

Subsistence in Northern Communities: Lessons from Alaska

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Indeed, hunting, fishing and gathering food is central to all indigenous peoples' survival. It is perhaps felt most poignantly in the thousands of communities scattered across the northern Polar Regions of our planet. The threat that all of the Arctic's indigenous peoples feel to their culture, their language, to their heritage and to their environment is intimately connected to the fear we all have regarding our inherent rights to hunting, fishing, and gathering.

– Aqqaq Lyngge (of Greenland), President, Inuit Circumpolar Conference (ICC); Remarks at the National Forum on the Future of Alaska Natives (1999)

Sadly, I know that too many of our colleagues only have passing familiarity of what we mean by subsistence. Subsistence is a word that many people use without really knowing what it means [to] the Native people of this land. Most Americans. . . think that subsistence means basic survival If you aren't familiar with the ways of Native people, you might not know that subsistence is more than just simple sustenance—it is a way of life. The gathering and harvesting of natural resources, by the natural Native people of this nation has been going on for thousands of years. Subsistence is so much a part of the fabric of native existence, that without it, there would be no culture, no tradition, perhaps no community, and certainly no means of giving expression to the spiritual aspects of Native life.

– Daniel K. Inouye, US Senator, Hawaii. Remarks at the National Forum on the Future of Alaska Natives (1999)

Introduction

In this era of expanding recognition that indigenous peoples are not “marginal peoples who are disappearing but rather marginalized peoples who are seeking accommodation” (Maybury-Lewis, 1997) within the states they inhabit, it is likewise gradually being accepted as a matter of public perception and policy that indigenous subsistence economies, too, are enduring, and further, that their continued existence offers some benefit to northern communities. These non-commercial and largely self-sustaining and self-regulating economies have not, as anticipated by assimilationists, gone the way of stone tools and other elements of what is often perceived as a noble but ar-

chaic and outmoded aboriginal lifestyle. On the contrary, although modernization, colonization, and other forces have encroached upon and to a certain extent modified subsistence lifeways, they have not eliminated them (Thornton, 1998). Indeed, in some cases, such as Inuit whaling, subsistence harvests of selected resources have *increased* per capita with economic development and an expanded wage economy (Freeman et al., 1998, p. 118). In other cases, subsistence harvests of natural resources have been revitalized, where they had been outlawed or suspended for a period of time. The recent and controversial renewal of whaling by the Makah of Washington State after a 70-year hiatus (Aradanas, 1998) is one example of this revitalization phenomenon, as well as of the flash points that surround contemporary subsistence debates.

Yet, despite this growing recognition of the enduring significance of subsistence, there is still a great deal of misunderstanding and division about just what it is or should be, and a great deal of wrangling and controversy surrounding how subsistence economies should be defined and regulated (Thornton, 1999). In Alaska, which pioneered subsistence legislation more than two decades ago, subsistence remains among the most contentious public policy issues today. While the politics of Alaskan subsistence, especially the fight between the state and federal government over management of subsistence hunting and fishing, are unique, as ICC President Lyngge points out above, the threats to subsistence economies are similar in communities throughout the North and in indigenous communities the world over. So what can we learn from the Alaskan experience with subsistence?

This paper examines the roots of the Alaskan subsistence crisis and suggests that there are lessons to be learned from the state and federal governments' myopic focus on fish and wildlife harvest allocation issues and their failure to consider subsistence economies in the broader context invoked by President Lyngge and Senator Inouye. These lessons include

1. The realization that the surrendering of aboriginal hunting and fishing rights may create as many problems as it solves;
2. The need to recognize the integral nature of subsistence to Native communities and cultures;
3. Acknowledgment that an accurate evaluation of the costs and benefits of subsistence must include social and economic policies as well as environmental ones; and
4. The recognition that to maintain the integrity of subsistence cultures, Native communities must take the lead in defining their own subsistence needs.

I argue that one reason why modern states and bureaucracies have been slow to recognize the benefits of subsistence cultures is that they are not well equipped to deal with the integral and communal characteristics of subsis-

tence economies, which are not only material but also profoundly social and spiritual in nature.¹ Similarly, Native socio-political organizations have not been especially well equipped to deal with subsistence management bureaucracies at the state and federal levels. This paper attempts to envision a context in which subsistence would become a more central focus and vital tool in long-term social and economic policy-making to sustain and develop northern communities in the future.

Lesson One: The Surrender of Aboriginal Hunting and Fishing Rights May Create as Many Problems as it Solves

... it is the intent of this legislation to protect the Alaska Native subsistence way of life, and the Alaska Native culture of which it is a primary and essential element, for generation upon generation, for as long as the Alaska Native people themselves choose to participate in that way of life, and to leave for the Alaska Native people themselves, rather than to the Federal and State resource managers, the choice as to the direction and pace, if any, of the evolution of the subsistence way of life and of Alaska Native culture.

– Congressman Morris Udall speaking on ANILCA, 126
CONG.REC.H. 10545 (Nov. 12, 1980)

The subsistence rights of Alaska Natives developed within a very specific and unique legal and historical framework, which I have analyzed in detail elsewhere (Thornton, 1998; 1999). Here I will emphasize only a few key aspects of this framework that have proved especially important in informing the current crisis over subsistence policy. First, Alaska Natives aboriginal hunting and fishing rights were implicitly recognized until formally *extinguished* by the state in the landmark Alaska Native Claims Settlement Act (ANCSA) of 1971. Although a seemingly minor provision of this massive social engineering legislation, both the federal and state governments considered the forfeit of these aboriginal rights necessary for industrial development of oil and other natural resources in the state to continue unimpeded. In addition, ANCSA gave Alaska Natives a stake in this industrial development by organizing them into regional and village for-profit corporations that controlled the land claims settlement consisting of title to 10 percent of Alaska's lands and compensation totaling nearly 1 billion dollars (\$3 per acre) for lands taken. Congress' interests overrode objections by Alaskan Natives, many of whom opposed giving up aboriginal hunting and fishing rights, but who were not given an opportunity to vote on ANCSA. For subsistence cultures, extinguishing these aboriginal rights proved to be an Achilles heel through which general weakening of subsistence protections could be effected over time.

In exchange for surrendering aboriginal hunting and fishing rights, Alaskan Natives initially received only a vague promise of protection from the US Congress, which called on "both the Secretary (of the Interior) and the

State (of Alaska) to take any action necessary to protect the subsistence needs of Natives." This promise was not realized in legislation at the federal level until 1980 with the passage of the Alaska National Interests Lands Conservation Act (ANILCA, PL 96-487). This federal subsistence law gave allocation priority to subsistence uses of wild resources over other consumptive uses, such as recreational hunting and commercial fishing, in times of shortage. Like ANCSA, Section VIII of ANILCA, containing its subsistence provisions, would not exist had it not been for Native pressure and resolve to maintain their rights. Despite the lofty intent expressed by Udall and others, ANILCA, like ANCSA, was the product of tenuous political compromises between competing interests. As such, it has been pivotal in framing the contemporary subsistence problem in terms of three divisive cleavages: 1) a cultural divide between Natives and non-Natives; 2) a rural-urban split in allocation of scarce resources; and 3) a federal vs. state conflict over management authority.

The law makes no attempt to define subsistence itself but only "subsistence uses;" These are "the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption" (Sec. 803). Yet the law does recognize a qualitative difference between Native and non-Native subsistence, wherein "the continuation of the opportunity for subsistence uses by rural residents of Alaska, including both Natives and non-Natives . . . is essential to Native physical, economic, traditional, and cultural existence" but only "to non-Native physical, economic, traditional, and social existence" (Sec. 801). The differences between "cultural" and "social" are not specified, but the distinction does make clear that Alaska Native subsistence practices are fundamental to their cultural survival.

However, ANILCA's recognition of the potential threats against Alaska Natives' cultural existence from a lack of subsistence opportunities was not enough to guarantee them preferential, much less exclusive, rights under the federal subsistence law. Through a political compromise, ANILCA awarded an allocation preference on the basis of rural residency rather than ethnicity, even though ethnicity-based preferences had earlier been granted for Alaska Native coastal community residents through the Marine Mammal Protection Act of 1972. In the case of terrestrial mammals and fish, species for which non-Native sport and commercial interests compete, the stakes were too high and the state and other non-Native interest groups vigorously opposed any form of Native preference or collective rights. Hence, the rural compromise was born, a bargain that recognized the strong dependency of Alaska's rural communities on subsistence but failed to enact any specific protections for Alaska Natives. At first glance the rural preference seemed to at least partially fulfill ANCSA's promise to provide for the Alaska Native subsistence needs. After all, prior to 1980 the majority of Alaska's rural residents were Natives and, though many Natives came from or migrated to urban centers, the majority

still lived in rural communities that were dependent on wild resources.² But any sort of long-range demographic analysis would have shown that these fragile majorities would not hold, and indeed it has not. By 1990, due to large migrations of non-Natives into the state, Alaska Natives comprised less than 20 percent of the state's population and had become minorities in both rural and urban areas. Today, more than half of Alaska Natives reside in urban areas, rendering them ineligible for subsistence harvests under ANILCA. At the same time, the growing non-Native urban majority in the state—three quarters of Alaskans live in urban areas, half in the Anchorage area—has become increasingly effective in attacking the rural preference at the state level. This is true both in the courts, which have found the rural preference in state law unconstitutional, and in the legislature, where efforts to pass a constitutional amendment permitting a rural preference consistently have been defeated.

Conflicts between the state and the federal government over the rural preference have exacerbated old tensions between the two over management of the state's lands and resources. Alaska has always had a strong federal presence, and today the federal government still controls 60 percent of Alaska's lands, much of which is protected from development as National Parks, Monuments, and Forests. But statehood in 1959 gave Alaska the right to manage its own fish and wildlife, and it is a prerogative that Alaskans strongly seek to maintain, if not by modifying their own constitution then by amending ANILCA, or both.

When the state's rural preference was declared unconstitutional, a crisis ensued, as all state residents became de facto subsistence users. In response, the federal government deemed Alaska out of compliance with ANILCA and in 1990 took over management of subsistence hunting, and more recently (1999) fishing, on federal lands. The state, in turn, maintained management authority over state and private lands, thus creating an odd patchwork with dual regimes and regulations.

At the same time, the federal government has been generally more sensitive to Native sovereignty issues, in part due to the special status of Native Americans in the US Constitution and the trust responsibility this carries. In 1993 the Secretary of the Interior listed 226 Alaska Native communities as federally recognized tribes and the "inherent sovereign powers" of these tribes "over their members and territory" were underscored in a 1998 Executive Order (#13084) by President Clinton. Although it is not clear what long-term effects this recognition will have on management of subsistence, the prospects for co-management of resources by Native tribes and the federal government are beginning to be explored.³ The state, in contrast, has been slow to follow suit, just as they have been slow to protect Native opportunities for subsistence vis-à-vis non-Native interests.

On balance, then, the ANSCA/ANILCA solution of extinguishing Alaska Native hunting and fishing rights in favor of weak subsistence lifestyle protections under a dubious rural preference has created as many problems as it has solved. Despite the lofty expectations of framers like Congressman Udall, ANILCA especially has served to divide interests along cultural, geographic, and governmental lines, thus paralyzing subsistence policy in ways that are inimical to building a long-term foundation for Alaska Natives' economic and cultural well being. Alaska's hostility to Native and rural preferences (a reflection of the state's increasingly urban, non-Native majority) has effectively alienated Alaska Natives, thus boosting their support for federal management of subsistence. Yet the federal government, while recognizing the importance of Native subsistence to their cultural existence, sees fit only to protect it through a weak rural preference and hopes that its present management role is temporary until the state comes back into compliance with ANILCA. As a result, while the subsistence crisis has temporarily abated, the resolution is not a stable one, and it is still not clear that Alaska Native subsistence interests will be safeguarded in the future. As the distinguished Canadian Judge Thomas Berger (1985, p. 65) observed: "In effect ANILCA is a partial restoration of Native hunting and fishing rights, but it does not go far enough. More is required if subsistence is to remain a permanent feature of Native life and culture." A fuller restoration of Native subsistence rights, although seemingly untenable in the present political environment, may prove in the long run to be the most effective and stable means of meeting Congress' obligations to provide for Alaska Native subsistence needs.

Lesson Two: Subsistence Economies are Integral to Native Communities and Cultures

Subsistence is about existence itself. It is about the meaning of life. It is about pain, sorrow, and happiness. It is about satisfaction, renewal, and hardship. It is about humor. It is about discipline, knowledge, and wisdom, to name a few.

– Statement on subsistence by Merle Apassingok representing Gambell, AK (1998, p. 81)

One lesson to be learned from the Alaskan subsistence policy debate is that Native peoples, despite the alienating effects of colonization and modernization, continue to conceptualize subsistence as an integral part of their culture, identity, and being. As such, we need to view it in other than market terms. When asked to define or translate the term "subsistence" into their own language, Alaskan Natives invariably offer foundational and embracing definitions, such as "our way of living," "our way of being," "our culture." Indeed, even in English the definition carries these connotations, although they are not dominant. The dominant conception of subsistence in English is much

narrower and less positive; it is an image of basic sustenance, of eking out a living, of impoverishment.

The broader and richer Native conception underscores the integral and integrated nature of subsistence. It is reflective of a primal perspective of the environment that was once common to all our species and which is still shared by most indigenous hunting and gathering peoples of the world. Anthropologist Robert Redfield (1953) characterized this primary view of the environment as possessing the following tenets: a) humanity and nature are sacredly conjoined—thus we cannot speak of humans *and* nature (as separate) but only of humans *in* nature (part of it); b) relations between humans and nature are based on exchange and orientations *with* rather than dominion and mastery *over* nature; and c) “Man and Not-Man are bound together in one moral order. The universe is morally significant. It cares . . .” Redfield argues that a great transformation of the human mind has occurred (at least among agricultural peoples) in the past 10,000 years since the advent of agriculture, and we find this primary view being abandoned. “Man comes out from the unity of the universe . . . as something separate from nature and comes to confront nature as something with physical qualities only, upon which he may work his will. As this happens, the universe loses its moral character and becomes to him indifferent, a system uncaring of man.”

Modern fish and game management, whether at the state or federal level, grows out of the latter, alienated perspective, while Alaska Native notions of subsistence are still ideologically rooted in the primary perspective. Thus, the state concentrates exclusively on monitoring and controlling the physical aspects of subsistence, such as fish and wildlife populations, harvest levels, seasons and bag limits, and the like, while Native subsistence hunters and fishers engage in a wide range of social and spiritual practices designed to preserve (few would use the term “manage”) a moral, physical, and social order with non-humans that extends well beyond the material realm. As a consequence of this cultural and paradigmatic divide, a great deal of miscommunication and misunderstanding occurs between Natives and non-Natives not only about the meaning of subsistence but also how it should be valued and protected. This is evident in both the economic and social realms of public policy.

In the economic realm, the state tends to undervalue subsistence by viewing it as something outside of the “real” economy, which involves cash and production on an industrial scale. At one level, this seems justified, for in Alaska subsistence harvests comprise only two percent of the total fish and wildlife harvest, compared to 97 percent for commercial uses and one percent for sport takes (Wolfe, 1998). But at another level, subsistence is by far the state’s largest employer, engaging tens of thousands of people each year who contribute to household, local, and regional economies through production,

distribution, and trade of resources. Unfortunately, most economic analyses do not even factor subsistence into their projections. If they do, they typically only calculate subsistence production values and measure them exclusively in terms of “replacement costs.” Replacement cost figures are based on estimated costs of substituting subsistence foods with similar products from market. Based on figures ranging from three to five dollars per pound, it is estimated that the rural subsistence harvest in Alaska—averaging about 375 pounds per person compared to just twenty-two pounds per person in urban areas—has a monetary value between \$160 and \$267 million dollars (Wolfe, 1998, p. 3). In Canada, similar replacement cost values have been calculated for Nunavut where the food harvest was estimated at \$30 million (Simpson, 1999). These figures demonstrate that subsistence is a vital sector of the rural economy in northern communities. And yet they represent only a small part of the story, as they do not include non-food subsistence products and the myriad socio-cultural benefits of subsistence lifestyles.

Subsistence is more than a production economy; it is also a social economy with complex distribution, consumption, and participation patterns. It is not only about how much you take from the land, but where you take it from, whom you take it with, whom you share it with and in what context. These relationships define the very core of rural Alaska Native communities. At the same time, integral social aspects of the subsistence economy are often harder to isolate and quantify than harvest levels, and thus have not been as well documented. But those figures we do have, particularly from Native communities in rural Alaska, are revealing. For example, according to 1997 Alaska Department of Fish & Game data (ADF&G-CPDB) for the Yup'ik Eskimo community of Tatitlek, 100 percent of households used subsistence resources, 88 percent harvested them, 100 percent gave away resources to other households, and 100 percent received them from other households. This means that even households that did not harvest resources, such as those composed of elders unable to harvest, still received resources and even shared them with other households. Such figures are not uncommon in rural Native communities highly dependent on wild resources.

In another recent ADF&G study of the Inupiat Eskimo community of Wales in Western Alaska the social ecology of sharing was explored in detail (Magdanz & Utermohle, 1998). Researchers found that sharing occurred primarily among extended families encompassing multiple household and three to four generations of kin linked by traditional social organizational ties. They also documented a minority of “super households,” (about 20 percent of all households) whose members accounted for 70 percent of harvest production. These super households had an abundance of able-bodied labor and therefore became the centers of subsistence production and distribution. This pattern, sometimes referred to as the 30-70 rule (the percentage of high-producing

households is typically closer to 30), is common throughout Native Alaska and illustrates the communal dimensions of subsistence economies and how they build and reinforce healthy social networks, customs, and values.

Unfortunately, because state management of subsistence emphasizes allocation and harvest levels among various user groups, it has largely ignored the benefits and realities of the social economy of Native subsistence. Worse, its culturally biased allocation schemes threaten some aspects of traditional Native social economies and “self-management” (see Feit, 1998) systems. Most glaringly, individual bag limits and seasons for fish and wildlife harvests are often out of sync with the communal and seasonal subsistence patterns. As the Wales example and the 30-70 rule demonstrate, some individuals and households will harvest much more than others based on their ability and resources to do so. Harvest levels of these individuals often exceed state bag limits, thus subjecting them to prosecution, even though they may be distributing much of their catch to other members of the community. Similarly, regulations on seasons and age and sex regulations are set primarily with the interests of satisfying sport hunters and not subsistence users. These cultural biases were successfully challenged by the Athabaskan community of Lime Village in the case of *Bobby v. Alaska* (1989. 718 F. Supp. 764), which found that subsistence regulations must be consistent with local customs and traditions of resource harvesting unless there is an overriding biological conservation concern. In Lime Village, under federal subsistence management, this verdict has led to some sensible revisions. Regulations now provide for year-round moose and caribou hunting and have replaced individual bag limits with communal quotas (see Caldwell, 1998). Still, in most areas the biases toward individualism and other ethnocentric Euroamerican fish and game management principles endure.

The above examples suggest that the state’s narrow vision of subsistence and its lack of understanding of the integrity and communality of Native subsistence economies has led to its undervaluing and impinging on subsistence lifeways in unfortunate and sometimes unrealized ways. Natives, despite increasingly well-organized political action and advocacy groups, are still not nearly as powerful as commercial and recreational user groups in affecting change in fish and wildlife management regimes at the state level. They have been somewhat more effective at the federal level, but a broader and more integrated subsistence management perspective is needed at all levels if subsistence is going to continue to contribute to Alaska Natives’ cultural existence in meaningful ways.

Lesson Three: An Accurate Evaluation of the Costs and Benefits of Subsistence Must Include Social and Economic Policies as well as Environmental Ones

It is rewarding and empowering to include Alaska Natives' oral testimony and local knowledge in all aspects of the regulations affecting our lifestyles. This brings local knowledge and scientific expertise to a level of mutual understanding and revitalizes our trust and involvement in decision-making processes.

– Patty Phillips, Eskimo-Aleut (1998, p. 80)

According to Tlingit custom, I was trained by my uncles in the traditional ways of subsistence. You might say this was my 'Tlingit schooling.' It was oriented around seasonal food gathering activities.

– Herman Kitka, Tlingit (1998, p. 47)

The above analysis has shown that the weak and narrow recognition of Alaska Native subsistence rights has not adequately protected their subsistence customs and traditions. That subsistence economies have endured as well as they have is testimony to the strength and desire of local Native tribes and cultures to maintain traditional relationships with their lands and resources despite a changing world. The recent federal takeover offers some hope that subsistence will be accorded a higher priority vis-à-vis other consumptive uses of fish and wildlife and that a wider range of cultural variables will be considered in formulating subsistence policy. At the same time, the role of the state (at both the federal and state levels) is likely to remain very circumscribed and, as a consequence, the unintegrated, production-biased view of subsistence is likely to endure.

The primary reason that this bias is likely to prevail is that modern states themselves are not well suited to deal with the web-like integration of subsistence economies. Alaska manages subsistence under two citizen boards, one for fish and one for game, which are advised by a Department of Fish and Game, staffed primarily with biologists, and by local advisory groups that are typically dominated by commercial and sport interests (see Thornton, 1999). The federal government created a Subsistence Board made up of federal land and resource managers and advised by ten regional councils consisting of appointees from local communities. While each system proposes to insure "scientific management" with some measure of local control, the kinds of data used to evaluate subsistence "opportunities" and "impacts" are typically very compartmentalized and largely limited to environmental concerns. Moreover, in evaluating environmental or regulatory actions, both state and federal management regimes tend to be minimalist in the protections they afford to customary and traditional subsistence values and practices (Kanczewick & Smith, 1991).

Evaluations of impacts to subsistence are based primarily on environmental assessments. For example, assume the USDA Forest Service proposes to clear-cut 100 million board feet of timber within the traditional subsistence hunting grounds of a particular Tlingit community in the Tongass National Forest. According to present evaluation criteria, such an action is not considered a restriction on subsistence as long as the collective habitat of the community's total available hunting areas are able (according to biological models) to support enough game to meet contemporary subsistence needs. But what if the clear-cut destroys a key traditional hunting area that a particular extended family or clan deems vital or sacred and to which it has maintained strong fidelity for generations? The kin group might be able to obtain resources elsewhere, but a sacred tie to their homeland would nevertheless be broken. Biological models and environmental analyses alone cannot address these issues. An array of sociocultural variables must also be considered, and these are not easy to evaluate due to lack of data and the context-specific nature of particular environmental actions.

Our lack of understanding of impacts to subsistence caused by socioeconomic change is even greater than that concerning environmental change. While some government-sponsored studies have been done,⁴ most state economic development plans, like economic projections, do not factor in changes to subsistence beyond estimating potential affects to production. The result is that we have relatively little knowledge of the effects of capitalist economic development on traditional communal subsistence patterns in most communities. The classical assumption is that new industries will displace or render obsolete the subsistence economy—in other words that an increase in industrial development and wage labor will lead to lower levels of participation and harvests in the subsistence economy. But existing studies suggest that the relationship is not that simple. In places like Barrow, where the Inupiat Eskimos became heavily involved in the wage economy through post-ANSCA oil development on the North Slope beginning in the 1970s, the number of *umialiqs*, or traditional whaling captains, increased rather than declined, as more Inupiat males gained access to the capital means to sponsor a boat and crew and sought the social prestige associated with *umialiq* status (see Smythe & Worl, 1986; Freeman et al., 1998). Similarly, we have little knowledge of the effects of industrial economic downturns on subsistence economies. Does participation in subsistence increase with rises in unemployment, inflation, and other negative trends? There are many issues here that have yet to be explored in detail and yet would seem critical to understanding the long-term viability of subsistence economies in relation to capitalist market economies (see also Hunn, 1999).

Beyond economics, there is also a wide range of health and culture welfare issues related to subsistence that are emphasized by Natives but rarely

examined by the state. For example, the consumption of subsistence foods is widely touted as being beneficial to physical health, and studies show that the consumption of traditional wild foods provides essential nutrients often not readily available elsewhere (Newton & Moss, 1993; Wolfe, 1998). Similarly, ethno-medical and cultural benefits not recognized by Western medicine, such as the “warmth” provided to the Inuit by seals, may be considered by aboriginal peoples as important reasons to consume certain indigenous foods (Borré, 1994). Yet, few long-term studies have been carried out linking factors such as life span and overall health with the production and consumption of local subsistence foods. Such broad, long-term studies, it seems, are not conducive to the short-term, compartmentalized objectives of studies typically sponsored by government bureaucracies.⁵

Participation in subsistence likewise is held to be vital to physical, mental, social, and spiritual health in Native communities. As we have seen, this basic principal is enshrined in ANILCA. But, again, we find few state-sponsored studies probing the nature of these links beyond a superficial level. Are communities or segments of communities with high levels of subsistence production (on traditional lands) and sharing less prone to such social ills as depression, deviance, drug abuse, and suicide? Preliminary evidence from ethnographers working in northern communities suggests that they may be (see, e.g., Borré, 1994; Niezen, 1998, pp. 81-102). But here, again, the connections between individual and communal health are complex and complicated by cross-cultural issues. As Borré (pp. 10-11) emphasizes for Canadian Inuit at Clyde River, “health is a state of being of both the individual and community that is attained through responsible social action. Individuals are dependent upon the production, distribution, and consumption of seal and other animals for products to maintain their health.” According to Borré, “Through the hunter’s actions, individual nutrition, spiritual, and psychosocial needs are met” as are communal needs through sharing and alimentary communion. “Inuit experience this as a state of true health: individuals and society are mutually dependent for their well-being on producing, sharing, and consuming seal.” Without proper links to subsistence resources, individuals may suffer physical and mental health problems, such as weakness, depression, and low self-esteem.

A recent study by Condon et al. (1995) on the Copper Inuit of Canada, contrasted subsistence hunting involvement among active and less active households between the ages of 20 and 35 and found a range of motivations for participating in subsistence beyond acquiring food. In addition, researchers found some noteworthy differences in psychological well-being and level of community integration between active and less active harvesters. More studies are needed to probe these important links and evaluate their implications for social policy. In the meantime, many community-based health programs in Native Alaska already are beginning to explore the links between

subsistence and physical and mental health practical ways. Some have even incorporated subsistence regimens into treatment programs for alcoholics and troubled youth with encouraging results.

Finally, what is the relationship between education policy and subsistence? As with health and identity, Natives traditionally viewed subsistence as a foundation for education. Traditional knowledge of environmental phenomena, plant and animal life, and social and cultural values, norms, and practices were transmitted from generation to generation *in situ* and *in vivo*, as part of the subsistence lifestyle and seasonal round of activities. This is still true today (Langdon, 2000), and Native epistemologies continue to emphasize learning from elders through shared experiences.

However, the advent of modern state education has wreaked havoc with traditional Native education systems in many ways. These include enforcing sedentary attendance at the expense of participation in the seasonal round; mandating a foreign language at the expense of the Native tongue; and implementing a curriculum designed to produce cooperative citizens of a modern industrial state at the expense of a hunting-gathering society. Once they had corralled students into their classrooms, the state-sponsored schools came to view subsistence at best as something extracurricular and not central to their mission, and at worst as a detrimental distraction to that mission.

While today's educators are typically more sensitive to the importance of subsistence education to young Natives, the structural constraints they operate under have changed little since the early twentieth century. How does this profound disjunction between traditional and modern educational systems affect subsistence lifeways? And, more importantly for public policy, how can the two be more effectively integrated?

In Alaska, these links are only beginning to be explored through local and regional efforts, such as the Alaska Rural Systemic Initiative (see www.an.kn.uaf.edu), an educational partnership between the University of Alaska, the Alaska Federation of Natives (AFN) and local school districts that seeks to blend Native and non-Native ways of knowing across school curricula. But systemic change is slow in coming and some educators worry that efforts to "culturalize" curricula may interfere with students' abilities to master "basic skills" (the 3 Rs, not subsistence) and "compete" on standardized tests.

We find a similar epistemological disjunction between Traditional Ecological Knowledge (TEK) and Western science in fish and wildlife research and management. While agencies have begun to acknowledge the importance of TEK and local expertise, they typically have little appreciation for its integrated epistemological context and how it often differs from scientific knowledge in form, content, and use (Nadasday, 1999). As a result, many local observations about such things as the health of fish and wildlife populations are dismissed as "anecdotal" and not considered scientific facts unless (or un-

til) they have been confirmed independently by scientists. Moreover, agencies tend to pursue TEK in an acquisitive and colonizing manner not unlike that of artifact hunters in the 19th and early 20th centuries. Their focus is not on enhancing or developing means for the maintenance of traditional knowledge among indigenous peoples, but rather on “getting information before it is too late” (Cruikshank, 1981, p. 86) and then rendering and assimilating TEK as “data” into scientific paradigms. As with education, there is little respect within state agencies for the importance of subsistence lifeways as knowledge production systems (which need basic support, just as scientific research does) or their role in shaping conservation values and beliefs. While some social scientists have called for a “paradigm shift” in science to more fully accommodate the cultural context of TEK systems (Berkes, 1999), others see this as weaving a tangled web and fear that the spiritual beliefs and values inherent in TEK, if not open to scientific scrutiny, might lead to unscientific decision-making and poor environmental policy (Howard & Widdowson, 1997, pp. 46-48).

Lesson Four: To Maintain the Integrity of Their Subsistence Cultures, Native Communities Have to Take the Lead in Defining Their Own Subsistence Needs

In the political confrontations to resolve fish and wildlife competition among subsistence, commercial, and sports hunting and fishing interests, Alaska Natives have learned that compromise translates into Native people giving up something they possess while non-Natives give up something they want. According to the Native view, this form of compromise has resulted in the continual erosion of their political rights, severely reduced subsistence allocations of hunting and fishing resources, and granted non-Subsistence users more than 95% of all fish and wildlife resources

– Rosita Worl, Tlingit (1998, p. 77)

When I think back through all the meanderings and permutations of the legislative and judicial history of Alaska Native subsistence, I find my recollections to be mentally jarring. By this I mean that the history is harsh and discordant. So many abrupt turns and reversals, so many unfulfilled promises. How often are we to negotiate in good faith, then be forced to watch, as terms are re-interpreted to fit the will of the prevailing legislative majority?

– Robert Loescher, Tlingit (1999)

As we have seen, the state has a weak track record in recognizing the multi-dimensional qualities of Native subsistence and protecting subsistence needs. Historically, these failures have stemmed partly from the superior political power of competing interests, but they are also a result of the limitations of a modern nation state’s rational bureaucracy to support traditionally integrated subsistence economies and lifestyles. It would be naive to assume that

these limitations are somehow going to disappear and that subsistence needs will begin to receive a true priority without a strong push from Native communities. Natives will have to take a proactive lead in shaping a strong subsistence policy for generations to come.

To date, Alaska Native groups, whether at the local, tribal, regional, or state level have been primarily reactive in their approach to subsistence policy. Unless the actions of the state significantly impinged or threatened their subsistence lifestyles, they tended to ignore them. As one pair of observers put it: "Alaska Natives viewed hunting regulations as foreign and irrelevant to their lives, just as hamburger-consuming Americans would view a law passed in India against killing and eating cattle" (Hensel & Morrow, 1998, p. 64). When state laws have clashed with local subsistence customs, conflicts typically have only come to the fore as a result of enforcement actions. Incidents of organized protest and civil disobedience against state hunting and fishing regulations are comparatively rare in comparison to benign non-compliance due to lack of knowledge, perceived irrelevance, or an overriding imperative to follow local customs and traditions. But as Alaska's non-Native population and resource allocation needs increase and Native tribes and advocacy organizations become more politically active, these conflicts are more likely to be played out in the public policy sphere.

In fact this has already begun to occur. In August 1997 a statewide Native Subsistence Summit was convened in Anchorage, where more than 900 delegates adopted a resolution, guiding principles, and twelve specific policy recommendations toward establishing a more effective subsistence policy. The guiding principles included the following (see Worl, 1998, p. 78):

1. Full participation and consent of the Alaska Native community, including hearings in villages in each region;
2. A subsistence priority based on Alaska Native community, religious/spiritual, nutritional, medicinal, and cultural practices rather than an individualized or needs-based system;
3. Only amendments which enhance subsistence rights and maintain federal oversight to at least its current level;
4. Co-management with equal state, federal, and tribal involvement;
5. Full recognition of customary and traditional uses including religious/spiritual and ceremonial;
6. Effective comprehensive reform of the state management system;
7. Recognition that subsistence is a basic indigenous right.

Native leaders subsequently traveled to Washington to deliver their message and recommendations to government officials in person. The twelve recommendations included calls for extended federal protections for urban

Natives, greater congruence between state and federal regulations and local customs and traditions, a greater Native stake in management through co-equal co-management agreements, and limitations on the State of Alaska jurisdiction over subsistence. These recommendations were further promoted in a follow-up National Forum on the Future of Alaska Natives held in Washington, DC, on September 9, 1999 in which leaders from state, national, and international organizations were invited to discuss the future of Alaska Natives and the role of public policy in protecting subsistence (National Forum on the Future of Alaska Natives, 1999). While not all the recommended policy changes have come to pass, they represent, along with the seven guiding principles, the first long-range, systemic plan for reforming subsistence policy to be put forth by Alaska Natives.

With a concerted and sustained effort on the part of Alaska Natives tribes and organizations, additional reforms can likely be achieved, but not without a struggle. State interests in management are strong and commercial and recreational interests will continue to vie with subsistence for their shares of the resource base. Thus, to effect reforms, Alaska Natives must not only take the lead, but also, as Tlingit corporate leader Robert Loescher (1999) has stated, be willing to accept risks and commit, a level of “technical, financial, and political resources” not put forth “since the passage of Alaska Native Claims Settlement Act itself.”⁶ Loescher even anticipates the need to support non-violent civil disobedience in order to foster change.

In fact, conflict situations in which Natives have “taken on” the state over subsistence policy have led to improvements in policy and management. Two examples of this are the Alaska Eskimo Whaling Commission (AEWC) and the Round Island walrus hunt. The AEWK was formed in response to a crisis when, in 1977, the International Whaling Commission banned the hunting of bowhead whales by Alaskan Eskimos without their involvement or consent. The AEWK opposed the ban, suggesting that it was not only detrimental to their subsistence but also based on poor scientific estimates of the whale population. The Inupiat maintained that many whales migrating offshore were not counted by biologists. In this case, the local knowledge proved correct as a re-survey identified four times as many whales as the original count. Hunting was reinstated under a quota system, and out of this near-debacle a productive co-management regime evolved. In 1981 the federal agency responsible for managing whales signed a pact with the AEWK that gave the Native entity a substantive role in the research and the lead role in allocation and monitoring of bowhead whale hunting in Alaska (Huntington, 1989; Brower & Hepa, 1998). This arrangement has proven successful to all parties and has inspired other efforts to design subsistence harvests that Native organizations can co-manage, such as the revival of subsistence walrus hunting on the Round Island sanctuary by Yup’ik residents of Togiak (Fall & Chythlook,

1998). Although they involve relatively small harvests of marine mammals to which Natives have exclusive rights, these successes are worth celebrating and can serve as models for broader co-management regimes.

Conclusion: A New Era for Subsistence?

The eminent Indian historian Francis Paul Prucha once commented on how US Presidents often define their initiatives towards Native Americans, however modest, as marking "a new era in federal Indian policy." Hopefully, the new millennium and a stronger Native role in subsistence policy will amount to more than inflated rhetoric and a new, progressive day for Native subsistence policy will dawn in Alaska.

As this paper has shown, however, there are deep cultural and political divides that continue to plague subsistence policy. Since their aboriginal hunting and fishing rights were extinguished under ANCSA in 1971, Alaska Natives have struggled to stem the erosion of their subsistence rights. Unfortunately, the subsequent legal regime under ANILCA offered only a minimal, compromise framework for supporting Native subsistence, and it remains a contentious and fragile endorsement. At the same time the broader effects of capitalist economic development and state economic, health, education and other policies continue to effect subsistence lifestyles in myriad ways. While environmental impacts to subsistence resources are evaluated, they are typically assessed within a very limited context, and the effects of broader socio-economic and educational trends on subsistence and the cultural institutions that are so intimately bound up with it are hardly examined within the subsistence policy realm.

Other northern indigenous communities can learn from the Alaskan example. The most important lesson of all, perhaps, is that indigenous peoples must not expect nation states to shape suitable policies concerning their cultures without strong leadership and involvement from Native communities themselves. In the past, cooperative management has too often meant the state manages and Native peoples cooperate. For a truly cooperative spirit to prevail, Natives must be involved as partners in all phases of policy development, including research, formulation, and implementation and in all policy arenas affecting subsistence, including health, environmental, economic, and social welfare. In Alaska, both the federal government and Alaska Native leaders are beginning to realize that achieving this kind of meaningful cooperation will require a significant amount of negotiation, education, communication and risk-taking, and thus an unprecedented commitment of will and resources. But, as Tlingit leader Robert Loescher (1999) points out, a healthy subsistence policy for Natives is worth the effort:

Is all of this worth fighting for? The answer is yes. Maybe more so than any fight or challenge ever faced by us as Alaska Native people But . . . we must face

this challenge with the willingness to put it all on the line. There is no longer any room in this fight for political in-fighting, back room deal-making, concessions made for the sake of business, or for those who would divide rather than unite. Now is the time to put to use all that we have garnered and developed over the years: our political sophistication, our economic stature, our collective will. They must all come to bear if we are to prevail. Will ours be the generation to preserve or let disintegrate the subsistence legacy?

About the Author

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Notes

1. By states, I mean nation-states, such as the U.S. and Canada, as well as regional (states, provinces, etc.) and local (city, borough, etc.) governments.
2. Some Alaskan cities, such as Juneau, were founded on aboriginal Native villages and became largely non-Native urban centers as a result of subsequent development. In such cases, local Natives are ineligible for subsistence under the rural preference.
3. For more analysis of the evolution of co-management regimes in Canada, see David C. Natcher's article in this issue (p. 146).
4. See, for example, those studies concerning potential effects of offshore resource development on subsistence communities carried out under the auspices of the U.S. Minerals Management Service Alaska Outer Continental Shelf (OCS) Program (www.mms.gov/alaska).
5. On the other hand, the state is finally beginning to focus attention on environmental contaminants in northern communities, typically the by-products of industrial development, as potential health hazards to subsistence consumers through exposure or ingestion (Jensen et al., 1997). On this issue, too, there are cross-cultural differences on matters such as epidemiology that need to be considered (see O'Neill et al., 1997).
6. For example, significant resources must go to defending customary and traditional subsistence practices in judicial and regulatory bodies, often against the State. According to Tlingit leader Rosita Worl (personal communication, February, 2001) these expenses can be a real drain. She notes that the Alaska Federation of Natives "spent \$157,747.82 just for the amici briefs on the Katie John [subsistence] case before the Ninth Circuit [federal court]. No public or private funds will fund litigation costs, and thus Natives alone pay for these. The regional ANCSA corp[oration]s and non-profits have been assessed to pay for this. As you are aware millions of dollars from State coffers are used to support their efforts."

References Cited

- ADF&G-CPDB. (2000). *Alaska Department of Fish and Game-Community Profile Database*. Juneau: Division of Subsistence, Alaska Department of Fish and Game. <http://fish.state.ak.us/local/akpages/FISH.GAME/subsist/subhome.htm>.
- Aradanas, J. S. (1998). Aboriginal Whaling—Biological Diversity Meets Cultural Diversity. *Northwest Science Forum*, 72(2), pp. 142-45.
- Berger, T. R. (1985). *Village Journey: The Report of the Alaska Native Review Commission*. New York: Hill and Wong.
- Berkes, F. (1999). *Sacred Ecology: Traditional Ecological Knowledge and Resource Management*. Philadelphia: Taylor & Francis.
- Borré, K. (1994). The Healing Power of the Seal: The Meaning of Inuit Health Practice and Belief. *Arctic Anthropology*, 31(6), pp. 1-15.
- Brower, H. and Hepa, T. (1998). Subsistence Hunting Activities and the Inupiat Eskimo. *Cultural Survival Quarterly*, 22(3), pp. 37-39.
- Caldwell, W. E. (1998). "Reasonable Opportunity" vs. "Customary and Traditional" in Lime Village. *Cultural Survival Quarterly*, 22(3), pp. 63-65.
- Condon, R., Collings, P., & Wenzel, G. (1995). The Best Part of Life: Subsistence Hunting, Ethnicity, and Economic Adaptation Among Young Adult Inuit Males, *Arctic*, 48(1), pp. 31-46.
- Cruikshank, J. (1981). Legend and Landscape: Convergence of Oral and Scientific Traditions in the Yukon Territory. *Arctic Anthropology*, 18(2), pp. 67-93.
- Fall, J. & Chythlook, M.B. (1998). The Round Island Walrus Hunt: Reviving a Cultural Tradition. *Cultural Survival Quarterly*, 22(3), pp. 59-62.
- Feit, H. (1998). Self-Management and Government Management of Wildlife: Prospects for Coordination in James Bay and Canada. In R.J. Hoage and K. Moran (Eds), *Culture: The Missing Element in Conservation and Development*. Washington, DC: Smithsonian.
- Freeman, M., Bogoslovskaya, L., Caufield, R., Egede, I., Krupnik, I., and Stevenson, M. G. (1998). *Inuit, Whaling, and Sustainability*. Walnut Creek, CA: Alta Mira.
- Hensel, C. & Morrow, P. (1998). Co-Management or Co-Optation: Alaska Native Participation in Regulatory Processes. *Cultural Survival Quarterly*, 22(3), 69-71.
- Howard, A., and Widdowson, F. (1997). Traditional Knowledge Advocates Weave a Tangled Web. *Policy Options*, 18(3), pp. 46-48.
- Hunn, E. (1999). The Value of Subsistence for the Future of the World. In V. Nazarea (Ed.), *Ethnoecology: Situated Knowledge/Located Lives*. Tucson: University of Arizona Press.
- Huntington, H. P. (1989). *The Alaska Eskimo Whaling Commission: Effective Local Management of a Subsistence Resource*. Cambridge: Scott Polar Research Institute, University of Cambridge.

- Jensen, J., Adare, K., and Shearer, R. (Eds.). (1997). *Canadian Arctic Contaminants Assessment Report*. Ottawa: Department of Indian and Northern Affairs Canada.
- Kancewick, M. and Smith, E. (1991). Subsistence in Alaska: Towards a Native Priority. *UMKC Law Review*, 59(30), pp. 645-677.
- Kitka, H. (1998). Deep Ties to Deep Bay: A Tlingit Elder's Training. *Cultural Survival Quarterly*, 22(3), pp. 47-48.
- Langdon, S. (2000). Subsistence and Contemporary Tlingit Culture. In A. Hope and T. Thornton (Eds.), *Will The Time Ever Come: A Tlingit Source Book*. Fairbanks: Alaska Native Knowledge Network and the Center for Cross-Cultural Studies, University of Alaska Fairbanks.
- Loescher, R. W. (1999). Native Subsistence Rights—Where are we Now in State and National Politics? Speech/paper presented to the Alaska Federation of Natives Political Leadership Summit, February 16, 1999. Juneau: Sealaska Corporation, www.sealaska.com.
- Magdanz, J. and Utermohle, C. J. (1998). Family Groups and Subsistence. *Cultural Survival Quarterly*, 22(3), pp. 51-52.
- Maybury-Lewis, D. (1997). *Indigenous People, Ethnic Groups, and the State*. Boston: Allyn and Bacon.
- Nadasday, P. (1999). The Politics of TEK: Power and the "Integration" of Knowledge. *Arctic Anthropology*, 36(1-2), pp. 1-18.
- National Forum on the Future of Alaska Natives, September 9, 1999*. (1999). Anchorage: Alaska Federation of Natives, Inc. and the Alaska Native Knowledge Network.
- Niezen, R. (1998). *Defending the Land: Sovereignty and Forest Life in James Bay Cree Society*. Boston: Allyn and Bacon.
- O'Neil, J. D., Elias, B., and Yassi, A. (1997). Poisoned Food: Cultural Resistance to the Contaminants Discourse in Nunavik. *Arctic Anthropology*, 34(1), pp. 29-40.
- Phillips, P. (1998). Bridging the Past and Future. *Cultural Survival Quarterly*, 22(3), pp. 79-80.
- Redfield, R. (1953). *The Primitive World and Its Transformations*. Ithaca: Cornell University Press.
- Simpson, L. (1999). The Subsistence Economy. In M. Soubliere and G. Coleman (Eds.), *Nunavut '99: Changing the Map of Canada* (pp. 91-92.). Iqaluit, NU: Nortext Multimedia Inc., and Nunavut Tunngavik Inc.
- Smythe, C. W. and Worl, R. (1986). *Barrow: A Decade of Modernization*. Report completed for the U.S. Minerals Management Service, Social and Economic Studies Program Technical Report No. 25.
- Thornton, T. F. (1998). Alaska Native Subsistence: A Matter of Cultural Survival. *Cultural Survival Quarterly*, 22(3), pp. 29-34.
- Thornton, T. F. (1999). Subsistence: The Politics of a Cultural Dilemma. In C. Thomas (Ed.), *Public Policy Issues in Alaska. Background and Perspectives* (pp. 205-220). Juneau: The Denali Press.

Wolfe, R. J. (1998). Subsistence in Alaska: 1998 Update. Juneau: Division of Subsistence, Alaska Department of Fish and Game.

Worl, R. (1998). Competition, Confrontation, and Compromise: The Politics of Fish and Game Allocations. *Cultural Survival Quarterly*, 22(3), pp. 77-78.

Table of Acronyms

ADF&G	Alaska Department of Fish & Game
ADF&G-CPDB	Alaska Department of Fish & Game-Community Profile Database
AEWG	Alaska Eskimo Whaling Commission
AFN	Alaska Federation of Natives
AFDC	Aid to Families with Dependent Children (Alaska)
AG	Office of the Attorney General (Alaska)
ANCILA	Alaska National Interests Lands Act (1980)
ANCSA	Alaska Native Claims Settlement Act (1971)
ANWR	Arctic National Wildlife Refuge
ARCO	Atlantic-Richfield Company
ASRC	Arctic Slope Regional Corporation
BLM	Bureau of Land Management (US)
BP	British Petroleum
CINA	child in need of aid
COE	Corps of Engineers (US Army)
DFO	Department of Fisheries and Oceans (CDA)
DFYS	Division of Family and Youth Services, Alaska
EIS	environmental impact statement
FWS	Fish and Wildlife Service (US)
ICAS	Inupiat Community of the Arctic Slope
ICWA	Indian Child Welfare Act (Alaska)
ICC	Inuit Circumpolar Conference
IGR	intergovernmental relations
IRA	Indian Reorganization Act (US, 1935)
JBNQA	James Bay and Northern Quebec Agreement (CDA, 1975)
KGH	Royal [Greenland] Trade Company
MMS	Minerals Management Service (US)
NDP	New Democratic Party
NIMBY	not in my back yard
NPR-A	National Petroleum Reserve-Alaska
NSB	North Slope Borough
OCS	Outer Continental Shelf
PCMA	Porcupine Caribou Management Agreement
PCMB	Porcupine Caribou Management Board
PF	Permanent Fund
TCC	Tanana Chiefs Conference
TEK	Traditional Ecological Knowledge
TFYS	Tribal Family and Youth Services
TLE	Treaty Land Entitlement (CDA)
USDA	US Department of Agriculture
YCEE	Yukon Council on the Economy and Environment
YES	Yukon Economic Strategy