Aboriginal Rights and Canadian Environmental Policy: Enhancing Sustainability or a Justification of Deregulation?

Frances Widdowson
Trent University
franceswiddowson@yahoo.ca

Presentation for the Annual Meeting of the Canadian Political Science Association
University of Saskatchewan, Saskatoon, Saskatchewan
May 30-June 1, 2007

Abstract: In many discussions about natural resource and environmental policy, there is an assumption that transferring regulatory responsibilities to aboriginal groups will enhance current environmental protection goals. It is argued that aboriginal peoples have their own forms of self-regulation that will help to bring about environmental sustainability. However, the primary sources of evidence used to substantiate these claims – native testimonials and the fact that aboriginal peoples did not have a significant impact on the environment before contact – are insufficient for establishing the reality of an aboriginal conservation ethic; more systematic evidence must be acquired before such an presumption can be acceptable. Through a historical and materialist analysis, this paper will evaluate the arguments put forward in support of the claim that aboriginal peoples exhibit an inherent ecological consciousness. It will then explore the policy implications of expanding aboriginal jurisdiction over environmental protection if no such environmental ethic exists, including the possibility that such a course of action will actually result in deregulation. As well, the potential political reasons for pursuing this policy direction on the basis of such anecdotal evidence and spurious reasoning will be considered.

*****

It is commonly argued that aboriginal peoples have a conservation ethic - philosophies and practices that help them manage the environment sustainably (Callicott and Nelson, 2004; Magne, 1999; LaDuke, 1993; Weaver, 1996). This ethic is perceived to have manifested itself in "customary laws"[1] and "institutions" that aboriginal peoples historically used to restrict their resource use. This existence of a conservation ethic in aboriginal cultures, in fact, is proposed as the major reason why the native population was able to live in relative harmony with the environment for thousands of years before European contact (Knudtson and Suzuki, 1993; RCAP, 1: 86-7, 658).

Aboriginal knowledge, values, beliefs and practices that protected the environment, it is asserted, were often ignored because of the colonial mentality of non-aboriginal governments. The assumption is that these governments wanted to destroy aboriginal peoples' traditional economies and political systems so that the environment could be used for the purposes of commerce and recreation, resulting in resource depletion (Sandlos, 2001; Bocking, 2005). Enabling aboriginal peoples to restore their environmentally friendly philosophies and practices through land claims and self-government agreements, therefore, is proposed as a solution to environmental problems. This proposal postulates that federal and provincial governments should transfer responsibility for environmental protection and resource conservation to native groups, so

that they can either self-regulate or restore their sustainable traditional economic practices (Keay and Metcalf, 2004).

But an examination of historical and material circumstances does not show that the generalization about an aboriginal conservation ethic can be sustained. Although some aboriginal individuals espouse environmentally friendly philosophies today and argue for the need to conserve resources, a great deal of evidence indicates that this was not a feature of aboriginal societies in the past. Notions of the existence of a conservation ethic have been sustained only by uncritically relying on aboriginal "oral histories" and mistakenly assuming that the relative preservation of the environment is evidence of conscious effort of sustainability even when the means to its destruction didn't exist.

Unfounded assertions about the existence of an aboriginal conservation ethic have created a number of problems for public policy development. Accurate information is needed to weigh the benefits and risks of a particular policy direction, and the invalid assumption that all aboriginal peoples are natural conservationists has the potential to result in an accelerated depletion of resources and environmental degradation. It would essentially create a system of open access to resources, with no behavioural restrictions or economic practices to restrain harvesting. It also could lead to a manipulation of the system by non-aboriginal economic interests, where aboriginal governments are used as a front to circumvent environmental regulations.

What Constitutes a "Conservation Ethic"?

Before assuming that a group has a conservation ethic, the anthropologist Natalie Smith argues that it first must be established that "people [are] restricting their use of a resource when they would prefer to continue consuming *and* resource availability and time permit further consumption" (2001: 434-435). Smith points out that this must be established even if resources are being consumed sustainably, since a harmonious relationship with the environment could be due to low population density or the existence of inefficient technology. In this case it would not make sense to infer conservation since a group's "reasons for limiting exploitation of the resources would be a byproduct of factors beyond their control" (Smith, 2001: 439).

Determining if a group is intentionally restricting their resource consumption is also necessary to establish whether conservation practices are conscious, and therefore transferable to the modern context. Smith points out that some groups that do not understand ecological principles or "the relationship between their limited use of a resource and the continued abundance of that resource" but sustainability is achieved through various taboos concerning harvesting (Smith, 2001: 441). A taboo that inhibits groups from hunting females and young animals, or restricts hunting locations and times (Smith, 2001: 446), for example, could have a conservation effect even if there was an absence of knowledge intending to bring about this result. Because such unconscious forms of conservation are not directly aimed at achieving sustainability, they would be ineffective management tools in periods of social and ecological change.

Conscious conservation, on the other hand, depends upon a group understanding plant and animal population dynamics and whether or not they are having an impact on population numbers (Smith, 2001: 441). As Smith points out, conscious conservationists are those "individuals who recognize the possible overuse or destruction of natural resources by humans, and who purposely alter their behaviour to reduce their impact on these resources" (2001: 442). These individuals also have the capacity to change their interaction with the environment, indicating the ability to exert a substantial control over nature. This is different from taboos that generally arise because they offer a survival advantage that is passed down from one generation to another. Lu Holt (2005), in fact, observes that conscious conservation tends not to exist in cultures with subsistence economies since such measures come into existence "when people exert use pressure on the resources and recognize the potential for overexploitation, conditions concurrent with population growth, adoption of [efficient] technologies, and market production" (201; see also, Oates, 1999).

Using these criteria, Smith concludes that the aboriginal group in her study - the Machiguenga - do not engage in conservation. According to Smith, the "Machiguenga are unaware of the consequences that their behaviors have on the environment and possess a different, non-ecological understanding of the demographics of animal populations". She notes that the cultural models that they possess

> evolved during a long period of living in sparsely populated , widely scattered, family-level settlements. Under these conditions individuals had a minimal impact on their local ecology and were only slightly affected by declining resource availability. When resources declined, the family would move to a new settlement - frequent relocation and low population density enabled resources to quickly regenerate, thus the Machiguenga did not confront long-term and extensive depletion of resources (2001: 442).

As evidence refuting the existence of a conservation ethic, Smith points to the fact that the Machiguenga do not believe that harvesting can cause resource depletion; when asked, they assert that resource scarcity in a particular area is due to the fact that animals have migrated elsewhere voluntarily, or have been scared away. Smith notes that the Machiguenga's cultural models "do not include human behavior as a causal factor in declining resources" since "they lack the necessary social structures and information about population dynamics that would permit them to conserve" (2001: 455).

The absence of these social structures and information also might explain why other aboriginal groups have not conserved resources in the past (Alvard, 1993; Krech 1999; Redford 1991; Terborgh, 1999; Slobodkin, 1968). The disappearance of many species, including horses, for example, coincided with the arrival of humans in the Americas over ten thousand years ago, indicating a human cause ("Ancient Man's Quest for Meat", 2001). None of these animals had evolved in relation to human beings, and they had no defense against the hunting technology developed in the Old World. This technology enabled these animals to be killed at a rate greater than their capacity to reproduce, resulting in their extermination (Flanagan, 2000: 12-13; Diamond, 1997: 46-7; Bishop,

1981: 54). The large numbers of big horned bison that were herded over cliffs and eventually driven to extinction provides a good example of one particular environmentally destructive practice that indicates the absence of a conservation ethic in pre-contact resource use (Krech, 1999).

Therefore, it cannot just be assumed that aboriginal groups in Canada have a conservation ethic; consuming resources at a sustainable level in the past could have been due to the existence of Stone Age technology, low population densities and the prevalence of subsistence economies. And because these circumstances no longer exist, policy makers cannot uncritically rely upon aboriginal traditional practices to aid the conservation of resources. *Conscious* conservation is required because of the increasing capacity of modern economic processes to destroy the environment.

The Case for an Aboriginal "Conservation Ethic" in Canada

Three years ago, Ian Keay and Cherie Metcalf wrote their award winning article "Aboriginal Rights, Customary Law and the Economics of Renewable Resource Exploitation" in the journal *Canadian Public Policy*.[2] In this article, Keay and Metcalf question the assumption that "Aboriginal fishers mirror non-Aboriginal profit maximizing behaviour" (2004: 3) since many aboriginal groups historically have had "a cultural relationship with their resources that emphasized conservation and spiritual connection" (2004: 5). Keay and Metcalf then use this assumption about aboriginal peoples' "cultural relationship with their resources" to challenge the cautious approach of the Canadian court system in granting aboriginal rights to harvest resources (2004: 3). As Keay and Metcalf note,

> if Aboriginal participants…feel a spiritual bond with their natural environment, and as a result, are morally, socially, and religiously obliged to extract only what they need from their resource base, then any court decisions that might exempt Aboriginal fishers from DFO [Department of Fisheries and Oceans] control will have virtually no effect on resource stocks or commercial industries (2004: 3-4).

But on what basis are Keay and Metcalf able to make such tentative claims about aboriginal peoples' "customary norms promoting sustainability and resource conservation"? In their article, Keay and Metcalf point to four bodies of evidence: aboriginal peoples' testimonials, anecdotal anthropological observations from current studies of aboriginal communities, an extensive historical literature, and evolutionary game theory.[3] These four bodies of evidence, which also are prevalent in other bodies of research claiming that aboriginal peoples have a conservation ethic, will be analyzed below.

The most common form of evidence that is used to support the existence of a "conservation ethic" is the testimonials, or “oral histories”, of aboriginal peoples. Winona LaDuke, for example, maintains that all aboriginal peoples in North America have "knowledge in living sustainably" and this "is something which would be valuable for the rest of society”. Such knowledge includes the principles of reciprocity and

cyclical thinking, which are “predicated on finding balance”. Reciprocity is based on the idea that the world is animate, and harvesting must be undertaken with respect, or an animal will not allow itself to be killed by the hunter. Cyclical thinking, on the other hand, is based on the belief that animals talk to people and they are watching what human beings do. If they see that humans are not treating the environment properly, it is asserted, they will use their powers to punish them in the future. Because of the existence of these beliefs within the native population, it is maintained that aboriginal peoples can help us solve the current environmental crisis facing the planet (Wilson, 2004).

Keay and Metcalf also use aboriginal accounts to buttress the claim about an aboriginal conservation ethic when they point out that "Aboriginal peoples themselves certainly suggest that a different set of norms and objectives govern Aboriginal resource use, relative to the objectives guiding non-Aboriginal users" (2004: 8). Using the example of the Mi'kmaq, Keay and Metcalf note that Russell Lawrence Barsh and James Youngblood Henderson claim that a principle known as *netukulimk* constrains aboriginal harvesting activities (Barsh and Henderson, 1999: 10; Henderson, 1997: 15). This principle, according to Barsh and Henderson, results in harvesters developing a philosophy of "moderation and respect", where they only take enough to meet their needs. It is claimed that the Mi'kmaq act thusly because they make no distinction between the spiritual and the natural world and believe everything is infused with a life force. As a result, the Mi'kmaq intentionally conserve all aspects of nature as a matter of respect (see also Blakney, 2003).

Similar types of testimonies also have been used to support the idea that aboriginal groups in the north have a conservation ethic. It has been noted that testimony at the Berger inquiry during the 1970s, for example, "confirms" the existence of a conservation ethic because "the stories and comments of Dene and Inuit people all suggest that their philosophical orientation, their concept of community, and their consequent practical interest in the land are…no less valid than the scientific practices of the modern resource manager” (Sandlos, 2001). Such testimonies also have been used to support the existence of such an ethic in other aboriginal cultures across Canada, including those on the Northwest Coast, the Plains, and the Eastern Woodlands (RCAP, 1:86-7).

As well as “oral histories”, anecdotal evidence from researchers studying aboriginal communities is used to support the existence of a conservation ethic in aboriginal societies. Keay and Metcalf claim that these anecdotes show that "Aboriginal resource extraction is often both radically different from non-Aboriginal extraction and consistent with customary norms promoting sustainability and resource conservation" (2004: 8). This includes the "sustainable use of forest resources"[4] and "modern Aboriginal subsistence fishing and hunting" (2004: 9).[5]

In the case of the hunting practices of northern aboriginal groups, in fact, John Sandlos notes that "the overwhelming anthropological evidence suggest that conservation methods based on family and kinship groups exist" (Sandlos, 2001). Two of the researchers that Sandlos relies upon to make claims about these northern aboriginal

"conservation methods" are Peter Usher and George Wenzel. Sandlos notes that Usher maintains that aboriginal conservation is connected to their subsistence practices because

> the activities associated with harvesting – checking traps, traveling, hunting, searching, and butchering – produce an intimate knowledge of wildlife health and abundance that is immediately shared among members of the household and family. Moreover, this knowledge circulates through the wider society in the form of oral narratives that are passed down from generation to generation (Sandlos, 2001, note 48).[6]

Wenzel's work is used by Sandlos to challenge the idea that aboriginal sustainable resource use is merely the result of the use of inefficient technology and the absence of motive. Sandlos maintains that Wenzel's research indicates that "contemporary anthropologists adopt a much wider view of traditional hunting" than those who previously assumed that the introduction of efficient European technology changed aboriginal hunting practices since this "ignores the capacity of Native people to adapt new technologies to traditional lifestyles". Wenzel is then quoted as stating that "anthropology today tends to see [aboriginal] hunting as an active system of environmental relations dependent on harvester decision-making rather than technology itself. Consistent with that, we have already seen that the key dynamic in Inuit sealing is the choice that hunters make about where, when, what, and how much to harvest" (Wenzel, 1991: 94, quoted in Sandlos, 2001). Sandlos then uses Wenzel's observations as the basis for the claim that "the Clyde Inuit hunting system reveals a complex set of ecological relationships. The Inuit do not hunt…without restraint, but make collective decisions about where, when, and how much to hunt according to the best available ecological information". According to Sandlos,

> Wenzel argues that Inuit subsistence strategies are governed by rules, social traditions, and standards of conduct associated with particular kinship groups, rather than the relative availability of technological artifacts such as guns and snowmobiles. His work suggests that Inuit approaches to subsistence and conservation are derived from a series of culturally instituted rights and responsibilities rather than a desire to hunt as much as opportunity permits. In addition, the ecological management systems of the Inuit are not based on the distancing mechanisms of the wildlife technician or the strict preservationist.[7]

In addition to such anecdotal forms of evidence, Keay and Metcalf claim that the existence of a conservation ethic is suggested by "an extensive historical literature that documents the persistence of natural resource conservation as a social norm fostered by Aboriginal cultures long after their introduction to European capitalist market institutions" (2004: 9). This includes "the maintenance of subsistence fisheries and small scale barter fisheries on Canada's west coast" [8] and the continuation of "subsistence hunting…in the pursuit of Canadian beaver stocks" in competition with profit maximizing hunters.[9]

Finally, Keay and Metcalfe point to evolutionary game theory as evidence for aboriginal conservation. This theory, according to Keay and Metcalf, "illustrates the robust nature of customary norms, even in the presence of strong economic incentives"[10] and that there is a "fairly substantive body of experimental evidence that establishes a relationship between variations in preferences and ethnic or cultural diversity".[11] It is argued that this experimental evidence indicates "that variations in preferences will be more persistent and dramatic where one finds traditional, long-standing differences in behavioral norms across cultures" (2004: 9).

But to what extent does the evidence pointed to by Keay and Metcalf – aboriginal testimonies, anecdotes from anthropologists, historical evidence of aboriginal peoples' continued subsistence practices in the face of market incentives, and evolutionary game theory - really indicate that aboriginal peoples have a conservation ethic? In order to accept such a conclusion, a much more thorough examination of current and historical circumstances is required.

A Critical Review of the Evidence

The testimonies of aboriginal peoples and anecdotal anthropological evidence are the most common forms of evidence used to support the existence of an aboriginal conservation ethic, but questions must be asked about how accurate these accounts are. Although historians extract information about the past from both oral accounts and written sources (as well as from archaeological, geological, palaeontological and linguistic evidence), it is important to note that there are added difficulties in using oral testimonies because they cannot be "pinned down" and can change dramatically over the years. This is especially relevant when one considers that oral traditions have been passed down through a number of generations; the longer the passage of time between an event and a recollection, the more likely the memory will be distorted by other events.[12] As the anthropologist Alexander von Gernet states

> the fact that oral narratives must be 'frozen' to be analyzed as evidence suggests that, in at least one important respect, they are different from written sources. Scholars have noted that a written document, while often biased in its original formulation, at least becomes permanent as it is archived and 'subtracted from time'. The original biases may be compounded by the interpretations of the historian who makes use of the document, but at least the content remains unaltered and may be interpreted by other parties. An oral tradition has additional problems. A primary or 'original' version (if such existed to begin with) is lost to modern scrutiny since it is replaced by later versions. What is left may be multiple layers of interpretations which have accumulated over time and a content that may only vaguely resemble an 'original' oration (1996: 11).

Oral accounts also present the additional possibility that they could have been completely changed from the original version after the fact (either consciously or unconsciously) to put forward a particular view of history. This makes their incorporation different from the historian's use of written documents since, as Keith Windschuttle points out, very

little of the written record that is available for historical interpretation "has been deliberately preserved for posterity". According to Windschuttle, "the biggest single source of evidence comprises the working records of the institutions of the past, records that were created, not for the benefit of future historians, but for contemporary consumption and are thus not tainted by any prescient selectivity. Most of these documents retain an objectivity of their own" (1996: 221).

Bruce Trigger also makes a similar point with respect to archaeological data. According to Trigger, "the past…had, and in that sense retains, a reality of its own that is independent of the reconstructions and explanations that archaeologists may give of it. Moreover, because the archaeological record, as a product of the past, has been shaped by forces that are independent of our own beliefs, the evidence that it provides at least potentially can act as a constraint upon archaeologists' imaginations". Although Trigger recognizes that the "propensity of value judgments to colour our interpretations" must be taken into consideration in analyzing archaeological data, he notes that "the deliberate construction and testing of two or more mutually exclusive interpretations of data can…increase the capacity for the constraints that are inherent in the evidence to counteract the role played by subjective elements in interpreting archaeological data" (1989: 381, 400). This capacity of both archaeological data and written documents to constrain interpretations is very different from oral testimonies, which are obtained specifically for the purpose of constructing history.

These problems with the accuracy and flexibility of a group's collective memory are why the anthropologist Morton Fried stresses the need for researchers to separate their own observations from the recollections of the people they are studying (1967: 84-5). Fried explains that statements made by aboriginal groups about the past are often inaccurate because these recollections can be infused with mythology. This is especially pronounced when groups have been dislocated in the process of colonization, which results in "a demand for a new mythology that bridges the gap between the acculturating native society and its new master" (1967: 94).[13] As Eleanor Leacock also has pointed out, "ethnohistorical studies of native North and South American societies… demonstrated that cultures reconstructed from interviews with tribal elders did not represent aboriginal times. To assume they did was to ignore the profound ways in which native peoples had been responding for centuries to Western trade and missionizing, and resisting invasion and conquest" (1982: 256).[14]

The “demand for a new mythology that bridges the gap between the acculturating native society and its new master", in fact, has created the potential for many native “oral histories” to be distorted by the views of romantic philosophies. In response to the increasing alienation, misery, urban filth and poverty brought about by the industrial revolution and capitalist exploitation, a number of romantic reactionaries have looked upon the past as a simpler, happier and more "natural" existence. Instead of conceptualizing technological advancements and increasing productivity as being a defining characteristic of our species' evolution, they are viewed as a kind of hubris, separating humans from their innate innocence and causing a "fall from grace". These romantic ideas are everywhere in current accounts of aboriginal culture, including those

developed by aboriginal intellectuals, where tribal societies are interpreted as having instinctively socialistic philosophies, egalitarian political structures and a widespread ecological consciousness.[15] Robert McGhee, a Curator with the Canadian Museum of Civilization, even notes that such romantic primitivism is referred to in French as *nostalgie de la boue* (literally "homesickness for mud").[16] According to McGhee, this is

> the sense that people who are simpler or more primitive than ourselves have lives which are more meaningful and more spiritually-grounded than our own. We apply this sort of thinking to our own ancestors with the assumption that, back in folkloric days, playing the fiddle badly and telling endless stories was somehow superior to watching television. Our culture applies the same sense to Native people, to whom it attributes a life of spiritual richness and environmental harmony to compensate for their material poverty and isolation from mainstream society…to such thinkers, archaeological interpretations of warfare or inter-ethnic competition before the arrival of Europeans, or evidence for pre-Columbian environmental degradation and the extinction of animal species is simply unthinkable…. (2004: 15).

While these romantic ideas originated within European populations, they have been absorbed in some of the "oral histories" of aboriginal peoples. This has been facilitated, according to Frances Abele, by the use of aboriginal viewpoints "in the service of environmental advocacy and conservationism". As Abele points out,

> prompted by the efforts of environmental activists to engage them in international advocacy to protect their homelands and way of life, indigenous peoples themselves may revise the way in which they see themselves and what they know, and they may begin to present themselves differently to the world (Abele, 2006).[17]

Abele notes that this circumstances was documented by Brosius (2000), when he showed that a "reinterpretation of anthropological research by anthropologists with a political mission" was the accepted as authentic by the indigenous group who were the subjects of the original research.

The reference to "anthropologists with a political mission" also shows that anecdotal anthropological evidence showing the existence of an aboriginal conservation ethic can be distorted by political imperatives. This information, in fact, is often provided by advocates, who are openly trying to make a case for increased aboriginal control over resource extraction. A good example is Harvey Feit - an anthropologist whose research is funded by the Crees to support their land claims negotiations, an aspect of which concerns control over resource management.[18] Although Feit's research must be judged on a case by case basis, there are a number of examples of implausible claims that are drawn from his own research. He claims, for example, that aboriginal peoples always have had the environmental management techniques present in modern society - harvesting sustainable yields determined through data collected on animal populations - for the purposes of conservation (1986: 49-65, especially 52 and 55). Such an assertion is highly unlikely when one considers that aboriginal harvesters are often illiterate, and

do not record their observations systematically so that they can be used to determine population dynamics.

With respect to the third body of evidence - the "extensive historical literature that documents the persistence of natural resource conservation as a social norm fostered by Aboriginal cultures long after their introduction to European capitalist market institutions" - one must also consider accounts indicating the opposite. What is often ignored, or downplayed, are the many cases where aboriginal groups did not appear to exhibit "natural resource conservation as a social norm". Stephen Bocking, even while trying to make a case for the existence of an aboriginal conservation ethic, for example, notes that in the 1950s and 1960s caribou scientists observed that native hunters "had little capacity for conservation, or even awareness of the need for conservation. Instead, faced with highly variable wildlife populations, hunters were opportunistic, killing wildlife wherever encountered. No restraint could evolve under conditions in which survival depended on a variable food source, and hence conservation and sustained yield were foreign concepts to Native hunters" (2005: 221). Bocking goes on to point out that "even as recently as 1981 scientists repeated the claim that Native hunting had once been limited only by primitive technology and low populations, and that rifles and snow machines had destabilized the balance between hunters and wildlife" (2005: 221).

John Sandlos, again while trying to support the existence of an aboriginal conservation ethic, also inadvertently shows many examples of the opposite. Many explorers and government officials are quoted as stating that aboriginal peoples made no attempt to show restraint in their harvesting methods, and that it was actually non-aboriginal people who recommended the imposition of government regulations to ensure that the introduction of efficient technology and population growth did not result in resource depletion (Kelsall, 1968: 209, 216, 227-8, 286; Symington, 1965: 52-69; Seton, 1911: 20, 48, 179; Pike, 1892: 47, 64-5, 108, 205, 271). These observers pointed to instances of indiscriminate slaughter and wounding without killing, two cases of which involved large numbers of caribou being left to rot.[19] John P. Kelsall also refers to the Inuit practice of wasting meat during the summer, where only the fatty parts of animals were consumed to supplement their diet, as well as the killing of pregnant female caribou to obtain "the favourite dish at all, the unborn young caribou cut from its dead mother". Kelsall remarks that "no practice seems more out of keeping with rational resource use, but it is still encountered" (1968: 219).

What needs to be explained, in fact, is how aboriginal peoples *could* have had the capacity to engage in intentional conservation historically. Aboriginal peoples had not developed numbers or other abstract forms of measurement, making it impossible for them to determine sustainable yields. Kelsall, in fact, noted that aboriginal peoples had a "heedless ignorance of the status of a limited resource" and "a limited perception of caribou abundance, because they lacked the wide-ranging synoptic view provided by aerial surveys" (Bocking, 2005: 221). Kenneth Hare (1955), a geographer from McGill University, argued that the accurate documentation of large scale vegetation patterns only became possible in the 1950s with the used of aerial surveys, which were a great improvement over field-notes taken on the basis of river travel with the assistance of

native guides (Bocking, 2005: 220). Therefore, there is no basis for environmental management practices in pre-literate and nomadic hunting and gathering societies.[20] This is even conceded by the anthropologist Marc G. Stevenson, who is an advocate for the recognition of aboriginal harvesting rights. He points out that

> far from being 'conservationists', Aboriginal peoples have been known to over-exploit resources, even to the point of extinction, especially where new and more effective technologies are adopted. A common strategy for most northern Aboriginal peoples was to 'hit' a hunting ground or fishing lake 'hard' to the point where the effort invested, as measured along a number of dimensions (e.g., physical, mental, social, economic, etc.), was no longer rewarded. The area or species was left alone, or 'fallow,' until it recovered to the point where effort once again produced the desired returns (Stevenson, pp. 168-169).

"Management" of wildlife, therefore, is likely to have just consisted of depleting resources until the carrying capacity of the area had been exceeded, and then moving to another location. It is highly probable that it is the abundance of wildlife that affected the limitations on aboriginal hunting practices, not any conscious attempt to conserve animal populations. Hunting and gathering differs from horticulture or agriculture because yields cannot be increased with human effort. Consequently, when an increase in population puts pressure on a resource, either an alternate resource must be exploited, or the population will correspondingly decrease. As the Archaeologist V. Gordon Childe puts it:

> the community of food-gatherers had been restricted in size by the food supplies available - the actual number of game animals, fish, edible roots, and berries growing in its territory. No human effort could augment these supplies, whatever magicians might say. Indeed, improvements in the technique of intensification of hunting and collecting beyond a certain point would result in the progressive extermination of the game and an absolute diminution of supplies (1936: 61).

Any "management" that actually does exist, in fact, likely occurs because of European influences. European societies had managed harvesting for centuries before they arrived in North America, and there are many instances of priests attempting to impart this knowledge to the native population (see, for example, Trigger, 1981: 27-28).[21] The need for conservation in European history came into being with population growth and technological development, both of which put a strain on natural resources. This is perhaps why, as Stevenson points out, conceptions of "management" are usually only articulated by younger native people who have been influenced by the "Whiteman's way" (2006: 68-69).

Assertions about the existence of an aboriginal "conservation ethic" generally are sustained by unwarranted inferences of commentators who, being influenced by *nostalgie de la boue* or other political imperatives, want to believe that such an ethic exists. John Sandlos, for example, is anxious to interpret any aboriginal practice as an indication of conscious aboriginal conservation. He criticizes Kelsall's references to the

indiscriminate slaughter of caribou as failing to consider "how this practice *might* contribute to the subsistence cycle [emphasis added]" (Sandlos, 2001, note 63). He also maintains that "one *could* interpret the consumption of fetuses as a cultural practice that prevents waste, given the necessity of late winter and early spring hunting [emphasis added]". It is even argued that the condemnations of the caribou "massacre at Duck Lake", where a large number of caribou were photographed rotting on the barren lands, failed to "consider the very different perspective of the Dene historian Ila Bussidor who was born in Duck Lake the same year as 'the slaughter'". A quotation is then provided by Bussidor claiming that

> the scientists were pointing to the carcasses left on the shores of Duck Lake as evidence of wastage, yet the Dene had been following their centuries-old method of survival. For them, leaving carcasses to be buried under the winter snow was a time-honored, reasonable way of storing some meat, in a land where people could never be sure of enough food for their families…Conservation Committee reports show that government officials talked about educating the Dene. But there's no record of anyone ever asking the Sayisi Dene why they killed so many caribou carcasses at one time and left the carcasses on the shores (Sandlos, 2001, note 66).[22]

But the photographic documentation of the mass killing shows that the "caribou [were] lying scattered over the barrens, some bloated and rotten, others eaten (all but the bones) by ravens". Such a circumstance does not indicate a "reasonable way of storing some meat" since the carcasses were not gutted and "buried under the winter snow". The fact that the caribou were either rotting or being eaten by animals means that these animals could not have been accessed as food at a later date to aid Dene survival. It actually indicates the far more likely scenario that an excess of caribou had been killed because of indiscriminate hunting methods. Bussidor, however, is an advocate for aboriginal control over environmental management and such a conclusion would not be consistent with this agenda.

Sandlos' most questionable interpretation, however, concerns his discussion of three Dene and Inuit "oral narratives" that he claims are indicative of conscious conservation. In this discussion, Sandlos first refers to the following Colville Lake (K'ahbamitue) story:

> a 'caribou person' named Cheely consults other caribou in the moments before his death and transformation into a human being: 'I want to make a deal with you,' he told them. 'Even if I become a human being in my next life, I want us to agree that we will always help each other.'

Sandlos then points to another Dene narrative where

> a hunter receives the terms of his relationship with the caribou from a member of the herds: 'the caribou said [to the hunter], 'we are just traveling north to a special place where our babies will be born. I came over to help you. Here, take my pipe and keep it all of your life. If you are hungry and can't get caribou, fill your pipe

> and think hard that you want to see me. I will come, but not every time. I will control the meetings we have, if necessary'.

In the third story examined by Sandlos, an Inuit Shaman, Orpingalik, attempts to attract caribou to his people with the following song:

> Wild caribou, land louse, long-legs,
> With the great ears,
> And the rough hairs on your neck,
> Flee not from me.
> Here I bring skins for soles,
> Here I bring moss for wicks,
> Just come gladly
> Hither to me, hither to me.

Although Sandlos maintains that these three stories are indications "that non-technical and non-professional conservation mechanisms do exist in northern Native cultures", they actually indicate the opposite - (misguided) attempts to attract animals so that *more* can be killed.

What is often promoted in the literature as a "spiritual" connection to the land, in fact, is a result of the *absence* of ecological understanding. Animistic beliefs are a reflection of hunting and gathering societies' lack of technological development and a lower capacity to control nature. People at this level of development reacted to scarcity by trying to appease animal spirits through various taboos and rituals.[23] Lack of success at hunting beaver, for example, was blamed by the Montagnais on feeding beaver bones to dogs instead of hanging them on trees or throwing them into the water, while the Southwestern Ojibwa thought "speaking ill of a beaver" would have the same effect (Krech, 1999: 201-3). It is these taboos and rituals that are referred to when anthropologists maintain that aboriginal peoples are "respectful" towards animals (Krech, 1999: 203; Nadasdy, 2003; Stevenson, 2006: 169).

Claims about aboriginal peoples' environmental management philosophies are even more questionable when the implications of the continuing existence of these various taboos and rituals are considered. If one assumes that following particular procedures in killing, butchering and disposing of wildlife will increase the availability of animal populations regardless of the number harvested (see Krech, 1999: 203-4) how will this aid environmental sustainability? Instead of limiting harvesting, bones will be hung in trees and "nice things" will be said about animals. These beliefs are actually obstacles to environmental management because fallacious assumptions will be used in efforts to restore wildlife populations.

Aboriginal spiritual beliefs, in fact, can even result in actions that are contrary to environmental management. One example is the belief in reincarnation; killing *more* animals becomes the answer to wildlife scarcity, since a greater number are believed to be "reborn" after they are killed. This led some aboriginal people to resist the

implementation of wildlife management practices on the grounds that animal spirits would be offended (Krech, 1981: 87). Another example is the idea that animals "choose" to be hunted. Stella Spak, for example, explains that

> according to traditional Dene understandings, animals consciously participate in hunting and a hunter can only kill animals that have allowed themselves to be hunted. The placing of a satellite collar around an animal, instead of accepting its offer, is denying the animal's right of choice and hence exhibits not only extreme disrespect towards the animal, but also endangers the continuation of everybody's survival as the animals may refrain from offering themselves in the future (Spak, 2005: 238; see also, Nadasdy, 2003).

With this logic, it would be impossible to impose any limits on resource harvesting. Even the mass slaughter of endangered species could be justified with the unsubstantiated opinion that the sighting of an animal indicates that it "has offered itself to the hunter".

The environmentally destructive character of these beliefs was recognized by government officials 100 years ago. Fred G. Durnford, in his testimony before the senate hearings on the north in 1907, for example, noted that "a very sad fact in connection with these caribou is that the Indians think the more they kill of them the more there will be. The result is that they slaughter them indiscriminately" (quoted in Chambers, 1907: 33). A similar view was expressed with respect to the Inuit in the early 1920s by the dominion government entomologist and conservationist C. Gordon Hewitt. According to Hewitt, "some of the Eskimo tribes entertain a belief that the caribou are sent to them by the spirit world to kill, and that unless they kill every caribou they meet, whether they require it or not for food or clothing, the spirit world will not send them any more". This belief, in Hewitt's view, "naturally leads to wasteful slaughter on the part of the Eskimos, and it is to be hoped that missionaries and others will endeavor to dispel such a pernicious idea" (Hewitt, 1921: 12, 66, 286).

Although it seems obvious that aboriginal peoples' harmonious relationship with their environment before contact was influenced by their relatively inefficient technology and subsistence economic systems, this self-evident reality is ignored, or downplayed, because it discredits the interpretation of aboriginal practice as occurring by design. J.R. Miller, for example, initially states that aboriginal peoples' "technology and value system made their pressure on the resources of their world light. Lacking iron and firearms, they were unable to inflict much damage on fellow humans and animals". Immediately after this, however, he states that "their animistic religion restrained them even from developing the desire to do so" (Miller, 1989: 20). But how could aboriginal people develop a "desire to inflict damage" on anything, when they had no concept of the technological resources necessary to do so?

Erin Sherry and Heather Myers, academics from the University of Northern British Columbia, go even further and maintain that the assertion that aboriginal peoples did not have a significant impact on the environment because of their primitive technology is a "myth". To support this assertion, they provide a quotation from Douglas Nakashima,

who maintains that hunter-gatherers developed “sophisticated hunting tools and strategies whose diversity and ingenuity defy their dismissal as primitive” (Nakashima, cited in Sherry and Myers, 2002: 354). (An assertion that is meaningless when one considers that references to technology being "primitive" are always relative; in this case, the technology of hunter-gatherers would be *relatively* primitive in comparison to the iron tools and machines introduced by Europeans). Sherry and Myers then use the example of the bow and arrow and dart/throwing complexes, which they maintain “rivaled Western technology until the invention of the repeating rifle in the late 19th Century” (2002: 354). Sherry and Myers maintain that this is the case because of dubious claims by Vuntut Gwitchin elders who assert that “a man on snowshoes could reliably kill game from a distance of 70 m with a bow and arrow”. The absence of iron, on the other hand, is apparently not seen as being significant, and there is no mention of its relationship to technological development and environmental destruction (2002: 354).

Although Sherry and Myers concede that aboriginal peoples have been known to engage in environmentally destructive practices, even to the point of "promoting the decline of species", they point out that "aboriginal communities do not condone them - and they are not limited to aboriginal harvesters" (2002: 349). But doesn't the fact that both aboriginal and non-aboriginal harvesters engage in these destructive practices , as well as the reality that many non-aboriginal people also "do not condone" them, mean that environmental sustainability has nothing to do with whether one is aboriginal or non-aboriginal? While it is important to stress that some aboriginal people are conservationists today, whether or not they are conservationists is not dependent upon their aboriginal ancestry, "spirituality", or traditional values. Instead, it concerns the particular political and economic context in which people are embedded. Most importantly, aboriginal attitudes towards conservation will be influenced by whether they occupy what Greg Poelzer has called a “productive interest” in policy development, whereby profits are accrued from commercial resource extraction (Poelzer, 2002).

The changing economic and political factors brought about by capitalist imperatives, in fact, explain why all cultures in the world today are becoming increasingly environmentally destructive. This shows the weakness of the last area of evidence pointed to by Keay and Metcalf to support their assertions about the probable existence of an aboriginal "conservation ethic" - evolutionary game theory. Although customary norms, such as the subsistence practices of aboriginal peoples, might be "robust", this merely indicates the fact that capitalism has developed unevenly historically. There might be "long-standing differences in behavioral norms across cultures" and there is a "relationship between variations in preferences and ethnic or cultural diversity, but cultural diffusion through globalization is also eroding these differences. Market forces, in fact, tend to break down the traditions of various cultures, subjecting them to the same pressures as modern societies (see, for example, Widdowson, 2006; Wood, 1996; Wolf, 1997).

The increasing influence of capitalist imperatives also explains why, as John Sandlos points out, "Native northerners have shown a historical capacity for depleting wildlife populations". Although Sandlos attempts to defend the existence of an aboriginal

conservation ethic by noting that “most Native depletions of wildlife populations were the result of market-driven responses to colonial economic activity in the North, and the entry of large numbers of non-Natives such as the Arctic coast whaling fleet", this assertion merely shows that it is economic and political factors, not a particular group's "spirituality", that determines environmental destruction or sustainability. This reality needs to be considered when examining aboriginal peoples' role in environmental management today.

The Political Implications of Assumptions of Innate Aboriginal Environmentalism

Assuming that aboriginal peoples have a "conservation ethic" has the potential to significantly impact natural resource and environmental policy. This is because it is likely that this assumption is erroneous, resulting in a misguided policy direction if it is uncritically accepted. Assuming that aboriginal peoples will automatically curtail their harvesting when such an impetus is absent, in fact, would result in what Keay and Metcalf refer to as open access harvesting. Although Keay and Metcalf are doubtful about the need for the current caution displayed by the courts in granting unfettered aboriginal harvesting rights, such prudence is warranted when one examines cases of what can happen when regulatory controls are relaxed.

In the case of current logging and fishing disputes, for example, a number of aboriginal groups now profit from cutting trees and selling lobsters and salmon, leading to numerous instances of environmental destruction. Aboriginal participation in the forest industry has resulted in unsustainable practices on a reserve in Alberta, the promotion of logging in environmentally sensitive areas in British Columbia (Poelzer, 2002), and comments by native harvesters in New Brunswick that they will cut down as many trees as possible because it is their inherent right (Anderssen, 1998; Blakney, 2003). With respect to fishing, numerous aboriginal harvesters have been charged in British Columbia for selling fish, even though they are supposed to only fish for food because of declining stocks (Chase, 1999). Disputes over lobster harvesting in New Brunswick also have involved aboriginal groups attempting to increase the number of lobsters trapped for commercial purposes in defiance of federal regulations. Some native groups were even asserting that they had a right to harvest lobsters during the breeding period when the fishery is normally closed, which would have been disastrous for the stocks (Simpson, 2006; DeMont, 2000).

Global capitalist developments now mean that even aboriginal subsistence practices cannot be relied upon for the achievement of conservation goals. Take, for example, the Inuit hunting of the bowhead whale, which is an endangered species. Although the Inuit agreed to a hunting moratorium in the 1970s to protect stocks, Inuit leaders argued for a resumption of the hunt on the grounds that it was necessary to preserve Inuit cultural identity. This was in spite of the concerns of bowhead specialists that killing even one whale could be a danger to the population. The fragility of the population is due to a number of factors that did not exist in the pre-contact period. This, along with the fact that modern technology is now used in the bowhead hunt, means that the continuation of Inuit subsistence practices today could result in the species’ extinction.

In addition to claims that killing bowhead whales was necessary to maintain Inuit identity, Inuit leaders maintained that the hunt should be allowed because it was non-aboriginal whalers who depleted the population, not the Inuit. Such an argument feeds into racist ideas that Europeans are naturally inclined towards environmental destruction, while aboriginal peoples, because of their "spiritual relationship to the land", are not. This disguises the reality that any group, regardless of their ancestry, can engage in unsustainable practices when certain historical and material circumstances are present.

Rather than protecting the environment from destructive practices, a separate native controlled regulatory environment will enable corporations to target aboriginal lands for development. Aboriginal people constitute the most economically marginalized segment of Canadian society, and as such, they will have the least power to resist offers from polluting industries relocating to their jurisdiction. This is already becoming apparent in the case of international whaling,[24] where corporate interests in Norway and Japan are aligning themselves with aboriginal groups in the Pacific Northwest in their attempts to restore commercial whaling. Although aboriginal groups in Washington State have gained exemptions from regulations banning whale hunting on the basis that it is a "traditional" or "sacred" activity (Mickleburgh, 1998; “When a whale is a culture”, 1998),[25] perhaps the right to make "a moderate living" by commercial whaling will be the next step.[26] After all, can't a legal argument be made that the commercial sale of whale meat is needed for aboriginal "subsistence"?

Environmentalists often align themselves with aboriginal groups in resisting environmentally destructive developments because it is assumed that aboriginal peoples’ have a natural conservation ethic. But aboriginal groups often use their resistance to development as a lever to extract more favourable land claims agreements from the government, and capitulation occurs after a settlement is reached (Bergman, 1998).[27] This can be seen in the case of the James Bay project in the 1990s, where the Province of Quebec announced that its public utility, Hydro Quebec, would begin a massive extension of a hydroelectric project it began in the 1970s. After mobilizing an international campaign and publicizing the havoc that such a project would wreak on Cree hunting grounds, development was put on hold. At the time, the environmentalist David Suzuki argued that the environmental impacts of the project explained "why the Cree are rejecting all offers of money and compensation and are prepared to fight any further development on their lands" and maintained that "the resolution of their battle with Hydro Quebec will inform us whether we can change our priorities and values" (Knudtson and Suzuki,1993: xxxi-xxxii).

.

But Suzuki's romanticism was to collide with the events of history. "The resolution of their battle with Hydro Quebec" was the Crees signing an agreement to allow logging, mining, and hydro-electric development to take place. In exchange for this assault on their "sacred lands", Quebec agreed to pay the Crees $3.5 billion over 50 years. And although the agreement promised to consult the Crees in how development would proceed so as to protect hunting and trapping, it was well known that the proposed hydroelectric project was going to flood vast areas of the region (Aubin, 2002; Seguin,

2002; “Quebec to increase money to Crees", 2002). And while the Sierra Club and Révérence Rupert continued to oppose the project, they maintained that, without the support of the Crees, it was unlikely that they could be politically successful (Séguin, 2006) .

The Crees' actions mirrored that of the Inuit a decade earlier. The Inuit agreed not to oppose the James Bay hydroelectric project in exchange for a $1 billion in compensation, also to be distributed over 50 years. Historian Olive Dickason notes that the Inuit leader at the time, Charlie Watt, was "among the more conciliatory Native leaders" towards development (1992: 405). Being president of the Makivik Corporation (the body created to administer the $90 million compensation package from the first phase of the hydroelectric project), as well as being associated with a number of business interests, meant that Watt would be one of the main beneficiaries of striking a deal with the government of Quebec (Cameron, 1994).

And the James Bay case is not unusual. It has been the sequence of events for all aboriginal "resistance" to development projects in the 1990s. Challenges to projects are brought forward by aboriginal groups on the grounds that it will destroy sacred fishing areas and hunting grounds. The next thing that occurs, however, is that aboriginal groups enter into negotiations with corporations involved in developing the area. After much "consultation" and legal wrangling, "Impact and Benefit Agreements" are signed, offering construction contracts, hiring targets for aboriginal employees, compensation, board memberships and research funding.[28]

In addition to the problem of environmental groups being demobilized by the Trojan Horse of aboriginal environmentalism, the assumption of the existence of an aboriginal conservation ethic could also be used by corporations to "greenwash" their unsustainable practices. It is now common for corporations to use aboriginal groups for public relations purposes, often by including their "traditional knowledge" in the review of development projects. This was the case with the attempts of BHP to develop a diamond mine in the Northwest Territories. Although BHP declared that it did not know what traditional knowledge was or how it could contribute to the environmental assessment of the mining development, it agreed to pay for the research that was being undertaken. Similar types of incentives are associated with the promotion of traditional knowledge at the international level, where entities such as CIDA and the World Bank fund traditional knowledge studies in developing countries to overcome resistance to development. The assumption that aboriginal peoples are “natural stewards” of the environment, therefore, could give projects that have been vetted by traditional knowledge findings an artificial legitimacy (see Widdowson and Howard, 2006).

This tactic, in fact, is already being exploited by Shell Oil in its efforts to portray oil sands as environmentally sustainable. In a half page advertisement in *The Globe and Mail* on January 26, 2002, for example, it is noted that “Bertha Ganter, an elder from the local community, is helping us to see the environment from a new perspective. She’s teaching us about Traditional Environmental Knowledge...we’re applying what we’re learning not just to improve our Athabasca Oil Sands Project, but to ensure we respect the

needs of generations to come". But nowhere in Shell's literature is it shown how this "new perspective" will help to "respect the needs of generations to come". All this advertisement does is to encourage readers to accept environmentally destructive activities such as oil and gas development on the basis that an aboriginal elder supports it.

The Inherent Problems with Romanticizing Aboriginal Culture

Despite the lack of evidential support for an aboriginal conservation ethic, many may remain unconvinced that the romanticization of aboriginal culture is a problem; sure, it may be a distortion of history and aboriginal culture, but what is the harm if it makes aboriginal people feel proud of their heritage? After all, aboriginal people are suffering terribly, and the myth that they have a "spiritual relationship" to the land is one way for them to feel good about themselves.

But besides the obvious problem of encouraging one group to see themselves as being racially superior to others, publicly accepting the idea of "natural environmentalism" has two very serious consequences. First, it justifies the devolution of responsibility for environmental management to aboriginal groups without ensuring that the proper regulatory controls are in place. This will not only increase the potential for environmentally destructive activities; it also prevents aboriginal peoples from being actual participants in the process of determining the carrying capacity of various ecosystems, and instituting measures to ensure that they are not exceeded.

Secondly, assuming that the relative environmental harmony that existed in North America before contact was due to some kind of mysterious aboriginal spirituality prevents us from understanding the actual causes of environmental deterioration, which is a deterrent to finding effective solutions. There are serious environmental problems facing the planet, and it is entirely possible that their continuation could lead to our species' extinction.

Such dire circumstances require a critical investigation of the actual causes of the environmental crisis. The fact that the emergence of capitalism has resulted in widespread environmental destruction, regardless of the spiritual beliefs of the cultures that have been absorbed into its orbit, indicates that this mode of production is a major contributor to the problem. It is the imperatives of this system, and its fundamentally unsustainable character, that needs to be examined. Assuming that certain cultures are innately predisposed to protecting the environment, regardless of their connection to capitalism, is a distraction from attempting to understand this very important reality.

Endnotes

[1] Although this subject cannot be taken up in this paper, it should be mentioned that references to the "customary laws" of aboriginal people generally pertain to custom, not to law.

[2] This article won the John Vanderkamp Prize. The prize is awarded to the best paper published in *Canadian Public Policy* each year.

[3] Keay and Metcalf also point out that "on the international stage, advocates for Aboriginal rights often emphasize the unique nature of Aboriginal preferences and community structures that are reflected in the sensitivity to environmental and natural resource sustainability inherent in their decision-making" (2004:

8), but it is not shown how these advocates come to this conclusion. All that is provided is an endnote that states the following: "such a view is reflected in the United Nations Draft Declaration on the Rights of Indigenous Peoples; a document formulated with the participation of indigenous peoples. For example, the preamble links increased control over their lands and environment for indigenous peoples with the ability to maintain their political, social and economic institutions, as well as their cultural and spiritual traditions. The draft declaration goes on to recognize that respect for the indigenous cultures and traditional practices will contribute to sustainable development and the, [sic] 'proper management of the environment'" (2004: 19, note 43).

[4] The source referred to by Keay and Metcalf is Boxall, Murray and Unterschultz (2003).

[5] Haener (2001) and George, Berkes and Preston (1996) are the sources provided as support for these assertions

[6] The source referred to by Sandlos is Usher, 1987: 6-7.

[7] Sandlos does not provide a source from which these claims are drawn, but earlier he mentions two books of George Wenzel's - *Animal Rights, Human Rights* (1991) and *Clyde Inuit Adaptation and Ecology* (1981).

[8] The sources used as support for this claim by Keay and Metcalf are Leal (1996) and Gladstone (1953).

[9] Carlos and Lewis (1993, 1999) are referred to as the sources by Keay and Metcalf.

[10] The first source for evolutionary game theory provided is Sethi and Somanathan (1996).

[11] The second source for evolutionary game theory is Henrich at al (2001)

[12]The archaeologist Mark Whittow has noted that locals visiting a 12th Century archaeological site in Jordan had "vivid and contradictory accounts of their father or grandfather living in the house the team was excavating" even though the site had not been occupied for hundreds of years. He goes on to point out that "anthropologists have demonstrated how fluid and adaptable oral history can be" and that "the oral history of a tribe was primarily concerned to explain the present" and "would adapt and shape its view of the past, creating stories with supporting details to explain and justify present circumstances". According to Whittow, even during continuous settlement of an area accurate memory lasts no more two generations and "in times of …social upheaval change is quicker and more profound" (Whittow, 1996).

[13] Bruce Trigger also makes this same point when he recognizes that there is a "tendency for lore to be refashioned as circumstances change" (1986: 336).

[14] Leacock maintains that the following anthropologists found that interviews with tribal elders were inaccurate accounts - Esther S. Goldfrank, *Changing Configurations in the Social Organization of a Blackfoot Tribe during the Reserve Period*, 1945; Joseph Jablow, *The Cheyenne in Plains Indian Trade Relations 1795-1840*, 1950; Oscar Lewis, *The Effects of White Contact upon Blackfoot Culture*, 1942; Elman R. Service, *Spanish-Guarani Relations in Early Colonial Paraguay*, 1954.

[15] The term "Eden" is even used to describe aboriginal societies before contact. See, for example, Chamberlin (1975); MacDonald (1974); and Brody (2001).

[16] See also, Sandall (2001), for a similar discussion of "romantic primitivism".

[17] Abele cites Anderson (2004) as a source for this point.

[18] Fikret Berkes, a Professor of Natural Resources at the University of Manitoba, notes that in 1974 that he "turned down an excellent opportunity to do a postdoctoral fellowship with a leading marine ecologist, to work instead with my anthropologist colleague, Harvey Feit, a move considered suicidal by many of my scientist friends" (1999: xii). Although Berkes does not explain the reservation his 'scientist friends' had, presumably it was because Feit was known for his advocacy work, not scientific objectivity.

[19] Warburton Pike noted a case were 326 caribou were killed, 200 of which were "left to rot in shallow water" (1892: 204). John P. Kelsall also refers to Manitoba Branch Officer J.D. Robertson's eyewitness account of a mass killing at Duck Lake describing "caribou lying scattered over the barrens, some bloated and rotten, others eaten (all but the bones) by ravens". J.D. Robertson, Caribou Slaughter -Duck Lake (Manitoba Game Branch Officer's Report, 1955), quoted in Kelsall, 1968: 219.

[20] Charles A. Bishop points out, for example, that aboriginal peoples were unlikely even to have a concept of overexploitation since they lacked an understanding of animal population dynamics. For a further discussion of this point, see Bishop 1981: 52-56.

[21] Trigger points out that Father Le Jeune, a Jesuit Priest, encouraged the allocation of hunting territories to each Montagnais family as a resource management measure.

[22] The source referred to is Bussidor and Ustun Bilgen-Reinhart (1997).

[23] This point was made succinctly by the frontier historian W.H. Hutchinson in his "Dissenting Voice Raised Against the Resurrection of the Myth of the Noble Savage". For an elaboration of his views see Martin, 1981: 13-14.

[24] This is also the case with respect to commercial fishing on the west coast. When the Fraser River was closed to commercial sockeye salmon fishing due to dwindling stocks, natives were allowed to continue to fish for food. This led a retailer to buy fish from native fishermen (Chase, 1999).

[25] For a view advocating the hunt see Bristol (1998).

[26]This is the conclusion of the Sea Shepherd Society, which claims to have obtained documentation through the Freedom of Information Act (US) in October of 1998, revealing that Makah Tribal Council's plans to start a whaling industry with Norway and Japan as clients. According to the Sea Shepherd Society, "an e-mail dated April 3, 1995, from Michael Tillman, Deputy Commissioner at the Southwest Fisheries Science Center of the National Marine Fisheries Service, to NMFS colleague Margaret Hayes and several others, relates a conversation between Hayes and Makah legal representative John Arum, saying "Maggie informed me that Arum had told her that Japanese interests had approached the Makahs about selling whale meat to them. So I wasn't surprised when he asked me generally about commercial sale." Sea Shepherd Conservation Society, 1998.

[27]Even if land claims have been settled, there can be aboriginal opposition if additional government funds are not forthcoming. NWT Premier Stephen Kakfwi stated that support could erode for the pipeline if the federal government did not provide the territorial government with $200 million. According to Kakfwi, "if we don't find the resources to fix our roads and improve our social health and program services, then some of the leaders might start advocating that we're not ready and we shouldn't be so openly supportive of large-scale development" (cited in Chase, 2002).

[28] For example, after Dogrib Grand Chief Joe Rabsesca signed an Impact and Benefit Agreement he noted that "We have always been open for business". "BHP, Inuit sign IBA", 1998. See also Belhumeur, 1997.

References

Abele, Frances. 2006. "Beyond Respect and Control: Traditional Indigenous Knowledge in Canadian Public Policy", in Michael Orsini and Miriam Smith (eds), *Critical Policy Studies* Vancouver: UBC Press.

Alvard, M.S. 1993. "Testing the 'Ecologically Noble Savage' Hypothesis", *Human Ecology,* 21: 355-387.

"Ancient man's quest for meat killed off the largest animals", 2001. *Toronto Star,* June 8: A19.

Anderssen, Erin. 1998. "Why Indian loggers won't quit", *The Globe and Mail,* April 24: A1/A6.

Anderson, David. 2004. "Nationality and 'Aboriginal Rights' in post-Soviet Siberia" in Takashi Irimoto and Takako Yamada (eds), *Circumpolar Ethnicity and Identity - Senri Ethnological Studies 66* Osaka: National Museum of Ethnology.

Aubin, Benoit. 2002. "Dancing with the enemy: After three decades of strife, Quebec and the Cree sign a historic agreement", *Maclean's,* 115(7), February 18: 20.

Barsh, R.L. and J.Y.Henderson. 1999. "Mashalling the Rule of Law in Canada: Of Eels and Honour", *Constitutional Forum* 11.

"Basics of Wasase, The", 2006. *New Socialist*, September-October 2006: 42.

Berkes, Fikret. 1999. *Sacred Ecology: Traditional Ecological Knowledge and Resources Management* Philadelphia: Taylor and Francis.

Bergman, Brian. 1998. "Megawatt ambitions", *Maclean's,* 111(2), March 23.

Bishop, Charles. 1981. "Northeastern concepts of Conservation and the Fur Trade", in Shepard Krech III (ed), *Indians, Animals and the Fur Trade* Athens: University of Georgia Press.

"BHP, Inuit sign IBA", 1998. *News/North,* December 14: A27.

Blakney, Sherri. 2003. "Aboriginal forestry in New Brunswick", *Environments*, 31(1): 61-78.

Belhumeur, Carole. 1997. "Cooperation produces successful relationship", *Native Journal,* February.

Bocking, Stephen. 2005. "Scientists and Evolving Perceptions of Indigenous

Knowledge in Northern Canada", in Ute Lischke and David T. McNab (eds), *Walking a Tightrope* Waterloo: Wilfrid Laurier Press.
Boxall, P. G. Murray and J. Unterschultz. 2003. "Non-Timber Forest Products from the Canadian Boreal Forest: An Exploration of Aboriginal Opportunities", *Journal of Forest Economics* 9: 75-96.
Bristol, Tim. 1998. "'Eco-colonialism' at Makah", *Native Americas*, Winter (http://nativeamericas.aip.cornell.edu).
Brody, Hugh. 2001. *The Other Side of Eden* Douglas & McIntyre.
Brosius, Peter J. 2000. "Endangered Forest, Endangered People: Environmentalist Representations of Indigenous Knowledge", in Roy Ellen et al. (eds), *Indigenous Environmental Knowledge and Its Transformations: Critical Anthropological Perspectives* Amsterdam: Harwood Academic.
Bussidor, Ila and Ustun Bilgen-Reinhart, 1997. *Night Spirits: The Story of the Relocation of the Sayisi Dene* Winnipeg: University of Manitoba Press.
Callicott, J. Baird and Michael P. Nelson, 2004. *American Indian environmental ethics: An Ojibwa case study* Upper Saddle River, N.J.: Pearson-Prentice-Hall.
Cameron, Stevie. 1994. "Boss of the north: Senator Charlie Watt faces critics over his handling of the James Bay deal" *Maclean's*, 107(13) March 28: 12-13.
Carlos, A.M. and F.D. Lewis. 1993. "Indians, the Beaver and the Bay", *Journal of Economic History* 53: 465-94.
Carlos A.M. and F.D. Lewis. 1999. "Property Rights, Competition and Depletion in the Eighteenth Century Canadian Fur Trade", *Canadian Journal of Economics* 32: 705-28.
Chamberlin, J.E. 1975. *The Harrowing of Eden: White Attitudes toward Native Americans* New York: Seabury Press.
Diamond, Jared. 1997. *Guns, Germs and Steel* New York: W.W. Norton.
Chambers, Ernest J. (ed). 1907. *Canada's Fertile Northland: A Glimpse of the Enormous Resources of Part of the Unexplored Region's of the Dominion* (Ottawa: Government Printing Bureau, 1907).
Chase, Steven. 1999. "DFO seizes salmon from B.C. warehouse", *The Globe and Mail,* December 4: A3.
Chase, Steven. 2002. "NWT Premier request aid for region", *The Globe and Mail,* February 5: B5.
Childe, V. Gordon. 1936. *Man Makes Himself* London: Watts and Co.
DeMont, John. 2000. "Trouble at Sea", *Maclean's,* May 22: 21-22
Dickason, Olive Patricia. 1992. *Canada's First Nations* Toronto: McClelland and Stewart.
Feit, H. 1973. "The Ethno-Ecology of the Waswanipi Cree: or how Hunters Can Manage their Resources", in B. Cox (ed*), Cultural Ecology: Readings on the Canadian Indians and Eskimos* Toronto: McClelland and Stewart: 115-25.
Feit, H.A. 1986. "James Bay Cree Indian Management and Moral Considerations of Fur Bearers" in *Native People and Renewable Resource Management*, Symposium of Alberta Society of Professional Biologists, Edmonton, ASPB: 49-65.
Flanagan, Tom. 2000. *First Nations? Second Thoughts* Montreal: McGill-Queen's University Press.
Fried, Morton. 1967. *The Evolution of Political Society* New York: Random House.
George, P. F. Berkes and R.J. Preston. 1996. "Envisioning Cultural, Ecological and Economic Sustainability", *Canadian Journal of Economics* 29; S356-60.
Gladstone, P. 1953. "Native Indians and the Fishery of British Columbia", *Canadian Journal of Economics and Political Science* 19:20-34.
Haener M.K. 2001. "Can Stated Preferences Methods Be Used to Value Attributes of Subsistence Hunting by Aboriginal Peoples", *American Journal of Agricultural Economics* 83: 1334-40.
Hare, Frederick K. 1955. "Mapping of Physiography and Vegetation in Labrador Ungava: A review of Reconnaissance Methods,", *Canadian Geography* 5.

Henrich, J. et al, 2001. "In Search of Homo Economicus", *American Economic Review* 91: 73-78.
Henderson, J.Y. 1997. *The Mi'kmaq Concordat*. Halifax: Fernwood Publishing.
Hewitt, C. Gordon. 1921. *The Conservation of Wild Life in Canada* New York: Charles Scribner's Sons.
Keay, Ian and Cherie Metcalf. 2004. "Aboriginal Rights, Customary Law and the Economics of Renewable Resource Exploitation", *Canadian Public Policy* XXX(1): 1-27.
Kelsall, John P. 1968. *The Migratory Barren-Ground Caribou of Northern Canada* Ottawa: CWS.
Knudtson, Peter and David Suzuki. 1993. *Wisdom of the Elders* New York: Bantam Books.
Krech, Shepard. 1999. *The Ecological Indian* New York: Norton.
Krech, Shepard. "'Throwing Bad Medicine': Sorcery, Disease, and the Fur Trade Among the Kutchin and Other Northern Athapaskans", *in* Shepard Krech III (ed), *Indians, Animals and the Fur Trade* Athens: University of Georgia Press.
LaDuke, Winnona. 1993. "Social Justice, Racism and the Environmental Movement", www.zmag.org/zmag/articles/barladuke.htm.
Leal, D. 1996. "Community-Run Fisheries', in B. Crowley (ed), *Taking Ownership* Halifax: Atlantic Institute for Market Studies.
Leacock, Eleanor. 1982. "Marxism and Anthropology", in Bertell Ollman and Edward Vernoff (eds), *The Left Academy: Marxist Scholarship and American Campuses* New York: McGraw Hill.
Lu Holt, F. 2005. "The Catch-22 of Conservation: Indigenous Peoples, Biologists, and Cultural Change". *Human Ecology* 33(2): 199-215.
Magne, Martin. 1999. "Archaeology and Rocky Mountain Ecosystem Management: Theory and Practice", *The George Wright Forum* 16(4): 67-76.
MacDonald, Robert. 1974. *The Owners of Eden: The Life and Past of the Native People* Ballantrae Foundation.
Martin, Calvin. 1981. "The War Between Indians and Animals", in Shepard Krech III (ed), *Indians, Animals and the Fur Trade* Athens: University of Georgia Press.
McGhee, Robert. 2004. "Between Racism and Romanticism, Scientism and Spiritualism", Kooyman and Kelley (eds), *Archaeology on the Edge* Calgary: University of Calgary Press.
Mickleburgh, Rob. 1998. "Confrontation looms over Indian whale hunt", *The Globe and Mail*, October 1: A1, A10
Miller, J.R. 1989. *Skyscrapers Hide the Heavens* Toronto: University of Toronto Press.
Nadasdy, Paul. 2003. *Hunters and Bureaucrats* Vancouver: UBC Press.
Oates, J.F. 1999. *Myth and Reality in the Rain Forest* Berkley: University of California Press.
Pike, Warburton. 1892. *The Barren Ground of Northern Canada* New York: MacMillan.
Poelzer, Greg. 2002. "Aboriginal Peoples and Canadian Environmental Policy: No Longer at the Margins", in Debora L. VanNijnatten and Robert Boardman (eds), *Canadian Environmental Policy: Context and Cases*, Second Edition, Toronto: Oxford University Press: 7-106
"Quebec to increase money to Cree in James Bay settlement: report", 2002. *Canadian Press Newswire*, January 18.
Royal Commission on Aboriginal Peoples [RCAP]. 1996. *Report of the Royal Commission on Aboriginal Peoples,* 5 Volumes. Ottawa: Supply and Services.
Redford, K.H. 1991. "The Ecologically Noble Savage", *Cultural Survival Quarterly* 15: 46-48.
Sandall, Roger. 2001. *The Culture Cult*. Boulder: Westview Press.
Sandlos, John. 2001. "From the outside looking in: Aesthetics, politics and wildlife conservation in the Canadian north", *Environmental History,* January.
Sea Shepherd Conservation Society, 1998. "Makah Grey Whale Hunt to be First Step in Commercial Enterprise", October 23.

Séguin, Rhéal. 2002. "Crees, Quebec sign historic deal: Agreement is first to offer management of natural resources and full autonomy", *The Globe and Mail*, February 8: A7.
Séguin, Rhéal. 2006. "Troubled waters", *The Globe and Mail,* December 19: A12.
Sethi R. and E. Somanathan 1996. "The Evolution of Social Norms in Common Property Resource Use", *American Economic Review* 86: 766-88.
Sherry, Erin and Heather Myers. 2002. "Traditional Environmental Knowledge in Practice", *Society of Natural Resources,* 15.
Seton, Ernest Thompson. 1911. *The Arctic Prairies* New York: Harper and Row.
Simpson, Jeffrey. 2006. "Burnt Church report cuts to the chase", *The Globe and Mail*, April 26.
Slobodkin, L.B. 1968. "How to be a predator", *American Zoology* 8: 43-51.
Smith, Natalie. 2001. "Are Indigenous People Conservationists?", *Rationality and Society* 13(4): 429-461.
Spak, Stella. 2005. "The Position of Indigenous Knowledge in Canadian Co-Management Organizations", *Anthropologica* 47(2): 233-246.
Stevenson, Marc G. 2006. "The Possibility of Difference: Rethinking Co-management", *Human Organization* 65(2): 167-180.
Symington, Fraser. 1965. *Tuktu; The Caribou of the Northern Mainland* (Ottawa: The Queen's Printer, 1965)
Terborgh, J. 1999. *Requiem for Nature* Washington: Island Press.
Trigger, Bruce. 1989. *The History of Archaeological Thought* Cambridge: Cambridge University Press.
Trigger, Bruce 1986. "The Historians' Indian: Native Americans in Canadian Historical Writing from Charlevoix to the Present", *Canadian Historical Review* LXVII(3).
Trigger, Bruce G. 1981. "Ontario Native People and the Epidemics of 1634-1640", in Shepard Krech III (ed), *Indians, Animals and the Fur Trade* Athens: University of Georgia Press.
Usher, Peter. 1987. "Indigenous Management Systems and Conservation of Wildlife in the Canadian North", *Alternatives* 14(1): 3-9.
Von Gernet, Alexander. 1996. *Oral Narratives and Aboriginal Pasts: An Interdisciplinary Review of the Literature on Oral Traditions and Oral Histories*, Department of Indian and Northern Affairs, April.
Weaver, Jace (ed). 1996. *Defending Mother Earth: Native American Perspectives on Environmental Justice* New York: Orbis Books.
Wenzel, George. 1991. *Animal Rights, Human Rights* Toronto: University of Toronto Press.
Wenzel, George. 1981. *Clyde Inuit Adaptation and Ecology: The Organization of Subsistence* Ottawa: National Museums of Canada.
"When a whale is a culture: Can a hunt that breaks today's rules be justified by ancient practices", 1998. *The Globe and Mail*, October 2: A14.
Wilson, Angela. 2004. "Indigenous Knowledge Recovery is Indigenous Empowerment", *American Indian Quarterly* 28(3 and 4); 359-372.
Windschulttle, Keith. 1996. *The Killing of History* Free Press.
Whittow, Mark. 1996. *The Making of Byzantium , 600-1025* Berkeley: University of California Press.
Widdowson, Frances 2006. *The Political Economy of Aboriginal Dependency: A Critique of the Royal Commission on Aboriginal Peoples,* Unpublished Ph.D. Dissertation, York University, Toronto.
Widdowson, Frances and Albert Howard. 2006. "Aboriginal "Traditional Knowledge" and Canadian Public Policy: Ten Years of Listening to the Silence", Paper Presented at the Annual Meeting of the Canadian Political Science Association, York University, Toronto.
Wolf, Eric R. 1997. *Europe and the People Without History* Berkeley: University of California Press.
Wood, Ellen Meiksins. 1996. *Democracy Against Capitalism* Cambridge: Cambridge University Press.