

ACCOMMODATING CATTLE:

*British Columbia's "Wars" with Grasshoppers and "Wild Horses"*¹

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INTRODUCTION

THIS IS A STUDY OF ANIMALS, ecologies, and the human communities that affect and are affected by them. It considers the grasslands of interior British Columbia (see Figure 1) and revolves around two closely related "wars" waged by ranchers and grazing officials against creatures whom they considered to be pests. Although both aimed to accommodate cattle in increasingly degraded grasslands, neither campaign was simple or entirely successful. Both disclose a great deal about the intersections of economy, ecology, science, and law in a colonized and rapidly modernizing British Columbia.²

I begin with a discussion of grasshopper "plagues" and the ways in which a campaign organized to eradicate them worked to expose and exacerbate economic inequities among immigrant cattle ranchers. This done, I recount a "war" with "wild horses" that also served to dispossess Native people and discredit their competing claims to land. And, finally, I connect the campaigns against grasshoppers and horses with a general argument about the inseparability of environmental problems from their intertwined social and ecological contexts.

¹ I am very grateful to Cole Harris and Graeme Wynn for their extensive comments and suggestions during the drafting of this article. I would also like to thank Matthew Dyce, Matthew Evenden, Mark Fiege, Bob McDonald, Jonathan Peyton, Joseph Taylor, and an anonymous reviewer for helping me to sharpen the analysis at the publication stage, and cartographer Eric Leinberger for making the map.

² This approach builds on recent work in history and geography, but three (admittedly quite different) books were particularly influential: Cole Harris, *The Resettlement of British Columbia: Essays on Colonialism and Geographical Change* (Vancouver: UBC Press, 1997); Arthur McEvoy, *The Fisherman's Problem: Ecology and Law in the California Fisheries, 1850-1980* (Cambridge: Cambridge University Press, 1986); and Timothy Mitchell, *The Rule of Experts: Egypt, Techno-politics, Modernity* (Berkeley: University of California Press, 2002), especially 19-53.

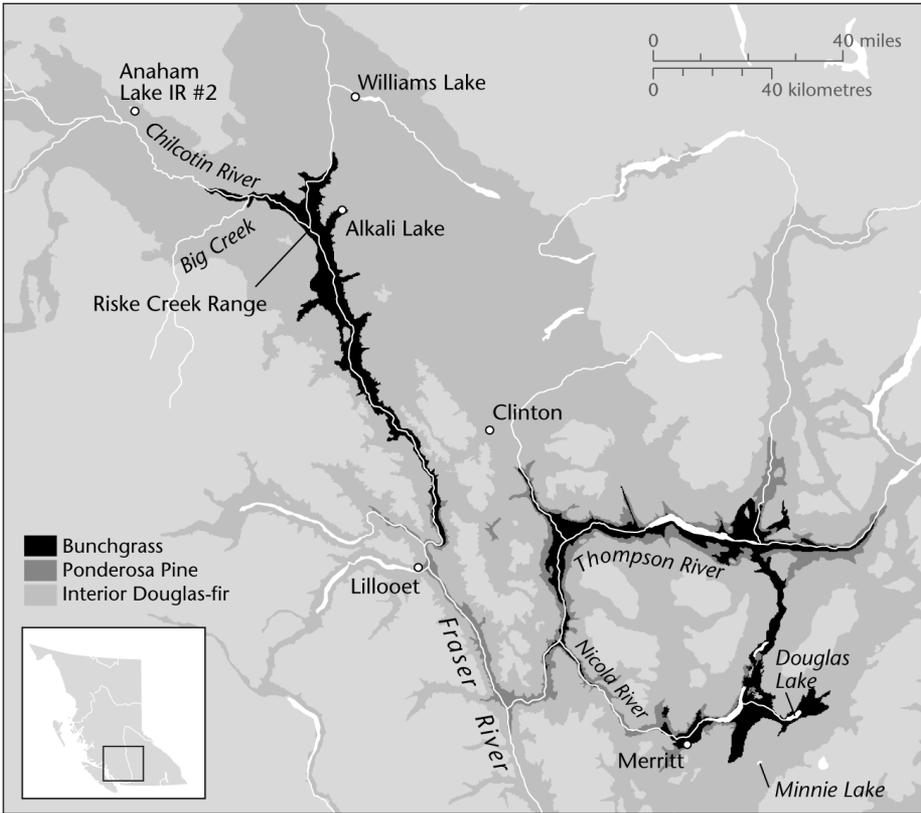


Figure 1: Study Area. Cartography by Eric Leinberger.

GRASSHOPPERS

Grasshopper irruptions are part of grassland ecology, but in the nineteenth century they rarely posed a problem to settlers. After 1890, however, settlers held that the scale and frequency of irruptions had increased significantly; in the 1920s, scarcely a summer went by without a “locust plague” (or the spectre of a locust plague) somewhere in the semi-arid interior of British Columbia. The first of them occurred in 1890, when large numbers of “hoppers” in the Nicola Valley began “doing considerable injury to pasture.”³ In the summer of 1898, grasshoppers again appeared in large numbers, principally in the Nicola Valley but also near Lillooet, where, according one resident, ranchers had “to feed out a

³ British Columbia, *First Report of the Department of Agriculture of the Province of British Columbia, 1891* (Victoria: Printed by Richard Wolfenden, 1892), 733.

lot of hay on account of the grasshoppers leaving pasture short.⁷⁴ They returned again in 1907, and in 1914, according to Dominion Inspector of Indian Orchards Tom Wilson, “were so numerous that their flight resembled a snow-storm.” Their impact appeared to Wilson to have been considerable: “We found that crops of clover, alfalfa, and ordinary hay crops had been much injured, so much so as to bring about an appreciable shortage in weight per acre, while the cattle grazing-grounds had been rendered bare.”⁷⁵

Late nineteenth-century entomologists advocated a number of relatively natural controls of pestiferous insect populations.⁶ “Black birds, meadow larks and particularly the several species of grouse” one report indicated, ate large numbers of grasshoppers “and should be jealously protected.”⁷ In a similar vein, an 1893 report from the British Columbia Department of Agriculture suggested: “The high bench lands in this part of the country are conveniently suited to the raising of poultry, especially turkeys, which, besides being a source of profit, are most useful in keeping down such pests as grasshoppers.”⁸ Blackbirds and turkeys could eat only so many grasshoppers, however, and by the end of the nineteenth century entomologists were advocating the use of poison baits – usually some combination of Paris green arsenic, water, manure, and lemon or molasses – to keep grasshopper numbers down.⁹

By all accounts, arsenic bait could be counted on to control grasshopper populations, but British Columbia presented particular stumbling blocks. Initial experiments indicated that only two of the forty or so species of grasshoppers found between Merritt and Riske Creek would take the poison bait and, as it turned out, not the right two.¹⁰ And then there

⁴ Jackson to Thomas Ellis, 6 April 1900, British Columbia Archives (hereafter BCA), BC Cattle Company Records, MS 2882, box 254, file 14.

⁵ Tom Wilson, “The Outbreak of Locusts of 1914,” *Proceedings of the Entomological Society of British Columbia* (Victoria: King’s Printer, 1915), 41–42.

⁶ On the use of birds in pest control, see Matthew Evenden, “The Laborers of Nature: Economic Ornithology and the Role of Birds as Agents of Pest Control in North American Agriculture, 1880–1930,” *Forest and Conservation History* 39, 4 (1995): 172–83.

⁷ British Columbia, *First Report of the Department of Agriculture*, 827.

⁸ British Columbia, *Third Report of the Department of Agriculture of the Province of British Columbia, 1893* (Victoria: Richard Wolfden, 1894), 742.

⁹ These mixtures were recommended for use in British Columbia as early as 1902. See British Columbia, *Seventh Report of the Department of Agriculture of the Province of British Columbia, 1902* (Victoria: Richard Wolfden, 1903). On early control methods, see James Whorton, *Before Silent Spring: Pesticides and Public Health in Pre-DDT America* (New Jersey: Princeton University Press, 1974).

¹⁰ Thomas Mackenzie to Ernest Simms, 19 April 1921, BCA, GR1441, reel 108, file 8657. The principal “injurious” species was *Camnula pellucida*, but reports from ranchers and other local observers also indicated that there had been small, isolated outbreaks of *Melanoplus atlantis* (later renamed *M. mexicanus*, *M. bilaturus*, and *M. sanguinipes*).

was the problem of distribution: spreading arsenic bait over relatively small parcels of cultivated land (as was being done by farmers east of the Rocky Mountains) was one thing, but applying it to extensive and sparsely settled rangeland was another.

The experience of the First World War suggested another line of attack. In August 1919, amid reports that grasshoppers were laying bare “an area of several hundred square miles” in the Chilcotin, Thomas Mackenzie, British Columbia’s first grazing commissioner, wrote the military, asking whether there “is anyone in British Columbia who has made a study of and is familiar with the use of various gases used in warfare in France.”¹¹ He wanted to gas the grasshoppers.¹² It is not clear whether Mackenzie was able to proceed with his experiments, but his appeal to the army is a Canadian reminder of what historian Edmund Russell and others have shown: that the means, methods, and metaphors of war permeated North American understandings of and approaches to insect control in the nineteenth and twentieth centuries.¹³ So, too, in British Columbia, words of war surrounded the grasshopper problem and suggested ways of solving it. The cover page of an important 1924 report, co-authored by Dominion entomologist R.C. Treherne and his assistant E.R. Buckell, depicted grasshoppers about to advance across open, undefended, and obviously pristine bunchgrass pasture (see Figure 2). Plans to control “outbreaks” – a word used to describe the beginning of wars – frequently turned on military metaphors. Faced with the overwhelming task of spreading arsenic bait on British Columbia’s open rangelands, entomologists noted the importance of “narrowing the frontline” before beginning “operations” or initiating a “campaign.”¹⁴

Science, however, spoke with many voices. Entomologists promoted better land use and carried out basic taxonomic and habitat studies even as they experimented with arsenic, organized poison control “campaigns,” and considered gassing the grasslands. Indeed, a central conclusion of early entomological research was that poor land-use practices had caused

¹¹ Thomas Mackenzie to Department of Militia and Defence, 6 August 1919, BCA, GR1441, reel 108, file 8657.

¹² Ibid.

¹³ Edmund Russell, “Speaking of Annihilation: Mobilizing for War against Human and Insect Enemies, 1914-1945,” *Journal of American History* 82, 4 (1996): 1505-29; Edmund Russell, *War and Nature: Fighting Humans and Insects with Chemicals from World War II to Silent Spring* (New York: Cambridge University Press, 2001). See also Joseph Blu Buhs, *The Five Ant Wars: Nature Science and Public Policy in Twentieth Century America* (Chicago: University of Chicago Press, 2004).

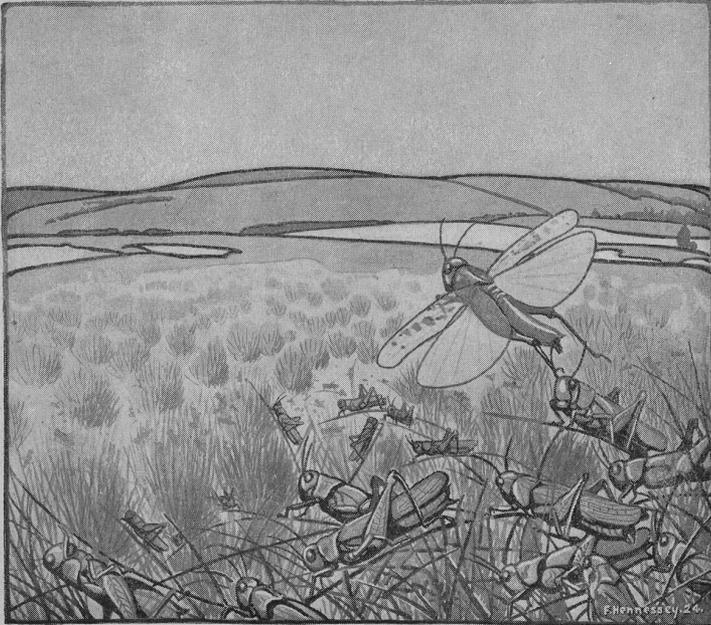
¹⁴ E.R. Buckell, “The Grasshopper Problem in Canada,” in *Proceedings of the Fourth International Locust Conference, Cairo, Egypt, April 22, 1936*, Appendix 42 (Cairo: Government Press, 1937).

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GRASSHOPPERS OF BRITISH COLUMBIA.

By R.C.Treherne and E.R.Buckell.



DOMINION OF CANADA
DEPARTMENT OF AGRICULTURE
BULLETIN No. 39—NEW SERIES

Printed by direction of the Hon. W. R. Motherwell, Minister of Agriculture, Ottawa, October, 1924

Figure 2: Grasshoppers about to advance across bunchgrass rangeland. Source: R.C. Treherne and E.R. Buckell, *The Grasshoppers of British Columbia* (Ottawa: Government Printing Bureau, 1924) UBC Special Collections.

the outbreaks. Reporting the preliminary results of studies initiated by Treherne in the summer of 1920, Grazing Commissioner Mackenzie noted: "The investigation disclosed the fact that owing to heavy grazing, the growth of forage is so sparse that grasshoppers are forced to travel far for food. Under such conditions it is not possible for their ordinary enemies to keep them down to normal numbers. In consequence they have rapidly increased."¹⁵ Indeed, when considering the historical record of outbreaks in the province alongside the ecological record of ranching (evident, Treherne said, in increasingly overgrazed range), it was possible to discern a pattern of increasingly widespread and severe grasshopper outbreaks. Viewed in this light, the solution was clear. According to Treherne, "it should be the aim of all interested in range conservation to attempt to reestablish the range grasses in such a manner and in sufficient quantity to enable the grasshoppers to remain more or less localized, and thus give the beneficial insects a chance to accomplish what they were placed in the world for."¹⁶

Much of this emerging analysis and interpretation followed from fieldwork done by Buckell on rangelands near Riske Creek.¹⁷ Located at the junction of the Fraser and Chilcotin rivers, the Riske Creek range is a broad, undulating plateau punctuated by steep, deeply incised river valleys. Before European resettlement of the region, Tsilhqot'in and Secwepemc people made extensive use of resources in the area, hunting, gathering, and eventually grazing horses and later cattle across a wide ecological and geographical domain.¹⁸ Beginning in the late 1860s, a new human

¹⁵ Thomas Mackenzie, "Report of the Grazing Commissioner," in *Report of the Forest Branch for 1921* (Victoria: Government Printer, 1921), 54.

¹⁶ R.C. Treherne, "The Grasshopper and the Range," n.d., BCA GR1441, reel 108, file 8657.

¹⁷ My analysis draws from the recent scholarly emphasis on situating science in spatial as well as historical context. See Matthew 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): 355372; Arn M. Keeling, "Charting Marine Pollution Science: Oceanography on Canada's West Coast, 1938-1970," *Journal of Historical Geography* 33 (2007): 403-28; Robert Kohler, "Place and Practice in Field Biology," *History of Science* 11 (2002): 189-210; David Livingston, *Putting Science in Its Place: Geographies of Scientific Knowledge* (Chicago: University of Chicago Press, 2003); Simon Naylor, "Introduction: Historical Geographies of Science – Places, Contexts, Cartographies," *British Journal for the History of Science* 38 (2005): 1-12; Steven Shapin, "Placing the View from Nowhere: Historical and Sociological Problems in the Location of Science," *Transactions of the Institute of British Geographers* (n.s.) 23 (1998): 5-12.

¹⁸ These reflections are based on Roy L. Carlson and Luke Dalla Bona, eds., *Early Human Occupation in British Columbia* (Vancouver: UBC Press, 1996); David L. Pokotylo and Donald Mitchell, "Prehistory of the Northern Plateau," in *Handbook of North American Indians*, ed. William C. Sturtevant, (Washington: Smithsonian Institution, 1998) 81-102.

geography was put in place and elements of a new ecology emerged.¹⁹ Ranchers with property rights erected fences and spread livestock across a landscape they increasingly called their own. At Riske Creek, by the early 1920s, elements of this new ecology and the intertwined environmental effects of colonialism and capitalism were everywhere apparent. “The open range” that Buckell believed had originally been “covered with a fine stand of Bunch-grass (*Agropyron* spp.), often from two or three feet in height” had been “practically destroyed” by overgrazing. In contrast, “those bunchgrass slopes that form the winter ranges ... having been fenced many years ago, and all cattle kept off them except in winter, still produce a fair stand of bunchgrass.”²⁰

In Buckell’s assessment, the geography of fields and fences and the population geography of grasshoppers were closely connected. On the open range where bunchgrass was heavily grazed, he found innumerable grasshoppers grazing shoots of new grass (not usually bunchgrass). In contrast, in areas where tall stands of bunchgrass still grew “in profusion,” grasshoppers were relatively hard to find, save, he said, for the odd few always found lurking along cattle trails and fence-lines. “There is little doubt,” Buckell concluded, “that the main injurious species of grasshoppers found on the British Columbia ranges are insects whose natural habitat is a dry, bare, closely grazed range, their food consisting of the small tender grass shoots which continue to come up although the grass is persistently eaten down by stock.” Indeed, the entomologist continued, “the feeding of the cattle and horses, by killing out the Bunch-grass and causing the range to be thinly clothed by low growing grasses, opens the range to the full glare of the sun and creates an ideal habitat for the species which are most injurious to British Columbia.”²¹ Buckell’s conclusion – that overgrazing caused the outbreaks – echoed that of his supervisor, Treherne. But the details of Buckell’s analysis differed significantly. Grasshopper outbreaks in British Columbia were caused less by habitat loss (forcing grasshoppers abroad in search of food) than by habitat creation.

Framed thus, the grasshopper problem came to stand for much of what entomologists and grazing officials considered wrong with British Columbia’s range cattle industry in the early 1920s. “I would like the stockmen to understand clearly that a great deal of the destruction

¹⁹ Cole Harris, *Making Native Space: Colonialism, Resistance, and Reserves in British Columbia* (Vancouver: UBC Press, 2002).

²⁰ E.R. Buckell, “The Influence of Locusts on the Ranges of British Columbia,” in *Fifty-first Report of the Entomological Society of Ontario, 1920* (Toronto: Clarkson James, 1921), 24–25.

²¹ *Ibid.*, 26.

wrought to the ranges is due entirely to their inactivity in keeping the stock distributed over the various types of range during suitable periods of the season,” Mackenzie emphasized in a 1922 letter to Buckell about what to include in a report for a popular trade magazine published by the provincial government. “In the course of time they will probably realize this but it is a difficult matter to educate them,” he wrote with considerable condescension, “and I feel that no opportunity should be lost to impress these facts upon them. They have lost sight of the fact that all the most important operations of their business take place on the open range and that these operations go on each year without any attention on their part.”²² A report about unregulated grazing gone awry would hold out hope of redemption in the form of conservation practices that would restore the grasslands.²³

Such was the scientific judgment, but ranchers and range managers opted for poison. They did so for several reasons, one of which was time. It would take decades to complete a closer survey of provincial grazing resources and to acquire the expertise, experience, and empirical data necessary to calculate carrying capacities for particular ranges. Changes in the economy of ranching after the First World War also promoted poison control. In the years after 1915, many ranchers enjoyed record profits as demand soared and prices paid for cattle hit record highs. But by the early 1920s, the boom was over and stock-raisers increasingly found themselves caught up in a cost-price squeeze stemming on the one hand from declining beef prices and on the other from deteriorating environmental conditions that drove up production costs. In this context, the politically powerful Nicola Stock Breeders Association urged government to act, although not as suggested by Buckell. “We would like to point out the serious nature of the grasshopper situation,” wrote association president H.S. Cleasby in a 1925 letter to the Deputy Minister of Lands: “The ranges have in great measure been eaten off by this pest chiefly on the early spring and fall ranges which has necessitated a much longer feeding season. We realize that range conservation is a means of controlling the grasshopper but with the scarcity of grass caused by this pest on all ranges, this work is practically impossible unless we greatly reduce our herds, which at present prices would spell ruin to the industry.”²⁴ Not surprisingly, sympathetic government officials were

²² Thomas Mackenzie to E.R. Buckell, 22 December 1922, BCA, GR1441, reel 108, file 8657.

²³ For early twentieth-century range conservation practices, see Arthur Sampson, *Range and Pasture Management* (New York: John Wiley and Sons, 1923).

²⁴ Nicola Stock Breeders Association to the Deputy Minister of Lands, 5 March 1925, BCA, GR1441, reel 108, file 8657.

slow to introduce new land-use practices. It was simpler, and far more acceptable politically, to concentrate on killing insects.

The acute nature of grasshopper outbreaks also powerfully influenced approaches to their control. An account written by Buckell from the Nicola Valley suggests something of the scale and severity of irruptions and why poison control would ultimately carry the day. In the summer of 1922, he wrote, “migrating swarms” of grasshoppers were seen moving off the open range in “countless numbers.” In many cases, “separate swarms covering an area of a quarter of a mile in width” were seen “crossing roads from 8 am until 6 pm for a week at a time.” Even the flow of water across the landscape slowed as irrigation ditches piled up with dead and drowning insect bodies – young grasshoppers as yet unable to fly. “Their numbers were beyond estimation,” the young entomologist wrote with awe, “and resembled a thick snowstorm, the individuals appearing as minute shining specks” against an otherwise bright blue sky.²⁵ The persistent spectre of such outbreaks and the periodic, often chaotic arrival of grasshoppers tended to send ranchers and range officials running for poison. Other, more benign approaches to insect control – range restoration measures – were simply overwhelmed by outbreaks that impelled citizens to use one set of “emergency measures” after another. New land-use practices were introduced after 1919 but only slowly, and they were usually subsidiary to quicker fixes such as poison.

Meanwhile, life history and habitat studies undertaken in the early 1920s convinced entomologists that there were “primary grasshopper breeding areas” throughout the interior, essentially large egg-bed base camps from which “outbreaks” originated.²⁶ At this point, Buckell later recalled, “the whole policy of attack on the problem changed.”²⁷ Entomologists could now organize preemptive strikes, the purpose of which would be to apply poison to grasshopper egg-beds at hatching time. Initial experiments on egg-beds at Minnie Lake proved very promising, and range managers began to ready themselves and ranchers for a war with insects. According to one grazing official, as many as “18 men will have to be ready at a moments notice to perform this duty and be able to mix the materials in their proper proportions . . . definite areas will have to be decided on over which the ranchers will be responsible to spread

²⁵ Buckell’s account comes from R.C. Treherne and E.R. Buckell, “The Grasshoppers of British Columbia, with Particular Reference to the Influence of Injurious Species on the Range Lands of the Province,” *Dominion Department of Agriculture Bulletin No. 39* (Ottawa: Government Printing Bureau, 1924), 20.

²⁶ Treherne and Buckell, “Grasshoppers of British Columbia,” 19.

²⁷ Buckell, “The Grasshopper Problem in Canada,” 4.

the bait ... and this broadcasting of bait will not be done until Vroom [his assistant] or myself sanction same, for as the grasshopper ... stays on the egg-bed for 24 hours and then approximately seven days elapse before they will tackle the bait, there is ample time in which to issue orders to start using the poisoned bait.”²⁸ Newspapers also picked up on the rhetoric of war. “British Columbia will fire the opening gun of a war against grasshoppers and locusts this week,” reported the *Victoria Daily Times* in May of 1924: “An invading army numbered in the billions will soon sweep down upon the Okanagan and other interior districts eating every blade of grass and other vegetation as it goes, but farmers are preparing desperately to meet it ... [T]he provincial government is providing enormous quantities of poison to be strewn in the path of the insect hordes. In this way literally tons of them will be destroyed before they reach cultivated areas.”²⁹ The Department of Agriculture also considered introducing thousands of turkeys, tending them with expert turkey herders, and rushing them as needed from one part of the grassland to another. The plan, however, was found to be “too expensive, and thousands of turkeys gobbling and trotting all over the country, blocking country roads as they moved from district to district, would prove a nuisance.”³⁰

Even without turkeys, mobilization for war proved to be more problematic than officials had expected. In the summer of 1924, some Native people refused to put poison on their reserves. The historical record is sparse, but apparently they were concerned about human illness and the loss of livestock as well as about rights of access to land. According to one Indian agent, in 1914 he had “obtained poison ... for the purpose of exterminating grasshoppers on an Indian Reserve, with very poor results, as the death of a few chickens and cattle and sickness of the children caused the Indians to look with great disfavor on any more poisoned bait being placed upon their lands, so that the matter had to be dropped.”³¹ Provincial grazing officials, however, identified overgrazed Indian reserves as potential source areas for outbreaks and pressed local Indian agents to do what they could to secure Native cooperation. As grazing official W.H. Brown put it in September of 1924: “I explained to [an Indian agent] the absolute necessity of cooperation with the Douglas Lake Indians and ... that this I thought could be accomplished because there was ample time before next spring to thoroughly canvas and explain

²⁸ W.H. Brown to Thomas Mackenzie, 11 September 1924, BCA, GR1441, reel 108, file 8657.

²⁹ “Farmers Prepare to Halt Insect Armies,” *Victoria Daily Times*, 13 May 1924.

³⁰ “Turkeys Will Halt Hopper Pest” *Vancouver Daily Province*, 27 May 1926.

³¹ Brown to Mackenzie, 11 September 1924.

to them that only with their cooperation could we possibly hope to finally exterminate the grasshopper and restore the depleted ranges to their 'old time' carrying capacity."³² What happened next is unclear. Brown's letter is a reminder, however, that the insects moved amid a complicated human geography. At Douglas Lake the war on insects ran up against the geography of colonialism.

By August 1924 the war on grasshoppers foundered on another front as well. "We are doing all we can, including baiting," Buckell explained in an letter to Mackenzie, "but very little cooperation has been received from the ranchers themselves, each man appearing to think that the work should be taken over by the government, entirely losing sight of the fact that with its limited forces in the field, it can do little more than furnish the poison, and assist in every way to organize and advise the stockmen."³³ Perhaps some ranchers did want the government to do the work, but others – small ranchers running as few as fifty head on frequently marginal land – considered that if overgrazing had been causing the outbreaks, then the burden of grasshopper control really ought be on those men whose animals were doing the damage: namely, the large ranchers (in the Nicola Valley, Frank Ward and Lawrence Guichon) with whom the small ranchers had been in bitter dispute for decades over winter pasture and grazing and irrigation rights. In this case, the war on insects was stalled by a class-based confrontation between many small ranchers and a few large ones who controlled most of the resources.³⁴

Rather than address the social and economic inequalities raised by the grasshopper problem, Mackenzie opted for legislation that would compel ranchers to use poison. "I feel quite certain from my inspection of the range as well as the results obtained during the past season that had all of the stockmen in that locality contributed a fair share of the work to the general poisoning campaign the grasshoppers throughout the Nicola district would be practically eliminated," he complained to Buckell in September 1925, "and I have suggested [to the minister of lands and the Dominion entomologist Gordon Hewitt] that if the work is to be carried on some action must be taken to require those who

³² Ibid.

³³ Thomas Mackenzie, Memorandum for the Honorable Minister of Lands 6 August 1924, BCA, GR1441, reel 108, file 8657.

³⁴ Others have pointed to the importance of class-based conflicts in the history of conservation. See Karl Jacoby, *Crimes against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley: University of California Press, 2001); Tina Loo, *States of Nature: Conserving Canada's Wildlife in the Twentieth Century* (Vancouver: UBC Press, 2006); Louis Warren, *The Hunter's Game: Poachers and Conservationists in Twentieth-century America* (New Haven and London: Yale University Press, 1997).

should be interested and whose welfare is dependent upon the control of the grasshoppers to contribute assistance in some way.”³⁵ There was nothing in Canadian or provincial law that could be used to compel ranchers to use poison, but there were examples from other jurisdictions. “In connection with the grasshopper control on the ranges,” Mackenzie noted as early as 1923, “I would urge that consideration be given the plans adopted by the Government of South Africa in accordance with the requirements of act no. 11, the statutes of the Union of South Africa for 1911.”³⁶ The South African Locust Destruction Act required white farmers and stock-raisers and Native people living on and off reserves to take part in poison control, and it spelled out the penalties for not doing so. It was tantamount to a Union-wide draft; everyone was required to serve in the war against locusts.³⁷

Building on the South African example, Mackenzie and provincial legislators began crafting the Grasshopper Control Act. Ranch hands were to spread poison provided by the province. Yet even this arrangement presented problems, not least those related to human health. A grazing official in the provincial government noted in 1925 that “men have suffered arsenical poisoning through working with the powder,” and he wanted to know whether the Workman’s Compensation Act applied to ranch hands: “I asked Mr. Ward if the [act] was applicable to ranch hands and deduced from the conversation that followed that it was optional, to which I pointed out that most likely, in the case of an accident, with government paying the wage-bill, a claim would be submitted.”³⁸ Therein lay the rub: Mackenzie and other government officials were reluctant to pay the wages of the workers who were applying the poison because “it would possibly set a bad precedent. Nearly all of the expenses in connection with insect control have heretofore been borne by the owner of the land.”³⁹ Therefore, ranch owners would have to pay the wages of the workers who were distributing the poison and also provide compensation for any associated injuries.

With this understanding, large ranchers began to doubt the value of a grasshopper control act. To maintain support for its proposed act, the government had to demonstrate the effectiveness of poison as a means of grasshopper control, and to this end it undertook a test project. By the late 1920s, the experiments at Minnie Lake seemed highly successful, and

³⁵ Mackenzie to Buckell, 15 September 1925, BCA, GR1441, reel 108, file 8657.

³⁶ Mackenzie to Buckell, 12 January 1923, BCA, GR1441, reel 108, file 8657.

³⁷ *Ibid.*

³⁸ Brown to Mackenzie, 4 March 1925, BCA, GR1441, reel 108, file 8657.

³⁹ Mackenzie to District Forester, Vernon, 27, January 1925, BCA, GR1441, reel 108, file 8657.

many powerful Nicola ranchers appeared to support a grasshopper control act. Recognizing as much, officials in the Grazing Branch moved quickly to draft legislation. Bypassing arguments about how to pay for poison control, the province decided to encourage the creation of grasshopper control zones.⁴⁰ In principle, communities could decide for themselves whether they wanted to create a control zone and thus be required to take part in poison control. The practical reality, however, was that the wishes of large landowners – who already supported the act – had carried the day. As Mackenzie noted after a meeting with ranchers in 1930: “Since there seemed to be antagonism at the Nicola meetings between the large and small owners of land it would seem advisable to suggest that, in any legislation enacted, consideration be given to requiring that the establishment of a grasshopper control district be based upon the wishes of the owners of at least 60% of the acreage to be included in a proposed control district rather than upon a 60% vote of the number of land-owners in such district.”⁴¹

Such arrangements strongly favoured large landowners and pretty much ensured that the Nicola District would become a control zone. Lamentably, Mackenzie noted, the provisions of the act did not apply to Native reserves, which were a federal responsibility under the Indian Act. Still, William Ditchburn, of the Department of Indian Affairs (DIA), assured provincial officials that his department would do what it could to convince Native people to take part in poison control.⁴² Everywhere else within control zones, the act applied. It enabled public officials “to enter upon lands within the control area or lands adjacent thereto, without consent of the owner or of any person having any estate or interest in the land” to look for egg-beds and to apply poison if need be.⁴³ Ranchers in a control zone did not have to put poison on their properties, but they could not stop others from doing so.⁴⁴ By the end of 1930, the administrative power of the state (in this case the Province of British Columbia) and the economic power and political influence of the large ranchers had created a legal space – the Nicola Control Zone,

⁴⁰ For a similar approach to weed control in the American west, see Mark Fiege, “The Weedy West: Mobile Nature, Boundaries, and Common Space in the Montana Landscape,” *Western Historical Quarterly* 35, 1 (2005): 22-48.

⁴¹ Thomas Mackenzie, minutes of the Grasshopper Control Committee, 16 January 1930, BCA, GR1441, reel 108, file 8657.

⁴² Ibid.

⁴³ Grasshopper Control Act, BCA, GR1441, reel 108, file 8657.

⁴⁴ Moreover, according to Section 8 of the Act: “No action shall be brought against the committee in its corporate capacity, or against any member of the committee, or against any servant or workman of the committee for damages occasioned by an act or thing done by it or him in good faith in pursuance of this Act and its regulations.”

comprising 1,163,595 acres – within which refusal to cooperate with poison control was illegal.⁴⁵

As the decade wore on and grasshopper plagues subsided, entomologists and grazing officials cautiously declared victory over their insect enemies. Even Buckell was impressed by the apparent success of poison control in the Nicola Valley. “The freedom from a grasshopper outbreak on the Nicola range during 1933, 1934, and 1935, is particularly striking” he noted, “owing to the fact that throughout the rest of the province a definite grasshopper outbreak was present during each of these three years.”⁴⁶ Other assessments were less careful. For example, in a 1938 article in the *Province* newspaper, agricultural official W.L. Talbot described how a “dramatic battle for control of the Nicola Valley ended in triumph within a few yards of defeat.” The carnage, said Talbot, had been considerable: “On some battlefields the dead lay as thick as four hundred and better to the square yard over large areas.” Although at times the battle seemed in doubt, entomologists ultimately took back the interior. Armed with poison bait and simple maps showing the location of egg-beds, they set out to subdue their insect enemy, and by August 1938, what was once a “vast” grasshopper “army” – at times a “huge” airborne “armada” – had been “reduced to a skeleton force.”⁴⁷ Talbot’s story was clear enough: “man” had waged war with insects and won. Of course, there was collateral damage along the way. Every year arsenic poisoning killed a few cattle. Many naturalists suspected that grasshopper baiting also killed many honey bees and songbirds, producing an early twentieth-century “silent spring.”⁴⁸ The extent to which other wildlife was affected by arsenic poisoning remains unclear.

But the entomologists’ hold on the interior was far more tenuous than they thought. Plagues approaching “biblical” proportions descended on interior rangelands during the summers of 1943, 1944, and 1945.⁴⁹ No range was left untouched. Grasshoppers ravaged even the “world famous” Nicola Control Zone.⁵⁰ Nor did the economic inequalities between big and small ranchers disappear. Indeed, if anything, they became more

⁴⁵ On the intersection of law, space, and social power, see Nicolas Blomley, *Law, Space, and the Geographies of Power* (New York: Guildford Press, 1994).

⁴⁶ Buckell, “The Grasshopper Problem in Canada,” 4.

⁴⁷ “Scourge of the Range: BC Grasshopper Plague Beaten,” *Vancouver Province*, 13 October 1938.

⁴⁸ “Grasshopper War Blamed,” *Victoria Daily Times*, 26 June 1936. The phrase comes, of course, from Rachel Carson, *Silent Spring* (Greenwich: Fawcett Publications, 1962).

⁴⁹ “Worst Grasshopper Plague Hits the Interior,” *Vancouver Province*, 3 October 1943.

⁵⁰ “Egypt Adopts Nicola Valley Plan to Rid Land of Age-old Scourge of Grasshoppers,” *Vancouver Province*, 13 June 1936.

exaggerated and entrenched over time. By the early 1950s, the Guichon Ranch comprised 40,000 deeded acres plus 500,000 more in permits and leases. Meanwhile, the Douglas Lake Cattle Company expanded to 170,000 acres of deeded and leased land with 450,000 more under grazing permit. Provincially, only the Gang Ranch, with its 1,000,000 combined acres, was larger.⁵¹ Most ranches were miniscule by comparison and relied on relatively marginal rangelands. Grasshopper irruptions exposed these inequalities but did nothing to resolve them.

WILD HORSES

The war with grasshoppers was only one part of a broader campaign against creatures that competed with cattle for forage in the grassland, and as battle plans were being developed on that front, a second related conflict was taking shape on another. There the enemy was “wild horses.” As early as 1891, a cattle rancher from Clinton, John Saul, complained that the “worst pest in this part of the country is wild horses. They help to eat up the ranges, break into fields, and are as hard to catch as deer. Another phase of evil wrought by these wild scrub horses is that the stallions are continually running off the tame mares so that often well bred mares produce worthless colts. I believe they are descendents of Indian horses. I am told they [the Indians] lay claim to them in an indefinite sort of way.” Although some of the horses were branded, Saul suggested that all of them be “shot off” as was being done, he said, “by the thousands” in Australia and parts of the American West.⁵² Others agreed, often adding that Indian horses carried mysterious diseases that spread to domestic stock. As another interior cattle rancher reported in 1889, “a very malignant distemper prevailed in this district and quite a number of animals died. It made its first appearance among the Siwash ponies, and from their habit of roving with large bands, it was impossible to keep their more valuable stock free.”⁵³ Victor Engstrom, a rancher from the Nicola Valley, noted a strange “stamper” in Indian horses and considered that “it would be advisable to exterminate such wild or nearly wild cayuses that are not attended to in the winter or never used as pack

⁵¹ These numbers come from Thomas Weir, *Ranching in the Southern Plateau of British Columbia* (Ottawa: Queen’s Printer, 1956).

⁵² Quoted in British Columbia, *First Report of the Department of Agriculture*, 847.

⁵³ *Ibid.*, 767.

horses or rounded up and corralled at regular intervals.”⁵⁴ Interbreeding and disease were seen as unmitigated “evils” that needed to be removed from the range.

Overgrazing was considered even more serious, especially after grasshopper outbreaks that depleted the range. Rancher J.E. Moore of Alkali Lake argued: “My experience and observations for the last 18 years in this section of the country is that the public pasture lands are overstocked and getting run down in consequence. We therefore must consider the best way of protecting the pastoral lands.” Rather than reduce the number of cattle, however, Moore turned to the problem of horses. By his estimate, there were five thousand “wild or nearly wild horses between Lillooet and Big Bar alone” (barely fifty miles by his estimate).⁵⁵ In Moore’s view, legislation was needed to remove them. Government officials agreed; for them the question was how best to achieve this. “Mr. Moore’s suggestion is, in my opinion, a good one, and would certainly mitigate the evil and eventually stamp it out,” wrote James Anderson of the Department of Agriculture, “but it would be a slow process as most of these useless cayuses are, I am informed, claimed by the Indians.” Anderson wondered whether a simpler solution was at hand: to compel Native people to keep their horses on their reserves. “It seems too bad that the Indians besides having the best of the country as reserves should be allowed to make use of the public domain in this most wasteful manner.”⁵⁶ Many ranchers shared this sentiment. As one ranch foreman from the Chilcotin region wrote, ominously, in regard to Indians horses on Big Creek: “The Indians will be warned by me once [to keep their horses on the reserves] and if they continue [ranging them around Big Creek] I think a way will be found to stop them.”⁵⁷ In fact, Native people could not keep their horses on the reserves all year and had long said as much. Reserves were small and rarely contained good grazing land. The best bunchgrass valley bottoms and natural hay meadows were already behind ranchers’ fences.

Criticism of overgrazing by horses (wild and otherwise) continued into the twentieth century and came to be reflected in provincial policy. Grazing Commissioner Mackenzie was probably the most outspoken critic of wild horses. Mackenzie had dealt with their effects in the

⁵⁴ Quoted in British Columbia, *Fourth Report of the Department of Agriculture of the Province of British Columbia, 1894* (Victoria: Printed by Richard Wolfenden, 1895), 884.

⁵⁵ *Ibid.*, 1129.

⁵⁶ Quoted in British Columbia, *Fifth Report of the Department of Agriculture of the Province of British Columbia, 1895-6* (Victoria: Printed by Richard Wolfenden, 1897), 1171.

⁵⁷ J.G. Aitken to J.D. Prentice, 8 December 1910, BCA, Western Canadian Ranching Company Records, MS 288r, box 503 file 1.

American West and was determined to prevent horses from degrading rangelands in British Columbia. One of his first acts as commissioner was to amend three extant pieces of legislation – the Grazing Act, the Animals Act, and the Trespass Act – to facilitate the removal of horses (including “Indian horses”) from provincial rangelands. As Mackenzie noted in a 1924 letter to the DIA, “the horses of the Indians are responsible for the heavy damage to the range in the early spring, which has occurred during late years and so long as this indiscriminate use continues the damage cannot be prevented.”⁵⁸ Conservation of range resources and protection of the cattle industry demanded that the animals be removed. Under the amended legislation, any horses left on the range after 1 January 1925 were to be rounded up by the state, and those animals not sold were to be shot.

The new law – widely supported by cattle ranchers – provoked interior Native people, who usually had far more horses than cattle, and who, because their reserves were so small, were much more dependent than settlers upon the Crown land for feed. “Why does the white man oppose to my stock to run on the range?” asked Nicola chief Johnny Chilliheetza: “We the Indians do not oppose to the white men to have their horses and cattle run on the ranges. The Indians say why do the white men want to kill our horses, if we said that to them, we were to kill their horses, would that be well? The white men if his horse was worthless no body will threaten to kill his horse as it is his horse, he owns it, no one will kill it. It is not well for the white men to say they are to kill the Indian horses because they are worthless, no matter how the horses are, they are the property of the Indians.”⁵⁹ George Pragnell, Indian agent in the Nicola District, added: “The Indians say that this is merely an attempt on the part of Ward [manager of the Douglas Lake Cattle Ranch mentioned above] and Guichon [the owner of another large Nicola Valley ranch] and one or two other cattle owners to corral all the grazing land. They say that they see no reason why, if one man wants to earn his living from cattle, another should not do the same in the way of horses, and that if they lose their horses they are ruined.”⁶⁰ Native people in the Cariboo region expressed similar concerns: white

⁵⁸ Thomas Mackenzie to William Ditchburn, 4 February 1924, UBC Koerner Library, RG 10, vol. 1001, file 901/36-11, part B, reel T3951.

⁵⁹ Chilliheetza to George Pragnell, 13 March 1924, UBC Koerner Library, RG 10, vol. 1001, file 901/36-11, part B, reel T3951.

⁶⁰ Pragnell to Ditchburn, 31 March 1924, UBC Koerner Library, RG 10, vol. 1001, file 901/36-11, part B, reel T3951.

cattle ranchers were claiming what little good rangeland was left in the interior for themselves.

William Ditchburn, of the DIA, was dubious. In his view, Native people's need for more grazing land would disappear if they got rid of such "useless animals."⁶¹ Horses, he noted, required more forage than cattle, yet had much less economic value. In a 1923 meeting with the Allied Indian Tribes of British Columbia he had argued: "The trouble with Indian cattle is this, that they allow their best ranges to be taken up by a lot of Cayuse horses that have no commercial value at all, and they would be far better off if they would kill every one of them." Indians, he said, "expect the Government of British Columbia to set aside new range lands for them, when their best ranges are being eaten up by horses that have no value. That is a fact."⁶² P.R. Kelly, a Haida representative, replied that the horses had value: "The Indians [from the interior] say that they raise horses because they are necessary and they realize good profits through the sale of those horses that are being raised."⁶³ But Ditchburn remained unconvinced: "There are a few cases, Narcisse and his father Johnny Chilliheetza in the upper Nicola; they raise good stock, not Cayuses; but there are a lot of places where the Indians have these Cayuse horses; and they are eating up to nineteen acres of range where a cow only uses thirteen."⁶⁴

By late March 1924, matters had become more serious. Pragnell had just returned from the Nicola District and was deeply concerned by what he heard. "A great many threats of imprisonment, fines, etc. have been made to the Indians causing a very antagonistic feeling to arise," he reported in a letter to William Ditchburn: "These people [the cattle ranchers] were talking as though the law was dead set against the Indians in particular, and I told Mr. Mackenzie that on top of all the propaganda going around regarding the settlement of the Indian questions, if his rulings were enforced it would only add fuel to the fire."⁶⁵ Pragnell had become convinced that the new law "was altogether too summary and arbitrary" and that to enforce it without first consulting Native people

⁶¹ Ditchburn to Pragnell, 16 April 1924, UBC Koerner Library, RG 10, vol. 11001, file 901/36-11, part B, reel T3951.

⁶² Conference of Dr. Duncan Scott, Deputy Superintendent General of Indian Affairs of the Dominion of Canada, and W.E. Ditchburn, Chief Inspector of Indian Agencies of British Columbia, with the Executive Committee of the Allied Tribes of British Columbia, 7 August 1923. Copies at Department of Indian Affairs and Northern Development (Vancouver Regional Office).

⁶³ *Ibid.*

⁶⁴ *Ibid.*

⁶⁵ Pragnell to Ditchburn, 9 April 1924, UBC Koerner Library, RG 10, vol. 11001, file 901/36-11, part B, reel T3951.

and addressing their concerns about access to grazing lands would be to invite reprisals. "The Indians are not prepared to stand idly by," the agent ominously observed, "while their horses are rounded up and removed from the range."⁶⁶ Faced with this opinion from the Indian agent, and after meeting himself with Native people in the Nicola Valley, Mackenzie reluctantly agreed to delay plans to enforce the new law until suitable grazing areas could be set aside as pasture for Native horses. In fact, however, neither the DIA nor the Grazing Branch believed Native people needed more land; rather, they believed that, by ridding themselves of horses and raising cattle, Native people would considerably increase the carrying capacities of the reserves.

Although the official hunt for horses was on hold and remained so into 1926, there were isolated shootings of horses owned by Native people around Williams Lake in the Cariboo and Douglas Lake in the Nicola Valley. For the most part, however, ranchers opted for other means. In December 1926, for example, the British Columbia Stockbreeders Association petitioned both the federal and provincial governments, asking whether "discriminate compulsory measures can be utilized to rid the ranges of British Columbia of Indian Cayuses as well as wild horses belonging to ranchers." The association recognized that settlers owned some of the horses, but its primary concern was horses owned by Native people. As the petition continued: "We believe this resolution should be of two-fold benefit to the Indian: first it would rid him of his own fond curse. Second it would have a tendency to enforce him to become a cattle raiser."⁶⁷ William Ditchburn agreed: "I am of the opinion that the complaint is well founded and our officials should use their best endeavours in inducing the Indians to give up raising useless horses altogether," he wrote in response to the petition. Indeed, he continued, "the best thing the Indians could do with [the horses] would be to kill all of those which have no particular use and turn their attention more to cattle."⁶⁸ Closer to the conflict, Indian Agent Pragnell was far more pragmatic: "With reference to the matter of trying to persuade the Indians [in the southern interior and around Williams Lake] to give up raising useless horses, this matter has been constantly impressed upon them by the Agent, the Constable, and myself ... I myself am afraid that there will

⁶⁶ From a second letter to Ditchburn written the same day. See Pragnell to Ditchburn, 9 April 1924, UBC Koerner Library, RG 10, vol. 11001, file 901/36-II, part B, reel T3951.

⁶⁷ Hay to Grisdale, 26 December 1926, UBC Koerner Library, RG 10, vol. 11001, file 901/36-II, part B, reel T3951.

⁶⁸ Ditchburn to Pragnell, 28 February 1927, UBC Koerner Library, RG 10, vol. 11001, file 901/36-II, part B, reel T3951.

be trouble if a process of elimination is used by the Provincial officials as despite all argument to the contrary the Indians place a certain value on these horses. They also argue that with the present shortage of hay, particularly on the reserves, they cannot keep cattle whereas horses can exist after a fashion." Yet, the agent observed, the horse problem ran much deeper than this: "I must add," he wrote, "that all these various troubles will not be settled until Chief Chilliheetza (Nicola) and his followers are finally and firmly dealt with and repressed. Whenever we suggest any improvements we are told that the Chiefs are going to settle it at Ottawa or with the King. A flat refusal of their demands and a statement of what the department proposes to do is really necessary to settle the unrest."⁶⁹ For the Native people involved, this was a fight against processes of colonialism that had dispossessed them of both land and livelihood.⁷⁰

This became abundantly apparent to grazing officials and others within the provincial government in the early 1930s amid renewed plans to rid rangelands of wild horses. Native people responded with law. In April 1930, a group of Native men led by Jack Swakum, Felix Gregore, and Myers Michel gathered at Merritt with lawyer M.L. Grimmet to protest the planned horse hunt. There are no transcripts of their meeting, but newspaper reports provide a glimpse of what was said. According to the *Vancouver Province*, "the Indians assert that the country and the ranges belong to them. They claim that they are non-treaty Indians and must live by their own resources, that horses are cash, as they are used in their trading, and that they and no other rangers know what horses are of value and what are not, and what should be shot and in what manner."⁷¹ Similarly, the *Vancouver Sun* reported on 19 April 1930 that "a somewhat ugly situation" was developing in the interior of the province because of the recent order from the provincial Grazing Branch to remove horses from the range. The article went on to say that "one Indian Chief, who interviewed the late Queen Victoria in England years ago, claims that her late majesty told him the land belonged to

⁶⁹ Pragnell to Ditchburn, 2 March 1927, UBC Koerner Library, RG 10, vol. 11001, file 901/36-11, part B, reel T3951.

⁷⁰ On the symbolic and practical political importance of the Crown in the history of Native protest, see Douglas Harris, "The Nlha7kapmx Meeting at Lytton, 1879, and the Rule of Law," *BC Studies* 108 (Winter 1995-96): 5-25; J.R. Miller, *Reflections on Native Newcomer Relations: Selected Essays* (Toronto: University of Toronto Press, 2004): 217-68. On patterns of Native protest in British Columbia, see Harris, *Making Native Space*; R.M. Galois, "The Indian Rights Association, Native Protest, and the 'Land Question' in British Columbia, 1903-1916," *Native Studies Review* 8, 2 (1992): 1-34.

⁷¹ "Range Death Order Stirs Indians," *Vancouver Province*, 4 April 1930.

the Indians and protests in strong terms against the government taking any of their rights away.”⁷²

Despite these arguments, the hunt began as planned, but it soon became apparent that Native people were not prepared to stand idly by. According to the Grazing Branch, a Nicola Valley roundup had been successful until Native men began opening the corrals at night and letting horses back onto the range.⁷³ In another instance, Native people reportedly herded horses onto their reserves only to let them back on the range when the hunters had passed. Apparently, they also uttered threats in hope of stopping the hunt. As Mackenzie lamented in a 1930 letter to W.H. Brown: “I agree that the big problem at the present time is the Indian and his useless horse. I was hoping that we might be able to start something in the Nicola and Keremeos district this winter that would influence the Indians to get rid of all their useless horses but the men we had in mind to undertake the work have as you know backed out. I have been thinking rather that it may be as well to leave the matter until the opening of spring when I believe I will be able to get a man or perhaps two from the outside who will undertake the work.”

⁷⁴ Similarly, at Alexis Creek, where white ranchers and Native people had been contesting a piece of meadowland since the 1890s,⁷⁵ ranchers worried that the rounding up of horses would invite “reprisals from the Indians in the shape of lost cattle and burned haystacks.”⁷⁶ According to one grazing official, the ranchers refused to get involved with the roundup, insisting instead that outsiders do the work.

The background of this conflict was formed by basic settler assumptions about Native peoples’ inability to use land properly. William Ditchburn reflected as much when he met with the Allied Indian Tribes of British Columbia in 1923, but similar views had been expressed long before. As early as 1888, Indian Reserve Commissioner Peter O’Reilly observed: “The grass ranges both on and off the [Nicola Valley] reserves are greatly eaten out principally by bands of wild horses belonging to the Indians which greatly injure the pasturage of the country and from which the tribe derives little or no benefit and the sooner they are got

⁷² “Protests Against Shooting of Wild Range Horses: Indians Aroused,” *Vancouver Sun*, 9 April 1930.

⁷³ Grazing Commission Meetings 1930 (unpublished transcripts), copies held by Ministry of Forests Library, Victoria, British Columbia.

⁷⁴ Mackenzie to Brown, 23 January 1930, BCA, GR 1441, reel 144, file 11064.

⁷⁵ Harris, *Making Native Space*, 209–10.

⁷⁶ H.E. Taylor to William Ditchburn, 21 August 1929, National Archives of Canada, RG 10, reel T16094, C-II-2, vol. 110063. On tactics of resistance generally, see, James C. Scott, *Weapons of the Weak: Everyday Forms of Peasant Resistance* (New Haven: Yale University Press, 1985).

rid of the better it would be for both the Indians and the settlers in the entire Valley.”⁷⁷ A few years later, in 1891, an Indian agent reported of the Alkali Lake Reserve: “There are about one hundred and fifty head of cattle owned by these Indians, and it would be to their advantage if they would procure more, by selling their numerous wild horses (of which they own 600) – which are of no use to them, and are gradually eating out the grass – and purchasing horned cattle with the proceeds.”⁷⁸ Closer to the conflict were assumptions about the horses themselves: that they carried diseases and ruined valuable settler stock through interbreeding. But the most important conclusion reached by settlers was that horses overgrazed and wasted range that would otherwise go to cattle. In 1923, Ditchburn suggested that horses consumed one-and-a-half times more forage than cattle. A 1936 grazing manual suggested that horses consumed about twice the forage as eaten by cattle.⁷⁹ Nineteen years later, a 1955 grazing report presented to Chief Justice Sloan during a Royal Commission on Forests and Forestry estimated “that one horse on the range throughout the year consumes or destroys (by trampling) forage sufficient to support four to five head of cattle.”⁸⁰ According to historian of science Theodore Porter, a large part of the power of numbers in public policy derives from their apparent objectivity. As Porter puts it, “quantification is a way of making decisions without seeming to decide.”⁸¹ Just so, it seems, did numbers help to decide (if not quite determine) the fate of “wild horses” in British Columbia. Although a close study of horses and grazing resources had never been undertaken in the province,⁸² a very considerable body of settler and scientific opinion and experience held that horses were variously ruinous on rangelands and had to be removed.

And removed they mostly were. In the final analysis, settlers and the apparatuses of power to which they had access were far more powerful than Native people and their few weapons of resistance.⁸³ As a 1950 story

⁷⁷ Peter O'Reilly to Superintendent General of Indian Affairs, 5 December 1888, UBC Koerner Library, RG 10, vol. 3704, file 17867, reel C1023.

⁷⁸ Canada, *Annual Report of the Department of Indian Affairs for 1891*, Sessional Papers (Ottawa: Printed by S.E. Dawson, Printer to the Queen's Excellent Majesty, 1892), 54.

⁷⁹ Unpublished Grazing Manual 1936, copy held by Ministry of Forests Library, Victoria, British Columbia.

⁸⁰ Report to the Royal Commission on Forests and Forestry, 1955, Grazing Division, BCA, GR 1379, box 1, file 2.

⁸¹ Theodore Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton: Princeton University Press, 1995).

⁸² There may be studies from the American West among the files of the Grazing Branch, but I did not find any during my research.

⁸³ Cole Harris, “How did Colonialism Dispossess? Comments from an Edge of Empire,” *Annals of the Association of American Geographers* 94 (2004): 165–82.

in the *Victoria Daily Times* observed, “over the last 30 years a sort of guerrilla warfare has been carried on against the wild horses and they are steadily being reduced. This year they must all go, if possible.”⁸⁴ Yet it is unclear just how many horses (wild and otherwise) were killed to conserve (claim) rangeland for ranchers’ cattle in British Columbia in the late nineteenth and early twentieth centuries. Records held by the provincial Grazing Branch indicate that 13,420 horses were removed from provincial rangelands between 1924 (when the eradication program was first enacted) and 1955 (when it began to slow down) and that this removal accounted for as much as a quarter of all expenditures on “range improvement” during these years.⁸⁵ Such was the cost and the carnage of conservation and “improvement” in British Columbia grasslands. Among the casualties of conservation and improvement were an unknown number of horses owned by Native people. To give just one small example, agrologist M.T. Wallace of the provincial Grazing Branch reported in 1951 that “three youths were charged with willfully killing ... three Indian horses [near Williams Lake]. These men, acting under another man’s license, had apparently shot the horses on private property.” Convicted in the County Court, the young men were acquitted in the Supreme Court “on the grounds that they believed that they had a right to shoot wild horses though no permits had been issued to them.”⁸⁶ Of course, the situation was more complicated than this. Ultimately, ridding the range of horses was part and parcel of a larger process of colonial dispossession.⁸⁷

The fate of the horses is clearer than the numbers involved. Although animal rights advocate Norma Bearcroft once wrote that British Columbia “contain[ed] a valley knee-deep in the carcasses of slain horses,” most horses left the province alive.⁸⁸ There is evidence that the British Imperial Army purchased horses from British Columbia during the Boer war (1899–1902).⁸⁹ Similarly, some seven hundred or so horses were shipped to the Soviet Union in the late 1920s – “durable”

⁸⁴ “War Declared on Wild Horses,” *Victoria Daily Times*, 9 January 1950.

⁸⁵ See *Reports of the Forest Branch*, British Columbia (King’s/Queen’s Printer, 1924–1960).

⁸⁶ M.T. Wallace, Grazing Report for 1951, BCA, GR1238, Kamloops Forest District, Grazing Reports, 1951–55.

⁸⁷ Others have observed similar close connections between conservation practice and processes of colonial dispossession. See Jacoby, *Crimes against Nature*; Loo, *States of Nature*; Warren, *The Hunters Game*; John Sandlos, *Hunters at the Margins: Native People and Wildlife Conservation in the Northwest Territories* (Vancouver: UBC Press, 2007); Mark Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999).

⁸⁸ Norma Bearcroft, *The Wild Horses of Canada* (Richmond: Canadian Wild Horse Society, 1972), 58–59.

⁸⁹ “Breaking in Wild Horses,” *Vancouver Province*, 10 April 1902.

animals apparently suited to the purposes of the Russian army on the Russian steppe.⁹⁰ The vast majority, however, were simply crowded into railcars and sent south to Montana, Washington, and Oregon, or east to Alberta, where they were slaughtered and rendered as fertilizer, pet food, or feed for fox farms – unromantic endings for animals that, by the mid-twentieth century, had become (for some) a much cherished symbol of western freedom and wilderness. In the early 1950s, the Society for the Prevention of Cruelty to Animals (SPCA) denounced the British Columbia horse hunt as barbaric. In one case, the SPCA complained, “the animals were being shot through the body in many instances left to die in pain. Mares were killed and their colts left to starve.”⁹¹ In another case, twenty-one “scrub range horses” suffocated inside a Canadian Pacific Railway boxcar bound for Vancouver. Originally, the horses were to be slaughtered and used as fox feed, but their carcasses became fertilizer instead.⁹² And, in 1958, the Royal Canadian Mounted Police stopped a Canadian trailer truck at the US border “after the SPCA complained that 25 wild horses had been kept in the trailer for 36 hours without food or water.”⁹³ They found that one of the horses was dead and that the rest were in poor condition. Still, the roundup continued. By 1959, according to geographer Thomas L. Knight, there were still between five hundred and fifteen hundred “feral” horses in British Columbia;⁹⁴ today there are perhaps four hundred.⁹⁵

CONCLUSION

In a 1929 letter to interior cattle ranchers, Frank Ward, manager of the Douglas Lake Cattle Company, insisted that the “grass in this district is so limited that we are required to take every possible care or we shall all be forced out of business for lack of pasture. All animals which live by grazing and are of no commercial value should be treated as a pest and destroyed.”⁹⁶ Yet, as this account of British Columbia’s wars with grasshoppers and wild horses illustrates, pest eradication was not

⁹⁰ Grazing Commission Meetings, 1930.

⁹¹ “Brutality Claimed in Horse Kills,” *Victoria Daily Times*, 28 February 1951.

⁹² “Horses Suffocate in Sealed Boxcar,” *Vancouver Daily Province*, 7 August 1951.

⁹³ “SPCA Charges Wild Horses Mistreated” *Victoria Daily Times*, 12 November 1958.

⁹⁴ Thomas L. Knight, “The Feral Horse in Anglo America,” *Geographical Review* 49, 4 (1959): 506–25.

⁹⁵ Andrew Findlay, “Mustang Valley,” *Canadian Geographic*, March/April 2005, 47–62.

⁹⁶ Frank B. Ward to The Nicola Stockbreeders Association, 30 May 1929, BCA, Douglas Lake Cattle Company Records, MS 1082, box 3, file 6.

straightforward. One battle ended in stalemate, the other in a partial realization not that Native people needed more and better land but, rather, that perhaps horses had a right to be treated humanely. Both conflicts had serious consequences for people and nonhuman nature alike. Both, moreover, reveal as much about where the province may be headed (unless we are careful) as about where it has been. In the case of grasshoppers, it was easier and much more acceptable politically to use poison than it was to tackle basic land-use problems that were essentially social in nature. And when range managers used law to compel participation in poison control – a move that resembled the social policy of military conscription – they did so to avoid confronting the social problem of class. Likewise, the ecological problem of range degradation was reframed in social, even racial terms that enabled some people to avoid confronting their own complicity in the process. Rather than reduce the number of cattle or adopt better land-use practices, ranchers and provincial land managers targeted competing claims to range – in this case “wild horses” that were usually “Indian horses.”⁹⁷ Certainly, small-scale ranchers and Native people encountered and experienced different forms of social power.⁹⁸ But in both conflicts, people with social power attempted to extract environmental problems from the wider social and ecological contexts in which they were embedded and then to solve them with simple, instrumental measures. This strategy left basic social and ecological problems unresolved, created new ones, and made others much worse – matters to keep in mind when contemplating solutions to contemporary environmental problems.

⁹⁷ For a similar analysis of struggles over declining salmon fisheries, see Joseph Taylor III, *Making Salmon: An Environmental History of the Pacific Salmon Crisis* (Seattle: University of Washington Press, 1999).

⁹⁸ A large body of scholarship examines the nature of power in society. For spatial perspectives, see: J. Allen, “Economies of Power and Space,” in *Geographies of Economies*, ed. R. Lee and J. Wills (London: Arnold Press, 1997), 59–70; Derek Gregory, “Power, Knowledge, and Geography,” in *Explorations in Critical Human Geography: Hettner-Lecture, 1997* (Heidelberg: University of Heidelberg, 1998), 9–40; Cole Harris, “Power, Modernity and Historical Geography,” *Annals of the Association of American Geographers* 81, 4 (1991): 671–83; Allan Pred, *Making Histories and Constructing Human Geographies: The Social Transformation of Practice, Power Relations, and Consciousness* (Boulder: Westview Press, 1990).