
Social and Economic Barriers to Subsistence Harvesting in a Northern Alberta Aboriginal Community

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Abstract: A community survey conducted in the Little Red River Cree Nation of northern Alberta identified several socio-economic barriers that impede peoples' ability to spend time in the bush and to engage in subsistence harvesting. This paper presents the results of the community survey, along with a discussion of the impacts of reduced harvesting and several options for mitigating harvesting barriers. The practice of subsistence harvesting is understood here as being essential for the enactment and maintenance of certain local social systems and cultural values.

Keywords: aboriginal peoples, subsistence harvesting, country foods, community health, traditional knowledge, Little Red River Cree Nation

Résumé: Une enquête communautaire réalisée au sein de la Nation crie de Little Red River au nord de l'Alberta a identifié plusieurs obstacles socioéconomiques limitant la capacité des membres de la collectivité à passer du temps dans la brousse et à pratiquer la récolte de subsistance. Cet article présente les résultats de l'enquête communautaire, ainsi qu'une discussion des conséquences de la récolte réduite et des nombreuses options pouvant pallier les obstacles à la récolte. La pratique de la récolte de subsistance est entendue ici comme essentielle à l'actualisation et à la préservation de certains systèmes sociaux et valeurs culturelles au sein de la collectivité locale.

Mots-clés: peuples autochtones, récolte de subsistance, aliments traditionnels, santé communautaire, connaissances traditionnelles, Nation crie de Little Red River

Introduction

For several decades now, a good deal of academic research concerning aboriginal peoples has striven to overcome the popular notion that these cultures have been assimilated, that whatever remains of the "traditional" is peripheral while the core of aboriginal life has been westernized. Much of this work has focussed upon hunting and gathering practices by illustrating their resiliency and importance, both in terms of their economic benefit for communities and in terms of their cultural significance. This research tradition, which was nascent in Canada in the early 1970s (Feit 1973; Freeman 1976), was infused with a new spark by the monumental Mackenzie Valley Pipeline Inquiry of the mid-1970s. In his final report, Mr. Justice Thomas Berger (1977) illustrated that the northern Canadian landscape continues to be a homeland and provider for aboriginal peoples rather than a desolate frontier awaiting modernization. This principle has been continuously substantiated and reiterated in writings by various scholars over the past three decades concerning aboriginal groups across Canada (Berkes, Hughes, George, Preston, Cummins and Turner 1995; Brody 1982, 2001; Condon, Collings and Wenzel 1995; Feit 1987; Jolles 2002; Salisbury 1986; Scott 1986; Tanner 1979; Tobias and Kay 1993; Usher 1987). In Alaska, an entire government department has been devoted to addressing the importance of subsistence harvesting (see Fall 1990 for an overview). As social changes in aboriginal communities have persisted and intensified, so too have academic efforts to depict these changes as part of a complex cultural process of negotiation and interweaving, rather than a wholesale process of assimilation.

While subsistence harvesting regimes remain strong in many aboriginal communities, there is cause for concern about the impacts of the vast sociocultural changes that have occurred in these settings over a relatively short period of time. The widespread shift from a mobile

lifestyle following a seasonal round to a sedentary one of community living has resulted in certain disruptions to harvesting regimes (see Damas 2002 for an examination of the Canadian Inuit case). In many parts of northern Canada, this shift to community life may have occurred as recently as the 1960s, just two generations ago. In these new community settings, Aboriginal peoples have witnessed the introduction of wage employment, the decline of the trapping industry and the introduction of a wide range of consumer goods, including new, high-cost harvesting technologies. While all these conditions existed in presedentary life to some degree, they have multiplied in scope and intensity following community settlement. In addition, the vast knowledge base that guides aboriginal hunters and gatherers has come under threat as bureaucracies have become entrenched in their societies, making demands on their time and reshaping the way that knowledge is transferred between generations (Cruikshank 1998: 45-70; Ingold 2000; Nadasdy 2003). These elements combine together to produce a set of circumstances in which it can be difficult to maintain harvesting regimes with the same coherence and frequency as in the past. This condition has very real quality of life implications in Aboriginal communities, where in many cases harvesting practices have been the focus around which life is oriented.

Following the lead of other authors (such as Fienup-Riordan 1986; Wenzel 1991), this paper examines the causes and effects of barriers to subsistence harvesting, in this instance through a case study conducted in the Little Red River Cree Nation (LRRCN) in northern Alberta, Canada. During the summers of 2001 and 2002, the LRRCN partnered with the Sustainable Forest Management Network¹ to undertake a harvest survey and a land-use mapping project in order to document the activities of local harvesters. The harvest survey also posed several questions about people's access to bush resources and factors that may impede their access, which are the focus of this paper. We shall first begin with some background information on the LRRCN and its subsistence harvesting regime before discussing the survey results and the potential (and realized) impacts of a decline in harvesting. While the findings here are unique to the communities in question, they very likely have application in aboriginal communities that exhibit a similar harvesting pattern and settlement history to that of the LRRCN.

Background on the Little Red River Cree Nation

The LRRCN is comprised of three communities (Fox Lake, Garden River and John D'or Prairie) that lie on the

Peace River in northeastern Alberta. The total population of the LRRCN is around 2 500, with the largest community (Fox Lake) numbering around 1 300. Only John D'or Prairie is accessible by an all-weather road, while the other two communities can be reached via seasonal roads that are very sensitive to precipitation. These communities were formed quite recently, between about 1959 and 1969. Prior to this, people followed a seasonal round of subsistence hunting, gathering and trapping. They moved through the bush in extended family units, emerging several times throughout the year to congregate in larger numbers at the mouth of the Mikkwa (Little Red) River, where the Hudson's Bay Company had established a trading post (Lore 1990). Today, Cree language and traditional culture, including hunting and gathering, remain strongest in the two more isolated communities.

While LRRCN hunters and gatherers no longer spend as much time in the bush as their ancestors did, they continue to follow the same basic practice of focussing upon particular species at times when their behaviour is most predictable while engaging in more opportunistic harvesting at other times. Moose is by far the most important local food species, and moose hunting becomes the major focus of community attention during the rut, which lasts from around late September to late October. During this time, moose are responsive to imitation mating calls, and hunters may move to the bush for several weeks, often taking their families with them. Other species are also hunted during predictable periods, but are of lesser importance than moose. Bears are commonly found near rivers in the late summer and early fall as they seek out food to prepare for winter. They become fat at this time and are therefore more desirable to hunters. Ducks are often hunted during late summer as well, when they are unable to fly during moulting. Various species of berries and medicinally useful plants are harvested as they ripen at certain times of the summer and fall. Intensive trapping is becoming increasingly less common within the LRRCN (Pyc 1998: 74). Some people make short trips to traplines and cabins during the winter in order to trap part-time, but virtually no one moves their families to the bush for extended periods for this purpose any longer. Low fur prices make trapping an inefficient and unviable vocation today, and it is largely pursued in order to maintain ties to the past and simply to spend time in the bush and for the socialization of children to the cultural landscape.

Access to hunting grounds near the LRRCN communities continues to be regulated along kinship lines, as was the case prior to community formation. Families maintain seasonal camps in the same place every year, and hunt within the surrounding area. The locations of these

camps and the approximate areas used by others are well known to local hunters. One hunter was able to identify the hunting areas of the other families on a 1:250 000 topographic map, and the accuracy of his map was corroborated by several others. The family territories he identified covered virtually all of the area around his community for quite a distance. While the boundaries of family territories appear static and rigid on a map, in practice they are more fluid and approximate, with rights to access being recognized based upon continued use of the area in question. These family territories can be compared with those of the eastern Canadian Cree (as discussed by Berkes et al. 1991; Feit 1987; Scott 1986; Tanner 1986) though they do not appear to function as wildlife management units as explicitly as their eastern counterparts (see Nelson 2003: 50-54 for a fuller discussion of this comparison).

Impacts of Diminished Harvesting

Despite the high degree of continuity between present and past harvesting, there is cause for concern regarding the changes that have occurred. Many of the social problems facing First Nations communities, including alcoholism, physical abuse, suicide and a general feeling of anomie can be linked to the social vacuum that was created when subsistence harvesting and the seasonal round ceased to be the orienting focus of life. Previous research conducted in the LRRCN indicates that among adult males, those who maintain strong ties to the bush and the hunting lifestyle are best able to cope with the challenges of modern life (Crabbé 1998). These people derive much of their personal well-being and sense of belonging through a connection with the lifestyles of their ancestors. Those with little or no ties to the bush lifestyle were found most likely to be "drifting" in their lives, with no sense of direction or foundation.

Reduced harvesting can also have negative effects on a more collective level. For countless generations, the family unit has defined the Little Red River Cree hunting and gathering group, and vice versa. Subsistence harvesting remains one of the primary activities for actualizing kin relationships through shared activity. Spending time in the bush together also serves to express a sacred worldview concerning human relationships to animals and the land, which binds people together on a level not experienced in other commonly shared activities, such as games and crafting. Without this common experience, kin relationships are not strengthened. Consanguineal and affinal relationships (e.g., mother, uncle, sister-in-law) of course remain, but the substance of those relationships is diminished without the connection offered by

shared experience. This effectively weakens the social fabric that has provided stability and support for generations of Little Red River Cree. For those who can not or do not hunt, alternatives are limited. Local jobs are few, and, even if obtained, do not very well replace the spiritual element of the bush lifestyle, nor the companionship of family. Men who do not hunt and are unemployed retain their position as father, brother, son-in-law, etc. within their family, but Crabbé's (1998) research indicates their social role in it is greatly reduced.

Kin relationships are not only maintained through the shared act of harvesting, but also through the distribution and consumption of country foods. Without any foods to share, the social networks governing their distribution would be lost, along with all of their positive influences. As Jolles (2002: 314) notes, the importance of food in constituting identity and relationships is frequently underestimated vis à vis the actual harvesting practice. The sharing of country foods along with shared consumption expresses a whole range of sacred beliefs and values that are not embodied in more secular activities. As one person told the lead author, "You treat it like a gift;" to share country foods generously is to acknowledge that they have been given to the hunter rather than taken (Nuttall 1992: 142). We encountered many instances during fieldwork where hunters gave away their entire share of a kill to their relatives. In most cases, harvesters were unable to give to everyone as much as they would like to, because there is simply not enough country foods being brought into the communities to provide for the demands of the growing population. Many people stated that they would like to share more outside their families, but that they rarely had enough to do so. This reduction in extra-familial food sharing has been noted in other aboriginal communities as well (Condon et al. 1995).

A diminished harvesting regime would of course have more explicitly economic impacts as well, as the potential losses in terms of food value would be considerable. The results of the 2001 community harvest survey indicate that the LRRCN bush harvest would cost around \$2 million to replace at the local grocery store (Nelson 2003: 46). Loss of country foods would particularly affect impoverished households, who may rely on them for basic nourishment. A study by the Alberta Treaty 8 Health Authority (2001) indicates that buying a healthy family food basket in Fox Lake would require nearly all of a family's monthly social assistance cheque. This is quite a substantial figure when one considers that the majority of the adult LRRCN population receives some form of social assistance (Webb 2001). The statistic is even more troubling when one considers the nutritional contribution of country foods to

local diets (see Wein, Henderson Sabry and Evers 1991). Lack of access to cash, coupled with reduced availability of country foods means that many people are unable to meet all their dietary needs.

A reduction in harvesting and concurrent atrophy of land use may also create the potential for loss of future access to harvesting lands. The hunting territories discussed in the previous section are not owned per se, but are occupied based upon a recognized usufruct right. Should a kin group cease to use a territory for several seasons in a row, another group may justifiably occupy it for subsistence purposes. Should an area remain unused for considerable time, it may even open a window to intrusion from outsiders. Diminished harvesting might allow industrial developers to encroach upon previously used territories without fear of violating treaty rights. An inter-generational reduction in lifetime land-use area is already evident in the LRRCN, which can be seen as a “shrinking circle” when mapped out (Pyc 1998: 120). The demise of the trapping economy has played a large role in this reduction. During a mapping interview, one man expressed concern that the land-use area he outlined would be misconstrued as the extent of the LRRCN traditional territory, when in fact both he and previous generations of his family had utilized a much wider range. He worried that resource developers could use mapping information to justify operations in areas of importance to LRRCN harvesters that are not currently in use. Another man suggested that old trails should be kept open and old hunting areas occupied in order to preserve access for future generations.

Barriers to Subsistence Harvesting

The data discussed here concerning barriers to harvesting results from a household harvest survey conducted in all three LRRCN communities during the summers of 2001 and 2002. Owing to budgetary and time constraints, not all citizens could be interviewed, so a senior member of each respondent household reported on behalf of all members. This spokesperson was selected at the discretion of the household members, rather than through any specific direction from the research team. Two local research assistants from each community administered the survey in person. Households were defined in terms of actual physical living units, and approximately 50% coverage of all LRRCN households was achieved. In addition, the lead author conducted semi-structured interviews concerning subsistence harvesting and participated in harvesting activities. These experiences inform and enrich the discussion below.

In order to establish a baseline, respondents were asked if they would spend more time in the bush if they could. The vast majority (92%) answered positively. They were next asked their perceptions of inter-generational access to bush resources: specifically, whether the previous generation had greater or lesser access, and whether the future generation will have greater or lesser access. The majority (69%) perceive a steady decline, in which the previous generation had greater access than they do, and the next generation will have even less access. Finally, the survey asked people to report any factors that they feel act as barriers to their subsistence harvesting practices. The results are shown in Figure 1, and are summarized below.

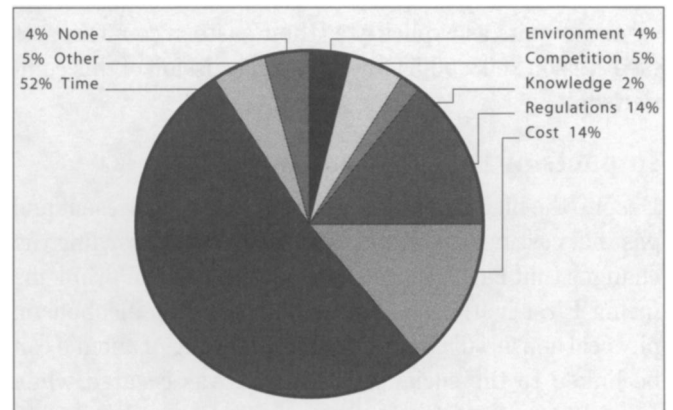


Figure 1: Perceived Barriers to Harvesting

Time (52%)

For clarity, several different responses are grouped under this heading, as they all reflect the essence of this barrier. Responses such as “kids in school,” “kids play sports,” “my job,” and “husband works” all refer to factors that limit the time available to engage in subsistence harvesting. If grouped this way, time barriers are by far the most commonly reported factor that inhibits harvesting activity. The lead author also noted during his interviews that lack of time to devote to subsistence harvesting was a recurrent complaint about the contemporary lifestyle in the LRRCN.

Lack of time may limit not only the duration spent in the bush on hunting trips, but may also inhibit one’s ability to get there in the first place. Hunting territories often lie a good distance from the community, and require extensive travel time to reach. Inability to make these trips may relegate hunters to more easily accessible, though less productive, hunting areas along roads and cutlines. In the minds of many Little Red River Cree, this barely qualifies as hunting, and provides none of the personal satisfaction of extended stays in the bush.² As shall be demonstrated below, time functions in a reciprocal relationship with other barriers such as cost and knowledge.

Wildlife Harvesting Regulations (14%)

Most reports of regulations as a barrier come from Garden River, which lies within Wood Buffalo National Park (WBNP). The residents there are subject to federal regulations on their harvesting that are enforced by Parks Canada, several of which are quite limiting. Each hunter must obtain a licence from Park officials, and is allowed to take only one moose per year. Moose hunting is prohibited altogether between June and September. The use of four-wheeled ATVs (All Terrain Vehicles, i.e., "quads") outside the settlement is prohibited and snowmobile use is allowed only for trapping purposes. Several Garden River residents have had quads confiscated by Parks officials in the past.

Regulations are, however, beginning to arise as an issue outside WBNP as well. In the spring of 2002 (the year following the survey), Provincial authorities attempted to enforce what they claimed was a long-standing ban on walleye fishing during their spawning run. Several people fishing at the mouth of the Mekkwa River (which lies just outside the reserve boundary) were threatened with prosecution if they failed to comply with this directive, which had never been locally heard of nor enforced previously. It is quite likely that "regulations" would be cited as a barrier more frequently if the harvest survey were conducted today.

Cost (14%)

Response bias may have in fact reduced the frequency of cost as a reported barrier on the survey. We found a relatively low level of unemployment among the survey respondents (29%) when compared with the estimate of 70% unemployment for the Nation as a whole (Webb 2001). Possibly those with employment were also more likely to participate in the survey, or the heads of household who completed the survey were more likely to be employed than other household members. Cost is frequently discussed as a harvesting barrier by social scientists who study changes to hunting and gathering cultures (e.g., Condon et al. 1995; Feit 1982; Fienup-Riordan 1986). Involvement in the fur trade created dependence among aboriginal peoples upon newer technologies for use in subsistence harvesting. This demand has continued to grow as new technologies become more available and accessible. Once initiated, new technologies tend to permeate hunting activity very quickly, and it becomes very difficult to reverse this process. For example, quads only became available in Fox Lake in the early 1990s, prior to which people commonly used horses to reach their bush camps. Today there are more quads than households in

Fox Lake. Quads enable hunters to make a greater number of trips in a shorter time, thereby allowing them to incorporate other activities into their schedule. While there are still a few horses around Fox Lake, it would be very difficult for an individual who could not afford a quad to use a horse for harvesting. The infrastructure of harvesting has changed so as to discourage this; it would be difficult for the horse-based hunter to co-ordinate activities with quad-based hunters, to obtain the needed tack, saddlebags and gear. Transportation is generally the greatest cost associated with contemporary harvesting (Feit 1982), and results at least in part from the time demands of modern life. Employed hunters must often make frequent short weekend trips to the bush if they are to make any, thereby necessitating speedy transportation. Other large expenses include firearms, ammunition, tents and food.

Competition (5%)

This barrier was reported quite infrequently. Competition amongst Nation members for hunting grounds is rare at this point, although one interviewee commented that some younger hunters have problems finding new places to hunt during the moose rut. There is a minimal degree of competition for hunting territories with non-aboriginal hunters and outfitters. Several families who formerly hunted along the western boundary of WBNP have left the area because of a bear outfitter operating there. Another family reported encountering a moose outfitter on their hunting grounds for the past two years. Even a small number of encounters, however, can have a disruptive effect on local harvesting practices. Those people with whom the lead author discussed this issue are unlikely either to share a hunting area with outsiders or to overtly challenge their presence; they are more likely to move elsewhere. This is partly a reflection of cultural norms concerning confrontation, and partly a mistrust of outsiders. Local hunters often report finding empty alcohol bottles at abandoned campsites, and doubt the judgment of what they consider to be inexperienced and careless trophy hunters. They are in fact more afraid of being shot than they are of sharing the land.

Environment (4%)

While many Little Red River Cree are concerned with the impacts of industrial activities upon the ecosystem, the survey results indicate that these impacts do not yet appear to inhibit harvesting. Pollution and ecosystem alteration in the areas are at this point minimal enough that the current situation might be described as preventative. However, while these factors do not yet limit har-

vesting *activity*, they may affect harvesting *success*. Several older interviewees commented that hunting was easier in the past because animals were more abundant. They also commented on the changes in the seasonal behaviour of the Peace River and its tributaries, which are corroborated by the findings of the Northern River Basins Study (Alberta Environmental Protection 1997). Since the W.C. Bennett Dam began operating on the Peace River in northern British Columbia., water levels have generally declined and seasonal floods have ceased. This has affected the small creeks and marshes that previously served as travel routes and as good wildlife habitat. Many have dried up while others have become stagnant and contaminated. One elder reported recently contracting "beaver fever" by drinking from a creek that he has used all his life.

Knowledge (2%)

It is interesting that knowledge (or lack thereof) was not more frequently cited as a harvesting barrier given the frequency with which it is discussed by community members, both in public and semi-directed interviews we conducted. Pyc (1998) also encountered repeated concerns that younger LRRCN hunters do not possess the same skills as their elders, and do not appear to be learning them. This knowledge gap is large enough that older hunters fear that the younger ones are "losing their culture" (Pyc 1998: 72).

Respondents may have failed to report knowledge as a barrier for several reasons. First, people may be reluctant to admit that their knowledge is lacking in some way. Further, respondents may indeed perceive lack of knowledge to be a problem, but do not consider it a barrier to being in the bush or to harvesting (though it may be a barrier to success). For some people, this may indeed be the case, but for others, the knowledge gap does indeed deter them from spending time in the bush. Nelson asked an interviewee who is in his late-teens if he believed that the bush culture would continue, and if he would become an active hunter in the future. He was not optimistic, and stated that "Maybe it would be different if I knew how to hunt."

Potential Solutions to Harvesting Barriers

While the effects of the barriers cited above may be summed up quite simply, generating solutions is much more complex. To do so is an attempt to reconcile lifestyles that are to some degree structurally incompatible, or at the very least not conducive to each other. Quite likely the affects of modern lifestyles on traditional harvesting practices will never be fully eliminated, but they may be mit-

igated. Given the importance of these traditional practices to Cree identity and well-being, it is essential that communities wishing to maintain these values and practices persist in generating even imperfect solutions. The following section suggests potential solutions for all the major barriers identified on the survey except for environmental degradation, which is both beyond our expertise and too complex a topic to discuss in the available space. For quick reference, the solutions presented here are summarized in Figure 2 at the end of the section.

Time

There will undoubtedly be growing demands on the time of adult LRRCN citizens as greater levels of education are sought, and as more people are able to find employment. School children will continue to face the same time constraints already present. While there is no real way to avoid these demands, steps can be taken to mitigate their impacts on people's time.

Most of the jobs that are available in the communities are administered by the LRRCN. It is therefore quite possible to structure job schedules so as to ensure that those who wish to hunt have the time to do so, particularly during favourable hunting periods. Some employees might choose to accept a reduced salary in exchange for more holidays or leaves of absence. For example, in the lead author's experience, some Yukon First Nations offer one week of paid "traditional leave" to their employees who wish to spend time on the land. At present, the demands on the administrative infrastructure of the LRRCN are reasonable enough that such flexibility is possible.

Education is also administered by the LRRCN, although the schools must meet the basic Alberta curriculum requirements. This allows for some degree of freedom in allocating time towards bush activities. At present, some of the LRRCN schools are quite proactive in this regard. Children are generally encouraged to accompany their parents during the moose hunting season, and sometimes to incorporate their experiences into their schoolwork. Students might be required to keep a journal of their activities or to complete a writing exercise on their experience. This not only alleviates the time barrier for children, but for their parents as well, who might not wish to leave their children for long periods of time to go hunting. Another approach to this problem is the incorporation of bush time into the school curriculum. J.B. Sewepegaham School in Fox Lake has conducted an extended fall fieldtrip for its students over the last few years. Parents are encouraged to accompany their children on these trips, thereby facilitating some incorporation of the children's school lives and home lives. Unfor-

tunately, extended fieldtrips can be expensive, and there is as yet no secure and consistent source of funding for these endeavours. It would be prudent for Provincial authorities to allocate education funds to such projects, and to replicate them in Garden River and John D'or Prairie (and hopefully in other First Nations as well).

Cost

Because of the apparently high employment level of our survey respondents, cost is probably a more substantial barrier than indicated by the survey results. Further, cost as a barrier functions in concert with lack of time; many people are only able to meet the costs of harvesting because they have permanent full-time employment. These jobs limit the time that they can devote to harvesting, which was indeed a frequently cited barrier. Fienup-Riordan points out that aboriginal hunters who work part-time or seasonally often have the best harvesting returns because they are best able to balance time and money (1986: 260). Unfortunately, they are often plagued by poor equipment that needs repair or replacement. Further, many younger hunters with families to support do not have the luxury of exchanging full-time for part-time employment. It is possible that many people would choose to focus more intensely on making their living through harvesting rather than through wage employment if they felt that this was possible in the face of the costs involved.

The most direct way to address this barrier would be the establishment of a guaranteed income program for subsistence hunters. Several such programs have already been established under various bodies, including two under the James Bay and Northern Quebec Agreement—JBNQA (one administered to the Cree by the Quebec government, the other administered to the Inuit by the Kativik regional government in northern Quebec), and more recently a program run by Nunavut Tunngavik Inc. (Royal Commission on Aboriginal Peoples [RCAP] 1996). The Crees' Income Security Program (ISP) under the JBNQA has received the most analysis because it is the oldest and most complex of the guaranteed income programs. Its mandate is to preserve subsistence harvesting as a viable way of life, recognizing its cultural significance to the James Bay Cree. The situation for them is much like the one I have described for the LRRCN: initial dependence upon fur markets, followed by drastically reduced fur prices and ever-increasing costs for hunting and camping equipment. Through the ISP, people can secure long-term access to funds that will allow them to remain on, or to return to, the land. Beneficiaries qualify for the program based upon the number of days they

have spent in the bush (away from the settlement) over the past year (RCAP 1996: 987).

Several evaluations following the introduction of the program indicate a positive reception and fulfillment of the stated goals. The average number of days per year spent on the land by practicing harvesters increased by 26% (from 170 to 214), and over 300 families used ISP funding to begin intensive harvesting (Feit 1982: 69). Of these families, over 200 remained in the program following the first year of funding. These tended to be families who had previous intensive harvesting experience but were forced to settle in town because they could not meet the expenses of long durations in the bush (*ibid.*). Critics of income security programs might point to several pitfalls, including the potential for misuse of funds and nepotism. These issues, however, plague many social programs administered in northern aboriginal communities, and should not be the basis for abandoning such efforts. While subsidization of subsistence harvesting is not a panacea, it is preferable to social assistance and other transfer payments. Unlike direct transfer payments, the ISP requires active participation by the recipient and promotes production, whereas social assistance does not (RCAP 1996: 985). Condon et al. found that many Inuit consider welfare to be detrimental to their community's health because it promotes laziness: "That's why them guys don't like to hunt anymore. They get free money, easy money from the government. Right there! Big spoiler for the younger people" (1995: 34). The ISP, on the other hand, promotes activities and attitudes that benefit both the individual and the community, and allows people to maintain traditional systems of self-sufficiency that have been upset by colonialism. Increasing the amount of time that hunters can spend in the bush can also prevent their economic marginalization. Greater productivity allows hunters to continue to make significant contributions to the family vis à vis wage-earners, thereby preserving egalitarian social ideals (Scott 1984: 83). Further, the ISP tends to promote family solidarity by allowing all the members to spend time in the bush. Feit reports that prior to the ISP, many all-male hunting camps had formed because there were insufficient funds to bring the entire family for an extended stay in the bush (1982: 66).

An increase in the number of hunters and time spent hunting might raise some concerns about potential over-harvesting of animal populations. This possibility is mitigated partly by the structure of the ISP (which pays beneficiaries based on their effort, i.e., days in the bush, rather than upon their harvesting returns), and partly through strong taboos against wastage. A comparison of harvests before and after the introduction of the Quebec

ISP does indeed demonstrate an increase in total big game and small game harvests (Scott 1984: 82). This resulted from the presence of new hunters, as each individual hunter maintained their pre-ISP harvest level (*ibid.*). However, the increase levelled out in subsequent years, probably once people were able to adapt their practices to accommodate greater numbers of hunters (Scott and Feit 1983). When more families began to produce meat for themselves, demand for this surplus decreased and people adjusted their harvest levels.

Wildlife Harvesting Regulations

This barrier will need to be addressed through dialogue with external parties, and possibly through legal procedures. Efforts have been underway for several years to establish a co-operative management relationship between Parks Canada and the LRRCN regarding Wood Buffalo National Park (Honda-McNeil 2000; Pyc 1998), but have been largely unsuccessful to date. As mentioned above, Nation members living outside WBNP have only recently encountered regulations upon their harvesting activities in the form of fishing regulations. Some effort at dialogue with provincial wildlife managers was made, though no consensus was achieved and no long-term relationship was established. While the LRRCN is part of a co-operative management arrangement that involves the Alberta government (see Natcher and Hickey 2002), this process focusses primarily upon commercial forestry and its effects upon animal habitat. Unfortunately, the arrangement currently involves neither federal Parks representatives, nor provincial wildlife managers who are responsible for harvesting regulations.

Competition

Limiting competition from outside hunters for the finite resources within the LRRCN traditional use area will most likely require co-ordination between the Nation and provincial wildlife managers. Efforts could be directed towards limiting the number of game tags awarded to recreational hunters and outfitters, and towards defining their geographic range such that it interferes with LRRCN harvesters as little as possible. At present, there exists no formal process for Nation leaders to consult with wildlife authorities on this level. Again, the co-operative management process mentioned above does not involve the authorities responsible for wildlife harvesting quotas.

Some Nation members discuss the possibility of becoming outfitters themselves in order to have more control over outsiders' hunting on their traditional lands. Some also feel that the economic benefits generated by

outsiders' hunting in the area should go to the Nation rather than to non-local outfitters. While this would certainly help the Nation put existing skills to use for economic growth, some members worry that outfitting would represent a violation of their relationship to animals because they do not perceive that non-aboriginal hunters have the same sacred relationship towards animals as they do. Further, outfitting would represent a re-allocation of scarce resources from local harvesters to foreign ones, which may be unacceptable to some. Outfitting is not unprecedented in the LRRCN, though. The Nation currently owns and operates a fishing lodge in the nearby Caribou Mountains, which caters to sport fishers. However, this area is rarely used by local harvesters, and therefore the lodge does not interfere much with local activity. Perhaps an outfitting operation that met this criterion might prove more acceptable to Nation members.

Knowledge

This is undoubtedly the most difficult barrier to address, partly because it is the cumulative result of several other barriers acting in concert (such as time and cost), and partly because it reflects a substantial change in Little Red River Cree lifestyle and social organization that is impossible to reverse. Overcoming this barrier is therefore a long-term challenge, one in which great efforts will not necessarily yield immediate results. As Ingold (2000) points out, skills are too often discussed as though they behave in a genetic pattern, as if they are simply passed down from one generation to the next, much like genes. He counters that we should instead conceive of a process of "enskillment," in which skills are grown in each individual, with room for variation and adaptation (Ingold 2000: 138). They are therefore subject to the context of the learner, rather than existing unto themselves. We have presented several possible explanations of why this barrier ranked low in the survey results, when it is in fact quite prevalent in the minds of Nation members. Because of the importance and complexity of this issue, we shall devote more time to addressing solutions than the survey results appear to warrant.

It is clear that children's life training and accumulation of knowledge in the LRRCN must be woven in with the new institutions that characterize modern life, especially schooling, since living in the bush full-time is simply not an option for most people. The lead author asked several elders if young people should focus more on learning about the bush, or if they should concentrate on schooling and jobs. They replied that school is most important because one can no longer live off the bush. Still, they said, it would be good if the youth could do both. This is not to say that tra-

ditional methods of teaching and learning should be subordinated to classroom learning. Indeed, it is unlikely that children could acquire much of the knowledge necessary for subsistence harvesting in this setting; they would instead be limited only to having *information*. This is a critical distinction. Goulet (1998) writes that knowledge acquisition among the Dene-Tha (the LRRCN's western neighbour) is considered to be the product of personal experience rather than the possession of information. In our experience, this is true of the Little Red River Cree as well. For example, the authors know that one can tell the difference between the tracks left in the late-spring by a cow moose that is pregnant and one that is not, because the hooves of the former tend to be more splayed than the latter. We cannot, however, translate this information into skilled practice on the land. To do so would require much experience along with guidance from learned trackers, which of course cannot be achieved in the classroom. To employ Ingold's (2000) metaphor of growth again, skills are planted rather than implanted, and must be given fertile ground in which to develop. This ground exists out on the land, rather than inside the school. It is therefore imperative that children are provided with the opportunity to spend a significant amount of time in the bush, and that this time is facilitated through the schools which have come to dominate their time. The fieldtrip program discussed above currently addresses this need in Fox Lake. However, similar efforts in the other two LRRCN communities have been more sporadic and of lesser duration. Taking 30 students to the bush for a week can be a costly endeavour, even if some gear is loaned to the program. As yet, there is no institutional support for this project because it lies outside the Alberta curriculum. It is vital that spending time in the bush and learning the necessary skills be considered a core subject for aboriginal students, rather than an extra-curricular activity.

There are also more pedagogical reasons to doubt the appropriateness of the classroom as a venue for learning subsistence harvesting and related skills. Aboriginal teaching styles have traditionally been indirect, and pupils learn from watching and questioning when needed, rather than through direct instruction (Goulet 1998). An interviewee explained that being in the bush with an elder is different from being in the classroom. There is more quiet time for reflection in order to absorb what one has learned. There is more independence for the pupil, and greater emphasis on self-sufficiency and individual practice rather than following rigid guidelines. Instructions are given when asked for. Indeed, it is rather contrary to local ideals to forcibly limit or direct the actions of another. It would be almost inconceivable for an elder to come into a class-

room and "teach" a lesson on subsistence harvesting. When invited to the classroom, elders tend to talk about their own experiences as an example for others to consider, rather than directly instructing students on what to do in the bush. As Cruikshank (1998: 54) points out, modern bureaucratic institutions (including schools) tend to fragment and compartmentalize knowledge so as to render it compatible with their bureaucratic guidelines. As a result, the "knowledge" that is delivered through these institutions is not an accurate or holistic reflection of knowledge transference and use in Aboriginal societies.

In addition, the Cree people with whom we worked tended to be much more at ease and open to conversation about these topics when they are in the bush. We have experienced a marked difference between conducting interviews in town versus in a bush camp. Those conducted in the bush tend to last longer, require less questioning or prompting on the interviewer's part, and elicit more in depth and profound responses. The bush is considered an appropriate setting for discussing things that are considered sacred in nature, such as human relationships toward animals. Institutions such as schools, in contrast, are part of the secular or profane realm. While they are not prohibitive of such topics, they are certainly not an inviting setting to discuss them from an elder's point of view. Transferring knowledge between these sacred and profane settings is frequently problematic for those who attempt to integrate traditional culture with modern institutions. Kayas Cultural College in Fox Lake has recently initiated a Cree Support Program (CSP) in order to develop a language and culture curriculum to be employed in the LRRCN's schools. The CSP co-ordinators are frequently required to deal with matters of protocol in the process of gathering learning materials for delivery in the classroom. Attempts to elicit stories from community members were largely unsuccessful until a teepee was constructed as an appropriate venue for conveying them.³ Certain subjects were considered altogether inappropriate for schools. In early community consultation meetings, elders dismissed the possibility of teaching about medicinal plants in the classroom, stating that this is best conducted in the traditional person-to-person manner (Tyler Tokaryk, Personal Communication, July, 2002). This is a particularly sensitive subject in the LRRCN, where medicine is still considered very sacred and powerful, and where many protocols regarding the transference of this knowledge persist. Other aspects of traditional culture are more open to negotiation, but often the same tension remains.

Much of this tension results from the persistence of cultural norms regarding teaching and learning in the

LRRCN, which are often incommensurate with Western ones. Knowledge and power are considered to be the products of experience rather than the possession of information, so one must therefore learn by doing, not by being told. Further, it is poor etiquette to claim publicly to be knowledgeable, directly or indirectly, by stating so or by offering knowledge to people who have not respectfully requested it (e.g., through a gift of tobacco) for an appropriate reason. As one interviewee said, "You are not supposed to put that stuff on display." Goulet notes this belief among Dene Tha: "[A] Dene's verbal claim that she or he is knowledgeable and powerful would be seen by other Dene as evidence that the speaker lacks knowledge and power" (1998: xxx). LRRCN elders are well aware of the challenges facing young learners today, and are eager to take proactive steps to help them. Yet, they are hesitant simply to abandon existing values in order to ease the transition, and are reluctant to rely wholly upon new institutions like schools for enskillment. Many feel that to do so would compromise the integrity of sacred knowledge. Thus, when they do participate in this new arena, there are many questions and concerns: Are these things being treated as sacred? Are they being respected and delivered in an appropriate way? The best way to alleviate such concerns is to ensure a high degree of community control in these matters, which can be best achieved by focussing attention on the bush as a learning venue.

All this is not to say that the schools have no place in teaching the skills and beliefs of subsistence harvesting, only that the entire learning domain should not be transferred there. Certain exercises are well suited to the classroom, such as hide scraping or butchering.⁴ It is also possible to plant knowledge before growing skills. Information about animals, animal parts, plants and other relevant items could be introduced in early grades before conducting field exercises. Fletcher (2001) has developed such a program in the form of an interactive CD-ROM for Innu students between grades four and six. This is accompanied by a teacher's manual with lists of associated activities. These are useful exercises that can be conducted prior to fieldtrips, but should not be taken as an adequate substitute for time spent on the land.

<i>Barrier</i>	<i>Elements</i>	<i>Potential Solutions</i>
<i>Time</i>	-wage employment -kids in school	<ul style="list-style-type: none"> • build harvesting leave opportunities into band jobs • incorporate field trips into the school curriculum
<i>Cost</i>	-transportation -firearms, ammunition, tents, etc.	<ul style="list-style-type: none"> • income security program for hunters
<i>Regulations</i>	-WBNP harvesting limitations -Alberta provincial regulations	<ul style="list-style-type: none"> • negotiation with Parks officials and Alberta wildlife managers for recognition of treaty rights • legal action to protect treaty rights
<i>Competition</i>	-outside hunters and outfitters	<ul style="list-style-type: none"> • work with Alberta wildlife managers to limit number of game tags and outfitting licences • become outfitters in order to increase control over outsiders' access to the area
<i>Knowledge</i>	-lack of bush time and experience for youth	<ul style="list-style-type: none"> • school-based fieldtrips to learn bush skills • in-class instruction on appropriate bush skills (e.g., hide scraping) • development of instructional tools/programs to teach bush skills

Figure 2: Summary of Barriers to Harvesting and Potential Solutions

Symbolic and Practical Values of Subsistence Harvesting

As more and more Aboriginal people migrate to cities, discussions of aboriginal identity increasingly revolve around symbolism and heritage. Since most urban aboriginal people's lifestyles (and, quite importantly, language) are not apparently different from those of other Canadians, symbols become more important for defining a unique aboriginal identity. Various emblems, clothing styles and ceremonial practices may be employed in order to distinguish themselves from others: dreamcatchers, the medicine wheel and clothes decorated with beadwork are commonly encountered symbols. Ceremonial practices such as sweat lodges and blessings are enjoying a revival in urban settings (Kulchyski et al. 1999: xxiii). These symbols and activities denote an allegiance to a certain heritage and a set of ideas that are held to be integral to aboriginal identity. It is increasingly understood within Native Studies scholarship that in the future, Aboriginal peoples will

draw upon this well of common heritage in order to forge a new self-concept within modern Canadian society, even though their daily lives will differ markedly from those of their ancestors (Newhouse 2000).

These concepts are less applicable, however, to rural Aboriginal communities, particularly those living in the isolated regions of the north. For these people, the traditional bush lifestyle does not merely represent a symbolic heritage, but rather survives as lived experience. The bush lifestyle does, of course, possess a symbolic value, and Aboriginal people have become more conscious of this value as the viability of subsistence harvesting becomes threatened (Fienup-Riordan 1986: 316). Still, this lifestyle does not retain its symbolic vitality and influence by existing as an abstract concept. Rather, its value is constituted and maintained through the practice of subsistence harvesting and related activities on the landscape. Enactment serves to define publicly one's social position with regard both to the land and animals as they exist in Aboriginal cosmology and to other people who share similar lifestyles and beliefs. Being in the bush and interacting with the landscape and animals is also said to produce certain characteristics, values and skills in individuals. During an interview, one woman compared her two sons, one of whom was raised mostly in the bush, the other in town. She noted a significant difference between them in terms respect and character, which she attributed to their different upbringings. The practice of harvesting further serves to maintain social networks between people who share a common worldview that is rooted in their relationship to the land and animals. Spending time in the bush serves to reify a set of values and beliefs that otherwise would exist only in abstract form.

For these reasons, it is vital that barriers to subsistence harvesting receive due attention through the types of measures suggested above, and that the bush lifestyle not be relegated to the status of a relic, or a symbolic heritage that exists only in memory. At the beginning of this paper, we illustrated how the basic structure of the subsistence harvesting regime in the LRRCN today mirrors that of the pre-settlement era. Despite changes in frequency and intensity, the essential organizational elements of the harvesting regime remain, including seasonal focus on various species, reciprocal exchange of country foods and organization of harvesting activities along kinship lines. It is equally important to understand that Aboriginal peoples have not become recreational hunters because they have moved into permanent settlements with grocery stores (Usher 1981). The 2001 harvest survey clearly demonstrates country foods continue to be harvested in significant quantities by LRRCN members, and distributed so

as to provide for as many people as possible. Further, the practice of hunting and gathering plays a vital role in maintaining social structures and relationships, a role far beyond mere recreation. The social influence of harvesting is especially important in northern communities like those of the LRRCN, where anyone under the age of 30 is likely just one generation away from a seasonally mobile subsistence lifestyle. The modest number of on-reserve career opportunities or other life-defining roles means that there are few alternatives for many young people who wish to remain in their communities. In such a case, the stability and empowerment offered by the bush lifestyle becomes a vital resource for people who are trying to negotiate a balance between old and new ways.

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Acknowledgments

This research has been made possible through the participation of the citizens of the Little Red River Cree Nation. In particular, we wish to thank our community research assistants, and Kayas College for institutional support. The authors gratefully acknowledge research funding from the Sustainable Forest Management Network, the Canadian Circumpolar Institute and the Department of Indian and Northern Affairs' Northern Scientific Training Program.

Notes

- 1 The Sustainable Forest Management Network is one of several Networks of Centres of Excellence that are funded by the Canadian government in order to promote research in areas of vital interest to Canadians. Please see <http://sfm-1.biology.ualberta.ca> for more information.
- 2 This type of opportunistic hunting has been described to myself and others (Pyc 1998) as "crow hunting" by LRRCN hunters, as it resembles scavenging more than skilled activity in the bush.
- 3 Therrien and Laugrand (2001) experienced a similar problem when conducting a workshop on traditional medicine with Inuit elders. The elders' first request was to alter the setting of the room so that it more closely resembled a campsite out on the land, which they considered to be an appropriate venue for discussing such things.

- 4 J.B. Sewepegaham school conducted a hide scraping program in the fall of 2002. Hunters were asked to loan their moose hides to the students to scrape and stretch for them.

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