of the state and set the conditions for the sale of aboriginal lands. By allowing timber to be harvested by the Dominion Government on Indian reserves, while forbidding Indians from living off reserve and requiring Indians to carry identity cards when off reserve, the Act increased the government's administrative control over the land twofold: first, it rid most "Canadian" lands of inhabitants who weren't expressly employed in the building of the Dominion through agricultural settlement and/or resource exploitation, making Indians *personae non-gratae* in any land other than that designated for them by the federal government. Second, it secured the option for the government to profit from the lands reserved for Indians, regardless of their habitation. In effect, the Indian Act was an abjuration of Indigenous peoples' rights to land use, land ownership, and freedom to interact and identify with lands outside of reserves, and it was seen as an essential first step in the government's western settlement goals.

The second step was to negotiate treaties with the Indians so that aboriginal title could be extinguished on the lands that would be sold or granted to settlers. Covering central Alberta, Treaty 6 was signed in 1876; covering southern Alberta, Treaty 7 was signed in 1877; and covering the northern part of the province, Treaty 8 was signed in 1899. Each of these treaties uses language that presupposes the government's authority over the land (their lack of knowledge of the land at the time, notwithstanding). In each of these treaties, the Indians "cede, release, surrender and yield up to the Government of the Dominion of Canada ... all their rights, titles and privileges whatsoever," and in return, the government promised provision of reserves to be made with "due respect being had to lands at present cultivated by the said Indians" (352). Once again, the Dominion Government makes clear that agricultural relationships to the land are the only ones worth serious consideration, and it reinforces this view by making provisions to supply free farming tools (spades, hoes, seeds, etc) "to any band of the said Indians who are now cultivating the soil, or who shall hereafter commence to cultivate the land" (354).

In principle, Indigenous peoples' relationships with their land could be preserved inasmuch as they would "have the right to pursue their avocations of hunting and fishing," but these rights were not granted on "such tracts as may from time to time be required or taken up for settlement, mining, lumbering or other purposes" (353). In a few instances, the Dominion

Land Surveyors had already identified specific tracts of value that were cut out of the already limited reserve areas, such as a belt of land “extending to a point one mile west of the coal seam on [the Bow] river ... beginning again one mile east of the said coal seam” (369). It is notable that although the Canadian surveys strictly adhered to a grid pattern, the boundaries of this particular reserve exclude the natural contours of the resources to which the government wanted access. The Dominion’s “purposes,” then, no matter how loosely defined, trump all other uses, even of land that has been set aside to compensate the Indigenous people for the extinguishment of their title to the land, which itself was a concession not all chiefs were willing to make. When asked to sign over the rights to his land during the Treaty 6 negotiations, Poundmaker, a Cree Chief, is reported to have said: “This is our land! It isn’t just a piece of pemmican to be cut off and given in little pieces back to us. It is ours and we will take what we want” (Beal and Macleod).” His comments highlight a concern for the need to view the landscape holistically, implicitly as one that could not be subdivided if it was to reflect accurately its value to its people, and not be viewed as a resource to be bartered. Poundmaker was not able to resist signing the treaty for long, however, faced with the double threat of large-scale land occupation and dwindling buffalo herds, he signed in the hopes that the treaty would offer some guarantees against the starvation of his people.



Glenbow Archives NA-1681-4

- Poundmaker, Cree Chief

With Treaties 6 and 7 in place, the Dominion Government was free to build the railroad and begin its concerted efforts to settle the interior lands with farmers. An Act Respecting the Canadian Pacific Railway was passed in 1881, giving the CPR a monopoly, land grants, and

\$25M in funding. Receiving not only the land necessary for the right-of-way, the CPR was promised the land most valued by the Dominion—land “fairly fit for settlement,” which it could then sell to settlers. In a debate in the Senate in 1881, where the opposition was arguing that “the cost and expense of managing the [interior] lands would swallow up the whole value of them,” and Sir Alexander Campbell responded that the Dominion was therefore wise in giving away the land to the railway company, which would then take on the costs of settling the lands through immigration campaigns and advertising: “construction of the railway was not the greatest part of [the CPR’s] undertaking,” for only settlement could ensure the success of the railway and of Confederation: “If they do not send settlers in very large numbers into the Northwest,” he argued, “it is impossible that the lands could be of any value, and the railway would be less than valueless” (*Debates* 117). The lands in question were, of course, the very same that were ceded by the Indigenous people of Treaty 6 and Treaty 7. That they were seen as less than valueless in the absence of settlers speaks not only to an obvious racism, but also to a lack of recognition of the economies that had been functioning in the landscape prior to the arrival of British, American, and European economists.

In 1883, an amendment was introduced to the Dominion Lands Act (DLA) that defined the values that land could possess, and also dictates the appropriate use for each type of land. Inherent in the Act’s stipulations is the assumption that land ought to be used rather than left to exist in the state in which it was found. The 1883 amendment also suggests that its authors had some understanding of the dangers of unregulated timber harvesting:

The Governor in Council may, from time to time, for the preservation of forest trees on the crests and slopes of the Rocky Mountains, and for the proper maintenance through the year of the volume of water in the rivers and streams which have their sources in such mountains and traverse the North-West Territories, reserve from sale, lease or license, such portions of the land in the North-West Territories, on, adjacent to, or in the vicinity of the Rocky Mountain ... and may set aside and appropriate such lands for a forest park, or forest parks, as he deems expedient, and may appoint officers for the preservation of such forest parks. (“Dominion” [1883] 28)

In its suggestion that trees should be preserved for the sake of preserving the integrity of watercourses, this clause suggests an awareness of the concept of (and the need to preserve)

ecological integrity, but communications between R.D. Lyons, of the British Colonial Office, and Evelyn Ashley, the Under Secretary of State, Colonial Department, show that the main impetus for this amendment, at least in the British Colonial Office, was an economic consideration:

The Foreign Office has kindly undertaken to make inquiries into the reported proximate exhaustion of the Forest Supplies of Northern Europe. Very astonishing statements are made as to similar exhaustion of Canadian Supplies ...[such as] that the Canadian Forests are within 6 years of exhaustion. ...[T]his is a question of very great importance to the Empire at large and has a very special bearing on the utilization of Waste Lands in Ireland, which offer abundant facilities for Re-afforesting [sic] (Lyons to Ashley)

The officer's concern for the supply of trade goods from Canada shows that economic management is the central motive here for ecological management. Furthermore, given that massive irrigation projects would be vital to agricultural prospects in Palliser's Triangle, the desire for water conservation in the 1883 amendment may be seen as contiguous with the desire to exploit the western lands through (agricultural) resource exportation. This letter makes clear that officers of the Crown encouraged resource development with a specific view to ensure a steady export of these goods to the rest of the British Empire.

As another case in point, Macoun presented a pamphlet at the Paris International Exhibition in 1900 that clearly situates Canada as an emerging economic power on the world stage on account of the forest resources it was able to access in the interior lands: "No other country affords so good a field for the profitable investment of capital in the manufacture of wood products; abundant raw material, cheap power and an unfailing market insure success" (1900, 3). Always overly optimistic about the Canadian land's ability to produce infinite resources, he notes that the domestic demand for wood products for settlers had increased exponentially of late, yet that Canada still had boundless resources available:

This increase in production has been far slower than the natural resources of the country warranted, but capital has not always been available, and competition in foreign markets was so keen that Canadian manufacturers were slow in entering a field in which success seemed doubtful. (3)

Suggesting that the resources themselves invite development, Macoun blames a lack of investment and fear of foreign markets for the country's slow pace in its lumber industry. These market forces, and not sound land-use planning, were what left Canada with a better situation than the United States, where "excessive production went on ... and their forests were depleted" (3). Yet, in the same document, Macoun lauds the "wise laws [that] have been made by the provincial and federal governments, having for their object the preservation of our forests" (4). In deference to the settlement goals of the nation, however, homesteaders who had no timber of their own were "entitled to a permit free of dues" to gather enough timber supplies to build a house (Macoun 1900, 16).

In 1885, the same year that the CPR was completed, the Canadian government took over the property claims of two prospectors in order to reserve ten square miles around a hot spring in the Bow River Valley. Two years later, the boundaries around the spring were expanded and the federal Rocky Mountain Park Act legislated that the land now known as Banff National Park be unavailable for "sale, settlement, or occupancy" ("Rocky" 155). It also provides for the "control of the hot springs" and for the "working mines and the development of mining interests within the limits of the park" ("Rocky" 155). The government's determination to control the spring and its environs was not inspired by a desire to protect the area from development *per se*, but only from private development and private wealth generation.

Both the 1883 DLA amendment and the 1885 legislation that created Rocky Mountains Park were economically motivated and were explicit in their developmental goals: the government did not create parks and forest reserves to protect the areas from development but to ensure that the revenues generated from development in these areas would, by right, remain with the Dominion Government. The 1887 Rocky Mountains Park Act (RMPA) extends the category of lands over which the government wished to maintain administrative and economic control to include not only those containing extractable resources but also those containing potential park or resort settings. Robert Craig Brown, in this essay, "The Doctrine of Usefulness," note that "underlying parks policy was the assumption of the existence of plentiful natural resources within the reserves capable of exploitation and the principle of shared responsibility of government and private enterprise in the development of those resources" (97). This same assumption underlies the DLA, though the resources in question were the lands themselves upon which farms could be established. Essentially, then, any land that could be more profitable than

prairie farm land was to be held in trust by the Dominion Government. Just as the DLA ensures that settlers cannot own resource-rich lands through an individual-labour-based ethic, the RMPA prevents the private ownership of hot springs or mountain park area.

Conclusion

From Confederation onward, one of the government's highest priorities was to facilitate the travel that would allow the land to be "peopled" and made into a settled space. In the interior lands, the government's approach to the environment was to assess its resources, often to the exclusion of a broader understanding of ecosystem dynamics, and to note the absence of settled life, ignoring the political, ecological, and social economies that existed before its arrival.

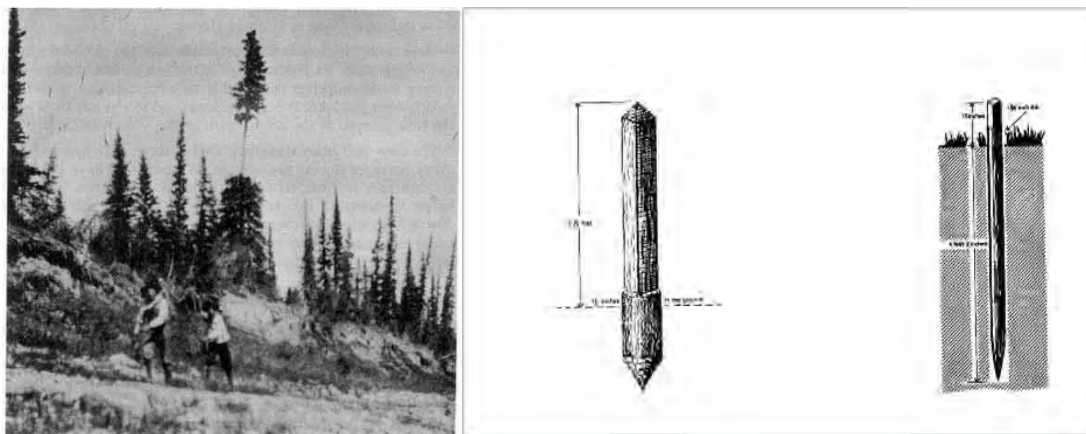
When the Province of Alberta was created by an act of parliament in 1905, the Dominion Government once again demonstrates its ability to view the land as somehow separate from its resources and ecosystems inasmuch as it granted provincehood and administrative rights to Alberta, but gave it no public land and no resource rights, choosing to retain rights to water, minerals and timber for "the purposes of the Dominion." In 1930, the Province was given control of some resource rights, but to this day, the federal government retains subsoil rights, including the majority of the province's oil reserves.

From the BNA Act to the Alberta Act, the legislation that governed land management in the interior encouraged a narrow view of desirable relationships between people and their environments. All Dominion land-use policies implicitly or explicitly determined that settlement of government-surveyed lands was the only route to establishing national and personal land rights. In addition to the legal ownership question, the policies also affected the ways in which people were invited to engage with the environment; the Dominion Lands Act clearly promoted a Lockean land ethic by encouraging settlers to connect with the land through site-focussed interaction and economic activity (farm or forestry or mining labour). This attitude becomes problematic when it attempts to replace an Indigenous sense of connection to a broader environment through multiple-site-focussed interaction (hunting and gathering). The holistic nature of the knowledge needed to be an efficient hunter and gatherer stands in stark contrast to that needed to take economic advantage from the survey projects' catalogues of geo-located resources.

In 1908, Charles Mair published his account of his travels through the MacKenzie Basin with the Treaty 8 commissioners. In it, he describes coming upon a culturally modified tree that marked a place of importance to the local Indigenous people:

That afternoon we rounded Point Brulé, a high, bold cliff of sandstone with three "lop-sticks" upon its top. The Indian's lop-stick, called by the Cree piskooténusk, is a sort of living talisman which he connects in some mysterious way with his own fate, and which he will often go many miles out of his direct course to visit ... They are made by stripping a tall spruce tree of a deep ring of branches, leaving the top and bottom ones intact. The tree seems to thrive all the same, and is a very noticeable, and not infrequent, object throughout the whole Thickwood Indian country. (N.pag.)

When viewed in contrast with the Dominion Land Survey monuments and markers, which were established because “a boundary not marked on the soil itself, may lead to future loss and injury, both to England and to Canada” (*Debates* 1857, 17), the living monuments are symbols of the organic sense of connection to landscape felt by those who know it well, whereas the survey posts and mounds are physical proof of government control as well as of a lack of intimate connection to the land it administered.



-Survey crew in front of lop-stick tree, used as an Indigenous land marker.

-Survey posts used in Dominion Land Surveys

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Picturing a National Landscape:
Images of Nature in *Picturesque Canada*

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According to tourism historian Orvar Löfgren, the nationalization of the landscape took place in countries ‘that saw themselves as marginal to the grand narrative of western civilization – the Scandinavian countries, the United States, and, later, Canada.’¹ Literary critic Leon Surette claims, likewise, that Canadian literature and culture became ‘topocentric’ as a result of the common complaint that ‘we have had no revolution, no civil war, no Indian massacres, in short, no spilling of blood to stir the imagination and create a Canadian story or myth.’² The Reverend George Monro Grant, Principal of Queen’s University and prominent Canadian nationalist, would have disagreed. As editor of *Picturesque Canada: The Country as it Was and Is*, Grant ensured that the ambitious guide, published in instalments between 1882 and 1884, included lengthy romantic descriptions of the heroic pioneer age, particularly that of the French Regime.³ But

¹ Orvar Löfgren, *On Holiday: A History of Vacationing* (Berkeley: University of California Press, 1999), 35.

² Leon Surette, “Here Is Us: The Topocentrism of Canadian Literary Criticism.” *Canadian Poetry: Studies, Documents, Reviews*, 10 (1982). [no pagination]. <http://canadianpoetry.org/2011/06/06/volume-no-10-springsummer-1982/>. Viewed 19 May 2014.

³ The book was published as two volumes in 1884, though the copyright is for 1882. George Monro Grant, ed., *Picturesque Canada: The Country as it Was and Is* (Toronto: Belden Brothers, 1882); Mary F. Williamson, ‘Illustrated Books, Periodicals, and Commercial Print,’ in Yvan Lamonde, Patricia Lockhart Fleming, and Fiona L. Black, eds. *History of the Book in Canada, vol. 2, 1840-1918* (Toronto: University of Toronto Press, 2005), 393. One literary scholar states that *Picturesque Canada* is ‘the most ambitious, important, and controversial guide to Canada in the post-Confederation period.’ D.M.R. Bentley, ‘Charles G.D. Roberts and William Wilfred Campbell as Canadian Tour Guides,’ *Journal of Canadian Studies*, 32, no. 2 (Summer 1997). [no pagination] <http://search.proquest.com.proxy.lib.sfu.ca/docview/203533050?accountid=13800>. Viewed 18 May 2014.

Picturesque Canada also includes equally lengthy romantic descriptions of the Canadian landscape, thereby foreshadowing the claim by nationalist historian A.R.M. Lower in 1964 that '[f]rom the land, Canada, must come the soul of Canada.'⁴

Two years before *Picturesque Canada* began to appear, Grant had already produced a series of illustrated articles on the country for *Scribner's Monthly* of New York.⁵ These articles, in turn, had been inspired by the success of *Ocean to Ocean*, the journal Grant published as secretary to Sandford Fleming's railway survey expedition across western Canada in 1872.⁶ In offering Grant the position of *Picturesque Canada* editor in December 1880, the publishers gave him complete control of the literary content. They also assured him of the enthusiastic response by 'the most influential men in Canada,' and of 'liberal patronage among the best circles in England.'⁷

In the preface to *Picturesque Canada* Grant explained that his aim was to represent the 'characteristic scenery' of the country as well as 'the history and life of its people' in order not only 'to make us better known to ourselves and to strangers,' but to 'stimulate national sentiment and contribute to the rightful development of the nation.' Rather than beginning on the Atlantic coast and moving westward to the Pacific, the series starts in Quebec City 'where our life began,' and follows 'the track of the fur-traders and coureurs de bois' up the St Lawrence and Ottawa to Lake Nipissing, Lake of

⁴ Arthur Lower, *Colony to Nation*, 4th ed. (Don Mills, ON: Longmans, Green, 1964), 563-4; Donald Wright, *The Professionalization of History in English Canada* (Toronto: University of Toronto Press, 2005), 152.

⁵ William Lawson Grant and Frederick Hamilton, *Principal Grant* (Toronto: Morang and Co., 1904), 245-7.

⁶ Dennis Reid, *Our Own Country Canada: Being an Account of the National Aspirations of the Principal Landscape Artists in Montreal and Toronto, 1860-1890* (Ottawa: National Gallery of Canada, 1979), 300; John S. Moir, 'From Sectarian Rivalry to National Vision: The Contribution of Maritime Presbyterianism to Canada,' in Charles H.H. Scobie and G.A. Rawlyk, eds, *The Contribution of Presbyterianism to the Maritime Provinces of Canada* (Montreal and Kingston: McGill-Queen's University Press, 1997), 166.

⁷ Grant was offered \$1800, equivalent to \$50 per section, plus a \$200 retainer fee. Library and Archives Canada, George Monro Grant fonds, Series I, R3202-0-3-E (http://heritage.canadiana.ca/view/oocihm.lac_reel_c1871/1?r=0&s=1) (viewed 2 June 2014), H. Belden to G.M. Grant, Toronto, 8 Dec. 1880, 1303-5. The publishers recommended that the authors receive only \$60 to \$70 a section, but one, at least, demanded \$100. H. Belden to Grant, Toronto, 5 Feb. 1881, 1322A; A.J. Bray to Grant, Montreal, 12 March 1881, 1335.

the Woods, and ‘the thousand miles of alluvial beyond, where the Verendryes first built forts and made alliances with prairie chiefs, and where the foundations of mighty provinces are now being laid.’⁸ The historical foundation of the country having thus been laid, and the promise of its future in the prairie west described, *Picturesque Canada* then returns to Ontario, heading eastward to Quebec’s Eastern Townships and lower St Lawrence, and finally bookending itself with chapters on the Maritime region as well as British Columbia.

Despite Grant’s nationalist agenda, *Picturesque Canada* was aimed in part at American tourists. In fact, the publishers were two Americans, the Belden brothers, who modeled the project on the highly successful *Picturesque America* which had appeared in book form in 1872 and 1874.⁹ Furthermore, even though the art director was Lucius Richard O’Brien, president of the Royal Canadian Academy, most of the illustrations were produced by artists from the United States.¹⁰ And, even though Rupert Brooke would later claim that Americans felt Canada was a country without a soul, they were sufficiently interested to warrant republication of the two volumes in Chicago under the title *Picturesque Spots of the North*.¹¹ The first chapter, written by Grant, nevertheless made it clear that he had Canadian and British audiences primarily in mind, for he

⁸ *Picturesque Canada*, iii.

⁹ *Picturesque America* also included a chapter on the St Lawrence and the Saguenay, and another on Lake Memphremagog, most of which lies in Quebec. William Cullen Bryant, ed., *Picturesque America: or, The Land We Live In*, vol. 2 (New York: D. Appleton and Company [1874]), 370-94, 451-6. Appleton of New York had also published *Picturesque Europe* and *Picturesque Palestine*, and some of the principals involved in *Picturesque Canada* would later publish *Picturesque Australasia*. Reid, *Our Own Country*, 298-9.

¹⁰ It appears that Canadian artists simply lacked the skills to make drawings suitable for conversion to wood engravings. On the bitter controversy resulting from the sidelining of Canadian artists, see Reid, *Our Own Country*, 308-16. On Frederic B. Schell, who produced more than half the illustrations, either alone or in collaboration, see Sue Rainey, *Creating Picturesque America: Monument to the Natural and Cultural Landscape* (Nashville and London: Vanderbilt University Press, 1994), 280-1.

¹¹ Rupert Brooke, *Letters from America* (Toronto: McClelland, Goodchild, and Stewart, 1916), 49; Patricia Jasen, *Wild Things: Nature, Culture, and Tourism in Ontario, 1790-1914* (Toronto: University of Toronto Press, 1995), 121.

dismissed the possibility of annexation to the United States, declaring that '[t]heir ways are not our ways; their thoughts, traditions, history, are not our thoughts, traditions, history.' Nationalist though he was, Grant supported continued ties with Great Britain, arguing that 'to break our national continuity in cold blood, to cut ourselves loose from the capital and centre of our strength' would only gain '[a] thousand possibilities of danger and not an ounce of strength.'¹²

The Belden brothers, who had established themselves in Toronto as publishers of county atlases, clearly felt confident, then, that there were enough English Canadians with the means and the commitment to national unity to ensure their project's profitability. In fact, they informed Grant in 1880 that the subscription list was 'much larger' than they had dared hope for.¹³ When *The Globe* of Toronto described the new undertaking in May 1881, it concluded that 'its progress will be watched with interest as a striking phase of national progress, and one that cannot fail to have far-reaching results in attracting attention to our material as well as our aesthetic advancement.'¹⁴ As historian Carl Berger has observed, however, late Victorian supporters of imperial federation such as the Reverend Grant might have sung the eulogies of progress and welcomed economic growth, but they also remained deeply suspicious of industrialization and urbanization.¹⁵ Thus, in *Picturesque Canada*, Montreal and Toronto are depicted as cities of parks and leisure, as well as centres of religion, education, and commerce, but not of manufacturing.¹⁶ This was not an entirely anti-modern stance,

¹² *Picturesque Canada*, 31. On Grant's support for closer ties with Great Britain, see Carl Berger, *The Sense of Power: Studies in the Ideas of Canadian Imperialism, 1867-1914* (Toronto: University of Toronto Press, 1971), 66, 121, 217-19.

¹³ Grant fonds, H. Belden to G.M. Grant, Toronto, 8 Dec. 1880, 1303-5.

¹⁴ Quoted in Reid, *Our Own Country*, 299.

¹⁵ Berger, *The Sense of Power*, 140. Lawrence S. Fallis, Jr notes that mid-Victorian Canadians were confident that Canada's social institutions, educational system, and attention to religion and morality 'would insure her against an over-emphasis upon purely material development.' 'The Idea of Progress in the Province of Canada: A Study in the History of Ideas,' in W.L. Morton, ed., *The Shield of Achilles: Aspects of Canada in the Victorian Age* (Toronto: McClelland and Stewart, 1968), 172.

¹⁶ *Picturesque Canada*, 104-41, 399-440. There is more focus on manufacturing in smaller centers such as Dundas and Galt. *Picturesque Canada*, 452, 464.

however, for – as Sue Rainey notes of *Picturesque America* – such urban scenes ‘created visions of order and stability that could build confidence in the future.’¹⁷

If, in Rainey’s words, *Picturesque America* focuses on ‘long-established industries rather than more recent and more disruptive large-scale factories,’¹⁸ this is even more the case for *Picturesque Canada* with its distant smokestacks hinting at undifferentiated factories in the urban centers.¹⁹ Grain elevators appear as prominent features on a number of skylines, [illust. 1, p. 584] but the only full view of a manufacturing industry, apart from a sawmill, is of the St Maurice Forges, an enterprise that dated to the French Regime.²⁰ The mills are nearly all water-driven, and muscle power provided by horses, oxen, and labouring men is featured prominently alongside canals and in mines, forests, and fisheries, as well as on the land.²¹ [illust. 2, p. 861] There are stark images of the relatively new oil-refining industry in Petrolia, Ontario, as well as of the salt mines in the Goderich area and the coal mines in Nova Scotia,²² but the picturesque convention – with its emphasis on unspoiled and undomesticated nature – generally avoided evidence of the industrial revolution as characterized by the shift from an organic economy based on energy captured from water, wind, and plants to a mineral economy based on fossil fuels, notably coal.²³

Aside from providing an important source of energy, water was the most important means of communication in Canada’s pre-industrial era, so it is perhaps not surprising that it is the dominant physical feature in *Picturesque Canada*. Grant may

¹⁷ Rainey, *Creating Picturesque America*, 203.

¹⁸ Rainey, *Creating Picturesque America*, 199-202, 220-1. The quote is from p. 221.

¹⁹ *Picturesque Canada*, 519, 533, 584, 634.

²⁰ *Picturesque Canada*, 97-9.

²¹ There are also several illustrations of windmills (*Picturesque Canada*, 147, 318, 320, and 349). Swedish research shows that energy provided by moving wind and water during the nineteenth century was rather insignificant when compared to firewood consumption or muscle energy. E.A. Wrigley, *Poverty, Progress, and Population* (Cambridge, UK: Cambridge University Press, 2004), 30n41.

²² *Picturesque Canada*, 537-40, 553, 839, 848.

²³ In an organic economy ‘the productivity of the land ultimately determined all else since the material artefacts useful to man were made from animal or vegetable raw materials.’ Wrigley, *Poverty*, 4, 46-52, 74-6, 220-2, 225-6.

have enthused about the progress of the Canadian Pacific Railway across the prairie, writing that '[w]ith congratulations and hope, we welcome the steel rails – harbingers of a new civilization and material pledge of the unity of the Dominion,'²⁴ but the fact remains that the relatively few railways are generally dwarfed by the surrounding landscape in *Picturesque Canada*'s illustrations, while waterways of various kinds appear in the great majority of them. [illust. 3, p. 772] Furthermore, boats far outnumber trains, creating the impression that rivers and canals are still the main conduits for travel and commerce.²⁵ This impression is reinforced by the statement that, even though railways were displacing canal trade in the United States, 'no means of communication is likely seriously to compete with the mode of transit [i.e., water] which is the distinctive feature of the trade of the Dominion.'²⁶

In keeping with *Picturesque Canada*'s bias towards the organic economy, sailing ships, canoes, and rowboats share space with steamboats whose smoky plumes lend them a romantic touch. Furthermore, in the descriptive passages, rivers that have been tamed by industry remain picturesque. From the bridge across the Ottawa River, for example, 'one looks at ease into the once mystic and awful, but now merely picturesque tumble and toss of living water, the famous Chaudière. Half a mile above, the long, graceful lines of a new and substantial iron railway bridge of eleven huge spans, give farther [sic] evidence of the mastery of man over this once wild spot.'²⁷ Modern as they might be, such bridges could also evoke a romantic link with the past, as in the description of the Grand Trunk Railway bridge at Ste Anne's whose sixteen towers, as 'massive as the keep of a fortress,' actually enhanced the 'magnificent' scenery of Lake St Louis.²⁸

Even though the majority of the illustrations in *Picturesque Canada* were American-produced, they tend to be of tamer, less rugged landscapes than those depicted in *Picturesque America*. In fact, based on the assumption that the picturesque view was

²⁴ *Picturesque Canada*, 342.

²⁵ *Picturesque America* included some forty images of railways, but *Picturesque Canada* only a dozen or so. Rainey, *Creating Picturesque America*, 219. Reid claims, mistakenly, that in the Canadian cityscapes 'the railway is much in evidence.' Reid, *Our Own Country Canada*, 303.

²⁶ *Picturesque Canada*, 387.

²⁷ *Picturesque Canada*, 174.

²⁸ *Picturesque Canada*, 149.

characterized by variety, intricacy, and roughness, in contrast to the beautiful which was defined as pastoral, orderly, smiling, and serene, many of the Canadian illustrations were more beautiful than picturesque.²⁹ Furthermore, the verbal imagery had the advantage of adding colour to bucolic scenes such as the one viewed from the path below Parliament Hill where ‘the silver river gleams, busy and beautiful, a hundred feet below; the white stems of the birch gracefully relieve the sombre gleam of hemlock and the fresher tints of maple.’ And also sound, for the same passage mentions the song of birds such as the oriole ‘with its uniform of black and orange,’ as well as ‘the faint buzz of the saw, and the noise of the “Big Kettle” [the Chaudière Falls].’³⁰

Bodies of water were, of course, not always serene, and Rainey notes that water in motion, ‘whether falling from a great height or roaring down a boulder-strewn cascade,’ was perceived ‘as evidence of nature’s power and energy.’³¹ There are ninety-five views of waterfalls (11 percent of the total) in *Picturesque America*, and only forty-one (7 percent) in *Picturesque Canada*, though it also depicts seventeen rapids.³² The description of the Muskoka River’s South Falls, with ‘the torrent, lashed into foam, hurling its mass of gleaming water down the ravine,’ captures the sense of energy referred to by Rainey. In fact, it conforms to the sublime convention with its emphasis on tumult and gloom,³³ but the author then shifts moods: ‘The vision while it delights also awes, and you are glad ere long to turn from it and get into the quiet beauty of still water, the sunshine glimmering softly down on the stream, or breaking in patches of light through the branches of the over-arching trees.’³⁴ Tellingly enough, much more numerous than the views of fast-flowing water are those of lakes, a few depicted as storm-tossed but most as placid and beautiful or picturesque.

²⁹ See Jasen, *Wild Things*, 9; and Susan Glickman, *The Picturesque and the Sublime: A Poetics of the Canadian Landscape* (Montreal and Kingston: McGill-Queen’s University Press, 1998), 10-11.

³⁰ *Picturesque Canada*, 186.

³¹ Rainey, *Creating Picturesque America*, 206.

³² My count of 894 illustrations in *Picturesque America* and 583 in *Picturesque Canada* does not include the composite images.

³³ Jasen, *Wild Things*, 8; Glickman, *The Picturesque and the Sublime*, 10.

³⁴ *Picturesque Canada*, 612.

Similarly, while *Picturesque America* responded to the charge that the coasts of the United States were low and dull by devoting considerable attention to waves and rocky coastlines,³⁵ there are only twelve scenes of wave-crested waters in *Picturesque Canada*. Six of these views are on the Great Lakes, three on the Atlantic, and none on the Pacific. And, even in describing a choppy Lake Superior, George A. Mackenzie managed to evoke the picturesque: ‘What beauty there is in it all! though by sea-sick or half sea-sick passengers for the most part unregarded. The rainbow springing from the prow; the dark-green waves overlaid with glances and flashes of blue; the fantastic shapes, the mysterious shadings and colourings of the clouds – as restless as the waters below – proclaim that even in the midst of an uncomfortable gale, we are surrounded by infinite forms of divinist beauty.’³⁶ To travellers who complained that the scenery consisted of an ‘endless skyline of inhospitable cliffs,’ Mackenzie responded that ‘visited at leisure in a small boat – the bays and islands explored, the rivers followed up – reveal scenes of surpassing loveliness.’³⁷

In keeping with its emphasis on a wild Nature, *Picturesque America* also depicts many geological features such as mountains, canyons, and caves. In fact, many of the chapters have titles such as ‘The White Mountains,’ ‘Cumberland Gap,’ and ‘The Mammoth Cave.’ *Picturesque Canada* does include an image of Lake Superior’s Thunder Cape as a black monolith hovering over a paddle wheeler with whitecaps breaking against its bow, but it is an exception. [illust. 4, p. 262] There are only twenty-two illustrations (4 percent) featuring Canadian geological features and the most famous one, ‘Cape Trinity,’ was modeled on O’Brien’s Turner-esque painting, ‘Sunrise on the Saguenay.’³⁸ And, while *Picturesque America* depicts at least one hundred unusual rock formations (over 11 percent) that serve as natural substitutes for architectural antiquities,³⁹ there are only eight such images in *Picturesque Canada*, four of which are

³⁵ Rainey, *Creating Picturesque America*, 214-15.

³⁶ *Picturesque Canada*, 250.

³⁷ *Picturesque Canada*, 253.

³⁸ *Picturesque Canada*, 716; Ellen Ramsay, ‘Picturing the Picturesque: Lucius O’Brien’s *Sunrise on the Saguenay*,’ in Paul Simpson-Housley and Glen Noreliffe, eds, *A Few Acres of Snow: Literary and Artistic Images of Canada* (Toronto: Dundurn Press, 1992), 159, 163, 165-7, 170.

³⁹ Rainey, *Creating Picturesque America*, 93-4, 113-15, 229, 232-8, 247.

from the long-settled Elora area, north of Toronto.⁴⁰ Paradoxically, the most vivid evocation of architectural romanticism is the view and description of Niagara Falls – generally considered to be the very essence of dynamic movement – as a frozen fantasyland. Thus, the reader is informed that after a few days of hard frost ‘[n]o marvels wrought by genii and magicians in Eastern tales could surpass the wonderful creations that rise along the surrounding banks, and hang over the walls of the cataract. Glittering wreaths of icicles, like jewelled diadems, gleam on the brow of every projecting rock and jutting crag. Arches, pillars, and porticos, of shining splendour, are grouped beneath the overhanging cliffs, giving fanciful suggestions of fairy-palaces beyond.’⁴¹

There is no western Canadian equivalent to the Yellowstone Valley or the Grand Canyon of Colorado where many of the rock features in *Picturesque America* are located.⁴² Yet, it is somewhat surprising that only one of the views in *Picturesque Canada* that focus on geological features is from West of Lake Superior. In fact, the contrast between the eastern and the western landscape is much less distinct in *Picturesque Canada* than in *Picturesque America*. In the eastern United States, according to Rainey, men fish in the streams and hunt in the forests – engaging in what she refers to as restorative ‘play’ as well as quiet contemplation – but the western wilderness is characterized by ‘sublime scenery as yet untouched by civilization.’ The message delivered by the artists who largely erased the presence of western railways, farms, mines, and mills, Rainey argues, was that ‘wilderness was still a special quality of the landscape of the United States,’ and ‘progress could be accommodated within the vast Western lands’ without conflict between development and Nature’s sublimity.⁴³

⁴⁰ *Picturesque Canada*, 262, 471, 475, 483, 484, 763. Examples of the geological theme can be found on pp. 571 and 676.

⁴¹ *Picturesque Canada*, 356.

⁴² Rainey, *Creating Picturesque America*, 209-11.

According to Reid (*Our Own Country*, 302), the illustrations for BC are half-tone photo-engravings, some of them after Notman photographs.

⁴³ Rainey, *Creating Picturesque America*, 203-5. Rainey neglects to mention that there is, in fact, a considerable number of images of rock formations in the northern New England region.

The message in *Picturesque Canada* is quite different; far from privileging the mountainous landscape, it relegates British Columbia to the end of the second volume.⁴⁴ As author of the chapter, Grant included a powerful description of the ‘cañons of the Homathico,’ where in a deep gorge beneath the towering rocks one could find ‘a mountain torrent, whirling, boiling, roaring, and huge boulders always in motion, muttering, groaning like troubled spirits.’ But this rather gothic image is countered somewhat by the observation that in every crevice there were ‘clumps of evergreen trees,’ and ‘wherever a handful of soil could rest it was sprinkled with wild flowers, amongst which bloomed the sweet lily of the valley.’⁴⁵ Furthermore, the illustrations generally place the British Columbia’s mountains in the distant background, making the scenes more picturesque than sublime.⁴⁶ And, to signal that the west coast province was about to enter the railway era, the illustration titled ‘Port Moody’ is subtitled ‘Vessel containing first shipment of Canadian Pacific R.R. Iron.’⁴⁷ [illust. 5, p. 874]

Describing the potential of British Columbia’s ‘exhaustless’ fishery, Grant enthused that ‘[a]n acre of water on the lower Fraser, or on one of the innumerable inlets that cut deep into island and mainland, will yield more than the richest prairie farm.’⁴⁸ The English picturesque favoured the wild over the pastoral, and woodsmen over peasants,⁴⁹ but the fact remains that *Picturesque Canada* pays more attention to agriculture than does its American counterpart which devotes only about thirty-five

⁴⁴ One highly favourable British review noted that, due to space limitations, ‘one region, perhaps richer in promise than all, as blest with a more genial climate – British Columbia – has to be dismissed with some fourteen pages, and a hinted promise, which we hope to see fulfilled ere long, of a more adequate treatment hereafter.’ *The Spectator*, 21 Nov. 1885, 18. <http://archive.spectator.co.uk/article/21st-november-1885/18/picturesque-canada>. Viewed 4 May 2014.

⁴⁵ *Picturesque Canada*, 875-6.

⁴⁶ According to Reid (*Our Own Country*, 302), the illustrations for BC are half-tone photo-engravings, some of them after Notman photographs.

⁴⁷ In addition, railway tracks share the foreground with the Fraser River in the engraving titled ‘Yale.’ *Picturesque Canada*, 879.

⁴⁸ *Picturesque Canada*, 880. Approximately twenty-four scenes include fishermen, but only about half are of commercial fishery.

⁴⁹ Malcolm Andrews, *The Search for the Picturesque: Landscape Aesthetic and Tourism in Britain, 1760-1800* (Stanford, CA: Stanford University Press, 1989), 64.

views (4 percent of the series total) to such features of the agricultural landscape as farming operations, hay wagons, or livestock.⁵⁰ The forty-four illustrations in *Picturesque Canada* that focus on farms or depict agriculture in some fashion represent more than three times the ratio (14 percent) of those in *Picturesque America*. Furthermore, the written descriptions are highly idealized, with an emphasis on the picturesque. Dismissing Cobbett's characterization of Prince Edward Island as 'a rascally heap of sand, rock, and swamp,' for example, the Reverend R. Murray described how the province's red soil threw into relief 'the tender green of meadow and lawn,' and how in the autumn the rich fields 'wave with golden grain.'⁵¹ Still more colourful is Louise Murray's description of the Niagara district's orchards, 'lovely in spring with the pink and white blossoms of peach and apple orchards, the delicate green of young leaves, and the deeper verdure of fields of wheat shooting into luxurious growth after their wintry sleep; and glorious in autumn with fields of red and golden maize, and yellow pumpkins, with apple orchards laden with ripe fruit, and with all the brilliant hues of dying forest leaves, every leaf burning in the flames of slow decay with its own tint and shade of beauteous light, and all blended together in a rainbow-like radiance of colour.'⁵²

Western agriculture clearly did not lend itself to such picturesque imagery, but even though *Picturesque America* includes no views of farms or farming from West of the Mississippi, there are eight such illustrations in *Picturesque Canada*, including a composite one of a row of combines, a row of horse-drawn harrows, a steam-driven threshing machine, and a mechanical hay loader. [illust. 6, p. 299] There is also an engraving depicting the interior of a settler's cabin, and the Mennonites are favoured with their own short chapter, including two views that depict farming.⁵³ In fact, Grant, who wrote the Manitoba chapter, favoured the labour-intensive methods of the

⁵⁰ Rainey claims that the ratio is 3 percent, but she does not mention the total number of illustrations. *Creating Picturesque America*, 238-9.

⁵¹ *Picturesque Canada*, 854.

⁵² *Picturesque Canada*, 371.

⁵³ *Picturesque Canada*, 318-24. For Quebec there are six views focusing on farms or depicting agriculture (63, 69, 76, 159, 696, 730), for Ontario twelve (206, 373, 378, 393, 394, 441, 446, 495, 523, 578, 621, 626, 649), for New Brunswick none, for Nova Scotia five (823, 824, 825, 827, 845), and for Prince Edward Island two, including one of mussel mud being dug during the winter for fertilizer (861, 862).

Mennonites over the mammoth wheat farms with their steam-driven machines, writing that the latter were ‘no doubt useful as far as the best interests of the country are concerned, but, after all, poor affairs in comparison with the log-house of the ordinary farmer; just as the deer-forest or grouse preserve in the Scottish Highlands is a miserable exchange for the wrecked shielings of the true-hearted clansmen, whose fathers died at Culloden for Prince Charles, and at Ticonderoga and Waterloo for us.’⁵⁴ It is somewhat ironic, then, that Aboriginals are restricted to the margins of the activities depicted in this chapter’s illustrations.⁵⁵ According to Grant, they were ‘[b]red and reared in poverty and dirt, and having generally the taint of hereditary disease, they are as a rule short-lived.’⁵⁶

There is one illustration of a Native ‘dog feast’ in the chapter on the region between Manitoba and the Rockies, and another of a ‘half-breed camp,’⁵⁷ but otherwise Grant focused on the Northwest’s economic potential, claiming that ‘[t]owns and villages are springing up in every direction, and vast breadths of fertile land which had lain unoccupied for centuries are being broken in upon by the plough.’⁵⁸ Even the southern plain, ‘formerly considered to be semi-desert,’ had been discovered by Dominion botanist John Macoun to have sufficient rainfall for the growth of cereals; in fact, Grant claimed, settlers referred to it as ‘the garden of the Lord.’⁵⁹ Much further north, the still undeveloped Athabasca region would, in Grant’s boosterish words, become ‘the Banner Province of Canada,’ for the Peace River ‘offers fewer impediments to navigation than either the St. Lawrence or the Saskatchewan,’ and ‘[t]he soil is as rich and the prairies are vaster than in Manitoba or Assiniboia.’⁶⁰

⁵⁴ *Picturesque Canada*, 298.

⁵⁵ See *Picturesque Canada*, 286, 289, 292.

⁵⁶ *Picturesque Canada*, 301.

⁵⁷ See the descriptions in *Picturesque Canada*, 332, 336. Natives figure more prominently in the chapter on Red River to Hudson’s Bay.

⁵⁸ *Picturesque Canada*, 330.

⁵⁹ *Picturesque Canada*, 327-8. On Macoun’s overly sanguine assessment of the area known as Palliser’s triangle, see Doug Owram, *The Promise of Eden: The Canadian Expansionist Movement and the Idea of the West, 1856-1900* (Toronto: University of Toronto Press, 1980), chapter 7.

⁶⁰ *Picturesque Canada*, 339.

The focus of the illustrations in the chapter on the territory west of Winnipeg is again on settlement, though at a very early stage, with an ‘emigrant’ train winding its way down a hillside and across the open prairie in one scene. In another, a large buffalo herd grazes at the foot of the Rocky Mountains, but the advance of civilization is announced with a full-page engraving of the North-West Mounted Police and, at the end of the chapter, a view towards an advancing steam locomotive.⁶¹

From an aesthetic perspective, Grant was not attracted to the treeless prairie landscape, for he wrote that the traveller ‘sees no living thing on the earth or in the air,’ causing his spirits to sink ‘as he rides deeper and deeper into this terrible silence, unless he has learned to commune with the Eternal.’ But, given that the cause for the bald landscape was fires lit by the Aboriginals, Grant claimed, there was a remedy, namely ‘tree planting on an extensive scale.’⁶² Grant was clearly influenced by the rapidly growing forest conservation movement, but, in contrast to the writers of *Picturesque America*, he was not particularly critical of the lumbering industry.⁶³ In fact, it is the one industry to have its own chapter in *Picturesque Canada*, one penned by Grant himself. Referring to the ‘practically boundless wealth of woodland’ that stretched ‘from our frontier to the Pole, and almost the Atlantic to the Pacific,’ Grant wrote that the ‘regions of an all but Arctic winter are made endurable, if not a source of actual pleasure, because the youth of our country are enabled to engage in an industry manly, healthful and remunerative.’ As suggested by the engraving ‘Exploring For New Limits,’ and as spelled out by a least one American travel writer at the time, woodsmen were viewed as the romantic equivalents of the French Regime’s fur trade voyageurs.⁶⁴ [illust. 7, p. 214] Furthermore, in Grant’s words, the picturesque shanties, hardy exploring parties in birch-bark canoes, tangled log jams, and ‘navies of huge rafts towed or floating seawards’ all had ‘a distinctive artistic interest.’ Canada was fortunate, then, that ‘[u]nlike the national industries of many other countries,’ lumbering blended with ‘instead of destroying, what

⁶¹ *Picturesque Canada*, 331, 334, 337.

⁶² *Picturesque Canada*, 340.

⁶³ Rainey, *Creating Picturesque America*, 244.

⁶⁴ See J.I. Little, ‘Travels in a Cold and Rugged Land: C.H. Farnham’s Quebec Essays in Harper’s Magazine,’ *Journal of Canadian Studies*, 47, no. 2 (Spring 2013): 230-2.

is picturesque in Nature.’⁶⁵ Grant did express concern, however, that wasteful logging practices and especially forest fires were a threat to the nation’s future, and he advocated that government ensure that the annual cut not exceed ‘the annual increment presented to us by Nature.’⁶⁶

Also in contrast to *Picturesque America* where snow is almost entirely confined to the tops of distant mountains, the devotion of an entire chapter of *Picturesque Canada* to the lumber industry provided Grant with an excellent opportunity to include a number of images set in winter (fifteen of the thirty-eight snow scenes are from this chapter), with snow serving as an aesthetic camouflage in one view of a clear-cut hillside.⁶⁷ Skidding logs in the eastern Canadian woods depended upon snow, which also assisted mobility in the settled countryside during an era when bare roads were still often very rough and muddy. Grant also claimed in *Picturesque Canada*’s first chapter that ‘snow does much of our subsoil ploughing,’ and, as ‘the best possible mulch, shading and protecting the soil at no cost,’ it was known as ‘the poor man’s manure.’ Furthermore, given that it was essential ‘to almost all the amusements of the year – the sleighing, skating, snow-shoeing, ice-boating, tobogganing – that both sexes and all classes delight in,’ an excess of snow ‘can never be so bad as the pall that covers England and Scotland half the year and makes the people “take their pleasures sadly.”’⁶⁸

Even though nationalists such as Grant promoted the myth of Canadians as a hardy northern race,⁶⁹ however, he was careful to avoid creating an impression of Canada as an inhospitable country. Commenting on one of the only two views in *Picturesque Canada* that depict winter storms, [illust. 8, p. 226] Grant observes that ‘it is a wild snow storm; the dark clouds are driven before fierce gusts of wind; thick

⁶⁵ *Picturesque Canada*, 212. While citing *Picturesque Canada* as evidence of the conflict between logging and the picturesque, Ramsay’s article ignores this chapter. Ramsay, ‘Picturing the Picturesque,’ 164.

⁶⁶ *Picturesque Canada*, 234-8. The need for forest conservation is also stressed in the chapter on western Ontario, but largely for flood control and aesthetic purposes. *Picturesque Canada*, 487, 501.

⁶⁷ *Picturesque Canada*, 235.

⁶⁸ *Picturesque Canada*, 4. The Ottawa chapter (see 190-2) includes an illustration and a description of tobogganing on the slide at Government House.

⁶⁹ See Carl Berger, ‘The True North Strong and Free,’ in Peter Russell, ed., *Nationalism in Canada* (Toronto: McGraw-Hill, 1966), 3-26.

snowdrifts shiver around the side of the depôt, but within all is warmth and good-cheer for the weary teamsters. Notwithstanding the wild weather, one of the depôt hands is driving a sleigh, with water-barrel, to the river, and the proprietor or superintendent, wrapped in fur coat and cap, has come over to take stock of the newly-arrived supplies.’⁷⁰ The message, in short, is that snowstorms can neither intimidate hardy Canadians or hinder economic activity. Furthermore, the fact that one of the first illustrations in volume 1 is a close-up view of a locomotive pushing a giant snowplough through a deep snow drift was surely a signal that modern technology was quite capable of overcoming such obstacles in the young northern nation.

Conclusion

Rainey observes that ‘while the text of *Picturesque America* gave considerable attention to the development of natural resources, industry, and railroads, the images reassured readers that the impact of such activities on the landscape was minimal – and sometimes positive.’ Adhering to the traditional subjects of the picturesque perspective, the artists focussed on ‘older, more familiar modes of industry, agriculture, and transportation – like mills, oxcarts, and sailboats,’ as well as incorporating factories and trains into attractive ‘scenes.’⁷¹ But the writers for *Picturesque Canada*, carefully edited by Principal Grant, expressed as much ambivalence about industrialization as did its artists.⁷² Thus, in the chapter on northern Ontario by the Reverends Grant and A. Kemp, the reader is informed that ‘[w]e are at present, thanks to our constant struggle with nature, in that stage of existence in which tall chimneys are regarded as more beautiful objects than those which crowned the Acropolis. A mill is a vision of delight, proudly pointed out to the stranger, and the hum of machinery is sweeter than the music of the spheres.’⁷³

⁷⁰ *Picturesque Canada*, 225. The two descriptions of Prairie snow storms (284, 289-90) are more ominous, but elsewhere it is claimed that ‘on account of the dryness of the air the cold is not so much felt’ as in eastern Canada (300).

⁷¹ Rainey, *Creating Picturesque America*, 246.

⁷² Grant and Hamilton, *Principal Grant*, 247-8.

⁷³ *Picturesque Canada*, 564.

The two authors did concede that “‘Roughing it in the bush” is delightful for a picnic or summer holiday, but when it means unremitting toil for a lifetime under the sternest conditions of living, it is not wonderful that everything that looks in the direction of labour-saving machinery should come to be hailed as a blessing, or that factories should be regarded as the symbols of civilization.’⁷⁴ Grant and the other writers of *Picturesque Canada* apparently felt, however, that mechanization and industrialization were necessary evils, at best. Thus, we read that ‘all that is distinctive and noteworthy in Grey, as in most of the counties of Canada, is to be found not in its towns, not at railway stations, but in the townships along the gravel roads and concession lines. There we meet the men and women who endured the rough welcome of the Genius in the wilderness; the men and women to whom we owe the smiling fields and orchards, and all the promise of the future.’⁷⁵

And, somewhat paradoxically, just as Americans were much quicker to embrace the wilderness ethos than were Canadians,⁷⁶ so those smiling fields and orchards were a more characteristic feature of *Picturesque Canada* than of *Picturesque America*, which favoured views of rugged, untamed Nature. One reason was clearly that large parts of the landscape of the United States (such as the Grand Canyon) are more picturesque and sublime in the traditional sense than that of Canada. But another reason is that Americans’ nationalist pride led them to focus on what made their country distinctive from Great Britain, with massive rock formations echoing and even trumping ancient ruins in stimulating a sense of awe. Canadian nationalists such as Grant, on the other hand, wanted their country to be more like the former mother country, not less.

Perhaps the most important reason for the rather tame landscape depicted in *Picturesque Canada*, however, was that Canada was still a young undeveloped country in the early 1880s, and Canadians wished to reassure themselves as well as outsiders that the northern climate was not an impediment to the nation’s strength and progress. Thus, we read that the scenery of the upper Ottawa was ‘perhaps, the least known in Canada,’

⁷⁴ *Picturesque Canada*, 564.

⁷⁵ *Picturesque Canada*, 574.

⁷⁶ See Roderick Nash, *Wilderness and the American Mind*, 5th edition (New Haven: Yale University Press, 2014).

yet ‘it is full of promise for the wealth and civilization of the future; unlimited wood-supply and water-power; land that bears the finest of cereals; marble that already decks the Chambers of our National Parliament; with hills and cliffs in whose womb lie, awaiting birth, the most useful of the economic metals.’⁷⁷ The economic future for this region, as for the country as a whole, therefore lay in the exploitation of natural resources rather than large-scale manufacturing, or what Wrigley refers to as the mineral economy. Despite the rather conservative nature of this vision, it was no less a colonializing one insofar as it made no place for the Aboriginal population. Thus, the upper Ottawa chapter quotes the Hudson’s Bay Company agent at Mattawa to the effect that the supply of furs was currently great, but only because of ‘the thriftlessness of the present race of the young Indians, who kill the animals required for breeding.’ In his opinion, the ‘fire-water’ supplied by ‘unprincipled traders’ would ensure that this race would not ‘last much longer.’⁷⁸

⁷⁷ *Picturesque Canada*, 194.

⁷⁸ *Picturesque Canada*, 210.