

3. Myths of the Ecological Whitemen

Histories, Science, and Rights in
North American–Native American Relations

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In the final chapter of *The Ecological Indian: Myth and History* (1999), Shepard Krech sets out an argument about how the Northern Algonquian peoples came to be conservationists by learning from Europeans during the course of the commercial fur trade.¹ This argument synthesizes his review of the ethnohistories of beaver conservation in the subarctic and concludes his main argument for the volume as a whole. In this chapter I show how his argument and the policy conclusions he draws from it are significantly flawed.

I do agree with a careful critique of the popular idea that Native Americans were universally ecologists, or environmentalists or conservationists. These are often “mythic” statements, as Krech argues, that obscure the complexity and diversity of indigenous peoples’ lives and of their uses of lands and resources. However, while rejecting the myth, we still need to carefully consider the ways in which specific Native American peoples have, or have not, under varying conditions, acted with respect and caring for lands, animals, and other peoples. I hope to give a better sense of some Native Americans’ relationships to the environment, and also of relationships between Native Americans and North Americans.

Krech’s choice of the ethnohistorical cases on which he based his fur-trade analyses, his selections from those cases of textual passages to quote, and his quick summaries of the available sources catch many of the highlights

of the available literature on the northern fur trades. Furthermore, his ability to make this material accessible to nonspecialist readers is impressive.

His analyses in this chapter are based primarily on six important published ethnohistorical case studies, each of which, he notes, is specific to a particular area and time period (1999, 175–76). From this disparate and therefore fragmented set of records he attempts to synthesize a single historical account of Euro-Americans’ conservation pedagogy for a vast continental expanse occupied by the Northern Algonquian peoples.² These peoples’ lands stretched from Labrador to the Rocky Mountains, and the recorded fur trade covered three and a half centuries.³

Krech’s analysis of this material is replete with surprising omissions, puzzling scholarly decisions, and problematic conclusions. In this chapter I therefore avoid examining Krech’s choices of evidence or the diversity of the historical record in order to focus on the structure of the arguments Krech presents. I explore four central problems with his analyses.

First, Krech neglects to assess the effectiveness of fur traders’ game-restoration policies or to consider whether the policies of nineteenth-century European fur traders could be considered conservation practices in a contemporary sense. Yet Krech argues that their policies were the primary means of restoring beaver populations and that they were the source of contemporary Northern Algonquian conservation practices.

Second, Krech’s treatment of Northern Algonquians is equally problematic. He fails to consider whether the most widely acknowledged conservation practice used by Northern Algonquians during the nineteenth century, hunting territories, could have been learned from other Northern Algonquians, not mainly from fur traders. He also argues that Northern Algonquians’ religious statements about human-animal relationships were demonstrably unrelated to “Western ecology” and to conserving game populations. But he omits to examine these statements in the light of the findings of biological research, which concur with some of the more enigmatic of them.

Third, having found fundamental problems with Krech’s analyses of both fur traders and Northern Algonquians, I trace the changing under-

standings and intercultural communications between them by examining the process on a smaller scale. A case study of a mid-nineteenth-century Hudson's Bay Company (HBC) beaver-restocking experiment shows how HBC leadership initially misunderstood beaver conservation and ecology and how Northern Algonquians were involved in the HBC leadership's beginning to understand ideas of conservation and ecology.

Fourth, at the very end of his analyses Krech makes political and legal pronouncements about the rights that Native Americans can have today. He bases these policy arguments on the lack of conservation knowledge and practices among Northern Algonquians during the fur trade and on his conclusion that their present practices are derived from those of Euro-Americans. His policy arguments are misleading, both with respect to the present status of indigenous rights recognition and in relation to the lessons he draws from fur-trade histories about Euro-Americans' and Native Americans' respective authority to govern the land.

Before I examine each of these problems, I set out how Krech frames the arguments.

Overview of Krech's Main Argument

Krech asks how Northern Algonquians, by whom he means Anishinaabe (previously Ojibwas) and Cree-Innu peoples (previously Cree-Montagnais), came to generally conserve beavers and other wildlife populations. He first argues that the historical record is mixed on whether Northern Algonquians conserved beavers and other game, and he concludes from this that they did not do so widely or consistently and that they lacked developed concepts of conservation, environmental concern, or ecological ideas (1999, 206). In support of his arguments he cites ethnohistorical evidence of recurrent instances of depletion of beaver populations in the eastern subarctic by Northern Algonquian hunters as well as by non-Native trappers.⁴ He also argues that the rituals and knowledge of the Northern Algonquians made conservation impossible (see below). There are several other threads to his argument about why historical Algonquians lacked these understandings and practices, but these are his key points.

Krech acknowledges that against his conclusion that historical Northern Algonquians did not systematically understand or practice conservation there is ample ethnographic evidence that twentieth-century Northern Algonquians "have shown an abiding concern for conservation, preventing waste, and managing hunting in family territories" (1999, 195). The main question he seeks to answer is how the assumed Northern Algonquian transition from having no, or minimal, thought of conservation to having widespread conservation concerns and practices came about (180–81, 206). His answer is that Northern Algonquians learned how to conserve game mainly from Euro-Americans (206).⁵ He cites three key examples of Euro-American pedagogy.

Krech's earliest example of European advice on how to promote the recovery of beavers was given by the Jesuit priest Paul Le Jeune, who told Montagnais hunters in 1634 in the St. Lawrence Valley that each family should take "its own territory for hunting" and selectively trap only large male beavers (cited in Krech 1999, 182). On the question of whether this is the origin point or an important source of Northern Algonquian hunting territory practices, Krech varies his views. On one hand, hunting territories "surely had multiple beginnings" (180), but that Le Jeune made the recommendation he did "implies" it was a "novel" idea (182). Le Jeune's comments of 1634 are the only specific example Krech cites of a plan for game recovery by Europeans before the 1820s.⁶

Krech goes on to argue that the "watershed era for the development of conservation and family hunting territories" was from 1750 to 1830 and that there "were two important reasons for the change: the great decline in the numbers of beavers and other mammals, and the active promotion of conservation and territories," measures taken by the Hudson's Bay Company to increase beaver numbers (186). The former provided the context for the HBC promotion of hunting territories and "conservation" ideas that finally took hold among Northern Algonquians (Krech 1999, 204–6). Krech's final step is to add that in the 1930s the HBC, Quebec, and later the Ontario and Canadian governments established beaver preserves designed as conservation measures to restock beavers and instituted an explicitly pedagogical

program that showed Crees how to conserve beavers (Krech 1999, 197; for a more detailed and different history of beaver reserves see Feit 2005).

Krech concludes: “Apparently, today’s conservation ethic and practices were largely absent among Northern Algonquians until certain historical conditions emerged in the wake of the arrival of European outsiders mainly interested in controlling Indians economically and spiritually. Before the nineteenth century the conditions were local and nascent, as was the interest in conservation. During the nineteenth century they became widespread, as did the interest in conservation” (206). In this chapter I examine the key nineteenth-century examples of European-initiated “conservation” policies and pedagogy.

Krech sets out what he means by “conservation” in the first section of his book, where he defines his terms. Of ecology and ecologists he says: “When speaking of Native Americans as ecologists . . . we should mean that they have understood and thought about the environment and its interrelating components in systematic ways (even if the system, all increasingly agree, is more metaphor than hard and bounded reality). When we speak of them as environmentalists, we presumably mean showing concern for the state of the environment and perhaps acting on that concern” (24). He cites a definition of “conservationists” as those who act so as to “not waste or ‘despoil, exhaust, or extinguish,’” and that they “with deliberation, leave the environment and resources like animal populations in a usable state for succeeding generations” (26; citing Jordan 1995).

Nineteenth-Century Fur Traders’ “Recruitment” Policies as Pedagogy

Krech argues that when the 1821 amalgamation of the Hudson’s Bay Company and the Northwest Company ended a long period of intense competition that had devastating impacts on beavers and other furbearer populations, HBC governor George Simpson tried to improve the fur trade under the new near-monopoly conditions. He reorganized the company, reduced and replaced staff, and took a firm hand in all matters. In addition to these initiatives, Krech writes, his “twin priorities were to ‘nurse the country,

that is, not to hunt it and allow beavers and other depleted fur-bearing animals to ‘recruit’ or recover; and to encourage native people to develop hunting territories in which they could conserve beavers” (187). He instituted several major measures intended to nurse beavers: he sought to stop the killing of young beavers and summer beavers, he sought to restrict the availability of steel traps, and he tried to limit the total number of pelts purchased in particularly depleted regions (187). These policies were important because Simpson was in a position to press for them over the vast area where the HBC traded, although the implementation of the policies was uneven (194–95).

In order to evaluate the effects and effectiveness of HBC fur traders’ policies, I will draw on the knowledge of both wildlife researchers and Native Americans. In the case of statements by Native Americans, I draw on my fieldwork among Waswanipi Crees.⁷ Statements from wildlife researchers and Native American hunters are made from within different epistemologies and cosmologies, so that when I compare them I judge what it is plausible to treat as parallel or related knowledge statements.⁸

Selective Trapping Policies

One of Governor Simpson’s policies was to instruct HBC traders to reduce purchases of young animals (Krech 1999, 187). Beavers do not generally leave the natal colony to go off to find a mate and possibly found a new colony until they are just short of two years of age, so a colony is typically composed of kits (born that year), yearlings (born the previous year), and a pair of mating beavers two or more years old. Simpson’s policy was aimed at reducing harvests of kits (Innis 1962, 326; Bishop 1974, 124; Ray 1974, 199; Francis and Morantz 1983, 128). Not trapping kits would allow them to mature, thus increasing the average age and size of beavers harvested. This could therefore improve both average pelt values and subsistence food quantities from a given number of harvested beavers. Given the relatively inelastic demands of many Algonquian hunters for both trade goods (Krech 1999, 184) and game meat for subsistence, this policy could also have led to reduced beaver harvests, as the hunters’ needs for trade value and subsistence could

be met with fewer, larger animals. The HBC promoted this policy by encouragement and by periodically reducing tariffs paid for small pelts or refusing to purchase them at all. Thus they implemented the policy by actively using the levers of the trading process, not by intervening in Northern Algonquian trapping directly.

The policy implicitly assumed that Northern Algonquians knew how to generally avoid catching kits. Contemporary Waswanipi hunters speak about several ways to selectively trap beavers by age and size.⁹ They say that the kits do not venture as far from the lodge as yearlings or adults and that by setting traps at sites distant from a lodge they can generally avoid trapping kits. They also say that when they catch beavers in a net or by hand in their burrows, they can release the younger and smaller animals. A published report advising on how to catch beavers alive in summer says the kits tire quickly when swimming, so much so that they are exhausted after a few dives and stay on the surface of the pond where they can be approached and picked up (Bailey 1922, 19).

Missionaries and fur traders have reported that techniques for locating and catching beavers by hand at burrows were known among Northern Algonquians throughout the fur-trade period from the seventeenth century on.¹⁰ Therefore, when the HBC policy was introduced in the early nineteenth century, Northern Algonquians knew how to hunt beavers in ways that could selectively exclude kits from harvests, as the HBC policy implied.

Thus this HBC policy was a joint effort, because Northern Algonquian hunters had the knowledge of beaver behavior and of trapping techniques needed to implement the selective trapping strategy. As the missionary, trader, and ethnographic reports indicate, Europeans knew of this Algonquian knowledge. The successes of the trapping strategies the HBC promoted were thus partly attributable to the knowledge and skills the Northern Algonquian hunters brought to trapping and partly attributable to the advice and pricing pressures of the HBC traders. The Northern Algonquians were active participants in implementing these policies, a point that Krech does not acknowledge or specifically analyze.

From a fur trader's perspective, summer fur pelts, which are not as dense or as deeply colored as fall or winter pelts, are a commodity of significantly lower value, and deferring harvests from summer to fall or winter therefore increases the economic value of the pelts. When Governor Simpson instituted a policy of reducing prices or banning purchases of out-of-season pelts, he also spoke of it as a policy that would help beaver recovery.

Both wildlife biologists and Cree hunters today would agree that such a policy could have had a positive benefit. In his comprehensive review of beaver research, wildlife biologist Milan Novak says that because "kits depend on the adults and yearlings for survival, food acquisition, dam and lodge maintenance, and feedbed establishment during their first summer and winter, maintenance of the family group is important" (1987, 295). Contemporary Waswanipi Cree hunters say that delaying the harvest from summer to fall or winter can improve the survival of kits because the kits cannot build or repair the lodge, the dam, or the feedbed that must be prepared by the older beavers in order for the young to survive subarctic winters.

Policies to Limit Beaver Harvests

Fur traders and Northern Algonquian trappers generally agreed that steel traps made it easier to harvest more beavers. The HBC policy of reducing access to steel traps could have helped to reduce beaver harvests, but its precise effects varied among different trappers. Reducing the availability of steel traps would have curtailed highly mobile trappers who tried to trap out an area and then move to another the next season, as they depended on tending a large number of quickly set traps in order to trap both intensively and widely.

For more localized hunters who were oriented both to family subsistence drawn from diverse local wildlife harvests (including furbearers, big game, waterfowl, and fish) and to pelts they needed to acquire goods through trade, a reduction in the number of their steel traps left them still needing to catch sufficient beavers for subsistence or, alternatively, to increase harvests of other game. Simpson noted that this policy succeeded where other subsis-

tence game was available, especially muskrats, but the policy did not succeed generally (Krech 1999, 188).

Another policy was to try to put a limit on the number of beaver pelts that fur-trading posts purchased in the areas controlled by the HBC. Where beavers were in short supply, the HBC tried to get traders to purchase pelts only up to a quota (Krech 1999, 187). This policy was applied intermittently at best, and local HBC traders were not themselves always consistent in pursuit of this policy, as it reduced the trading profits they had to report for the posts they managed. The HBC leadership was also inconsistent, as it did not reduce its purchases of beaver pelts in areas where there were still competing traders for fear that if the HBC bought fewer pelts, trappers would simply sell more pelts to those competitors (Francis and Morantz 1983, 130–31).

Indeed, the HBC not only maintained an unlimited willingness to buy beaver pelts in these areas but sometimes encouraged maximizing harvests (Krech 1999, 191; Francis and Morantz 1983, 129). It encouraged and sometimes actively supplied equipment to facilitate a trapping out of valuable furbearers, in hopes that smaller competing traders with less capital would be forced to withdraw from the areas, as they could not survive the ensuing periods of reduced trade. Simpson's long tenure as governor was marked by recurrent, systematic, and sometimes widespread campaigns to deplete the furbearers of those regions where there were competing fur traders or where the HBC's continuing access to the region was made uncertain by political circumstances (see Merk 1968; Innis 1962, 332; Francis and Morantz 1983, 129). These policies were destructive and wasteful of beavers and other furbearers, and they dramatically reduced their numbers on occasions.

Overall, Simpson's policies instituted to "recruit" beavers after 1821 were not judged to have had much success until the second half of the nineteenth century, although the reasons for this were multiple and varied by region (Krech 1999, 187–188). As we have seen, some of the HBC policies were effective; some were intermittently effective; some were effective with some groups of trappers and not others; some met both conservation and economic goals; and some were known to systematically deplete, not "recruit," game

in order to benefit the HBC's economic interests. It is therefore not surprising that HBC policies did not have clear and repeatedly beneficial effects on beaver populations and that beaver recovery was slow and spotty, although HBC policies did help in some regions and probably "in general."

Overall, it is not clear what this inconsistent and partly contradictory set of policies would have taught to Northern Algonquian hunters about beaver recruitment.

Failing to Analyze Whether Fur Traders Were "Conservationists"

It is also not clear from this evaluation of HBC policies that the fur traders had what we could today call ecological knowledge of systemic environmental relationships, or environmentalist concerns, or consistent conservation practices, in the senses in which Krech has adopted these terms. That the HBC policies had mixed purposes and diverse effects is not surprising. Simpson did not use the term "conservation" for what he did; only Krech does. It is a fundamental analytical omission that Krech does not ask what nineteenth-century fur traders meant by "nurse the country" or "recruit" beavers or if their ideas fit twentieth-century definitions.

The concepts of conservation, environmentalism, and ecology developed over considerable time, and they were only well elaborated—and became part of a general European and North American awareness—during the latter decades of the nineteenth century, although they had earlier roots (see Marsh 1965; Hays 1969; MacKenzie 1988; Bramwell 1989; Grove 1995).¹¹ Modern game-hunting regulations and conservation tools were developed in the late nineteenth and early twentieth centuries in North America, although English roots reached back a millennium (McCandless 1985, chap. 1; Huntington 1992, chap. 2; Warren 1997). Wildlife management as a profession developed as part of the institutionalization of progressive conservationism in North American government policies in the early twentieth century (Worster 1977, chap. 13; Hays 1969; and see Leopold 1947 for the first scientific "textbook" on game management). Fully developed ideas of population biology and breeding populations of animals developed around the middle of the twentieth century (Worster 1977). Scientific knowledge

of beaver population dynamics developed after the mid-twentieth century (see citations in Novak 1987).

Krech's failure to examine fur traders' policies in the light of the then-current historical understandings is hard to explain because his book is largely an analysis of ethnohistorical research, and he is aware of the growth of ecological, environmental, and conservation ideas and practices during these centuries. Krech actually notes the history of ecological, environmental, and conservationist ideas in European and American history in some detail in his introductory chapter (Krech 1999, 23–25). He cites, among others, George Perkins Marsh, whose *Man and Nature*, first published in 1864, was “one of the most critical early works for the development of both conservation and ecology”; Gifford Pinchot, an early-twentieth-century forester and government official, who is “widely regarded as the founder of contemporary conservationist policy in America”; John Muir, the contemporaneous “preservationist”; and many recent historical accounts of the period (see Krech 1999, 23–25, and notes 15–24 on pages 233–35).

Furthermore, as noted above, Krech carefully adopts explanatory definitions of what he means by “ecologists,” “environmentalists,” and “conservationists” (1999, 24–26), and he applies these definitions when judging whether nineteenth-century Northern Algonquians can be called by these terms (see below). But he does not analyze whether nineteenth-century European traders can be called by these terms; he simply labels their policies as conservation policies (186, 187, 190–94, 206, 207).

The above assessment of HBC policies indicates that these policies did not obviously conform to the definition of “conservation” given by Krech. They did not always avoid despoiling or exhausting game, nor did they consistently and “with deliberation, leave the environment and resources like animal populations in a usable state for succeeding generations,” as Krech's definition of “conservation” requires (26; see below for a case study that explores some of what traders knew and did not know).

Krech's failure to locate European fur traders' policies in the history of environmental ideas and practices and his failure to evaluate whether their policies and practices conformed to his definition of “conservationist” un-

dermine his claim that the fur traders were the sources of Northern Algonquians' current conservationist ideas and practices.

Ignoring Northern Algonquians' Pedagogy and Ideas

Consistent with his assumptions about nineteenth-century fur traders, Krech argues that an expansion of the use of hunting territories by nineteenth-century Northern Algonquians was due primarily to the pedagogy of fur traders. He does not consider the importance of Northern Algonquians learning from other Northern Algonquians.

The HBC promoted the adoption of hunting territories by Northern Algonquians (Krech 1999, 187), and diverse commentators generally agree that such territories were potential means of aiding the growth of game populations. Having a recognized claim to use the same land year after year would allow hunters who left some beavers to reproduce to be more assured that the beavers would not be killed by other trappers in their absence.

But the HBC policies, begun in the 1820s, must be seen in the light of Northern Algonquians' use of hunting territories in several areas during the preceding decades. There are reports from fur traders that hunting territories were in use in the second half of the eighteenth century among Northern Algonquians on both the east and west coasts of James Bay (Krech 1999, 183). Some reports of hunting territories to the east of James Bay go back to the 1740s and occur repeatedly thereafter (Morantz 1983, 110–20).¹²

This is confirmed by what appears to be a survey that the HBC made about hunting territories around James Bay in about 1814–15 (Morantz 1986, 73–75). The surviving records from the London headquarters include general answers in the same numbered format from several post managers, confirming the existence of hunting territory systems that they vaguely described in similar terms. Toby Morantz notes that the similarity of the wording of the responses may indicate that the traders discussed their responses among themselves before sending them (1986, 73–75). However, Morantz and Krech differ over the implications of these documents for how and when hunting territories developed before 1821.¹³ But the important point here is that both acknowledge that hunting territories were established

among some Northern Algonquians for decades before the HBC initiated its policy in the 1820s.¹⁴

Thus Simpson's policies were promoting an existing practice, whatever its origin, and those Northern Algonquians who adopted or returned to hunting territory practices at the end of a disruptive period in the fur trade after 1821 could have learned of these techniques from other Northern Algonquians. Hunters would have periodically been in contact with other hunters who were using or who had previously used hunting territories, or they could have heard indirectly about those using hunting territories, and some might also have remembered or been told that their kinsmen had used such techniques in the past. Further, a commonsense view would suggest the importance of learning from other hunters. How else would new users learn to organize hunting in the territories, which typically would have been hundreds of square miles in size, so as to distribute the harvests of beavers among dozens and sometimes hundreds of colonies in ways that aided the recovery of beaver numbers? This could only be learned from other Northern Algonquian hunters or by experience. Fur-trade records do not indicate that the traders had detailed experience of organizing hunting by territories. Krech does not consider whether learning from other Northern Algonquian hunters was of central importance in the wider adoption of hunting territories.

Who Most Effectively Promoted Hunting Territories?

Despite HBC policies, the practice of using hunting territories did not spread smoothly or quickly after the reduction of the disruptive and intensely competitive fur trading in the 1820s. Simpson noted that the practice was only slowly taken up by Northern Algonquians even when they "may see ultimate benefit" (Krech 1999, 188). There were several reasons for this, some reported by the traders, others not considered.

Traders noted that where territories were not already in use, their practice required adjacent groups to agree not to trespass (Krech 1999, 193). Some Northern Algonquian groups did not readily adopt hunting territories, because they wanted mobility to pursue migratory subsistence game

such as caribou (Krech 1999, 188). Furthermore, the continuing presence of smaller, independent traders and trappers, increased in numbers by the dismissal of many former HBC and Northwest Company employees during the period of consolidation, meant that itinerant trappers continued to disrupt local trappers' efforts to leave some beavers to reproduce.

The effectiveness of HBC policies was also limited by cultural misunderstandings. HBC traders had a different and incorrect idea of the social groups, or "families," that used hunting territories. Morantz analyzes social organization of the Crees on the east coast of James Bay in the nineteenth century from the data in the HBC trading post records, and she notes the lack of systematic analysis of Northern Algonquian social groups in the fur traders' reports (1983, 61). While many of the traders' detailed reports of who stayed with whom "indicate that extended families were the norm . . . the HBC traders persisted in listing the composition of nuclear families" (89). They thus conceptualized Crees as living in nuclear families, although the records of groups visiting the post indicate that extended families were the norm. Furthermore, Morantz shows that the composition of these extended family groups was frequently altered from year to year (90–93).

Thus hunting territories, where they were adopted by Northern Algonquians, were likely used by fluid extended families. The traders' vision of hunting territories was different, and it may have been too rigid, seeking to promote the use of hunting territories by small, relatively fixed nuclear kin groups. Simpson described his efforts as trying "to confine the natives throughout the country now by families to separate and distinct hunting grounds" (qtd. in Krech 1999, 187–88). This may indicate why fur traders' advice was not as effective as they hoped in encouraging the adoption of hunting territory practices.

Thus the use of hunting territories was a Northern Algonquian practice that most hunters probably learned from other hunters and which the HBC sought to encourage but with only partial success. Krech reaches a different and less plausible conclusion, without considering Northern Algonquians as pedagogues, that the use of hunting territories became more wide-

spread mainly as a result of HBC promotion. The weight of evidence is that HBC policies encouraged and aided a Northern Algonquian practice.

Were Northern Algonquian Ideas Unrelated to “Western Game Management”?

Krech’s argument that fur traders were responsible for the widespread development of beaver conservation during the nineteenth century rests in part on the assertion that the idea of conservation—specifically leaving some animals to reproduce for the future—was unknown to Northern Algonquians. Krech claims that Northern Algonquian ideas and beliefs contradict the idea of a relationship between current hunting practices and future game abundance or harvests.

Krech notes that there “is abundant evidence” that many of the Northern Algonquians’ beliefs which “existed from the sixteenth up to the twentieth century” were inconsistent with conservation, albeit that they were not unchanging (1999, 204). These included ideas that animals have souls; that humans and animals have social and emotional relationships with each other; that animals know what is said about them and how their remains are treated; that there are rules for the treatment of bones and animal remains; and that animals are reincarnated (201–4). Krech shows that these ideas and practices were often not accompanied by what Europeans of the time thought was behavior that helped game abundance, and he concludes by generalizing that “what is striking about the taboos . . . is that they apparently had nothing to do with waste and the conservation of animal populations until recently” (204).

This last statement is not surprising. Nineteenth-century Northern Algonquians are no less likely to have used the ideas and practices of today’s conservationists than the fur traders of the period were. But Krech goes on to argue that Northern Algonquians did not understand that there was a relationship between their hunting of animals and game numbers. He notes that at York Factory on the west coast of James Bay in the eighteenth century, Northern Algonquians told several HBC traders, in the context of caribou hunting, that “they could not kill too many” (204). This may have been the case with caribou at certain periods, given the limited numbers of hunt-

ers relative to the sometimes very large numbers of caribou in a herd at its peak, and given that caribou numbers vary over decades somewhat independently of harvest levels (see Berkes 1999, 97–99, for a recent review). But other Northern Algonquians made similar statements about the relationship of hunters and game more generally (Krech 1999, 204, citing Brightman 1993, 287–88).

From these puzzling reports of Northern Algonquian beliefs Krech mixes up a damning set of paraphrased statements and inferences, along with some conclusions:

One can only speculate on the consequences of such beliefs for conservation. If caribou or other animals made themselves available to be killed no matter how many had been killed, then why stop killing them? . . . [Others have reported that] failure to kill animals who offered themselves to the hunter might have constituted an offense [to the animals]. If beavers disappeared from a region, the disappearance had nothing to do with hunting too many and everything to do with a deliberate or inadvertent taboo infraction. The reappearance of beavers was contingent not on adjusting how many animals one killed in the future but on exercising far greater care obeying the taboos. One reason to change tactics and, say, leave two beavers per lodge to produce the next generation, is if one started to doubt the wisdom of killing all beavers in the destructive synergy of competition and commodification (and if one was not starving). If a hunter could protect his ground from trespassers and poachers, then this new “rationality”—leaving a breeding core undisturbed—might influence how he managed beaver populations on his territory. (1999, 204–5)

Krech thus argues that the “rationality” of conservation practices had to be learned from fur traders because Northern Algonquians’ statements about human-animal relationships that were exemplary of their beliefs, or “taboos,” did not recognize the effects of their hunting on game numbers.

Krech's paradigmatic example of these statements, and the one he cites most often to demonstrate that Northern Algonquians lacked knowledge of how to increase game is, "Why would the York Factory Cree allege that 'the more they destroy the more plentiful they grow'?" (Krech 1999, 205, also at 186, 194, 204, quoting Andrew Graham's report of Northern Algonquians statements). Krech answers by noting that Northern Algonquians believe in animal reincarnation. But to ensure reincarnation, hunters had to follow "rules" or "taboos" that "Western ecologists would argue are unrelated to breeding success and conservation" (Krech 1999, 207). In Krech's argument this statement also indicates why conservation needed to be learned from the traders and other Euro-Americans (205, 207).

But the statements Krech quotes are both more and less puzzling than he makes them out to be. They are more puzzling because the York Factory Crees do not actually say that animals return in the same numbers: they say that the number of animals increases when they are hunted. This cannot be explained by reincarnation, as Krech infers, since there are more than the same numbers of animals available. The texts are less puzzling, however, because the statements Krech has singled out for paradigmatic treatment reveal the presence of just the kind of knowledge he thinks they deny; that is, they identify one of the relationships between how a hunter's harvests "might influence how he managed beaver populations on his territory" (Krech 1999, 205). Krech fails to consider what Northern Algonquians were saying in relation to what is known of beaver reproduction in twentieth-century biological research.

In his review of research on beavers, Novak reports that the fecundity of female beavers is density-dependent and that it consequently responds to trapping intensity. He reports that two studies found more kit beavers one or two years after trapping commenced at lodges, and another found that as the harvest rate increased during the course of a year, so did embryo counts of the breeding females during the same year, up to heavy harvests of about 70 percent, at which level they depressed embryo counts (Novak 1987, 286). Thus, trapping at a colony was associated with the breeding female's having

an increased number of embryos formed and with an increase in the number of kits born, up to a reasonably high level of trapping intensity.

Novak points out that fecundity "thus can be manipulated by the manager" (1987, 286), the person who decides on the harvest level. Presumably, then, this relationship can be observed by a knowledgeable trapper as well as wildlife researchers, especially those who return to the same area repeatedly. A knowledgeable trapper, Northern Algonquian or Euro-Canadian, can also presumably "manipulate" fecundity under these conditions when deciding on harvest levels at beaver colonies.

Thus biologists find that with beavers, under wide conditions, harvesting can lead to increases in the numbers and the biological production of the game population. Furthermore, knowledge of these relationships, once observed or learned, can be used by managers or, I suggest, knowledgeable trappers to alter the condition of the game population and of the hunt.

Krech, like the traders before him, does not recognize that under some conditions the relationship between harvesting and game numbers is counter-intuitive: certain levels of harvesting of beavers do not reduce or deplete the population, but increase it. Thus Krech's argument that Northern Algonquians lacked an understanding of relationships between hunting and game numbers because they made counter-intuitive statements is wrong.

Is the same conclusion to be reached for all game and game hunting? As I understand the general biological evidence, no, although some conditions where harvesting game will increase their numbers are found with many other species. But these conditions are typically more restricted than in the case of beavers. A pattern where harvesting intensity has counter-intuitive effects can occur when certain biological populations are harvested after a period of non-use, or when harvesting goes from a very low level of use to more intensive harvesting. This might occur, for example, if a hunting territory were divided into sections each used every few years, as has been reported (see below).

Fikret Berkes, a human ecologist who did his doctorate in marine sciences and who has done research with contemporary James Bay Crees, has

described what can happen when a lake that has not been fished or has been lightly fished starts to be harvested, even at low harvest rates. The fishing can result in removal of the old and large fish, but “the removal of such fish (and lowered competition for food) would result in higher survivorship, increased growth rates, and earlier maturation of the younger individuals of the same species” (1999, 119). This means that harvesting can increase fish numbers and total “biomass.” Berkes goes on, “This phenomenon is known to scientists and managers as ‘population compensatory responses’ . . . and occurs with all living resources” (119). He claims that this “is the Western scientific counterpart of the Cree notion that continued proper use of resources is essential for sustainability” (119).

Northern Algonquians could readily have noted indicators of changes in fish or game abundance when harvesting or returning to the same area over time, as they do today (Feit 1987). Thus counter-intuitive relationships between harvests and game abundance might be observed under specific conditions for a wide variety of species.

Misrepresenting Northern Algonquians

Did Northern Algonquians understand that the relationship between harvest and game numbers was not always counter-intuitive? Recurrent reports of statements by Northern Algonquians demonstrate that they did. Despite denying that nineteenth-century Northern Algonquians understood such relationships, Krech cites statements in which they demonstrate their understanding that hunting could reduce game numbers. An example is trader Joseph Beioley’s 1824 report of hunters at Rupert House. When asked not to kill summer beavers and to spare kit beavers in winter, the hunters said that this was “perfectly accordant with their own Ideas on the subject and their Desires of not impoverishing their Lands” (Krech 1999, 191; for a more extensive passage from this exchange see Francis and Morantz 1983, 129).

Krech’s most extended example of a Northern Algonquian discussion of beaver depletion comes from the west coast of James Bay. In the 1790s, David Thompson, an HBC surveyor, reports that an old Western Woods Cree man, Krech summarizes, told him that declines in beavers were linked “to

his tribesmen’s desire for manufactured goods, to the lack of control over hunting, and to the attitude of a Cree creator” (1999, 189). The Cree is reported to have said that the “Great Spirit” was determined that beavers “are now all to be destroyed,” and he recounted a story about beaver destruction in mythic times (Thompson qtd. in Krech 1999, 189). In his own time, he noted, God had given trespassing trappers castoreum, a natural scent and lure that is especially effective with steel traps, it being the “secret of the destruction.” Thompson reports that the old man concluded, “We are now killing the Beaver without any labor, we are now rich, but [shall] soon be poor, for when the Beaver are destroyed we have nothing to depend on to purchase what we want for our families, strangers now run over our country with their iron traps, and we, and they will soon be poor” (189, brackets in Krech). Thompson reported that the prediction came true.

Krech comments as follows on the elder’s statement without offering any explanation for his interpretation of it: “But predicated on an endless supply of beaver, this consumption could not last” (1999, 189). Krech misunderstands or misuses the old Cree hunter’s reported statement; the hunter did not say there was an endless supply. His explanation was quite precise: the decline in beavers was occurring because of over-trapping, and the over-trapping was due to several things: his peoples’ desire for trade goods, the presence of intruding trappers with a new technology, and the inability to control the trappers’ actions. As Thompson said: “Every intelligent man saw the poverty that would follow the destruction of the Beaver, but there were no Chiefs to controul it; all ways perfect liberty and equality” (qtd. in Krech 1999, 189).

This is a story about a limited supply of beavers rather than of an endless supply or of failing to see the consequences of over-trapping. The Cree indicates why depletion is happening and, being a religious man, indicates that it must be the Great Spirit’s will that this combination of events is happening, for the story of previous times indicates that it has happened before. This statement, despite its religious cosmology, demonstrates a clear and accurate prediction that present over-trapping will deplete the beaver population.

Thus, statements that Krech takes as exemplars of Northern Algonquians' general ignorance of conservation and of the relationship between present hunting and future game numbers are actually demonstrations of precisely this knowledge, sometimes in a counter-intuitive form.¹⁵ Indeed, the frequency of fur traders' citations of these counter-intuitive statements by Northern Algonquians demonstrates the repeated failure of many fur traders, and later anthropologists and other North Americans and Europeans, to learn from Northern Algonquians.

Throughout these analyses, Krech demonstrates a systematic bias by treating the knowledge and skills of Northern Algonquians differently than European and North American knowledge and skills: he reports but then does not consider the significance of the statements of the Rupert House hunters supporting HBC policies; he misrepresents the statements of the elder Cree from the west coast of James Bay who recounted why beaver depletions were occurring; he fails to seriously examine Northern Algonquians' statements describing counter-intuitive effects of hunting on game numbers; and he pejoratively dismisses Northern Algonquians' religious perspectives on human-animal relationships (see Krech 199, 204–5). This can be compared to his unexamined assumption that the nineteenth-century fur traders were conservationists.

Learning about Game Conservation: A Case Study

Given the failures of Krech's analyses of both traders' and Northern Algonquians' knowledge and practices, is it possible to document what each might have learned from their long interaction? My view is that we cannot determine who taught conservation to whom over the course of the nineteenth century. The communicative interactions and the changes in understandings and values that such a question requires be examined are too subtle and complex to document in a general way from the fragmentary intercultural records of fur traders that Krech uses. Nevertheless, I think it is possible to examine especially well documented cases to find some partial answers.

Such a case is provided by one of the most frequently cited examples of HBC intentions to increase beaver numbers: the restocking of Charlton Island and a few other small islands in James Bay with beavers in the early to mid-nineteenth century. Starting in the 1830s, the HBC decided to restock the islands with the aim of running its own beaver "park" or "nursery." This has often been cited as an example of HBC conservation, but it is more an example of learning about conservation.

Governor Simpson reported in 1836 that he had talked to several "Gentlemen in this part of the Country" on the subject of establishing a nursery for beavers on Charlton Island, but he had not received a favorable response until R. Miles, the trader in charge of the Rupert House District, wrote him of the idea in 1836 (Brooks 1929, 14).¹⁶ Simpson responded enthusiastically to the idea of "parking of Beaver," authorizing Miles to set up an "experiment" on Charlton Island (14). HBC documents noted that, because Charlton Island was some distance from shore, it would be "easy of protection from Indians" (16).

Henry Connolly, who worked for the HBC at the time, wrote about the events nearly three-quarters of a century later. His account gives a more local view of what happened after Miles took charge of the district "about 1835":

One day the old coast Chief (who was always called the Governor) had a long talk with Mr. Miles. Among other matters, he spoke of the Charlton Island . . . He said the island was about six or seven miles long and four or five broad, very level, well wooded and with many ponds, would make a fine preserve for Beaver, on which the Company should put the beaver to breed. Mr. Miles was very glad of this hint, and he told the old man he would see about it and he did not forget it, so at the meeting of the Governor and Council of the Southern department at Moose Factory in 1839 Mr. Miles proposed putting some beaver on the island which was agreed to by the Council, and orders were given to the gentlemen in charge of different districts to procure young beaver to be sent to Moose Fac-

tory to be given out to people to look after but some way or other they did not succeed. (Connolly n.d.)

It is not clear from the available evidence whether Governor Simpson ever knew that the recommendation that restocking beavers on Charlton Island was feasible was made by the old coast chief at Rupert House.

Once he received approval for the old chief's idea, Miles struggled to get live beavers to restock the island. Simpson authorized catching young beavers in 1836 to be sent to Charlton in the spring of 1839, when he hoped to have "at least 100 pair" for restocking (Brooks 1929, 15). Miles wrote on February 1, 1839, that he had only acquired a second live beaver, also male (16). He noted that it initially was difficult to secure live beavers from many Indians because they "imagine the Beaver would leave their lands altogether were they to bring them here alive" (qtd. in Francis and Morantz 1983, 129). But by 1843 Simpson noted that a total of thirteen pairs had been relocated (Brooks 1929, 16, 19). Again, Connolly, gives us a more extended insight into what happened at Rupert House:

Where they succeeded was at Rupert's House where two old women took them [the beavers] in charge. They did not lose a single one. In the winter of 1839 two old men were sent to the island to hunt up any others but did not see any signs of them, only got three martens and a few foxes. The old men drew a map of the island, of the creeks and ponds. Mr. Miles sent the map to England. Some time in June 1840 a boat was sent to Charlton Island, manned by some of the Company's men and Indians, taking four or five pairs of young beaver. A few days before the departure of the boat, the old Governor and another crossed over to the opposite side of the river to hunt, the tide being low. They perceived something lying on a lump. The younger man went to see what it was. It proved to be a large beaver asleep. When the man saw it to be beaver, ran up to it and caught it, but the beaver bit his hand, but would not let it go. When his companion reached him they secured him and paddled back to the post and brought it to the house. Mr. Miles was

very much pleased and gave the brave fellow a nice present. They gave the beaver the name of old George in honor of the Governor. Old George was sent to Charlton Island, where no doubt he helped to increase and multiply his kind. (Connolly n.d.)

Learning how to harvest the progeny of the beavers transported to the island proved equally challenging for HBC men, although they again had advice and help from Cree hunters. In 1843 Simpson noted that there were fifteen beaver houses reported by Indians sent to the island to take stock, although there was "no means of course of ascertaining the number inhabiting these houses, and there may be other lodges as yet undiscovered" (Brooks 1929, 19). By 1845 the first of the Indians asked to reside on the island as "keeper," Tom Pipes, reported that there were then at least forty lodges, and Pipes and another Cree, Kataunawait, made a report in which the lakes were referred to by letters or numbers for identification on the maps (Brooks 1929, 20–22).

Joseph Gladman, a new trader at Rupert House, reported to Simpson that after spending the winter of 1845–46 on Charlton the keepers "discovered twenty new lodges." But despite finding additional colonies, they "retain the opinion that the year olds did not make separate Lodges last summer, but must in general be passing the Winter with the Parent Beaver, otherwise they would have found more Lodges of $\frac{3}{4}$ Beaver [a measure of beaver pelt size roughly equivalent to yearlings]" (Brooks 1929, 23). The report goes on to suggest that the other explanation would be that some young were leaving the island, which the Indians thought possible from the tracks of beavers they saw along the seashore (23). In either case, the yearlings were not establishing many new colonies.

Gladman added that the Indians "desire me to acquaint you that, in their opinion, it is advisable to kill some of the old Beavers annually, to prevent the Island being overstocked, or driving each other off, as they will be apt to do, if they become too numerous" (Brooks 1929, 24). In 1847 the Indians reported sixty-eight colonies and were "of the opinion that the land is now well stocked . . . and that it is time to kill some of the Beaver to prevent them becoming too numerous" (25–26). In 1848–49 they reported seventy lodges,

and that “in whatever direction they came upon Rivers or Lakes they were sure to see a lodge or Vestiges of Beaver (26). In 1849 they reported the island overstocked with beavers, and in 1850 they reported finding two dead beavers which they judged to have died trying to migrate off the island (27). The hunters’ reports indicate that the beavers were at the limit of the island’s ability to support their numbers, as they had warned since 1845–46, and they advised that it would be “advantageous if a few of the older Animals were killed” (27).

In May 1851, Simpson authorized Gladman “to draw 5000 Beaver Skins from the Island Preserves,” of which there were three by this time, Charlton Island being the best established (Brooks 1929, 27). Gladman reported in March 1852 that the number of beaver pelts taken on Charlton Island “does not amount to one sixth of what was desired to be procured—The Indians give it as their opinion that there were not that number of beaver on the Island—as on taking a Lodge they seldom found the young ones of last spring except where there were only two old Beaver—but they often found several old and two year old Beaver in the same Lodge sometimes to the number of ten or twelve . . . and only a chance young one among them” (28). The Indians told Gladman that with so many older beavers in the lodges, young ones must have been killed or “perished during preceding seasons for want of water the Lodges being made in Lakes which would be entirely frozen to the bottom in winter—others have perished in the Sea when going on a quest of more favourable places of refuge” (28). Their comments indicate that overcrowding was already affecting the number of kits born and the number surviving. They also reported that their trapping effort left some beavers that were not harvested (28).

Neither Simpson nor Gladman initially understood what had happened. Simpson wrote that the number of beavers taken “has fallen very short of what we were led to expect last year from the highly colored reports made as to the number of beaver on the island, which, it was stated, were so numerous they were actually quitting it in quest of food in other places. To prevent a wholesale massacre in the preserve, the Council limited the hunts to 5000; I was, therefore, very much surprised to find that the total returns of

20 hunters employed all last Winter amounted to no more than 800 skins. You attribute this failure (for as compared with our expectations it may be so called) to sickness among the hunters, but I am disposed to believe that it is partially to be attributed to the fact that the beaver do not exist in the numbers represented to us” (Brooks 1929, 29).

Gladman replied that the Indians “one and all gave it as their candid opinion, that the Beaver were not so numerous upon the Island as the calculations would lead us to expect,” but he went on to “regret that the information I received from the Indians regarding the Preserve has been deemed unsatisfactory, I however stated all which they told me” (29–30). Thus it was the calculations of beaver population growth made by the HBC that were too high.

How the calculations were made is unclear, and it is clouded by diverse accusations of blame. The HBC had Cree reports that there were more than seventy colonies in 1847, and as Samuel Hearne had reported in 1795, beavers had five or at most six young per year, so colonies would rarely exceed a dozen animals (1971). After the Crees reported in 1845 that it was time to harvest beavers and in 1848 that beavers were overstocked, the HBC leadership appears to have assumed that the growth in beaver colonies and numbers would continue during the several years that they delayed culling, even though Cree reports showed a rapid decline in the rate with which new beaver colonies were found, twenty in 1845–46, eight more in 1847, two more in 1848, although it may be that later reports have not survived in the records. The HBC appears to have assumed that beaver numbers could increase substantially because they were only limited by the abundance of food, and that food was abundant. But Cree reports stressed that the limited number of appropriate lake and stream sites was limiting the number of new colonies, and therefore the number of adults that were breeding.¹⁷

In 1856 Simpson himself concluded that “from what we can learn the number of beaver does not rapidly increase after attaining a certain point, which we may assume to be the maximum that the means of living and other local peculiarities, unknown to us, admit” (Brooks 1929, 31). If this statement is taken at face value, then this can be considered the moment

at which the HBC leadership began to understand the complexity of beaver population dynamics.

Further, by attributing “the maximum” to the beavers’ own “means of living and other local peculiarities,” they also learned that they needed to know more about the dynamic interactions of animal populations in relation to environments. Thus, this may also be taken as the beginning, for the HBC leadership, of an awareness of ecological knowledge in the sense that Krech cites—thinking systematically about the environment and its components. These documents may therefore give us a rare glimpse into a decisive moment in the development of HBC learning about conservation.¹⁸ This learning involved not only drawing lessons from the experience of HBC decisions about hunting that were implemented jointly with Northern Algonquians, but also having some help in understanding that experience from the commentaries provided by the Northern Algonquians, even if those commentaries were not yet fully understood by the HBC.

That the Charlton Island experiment provided the context in which the HBC leadership become aware of the complexity of game population dynamics and that these dynamics were related to environmental conditions puts into perspective what the HBC did not know when it implemented its measures to “recruit” beavers starting in the 1820s. It makes clear why Krech is in error to assume that these policies expressed contemporary ecological and conservation ideas.

In the decades after the initial Charlton Island experiment, Northern Algonquians appear to have had some direct influences on HBC practices. After the hunt of 1851–52 the HBC accepted the advice of the hunters not to trap the island again for a few years. Crees were reported in 1842 to be using rotational hunting in the Rupert House District: “They alternate years work different sections of their lands, leaving such to recruit two or even three years, or otherwise long ago their lands (particularly the Coast Indians whose Beaver grounds are so limited) would have been exhausted” (Krech 1999, 191; quoted here from Francis and Morantz 1983, 129). When the HBC recommenced trapping on Charlton Island it did so every three or four years thereafter, with from 250 to 500 beavers commonly being taken

in the hunts between 1853 and the 1870s (Brooks 1929, 31–38; Watt 1930a, 1–3). The HBC appears to have learned rotational trapping from the Northern Algonquians.

Thus there is no basis for Krech’s ignoring the knowledge and active agency of Northern Algonquians in the processes leading to the recovery of beaver populations, or for his allowing only generally that it may have occurred, but only after the ideas and practices were learned from HBC traders (Krech 1999, 206). The process of developing practices that were forerunners of conservation programs was a mutual one. The evidence from this one particularly well documented case study shows that improvements in HBC policy and practices depended in important ways on Northern Algonquians’ knowledge and experience. The Charlton Island case suggests that the general increase in beaver numbers across the region was primarily the result of the Northern Algonquians’ efforts to reestablish beaver populations, aided by HBC efforts.

Interestingly, there is some evidence that this is how Cree hunters and some later HBC traders saw the process. James Watt, the HBC trader at Rupert House from the 1920s to the 1940s, found Cree hunters and retired HBC employees who had family stories of their parents’ involvement in the Charlton Island beaver preserve, and oral traditions that a hunt there once caught more than eight hundred beavers, as well as stories of the succeeding decades (Watt 1930a, 3). Commenting in 1930 on an HBC London Committee letter of 1826, which took some of the early steps “to preserve the beaver,” Watt said that after talking with elder Crees:

So far as I have been able to learn from Indian traditions, the steps taken were to maintain the rights of an Indian family to a specified hunting ground; the Indian then farmed his lands, when possible on a rotation system—leaving certain lakes and creeks un hunted for a term of years—until the beaver were sufficiently numerous to kill again.

This was the general idea, but not always strictly adhered to. During the periodical scarcity of rabbits and other country food,

so many beaver were often killed for food as to seriously deplete the breeding stock.

Even with this drawback the system worked sufficiently well for the company to ship from Ruperts House 4982 Beaver in 1893. (Watt 1930b, 1)

This statement presents the HBC policies as helping Crees maintain their rights to their hunting territories, not creating them, and it reiterates that it was the Crees who practiced rotational use of hunting territories.

Thus Krech's analyses about how beavers recovered and how conservation developed is wrong, both because it denies the active and leading role of Native Americans and because it fails to recognize that the complex relationships between the Northern Algonquians and the fur traders were vital to the process.¹⁹

Krech's Policy Pronouncements:

Hidden Agendas and Misrepresented Choices

On the last pages of his final chapter, just preceding the epilogue, Krech offers his own political policy advice about the claims to lands and resources made by Northern Algonquians today: "over the last three decades the story of conservation has been inseparable from the all-embracing political and economic movement to control Northern Algonquian lands and energy" (1999, 198). He implies that it is Native Americans who have made the story of conservation a political one, not the rapid expansion of massive government and corporate resource exploitation projects into the North. Krech says that in the view of Crees and anthropologists who have "echoed" their rhetoric, myself included, "history legitimates the Cree authority, rather than provincial or federal authority, to manage natural resources" (199–200). Krech rejects Cree and Innu claims that they have "the right to decide resource and conservation issues" (207) and that "they, rather than the governmental or private interests, should be responsible for environmental management" (208).

Krech rejects these statements because Crees and other Native Americans "often base their claim on a natural right stemming from their relation-

ship to the environment, which, in opposition to large-scale development projects, they present as balanced and harmonious" (207–8). In opposition to these claims, he asserts that he has shown that "the historical evidence is lacking for conservation until long after the arrival of Europeans, and it is quite equivocal and mixed for the family territorial system" (200). Thus Krech uses his ethnohistorical research as a means of deciding who has the most authoritative and legitimate claims to control and manage lands and resources in North America today, governments or Native Americans.

Krech does not mention these political policy goals in the introduction to his book or in the previous two hundred pages. I mention this not because I think it is wrong for scholars to address policy issues; scholars do need to address important national and international issues with their scholarship. But I think that when one of the goals of a scholarly book is to enter into political debate, the author has a responsibility to signal that intention to readers before they read the analyses.

Krech writes as if his political policy choices flow more or less directly from his historical research findings, but his policy pronouncements are embedded in complex legal, political, and historical issues that he either fails to address or misrepresents. He frames his policy pronouncements by adopting the self-image of a moderate. He writes that his rejection of Native Americans' authority over lands and resources does not mean, as some "might be tempted to argue," that Native Americans have no rights (208). Krech argues that Native Americans should be involved in the co-management of resources with governments, because "No one disputes that senior hunters have gained a detailed and sophisticated understanding (albeit cultural) of their surroundings and the animals" (209). He notes that co-management of natural resources is widespread today in the Canadian and Alaskan North (208).

But Krech does not make clear that co-management in the North is typically a government policy and that it does not fulfill widespread Native American visions or goals. Co-management, insofar as it is officially recognized today by governments in North America, is most commonly either a delegation of administrative authority given to Native American peoples

by agencies of the government, or it is an advisory participation for Native American peoples in the institutions of the nation-state (although there are exceptions) (Spaeder and Feit 2005).

Thus co-management is not what most Cree and Innu peoples have sought, namely, decision-making authority based on recognition of their coexisting rights and governance, which exist independently of recognition by the governments of Canada or the United States. They are seeking more equal relationships based on their own authority to govern. Nevertheless, many Northern Algonquians also recognize that their authority must be exercised in the midst of, and in relationship with, governments, and their claim is not for exclusive governance (see Moses 2002 and Cree hunters' court testimonies cited in Richardson 1975; see Ashini 1995 for an Innu view; also see Scott 1988, Feit 2005, and Feit forthcoming).

Krech does not present these Northern Algonquian views. Instead, he misrepresents Northern Algonquians as arguing for completely exclusive rights, thus setting up a false choice between exclusive Native American management and exclusive government-mandated co-management. I understand that Northern Algonquians envision forms of dual self-determination with governments, not government-mandated co-management or their own exclusive governance.

Further, that Crees, Innus, and other Native Americans seek recognition of their rights does not derive fundamentally from a claim to be ecological Indians, or people who practiced twentieth-century forms of conservation before the twentieth century. It derives from their rights and their recognitions in law, from the histories of their relationships with European and other North American settlers and their descendants, and from their historical and current ways of caring for the land.

Krech does not mention that there are existing legal bases for indigenous rights. Indigenous rights are grounded in Native Americans' own legal systems, and they are also recognized by the courts and laws of the United States and Canada, by the Canadian constitution, and in international law and legal instruments. The extent and meaning of the rights and their recognitions are incompletely defined and highly contested (Morse 1985; Wil-

liams 1990; Anaya 1996; Alfred 1999; Haring 2002; Fixico 2002), but their existence is not in doubt in the United States or Canada, although this is not widely recognized in public debates. One of the strongest areas of agreed rights relates to basic indigenous rights to lands, wildlife, and their use (Hutchins, 2006). It is erroneous for Krech to write as if these indigenous rights can be dismissed today, as if the very existence of indigenous rights to lands and wildlife is completely open to question.

Further, Krech's policy conclusions present a choice between indigenous rights that are of autonomous origin from the nation-state, on the one hand, and nation-states' claims to sovereign supremacy, on the other. This framing of policy issues is the classic choice presented by Euro-American political systems rooted in nation-state sovereignty. But the ethnohistorical records Krech reviews do not support such a polarized choice, and they indicate that there are other possibilities that need consideration.

The fur trade described in the case studies Krech cites was based on establishing a variety of relationships between traders and Northern Algonquians, which both traders and hunters often saw as beneficial, even as they each contested the terms of trade and the obligations of relationships, and even as Europeans often accumulated excessive profits. The HBC generally preferred the Northern Algonquians to be on the land, controlling it against outsiders and using their social and tenure arrangements to organize the hunt and produce furs for the trade. The HBC did not attempt to take over the hunting activities on any large scale, and it did not attempt to take over the control of the land in practice. Its strategies were aimed at trying to maximize the Northern Algonquians' hunt for furbearers and to control as much of the trade as it could vis-à-vis its competitors. That is, Northern Algonquian authority and control of lands were generally crucial to the HBC's economic goals and profits and to its trying to reduce the access or survival of its competitors, and the HBC used and supported Northern Algonquian authority over the land rather than generally disrupting that authority.

Northern Algonquians, for their part, engaged in the trade for centuries mainly because they wanted to, and they often reshaped the trading rela-

tionships and practices dramatically to suit their visions. The histories of the fur trade thus include an enduring series of what ethnohistorians now often call “partnerships” (see Francis and Morantz 1983), although these also involved complex relations of power.

But the ethnohistories done to date are about trade and not about issues of governance authority, so there are only the most initial of results for this topic. European traders assumed that HBC governance authority prevailed because it derived from the company’s being the royally chartered ruler of the James Bay and Hudson’s Bay drainages from 1670 to 1869, when its lands were sold to Canada. Consistent with European ideas of the time, traders probably believed that Native American hunting societies had no organized forms of governance, a view that anthropological research has proven erroneous (Asch 1997; Tully 1995).

Thus there was also an effective Northern Algonquian occupation, tenure, and authority in forms appropriate to a hunting society. The record of the fur trade contains some imprecise reports of Northern Algonquian assertions of their authority. In the 1820s Rupert House Crees were reported to be “tenacious of their Property in their Lands and are not pleased when other Indians encroach on them” (qtd. in Krech 1999, 190). Such statements are difficult to interpret, because fur traders did not understand hunting territories or the “political” organization of territories or of hunting groups or bands.

The HBC also recognized Northern Algonquian authority, both implicitly and explicitly, because doing so was often valuable to its trade. Thus when the HBC leaders promoted Northern Algonquian use of hunting territories in order to help beaver recovery, they also understood that this could help to keep out itinerant trespassing trappers, many of whom who were less likely to be its customers. In promoting hunting territories, the HBC was promoting and implicitly recognizing both a form of Northern Algonquian land tenure and a form of Northern Algonquian authority over lands and wildlife. This was potentially significant for Northern Algonquians, whether the HBC understood the recognition or not.

Thus for long periods and over broad areas Euro-Americans and Northern Algonquians coexisted without a consistent or effective repudiation of Northern Algonquian authority over lands and resources by the HBC or others. There were two coexisting claims to authority, both very different from that of a modern nation-state—a chartered trading company and hunting band societies—and a set of ad hoc accommodations, relationships, and sometimes partnerships that linked them.

For the twenty-first century I call this kind of relationship “messy co-governance rooted in coexistence,” the unexpected conjuncture of Native American self-determination and Euro-American sovereignty (Feit 2005). This kind of relationship is not easy to “see” today because it does not conform to the dominant assumptions of nation-state sovereignty. But it is not surprising that it developed during the fur-trade period in the Northern Algonquian region, because the HBC-mandated trading region was only nominally within a nation-state, although this changed over time. Such coexisting authority over the land was not equal; power shifted dramatically over time, and Euro-Canadians and Euro-Americans gained effective dominance, albeit only as recently as the 1970s in the eastern drainage of James Bay. But that dominance includes diverse recognitions of Native Americans’ rights and authority, and Native American societies have survived, on the land, and have not been assimilated.

Thus the history of the fur trade does offer insights for policy choices today: it shows that the historical practices of authority and governance of both Euro-Americans and Native Americans coexisted. This does not fit into the choices offered by Krech. In his political conclusions there is no possibility of the coexistence of self-determining Native American peoples and nation-states. A key conclusion from the history of the fur trade is that the long and complex co-governance based on the coexistence of both Native American and nation-state authority should be recognized today.

Krech does not conscientiously attempt to use fur-trade history to consider what the policy choices or questions should be today. *The Ecological Indian* thus not only fails to present credible analyses of both nineteenth-

century Euro-American fur traders and Native Americans, and of the politics of indigenous rights today, but it also disappoints and misleads readers about present circumstances and possibilities for North Americans and Native Americans.

Notes

1. Earlier versions of this chapter were given at the American Anthropological Association Annual Meeting, Chicago, November 19–23, 2003; and at the Canadian Ethnology Society Annual Meetings, London, Ontario, May 6–9, 2004. The funding for the research used in this article was provided by the Social Sciences and Humanities Research Council of Canada and the Arts Research Board of McMaster University. I received helpful advice and comments from Fikret Berkes, Mario Blaser, Monica Mulrennan, Douglas Nakashima, Matthew Ottereyes Sr., Richard Preston and Colin Scott. I also received help from Anne Morton and others at the Hudson's Bay Company Archives. I want to thank the Public Archives of Manitoba, Hudson's Bay Company Archives, and the National Archives of Canada for permissions to use their collections. I also want to thank the many hunters and elders among the Waswanipi Cree whose knowledge and experience I have drawn on in this article. The term "Whitemen," or more commonly "Whiteman," is used by contemporary James Bay Crees as a general designation for non-Natives.

2. I use the term *European* to refer to non-Natives during the period when many traders and missionaries were of European birth, including the British, or their local descendants. But I intend the term to include others born in North America and elsewhere as well. For the late nineteenth and twentieth centuries or for urban populations I use *North Americans* or *Americans* or *Canadians* for non-Natives, as is most appropriate to the context, and *Euro-American* to concisely encompass both periods. I intend the use of *Americans* or *Canadians* to be inclusive of people of the other country unless the context differentiates. Sometimes I use *Western*, as when I take up Krech's arguments about "Western" ideas or elsewhere where he has used the term, although I try to do so with caution, recognizing both the diversity of views it encompasses and the overly rigid separation it implies with non-Western ideas.

3. Krech's chapter focuses on the Northern Algonquians. When I want to use a term wider than *Northern Algonquians*, I will use *Native Americans*. In Canada the general term *First Nations* would apply today to the groups of Northern Algonquians that Krech discusses as well as to other "Indians" in Canada. Northern Algonquians lived on lands that are now part of both Canada and the United States. Given that *The Ecological Indian* was prepared and published through a U.S. publishing house, I have used the term *Native Americans*. However, the arguments I make in this chapter apply to both countries, and I sometimes use the word *indigenous* to recognize this, especially in legal contexts. I will use the term *Indians* when I am referring to European and North American ideas about Native Americans (see Berkhofer 1978).

4. The fur-trade records are replete with repeated game depletions, but these periods are typically followed by periods of game recovery. The sequences themselves can occur repeatedly in the same region only decades apart, suggesting that there are specific reasons for depletions at particular times. Since game recoveries were also recurrent in areas where Northern Algonquians continued to hunt, these too need analysis. Elsewhere I reanalyze the recurrent depletions and recovery of game and show that depletions are often related in the historical records to re-

ported periods of intrusions or trespass. Nevertheless, because "intrusions" and "trespass" and are imprecise terms in the records, it is not always possible to draw conclusions about who provoked particular depletions or why recoveries occurred (Feit forthcoming).

5. Related arguments have been made by a number of other scholars, including Ray (1975) and Brightman (1993).

6. Elsewhere I suggest that when the quotes from LeJeune are read in their context it is apparent that LeJeune was trying to sedentarize the Montagnais, and his primary goal was to make agriculture their primary means of subsistence, in order to more effectively convert them by getting them to reside at the mission sites. Game population recovery was a concession to the powerful fur traders in New France and a means of subsistence security in the context of the unreliable European farming practices in New France at the time. The territories LeJeune refers to were therefore not to be residential lands of full-time hunters. Thus they were not what anthropologists have called hunting territories over the course of the last century (see Feit forthcoming).

7. I treat comments that have been made to me independently by several experienced Waswanipi Cree hunters as expert knowledge. When I consider statements by Cree experts I usually also seek out the views of wildlife management experts, and vice versa. I do this not to "verify" knowledge claims made by either but rather to "triangulate" understandings, because looking for second and sometimes third sources of information of ten adds to understandings of why things happen in a particular way or what their limits are. I did a total of a year of field research at Waswanipi in the James Bay region of northern Quebec between the falls of 1968 and of 1970, and summer or seasonal research each year from 1978 to 1987 and from 1997 to 1999. I was also a social science adviser to the James Bay Cree regional political organization from 1971 to 1978 and occasionally thereafter.

8. I typically express my conclusion as a statement about what "the beaver" do or as "what so-and-so says about the beaver," as the circumstance warrants. But I do not seek to make statements in the same form that either wildlife managers or Cree hunters would phrase their ideas—I express my understandings.

9. I use the term *hunting* to include trapping when I mean the wider pattern of Northern Algonquian living on the land and providing for both family subsistence and trade. I use *trapping* to refer specifically to the techniques used to capture furbearers or to trade-related hunting activities, depending on the context, whether conducted by Native Americans, Europeans, or North Americans. When I use *hunting* to refer to living on the land I use it to include the range of activities that were primarily the sphere of women in Northern Algonquian societies, of ten including small-game hunting and fishing and the butchering, specialized pelt processing, food preparation, and distribution of most game animal meat.

10. See Krech (1999, 182), seventeenth-century Jesuit reports in Thwaites (1897, 6:299, 301, 303), eighteenth-century HBC reports in Hearne (1971, 236–38), and reports that such techniques were widespread in the eighteenth and early nineteenth centuries in Lewis Henry Morgan's monograph on beavers (1986, 238–39). The eighteenth- and nineteenth-century reports do not indicate whether selective harvesting by age was being practiced at the burrows, but Paul LeJeune's seventeenth-century account noted that Montagnais in the St. Lawrence Valley were not leaving live beavers at a colony.

11. Grove (1995) gives much earlier examples of environmentalism, environmental ideas, and land management, many in specifically colonial settings. Grove also indicates why they were not widely adopted and applied in Europe. Unfortunately, as yet we have little comparable re-

search for the non-tropical areas, and generally for the New World, although one such encounter is documented below.

12. Krech is reluctant to allow this well-documented 1740s east coast Cree use of hunting territories to be an example of a Northern Algonquian practice without European tutelage. He acknowledges this as one possibility, but he also argues that “perhaps” it is a result of practices arising from “fur traders concerned that destroyed commodities [furs] would erode their profits” (1999, 194–45), even though clear HBC policies were only established in the 1820s. Or perhaps, he suggests, “outsiders like Le Jeune,” the Jesuit priest whose plans for the Montagnais he quotes from the 1630s, “had some sway over conservation attitudes” (194). Le Jeune spoke a hundred years earlier in another region (see note 6 and Feit [forthcoming] for a discussion of these arguments).

13. Morantz notes that only in the traders’ reports of a decade later, in the 1820s, are there more precise descriptions of hunting territories (1986, 74–75). She suggests that one hypothesis is that the HBC traders did not understand the practices yet in 1814–15. Krech suggests that the later traders’ reports were more accurate because the Northern Algonquians’ practices themselves were emergent rather than well developed between the 1740s and the 1820s (1999, 190–91, 194). Morantz argues that given that there was only a decade between the 1814–15 reports and the more detailed ones, it is less likely that a rapid change in hunting territory practices developed than that the fur traders’ understandings of the practices developed quickly (1986, 74–75).

14. See Feit 2004 for discussions of how hunting territories could have developed in the period before the arrival of Europeans.

15. Many of Krech’s other inferences from Northern Algonquian statements, summarized in the passage quoted earlier from pages 204–5, are also oversimplified or erroneous. For example, I found that many Northern Algonquians believe that animals which present themselves to a hunter or which leave clear signs of their presence for a hunter should be killed. But this does not need to lead to over-hunting, as Krech suggests, because when hunters decide not to take more animals in an area they do not return to it again, sometimes for weeks or even several years. Thus they do not encounter animals or animal signs there anymore. Similarly, for Northern Algonquians there is no necessary contradiction between stopping the trapping at a beaver colony and thus leaving beavers alive whose signs a trapper has seen there. Many Cree hunters today think that the beavers that are not caught in the first week or two are signaling that they do not want to be caught, at least for the moment, and many trappers take their traps out and leave when this happens. Explaining animal declines by referring to causes other than hunting, such as violation of taboos, need not be surprising, since most northern mammals have highly variable population numbers that cannot be explained solely by hunting intensity. These variations are generally not well understood by wildlife researchers or by Crees. Thus having other explanations does not indicate that hunters are denying the effects their own hunting may be having. Stressing rituals of respect for animals can make sense in any society, not because it necessarily leads to immediate decisions on whether to harvest game at the time of the ritual, but because social groups are constantly faced with choices among conflicting needs and values. Highlighting the inherent value of animals through rituals can become part of the choices and debates over what is permissible and what is not morally acceptable in society, and it can also be a way of educating the young in these values and choices. We do not know if Northern Algonquian understandings and rituals worked this way in the seventeenth, eighteenth, and nineteenth centuries, as we generally lack sufficient material to interpret their ideas and practices of those periods in depth.

So we need to be cautious in our explanations of what such statements mean, because several explanations are possible.

16. I am indebted to Richard Preston for alerting me to some of the rich information about this HBC conservation initiative and for making available to me extracts from a manuscript written by Henry Connolly, who worked for the HBC in the 1830s in the district near Charlton Island. At the request of the HBC and in support of their claims to the island, Connolly swore an affidavit in 1903 or 1904, when he was retired, in which he affirmed that the HBC had placed beavers on Charlton Island (Connolly n.d.). His manuscript, which elaborates on this history, is being prepared for publication by Preston and James Morrison (see Preston 2004). My account is also based on a collection of forty-eight extracted references to HBC activities on the island drawn from Governor Simpson’s and other HBC head office records prepared by J. Chadwick Brooks, the secretary of the HBC in 1929. These extracts extend from 1836 to 1871. Brooks prepared these as an affidavit in another HBC legal claim for title to Charlton Island (Brooks 1929). These sources are supplemented with information reported in a letter by James Watt, HBC postmaster at Rupert House in 1930, to his superior in support of his own proposal to reestablish a fur farm at the post. Watt’s information is drawn from an old post journal he found from 1854–59 and from conversations this discovery provoked with local Cree hunters and retired HBC employees at Rupert House in 1930 (Watt 1930a).

17. To put the harvest quota of five thousand beavers into a broader perspective, I would note that the trade of the Rupert House post in the latter part of the nineteenth century was considered very good at nearly five thousand beaver pelts a year (Watt 1930b). It is difficult to estimate the size of the hinterland from which those pelts were drawn or the intensity of the hunt, but an approximation based late-twentieth-century maps of Rupert House Crees’ hunting territories would be approximately 10,600 square miles. In the 1930s, HBC traders reported the area of Charlton Island as 115 square miles.

18. This was a decade before George Perkins Marsh’s book, and several decades before the later-nineteenth-century conservation movement.

19. Krech’s final example of European pedagogy occurs in the 1930s and 1940s when “the HBC, Quebec, and later, Ontario and the federal government joined forces to institute beaver preserves” and teach conservation to the Crees (1999, 197). In a detailed history of these well-documented events, I show that they involved complex forms of cooperation, independence, mutual aid, and effective co-governance among governments, traders, and Cree trappers (Feit 2005).

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Native Americans and the Environment

Perspectives on the Ecological Indian

Edited and with an introduction by
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Foreword by Judith Antell

Preface by Brian Hosmer

Afterword by Shepard Krech III

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