"SHALL WE LINGER ALONG AMBITIONLESS?"

Environmental Perspectives on British Columbia[1]

GRAEME WYNN

During our stay here we have managed to communicate by way of signs and expressions of the face, but it is obvious we could have learned a great deal more, especially of the government and religion of these people, had we shared a common language.

Member of Captain James Cook's party
at Nootka Sound, 17 April 1778

I trust that the precision with which the survey of the coast of North West America has been carried into effect, will remove every doubt, and set aside every opinion of a north-west passage ... [because I have made] the history of our transactions ... as conclusive as possible.

Captain George Vancouver, August 1794

It would be unreasonable to suppose ... that a body of civilized men, under the sanction of their government, could not rightfully settle in a country needing their labours ... Unless such a right were presumed to exist, there would be little progress in the world by means of colonization – that wonderful agent, which ... has changed and is changing the whole surface of the earth.

G.M. Sproat, on the views of
American woodsmen in Alberni Inlet, 1860

[1] I thank Bob McDonald and Cole Harris, both more knowledgeable about British Columbia than I, for their comments on an earlier version of this article. I also absolve them from responsibility for the peculiarities and oversights that remain. Thanks also to Bob McDonald for offering me the opportunity to put together this special issue and for his important assistance along the way.

[A]s the actual terminus of the only transcontinental line under one management ... as the centre of the lumbering community unsurpassed on the continent, with immense resources of coal and iron in our immediate vicinity ... with fertile valleys on one side and the sea teeming with all kinds of fish on the other, we can see nothing that is wanting.

News Advertiser (Vancouver), on arrival of the first CPR train, May 1887

We have an extensive province without a population. Shall it remain in its primeval state ... with its forests of wealth rotting, with its vast treasures of riches lying hid, with its pastoral lands arid wastes, with its waters stinking with fish undevoured ... Shall we linger along ambitionless ... and pass away without employing that power that Heaven has placed in our hand?

Vancouver alderman James Fox, 1890

Much he cared that he was spoiling leases for future working, like a mine manager who should hurriedly exhaust the rich patches of his mine. Leases, he said, were going up in value. Someone would find it worthwhile, some day, to buy from him the stretches of forest whose sea-fronts he had shattered and left in a tangled wreckage. As for him, he was going to butcher his woods as he pleased. It paid!...

Carter, logging boss, 1907

We have nothing like the timber resources we once thought we had. Our production capacity is being reduced alarmingly ... our most valuable areas are being overcut. Our production ... must of necessity fall off sharply during the next few decades if prompt measures are not taken to forestall it.

C.D. Orchard, Chief Forester of British Columbia, 1942

Chop. Chop. Chop. The blessed forests came down and interested passers-by watched ... then speculated on their past and their future. The forest vanished and up went the city.

Ethel Wilson, in *The Innocent Traveller*, 1944

Ours is "the story of development, of the building of a ... homogeneous province; of a god-fearing pioneer people, dedicated to progress, strengthened by their contest with a great land at first reluctant to yield its full resources."

W.A.C. Bennett, in *A Century of Progress*, 1958

I hate practically everything British Columbia stands for today – the shoddy, uncaring development of natural resources, the chamber of commerce mentality that favours short-term material gain over all other considerations, the utter contempt for human values of all kind.

Roderick Haig-Brown,
to the Canadian Authors' Association, 1965

When, or if, we should ever decide that subduing is not the only, or even the most desirable, way of making our way through the world, these shining islands may be the signposts that point the way to a renewed harmonious relationship with this, the only world we're ever going to have.

Bill Reid, on Gwaai Haanas/
Queen Charlotte Islands, 1984[2]

* * * * *

PRODUCING A "SUPER, NATURAL" PROVINCE

Modern-day British Columbians cannot escape their environment. Most live within sight of mountains, and more have easy access to the sea and lakes. Many earn their livings from work in or close to nature. Fewer than four million people occupy a territory more than six times the size of England and Wales and nearly twice as large as France. They are frequently reminded (or remind themselves) that the southern parts of the province, where most British Columbians live, are a good

[2] These quotes provide a quick and approximate map of the territory through which this article proceeds. Each of them is referred to, in part, in the article, and these repetitions are signalled by the use of italic text. Quotes are from, respectively: *Captain Cook at Nootka Sound: A Daily Account of Captain Cook's stay at Nootka Sound, compiled from Cook's and other's journals, for the days March 7 to April 26, 1778*, Friday 17 April, UBC Library; W.K. Lamb, ed. *George Vancouver: A Voyage of Discovery to the North Pacific Ocean and Round the World, 1791-1795*, 4 vols. (London: Hakluyt Society, 1984), 4:1390-1; G.M. Sproat, *The Nootka: Scenes and Studies of Savage Life*, edited and annotated by C. Lillard (Victoria: Sono Nis Press, 1987 [London, 1868]), 8; *News Advertiser* (Vancouver), 24 May 1887; *News Advertiser* (Vancouver), 12 February 1890; M.A. Grainger, *Woodsmen of the West* (London: E. Arnold, 1908 and Toronto: McClelland and Stewart, 1964), 55; C.D. Orchard, "Forest Working Circles," Memo to the Hon. Wells Grey, August 1942, Orchard Papers, vol. 8, file 15, UBC Special Collections; E. Wilson, *The Innocent Traveller* (Toronto: Macmillan, 1944), 124; British Columbia Centennial Committee, *British Columbia Official Centennial Record: 1858-1958: A Century of Progress* (Vancouver: Evergreen Press, 1958), 9; R. Haig-Brown, After-dinner speech reported in *Victoria Daily Colonist*, 22 June 1965 and the *Globe and Mail* (Toronto), 22 June 1965; B. Reid, "These Shining Islands," in *Islands at the Edge: Preserving the Queen Charlotte Islands*, ed. Islands Protection Society (Vancouver: Douglas and McIntyre, 1984), 30. By contrast, the illustrations that accompany this article are intended to complement the text rather than simply to "illustrate" specific points within it. They might be read as a related, but nonetheless independent, visual essay.

deal milder in the winter months than is the rest of Canada. Rain, and lots of it, is the penance paid for the clement conditions of what critics (or the envious) are quick to call the "Wet Coast." But a thriving local viticulture industry and early-blooming spring flowers lend credence to popular perceptions that this is a land of wine and daffodils, if not roses. Even the tourist brochures that arrive in the mail, and vehicle licence plates, often bolted just inches above the exhaust pipes of single occupancy and sports utility vehicles, insist that British Columbia is a "Super, Natural" province, a place that is, to put none too fine a point on it, "Spectacular by Nature."[3]

Mountainous terrain, surging rivers, spectacular lakes, enormous trees, *fertile valleys on one side and the sea teeming with all kinds of fish on the other*: people have lived with all of these things through the human history of British Columbia, and, as the words of Vancouver alderman James Fox used in the title of this article suggest, they have provided a constant challenge to provincial residents. Paradoxically, however, this has had little influence upon provincial scholarship. Although the works of provincial historians, like those of historians everywhere, reflect the contexts out of which they were written, few of these studies suggest that their authors thought about or wrote of nature or the environment in British Columbia in distinctive ways. Much the same is true of work in other disciplines. Accounts of the provincial past and present often include references to the physical environment, in scene-setting descriptions, as a stage on which the human drama has been played out, as an obstacle to movement, or as an opportunity awaiting improvement. But these references hardly differ, in form, from those in countless other works about other places. Until very recently, most non-fiction writing on British Columbia has characterized the environment in utilitarian terms, as little more than a setting for human endeavours and as a storehouse of resources for human use.

As Allan Smith noted almost a quarter century ago, the "first generation" of provincial historians, active between 1880 and the First World War, drew their inspiration from "the values and experience of bourgeois Victorians."[4] Like many colonial and imperial scholars of their time, they defined history relatively narrowly and found little if any room in their accounts for indigenous peoples. Although explorers

[3] That all is not quite what it seems and that management of the "Super, Natural" environment has "become a highly complex bargaining process involving persons and agencies from the public and private sectors" are two points to be taken from A.H.J. Dorcey, "The Management of Super, Natural British Columbia," *BC Studies* 73 (1987): 14-42.

[4] Allan Smith, "The Writing of British Columbia History," *BC Studies* 45 (1980): 73-102.

such as James Cook at Nootka appreciated the depth of indigenous culture and lamented the gap in their capacity to understand it – *we could have learned a great deal more ... had we shared a common language* – few of the colony's early settlers and historians were as sensitive to indigenous societies and their traditions. Lacking written records, the native inhabitants of British Columbia were – to use anthropologist Eric Wolf's phrase – generally regarded as "people without history."[5] Most of those who came to the region in the late nineteenth and twentieth centuries essentially ignored or disparaged Aboriginal peoples' rituals, great myths, societal organization, and intimate familiarity with and adaptation to local environments. To be sure, anthropologists sought to document most of these things in considerable detail late in the nineteenth century, but primarily as manifestations of essentially static cultures that they (by and large) assumed would soon disappear before the march of European "civilization."[6]

For those engaged in the processes of settlement and resource extraction, such an outcome was almost everywhere accepted as a necessary article of faith. *Colonization – that wonderful agent* of change, could hardly run its course if things were presumed otherwise. Even Gilbert Malcolm Sproat, more attuned to Native claims to land and resources than were most of his generation, allowed his scruples on this score to be overridden by "the determination of intruders under any circumstances to keep what has been obtained."[7] If, "history" in this far corner of the Empire had a beginning, it was, for settlers and scholars alike, generally and at best, with the explorers. Cook and Vancouver, Mackenzie and Fraser, Quimper and Bodega y Quadra and Narvaez, marked the coming of Europeans to these distant shores. Their surveys, *carried into effect [with every care]... and as conclusive as possible, [were intended] to remove every doubt* about the qualities of the place. For most newcomers, explorers set development in motion. By banishing the mists of the unknown and translating the region into terra firma on navigators' charts and official maps, they focused public attention

[5] E.R. Wolf, *Europe and the People without History* (Berkeley: University of California Press, 1982).

[6] Although, as T.C. Reimer, "The Making of British Columbia History: Historical Writing and Institutions, 1784-1958" (PhD diss., York University, 1995) points out, Frederick Howay's views of Native peoples shifted considerably over the first three decades of the century as he came to understand more of their place in the maritime fur trade. See also T.C. Reimer, "Disciplined Past: Walter Sage, Mack Eastman and the Professionalization of British Columbia History, 1915-1942," paper presented at BC Studies Conference, Victoria, 1992 (available in Rare Books and Special Collections, UBC).

[7] Sproat, *The Nootka*, 9.

upon it. Through their observations and transcriptions, the far Pacific was brought within the orbit of colonial interests.[8]

Histories of British Columbia's developing society written in the years before 1914 turned around three persistent themes: the individual's capacity to shape his (rarely her) destiny, moral improvement, and material progress. In these accounts, early British Columbia was a land of self-made men whose enterprise had been instrumental in the development of orderly, God-fearing communities. Thus Governor Douglas received praise for upholding the legal and moral order when thousands of unruly American gold-seekers rushed up the Fraser River in the 1850s; missionaries were celebrated for bringing Christianity to Native peoples; and Judge Begbie was seen to have "left strong finger marks on the history of British Columbia in the plastic days of its first growth."[9] But moral advancement and the emergence of great men went hand in hand with, and in some degree rested upon, economic improvement. Queen Victoria's colonial servants sought to unleash the wealth of the world: and British Columbia, *an extensive province without a population*, was a potential cornucopia. It was a place where local scribes could *see nothing that is wanting.* It was, wrote R.H. Coats and R.E. Gosnell in their biography of Sir James Douglas, "an empire equal in area to a third of Europe, and, though still in a state of savage nature, rich beyond measure in ... possibilities."[10]

"Savage nature," several scholars have shown, had its attractions as a testing (or exhibition) ground for a select group of Victorian and Edwardian males anxious to demonstrate both their power over nature and their masculinity by killing wild animals on the fringes of Empire.[11] But the herds that yielded trophy heads of astonishing, and affirming, size and splendour were only a small part of British

[8] D. Clayton, *Islands of Truth: The Imperial Fashioning of Vancouver Island* (Vancouver: UBC Press, 2000) examines important dimensions of this story through the lens of critical social theory. C. Bracken pushes this approach to an extreme in *The Potlatch Papers: A Colonial Case History* (Chicago: University of Chicago Press, 1997). J. Cruikshank's forthcoming volume with UBC Press (tentative title, *Do Glaciers Listen?*) offers a supple and altogether fascinating rumination on the subject of local knowledge, colonial encounters, and the social imagination in the Gulf of Alaska.

[9] R.E. Gosnell, *A History of British Columbia* (Vancouver: Lewis Publishing Co., 1906), 94, cited in Smith, "Writing," 77.

[10] R.H. Coats and R.E. Gosnell, *Sir James Douglas* (Toronto: Morang, 1909), 94, cited in Smith, "Writing," 74.

[11] T. Loo, "Of Moose and Men: Hunting for Masculinities in British Columbia," *Western Historical Quarterly* 32, 3 (2001): 296-319; K. Wonders, "A Sportsman's Eden," *The Beaver*, October - November 1999 and December 1999 - January 2000, 26-32 and 30-37; and G. Colpitts, *Game in the Garden: A Human History of Wildlife in Western Canada to 1940* (Vancouver: UBC Press, 2002). See also T. Loo, "Making a Modern Wilderness: Conserving Wildlife in Twentieth-Century Canada," *Canadian Historical Review* 82, 1 (2001): 92-121.

Columbia's riches beyond measure. The province's natural grandeur attracted brief attention at the height of the economic boom before the First World War, when timber *leases ... were going up in value*, resources appeared inexhaustible, and progress seemed unstoppable. Strathcona Park was established on Vancouver Island, but only with a large eye on the revenues expected to flow from the development of civilized "pleasure grounds" in this natural setting.[12] For most, the main chance offered by the wealth of the province lay in more direct conversions of nature. That is to say, profit was to be found in the salmon that could be canned to feed workers in Britain's industrial cities, in the trees that could be felled to house immigrants to the Prairie west, in the minerals that were hauled from the earth to constitute wealth (gold, silver) or to be put to valuable use in the new industrial economy (lead, copper), and in the land that promised homes and farms and comfort. All these the province offered in profusion, and their exploitation was part of the great process of bringing a wilderness into civilization.

Abundance was not without its problems. But these could usually be resolved by the simple pro-development calculus of the day. Faced with the likelihood that a proposed copper reduction plant would spill toxic pollution into the Similkameen River, the federal government's chief fisheries officer for British Columbia encapsulated prevailing values when he explained his department's reluctance to intervene against industrial progress: "Whilst the Department is anxious to protect the fish, it cannot be done at the expense of such an undertaking."[13] If fish and furs, timber and minerals, land and opportunity seemed to abound in this place of plenty, it was clear that some resources were more highly valued than were others and that none was prized for more than its use-value. The "Herculean" obstacles confronted in realizing the potential of this surfeit of opportunities were regarded, for the most part, as difficulties of "geography." Acknowledging them served only to emphasize what marvels of exploitation had been achieved. Taken together, the actions of early British Columbians and the accounts of the province written during these years offer a collective tribute to "the rise and progress of British Columbia" within the British Empire.[14]

[12] For a brief history of Strathcona Park, see W. Baikie and R. Phillips, *Strathcona: A History of British Columbia's First Provincial Park* (Campbell River: Ptarmigan Press, 1986).

[13] F.H. Cunningham to H. Shotton, 24 October 1916, NAC-Vancouver, Department of Fisheries, Pacific Region Records, RG23 PR vol. 2239, file 34-1, part 2, cited by A. Keeling, "The Effluent Society: Water Pollution and Environmental Politics in British Columbia, 1889-1980" (PhD diss., University of British Columbia, 2004), 141.

[14] The phrase comes from A. Begg, *History of British Columbia from its Earliest Discovery to the Present Time* (Toronto: W. Briggs, 1894), 7.

1. Super, Natural British Columbia

This photograph of Buttle Lake on Vancouver Island was made in 1911. Its history, as well as its spectacular nature, are worthy of attention, for together they say a good deal about attitudes toward the environment in British Columbia. This image was one of a series of pictures taken on a semi-official visit to the Buttle Lake area shortly before it was included in Strathcona Park by an Act of the Provincial legislature in 1911. The Hon. Price Ellison, Minister of Finance and Agriculture in the McBride government, who led the visit to the Strathcona Park area, probably had leather-bound presentation albums prepared for those who accompanied him on the trip. These albums included pictures of camps and canoes as well as of expedition members and formed a revealing and at times spectacular record of the landscapes of this still little-known area. The album presented to one of the party, A. E. McPhillips, was found in the Old Fort Book and Print Shop in Victoria by Roderick Haig-Brown, when he was stationed in that city during the Second World War. He gave the album to his friend Will. J. Reid, who had a retreat on Buttle Lake. Anticipating rising water levels in the lake, the BC Power Commission appropriated this place, called Nootka Lodge, in 1955 when it sought to build a dam on the Upper Campbell River to generate hydroelectricity. In the winter of 1955-6 a heavy snowfall caused the roof of the abandoned building to collapse and the album was damaged by the elements. Reid rescued it and returned it to Haig-Brown shortly before the ruined Lodge was looted and vandalized. Haig-Brown then donated the album to the Harry Hawthorne Foundation Collection in the University of British Columbia Library. After recounting this story shortly after Christmas 1956, in a letter to the University library, and conspicuously neglecting to mention that he, Reid and Hawthorne had been involved in the often bitter and ultimately futile struggle to save Buttle Lake through the early 1950s, Haig-Brown wrote of the album: "It includes many scenes permanently lost to future generations of British Columbians."

"Buttle Lake looking North from near the Southern End"
UBC Library, Rare Books & Special Collections: BC 1456 - 12.

Those who lived in and wrote about British Columbia between the World Wars tended to be less optimistic. Indeed, there were good reasons for them to be gloomy. The economic crash of 1929 dealt a serious blow to expansionist dreams everywhere. But even before this, as John Thistle's paper in this issue demonstrates, some contemporaries were coming, albeit haltingly, to sense the limits of particular resources. From this it was a short, though neither popular nor widely accepted, step to the conclusion that British Columbia's resource cornucopia was rather less bounteous than it had once seemed to be. The helter-skelter plunder of British Columbia's forests was reigned in, to some extent, by new ideas and new policies of "conservation" introduced in large part from the United States.[15] These initiatives were hardly antagonistic to exploitation. For all the contemporary rhetoric that described the British Columbia Forest Branch (established as part of the Department of Lands in 1912) as bringing an end to the "epoch of reckless devastation" in the province's forests, early forestry was all about use (albeit wise and efficient use) of the resource.[16] Conservation was not preservation. Revealingly, the Forest Branch spent much effort and most of its budget, during its early years, on preventing "waste" by fighting forest fires.[17] By some accounts at least, it was more successful at forwarding the agenda of forest capitalists than were the plans of professional foresters. By 1942 it was left to the chief forester to lament: *We have nothing like the timber resources we once thought we had.*

In a similar vein, as Arn Keeling demonstrates below, even fresh and marine waters were regarded as a resource to be used, as their "assimilative capacity" was tapped to dispose of the waste generated by growing urban populations and developing industries. Within this context, contemporary social and scientific perspectives on the province's rivers, lakes, and seas had more to do with water's efficiency in the disposal of waste than they did with aesthetics or aquatic ecology. Indeed, as James Murton's engagement with the words and pictures of promoter J.W. Clark later in this issue reveals, many in interwar British Columbia tended to construe development as "natural" and to portray

[15] T.R. Roach, "Stewards of the People's Wealth: The Founding of British Columbia's Forest Branch," *Journal of Forest History* 28, 1 (1984): 14-23. See also R.P. Gillis and T.R. Roach, *Lost Initiatives: Canada's Forest Industries, Forest Policy and Forest Conservation* (New York: Greenwood Press, 1986).

[16] S. Gray, "The Government's Timber Business: Forest Policy and Administration in British Columbia, 1912-1928," *BC Studies* 81 (1989): 24-49; S. Gray, "Forest Policy and Administration in British Columbia" (MA thesis, Simon Fraser University, 1982).

[17] Roach, "Stewards"; and J.V. Parminter, "An Historical Review of Forest Fire Management in British Columbia" (MF thesis, University of British Columbia, 1978).

it as proceeding more or less in partnership with nature.[18] *The forest vanished and up went the city.*

Scholarly emphases shifted during the interwar years as authors moved away from an imperial perspective to chart the place of the province in the developing nation. Still, economic development remained a significant leitmotiv. Resource exploitation attracted much attention, but, with the growing professionalization of historical scholarship in British Columbia and Canada more generally, it fell under a more analytical and critical light.[19] Some researchers even began to question the rhetoric and the teleology of progress. On balance, W.A. Mackintosh and H.A. Innis, who developed a distinctively Canadian perspective on colonial economic history, were probably the most important influences on BC scholarship during these years. Their approach, commonly known as the staples thesis, or staples theory, emphasized the importance of resource-based industries to the development of new world societies.[20] It turned away from earlier emphases on the heroic deeds of great adventurers to consider the interaction of underlying and impersonal forces that were seen to shape trade and the nation.

Applied to British Columbia, these ideas called attention to the ruggedness of the environment. Innis, travelling through the province in 1932, quite typically thought its historical development a story of "struggle against mountains, rocks and forest."[21] Staples theorists also emphasized the particular characteristics of the province's major resources while stressing the ways in which geography, technology, and economics moulded provincial society. Thus, W.A. Carrothers

[18] But compare Murton's effort to suggest ambiguity in answer to the question about what J.W. Clark saw with M. Cobb and D. Duffy's more unilateral reading of earlier images of the same broad areas in "'A Picture of Prosperity': The British Columbia Interior in Promotional Photography, 1890-1914," *BC Studies* 52 (1981-82): 142-56. See also J. Schwartz, "The Photographic Record of Pre-Confederation British Columbia," *Archivaria* 5 (1977-78): 17-44; and articles in "The Past in Focus: Photography and British Columbia, 1858-1914," *BC Studies* (special issue) 52 (1981-82).

[19] In addition to Smith, "Writing," see Reimer, "Making," and Reimer "Disciplined Past," for a fuller discussion of the rise of "university history" and the professionalization of historical scholarship in British Columbia.

[20] W.A. Mackintosh, "Economic Factors in Canadian History," *Canadian Historical Review* 4 (1923): 12-25; W.A. Macintosh, *Agricultural Cooperation in Western Canada* (Kingston and Toronto: Queen's University and Ryerson Press, 1924), 1; W.A. Macintosh, "Innis on Canadian Economic Development," *Journal of Political Economy* 61 (1953): 187; H.A. Innis, *Settlement and the Mining Frontier* (Toronto: Macmillan, 1936). There is a useful discussion of Innis's contributions in C.C. Berger, *The Writing of Canadian History: Aspects of English-Canadian Historical Writing Since 1900*, 2nd ed. (Toronto: University of Toronto Press, 1986), chap. 4, pp. 85-111.

[21] H.A. Innis, "Field Notes: Toronto to BC, 1932," Harold Innis Papers, University of Toronto Archives, B72-0003, box 6, file 15, cited in Reimer, "Making," 339.

argued that technological innovation in British Columbia's coastal forest industry was driven by the size of the trees and the difficulties that climate and relief imposed on the movement of logs from stump to mill.[22] Harold Innis, commenting on this work when it was included in A.R.M. Lower's history entitled *The North American Assault on the Canadian Forest*, found in its arguments an explanation for the autonomist outlook of British Columbia. In a similar vein, William Carrothers's study entitled *The British Columbia Fisheries* and Innis's own study of mining in the Kootenay mountains tied the history of British Columbia to the development of its resources.[23]

Not all historians of British Columbia followed the staples theory. Some drew inspiration from the work of the American Frederick Jackson Turner. At first glance, at least, his "frontier thesis" seemed to afford considerable power to the environment. In Turner's own words, that ever-shifting zone of "settlement nearest the wilderness" found at "the hither edge of free land" where "savagery and civilization" met gave American democracy its distinctive qualities.[24] The frontier transformed. There, pioneers shed the trappings of older, more complex and more settled societies; restrictive institutional and social customs fell away; and individualism flourished.[25] Among Canadians who engaged these ideas, Walter Sage of the University of British Columbia insisted, in several publications appearing between 1928 and 1942, that the environment played a central role in shaping Canada and its provinces.[26] By Sage's account, those who developed British Columbia faced the "stern facts of geography" and confronted the "inexorability" of geographical factors.[27] Here the environment was afforded direct and

[22] W.A. Carrothers, "Forest Industries of British Columbia," in *The North American Assault on the Canadian Forest: A History of the Lumber Trade Between Canada and the United States*, ed. A.R.M. Lower (Toronto: Ryerson Press, 1938), 227-344.

[23] W.A. Carrothers, *The British Columbia Fisheries* (Toronto: University of Toronto Press, 1941), vii-xii.

[24] F.J. Turner, "The Significance of the Frontier in American History," in *The Frontier in American History*, ed. F.J. Turner (New York: Henry Holt and Company, 1920), 1-38 .

[25] Later analyses suggest that this transformation, which Turner ascribed somewhat mystically to the frontier environment, was substantially driven by economic considerations – and specifically by the contrasting ratios of people (labour) to land in old- and new-settled territories. See C. Harris, "The Simplification of Europe Overseas," *Annals of the Association of American Geographers* 67, 4 (1977): 469-83.

[26] He did not simply follow Turner in developing these arguments. Sage's ideas emerged, rather, as a blend of staples and frontier approaches, leavened with ideas borrowed from the work of Andre Siegfried (which emphasized the north-south [geographical] grain of the continent while recognizing the east-west [historical] ties of politics).

[27] W.N. Sage, *British Columbia and the United States: the North Pacific Slope from Fur Trade to Aviation* (Toronto: Ryerson Press, 1942), 192, 228, 268, 298. Forces such as these determined that Canada developed as a suite of five cultural regions, each of which had its counterpart in

influential agency, although the ways in which it exercised its power remained obscure, and the simple deterministic assumptions upon which arguments for the transformative power of the frontier seemed to rest were soon discredited.

In the quarter-century or so after 1945, economic development was central to the province's political agenda, and – as the anecdote with which Tina Loo begins her article in this issue reminds us – visions of environmental transformation in the cause of economic growth danced in many minds' eyes. British Columbia's past and future was represented as *the story of development*, as the achievement and prospect of *a god-fearing pioneer people, dedicated to progress.* Criticisms of the environmental effects of growth and development surfaced, and they struck a resonant chord among a growing segment of the provincial population. But the rising tide of unease did little to stop expansion – *the shoddy, uncaring development of natural resources, the ... [clamour for] short-term material gain over all other considerations*, that so appalled Roderick Haig-Brown in 1965.[28] Commenting on the provincial government's establishment of an environment and land use committee in 1971, *Victoria Times* reporter Ian Street wrote: "It seems quite clear the balance, in the eyes of the government, is still tipped heavily in favor of development. Not development at any price, perhaps, but still development over the preservation of the environment where natural resources exist."[29]

Public disquiet failed to colour interpretations of the province's past with environmental concerns. Across North America during the 1960s, humanistic and social scientific scholarship embraced issues of class, race, and gender.[30] Whatever the reasons for this change, its effects were quickly felt among scholars of the Pacific province.[31] Studies of immigrant minorities, of the place of women in society (past and present), and of labour struggles proliferated.[32] Reflecting the new

American territory to the south. See W.N. Sage, "Some Aspects of the Frontier in Canadian History," in Canadian Historical Association, *Report*, (1928): 62-72; W.N. Sage, "Geographical and Cultural Aspects of the Five Canadas," in Canadian Historical Association, *Report* (1937): 28-34; W.N. Sage, *Canada from Sea to Sea* (Toronto: University of Toronto Press, 1940).

[28] A. Keeling and R.A.J. McDonald, "The Profligate Province: Roderick Haig-Brown and the Modernizing of British Columbia," *Journal of Canadian Studies* 36, 3 (2001): 7-23.

[29] I. Street, "BC Government Not Even Trying to Save Environment," *Victoria Times*, 16 May 1971, 5, cited by Keeling, "Effluent Society," 180.

[30] See Berger, *Writing*, "Tradition and the 'New' History," 259-320, for a summary.

[31] Smith, "Writing," 88-90.

[32] W.P. Ward, *White Canada Forever: Popular Attitudes and Public Policy toward Orientals in British Columbia* (Montreal and Kingston: McGill-Queen's University Press, 1978); P. Roy, *A White Man's Province: British Columbia Politicians and Chinese and Japanese Immigrants, 1858-1914* (Vancouver: UBC Press, 1989); B.K. Latham and R.J. Pazdro, eds., *Not Just Pin Money:*

emphasis on structural interpretations of society, political scientist Martin Robin offered a vigorous interpretation of British Columbia's political experience as a reflection of its social and economic formations. He framed the early part of this story as a "rush for spoils" and symbolized the emergence of large corporate interests after 1933 as the development of "pillars of profit." Although these phrases, used in the titles of Robin's two volumes, parallel earlier interest in the patterns of resource exploitation, and his account echoes Carrothers and Innis in emphasizing the dominance of large firms in the forest and mining industries, Robin finds the distinctive characteristics of "the company province" in a class-based analysis that also turns on the development of a substantial petit-bourgeoisie in the service sector and the relative absence of independent commodity producers (particularly farmers).[33] Here, as in most other work on British Columbia between the 1960s and the 1980s, little attention was paid to nature or the environment.[34]

Only in the final decades of the twentieth century, when die-hard environmental activism was blended with a broader societal discourse about environmental sustainability, did general utilitarian assumptions about (or benign neglect of) the environment give way to a broadly based consensus that the environment was more than a source of economic wealth. Then growing numbers of British Columbians began to think *that subduing ... [might] not [be] the only, or even the most desirable, way of making ... [their] way through the world*, and that it might be a good idea to look for ways of establishing a more *harmonious relationship with ... the only world [they were] ever going to have.* Like most such transitions, this was a gradual shift that began indistinctly and gained ground over time. With hindsight, and the characteristically acute perception that

Selected Essays of the History of Women's Work in British Columbia (Victoria: Camosun College, 1984); W.P. Ward, "Class and Race in the Social Structure of British Columbia, 1870-1939," *BC Studies* 45 (1980): 17-36.

[33] M. Robin, *The Rush for Spoils: The Company Province, 1871-1933* (Toronto: McClelland and Stewart, 1972); M. Robin, *Pillars of Profit: The Company Province, 1934-1972* (Toronto: McClelland and Stewart, 1973).

[34] Earlier concerns were largely submerged, although, in her 1958 centennial history of the province, Margaret Ormsby threaded her conviction that the provincial hinterland, or frontier, liberated the potential of those who settled there. See Margaret Ormsby, *British Columbia: A History* (Toronto: Macmillan, 1958). Yet hers was a qualified frontierism, despite her assertion that western Canadians knew that they were "both on the edge of civilization and on the verge of something new." See Margaret Ormsby, "A Horizontal View: Presidential Address," *Historical Papers-Communications historiques* 1966: 2. For all that, the power of the frontier ideology in the public mind is considerable: See E. Furniss, "Pioneers, Progress, and the Myth of the Frontier: The Landscape of Public History in Rural British Columbia," *BC Studies* 115-16 (1997-98): 7-44; E. Furniss, *The Burden of History: Colonialism and the Frontier Myth in a Rural Canadian Community* (Vancouver: UBC Press, 1999).

it provides, early-germinating seeds of what later became a grassroots movement can be identified in the isolated voices of doubt, anxiety, and protest raised against prevailing pro-development norms in the decades of the mid-twentieth century. Thus the well-known BC fishing writer and naturalist Roderick Haig-Brown led a lively charge early in the 1950s against the damming of Buttle Lake and the despoliation of part of Strathcona Park on Vancouver Island. Important as this protest was in defining the possibilities of opposition, it failed, in practical terms, to secure the victory it sought, and most of its principals remained wedded to the view that nature was a resource to be used. Their challenge was site-specific and failed to formulate a trenchant critique of the prevailing faith in technology and resource development.[35]

A decade or so later, the development juggernaut rolled across another part of the province. In 1964, men and women and children who had made homes and formed communities in the relatively isolated West Kootenay district were told that their settlements would soon disappear beneath the rising waters impounded by massive dams on the Columbia River. Overnight, their memories tell them, they were transformed from residents of utopia into people in the way of a progress. Tina Loo and Linda Kendall explore these matters in very different ways in the pages that follow. For Loo the episode provides insight into the hubris of high modernist planning. It reveals the agents, techniques, and logic behind the environmental megaprojects that stood, in the 1960s, as culminating triumphs of a century-long trajectory of provincial development predicated on a strongly utilitarian view of the environment. But this story also offers a reminder of the "multiple modernities" at play in British Columbia during these years, or – to shift Loo's emphasis somewhat – an indication of British Columbians' growing disenchantment with the bureaucratic planners' agenda. For Kendall, the child of a family served with an eviction order in 1965, the episode still brings back memories sharp and painful enough that her docu-poems reverberate with her feelings about the death of a community.

Like the beams of old log homes set to the torch by agents of progress, the embers of resentment at what happened along the Arrow Lakes smouldered long in the hearts of those displaced and in the minds of some of those who had watched the process from afar.[36] Fanned by

[35] A. Keeling, "'A Dynamic, Not a Static Conception': The Conservation Thought of Roderick Haig-Brown," *Pacific Historical Review* 71, 2 (2002): 239-68; Y. Qureshi, "Environmental Issues in British Columbia: An Historical-Geographical Perspective" (MA thesis, University of British Columbia, 1991).

[36] See also S. Toller and P.N. Nemetz, "Assessing the Impact of Hydro Development: A Case Study of the Columbia River Basin in British Columbia," *BC Studies* 114 (1997): 5-30; and J.W.

growing public disillusionment with nuclear testing (as detailed in Frank Zelko's article on the roots of the Greenpeace movement), chemical pollution, corporate mendacity, and wilderness desecration, they contributed to the spread of a heightened environmental consciousness among British Columbians. So too did the presence in the province of a substantial number of young Canadians and Americans, broadly members of a counter-culture that included those known variously as hippies, draft-dodgers, and refugees from the corporate rat-race, most of whom deplored the wasteful consumption that they saw around them.[37] Priorities and values changed. After being treated as ciphers in engineers' equations and obstacles in the way of bureaucratic designs, people reasserted their humanity.

Environmentalism took its place alongside other new social movements. More and more attention focused on the effects of air and water pollution, and action was taken to address the worst of these and similar problems. In British Columbia protests to preserve old-growth forests and to protect wilderness areas proliferated. "Sustainability" and "sustainable development" entered popular discourse. New environmentalist organizations dedicated to the cause of environmental protection sprang up and attracted substantial followings. As a single case in point, the Western Canada Wilderness Committee, founded in 1980, had a membership of over 30,000 people and annual operating revenues of more than $2.5 million little more than a decade later. On the basis of these developments, the journalist and interpreter of American popular culture Joel Garreau characterized British Columbia (somewhat tendentiously given the continuing importance of resource extraction industries to the economy) as part of "Ecotopia," that region of North America (including Alaska, Washington, Oregon, and California) in which alternatives to the "bigger-is-better, growth-is-inevitably-good" philosophies prevalent elsewhere were embraced by "otherwise ordinary middle-class suburban homeowners" and others.[38]

But the "new dawn" of environmentalism soon gave way to the harsher light of another day. Across North America the rise of neoliberalism reshaped public discourse and sought massive reductions in state expenditures, which translated into massive reductions in the state's capacity

Wilson and M. Conn, "On Uprooting and Rerooting: Reflections on the Columbia River Project," *BC Studies* 58 (1983): 40-54.

[37] J. Wilson, "Forest Conservation in British Columbia, 1935-85: Reflections on a Barren Political Debate," *BC Studies* 76 (1987-88): 3-32.

[38] J. Garreau, *The Nine Nations of North America* (New York: Avon Books, 1981), 245-86, quote from p. 250.

to manage economic, social, and environmental issues.[39] As the state was "hollowed out" and its ability to frame and administer environmental policies contracted, the rhetoric of natural resource management shifted. Jeremy Wilson's study of bird protection in British Columbia elsewhere in this issue reminds readers that an earlier emphasis on integrated resource management gave way to discussions of biodiversity in the 1970s and 1980s.[40] The new term proved widely attractive. Common as it became, it remained ill-defined in the popular mind, and it was soon turned to serve as a smokescreen for inaction or worse. Thus the British Columbia Forest Practices Code (FPC) introduced in the 1990s included a well-noticed "Biodiversity Guidebook," but other regulations, designed to limit the impact of the code on timber harvests, severely constrained the protection afforded biodiversity and endangered species.[41] Since then, the FPC has been replaced by a results-based management regime, state agencies have been reduced in size, and the support for science and surveillance so essential to effective environmental protection has been cut back.

There are variant forms of this story, and Jeremy Wilson provides a detailed and important account of one of them. Discouraging as this tale (and the cumulative weight of others like it) might seem to those intent on sustaining and protecting the environment, all is not lost. The weak have traditionally found weapons to further their causes, and, as Wilson points out, new forms of resistance are already being identified and implemented to secure the protection of old-growth forest.[42] These are important developments. Yet, as the lively opinion piece by Tracy Summerville and Heather Myers that concludes this issue demonstrates, neither "problems" nor "solutions" are simple when it comes to matters such as these. Limiting access to resources in the interests of biodiversity, ecology, or preservation (because they are "spectacular by nature") can have significant, and deleterious, economic and social effects upon particular segments of the population, and it is enormously difficult to balance interests in such circumstances. Thus it is vital to the future of the province and its people that the concerns of all sides be heard, that

[39] S. McBride, *Paradigm Shift: Globalization and the Canadian State* (Halifax: Fernwood, 2001).

[40] See also J. Wilson, "Talking the Talk and Walking the Walk: Reflections on the Early Influence of Ecosystem Management Ideas," in *Canadian Forest Policy: Adapting to Change*, ed. M. Howlett (Toronto: University of Toronto Press, 2001), 94-126 .

[41] G. Hoberg, "The 6 Percent Solution: The Forest Practices Code," in *In Search of Sustainability: British Columbia Forest Policy in the 1990s*, ed. B. Cashore, G. Hoberg, M. Howlett, J. Rayner, and J. Wilson (Vancouver: UBC Press, 2001), 61-93 .

[42] The allusion is to J.C. Scott, *Weapons of the Weak: Everyday Forms of Peasant Resistance* (New Haven: Yale University Press, 1985).

differences be treated with respect, and that the demands and actions of all involved be temperate and judicious.[43]

Students and faculty in the universities of British Columbia were quick to respond to the challenges and changes of the late twentieth century.[44] Theses and articles relating to one or another aspect of the environment, resource use, park and wilderness areas, and so on appeared with rising frequency after 1970. The arguments, emphases, and perspectives articulated in these works differed, for the most part and in important ways, from those found in the relatively infrequent earlier engagements with these topics. Rarely, now, was the environment treated as a simple stage or as an uncomplicated source of commodities. Again it is difficult to date the beginnings of this shift precisely. Margaret Ormsby might have voiced one of its earliest manifestations when she reflected, in 1966, on the paradox at the heart of Western development. Following a familiar BC script and influenced by the recent work of American historian David Potter, she described those who came to these bountiful territories as "People of Plenty." But she also injected a note of irony into this characterization by observing that "they could survive in the remote wilderness and make profit from their enterprise only by destroying the very source of their support."[45]

The extent and implications of this destruction as well as other environmental matters have been increasingly important foci of scholarly concern in the years since Ormsby wrote. Scanning the pages of *BC Studies* since the first issue appeared in 1968, one finds articles that touch upon a wide range of broadly environmental questions, from the effects of licensing, science, and permit systems on salmon, pollution, and trees, through the impacts of disease diffusion and the reservation of agricultural land, to items that offer ruminations on fly-fishing and colonialism, thoughts about "being green," perspectives on the "war in the woods," reflections on debates over forest conservation, proposals for the development of sustainability, and analyses of popular images

[43] M.G. Reed, *Taking Stands: Gender and the Sustainability of Rural Communities* (Vancouver: UBC Press, 2003) is a timely and important contribution to this general discussion.

[44] For example, J.G. Terpenning, "The BC Wildlife Federation and Government: A Comparative Study of Pressure Groups and Government interaction for Two Periods, 1947-1957 and 1958-1975" (MA thesis, University of Victoria, 1982); J. Wilson, *Talk and Log: Wilderness Politics in British Columbia, 1965-1996* (Vancouver: UBC Press, 1998); G. Kahrer, "Logging and Landscape Change on the North Shore of Burrard Inlet, British Columbia, 1860's to 1930's" (MA thesis, University of British Columbia, 1988)and D. J. Sandquist, "The Giant Killers: Forestry, Conservation and Recreation in the Green Timbers Forest, Surrey, British Columbia to 1930(MA thesis, Simon Fraser University, 2000).

[45] Ormsby, "Horizontal View," 4; D.M. Potter, *People of Plenty: Economic Abundance and the American Character* (Chicago: University of Chicago Press, 1954).

of forests and landscapes.[46] Perhaps one in ten of the 400 or so articles published in *BC Studies* over the last thirty-five years could be said to bear reasonably directly on environmental subjects, and the frequency with which such matters are engaged has increased with time.

Several conclusions surface from this all-too-brief sketch of environmental perspectives in and on British Columbia. First, it is clear that this is complicated territory and that efforts to generalize about it are fraught with danger. Appreciating this, historical geographer Cole Harris once compared the effort of writing about the past of British Columbia to the experience of watching water-skimmers on a pond: "the object of scrutiny is both near at hand and elusive, individuals appear and are lost in general movement, and activity is more obvious than pattern or purpose."[47] Novelist Jack Hodgins offered another view of the issue through the eyes of Strabo Becker in *The Invention of the World*. Seeking to understand Vancouver Island, Becker catalogues its elements and produces a curiously revealing, undifferentiated jumble of attributes. His island, he reflects, is:

[46] B. Hayward, "The BC Salmon Fishery: A Consideration of the Effects of Licensing," *BC Studies* 50 (1981): 39-51; M. Evenden, "Remaking Hells Gate: Salmon, Science, and the Fraser River, 1938-1948," *BC Studies* 127 (2000): 47-82; L. Kolankiewicz, "Compliance with Pollution Control Permits in the Lower Fraser Valley," *BC Studies* 72 (1986-87): 28-48; E. Pinkerton, "Taking the Minister to Court: Changes in Public Opinion about Forest Management and Their Expression in Haida Land Claims," *BC Studies* 57 (1983): 68-85; R. Boyd, "Smallpox in the Pacific Northwest: The First Epidemics," *BC Studies* 101 (1994): 5-40; R.T. Galois, "Measles, 1847-1850: The First Modern Epidemic in British Columbia," *BC Studies* 109 (1996): 31-46; J.R. Gibson, "Smallpox on the Northwest Coast, 1835-38," *BC Studies* 56 (1982-83): 61-81; M.-E. Kelm, "British Columbia's First Nations and the Influenza Pandemic of 1918-1919," *BC Studies* 122 (1999): 23-48; M. Andrews, "Epidemic and Public Health: Influenza in Vancouver, 1918-1919," *BC Studies* 34 (1977): 21-44; A. Petter, "Sausage Making in British Columbia's NDP Government: The Creation of the Land Commission Act, August 1972-April 1973," *BC Studies* 65 (1985): 3-33; C. Garrish, "Unscrambling the Omelette: Understanding British Columbia's Agricultural Land Reserve," *BC Studies* 136 (Winter 2002-03): 25-56; M. Thoms, "A Place Called Pennask: Fly-Fishing and Colonialism at a British Columbia Lake," *BC Studies* 133 (2002): 69-98; D. Blake, N. Guppy and P. Urmetzer "Being Green in BC: Public Attitudes Toward Environmental Issues," *BC Studies* 112 (1996-97): 41-61; D.J. Salazar and D.K. Alper, "Beyond the Politics of Left and Right: Values of Environmental Activists in British Columbia," *BC Studies* 121 (1999): 5-34; L. Stefanick, "Baby Stumpy and the War in the Woods: Competing Frames of British Columbia Forestry," *BC Studies* 130 (2001): 41-68; S. Gray, "Government's Timber Business"; J. Wilson, "Forest Conservation"; R.M. M'Gonigle, "Developing Sustainability: A Native/Environmentalist Prescription for Third Level Government," *BC Studies* 84 (Winter 1989-90): 65-99; W.S. Prudham and M.G. Reed, "Looking to Oregon: Comparative Challenges to Forest Policy Reform and Sustainability in British Columbia and the Pacific Northwest," *BC Studies* 130 (2001): 5-40; B. Willems-Braun, "Colonial Vestiges: Representing Forest Landscapes on Canada's West Coast," *BC Studies* 112 (1996-97): 5-39; Cobb and Duffy, "Picture of Prosperity."

[47] C. Harris, "Reflections on the Surface of a Pond: A Review Article," *BC Studies* 49 (1981): 86-93, quote from p. 86.

> twelve thousand square miles of rugged stone mountains and timber stands and logged-off slopes and deep green valleys, sprinkled with fishing villages around rotting wharves, with logging camps of tarpaper huts on skids, with towns and resorts and hobby farms, with snag-spiked lakes and long crooked green rivers ... [Its] tree-furry coastline [is decorated] with used-car lots, rotting hay barns, smoke-blooming pulp mills, weedy estuaries, log-booming grounds and brand new subdivisions, with old bleached freighters painted up for restaurants and rusted wartime destroyers sunk for breakwaters.[48]

This list, this careering mishmash of natural and cultural features, could clearly be extended: it could just as easily be invoked across the Strait of Georgia. The human landscapes of the province are, for the most part, new and raw. British Columbia is full of places in the process of becoming (or declining) and of juxtapositions that seem incongruous to the aesthetic standards of eyes and minds shaped by the images of time-worn European countrysides and the representational conventions of English romanticism. Hodgins' title reminds us that these landscapes are parts of a world still being invented, of a territory where ("Super Natural"?) places, like the individuals who move through them, are in progress, still developing new identities. No wonder they are hard to understand.

The second conclusion is that all of this reflects the rapidity of British Columbia's development. Although New Zealand is generally regarded as the prime example of a place in which time was compressed – in which environmental changes that took fifteen centuries in Europe and four in eastern North America were accomplished in little more than 100 years – British Columbia surely stands as a contender for honours in these stakes.[49] The world beyond British Columbia knew virtually nothing of this place when Britain and its American colonies went to war in 1776. In the years that followed, newcomers (along with the diseases, guns, attitudes, and legal systems as well as the technologies and the economic principles that they introduced) shouldered indigenous peoples aside and established a new social order. But even today, or so the most probing student of this re-settlement process avers, the province's immigrant society "has hardly come to terms with where it is." Living in a rapidly changing "crossroad of colonialism and the modern world," the majority

[48] J. Hodgins, *The Invention of the World* (Toronto: Macmillan, 1977), x-xi.

[49] K.B. Cumberland, "A Century's Change: Natural to Cultural Vegetation in New Zealand," *Geographical Review* 31 (1941): 529-55; E. Pawson and T. Brooking, eds., *Environmental Histories of New Zealand* (Auckland: Oxford University Press, 2002).

of people in British Columbia have found that "it is not an easy place to know."[50]

Perhaps inevitably, the settler majority have simplified the challenge of trying to comprehend the province, assuming that the land to which they came *was wilderness, that they [were and] are bearers of civilization*, and that they had an ordained, perhaps even divine, right to exercise their dominion over the Earth. Viewed through this frame, the onslaught on the environment, the spendthrift attitude towards resources, and the erasures of Native histories that characterized the development of the province through most of its history can be understood to some extent: these phenomena sprang from the mental maps, or imagined geographies, that relocated and displaced people constructed to help them make sense of unknown local pasts, to deal with their disconcerting presents, and to assist them in realizing their dreams of economic improvement.

This helps – a third conclusion – to account for the rapacity of development in early British Columbia. That inhabitants of the province exhibited a deep-seated, almost insatiable desire for material progress should not be surprising. Like most immigrant peoples, British Columbia "pioneers," or "frontier settlers," faced (at least) a twofold challenge. Most of them wanted to get ahead and to make this new place their own. They hoped to gain wealth, establish domicile, and settle in. To adapt a concept developed by literary critic Terry Goldie, they sought to "become indigenous," to turn opportunity into "home."[51] The struggle to do this shaped many facets of their existence in the province. Intellectual historian Chad Reimer has argued that it coloured early historical writing on British Columbia and that it helps to account for the scant attention paid to truly indigenous people in these accounts – for how could newcomers see the place as theirs if others exercised competing claims?

Without question, the task of converting hope into sanctuary was a significant test of the newcomers' resolve and capacities. British Columbia was a hard land to tame. By comparison with New Zealand, for example, it submitted grudgingly to European designs. The size of the territory, the ruggedness of its terrain, the difficulties of moving

[50] C. Harris, *The Resettlement of British Columbia: Essays on Colonialism and Geographical Change* (Vancouver: UBC Press, 1997).

[51] T. Goldie, *Fear and Temptation: The Image of the Indigene in Canadian, Australian and New Zealand Literature* (Montreal and Kingston: McGill-Queen's University Press, 1989); see also P. Read *Returning to Nothing: The Meaning of Lost Places* (Cambridge and New York: Cambridge University Press,1996).

2. History, Memory and Place

All is not what it seems in this photograph: the dominant cultural feature in the landscape – the totem pole – shouts "British Columbia" but the physical landscape subverts this interpretation. Yes, this is a BC artifact. It is known as "The Raven Totem of Massett." But this is not Gwaaii Haanas. It is Alberta. According to anthropologist Marius Barbeau [in *Totem Poles* Bulletin 119, Vol. 2, Anthropological Series #30 (Ottawa: National Museum of Canada, 1960), pp. 568-70], the files of the Canadian National Railway (CNR) show that "this tall pole" (it was 60 to 70 feet high and "presumably the tallest in the Queen Charlotte Islands") was secured for the Company in 1919 by Captain Nicholson, manager of the Canadian National Steamship Service. The CNR erected it in Jasper Park in 1920. Rather half-hearted efforts to get "the legend" of the pole came to naught, and thus it stood, out of place, out of time, out of context and barely understood, near Jasper station for the visual consumption of early twentieth-century travelers. Originally unpainted, it was, said Barbeau, "gaudily repainted several times," presumably in attempts to "improve" its appeal to passers-by curiously insensitive to the intimate and intricate links that tie history, memory, people and place together. This relocated artifact speaks of cultural loss, the denial of memory, the hubris of the colonizer and a striking disregard for the environment in its broadest sense. Years after its relocation, Barbeau established that the carving was done by "Simeon Stiltae, a member of the Slinglaanos clan of Yan village, opposite Massett," sought to interpret the "figures on the pole...from the top down... [beginning with] the supernatural Raven, with in front of him between his wings his Son...." But the lateness of this endeavour, and the displacement of this magnificent artifact, speak volumes about the attitudes of early British Columbians toward indigenous peoples and their environments. They also remind us, to paraphrase Peter Read (see note 51 in text), of the difficulties inherent in "returning to nothing" and in trying to find meaning in (and the meaning of) lost places.

"The Raven Totem of Massett," UBC Library,
Rare Books & Special Collections: BC 893.

amid the mountains – all this served to miniaturize the achievements of newcomers. The European colonization of New Zealand was no cakewalk, but there the landscape was transformed, steadily and visibly, into a productive agricultural domain. Within a century or so of the beginnings of organized settlement, it was possible for sanguine observers to describe New Zealand landscapes as rough facsimiles of the English countryside.[52]

By contrast, English poet Rupert Brooke felt himself a long way from his Cambridgeshire home as he passed through the Rocky Mountains by train just before the First World War. Ignorant of the Native presence in the places through which he travelled, he claimed to miss the voices of the dead and lamented the dearth of ghosts – the absence of history – in these parts. Here, as in so much of British Columbia's expanse, nature overshadowed any human presence, and geography seemed to triumph over history. In these mountains, wrote Brooke in a phrase that might have served as a synopsis of contemporary attitudes towards the province as a whole, the breezes "have nothing to remember and everything to promise."[53] There was naught to propitiate and all to strive for. Promise had to be realized, potential to be turned to wealth without a backward glance, in the rush to domesticate and to realize the spoils of the place. And so it continued, for decades, in the minds of most settlers in most parts of the province. Even in those environmentally more benign southwestern parts of British Columbia, where newcomers had been established longest, forest loomed at the doorstep, a vast hinterland lay beyond, and human inroads on the provincial environment seemed severely limited until well after the Second World War.[54] A difficult realm, a forbidding antagonist, this land brooked little benevolence from those anxious to convert it to their purposes.

CONTEXTS FOR ENVIRONMENTAL STUDIES

There is now a small library of scholarship on the development of environmentalism in the United States and, to a lesser degree, elsewhere in the world after 1960.[55] For Samuel Hays, perhaps the first to provide

[52] As, for example, in A.H. Clark, *The Invasion of New Zealand by People, Plants and Animals: The South Island* (New Brunswick, NJ: Rutgers University Press, 1949).

[53] R. Brooke, cited by Harris, *Resettlement*, 30. See also S. Martin and R. Hall, *Rupert Brooke in Canada* (Toronto: Peter Martin, 1978).

[54] G. Godwin, *The Eternal Forest* (Vancouver: Godwin Books, 1994).

[55] For a useful broad overview, see R. Guha, *Environmentalism: A Global History* (New York: Longman, 2000).

a book-length account of the development of the environmental movement in the United States, postwar environmentalism stood in sharp contrast to earlier conservationist thought.[56] Conservation, argued Hays, was a producer ideology. Following his own earlier argument he insisted that the conservation movement was the child of progressive reform, focused on the efficient use of resources. Postwar environmentalism, by contrast, was a consumer movement. It was the product not of a coterie of "experts" but, rather, of ordinary citizens increasingly anxious about the damage and loss of scenic places, about their own well-being in the face of chemical pollution and toxic bio-accumulation, and about the long-term prospects of life on Earth (which were called into question by resource depletion and a rapidly escalating global population). In his rendering, beauty, health, and permanence were the watchwords of a grassroots American movement that sprang from the 1960s.

Others have read the past somewhat differently. In *Forcing the Spring*, for example, Robert Gottlieb formulates a broader, more inclusive and more continuous interpretation of environmentalism than does Hays. For Gottlieb, environmentalism was, and is, as much a response to urban and industrial change as it was, and is, about arguments for protection and management of the natural environment. This view identifies an important taproot of environmentalism in the work of activists of the 1890s, who sought to address "the hazards of urban and industrial life" and to ameliorate their impacts upon ordinary people. They generally stood apart from those who responded to urbanization by seeking to preserve wild nature.

To be sure, a few individuals, a broad commitment to progressive politics, and shared acceptance of the idea of resource management threaded connections between the two groups. But the distinctive, and largely overlooked, commitments of early "pollution fighters" are critical, in Gottlieb's view, because they directly anticipate the concerns of the 1960s. Moreover, Gottlieb would insist, twentieth-century social and economic changes spawned new (and similar) ideas and movements, especially after 1945, in protest against what Paul Goodman called the "organized society." In this long view, the two decades after 1970 saw the consolidation, entrenchment, and diversification of earlier initiatives as some (mainstream) activist groups worked for more efficient environmental management and others advocated for "environmental justice and environmental democracy" in ways that ultimately pushed questions

[56] S.P. Hays, *Beauty, Health and Permanence: Environmental Politics in the United States, 1955–1985* (New York: Cambridge University Press, 1987).

of gender, ethnicity, and class to the forefront of the contemporary environmental movement.[57]

As always, a complex world defies simple synopsis. Both Hays and Gottlieb make legitimate claims, but neither singly nor together do they provide all the answers. Susan Schrepfer's sophisticated arguments about the growth of militant environmentalism, in *The Fight to Save the Redwoods*, help to fill out the picture.[58] By her account, environmentalists changed their stripes in the years after 1945, when they turned away from an essentially mystical search for salvation in nature (exemplified by Thoreau and, especially, John Muir) to ground their indictments of both the human drive to dominate nature and the conviction that technology would solve environmental "problems" in a thorough understanding of science. From this shift came the data and the arguments that underpinned postwar environmentalism's concern (to use Hays's terms) with health and permanence.

Still, the new stripes failed to satisfy all of those who were drawn to the mushrooming environmental movement. Many were uncomfortable consorting with "the enemy" – the scientists and technologists whose beliefs and practices had, they felt, brought the world to the edge of disaster. Radical voices within the movement chose retreat from, rather than engagement with, these devils. Their path led, in one direction, to the discovery of "the ecological Indian," or the conviction that Native peoples were North America's "first conservationists," possessed of a land wisdom and a respect for nature that stood in marked contrast to (and powerful indictment of) European attitudes towards the Earth.[59] In another direction, it led back to John Muir, animism, and the almost unassailable conviction that wilderness was sacred space. All of this was important for British Columbia because many of these developments (as well as other influences, such as Quaker conviction) shaped the rise of environmental concern in the province. Early in the 1970s, they also triggered the bright blaze of disquiet about pollution that forms the end point of Keeling's discussion of sewage disposal in Vancouver. And they provided a secure foundation, in the local chapter of the Sierra Club, for a growing commitment to wilderness preservation in the last quarter of the twentieth century.

[57] R. Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington, DC: Island Press, 1993).

[58] S.R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform, 1917-1978* (Madison: University of Wisconsin Press, 1983).

[59] This is most effectively followed in Shepard Krech III, *The Ecological Indian Myth and History* (New York: W.W. Norton and Co., 1999).

By most accounts the environmental movement was catalytic in the emergence, in the United States, of a new field of scholarly inquiry known as environmental history.[60] Although the first works to claim this ground-breaking title were fairly traditional studies of the intellectual and political histories of the environmental movement and what was then often taken as its predecessor, the conservation movement, the field evolved and expanded rapidly.[61] From an initial emphasis upon "what those who admired (or hated) wild nature thought about it," historians attracted to the new field from a variety of topical and subdisciplinary perspectives moved to examine and remake the dichotomy between conservationists and preservationists and to explore "the complexities of the relationship between science and environmentalism."[62] Many also studied the past to light the way to a better future.

Into the early 1980s, much writing in environmental history either attempted to identify the proper ethical basis of human-environment relations or offered jeremiads intended to reveal the damage that human actions had wrought upon the face of the Earth. This work took many forms. It included studies of those who better understood nature, or behaved in finer ways towards the Earth, than did mid-twentieth century Americans.[63] It traced the contours of environmental thought at various times and in various places to chart the ways in which attitudes towards nature reflected cultural contexts, thus implying that lessons might be learned and contemporary attitudes adjusted by cultural change.[64] It spawned case studies that offered more or less explicit

[60] In 1972 Roderick Nash attempted to give pedagogic shape to the field in "American Environmental History: A New Teaching Frontier," *Pacific Historical Review* 41 (1972): 362–72.

[61] R. Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 1967); and S.P. Hays, *Conservation and the Gospel of Efficiency* (Cambridge, MA: Harvard University Press, 1958).

[62] R. White, "American Environmental History: The Development of a New Historical Field," *Pacific Historical Review* 54, 3 (1985): 297–335, is a superb historiography essay tracing the early development of the field. Quotes from pp. 300 and 313.

[63] This strand yielded (and continues to yield) biographical accounts of estimable figures, from Thoreau and Muir to Leopold and George Perkins Marsh. See, for example: S. Fox, *John Muir and His Legacy: The American Conservation Movement* (Boston: Little, Brown, 1981); M.P. Cohen, *The Pathless Way: John Muir and American Wilderness* (Madison: University of Wisconsin Press, 1984); S. Flader, *Thinking Like a Mountain: Aldo Leopold and the Emergence of an Ecological Attitude toward Deer, Wolves and Forests* (Columbia, MO: University of Missouri Press, 1974). See also studies of American Indian ecology, such as J. Donald Hughes, *American Indian Ecology* (El Paso: Texas Western Press, 1983); and W.R. Jacobs, *The Fatal Confrontation: Historical Studies of American Indians, Environments and Historians* (Albuquerque: University of New Mexico Press, 1996).

[64] Nash, *Wilderness and the American Mind*; and D. Worster, *Nature's Economy: A History of Ecological Ideas* (New York: Cambridge University Press, 1977) are rather different but important examples.

indictments of spendthrift resource use, human hubris, and/or the destructiveness of capitalism. In the end it led to a conclusion that both chastened and encouraged: "The present [had] inherited a lesser nature, but it had achieved a superior knowledge. It was sorrier but wiser."[65]

In the last two decades or so, environmental history has expanded and diversified immensely. Surveying the field at the beginning of the new millennium, John McNeill defined it as history that attends to the "mutual relations between humankind and the rest of nature."[66] In his view, three main varieties of environmental history "jostle one another amiably" for attention: *material* environmental history emphasizes the economic and technological in human affairs and focuses upon changes in biophysical environments; *cultural/intellectual* environmental history considers representations of nature, how they change, and what they reveal about those who produce them; *political* environmental history explores the ways in which legal systems and (more generally) the state affect the natural world.

These categories are neither all-inclusive nor intentionally exclusive. Each has its own subdivisions, and it should be clear that the field could be characterized in other ways. Furthermore, emphases other than these might warrant attention in other accounts. Some might note that questions about environmental justice have attracted many students in recent years. Others might make more of the so-called "cultural turn" that has swept through the humanities and social sciences in the last little while, and less of environmental history, by pointing to the growing attention afforded social constructions (of knowledge and nature) by scholars beyond the field. Those within what McNeill calls the big tent of environmental history might respond that their subject is carving its own distinctive path through the cultural turn, shaped by its concern with the material world.[67] But neither a complete nor a precise inventory is possible here. The basic points to be made are that environmental history is a vigorous, expanding field of inquiry that commands a good deal of attention in the United States, that it is deeply interdisciplinary, and that it is far less Whiggish, declensionist, and tied to environmentalism than it was fifteen or twenty years ago.

Measured against American scholarship in this field, Canadian environmental history is underdeveloped. In comparison with the vitality,

[65] R. White, "Environmental History: Watching a Historical Field Mature," *Pacific Historical Review* 70, 1 (2001): 103-11.

[66] J.R. McNeill, "Observations on the Nature and Culture of Environmental History," *History and Theory* 42 (2003): 6.

[67] As Richard White does in "Environmental History."

density, size, and rapid growth of the rich and varied specimens of this new scholarly genus that have sprung up in the United States, Canadian varieties have been slow to flower. There are a few robust plantings, thinly strewn across the landscape, and rather more promising seedlings, but against the verdant meadow of American work, the patchiness of the Canadian field is striking. One hopes that the spring glory of environmental history is yet to break in the north. But it has to be said that Canadian pastures have lain relatively untended until recently, and that the seeds of environmental history have found soils, climate, and available niches north of the forty-ninth parallel to be more limited and limiting than those to the south. History, geography, and political economy have each, in different ways, deprived the field of opportunities for growth in Canada.

At one level, Canadians watching the oft-remarked expansion of environmental history in the United States seemed to wonder what all the fuss was about. After all, they observed, "the writing of Canadian history has always been concerned with the environment."[68] Because it traced the development of a new country, it was, inevitably, about the reshaping of the land by fur traders, miners, lumberers, and farmers. Had not Arthur Lower, the most nationalistic of Canadian historians writing in English in the first half of the twentieth century, recognized that the North American past was "largely the story of man's struggle with nature"?[69] Indeed, but this missed much of the point. Although nature had a place in histories that adopted the staples approach – Innis began his books on the fishery and the fur trade with extended discussions of the cod and the beaver – these works focused on human uses of the environment. Fish, fur-bearing animals, and pine trees had their "geographies" (they were found in certain places), and these were influenced by ecological considerations (water temperatures, habitat, growing seasons). But these staple products, along with minerals and even the land itself, remained commodities for human exploitation. Their distributions shaped patterns of development, economies, and even societies, but there was little concern in this work for the reciprocity and mutuality of relations between people and nature that proponents of environmental history regard as central to their enterprise.

Space in which to embrace environmental history was also cramped, in Canada, by the relative vigour of historical geography from the

[68] R. Cook, "Cabbages Not Kings: Towards an Ecological Interpretation of Early Canadian History," *Journal of Canadian Studies* 25, 4 (1990-91): 5-16.

[69] Lower, *North American Assault*, 1.

1960s onward. Although their numbers were relatively few, Canadian historical geographers held a far more important place among those interested in the Canadian past than did their US counterparts among those working in American history.[70] Moreover, work on the human-environment interface (on the mutual relations between humankind and the rest of nature, as John McNeill renders it) was a venerable part of the geographical tradition. Variously characterized as an interest in "land and life" or "people and place," work in this vein had once been an important part of American geography; however, struggles to define the discipline after the Second World War rendered it increasingly marginal. Ironically, as concern for the environment swelled into a mass movement and spawned "environmental history," geographers in the United States had little to say about the historical dimensions of human-induced changes to the face of the Earth.

In Canada, by contrast, historical geographers seemed to fill the niche that environmentally minded historians to the south colonized so successfully. In truth, however, they held no more than a toehold. Canadian historical geography had not escaped the influences running through the wider discipline. By the 1970s most work in this genre was much more economic than environmental in focus. With a small handful of exceptions, it emphasized spatial patterns, social collectives (ethnic groups), and landscape forms more than it explored processes, interactions, and ecologies. The dedication in the first volume of the *Historical Atlas of Canada* rightly traced the main lines of the field's intellectual pedigree at that juncture back to Harold Innis and the Canadian-American historical geographer Andrew Clark, for whom the environment was essentially an inert and rather featureless stage upon which patterns of human activity were traced and imprinted through time.[71]

[70] A place reflected in the development, execution, and reception of the *Historical Atlas of Canada*, 3 vols. (Toronto: University of Toronto Press, 1987, 1990, and 1993).

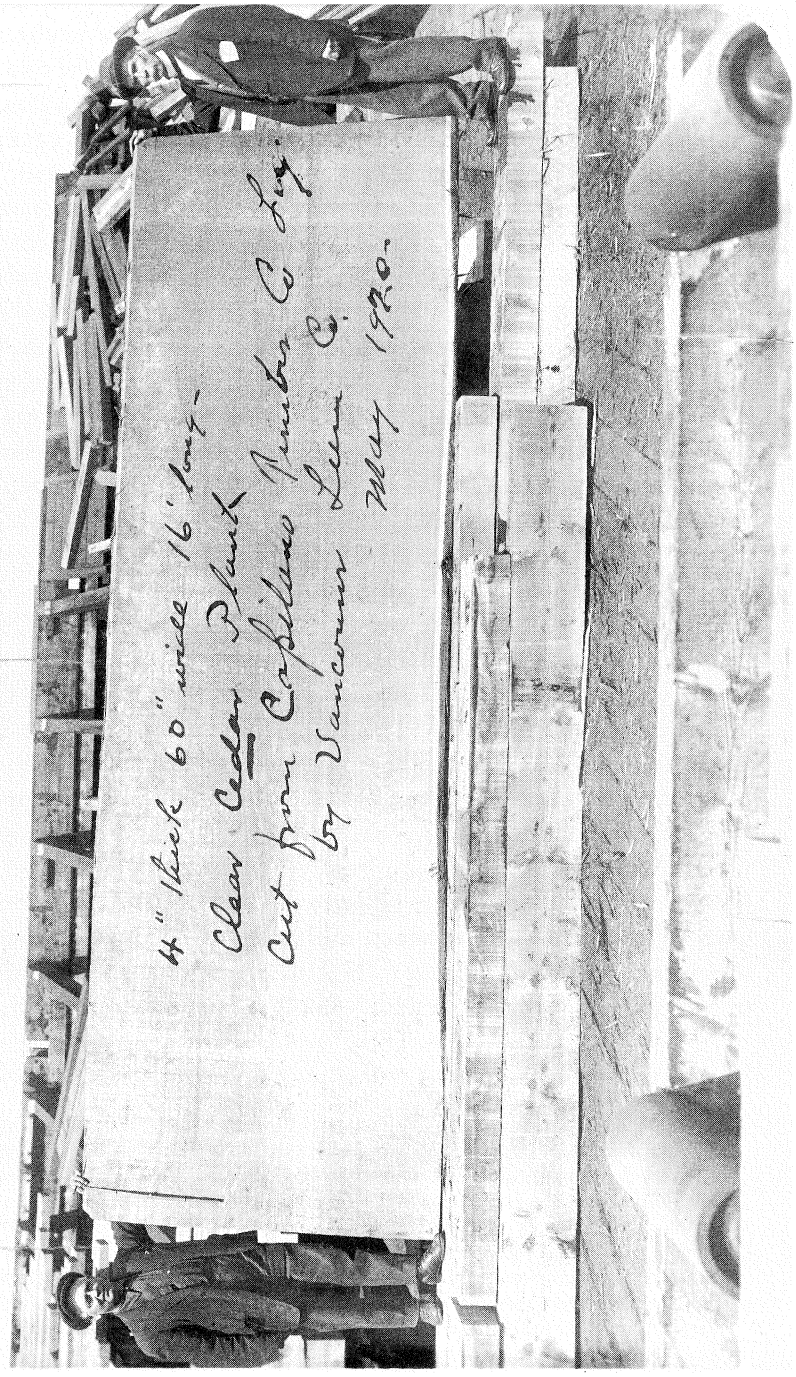
[71] This is a much too compressed sketch of a series of complicated developments that can be traced in more detail in essays by M.P. Conzen, "The Historical Impulse in Geographical Writing about the United States, 1850-1990," and G. Wynn, "Geographical Writing on the Canadian Past," in *A Scholar's Guide to Geographical Writing on the American and Canadian Past*, ed. M. Conzen, T. Rumney, and G. Wynn (Chicago: University of Chicago Press, 1993), 3-90, 91-124, respectively . The exceptions are constituted by some of the work of such geographers as C. Heidenreich, *Huronia: A History of the Huron Indians* (Toronto: McClelland and Stewart, 1971); G. Wynn, *Timber Colony: A Historical Geography of Early Nineteenth-Century New Brunswick* (Toronto: University of Toronto Press, 1982); K. Kelly, "The Impact of Nineteenth-Century Agricultural Settlement upon the Land," in *Perspectives on Landscape and Settlement in Nineteenth Century Ontario*, ed. J.D. Wood (Toronto: McClelland and Stewart, 1975), 64-77; J.G. Nelson, *Man's Impact on the Western Canadian Landscape* (Toronto: McClelland and Stewart, 1976).

Finally, it seems clear that the political economy of education contributed something to the relative underdevelopment of environmental history in Canada. In Canadian universities across most of the country, the 1980s and 1990s were decades of fiscal contraction.[72] Faced with increasing numbers of faculty retirements, departments unable to replace retired colleagues often found themselves stretched to maintain important parts of their programs. New hires were few, and when and where they occurred, they tended to address pressing established needs. Openings for scholars trained as environmental historians were rare indeed. Not all was bleak, to be sure. The new field drew the attention of several established scholars who began research and teaching in the area. And there were benefits in this. Despite relatively small numbers and (often) bifurcated interests, Canadian environmental historians brought a wide range of approaches to their engagement with the field, which is correspondingly robust. New appointments (including a number under the Canada Research Chairs program) have also invigorated the field of late. Many of these initiatives are explicitly interdisciplinary, linking environmental history to geography and the history of science in particular.[73]

Although their focus is resolutely upon British Columbia, the historians, geographers, political scientists, and others whose works constitute this issue write out of and speak to these contexts. As revealed in the footnotes and the texts of their articles, these scholars have wide-ranging interests that draw upon the literatures and concerns of several disciplines to throw light on various facets of the provincial past and present. Arn Keeling, trained as a historian and a geographer, relishes the close-grained empirical emphasis typical of much recent (American) historical work on urban pollution, but he leavens this with reference to more abstract, theoretical conceptualizations of the urban process to produce an insightful treatment of the development of Vancouver's sewerage system – one that also illuminates the "deep

[72] I explore some of the background arguments here in G. Wynn, "A Place for Geography?" *New Zealand Geographer* 60, 1 (2004): 50-9.

[73] Currently, four Canada Research Chairs are identified as focusing on environmental history, broadly conceived. Two of these are in British Columbia: Tina Loo in the Department of History at the University of British Columbia, and Joseph E. Taylor III in the departments of History and Geography at Simon Fraser University. At Queen's University, BC native Laura Cameron (MA, History, UBC) holds a CRC in geography, and at Universite du Québec a Trois Rivières, Stéphane Castonguay, trained as a historian of science, is Chaire de recherche du Canada en histoire environnementale du Québec. Several other CRC holders focus on environmental issues, broadly conceived. Examples within history include Colin Coates (York) and Joy Parr (UWO); in the social sciences and humanities more generally, note also Victor Admowicz (Acadia – Environmental Economics), Fikret Berkes (Manitoba – Resource Management), Andrew Biro (Acadia – Water) and Catriona Sandilands (York – Sustainability).


4" thick 60" wide 16' long -
Clear Cedar Plank
Cut from Capilano Timber Co Ltd.
by Vancouver Lumber Co.
May 1920.

3. Resource Cornucopia

This image has a simple, even iconic, appeal. It is carefully composed and well executed, yet it shows few signs of artistic or aesthetic abstraction. It is clearly one of the dozens of "record images" that Joan Schwartz – see note 18 in text – recognizes as a major element of the extensive photographic archive in British Columbia. In this it takes its place alongside hundreds of photographs that simultaneously document the magnificent richness of the provincial environment and the human capacity to exploit this wealth. Consider the picture and marvel at its message. Such magnificent lumber cut from timber growing on the fringe of the province's largest city, a place of almost 120,000 people at the time! What mortification for those used to logging the shrinking, ever more remote forests of eastern Canada, from which the giant pines (that rarely yielded planks half this size) had long since vanished. Almost adjacent to this illustration in the collection from which it is taken is a smaller image of a man standing at full upward stretch against the butt end of a large log on a railway car. Toes to fingertips, he fails to encompass the diameter of the log. The photograph is inscribed ungrammatically but meaningfully: "Sample of Whats To Come Sept 1918." Here too, perhaps, we are afforded a glimpse of the sense of pride that British Columbians felt in the combination of "technology, investment and prodigious effort" that allowed them to subdue and exploit the natural environment. Pictures such as these make it difficult to accept the argument advanced by John Szarkowski [in *The Photographer and the American Landscape* (New York: 1963), p. 4] that widely familiar photographs of loggers standing beside (or lying in the undercut) of massive trees up and down the Pacific coast are "stately death portraits of the great cedars and firs" about to fall victim to the loggers' axes and saws. On the contrary, these were "boastful," rather than "elegiac" statements (as Schwartz noted in 1977-8) and the central figure in their story was "the assailant not the victim"; they spoke to the triumph of increasingly powerful human Davids over the largest Goliaths of nature.

"Clear Cedar Plank,"UBC Library, Rare Books
& Special Collections: BC 1456 – 33 – 62.

interconnections between urbanization, space, and nature." Geographer John Thistle treats early efforts to deal with depletion in the Pacific halibut fishery and also speaks to the history of fisheries science, the politics of conservation diplomacy, and the particular challenges of understanding marine environments. James Murton's focus upon a series of lantern-slides used to promote the development of British Columbia reflects his simultaneous engagement with history and geography. His article suggests the ambiguities inherent in all representations of nature, environments, and landscapes as it uncovers something about provincial attitudes towards settlement and society between the wars.

Drawing upon her memories and experience of displacement, Linda Kendall documents this process and reminds readers of the close bonds that develop between people and their environments as she centres herself and others in a place that corporate interests were all too quick to treat as abstract (and thus dehumanized) space. Viewing the same process through a wider frame, historian Tina Loo sees the social and environmental consequences of hydroelectric power development as products of the high modernist impulse of the 1960s. In her dramatic telling, the story of a small section of British Columbia bordering the Columbia River speaks to larger concerns, and environmental history finds its political voice. Although Loo stops short of making this claim, her article echoes anthropologist James C. Scott's anxiety "that certain kinds of states, driven by utopian plans and an authoritarian disregard for the values, desires and objections of their subjects," can pose "a mortal threat to human well-being."[74] Political scientist Jeremy Wilson, with his measured assessment of the ways in which neoliberal commitments to "hollowing out" the state undermine prospects for judicious, scientifically based environmental management, provides another reminder that state policies can have far from benign environmental consequences. For Tracy Summerville, a political scientist, and Heather Myers, a geographer, both of whom teach in the University of Northern British Columbia, the issue of environmental justice is central. They challenge readers to ask in whose interests particular environmental policies are implemented and to ponder the economic, social, and geographical consequences that flow from efforts to preserve particular parts of nature. And finally, Frank Zelko, an Australian who completed his doctoral research under the supervision of environmental historian Donald Worster at the University of Kansas, demonstrates both the international dimensions of the task

[74] J.C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 7.

of understanding the environmental history of British Columbia and the complexity of seemingly well-known developments. His detailed account of the origins of the Greenpeace movement also offers a timely reminder of the power and potential of individual commitment as it brings to mind Margaret Mead's now familiar assertion that "a small group of thoughtful people could change the world. Indeed, it's the only thing that ever has." In short, there is much to consider and to discuss in all of this, and much beyond that is yet to be engaged.

SPECULATIONS FOR *"INTERESTED PASSERS-BY"*

What, then, of recent work on the human-environment interface in British Columbia? What has been done? What does it tell us? What major questions remain unanswered, or even unasked? Here I cast the net broadly without any pretense at completeness. Consider this a sample or reconnaissance rather than an inventory. To structure what might otherwise disintegrate into an impenetrable annotated bibliography, I identify a series of broad themes, under which sometimes quite disparate pieces of work are subsumed, and give two or three paragraphs to each. Inevitably, these categories overlap at various points, and they undoubtedly fail to identify all possible worlds of importance.[75] My purpose is less to catalogue than to provoke, intrigue, and excite.

Indigenous peoples and their environments: Since the 1992 Convention on Biological Diversity urged that the knowledge, innovations, and practices of indigenous and local communities be respected, preserved, and maintained, a good deal of attention has focused, worldwide, on traditional ecological knowledge (TEK). This certainly gave a fillip to, but did not initiate, interest in such questions in British Columbia. Students of indigenous societies in the province have long sought to document and understand the ways in which members of those societies related to the natural world. Analyses of creation myths and traditional stories have led to the conclusion, broadly and baldly stated, that Native peoples regarded nature as animate and attributed symbolic and religious significance to its constituent elements. But recent years have seen more concerted efforts to acknowledge and value TEK. There have

[75] Thus a guest editor with more ambition, skill, and space than I might have sought to work three articles in *BC Studies* 141 (2004) into the mix, although their main emphases are elsewhere: C. Dummitt, "Risk on the Rocks: Modernity, Manhood, and Mountaineering in Postwar British Columbia" (3-30); K. Routledge, "'Being a Girl without Being a Girl': Gender and Mountaineering on Mount Waddington, 1926-36" (31-58); and N.J. Young, "Environmental Risk and Populations at Risk: The Constitution of British Columbia's Offshore Oil and Gas Controversy" (59-80). And so on.

been important attempts to integrate it with Western understandings of natural systems to provide the foundations of cooperative resource management schemes (co-management) that combine state authority with local decision making.[76] There are dangers in this: of appropriation, of making TEK a static rather than a dynamic form of knowledge, and so on. But there are also benefits: the empowerment of Native peoples and the incorporation of their deeply rooted understandings of the environment into plans for its management.

Moreover, the heightened sensitivity to indigenous knowledge and practices reflected in these initiatives has its parallels in inquiries that are substantively revising long accepted descriptions of Northwest Coast peoples as "non-cultivators." Of special note here is the work conducted by Nancy Turner, Douglas Deur, and others that has identified forms of low-intensity plant cultivation involving the trans/plantation of propagules, the modification of soils, and weeding and irrigating in small estuarine plots at various points along the Coast and in the semi-arid Interior.[77] Others are demonstrating that indigenous peoples tended clam beds to enhance their productivity and used fire as a tool of ecological management.[78] Taken as a whole, work along

[76] For example, E. Pinkerton, "Factors in Overcoming Barriers to Implementing Co-management in British Columbia Salmon Fisheries," *Conservation Ecology* 3, 2 (1999): 2 (available on-line at <http://www.consecol.org/vol3/iss2/art2>); and T. McDaniels, M. Healy, and R. Paisley, "Cooperative Fisheries Management Involving First Nations in British Columbia: An Adaptive Approach to Strategy Design," *Canadian Journal of Fisheries and Aquatic Science* 51 (1994): 2115-25.

[77] D. Deur, "Salmon, Sedentism and Cultivation: Toward an Environmental Pre-History of the Northwest Coast," in *Northwest Lands, Northwest Peoples: Readings in Environmental History*, ed. P.W. Hirt and D.D. Goble (Seattle: University of Washington Press, 1999), 129-55; S. Peacock, "Putting Down Roots: The Emergence of Wild Plant Production on the Canadian Plateau" (PhD diss., University of Victoria, 1998). More broadly, see also: D.C. Harris, "Territoriality, Aboriginal Rights and the Heiltsuk Spawn-on-Kelp Fishery," *UBC Law Review* 34 (2000): 195-238; R. Kyle, "Aboriginal Fishing Rights: The Supreme Court of Canada in the Post-Sparrow Era," *UBC Law Review* 31, 2 (1997): 293-316; N.J. Turner, "'Doing It Right': Issues and Practices of Sustainable Harvesting of Non-Timber Forest Products Relating to First Peoples in British Columbia," *BC Journal of Ecosystems and Management* 1 (2001): 44-53.

[78] "Science Chases Legends to Secrets of Clam Gardens," Stephen Hume *Vancouver Sun*, 25 October 2003, C7; and D. Lepofsky, D.D. Hallett, K. Washbrook, A. McHalsie, K. Lertzman, and R. Mathewes, "Documenting Precontact Plant Management on the Northwest Coast: An Example of Prescribed Burning in the Central and Upper Fraser Valley, British Columbia," in *Keeping It Living: Traditions of Plant Use and Cultivation on the Northwest Coast*, ed. D.E. Deur and N.J. Turner, (forthcoming); D.J. Hallett, D. Lepofsky, R.W. Mathewes, K.P. Lertzman, "11,000 Years of Fire History and Climate in the Mountain Hemlock Rainforests of Southwestern British Columbia Based on Sedimentary Charcoal," *Canadian Journal of Forest Research* 33 (2003): 292-312; J. Ostapkowicz, D. Lepofsky, R. Schulting, and S. McHalsie, "The Use of Cattail (Typha latifolia L.) Down as a Sacred Substance by the Interior and Coast Salish," *Journal of Ethnobiology* 21 (2002): 77-90; and A. Lertzman, L.D. Gavin, D. Hallett, L. Brubaker, D. Lepofsky, and R. Mathewes, "Long-Term Fire Regime Estimated from Soil Charcoal in Coastal Temperate Rainforests," *Conservation Ecology* 6, 2 (2002): 5.

these lines has considerably refined the understanding of indigenous peoples' relations with their environments and has served to correct the aberrant, simplified (or essentialized) characterizations of traditional ways formulated on first encounter by Europeans unable to fully or properly comprehend what they saw and heard.[79]

In the end, however, no engagement with postcontact British Columbia can escape consideration of the impact of the European presence and, especially, of the reserve system upon Native lives and upon their relations with the environment. As Richard Mackie and Cole Harris have shown, the arrival, with the fur trade, of commercial capitalism in British Columbia disrupted indigenous trading patterns by imposing a new geography upon the territory and bringing Native peoples within the theatre of European disciplinary power. Later, "the most fundamental line on the map of British Columbia," the one that separates "the tiny fraction of ... [land] set aside for Native peoples from the rest, opened for development," reframed both the existence and the opportunities available to indigenous peoples (and newcomers) in the province. This colonial construction of space was both material and consequential. It orchestrated the geographical dispossession of the colonized and thus "facilitated the emergence of new, immigrant human geographies" that became, in turn, "native peoples' most pervasive confinement." Neither the politics nor the environmental history of British Columbia can be properly understood without acknowledgment of its role.[80]

Introduced ills and organisms: In the years since Alfred Crosby explored the "Columbian Exchange" of people, plants, and animals between Europe and the Americas, and then generalized these concerns in *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*, the transformation of New World territories by introduced biota has been an important focus of work by geographers and historians.[81] In North America, attention has focused particularly on Crosby's claims that introduced diseases were "the shock troops" of imperial conquest

[79] For impressive explorations of this issue, see Clayton, *Islands of Truth*; and Cruikshank, *Do Glaciers Listen?*

[80] R. Mackie, *Trading Beyond the Mountains: The British Fur Trade on the Pacific, 1793-1843* (Vancouver: UBC Press, 1996); C. Harris, "Strategies of Power in the Cordilleran Fur Trade," and "The Making of the Lower Mainland," in *Resettlement*, 31-67 and 68-102, respectively; C. Harris, *Making Native Space: Colonialism, Resistance and Reserves in British Columbia* (Vancouver: UBC Press, 2002); C. Harris, "How Did Colonialism Dispossess? Comments from an Edge of Empire," *Annals of the Association of American Geographers* 94, 1 (2004): 165-82; D. Clayton, "Critical, Imperial and Colonial Geographies" in *A Handbook of Cultural Geography*, ed. K. Anderson, M. Domosh, S. Pile and N. Thrift (London: Sage, 2003), 354-68.

[81] A.W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (New York: Cambridge University Press, 1986).

and that it was germs rather than Europeans that swept aside indigenous populations. An enormous, impressive, and contested series of studies by historical demographers and others has sought to give numerical substance to such claims. This has completely revised earlier estimates of precontact indigenous populations in the Americas and has revealed the often-devastating effects of introduced diseases that spread rapidly in advance of European peoples. In its most arresting formulations, this work posits a hemispheric population of over 100 million before 1492 and argues that indigenous numbers fell by 90 percent in the century or so after diseases first wrought their catastrophic effects on particular populations.[82] Others, more cautious and more attentive to the influence of time and space on the unfolding tragedy, offer more guarded estimates of precontact numbers and of the ravages of introduced "ills." In this vein, historian Arthur J. Ray proposes a precontact population of slightly more than half a million for all of present-day Canada, with some 150,000 to 200,000 of these on "the Pacific slope" (essentially, British Columbia).[83]

There is no doubt that introduced diseases took their toll on the indigenous peoples of British Columbia. Smallpox, measles, and influenza were the major known culprits.[84] But debate continues about the timing, extent, and effects of their presence. Smallpox, for example, broke out in a number of locations between the Columbia River and Sitka, Alaska, late in the eighteenth century; appeared in the Stikine, Nass, and Skeena River areas in the mid-1830s; and spread northward from Victoria into Haida, Tsimshian, Gitxsan, and Tlingit territories in 1862-63. Cole Harris and Robert Boyd, students of the eighteenth-century epidemic(s), differ in detail over the route by which smallpox reached the Coast, over whether there was a single Coast-wide epidemic or two discrete outbreaks (with one in the south and one in the north), and over the possibility of a second outbreak in the early nineteenth century.[85] But these differences

[82] H.F. Dobyns, "Estimating Aboriginal American Population: An Appraisal of Techniques with a New Hemispheric Estimate," *Current Anthropology* 7 (1966): 395-416; H. Dobyns, *Their Number Became Thinned: Native American Population Dynamics in Eastern North America* (Knoxville: University of Tennessee Press, 1983); W. Denevan, "Native American Populations in 1492: Recent Research and Revised Hemispheric Estimate," in *The Native Population of the Americas in 1492*, ed. W. Denevan (Madison, WI: University of Wisconsin Press, 1992), xvii-xxxviii; and D.H. Ubelaker, "North American Indian Population Size: Changing Perspectives," in *Disease and Demography in the Americas*, ed. J.W. Verano and D.H. Ubelaker (Washington: Smithsonian Institution, 1992), 169-78.

[83] A.J. Ray, *I Have Lived Here Since the World Began: An Illustrated History of Canada's Native People* (Toronto: Lester Publishing, 1996), 20-1.

[84] In addition to items cited below, see items by Boyd, Galois, Gibson, and Kelm in note 46 above.

[85] R. Boyd, *The Coming of the Spirit of Pestilence: Introduced Infectious Diseases and Population Decline among Northwest Coast Indians, 1774-1874* (Seattle: University of Washington Press,

matter little beside the heart-rending destitution, wretchedness, and mortality produced by each of these major epidemics.[86] Recent anxieties about SARS, and before that over HIV/AIDS, are reminders that much research remains to be done on the breakdown of the "epidemiological isolation" of British Columbia by improvements in transportation, which have produced quicker and more frequent links with other parts of the world. The roles of science and society (through such considerations as inoculations, quarantine, and education) in shaping the incidence and effects of such outbreaks also merit research attention.[87]

For all the economic, aesthetic, and nuisance value of introduced plants and animals in British Columbia – think of grapevines, cattle, and Atlantic salmon in the first category; "monkey puzzle trees" (*Araucaria aruacana*), daffodils (*Narcissus sp.*), and domestic cats in the second; and gorse (*Ulex europaeus*), purple loosestrife (*Lythrum salicaria*), and Eurasian water milfoil (*Myriophyllum spicatum*) in the third – rather less attention has focused on these and other examples of "ecological imperialism" in the province than on comparable introductions elsewhere.[88] There are reasons for this. Many BC "exotics" of European (and indeed Asian) provenance were long-naturalized in other parts of North America before they entered the province and, thus, seemed less radically "new." Introductions are easier to document (and biogeographically perhaps more consequential) in clearly bounded domains such as small islands.[89] Still, there are fascinating and important stories to be told here. Again the breakdown of isolation is a significant

1999); C. Harris, "Voices of Disaster: Smallpox around the Strait of Georgia in 1782," *Ethnohistory* 41, 4 (1994): 591-626; R. Boyd, "Commentary on Early Contact–Era Smallpox in the Pacific Northwest," *Ethnohistory* 43, 2 (1996): 307-28.

[86] The heart-rending destitution was remarked on by Governor Douglas at Fort Simpson at the time of the measles epidemic of 1848, cited in Boyd, *Coming*, 156-7.

[87] The breakdown of epidemiological isolation is a major thread in an excellent study by F.J.P. Hackett, *"A Very Remarkable Sickness": Epidemics in the Petit Nord, 1670-1846* (Winnipeg: University of Manitoba Press, 2002).

[88] Recognizing, of course, that these categorizations (economic, aesthetic, etc.) are arbitrary and anthropocentric.

[89] Thus much attention has been afforded this theme in New Zealand. See, by way of an introduction, G. Wynn, "Re-Mapping Tutira: Contours in the Environmental History of New Zealand," *Journal of Historical Geography* 23, 4 (1997): 418-46. One of the few forays into these matters for British Columbia forms one part of R.A. Smith, "Natures of Change: A Transnational Environmental History of Vancouver Island and the South Island of New Zealand" (MA thesis, University of British Columbia, 2002), which limns three comparisons – of species introductions, hydroelectric developments, and sustainable forestry – between these two locales; Richard White's splendid study of Island County, Washington, also comes to mind as an example of the kind of work that might be done at an "island scale" in British Columbia (R. White, *Land Use, Environment and Social Change: the Shaping of Island County, Washington* (Seattle: University of Washington Press, 1980).

part of the picture, and a recent upsurge of concern for the effects of invasive alien species suggests a good deal of scope for interpretive studies with historical and contemporary relevance.[90]

Forests: There is now a voluminous literature on the forest industries of British Columbia, but remarkably little of this is historical, and surprisingly little of that has much of an environmental bent. Moreover, most of the work in this category has a strong political emphasis. Beyond the many popular and corporate histories of the industry, forest management (especially tenure issues) and government policies are the mainstays of the historical literature.[91] Inquiries relating to processes of industrial restructuring probably constitute the next most significant body of work.[92] Much of this is empirically rich, historically sound, and very useful because the development of the industry and its environmental impacts cannot be fully understood without it. But the log and pulp divisions and the Interior and coastal branches of the BC forest industries still await their material (and, to a lesser extent, cultural) environmental historian(s).

[90] Y. Baskin, *A Plague of Rats and Rubber Vines: The Growing Threat of Species Invasions* (Washington: Island Press, 2002); and J. Van Driesche and R. van Driesche, *Nature Out of Place: Biological Invasions in the Global Age* (Washington, DC: Island Press, 2000). The other side of the story about introductions is, of course, the loss or diminution of species. See, for example, B.A. Leach, "The Decline of Geese and Swans on the Lower Fraser River," *BC Studies* 43 (1979): 29-44.

[91] The literature is far too large to survey here. As examples of popular and corporate histories, see: E. Gould, *Logging: British Columbia's Logging History* (Saanichton: Hancock House, 1975); G.W. Taylor, *Timber: History of the Forest Industry in British Columbia* (Vancouver: J.J. Douglas, 1975); S. Baptie, *First Growth: The Story of British Columbia Forest Products Limited* (Vancouver: BCFP, 1975); and D. MacKay, *Empire of Wood: The Macmillan Bloedel Story* (Vancouver: Douglas and McIntyre, 1983). Work on the main themes noted here includes: Gray, "Forest Policy"; Gray, "Government's Timber Business"; D.K. Mullins, "Changes in Location and Structure in the Forest Industry of North Central British Columbia" (MA thesis, University of British Columbia, 1967); Wilson, "Forest Conservation"; Wilson, *Talk and Log*; R.A. Rajala, "A Political Football: Federal-Provincial Cooperation in British Columbia Forests, 1930-1995," *Forest History Today* (Spring/Fall 2003): 29-40; M.P. Marchak, *Green Gold: The Forestry Industry in British Columbia* (Vancouver: UBC Press, 1983); M.P. Marchak, S. Aycock, D. Herbert, David Suzuki Foundation and Ecotrust Canada, *Falldown: Forest Policy in British Columbia* (Vancouver: David Suzuki Foundation, 1999); R.M. M'Gonigle, "Tenure Reform in BC Forests: A Communitarian Strategy for Sustainability," *Policy Options* 17, 9 (1996): 11-15; and R.M. M'Gonigle and B. Parfitt, *Forestopia: A Practical Guide to the New Forest Economy* (Madeira Park, BC: Harbour House Publishing, 1994).

[92] A significant strand of this work seeks to connect itself to the "Innisian tradition," although it is perhaps more interested in capital than the staple and is even less environmental in its emphases than is the original work of Innis and others. See R. Hayter, *Flexible Crossroads: The Restructuring of British Columbia's Forest Economy* (Vancouver: UBC Press, 2000); and T.J. Barnes and R. Hayter, eds., *Troubles in the Rainforest: British Columbia's Forest Economy in Transition* (Victoria: BC Western Geographical Press, 1997). See also R.A. Clapp, "The Resource Cycle in Forestry and Fishing," *Canadian Geographer* 42 (1998): 129-44.

A couple of important recent studies suggest the sorts of questions that beg further investigation. Among local histories, Richard Mackie's *Island Timber* is outstanding for its precise and revealing (albeit brief) treatment of the liquidation of the once-magnificent forests of the Comox Valley and (reminiscent of William Cronon's treatment, in *Nature's Metropolis*, of the way in which the forests of Wisconsin were consumed by the voracious mills of Chicago) for its explication of the connection between Comox logging and the Fraser mills in New Westminster.[93] Richard Rajala's transnational account, *Clearcutting the Pacific Rain Forest*, is rooted in labour history and subtitled "Production, Science and Regulation." Its strong focus on technology not only elucidates the de-skilling effects of new machines but also reveals a good deal about the environmental consequences of mechanization in the woods.[94]

More than this, however, a vast scientific and technical literature awaits thoughtful engagement by historically minded investigators.[95] Detailed studies of the environmental effects of different logging practices, of erosion from exposed slopes and road cuts, of temperature changes in streams as a consequence of canopy removal, and so on have proliferated in the last quarter century as a result, in part, of concerns voiced by environmentalists about clearcut logging and the loss of old-growth forests. They provide a wealth of information that remains to be synthesized, interpreted, and utilized judiciously for thinking about the interactions of humans, markets, technologies, and forests in British Columbia. Beyond this, recent debates about the forest – manifest in various ways from protests over logging in Clayoquot Sound and the Great Bear Rain Forest to hearings of the Commission on Environment and Resources – offer rich fields of inquiry for what McNeill calls cultural environmental history and for those interested in contemporary concerns.[96]

[93] R.S. Mackie, *Island Timber* (Victoria: Sono Nis Press, 2000); W. Cronon, *Nature's Metropolis: Chicago and the Great West* (New York :W.W. Norton, 1991).

[94] R.A. Rajala, *Clearcutting the Pacific Rain Forest: Production, Science, and Regulation* (Vancouver: UBC Press, 1998)

[95] For example, see G.F. Hartman, J.C. Scrivener, and M.J. Miles, "Impacts of Logging on Carnation Creek, a High-Energy Coastal Stream in British Columbia, and Their Implication for Restoring Fish Habitat," *Canadian Journal of Fisheries and Aquatic Sciences* 53, Suppl. 1, (1996): 237-51; and M.J. Bradford and J. R. Irvine. "Land Use, Fishing, Climate Change, and the Decline of Thompson River, British Columbia, Coho Salmon," *Canadian Journal of Fisheries and Aquatic Science* 57 (2000): 13-16.

[96] J. Dempsey's MA in progress in geography at University of British Columbia is focused on the Great Bear Rainforest; G. Hoberg and E. Morawaki, "Policy Change through Sector Interaction: Forest and Aboriginal Policy in Clayoquot Sound," *Canadian Public Administration* 40, 3 (1997): 387-414; H. Myers and T. Summerville, "Anti-Use Campaigns and Resource Communities: The Consequences of Political Correctness," *Policy Options* 25, 4(April 2004): 65-72.

Waters: Water will probably be an important focus of popular and scholarly attention as one of the great environmental issues of the early twenty-first century.[97] On the world stage, debates about the privatization of the resource rage in the United Kingdom, in Europe, and in the global "South." There are also basic concerns about supply (for sprawling North American cities and for crowded, fast-growing squatter settlements in Africa, South America, and Asia) and quality (remember Walkerton, Ontario).[98] All of these topics are being expressed in British Columbia. Residents of the Greater Vancouver Regional District face water rationing; contaminated water "scares" seem to make the news each summer; and American demands and local and international entrepreneurial ambitions periodically generate debate about water exports, reminding those of us old enough to remember "Nixon Drinks Canada Dry" buttons that all of these things have histories and that vigilance, engagement, and commitment to defending the public interest is vital on many fronts.[99]

Important though they are, questions of water purity and availability for human consumption are only part of the story. Water has vital recreational, aesthetic, and, above all, ecological functions. In providing fish habitat, it also plays a vital role in the provincial economy. Disturbance of riverine environments, changes in water temperatures, increases in turbidity produced by human or other disturbances, and so on can profoundly affect fish stocks. So too of course can dams constructed for hydroelectricity generation or other purposes.[100] The issues are, invariably, complicated, and historical perspectives on current disputes are invaluable to thoughtful, considered discussion and the wise resolution of debates. In this context, Matthew Evenden's recent book, *Fish versus Power,* is a major contribution not only to understanding the course of early twentieth-century development in British Columbia (and why there are no dams on the main stem of the Fraser River when the Columbia River has been turned into an organic machine)

[97] M. de Villiers, *Water* (Toronto: Stoddart, 1999).

[98] See, for example, K. Bakker, *An Uncooperative Commodity: Privatizing Water in England and Wales* (Oxford: Oxford University Press, 2004); and V. Shiva, *Water Wars: Privatization, Pollution, and Profit* (Cambridge, MA: South End Press, 2002).

[99] As examples, see R.S. Campbell, P. Pearse, and A. Scott, "Water Allocation in British Columbia: An Economic Assessment of Public Policy," *UBC Law Review* 7 (1972): 247-92; M.B. Clark, "Water, Private Rights and the Rise of Regulation: Riparian Rights of Use in British Columbia, 1892-1939," *The Advocate* 48 (1990): 253-62.

[100] On broad background to this point, see M. Jaccard, J. Nyboer and T. Makinen, "Managing Instead of Building: BC Hydro's Role in the 1990s," *BC Studies* 91-2 (1991-92): 98-126; and M. Jaccard, "Deconstructing Hydro: The BC Electricity Sector in This Decade," *BC Studies* 129 (2001): 51-78.

but also to understanding "the transnational forces that shaped the river, the changing knowledge and practices of science, and the role of environmental change in shaping environmental debate."[101] Yet much scope remains, on the Fraser and elsewhere in the province, for other kinds of work, including perhaps a New World version of Marc Cioc's "eco-biography" of the River Rhine.[102]

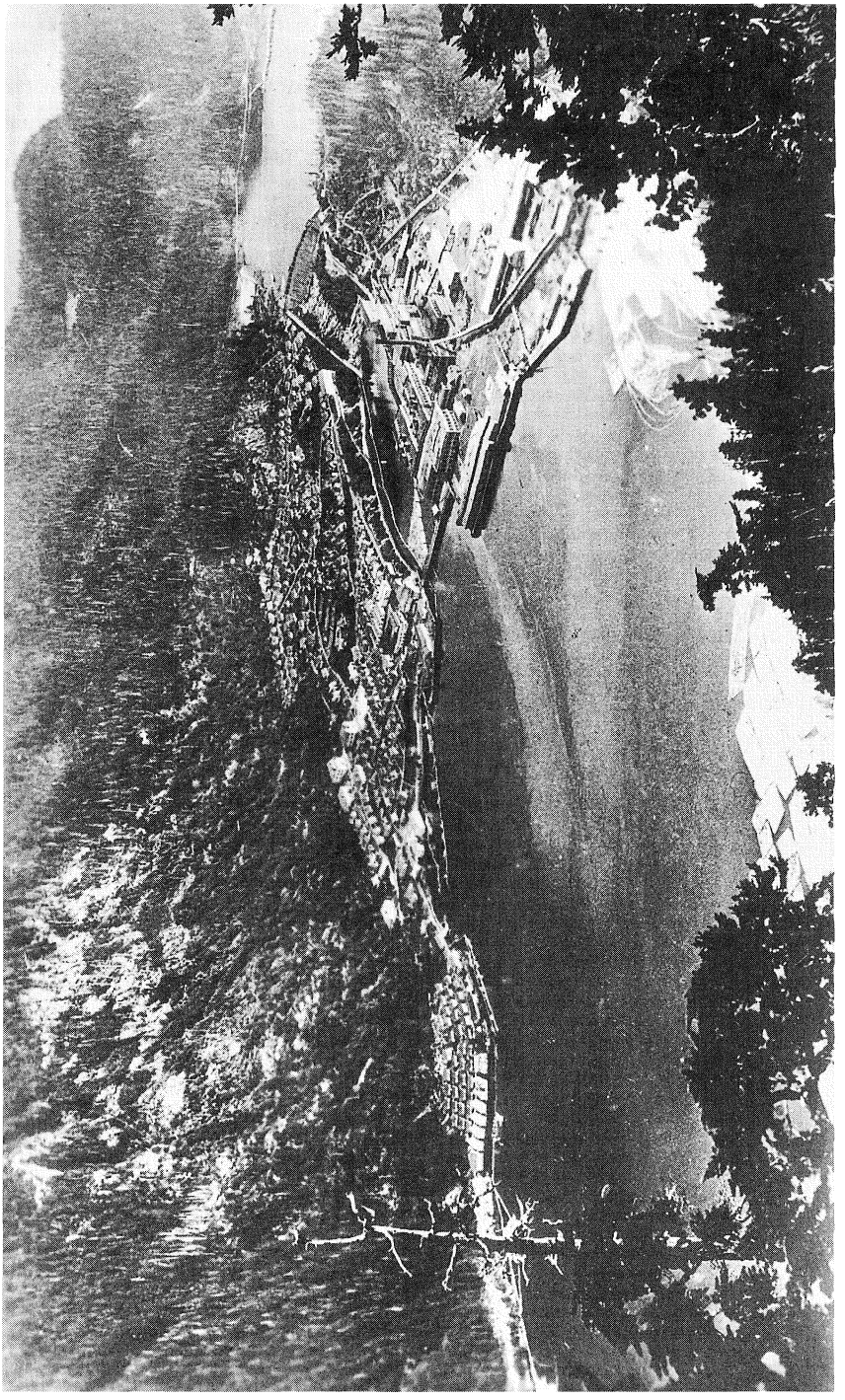
Government and university research units and the Fisheries Research Centre at UBC are conducting important scientific work in oceanography and fisheries science to address a range of pressing contemporary management issues. A large multidisciplinary research team assembled and funded through a joint program involving Canada's natural science and engineering, social sciences and humanities, and health research granting councils is at work on both Atlantic and Pacific flanks of the country addressing a series of issues on what they characterize as "Coasts under Stress."[103] In the west, these range from investigations of seaweed harvesting in Northwest Coast Aboriginal communities, through the modelling of past ecosystems in the Hecate Strait, to a comparative historical study of the pulp mill towns of Ocean Falls, Prince Rupert, and Swanson Bay. All of this work is intended to offer perspective on the human and social as well as the scientific dimensions of economies developed, resources exploited, ecologies affected, and lives lived at the interface of land and water. Yet much work remains to be done on contemporary and (especially) historical water- and fisheries-related questions. For good and obvious reasons, salmon have been the focus of most scholarly inquiry, and management and resource allocation issues have long been to the fore.[104] But many other fisheries warrant attention,

[101] M. Evenden, *Fish versus Power: An Environmental History of the Fraser River* (New York: Cambridge University Press, 2004), quote from dust-jacket. The reference to the Columbia is an allusion to R. White, *The Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995). See also M. Evenden, "Social and Environmental Change at Hells Gate, British Columbia," *Journal of Historical Geography* 30 (2004): 130–53.

[102] M. Cioc, *The Rhine: An Eco-biography, 1815–2000* (Seattle: University of Washington Press, 2002).

[103] The work of the Fisheries Centre can be approached through <http://www.fisheres.ubc.ca>. Information about the Coasts Under Stress project is at <http//www.coastsunderstress.ca>.

[104] There is a voluminous historical literature on the Pacific fisheries, but little of this is explicitly environmental. For some sense of the range of work, see: G. Meggs, *Salmon: The Decline of the British Columbia Fishery* (Vancouver: Douglas and McIntyre, 1995); J.F. Roos, *Restoring Fraser River Salmon: A History of the International Pacific Salmon Fisheries Commission, 1935–1985* (Vancouver: Pacific Salmon Commission, 1991); D. Newell, *The Development of the Pacific Salmon-Canning Industry: A Grown Man's Game* (Montreal and Kingston: McGill Queen's University Press 1989); D. Newell, "Dispersal and Concentration: The Slowly Changing Spatial Pattern of the British Columbia Salmon Canning Industry," *Journal of Historical Geography* 14 (1988): 22–36; D. Newell, *Tangled Webs of History: Indians and the Law in British Columbia's Pacific Coast Fishery* (Toronto: University of Toronto Press, 1993). See also D. Newell and R.E.



4. The stern facts of time, space and the market

Located at the Head of Cousins Inlet, near Bella Bella, Ocean Falls sometimes claimed the title of "The Wettest Town in Canada." Here it is in its heyday – and sunshine – early in the 1950s. Accessible only by water, and crowded into a seemingly almost impossible site, Ocean Falls was in many respects a classic resource town, its site and situation determined by the requirements of the industry and its form largely shaped by corporate interests. As the production of wood pulp gained in importance at the turn of the twentieth century, this remote location seemed to offer great advantages. The inlet gave access to the Pacific Ocean. The enormous waterfall at the head of the inlet held great potential for hydroelectricity generation (upon which pulp and paper production depended). And Link Lake above the falls offered copious amounts of pure fresh water for use in the manufacturing process. In 1903, the Bella Coola Pulp and Paper Company acquired 260 acres of land encompassing the head of the inlet and the falls at the mouth of Link Lake. Within a few years a townsite was laid out and a company town began to take shape, but the Company lacked an adequate supply of logs and went into receivership. New ownership erected a new pulp mill (which commenced operation in 1917) and through the 1920s the community of Ocean Falls flourished. Much of the town's infrastructure – the school, hospital, firehall, bunkhouses and apartments, a swimming pool – was company built and owned, but a wide range of active social and sporting clubs developed despite, or perhaps because of, the isolation of the place. Depression and War brought difficult economic times, but growth and expansion resumed in the 1950s until Ocean Falls was hit by an industry- wide strike in 1957, and two disastrous landslides caused by excessively heavy rain, even for a community in which the average annual precipitation approaches 180 inches. By 1970, the premium imposed on production costs by old machinery and geographical isolation moved then owners, Crown Zellerbach, to close the mill. Under pressure to save the community and assist the industry, and weeks before the planned closure in 1973, the provincial government bought the mill and the town – a late and particular reminder of the countless ways in which the state has sustained the (resource) economy of the province over the years. But official intentions could not blunt the effects of location, time and economics. The rising cost of procuring raw materials, outdated machinery and weak pulp markets as well as labour unrest and the cost of high-interest loans forced the shutdown of the mill in May 1980. Many buildings were demolished and in 1996 the town had only 150 residents. Despite government intervention, the cycle of resource dependence, from investment through boom to bust, that has characterized so many of British Columbia's communities had run its course.

"Ocean Falls, BC, from Sawmill Mountain," UBC Library,
Rare Books & Special Collections: BC 1456 - 81.

and excellent work by environmental historians and others, focused on the Pacific and Atlantic coasts of the United States, suggest potentially fascinating new questions and approaches that might be brought to bear on BC topics.[105] Given the twentieth-century commitment to fisheries management in British Columbia, here above all, perhaps, there are interesting opportunities for the blending of environmental historians' familiar research questions with those rooted in the history of science.[106]

Land: The land has hardly had its due in British Columbia. In general terms, trees and minerals taken from the land were more lucrative than were the agricultural crops produced by it. This province was not a "yeoman empire" in the way that so many other parts of North America were or were said to be.[107] By and large, newcomers found opportunities in the mills, mines, forests, and towns of British Columbia rather than in its agricultural countryside. But there were exceptions, and they are not unimportant. The rangelands of the dry Interior offer outstanding prospects for close and careful investigation by a historian or geographer with a strong grasp of grassland ecology and a comparative eye turned to work on the American west and other rangeland frontiers.[108] The

Ommer, *Fishing Places, Fishing People: Traditions and Issues in Canadian Small-Scale Fisheries* (Toronto: University of Toronto Press, 1999); M.P. Marchak, "What Happens When Common Property Becomes Uncommon?" *BC Studies* 80 (1988-89): 3-23.

[105] For the Pacific US, see A. McEvoy, *The Fisherman's Problem: Ecology and the Law in the California Fisheries, 1850-1980* (Cambridge: Cambridge University Press, 1986); and Joseph E. Taylor III, *Making Salmon: an Environmental History of the Northwest Fisheries Crisis* (Seattle: University of Washington Press, 1999). Taylor, now at Simon Fraser University (see note 73), is projecting a sweeping historical study of fisheries in the North Pacific Ocean. For a wide-ranging and stimulating introduction to work on other stocks in other areas, see P. Holm, T.D. Smith, and D.J.B. Starkey, eds., *The Exploited Seas: New Directions for Maritime Environmental History* (St. John's: International Maritime Economic History Association, 2001).

[106] For a thought-provoking piece of work in this vein, see M. Evenden, "Locating Science, Locating Salmon: Institutions, Linkages and Spatial Practices in early British Columbia Fisheries Science," *Environment and Planning D: Society and Space* 22 (2004): 355-72. For a somewhat similar interest with regard to forests, see R.A. Rajala, "The Vernon Laboratory and Federal Entomology Research in British Columbia," *Journal of the Entomological Society of British Columbia* 98 (2001): 177-88. More generally, see R.A. Rogers and C. Stewart, "Prisoners of Their Histories: Canada-US Conflicts in the Pacific Salmon Dispute," *American Review of Canadian Studies* 27, 2 (1997): 253-69; and J.E. Taylor III, "El Nino and Vanishing Salmon: Culture, Nature, History, and the Politics of Blame," *Western Historical Quarterly*, 29, 4 (1998): 437-57. And for a more general rumination, see J.P. Hull, "The Second Industrial Revolution and the Staples Frontier in Canada: Rethinking Knowledge and History," *Scientia Canadensis* 18, 1 (1994): 22-37.

[107] The best overview of agriculture in British Columbia is D. Demeritt and C. Harris, "Farming and Rural life," in Harris, *Resettlement*, 219-49.

[108] Again, important work from other jurisdictions suggests questions and approaches: see M. Fiege, *Irrigated Eden: the Making of an Agricultural Landscape in the American West* (Seattle: University of Washington Press, 1999); and N. Langston, *Where Land and Water Meet: A Western Landscape Transformed* (Seattle: Washington University Press, 2003).

enthusiasm for orchards in turn-of-the-century British Columbia has received a good deal of attention from scholars fascinated by the transplantation of English aspirations to the Pacific province by remittance men and women intent on preserving something of their old country lives.[109] But other stories remain to be told, both of the environmental engineering involved in irrigation works and, perhaps more important, where orcharding persisted and flourished in the Okanagan Valley, of the influence of the pomological research conducted at the Dominion Agricultural Research Station in Summerland as well as of the use of sprays and fertilizers and pesticides for apple production.[110]

The spread of vineyards in the Okanagan in more recent years also begs fine-tuned environmental analysis for few forms of agriculture are as closely adjusted to the specifics of soil and climate as viticulture, and the intertwining of competition, shifting markets, and changes in the varieties of grapes produced in this industry has surely left a complex story worth the telling. Competition between agriculture and other forms of land use forms the basis of another important environmental story. In the Okanagan, urban and residential development – including the multiplication of retirement communities, the growth of recreational facilities, and the development of golf courses – has placed agricultural land under severe and often irresistible pressure. On the outskirts of Vancouver, the loss of agricultural land to urban growth has a long history.[111] Efforts to arrest the trend through the establishment of an agricultural land reserve (ALR) had some success, but the full story of the environmental implications of exclusions from and conversions of ALR land remains to be told. And when it *is* told, the proliferation of enormous glasshouse complexes in the Lower Mainland will surely form an exclamation point in the narrative.

Mines: Gold, coal, silver, lead, zinc, copper, asbestos ... the list of minerals produced in British Columbia is long, and the list of mines considerably longer. Centres of working-class consciousness, union struggles, and social unrest, mining communities have been the focus of a good deal of work by social, labour, and legal historians as well as by

[109] C. Harris and E. Phillips, eds., *Letters from Windermere, 1912-1914* (Vancouver: UBC Press, 1984); N. Riis, "The Walhachin Myth: A Study of Settlement Abandonment," *BC Studies* 17 (1973): 3-25; P. Badir, "'Our Performance Careless of Praise': Loss, Recollection and the Production of Space in Walhachin, British Columbia," *BC Studies* 133 (2002): 31-68.

[110] Wayne Wilson, "Irrigating the Okanagan, 1860-1920" (MA thesis, University of British Columbia, 1984), offers a beginning for the study of irrigation works.

[111] G. Wynn, "The Rise of Vancouver," in *Vancouver and Its Region*, ed. G. Wynn and T.R. Oke (Vancouver: UBC Press, 1992), 69-148; M. Kluckner, *Paving Paradise: Is British Columbia Losing Its Heritage?* (Vancouver: Whitecap Books, 1991).

geographers.[112] But little attention has been paid to their environmental histories, although mines and the activities associated with them almost invariably left considerable, and persistent, marks on the environment. Despite its almost mythic status in popular histories of the province, the Fraser River gold rush remains under-studied. Even today, boulder-strewn gullies and signs of massive sediment displacement evident along the middle reaches of the Fraser River speak more fully and eloquently of placer mining's environmental impacts than do words in books. The possibilities for comparative and transnational work on this topic are considerable, and recent studies of the Klondike gold rush suggest ways in which new work in British Columbia might be framed.[113]

Despite efforts to revegetate and thus to disguise them, vast open pits, dumps, and tailings ponds left by copper mining near Phoenix, Princeton, and Kamloops remain prominent in the landscape. Adits and stopes and dumps from the hard rock mining boom in the mountains of the Slocan Valley riddle the hillslopes of that area to this day. The open pits of more recent coal-mining operations in the east Kootenays and in the Tumbler Ridge area of the north are even more compelling evidence of the capacity of human interest and powerful machinery to change the face of the Earth. Mining almost invariably left its mark on the land. It also, often, left less visible environmental traces in seepage from tailings ponds and the pollution of rivers and other waters, in fine airborne particles from mechanical ore crushers, and in chemicals released into the atmosphere by other processes. From Cassiar in the remote Stikine Mountains of northern British Columbia, where an asbestos mine sustained a community for forty years after 1952, to Britannia Beach, a few miles north of Vancouver and once the largest producer of

[112] Examples include: J. Mouat, *Roaring Days: Rossland's Mines and the History of Mining in British Columbia* (Vancouver: UBC Press, 1995); J. Mouat, "Creating a New Staple: Capital, Technology and Monopoly in British Columbia's Resource Sector, 1901-1925," *Journal of the Canadian Historical Association* 1 (1990): 215-17; and C. Harris, "Industry and the Good life Around Idaho Peak," *Canadian Historical Review* 66, 3 (1985): 315-43; Harris, *Resettlement*, 194-218.

[113] Comparative and transnational because the Fraser rush was part of the great circum-Pacific series of gold rushes that began in California in 1849 and, over the next fifteen years, encompassed Australia and New Zealand as well as British Columbia. Techniques and individuals moved freely around this orbit. For an important statement and exemplification of the possibilities of specifically transnational history, see I. Tyrell, *True Gardens of the Gods: Californian-Australian Environmental Reform, 1860-1930* (Berkeley: University of California Press, 1999). On a somewhat different tack, see D.K. Alper, "Transboundary Environmental Relations in British Columbia and the Pacific Northwest," *American Review of Canadian Studies* 27, 3 (1997): 359-83. Recent work on the Klondike from an environmental perspective includes B.L. Willis, "The Environmental Effects of the Klondike Gold Rush, 1896-1906: Alterations to Land, Destruction of Wildlife, and Disease" (MA thesis, University of Western Ontario, 1997); and K. Morse, *The Nature of Gold: An Environmental History of the Klondike Gold Rush* (Seattle: University of Washington Press, 2003).

copper in the British Commonwealth, the environmental histories and geographies of mining settlements largely await exploration.[114] Different as these places and communities were and are, one from another, as resource camps they constitute one of the province's and the country's basic settlement forms.[115]

Parks, wild places, and social nature: In a recent "Insight" article in the *Vancouver Sun*, columnist Stephen Hume focused on the remote and relatively little known Muskwa-Kechika area of far northern British Columbia to raise a number of crucial questions about the status of parks and wild lands in the province.[116] Recognized as "a unique region of global significance" and set aside as a special management area in March 2001, the 6.3-million-hectare Muskwa-Kechika was described as offering a "new model of environmental governance." Industry, government, indigenous peoples, hunters, scientists, and environmentalists joined in supporting the consensus forged to reconcile opportunities for resource development with concerns for environmental stewardship in an area of spectacular landscapes remarkably rich in wildlife. But, Hume reports, the foundations of this remarkable agreement are being eroded: administrative support has been cut, mechanisms to ensure consultation and cooperation among stakeholders have been discarded, and scientific research has been impaired and ignored at precisely the same time as legislative amendments undermined "the integrity of the whole provincial parks system" by permitting resource extraction and reducing other limits to development within park boundaries.

This is an important story. For Hume it is a call to resistance: "our own children will never, never forgive us if we permit short-sighted politicians to ... fritter away [the special nature of this place] in the pursuit of a few quick bucks." For others, it is "déjà vu all over again." Since the creation of British Columbia's first provincial park, Strathcona on Vancouver Island, the battle between "protection" and "development" has see-sawed back and forth, with hard-won gains by way of park-creation or the establishment of management agreements that pay some attention to the need to preserve wild places repeatedly undone by changes in des-

[114] Mining remains curiously under-studied in the literatures of environmental history and geography. For an attempt at an overview, see R. Francaviglia, *Hard Places: Reading the Landscapes of America's Historic Mining Districts* (Iowa: University of Iowa Press, 1991). For an introduction to some facets of the BC picture, see G. Walden, *Black Pits and Vanishing Hills: Coal Development in British Columbia* (Vancouver: BC Wildlife Federation, 1976).

[115] For some elaboration of this point, see C. Harris, "The Pattern of Early Canada," *Canadian Geographer* 31, 4 (1987): 290-8, reprinted in *People, Places, Patterns, Processes: Geographical Perspectives on the Canadian Past*, ed. G. Wynn (Toronto: Copp Clark Pitman, 1990), 358-73.

[116] S. Hume, "Alarm Bells Ring for Our Serengeti," *Vancouver Sun*, 1 May 2004, C5.

5. Hard lives in Hard rock

Pioneer was the first of the gold mines in the Bridge River area. Located in a narrow section of the valley of Cadwallader Creek, it was developed in the 1920s, although gold had been found here in 1858 and again in the last years of the nineteenth century and considerable investment went into the mine in the years around the First World War. None of these early efforts paid enough to sustain operations. In 1928, however, Pioneer Gold Mines of British Columbia was incorporated as a limited liability company. Six years later the mine was said to have generated profits of a million dollars in six months. The company town, tucked into the valley, verged on the alpine meadows of Mount Ferguson. On her way to Lillooet by train from Vancouver in June 1933, Emily Carr noted in her journals, *Hundreds and Thousands* (Toronto: Clarke, Irwin, 1966) that she travelled with "vast quantities of prospectors going to the mines with their packs on their backs...building airy castles for themselves, and wives, children, aged parents, and who-not, generous in their imagined affluence" (pp. 34, 37). In 1953, when this illustration was mailed as a postcard from Goldbridge, the Pioneer mine had been overshadowed by neighbouring Bralorne Mine, with which it merged in 1959. These mines were among the richest, most productive sources of gold in Canada. By one estimate these lode gold operations yielded $200 million in less than half a century, before they were closed in 1971. From them, miners excavated vast quantities of rock. Crushing and separation processes were necessary to secure the gold from the quartz, and these operations were far from environmentally benign. Shortly before its closure, the Bralorne shaft went a mile deep, to a point some 2000 feet below sea level. The workings included 100 miles of tunnels. Appalled twenty-five years earlier by the thought of descending "that awful shaft on a lift," by the "awful, awful black hole of the mine," and by the concussions of blasting, Emily Carr wondered: "Oh, is there any gold in the world worth all that?" (p. 38). Over the years, tens of thousands of workers and an unknown number of investors believed so. Among them was the recipient of this postcard, Rolf Knight of Wall Street in Vancouver. The advice he received by it demonstrated both the continuing challenge of moving amid the mountains of British Columbia, and the place of workers' unions in the resource economy: "Just after I phoned to you," wrote "Ali", "I found out that the planes are still flying[,] provided it is flying weather. Every Day. leaving 11:30 am. From Lulu Island....it costs $37.00 return, Takes *one hour.* Train cost about 25.00 return. ....Rolfie, *Don't* forget your *union withdrawal card."* [See also P. Knight and R. Knight, *A Very Ordinary Life* (Vancouver: New Star, 1974).]

"Pioneer Townsite, looking down Cadwallader Creek to Bralorne,"
UBC Library, Rare Books & Special Collections: BC 1526 – 63.

ignation, regulation, or practice that open once-reserved areas to further development.[117] Perhaps this is a reflection of the environmentalists' plight: to fight the same battle over and over in different places. After all, wrote American novelist and lover of the west, Wallace Stegner, "environmentalism or conservation or preservation, or whatever it should be called, is not a fact, and never has been. It is a job."[118] Perhaps too, it is the source of the wilderness-defenders' conviction that every battle lost means that there is less ground upon which to take a stand. Such historical and contingent considerations are key to understanding the pattern of successive campaigns to preserve wild places in the province – from the "Nitinat Triangle" through the "Valhalla Wilderness" to Clayoquot Sound and on to the Stein, the Stikine, and the Muskwa-Kechika. As places of resistance each of these has had its chroniclers, and some have had their analysts, but much remains to be explored.[119]

On other matters, too, there is much to be gained from engagement with the work of environmental historians in the United States, where national parks and the wilderness movement have long been a major focus of interest. There, scholars have moved beyond discussions of the whys and wherefores of park creation – spawning debate over the "wastelands thesis" and the "doctrine of usefulness" – to consider the consequences of such strategies for ecologies, Native peoples, and others. Such concerns lead quickly and directly to questions of social (in)justice perpetrated by the designation of parks for preservation and, beyond that, to a re-evaluation of the very idea of wilderness.[120] Thus wilderness has come to be recognized as an ideological concept, and the work that

[117] On this general theme, see J.K. Youds, "A Park System as an Evolving Cultural Institution: A Case Study of the British Columbia Provincial Park System, 1911-1976" (MA thesis, University of Waterloo, 1978).

[118] W. Stegner, "A Capsule History of Conservation," in *Where the Bluebird Sings to the Lemonade Springs: Living and Working in the West* (New York: Random House, 1992), 152.

[119] For example, *Clayoquot and Dissent: Essays by Tzeporah Berman, Gordon Brett Ingram, Maurice Gibbons, Ronald B. Hatch, Loys Maigon, Christopher Hatch* (Vancouver: Ronsdale Press, 1994); R.M. M'Gonigle and W. Wickwire, *Stein: The Way of a River* (Vancouver: Talonbooks, 1988); W. Wickwire, "Ethnography and Archeology as Ideology: The Case of the Stein River Valley," *BC Studies* 91-92 (1991-92): 51-78.

[120] L. Warren, *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* (New Haven: Yale University Press, 1997); K. Jacoby, *Crimes against Nature: Squatters, Poachers, Thieves and the Hidden History of American Conservation* (Berkeley: University of California Press, 2001); R. Burnham, *Indian Country, God's Country: Native Americans and the National Parks* (Washington, DC: Island Press, 2000); M.D. Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999); S.A. Germic, *American Green Class: Crisis and the Deployment of Nature in Central Park, Yosemite, and Yellowstone* (Lanham, MD: Lexington Books, 2001); W. Cronon, "The Trouble with Wilderness, or, Getting Back to the Wrong Nature," in *Uncommon Ground: Toward Reinventing Nature*, ed. W. Cronon (New York: W.W. Norton, 1995), 69-90.

activists have invested in defending it as a place beyond human interference, as nature beyond culture, is seen to have carried environmental concern down a path that blinds its adherents to humanity's place *in* nature. From this point of view, the enormous efforts that wilderness advocates spend on preserving "pristine" areas fall short because the environmentalism shaped by their commitment fails to offer a guide to living in the messy conflicted world of everyday existence in which people and nature are inextricably intertwined.

Similar concerns have been pushed even further in recent work on the West Coast rainforest.[121] Writing from a social constructivist perspective, Bruce Braun examines the various ways (social, discursive, and political) in which the forest has been represented and understood. His forest has little to do with trees and much more to do with "epistemic, cultural and political space." He is interested in how this thing called "the forest" is "made visible" or (at somewhat greater length) in "how it *enters history* as an object of economic and political calculation and a site of emotional and libidinal investment." In this view the forest, and nature more generally, is an artefact created by human interests and perceptions rather than an "essence" or a "given." Thus the corporate forest is a machine for making fibre. The ecologist's temperate rainforest is an intricate web of relations and a "necessary theoretical fiction" – a contingent invention posited for the purposes of critique. And so on. Each of these myriad constructions of the forest depends on omissions as well as inclusions; each embodies important "cognitive failures" (erasing the presence of First Nations peoples, of woods workers, of ecological relations, and the like). In the end "there are many forests, not one," and the ways in which these are represented and articulated are profoundly political. Braun's goal is to reveal how "these natures are also entangled with histories of colonialism and present-day struggles to imagine alternative postcolonial futures." There is much at stake in all of this, including the hope of developing a new "progressive environmentalism," but above all Braun challenges readers to think again about the ways in which past and present, culture and nature, discourse and power, space and place, and the local and the global are entwined.

Pollution: Pollution has many dimensions. It is, first of all, a shifting, social construction. Pollutants, like resources, are cultural appraisals.

[121] B. Braun, *The Intemperate Rainforest: Nature, Culture, and Power on Canada's West Coast* (Minnesota: University of Minneapolis Press, 2002). See also B. Braun, "Colonial Vestiges: Representing Forest Landscapes on Canada's West Coast," *BC Studies* 112 (1996-97): 5-40. More generally, see D. Demeritt, "Science, Social Constructivism and Nature," in *Remaking Reality: Nature at the Millennium*, ed. B. Braun and N. Castree (New York: Routledge, 1998), 173-93.

They are identified in particular contexts, with particular tools. Improvements in knowledge and/or in the technology of detection shift definitions of pollution. The very idea of pollution reflects an ordering of the world or, at least, the division of its component matter into categories. It entails the idea, and an assessment, of risk. Its definition turns on economic as well as on cultural and technical considerations. It can be organic, chemical, particulate, or sensory, and it occurs in different media – air, water, and soil. Almost by definition, therefore, pollution studies are inherently interdisciplinary: there is a deal of science involved in the definition and detection of pollution, in the identification of its ecological and other consequences, and in the formulation of responses to social, political, and scientific concerns about it. But the ultimate litmus test of pollution's existence lies in the social realm, as do the factors shaping responses to it.

For all that, pollution was clearly an issue of increasing importance in twentieth-century British Columbia. If concerns shifted from cities to hinterlands, from water to air, and back again, and if they resist simple mapping into a pattern that reveals growing anxiety giving rise to action and alleviation, this is all part of the complicated, important, and inescapably environmental story embodied in this deceptively simple nine-letter word. Scientific and impact assessment studies make up the bulk of the literature on pollution in this province, but this is beginning to change.[122] A recent UBC doctoral dissertation by Arn Keeling (from which his paper in this issue is a first publication) effectively charts important dimensions of this story in British Columbia by examining the pollution of provincial waters by mines and pulp mills as well as by urban sewerage. His is an intricate tale of divided political responsibilities, of tensions between environmental concerns and the desire for development, of developing science, of the challenges posed by the ecological and geographical characteristics of the province, of the development of environmental regulation, and of the part played by public interest groups in focusing concern about and provoking action on pollution issues after 1960. Studies of soil, air, noise, and light pol-

[122] As examples of work elsewhere, see C.E. Colten, "Too Much of a Good Thing: Industrial Pollution in the Lower Mississippi River," in *Transforming New Orleans and its Environs: Centuries of Change*, ed. C.E. Colten (Pittsburgh: University of Pittsburgh Press, 2000), 141-59; C.E. Colten, "Basin Street Blues: Drainage and Equity in New Orleans, 1890-1930," *Journal of Historical Geography* 28, 2 (2002): 237-57. For a sample of scientific approaches, see D.V. Ellis, "Mining – Island Copper (Canada)" in *Environments at Risk: Case Histories of Impact Assessment*, ed. D.V. Ellis (Berlin: Springer-Verlag, 1989), 70-108; D.F. Alderdice and J.F. Brett, "Some Effects of Kraft Mill Effluent on Young Pacific Salmon," *Journal of the Fisheries Research Board of Canada* 14, 5 (1957): 783-95.

lution, of the ways in which communities reacted to and dealt with local pollution threats, of the issues posed by garbage disposal and landfills, and of environmental inequities remain to be undertaken.

Urban Nature: Those who resented criticisms of the logging industry by "urban environmentalists" used to claim that "Vancouver is the biggest clearcut in British Columbia." The assertion is polemical, and it was intended to be. But it serves as an arresting reminder of the ongoing, incremental, and ultimately profound environmental transformation wrought by urban development. Look at a satellite image of the Lower Mainland and it is possible to think of the city as a great scar. Visit the burgeoning suburbs on the eastern periphery of the regional district, mark the bulldozed, levelled earth almost devoid of trees on which new houses are being erected by the dozen, and believe that the earth has suffered gashes and abrasions.[123] Walk the streets of West Point Grey and the wounds seem less obvious. Houses, roadways, lanes, lawns, gardens, trees blend together almost "naturally." Enter the downtown core and the landscape is more obviously an artificial creation. But even here pigeons circle overhead and patio pots sprout shrubs and flowers, even if the wind blows more forcefully and erratically. The city – any city – is hard to characterize. It is a dense and heady mélange of environments. And each of these is a hybrid space in which nature and culture are mixed in countless, ever shifting ways. Yes, the story of city building is the story of environmental transformation.[124] *The forest vanished and up went the city.* But this is only the thinnest edge of a story that has received far too little attention in British Columbia and elsewhere.

In the fabric of the city, on the ground where any understanding of material environmental change has to be rooted, the intricate quality of human-environment relations is revealed in countless ways. Scant traces of "lost" (now culvert-borne) streams are juxtaposed with well marked restoration projects for "salmonid-enhancement." Carefully tended gardens of exotic specimen plants are admired while the presence

[123] A. Rome, *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (Cambridge: Cambridge University Press, 2001), is an important treatment of the environmental effects of recent suburban development in the United States, but its findings should not be transplanted holusbolus to Canadian settings.

[124] Some treatment of this in Vancouver can be found in T.R. Oke, M. North, and O. Slaymaker, "Primordial to Prim Order: A Century of Environmental Change," in Wynn and Oke, *Vancouver and Its Region.*

6. City on the Edge

This is Vancouver in 1948. It is a city on the edge of many things: a continent; a mountainous hinterland; an ocean (almost); rapid expansion; metropolitan status. The North Arm of the Fraser winds through the bottom/left of the picture; Central Park is just above and to the left of its centre; New Westminster intrudes at bottom right, and English Bay and the entrance to Howe Sound are to the right of, and below, the aircraft wingtip. How small the city looks by comparison with today. The population of the entire area in the photograph was probably no more than 400,000. A swath of streets and buildings follow the Kingsway axis, but large areas of Burnaby, East Vancouver and South Vancouver remain undeveloped. Sizeable parts of Vancouver west of Granville Street likewise remain unoccupied by dwellings. North and especially West Vancouver are still substantially forested, although recent developments in the British Properties are discernible. Although they are not visible, individually, in this photograph, the Marine Building on Burrard Inlet and the Sylvia Hotel on English Bay were the landmark buildings of the downtown peninsula. Yet how much has changed since the 1860s. Remnants of the once-dense forest of the peninsula remain only in patches, themselves mostly logged and burnt over in earlier decades. Agriculture, the urban grid, industrial uses and a conspicuous golf-course or two have brought new order to the landscape. Soils and vegetation have been transformed by building and farming. Former streams run through culverts, and carry urban wastes into surrounding waters. On the north shore, the Capilano and Lynn river valleys show the scars of recent logging. Sawmills and log-booms along the North Arm of the Fraser River reflect the city's economic dependence on and exploitation of its resource hinterland. Every turn provides signs and reminders of the dynamic nature of human-environment relations, of the close connections between the city and its surroundings, and of the limits placed in the way of human choice and action by the physical environment, at least temporarily.

"Vancouver: from the southeast, 1948," Oblique aerial photograph, BC:589:48, Geographic Information Centre, UBC


240
250
260
280
290
300
310

of coyotes in urban lanes is deplored.[125] Swamps are filled, foreshores extended, and roads graded. The extension of blacktop, paving, and built-up areas changes hydrological regimes and the albedo of the surface; downtown temperatures are elevated above those in the surrounding countryside by urban heat island effects; and urban design preferences contribute to atmospheric pollution in distant downwind valleys.[126] The range and intensity of the environmental changes associated with urban development and the sheer concentration of humans in cities (which generally leads to the keeping of detailed records of these places) make urban centres marvellous sites for investigation of the processes of environmental transformation and of changing human attitudes towards the natural world. In British Columbia, where urban histories are relatively short, these themes, as well as the interrogation of planning and design initiatives from an environmental perspective, offer splendid opportunities for work that both uncovers the past and illuminates the present.[127]

Sustainability: Sustainability has become a religion. Since the Bruntland Commission gave global currency to the idea of "sustainable development," the concept has received enormous official and popular sanction. There are sustainability offices and sustainable development research units in universities; some institutions have considered implementing compulsory courses in the subject (to replace the old "three Rs" – "Reading, 'Riting, and 'Rithmetic" – with the new "Reduce, Re-use, and Recycle"?). Building codes bend to the enthusiasms of the new creed, university presses publish books in series devoted to the topic, and environmental/sustainability clubs are active in high schools. The mantras of sustainability are recited widely and frequently, even mindlessly. Ephemeral events such as the Olympic Games are described as sustainable, or celebrated for promising a sustainable legacy. Questioning the multifarious doctrines of sustainability is akin to heresy. Or so it often seems.

There are many good reasons for all of this, and they warrant careful, thoughtful investigation. No doubt many of the issues of concern to proponents of "sustainability" are real. But the ways in which these

[125]The final chapter of L. Ford, "Coyote Goes Downriver" (MA thesis, University of British Columbia, 2000), deals with coyotes in Vancouver.

[126]A recent and useful American exploration of some of these themes is M. Klingle, "Urban by Nature: Shaping Seattle's Metropolitan Environments, 1880-1960" (PhD diss., University of Washington, 2001). See also T.R. Oke, *Boundary Layer Climates* (London: Methuen, 1978).

[127]Again, for the purpose of thought-provoking comparison, see B. Stephenson, *Visions of Eden: Environmentalism, Urban Planning and City Building in St. Petersburg, Florida, 1900-1995* (Columbus: Ohio State University Press, 1997).

concerns have become embedded in the public consciousness and the extent to which angst influences actions also pose fascinating questions. Such analyses might well point to the ecological footprint concept, promulgated by UBC academics Bill Rees and Mathis Wackernagel, as a critical element in the advance of public conviction about the importance of sustainability.[128] Conceived as a simple and arresting tool to reveal the extent of human dependence upon ecological resources, the footprint concept relates human resource demands to the amount of productive land required to provide the materials necessary for (and to assimilate the waste products generated by) particular patterns of consumption. By this measure the two million people resident in the Lower Fraser Basin require some twenty times more land than they occupy in order to meet their food, energy, and other resource demands. They (we?) are, in other words, appropriating resources from elsewhere to sustain a bountiful way of life.

In this, of course, southern British Columbians differ little from other inhabitants of the developed world. Their experience, their histories, parallel and draw from the long process of economic and territorial expansion by the peoples of Western Europe. This process turned upon conquest, resource extraction, and wealth accumulation. By separating production and consumption – in ways that were facilitated by technological advances, by the extension of political hegemony, and by the geographical specialization of production based on the "rationalization" of economic activity – it also insulated those at the developed centres of the emerging world system from the environmental and social consequences that flowed from these developments.

Some of the biggest and most difficult questions of environmental history/geography are encapsulated in this story. But the pressing question for those with an eye to the present and the future is: "what to do about it?"[129] British Columbians are fortunate in having several

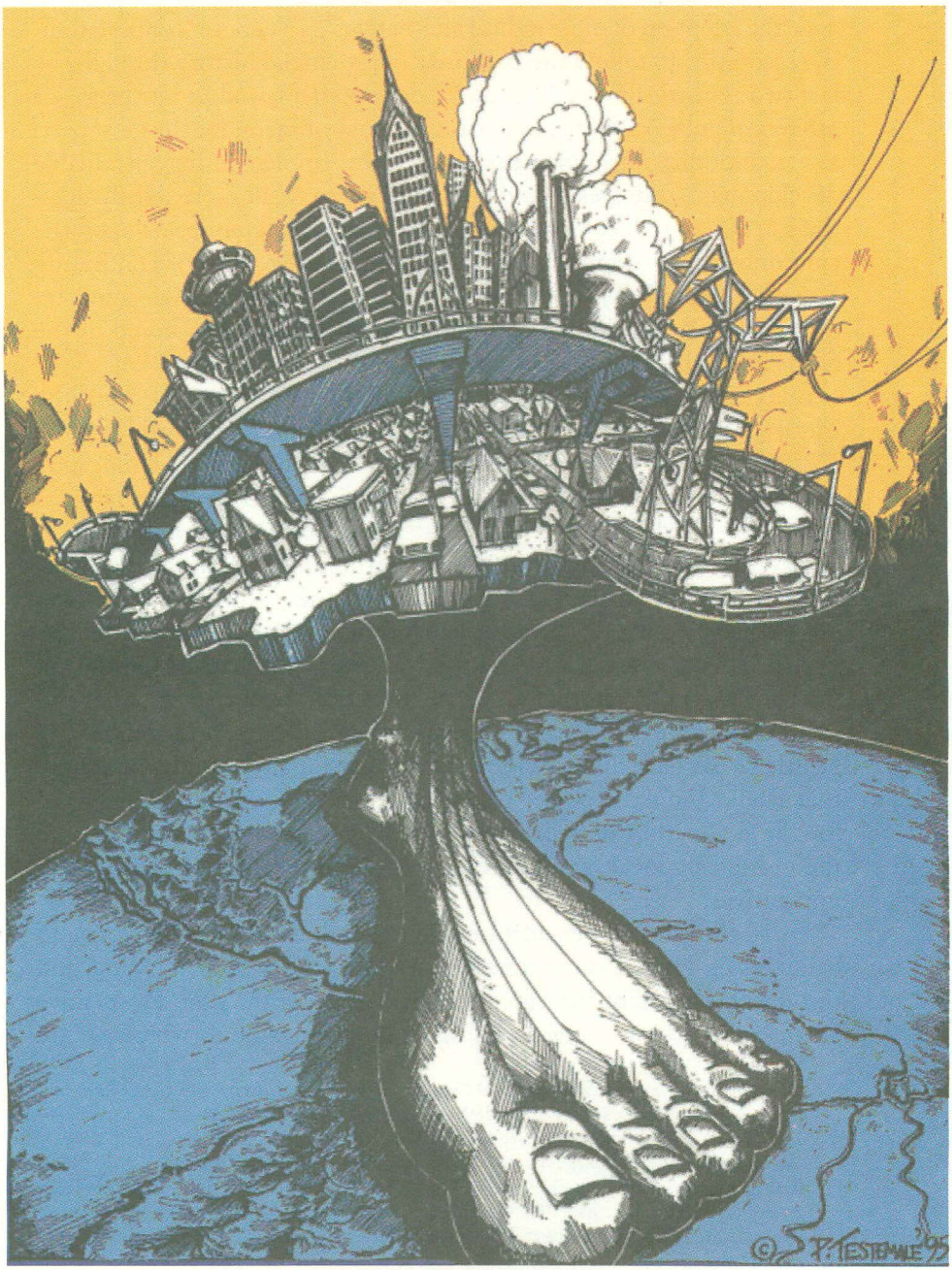
[128] M. Wackernagel and W. Rees, *Our Ecological Footprint: Reducing Human Impact on the Earth* (Gabriola Island, BC: New Society Publishers, 1996). See also <http://www.ire.ubc.ca/ecoresearch/ecoftpr.html>.

[129] For example, R.M. M'Gonigle, "Native Rights and Environmental Sustainability: Lessons from the BC Wilderness," *Canadian Journal of Native Studies* 8, 1 (1988): 107; R.M. M'Gonigle, "Tenure Reform in BC Forests: A Communitarian Strategy for Sustainability," *Policy Options* 17, 9 (1996): 11-15; C.S. Binkley, "A Crossroad in the Forest: The Path to a Sustainable Forest Sector in BC," *BC Studies* 113 (1997): 39-61; and C. Burda, F. Gale, and R.M. M'Gonigle, with commentary by P. Marchak and M. Church, "Eco-Forestry versus the State(us) Quo, Or, Why Innovative Forestry Is Neither Contemplated Nor Permitted within the State Structure of British Columbia," *BC Studies* 119 (1998): 45-86; M. Healey and Westwater Research Centre, *Seeking Sustainability in the Lower Fraser Basin: Issues and Choices* (Vancouver: Institute for Research and the Environment, Westwater Research, 1999).

7. The Bigfoot

In *The Wealth of Nations*, published in 1776, Adam Smith argued, in now well-known ways, against restrictions on trade. By this account, it was far more efficient to specialize and exchange than to engage in jack-of-all-trades self-sufficiency. Just as farmers would benefit by producing the commodities best suited to their soils and climate rather than attempting to grow all of their own needs, so nations would gain by concentrating on the production of those things in which they held a natural advantage and exchanging surpluses with other efficient producers. In the years since, this basic position, a fundamental tenet of classical economics, has shaped much of the modern world. Specialized agricultural regions (corn and hogs here, wheat there, dairying someplace else) emerged; so did industrial nations, heavily dependent on imported foodstuffs and other supplies. Every reduction in the friction of distance tended to increase the amount of contact and exchange between places, regions, and nations, and this was considered a net good, improving living standards and increasing aggregate productivity and efficiency within trading blocs. Technology and trade seemed to be the keys to infinite expansion of the earth's carrying capacity. But this view took no account of the ecological costs, of the (unavoidable) inequities, or of the long-term limits to such growth. In recent years, researchers and activists have developed a number of heuristic concepts to alert people to this point. The notion of the "ecological rucksack" exposes the quantities of raw material (including energy) used in the production of everyday items. By this measure, each kg of steel "disturbs" 21 kg of raw material; for aluminum the figure is 85; for gold (think of the Pioneer mine) 540,000; and for diamonds 53 million. The ecological rucksack of a 20 kg computer is said to weigh 1500 kg, and the rucksacks for 0.33 litre beverage containers made of glass, tin and aluminum tip the scales at approximately 3, 15 and 20 kgs respectively. The calculation of "food miles" is similarly intended to reveal the enormous costs in energy consumption, CO_2 emissions and so on, of an increasingly global market in foodstuffs. By some calculations the amount of food traded internationally – including the cheeses from France, the grapes from Chile, the oranges from Florida and the vegetables from California that fill British Columbia supermarkets – has risen by more than 2000 percent since 1970. This is reflected in the fact that the items on a typical plate of food in North America have probably traveled an aggregate 1500 miles or more before consumption. Neither of these useful ideas has had quite the same impact as a third, the ecological footprint concept developed by William Rees and Mathis Wackernagel (see note 128 in text). Rather than asking, in the vein of ecological economics, what population a particular region can sustain, the ecological footprint measures the amount of productive land and sea that is required to support the consumption habits of a particular population. The results are arresting. By Bill Rees's calculations the 1991 population of the city of Vancouver appropriated "the productive output of a land area nearly 174 times larger than its political area to support its ... consumer lifestyle" (http://dieoV.org/page110.htm). Hence the big footprint illustrated here. Vancouver, other large modern cities, and all of the world's "advanced" economies are "running massive unaccounted ecological deficits with the rest of the planet."

"The Ecological Footprint," Drawn by Phil Testamale for the cover of M. Wackernagel and W. Rees, *Our Ecological Footprint*. Used with the permission of Dr. William Rees, SCARP, University of British Columbia.


©S.P. TESTEMALE '95

guides on hand to help them consider the merits of, and perhaps to choose among, paths that might be designated "continuation of the status quo," "implementation of orthodox sustainable development strategies," and "the adoption of more radical alternatives." To choose "continuation" is, essentially, to follow the trajectory of provincial history through the last two centuries; to make growth, development, and profit the major arbiters of policy choice; and to treat the environment, for the most part, as a commodity for human use and benefit. Implementing sustainable development strategies would entail efforts to tread more lightly upon the Earth – to reduce consumption, to lessen human impacts upon the environment, to diminish pollution, and to seek ways of continuing economic growth while minimizing the drawdown of environmental capital represented by the accumulation of solar energy stored in the fabric of the Earth.

Looking to more radical solutions might lead to retreat from the "destructive anthropocentrism" of the present, developed world into the ecosophy advocated by Victoria resident Alan Drengson. Drengson's philosophy promotes an "ecological wisdom ... manifested as ecological harmony," in which it becomes the responsibility of the individual to "unify his/her own nature, so that harmonious relationships with other beings reveal their intrinsic value in the immediacy of his/her ongoing experience."[130] Less ethereal, but potentially transformative in their effects, are the arguments advanced by Michael M'Gonigle of the University of Victoria for the "re-invention" of both economics and politics to address the needs of "eco-system integrity and community health."[131] At base his is a sophisticated case for a reordering of society that would limit the power of centrist institutions and provide space for the realization of a dispersed form of social power exercised on the ground by local communities sensitive to ecological and societal imperatives.

These choices will be addressed, in the end, through public fora and ballot boxes. Debate about the alternatives that they present is vital, and this debate should be informed by a firm grasp of the past. Perspective on the present – an understanding of how we came to where we are

[130] A. Drengson, *Beyond the Environmental Crisis* (New York: Peter Lang, 1989); A. Drengson, *The Practice of Technology: Exploring Technology, Ecophilosophy and Spiritual Disciplines for Vital Links* (Albany: State University of New York Press, 1995); and A. Drengson, *Shifting Paradigms: From Technocrat to Planetary Person* (Victoria: LightStar Press, 1983).

[131] F.P. Gale and R.M. M'Gonigle, *Nature, Production, Power: Towards an Ecological Political Economy* (Northampton, MA: Edward Elgar, 2000); and R.M. M'Gonigle, "Ecological Economics and Political Ecology: Towards a Necessary Synthesis," *Ecological Economics* 28 (1999): 11-26.

– is essential to the exercise of sensible choice about the future. The articles in this issue of *BC Studies* are offered as contributions to the development of this perspective. They are not enough – words never are – but they are a beginning. They stand, individually, as well-written, richly detailed accounts of some facets of the long, complex, and important story of the relations between humans and nature in British Columbia. Collectively they resemble a very much unfinished pointillist painting more closely than they do a map of the field. Much is missing from the picture elaborated between these covers. But the pieces that are here should provoke thought and reflection about, and provide insight into, a number of enduring and pressing questions.[132] Not least might these essays help undermine the widespread and persistent conviction in British Columbia that nature is separate from culture, or that it is something external to society, "a place to which one *goes* – the site of 'resources,' a stage for 'recreation,' a source for 'spiritual renewal,' and a scene for 'aesthetic reflection.'"[133] Perhaps they might also serve to convince us that the environment is as central to the future of British Columbia (and other places) as we now recognize it has been to the past because it, like Bill Reid's shining islands, constitutes *the only world we're ever going to have.*

[132] In this perhaps they might encourage, among readers of and contributors to *BC Studies*, scholarly debate and further thought "about the general issues raised by the history of this place and [the uniqueness of] its context." See R. Fisher, "Matter for Reflection: *BC Studies* and British Columbia History," *BC Studies* 100 (1993-94): 59-77.

[133] Braun, *Intemperate Rainforest.*