

Ethical Issues and Subsistence Research in Alaska

Terry L. Haynes

Introduction

One of my first tasks as a new graduate student in the Joint Program in Medical Anthropology at U.C., San Francisco and Berkeley in 1976 was to find faculty advisors. Having spent the previous summer conducting historical research in interior Alaska (Haynes 1976) and hoping to continue working there, I needed guidance from faculty members knowledgeable about the Arctic and Subarctic. Although he might not be listed as a specialist in these geographic areas and certainly is better known for his work in South Asia, Professor Gerald Berreman made my short list because he had conducted ethnographic research on the Aleutian Islands early in his career and was generally familiar with Alaska (see Berreman 1954 and 1964).

I later enrolled in his Social Issues seminar (Anthropology 250G) and nurtured my budding interest in research ethics and the social responsibilities we have as anthropologists. I came to respect Gerry's longstanding concern for and personal commitment to these imperatives. His influence inspired one of my colleagues, Sandra Wood, and I to organize for the 1978 Southwestern Anthropological Association conference a keynote symposium that focused on what we perceived as inadequacies in the training of anthropologists for contemporary fieldwork. Our basic premise was that the "sink or swim" method of training students to conduct fieldwork and address ethical dilemmas is irresponsible and a disservice to those among whom we do research. Gerry kindly consented to serve as the discussant for this symposium and presented his usual provocative and candid insights to an attentive audience. The Kroeber Anthropological Society later published the papers from this symposium and several others that we solicited for this issue (Wood and Haynes 1979).

Gerry described his Social Issues seminar in 1979 as a course in applied social science that examined the relevance of anthropological research, insights, and teaching for understanding human problems. He persistently cautioned those of us wanting to engage in "relevant anthropology" outside of academia to think carefully about the implications of working for government agencies, multinational corporations, and other organizations whose objectives might conflict with our responsibilities and obligations as anthropologists. I've never forgotten Gerry's oft-repeated adage that policymakers use social scientists much as a drunk uses a streetlight—for support, and not for illumination—and subsequently have concluded that it applies equally to others in positions of power in both the public and private

sectors. Despite these admonitions, however, in 1982 I accepted a position with the Division of Subsistence in the Alaska Department of Fish and Game (ADF&G), and joined an exciting new social science research program in state government that was being administered and staffed by anthropologists and like-minded professionals with a keen interest in the human condition.

This paper is a general introduction to the Division of Subsistence research program and describes steps taken to minimize or avoid ethical issues that could jeopardize the ability of staff to conduct fieldwork and report their research findings. It illustrates the skills and tools that anthropology and anthropologists can bring to a state government agency whose decision-making had previously been framed principally by biologists and in biological terms. A critical assessment of the Division's work, including its research findings and other contributions to natural resource planning and management in Alaska, are beyond the scope of this paper.

State and Federal Subsistence Statutes

In 1978, the Alaska Legislature passed the first state subsistence law, finding that that "it is in the public interest to clearly establish subsistence use as a priority use of Alaska's fish and game resources and to recognize the needs, customs, and traditions of Alaskan residents." The state law defined subsistence uses as,

the customary and traditional uses in Alaska of wild, renewable resources for direct personal and family consumption as food, shelter, fuel, clothing, tools, or transportation, for the making and selling of handicraft articles out of nonedible by-products of fish and wildlife taken for personal or family consumption, and for the customary trade, barter, or sharing for personal or family consumption. [Alaska Statute 16.05.940:26]

This statute required the Alaska Boards of Fisheries and Game to adopt regulations permitting subsistence uses to occur when a harvestable surplus of a resource has been identified. In times of resource shortage, subsistence uses were to be assigned a preference over commercial, sport, and personal uses of that resource. Finally, the 1978 law created the Division of Subsistence within ADF&G to "compile existing data and conduct studies to gather information, including data from subsistence users, on all aspects of the role of subsistence hunting and fishing in the lives of residents of the state" (Alaska Statute 16.05.094).

In 1980, the U.S. Congress passed the Alaska National Interest Lands Conservation Act (ANILCA), whose Title VIII was essentially the federal counterpart to the Alaska subsistence law and applied to federal public lands in the new conservation units (primarily national parks and wildlife refuges) created by this act. ANILCA contained provisions that allowed the state to continue managing

subsistence harvests on federal public lands as long as the state law complied with the subsistence preference as defined in federal law. In order to comply with ANILCA, the state law was revised in 1986 to specifically limit subsistence uses to rural residents. However, in 1989, the Alaska Supreme Court ruled in *McDowell v. State* that the rural subsistence priority violated the “equal access” provisions in the Alaska constitution. Although the state subsistence statute was not repealed, it no longer contained the rural priority required for the state to retain its management authority for subsistence on federal public lands.

Consequently, in 1990 the federal government assumed responsibility for subsistence management of fish and wildlife on federal public lands in Alaska and established an Office of Subsistence Management in the U.S. Fish and Wildlife Service to administer its program. Federal authority was later extended to certain navigable waters in Alaska following a 1995 federal court ruling in *Katie John et al. v. United States of America* that, for purposes of the federal subsistence statute, “public lands” in Alaska included navigable waters on or adjacent to federal conservation units. In spring 2001, an *en banc* panel of the Ninth U.S. Circuit Court of Appeals upheld the lower court decision. Alaska’s governor must decide in October 2001 whether or not to appeal this ruling to the U.S. Supreme Court.

The resulting system of “dual management” has generated considerable controversy in Alaska and has resulted in duplication of certain functions that had been performed by the ADF&G and the state’s regulatory boards. For example, the federal government only regulates subsistence uses on federal public lands (comprising about 60 percent of all lands in the state), while the state retains authority over all other harvest activities on federal public lands—in addition to continuing to regulate all uses—commercial, sport, personal, and subsistence—on state and private lands. The federal subsistence regulations do not apply to endangered species, migratory waterfowl, or marine mammals, which are under the purview of other federal laws. Additional insights into the history of subsistence management in Alaska and the current debate have been discussed elsewhere and will not be repeated here (see Kelso 1982; Fall 1990; Caulfield 1992; Wolfe 1993; Bosworth 1995; and Cultural Survival Quarterly 1998).

Not surprisingly, subsistence management has been and continues to be a highly emotional, politicized, and unsettled issue that impacts the lives of many Alaskans (indeed, subsistence is at the heart of the debate concerning opening a small part of the Arctic National Wildlife Refuge to oil and gas exploration). Rural Alaskans, Natives and non-Natives alike, arguably are the most directly affected by subsistence laws and regulations because of the continuing importance of fish, wildlife, plant, and marine resources to household and community economies in rural areas. However, the political influence of rural Alaskans is waning as urban population growth accelerates and outpaces that occurring in most rural areas of the state. Vocal urban residents, lobbyists, and sportsman’s associations object to laws

that restrict their access to hunting and fishing on federal public lands and have vigorously opposed attempts to amend the state constitution to allow a rural preference for subsistence uses on state-managed lands. In such a climate, information on subsistence uses sometimes is not at center stage of the debate but arguably remains very important.

Division of Subsistence

The Division of Subsistence (Division) commenced operations in 1979 and established offices in rural and urban areas across the state. A few years ago the statewide staff of about 35 included researchers training in biology, journalism, and wildlife management, and as many as eight Ph.D. anthropologists—rather impressive, given that a few years earlier in 1980-81 only 11 doctoral level cultural anthropologists resided permanently in Alaska (Feldman 1981:103). The Division's research findings are reported in the Division of Subsistence Technical Paper Series, and harvest data are stored in a computerized Community Profile Data Base (CPDB). The division's 260+ technical papers and the CPDB contain a wealth of information not available elsewhere on the subsistence use of renewable resources in about 200 rural Alaska communities, many of which are inhabited predominantly by Alaska Natives. In addition, the Division frequently conducts studies through contracts and cooperative agreements with other agencies, with the resulting final reports sometimes published by the sponsoring agency.

Conducting ethnographic research for use in the fish and wildlife management arena raises a host of ethical issues like those discussed and debated in Gerry's seminars. The Division's research findings are routinely at the center of land use planning and resource management decisions, making it imperative that what Alaskans tell our staff about their uses of the land and its resources is recorded and portrayed accurately. To do this successfully, respondents must trust Division staff and be confident that providing information to a government agency will not work against their best interests. At the same time, researchers must not make promises regarding how study findings might be used to shape the debate or determine the outcome of a particular resource management or regulatory issue.

There is always the possibility of the Division's research findings having unintended negative consequences on subsistence users. That is why staff also routinely work within ADF&G to educate managers and influence the decision-making process in other ways. For example, Division staff often serve as cultural brokers between agency staff and rural Alaskans, and continually strive to reduce stereotypes that can hinder these interactions. Public mistrust of government agencies is not unusual in Alaska, so a continuing effort must be made to dispel the stereotypes that some people might have about subsistence research and about the true nature of subsistence economies in Alaska.

The Division's research program is administered systematically and includes the following procedures that are designed to protect both the confidentiality of survey respondents and the integrity of study findings.

Research ethics: Subsistence research involves human subjects and therefore requires special considerations to protect those subjects from possible adverse effects resulting from their voluntary participation in subsistence studies. The Division's "Policy on Research Ethics" (Division of Subsistence 1984) builds on the "Ethical Principles for the Conduct of Research in the North" developed by the Association of Canadian Universities for Northern Studies (1981). These 17 principles deal with informed consent, researcher conduct, confidentiality, and review of reports, and are used as guidelines by our staff who ultimately must determine the extent of their applicability in particular instances. In addition, the policy contains specific guidelines for protecting the privacy of human subjects and clarifying the ownership, control, and release of data derived from subsistence studies.

Study design and community approval: Division staff always introduce a proposed research plan to the governing body or bodies of the study community for their input and approval. Studies are not conducted without prior approval from the local government; in a few cases, research plans have been canceled when a proposed study was not endorsed.

Local involvement: Whenever possible, and in the absence of bilingual staff in the Division, one or more local residents will be hired and trained to assist in data collection and serve as interpreters when respondents prefer to communicate in their native language. One commonly used research model involves hiring local residents to conduct most if not all the data collection under the supervision of Division staff. Such strategies provide short-term employment opportunities for rural residents and provide one mechanism for educating community residents about the study goals and objectives. Local research assistants can also help to ensure that survey questionnaires are appropriate for that particular community and that the proper protocols are followed. The Division now has a long history of collaborating with Alaska Native organizations on subsistence studies and conducting training workshops for groups that are planning to engage in their own subsistence data collection.

Confidentiality: The identity of individual respondents and the information they reveal to Division researchers is regarded as confidential information. Division policy is to protect the privacy of human subjects. Staff members follow specific procedures designed to preserve the anonymity of study participants so that information maintained in our records cannot be linked to identifiable persons. Field notes and map biographies stored permanently in Division files are coded and names are not used. Codes also replace personal names on survey forms, although a separate sheet linking names with codes may be retained for scientific purposes, including sample selection and data analysis. This information also facilitates comparison of

individual and household information from multiple studies of the same community over time. Harvest data typically are reported as community totals. Maps depicting areas used to harvest renewable resources typically are a composite for the entire community covering multiple years and do not reveal specific information provided by individual households.

Observing subsistence activities: Participant-observation is an important tool in subsistence research and provides a context for better understanding the quantitative and socioeconomic data recorded in household surveys. In the Division's early years, baseline community studies often were conducted over a twelve-month period so that seasonal subsistence activities could be observed throughout the annual harvest cycle and relevant information described and recorded in field notes. Funding constraints and the nature of many current research projects regrettably has limited the time that staff can devote to observation of subsistence and related activities, with a few notable exceptions.

Enforcement of regulations: Staff occasionally witness or are informed about harvest violations while conducting fieldwork. Biologists in the ADF&G management divisions have enforcement powers and in similar circumstances would be authorized, even obligated, to issue citations. Division staff do not have enforcement powers for this very reason: establishing and maintaining rapport with rural residents would be extremely difficult, if not impossible, and might compel respondents to withhold important information during personal interviews. Indeed, survey respondents would be unlikely to speak candidly about harvest activities if telling the truth would result in citation or legal action. The harvesting of subsistence resources sometimes occurs opportunistically and outside established state and federal seasons. Subsistence research is designed in part to identify such disparities and seek ways to accommodate traditional harvest practices in the formal regulations—if and when legalizing such practices would not jeopardize the biological integrity of the affected wildlife resource.

Community review: Drafts of final reports and maps depicting areas used for seasonal subsistence activities are provided to the community and other study collaborators for review and comment. Upon publication, copies of final reports and maps are provided to the study communities for their own use.

Disposition of study findings: As noted above, quantitative data derived from subsistence studies are stored in the division's computerized CPDB, while study findings generally are reported in the Division of Subsistence Technical Paper Series. Final reports for some studies conducted pursuant to cooperative agreements or in collaboration with other agencies are published separately or by the sponsoring agency (see Fall and Utermohle 1995; Haynes, Andersen, and Simeone 2001). Synopses of major study findings sometimes are prepared for distribution to the study communities (see Georgette 2000; Andersen 2001) and to ensure that relevant

information is available in a timely manner for use in decision-making processes. Staff also are encouraged to make presentations in public schools and at professional conferences, and to submit articles for publication in professional journals (Wolfe and Walker 1987; Andrews 1989; Haynes and Bosworth 1996). Finally, the Division maintains an Internet website that contains information about its research program and about subsistence in Alaska.

Application of study findings: Although a research project may be conducted to address a specific management question, the study findings may eventually be used for other purposes. Once field data have been corrected, compiled, explained, and safeguarded, they essentially become public information and are subject to uses beyond the control of the Division. For this reason, staff must ensure that study data are portrayed accurately and anonymously in final reports and databases.

For example, maps depicting community moose hunting areas frequently are included in technical reports. Some rural respondents have provided this information reluctantly and asked how urban hunters would be prevented from using it to intrude on their hunting areas and conceivably improve their odds of success. This has not surfaced as a significant problem but an urban hunter once obtained a copy of a technical report specifically for this purpose, believing it would aid him in finding a good area to hunt moose. From the Division's perspective, information is power, and detailed maps provide vital documentation for use by decision-makers whose actions can either protect habitat that is important for subsistence purposes or subject it to competing and conflicting uses.

Traditional Ecological Knowledge: Although some of the subsistence information routinely collected by the Division can be categorized as *traditional ecological knowledge* (TEK), it was not advertised as such for many years. More recently, however, research projects are being designed specifically to acquire TEK for application to management and regulatory issues and TEK information is being made more accessible to educate the public (see Haynes and Wolfe 1999). This new emphasis on TEK is in part a result of Native peoples in Canada successfully using TEK to address resource management issues there; Alaska Natives have been similarly well-positioned to emphasize the importance of TEK and to demonstrate how it can be used by managers and policymakers. In some instances, legitimate concerns have arisen about the ownership of traditional knowledge, how it should be collected, and the extent to which it should be shared with government agencies. Although the Division has not yet formulated specific policies and procedures regarding the collection and disposition of TEK, our general research protocols remain in place and will be amended as necessary in the coming months.

Cooperative management: The Division of Subsistence has maintained a longstanding commitment to educating and informing policymakers, managers,

planners, and the public about the role and importance of subsistence in the economy of Alaskan communities, especially those in rural areas. However, subsistence users have increasingly demanded a more direct role in the decision-making process and are finding ways to more actively represent their own interests and rely less on intermediaries. As they developed constructive working relationships with rural Alaskans, Division staff often discovered that they were among the first ADF&G staff to actually spend time in the community and show an interest in the ideas, opinions, and experiences of local residents. This has compelled the Division to encourage resource managers, planners, and biologists to more actively find ways to involve rural Alaskans and Alaska Native organizations in their work. Doing so introduces new ideas into natural resource planning and management, and increases the likelihood of subsistence users supporting the process and its outcome. It also provides a forum for thoughtful discussion of biological research techniques, such as radiocollaring of moose and muskox, which may conflict with cultural beliefs in Alaska Native communities.

Some readers may conclude that the Division procedures and practices discussed above simply state the obvious in describing what should be standard procedure for anthropological research. In the Division's experience, however, not all government agencies in Alaska routinely show the same respect and deference to rural Alaskans. Instead, they spend only the time necessary to accomplish their task and hopefully do so in time to catch a plane back home the same day. Division staff have found (and been told) that our common sense procedures clearly set us apart from many other government agencies and enhance our ability to establish and maintain constructive working relationships in rural communities.

Findings

The Division of Subsistence research program has compiled a substantial body of information documenting the harvest and use of fish and wildlife resources by rural Alaskans. This quantitative and qualitative information has enabled staff to make interesting and important theoretical contributions that advance our knowledge of contemporary hunting and fishing groups, in addition to meeting the ongoing demands of managers and policymakers for quantitative data. The following general findings illustrate some of the Division's more noteworthy contributions to our understanding of subsistence economies in Alaska:

- Rural Alaskans (who comprise about 20 percent of the state's residents and 49 percent of the Alaska Native population) annually harvest an estimated 43.7 million pounds usable weight of wild foods. This translates into about 375 pounds per capita in rural areas. In comparison, urban Alaskans consume about 22 pounds of wild food per capita, while the average American in the continental U.S. uses about 220 pounds of domestic meat, fish, and poultry annually.

- Subsistence harvests in Alaska vary considerably by geographic area, ranging from 153 to 664 pounds per capita annually. Anadromous and freshwater fish comprise the bulk of both the rural and urban wild food harvest in Alaska, accounting for 59 percent and 68 percent, respectively, of all wild foods obtained for personal and family consumption. Marine mammals, land mammals, and waterfowl are seasonally important and contribute significantly to the economies of some households and communities. Although subsistence hunting and fishing accounts for only about two percent of the total harvest of fish and wildlife in Alaska (compared to 97 percent for commercial fisheries and one percent for recreational hunters and fishers), this harvest provides a significant proportion of the protein consumed in many rural communities (Wolfe 2000).
- While acknowledging the difficulty in assigning a dollar value to fish and wildlife harvested for subsistence uses in Alaska (Brown and Burch 1992), the estimated cost of imported foods that would be required to replace wild foods ranges from about \$131 million to \$218 million annually (calculated at \$3.00 - \$5.00 per pound replacement cost). This replacement cost varies considerably across the state but approaches 59 percent of family income in some Alaska Native households.
- Subsistence is a component of a “mixed subsistence-market economy” in many rural areas of Alaska. Extended family groups harvest fish and wildlife resources using efficient small-scale technologies, such as fishwheels, gill nets, motorboats, and snowmachines. Production is directed to meeting the self-limiting needs of families and small communities, rather than focusing on commercial markets. Intermittent and seasonal cash employment supplements subsistence production, in part because stable and full-time employment opportunities are limited in many rural areas.
- In addition to its economic significance, subsistence continues to reinforce important social and cultural values. Subsistence activities are vital for unifying families and communities, especially but not exclusively in Alaska Native villages. Extended family members typically cooperate in the harvest and processing of subsistence resources, then share the products among themselves and with others in the community (Magdanz and Utermohle 1998).
- In many rural communities a small subset of households referred to as “super-households” harvest most of the community’s supply of wild foods. More specifically, about 30 percent of the households often produce 70 percent or more of the total community harvest of wild foods (Wolfe 1987). Distribution of these resources occurs primarily among relatives and others with whom the

harvester has reciprocal social obligations. Subsistence foods in small amounts also are bartered through customary trade networks.

Summary

The complexity of fish and wildlife management in Alaska today is only partially a result of dual subsistence management by the state and federal governments. Members of the public, special interest groups, and policymakers also debate the merits of predator control, the impacts of all-terrain vehicles, and the effects of development on productive fisheries and wildlife habitat. However, the subsistence debate takes center stage because it has so deeply divided Alaskans and generated a considerable amount of controversy for more than 20 years. In such circumstances, resource management programs must be creative and responsive in order to be successful. By establishing the Division of Subsistence in the Alaska Department of Fish and Game, state lawmakers acknowledged the fact that both natural science and social science data are essential components of the resource management decision-making process. Indeed, resource managers now often admit that they really manage human behavior or at least have more control over it than they do over wildlife resources or the environment.

Anthropologists sometimes choose to avoid applying their skills and expertise to contemporary social issues, perhaps because doing so can be controversial, demanding, and require a major investment of time and resources, whereas pursuing an esoteric or "safe" research topic might be less challenging but more pleasant. Those of us working as applied anthropologists in the public sector must also recognize that we might face ethical dilemmas in which our obligations as public servants may conflict with our role as anthropologists. It is important to weigh this position against the option of standing aside and doing nothing to contribute to an informed decision-making process. As public servants, staff in the Division of Subsistence in the Alaska Department of Fish and Game arguably have made important contributions to resource management and public policy by documenting the workings of contemporary subsistence-based economies in rural Alaska. This alone is not enough, however, as Gerry himself noted in his 1968 article, "Is Anthropology Alive?":

In a world where anything we learn is likely to be put to immediate and effective use for ends beyond our control and antithetical to our values, we must choose our research undertakings with an eye to their implications. We must demand the right to have a hand or at least a say in the use of what we do as a condition for doing it. That demand may most often fall short of realization even when it is granted, but unless it is a minimal condition of our work we may become instruments for inhumanity in the guise of humane scientists.

We must seek to apply our knowledge and skills to real problems, defined by us and not simply accepted from the sources which provide our funds. We must ask questions which address the problems of our time rather than merely those which minimize or obscure them.... *This* is the acceptance of the responsibility of the social scientist. [Berreman 1968:395]

The Division of Subsistence has a legal mandate to collect information on all aspects of hunting and fishing in the lives of state residents. This has recently included branching out to assess the effects on subsistence foods of disasters like the *Exxon-Valdez* oil spill (Fall and Field 1996) and of other types of contaminants (Wolfe 1996). Staff must develop an appropriate study plan when a "real problem" is identified, obtain local approval and establish a working relationship with the study population, collect the data, and then analyze this information and make it available for application to resource use decision-making. Good information can be an effective tool for educating and informing decision-makers, but the challenge comes in presenting information in ways comprehensible to persons not trained in the social sciences—and who may not want to hear what we have to say.

However one evaluates the performance of the Division as an applied anthropology research program in a state government agency, we have taken steps to minimize the possibility of study findings being misrepresented or used to the detriment of rural Alaskans. We continue to seek ways to ensure that, when it is available, subsistence use information is available for use in decision-making processes that affect or involve subsistence users across the state. With a staff sensitive to cross-cultural issues and oriented toward working with the public, the Division has played a vital role in strengthening the overall working relationship between the Department of Fish and Game and rural Alaskans—and in bringing an important new ingredient to the decision-making process. I believe anthropologists in the Division of Subsistence are meeting the challenge of being responsible social scientists and are making positive contributions to resource management in Alaska. In doing so, they are demonstrating that anthropologists can work effectively in government agencies without compromising their ethical principles, despite the constraints inherent in the bureaucracy.

Works Cited

Andersen, David B.

- 2001 Local Hunting of Moose, Caribou, and Bear: 2000. Harvest Survey Results for Middle Yukon and Koyukuk River Communities. Fairbanks, AK: Alaska Department of Fish and Game, Division of Subsistence.

Andrews, Elizabeth F.

- 1989 A Low-Profile Subsistence Fishery: Pike Fishing in Minto Flats, Alaska. *Arctic* 42(4):357-361.

Association of Canadian Universities for Northern Studies (ACUNS)

- 1981 Ethical Principles for the Conduct of Research in the North. *In* Proceedings, First International Symposium on Renewable Resources and the Economy of the North. Milton M.R. Freeman, ed. Pp. 260-262. Ottawa: ACUNS.

Berreman, Gerald D.

- 1954 Effects of a Technological Change in an Aleutian Village. *Arctic* 7(2):102-107.
- 1964 Aleut Reference Group Alienation, Mobility, and Acculturation. *American Anthropologist* 66(2):231-250.
- 1968 Is Anthropology Alive?: Social Responsibility in Social Anthropology. *Current Anthropology* 9(5):391-396; 407-435.

Bosworth, Robert

- 1995 Biology, Politics, and Culture in the Management of Subsistence Hunting and Fishing: An Alaskan Case History. *In* Human Ecology and Climate Change: People and Resources in the Far North. David L. Peterson and Darryll R. Johnson, eds. Pp. 245-259. Washington, DC: Taylor and Francis.

Brown, Thomas C., and Ernest S. Burch, Jr.

- 1992 Estimating the Economic Value of Subsistence Harvest of Wildlife in Alaska. *In* Valuing Wildlife Resources in Alaska. George L. Peterson, Cindy Sorg Swanson, Daniel W. McCollum, and Michael H. Thomas, eds. Pp. 205-254. Boulder, CO: Westview Press.

Caulfield, Richard A.

- 1992 Alaska's Subsistence Management Regimes. *Polar Record* 28(164):23-32.

Cultural Survival Quarterly

- 1998 Crisis in the Last Frontier: The Alaskan Subsistence Debate. Volume 22, Issue 3.

Division of Subsistence

- 1984 Policy on Research Ethics. Division of Subsistence, Research Notebook Series, Report No. 2. Juneau: Alaska Department of Fish and Game

Fall, James A.

- 1990 The Division of Subsistence of the Alaska Department of Fish and Game: An Overview of its Research Program and Findings: 1980-1990. *Arctic Anthropology* 27(2):68-92.

Fall, James A. and L. Jay Field

- 1996 Subsistence Uses of Fish and Wildlife before and after the *Exxon-Valdez* Oil Spill. American Fisheries Society Symposium 18:819-836.

Fall, James A. and Charles J. Utermohle, eds.

- 1995 An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska, Vols. I-VI. Social and Economic Studies Unit, OCS Study MMS-95-010, Technical Report No. 160. Anchorage: U.S. Department of the Interior, Minerals Management Service, Alaska OCS Region.

Feldman, Kerry D.

- 1981 Anthropology and Public Policy in Alaska: Recent Policy Related to Legal Systems, Native Subsistence, and Commercial Fisheries. Policy Studies Review 1(1):87-110.

Georgette, Susan

- 2000 Subsistence Harvests in Northwest Alaska: Caribou, Moose, Bear, Wolf, and Wolverine, 1999-2000. Kotzebue: Division of Subsistence, Alaska Department of Fish and Game.

Haynes, Terry L.

- 1976 They Didn't Come in Four-Wheel Drives: An Introduction to Fortymile History. Report prepared for the Bureau of Land Management, Fortymile Resource Area, Tok, Alaska. Boulder, CO: Western Interstate Commission for Higher Education.

Haynes, Terry L., and Robert G. Bosworth

- 1996 Social Scientists and Subsistence Resource Management in Alaska. High Plains Applied Anthropologist 1(16):63-68.

Haynes, Terry L., David B. Andersen, and William E. Simeone

- 2001 Denali National Park and Preserve: Ethnographic Overview and Assessment. Report prepared for the National Park Service under terms of Cooperative Agreement CA 9910-7-0040. Fairbanks: Division of Subsistence, Alaska Department of Fish and Game.

Haynes, Terry L. and Robert J. Wolfe, eds.

- 1999 Ecology, Harvest, and Use of Harbor Seals and Sea Lions: Interview Materials from Alaska Native Hunters. Division of Subsistence Technical Paper No. 249. Juneau: Department of Fish and Game.

Kelso, Dennis D.

- 1982 Subsistence Use of Fish and Game Resources in Alaska: Considerations in Formulating Effective Management Policies. Division of Subsistence Technical Paper No. 65. Juneau: Alaska Department of Fish and Game.

Magdanz, James and Charles J. Utermohle

- 1998 Family Groups and Subsistence. *Cultural Survival Quarterly* 22(3):51-52.

Wolfe, Robert J.

- 1987 The Super-Household: Specialization in Subsistence Economies. Paper presented at the Annual Meeting of the Alaska Anthropological Association.
- 1993 Subsistence and Politics in Alaska. *In* Politics and Environment in Alaska. Alexander B. Dolitsky, ed. Pp. 13-28. Juneau, AK: Alaska-Siberia Research Center Publication #5.
- 1996 Subsistence Food Harvests in Rural Alaska and Food Safety Issues. Paper presented to the Institute of Medicine, National Academy of Sciences Committee on Environmental Justice. Spokane, WA.
- 2000 Subsistence in Alaska: A Year 2000 Update. Juneau: Division of Subsistence, Alaska Department of Fish and Game.

Wolfe, Robert J., and Robert J. Walker

- 1987 Subsistence Economies in Alaska: Productivity, Geography, and Development Impacts. *Arctic Anthropology* 24(2):56-81.

Wood, Sandra J., and Terry L. Haynes

- 1979 (1981) So You Think You Want to do Fieldwork: The Changing Face of Anthropological Research. *Kroeber Anthropological Society Papers* 59-60:68-75.