SUBSISTENCE HUNTING FISHING AND GATHERING RIGHTS OF NATIVE PEOPLE IN THE U.S.A. AND THE U.S.S.R.

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"The exquisite work of our ancestors teaches us to create work suited for the day in which we live. By taking the old, breathing new life into it, and developing a new creation, the spirit of our people lives.

We carry with us fragments of our culture and are now bringing those elements into the much broader scope of world civilization. We cannot return to the old ways but we must reflect them in our attitudes and in our art. This will be our contribution."

Jim Shoppert, Tlingit Indian artist, 1981

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PREFACE

Public attitudes towards utilization and conservation of native wildlife species vary strikingly from one group of organisms to another. For example, some folk believe that under no circumstances should native species be utilised for commercial purposes while others think it acceptable to utilise native fish but not native mammals. There are also striking differences in attitude among people of different education, economic status, profession, and cultural background. Furthermore, these attitudes are evolving, and not always in a common direction.

Western Australian legislation gives no clear guidance in this matter. The several Acts involved are inconsistent and, in some instances, contradictory.

Given the varied and changing nature of public attitudes in these often highly emotive matters, and the complexity of the legislation, it is desirable that legislation is kept under constant, or at least periodic review. The purpose of this report is to review current attitudes, legal and administrative processes, and field management programs of certain wildlife conservation matters in the United States and the Soviet Union, and to consider how these may relate to Western Australian circumstances.

In particular this report considers historical and recent developments with respect to special hunting and fishing rights for native American and Soviet people. These subjects are relevant to current wildlife management issues in Western Australia.

Largely because of language difficulties, my investigations were less comprehensive in the U.S.S.R. than in the U.S.; nevertheless, the Soviet experience has added a useful dimension to my conclusions.

The study which has culminated in this report was funded under the Government's Special Executive Fellowship Scheme. I would like to acknowledge the generous support of the Department of Executive Personnel under this Scheme, and the co-operation received from the Department of Conservation and Land Management which made it possible for me to spend so long away from my normal duties.

I must also acknowledge the wonderful hospitality and assistance I received during my travels from Soviet and American colleagues. Everyone I met and talked to was interested in my project, frank and helpful in their response to my questions, and overwhelmingly generous in their help in so many practical ways.

In the Soviet Union, I was made an official guest of the Soviet Academy of Science and provided with free transport and assistance allowing me to visit the State Hunting and Fishing Farm at Agzu and other places. That assistance was greatly appreciated.

Even if nothing else were gained from this project, I feel that it has been worthwhile for me on account of the new friendships and professional contacts I have made in the American and Soviet wildlife conservation and management agencies, and the personal fulfilment which such contact inevitably brings.

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INTRODUCTION

Australia, North America and the Far East of the U.S.S.R. have a common history in that during the 18th and 19th centuries they were invaded by people of European origin with a superior technology to that of the native hunters and gatherers. The Europeans brought a very different economic system based on primary and secondary industries and cash. There were varying degrees of violent conflict but in all cases the general result has been replacement of the indigenous culture with that of the Europeans. Yet in some areas elements of the original hunting and gathering culture remain.

The colonists introduced laws intended to protect the rights of native people to continue their traditional ways. Regrettably, legal hunting and gathering rights of native people have not always been respected. Frequently traditional hunting and gathering activities interfered with the colonists' land management practises or competed directly with the colonists' desire to utilize the same resources. Most recently a new kind of conflict has arisen between Natives and Whites because of the protected status of some hunted animals and the view of White "animal rights" activists that killing wild animals for any purpose is unacceptable. Some of these animals have "endangered" status.

In White communities the importance to native people of the process of hunting and gathering, as well as the product, rarely has been recognised. Only as anthropologists explored the intricacies of native lores and mores did the social and religious significance of these activities become clear and the concept of "subsistence" emerge, encompassing these aspects together with nutritional needs of native people.

In each of the three continents mentioned there is a degree of recent cultural revival on the part of native people, coupled with recognition by non-natives of the rights of ethnic minorities to retain elements of their cultural traditions if they wish.

In the United States and Canada a process of legislative and administrative review has been ongoing for some decades and 'subsistence' provisions are enshrined in legislation. Further, there has been a series of court decisions which have clarified the meaning and operation of the legislation in those countries. These matters have enormous impact on wildlife and fishery management.

Wildlife and fishery management strategies are aimed at either complete protection of the resource or sustainable use of it. They may involve giving priority to either commercial or recreational users, or achieving a balance between them. Recognition of native subsistence rights introduces a third element which may compromise the other two.

This report examines aspects of subsistence law and administration in the United States and the U.S.S.R. The conclusions drawn are relevant to revision of these matters in Australia where many of the same issues arise.

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SUBSISTENCE IN PRE-CONTACT TIMES

In North America prior to European contact, most Indian and Eskimo communities were founded on hunting, fishing and gathering the natural resources of the land and sea. Complex technologies, seasonal adjustment of living places, kinship organisation, belief systems, and ceremonial and ritual associations were adjusted to the fundamental and intimate linkage between native people and the natural resources which supported them. The term "subsistence" is used for this "customary and traditional" relationship of native people to those resources, the environment, and each other. It is not a term referring solely to consumption of natural resources for food.

A society to which the term 'subsistence' applied was one in which all members had access to the harvest of those natural resources of the immediate environment necessary for the group to feed itself and sustain its social, cultural and spiritual institutions. The actual harvest may have been performed by only a section (usually a majority) of the community, but there were distribution systems for exchange and sharing, usually based on kinship. The exchange and sharing processes inevitably played a fundamental role in maintaining social structures. Traditionally such mutual obligations were usually accompanied by ritual and ceremony, and together these processes helped give integrity and identity to the society members.

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SUBSISTENCE IN NORTH AMERICA TODAY

4.1 The subsistence concept

Following exposure to Euro-American culture native societies suffered severe breakdown of traditional, socially integrative cultural systems. Chronic depression and high rates of alcoholism and suicide were the universal result. In most cases the new circumstances brought substantial improvements in living standards, including regular food supplies and effective health and education services. However, unemployment has continued to be a major problem, especially in remote areas such as Arctic Alaska, and these improvements have not compensated for boredom and loss of social identity and spiritual meaning.

In a few communities the Christian Church (Russian Orthodoxy in the case of the Pribilof Islands) has provided an alternative belief system replacing the indigenous systems. Even so, hardly any Native community has been immune to severe social disruption since Euro-American contact.

Past official or unofficial government policy in the United States has generally been one of assimilation. Education programs have been geared primarily to Euro-American social, economic and political systems. In the case of Alaska, the Federal Alaska Natives Claims Settlement Act (1971) was a deliberate social engineering exercise designed, in part, to jump native people over the cultural gap directly into the modern American cash-economy world of corporate business ventures. This has been only partially successful. A proportion of today's young native people in Alaska are employed in the regional and village corporations established under that Act, in other industrial enterprises, or in government administration. Yet in many communities, especially the remote ones in environmentally severe conditions, business and industrial opportunities are very limited. The wage-earning population in most villages is a very small percentage of the whole. (This situation has direct parallels in Australian Aboriginal communities.)

In those common circumstances a majority of the people depend upon fishing, hunting and gathering both for daily food supplies and gainful activity. In other words subsistence is still an essential feature of Native community life for very practical nutritional and social reasons.

Complete assimilation into the Euro-American society and cash-economy is rejected by most native communities.

"Us Natives, we should have the right to live out our culture, something that cannot die ..... to take away our culture would be to take away our lives, everything we knew, everything our parents knew, everything our children should know ..... What is that billion dollars? [referring to the compensation payment for land lost under ANCSA]. I'd rather have my fishing and hunting rights."
(Franklin James, Ketchikan, (in) Berger, 1987)

"The great law of culture is to let one become what they were created to be. Let me be an Inupiat with the freedom to hunt, to fish, to trap, and to whale as my forefathers did."
(Delbert Rexford, Barrow (in) Berger, 1987)

In keeping with such views there is commonly a cultural revival whereby native people are attempting to re-establish and reassert significant elements of their traditional cultures, and

redefine a sense of identity and purpose. This process is strong and progressive everywhere from the Indian reservations of south-western U.S.A., to the fishing communities of the densely forested Northwest, and the Arctic whaling villages of the North Slope of Alaska. In this writer's view, we are witnessing an evolution of cultures in these communities which will lead eventually to new and different kinds of societies, rather than the complete assimilation of one by another. Subsistence fishing, hunting and gathering plays an essential role in this cultural evolutionary process.

Subsistence activities require special skills and a complex understanding of local environment. In native villages success as a fisherman or hunter is highly prestigious. For example, the whaling captains of Arctic Alaskan villages are invariably community leaders. Whether they hold office or not, leaders are men and women who provide for the needs of others in the village. Subsistence rates very highly in the value systems of village life and contributes substantially to achievement of individual sense of purpose, pride, self-worth and identity.

The broad concept of subsistence described here is now embodied in U.S. Federal law and in the laws of some states. These laws are intended to protect the rights of people in remote communities to utilise the natural resources of their environment for food and other uses, and also their rights to maintain traditional activities which are important in their culture.

4.2 Problems in implementation and White acceptance of the subsistence concept

a) Racism

In essence subsistence laws allow some citizens rights and privileges not shared by others. The concept is applied especially to Native people whose immediate ancestors were entirely dependant on a subsistence economy, but in some cases (as in Alaskan State law) it applies equally to any resident of prescribed remote areas. It is inevitable that such laws will invoke resentment and dispute between those who have the special rights and privileges and those who do not. In this case, because the people who have them are mainly ethnic minority groups, it is also inevitable that racist views will become involved.

While speaking about Indian fishing rights in Washington (Seattle symposium, July, 1989) Mr Curt Schmidt, State Director of Wildlife, said *"racism and religious intolerance is a fact and we must deal with it - no one has clean hands"*. It is difficult but important to recognise and acknowledge racist attitudes (especially in oneself) and prevent them interfering with a subject which is already socially complex. An objective should be to see subsistence laws debated and administered solely on the basis of social need and legal rights.

b) Conflicts with sport fishing and hunting.

Tourism has become a major growth industry in remote areas of the U.S. Sport fishing and hunting is one of the primary attractions. There is substantial investment in the travel and accommodation industries, and guiding and equipment industries which support the sportsmen. All this interest and effort focuses, in many situations, on the same resource which supports the subsistence economies of remote villages. Conflict between subsistence fishers and hunters and sports fishers and hunters is frequent and bitter.

Sports associations such as the American Riflemen's Association are strident opponents of laws which give subsistence users priority access to fish and game resources. In several notable cases they have been supported by government fish and game management agencies in court actions.

Natives, on the other hand resent the rights of sportsmen to enter and take fish and game on what they regard as their traditional hunting grounds.

"Say [a white man] bought a license in Anchorage on this river, they figure they have a right to move into any spot in the country. And I've seen it, Lester's seen it and everyone's seen it just time and time again."
(Bobby Kokrine [in] Berger, 1987).

c) Gradation between subsistence and commercial utilisation

One reason for the lack of acceptance and understanding of the concept of subsistence is the gradation between natural resource utilisation for local nutritional and cultural needs, and commercial utilisation as part of remote community economies. Remote communities in environmentally severe circumstances, such as the villages along the Arctic coast of Alaska have few options for employment of their people in cash-economy activities. A few have been able to take advantage of mining, tourism or military developments, but rarely has a complete transition been made. A significant proportion of the community remains unemployed in most cases.

A partial switch to a cash-economy usually began immediately with European contact one or two centuries ago. For example native people were engaged in the commercial bowhead whaling industry of the Bering Straits and Chukchi Sea and the fur-seal industry of the Pribilofs. In some cases, eg. the bowhead whale fishery, over-harvesting decimated the stock, not only destroying the resource but also creating antipathy to the industry on the part of the outside world.

In spite of difficulties resulting from depleted resources, collapsed markets, and governmental restrictions, many remote communities regard these natural resource industries as "traditional" and among the few options they have for developing their local economies. These industries generally involve community group participation and in the past they have been a useful replacement of the older traditional, and truly subsistence activities in terms of maintaining social cohesion. Consequently there is common confusion and dispute about the scope of the term "traditional" and whether the term subsistence can be broadened to embrace commercial activities such as fur-trapping because it "feeds" a social need.

d) Hunting and fishing method and technology

Another common source of misunderstanding and dispute about subsistence relates to the concept of 'traditional method'. Many white people argue that special fishing and hunting privileges for Native people are acceptable provided that the methodology and technology are traditional, usually meaning of the kind used prior to contact with Europeans. This view does not acknowledge that people will always seek to use the most efficient available method in any activity, and that to do so is a part of natural cultural change and betterment. It also fails to acknowledge the day to day importance of the products of subsistence activities in the economy of Native communities, or the social significance of the activity. The argument is neither realistic in its expectations of human behaviour nor relevant to the social circumstances of modern Native communities, at least the rural ones.

From a resource management point of view the important factor is not how wild animals are caught but how many, and which elements of the population are taken. These are management issues not technological ones. Any problems of increased take resulting from improved technology are controllable by harvest management. More effective technology may improve the humaneness of the kill and reduce the frequency of mutilation and loss.

Most Native communities have been quick to adapt European technology to their subsistence harvest activity. Modern firearms, fishing equipment, and mechanised transport are now naturally and effectively used by Native fishermen and hunters. Similarly, recreational sport fishing and hunting is now supported by a highly efficient equipment industry to the extent that the sportsman has an incredible array of sophisticated gadgetry available to him. Game management agencies cope with the potential for increased harvest provided by this increased efficiency by tighter controls. The same principle is relevant to subsistence fishermen and hunters.

However, modern technology has one significant impact on subsistence fishing and hunting. In general, the equipment can not be made by the operator from local materials. He must purchase the items, or at least the materials for making them. Also, machinery requires fuel, firearms require ammunition, storage requires refrigerators and electricity. To obtain these now essential items, the subsistence fisherman and hunter must have cash. Thus he is directly drawn into, or associated with, the cash- economy.

This is one way in which the subsistence and cash-economy systems are being blended into new kinds of village economies. The hunter-fishermen may be the unemployed members of the greater family, relying on the cash input of employed members and contributing harvest from the wilds as their input to the family budget. Alternatively, employment may be seasonal or part-time so that some individuals may play both roles. In the North Slope Borough of Alaska employees are entitled to "subsistence leave" as well as recreational and sick leave; on days of good weather in Barrow local offices can be short-staffed with even senior personnel out seal-hunting.

e) Competition with commercial operations

Where the resource is very large, as in the Pacific coast salmon fishery, there is naturally a move to utilise it commercially. Technology is developed for large-scale harvesting and processing. Large sums of capital are invested, many jobs are created, and service industries develop around the primary one. In these circumstances developers and governments are inclined to see subsistence users as 'getting in the way'.

Regrettably native subsistence users rarely have the skills or motivation to be the people who get the jobs. Such massive and sometimes wasteful harvests are often offensive to their spiritual beliefs. Usually they watch the commercial operation from the sidelines with resentment. This is certainly the history of the U.S. Pacific salmon fishery.

In the 'lower 48' states, native people are entitled by law to a share of the harvest for either commercial or subsistence use. Only recently have native Alaskans established similar rights.

One solution to this in Alaska has been 'affirmative action' programs providing native people with capital grants and training programs so that they may enter the commercial industry. This has proved quite successful but, again, it raises the issue of special privileges for ethnic minority groups and has political difficulties.

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LEGAL PROVISIONS FOR HUNTING, FISHING AND GATHERING RIGHTS OF NATIVE PEOPLE IN THE UNITED STATES

The special rights of native Americans to hunt, fish and gather wildlife resources are effected by a range of Federal and State legislation and court decisions, some stemming from actions taken in respect of the Indian Treaties of the last century.

5.1. The Indian Treaties

The major Indian Tribes were, and still are regarded by the U.S. Government as sovereign nations. Consequently the Indian Treaties are regarded as settlements between sovereign states with the status of inter-government treaties or conventions.

Article VI, Section 2 of the U.S. Constitution states:

"The Constitution of the United States and all Treaties made, or which shall be made, under the authority of the United States, shall be the supreme Law of the Land; and the judges in every State shall be bound thereby, any thing in the Constitution or Laws of any State to the Contrary not withstanding."

Consequently, U.S. courts have ruled that rights established under the Indian Treaties are superior to the laws of any State and protected by Article VI of the Constitution. Additionally, and as partial compensation for the land ceded by the Tribes, the Federal Government has assumed a trust responsibility which guarantees protection of treaty rights. The loss, infringement or abrogation of these rights would repudiate promises made to the Indians in exchange for which the United States acquired vast quantities of land and mineral resources. Only the U.S. Congress, through exercise of its plenary power over Indian affairs, may terminate Indian treaty rights. Federal courts have protected Indian treaty rights against such action by assuming that Congress would not abrogate in the absence of an overwhelming national interest. Should the abrogation of such rights occur, however, the affected tribes would be entitled to compensation.

The language of the Indian Treaties varies but, with respect to hunting and fishing rights, they generally comply with the following:

"The right of taking fish, at all accustomed grounds and stations, is further secured to the said Indians in common with the citizens of the territory . . . . together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands."
(Treaty of Medicine Creek, 1855, Art. 3,10 stat. 1132)

This language does not limit the right to subsistence fishing and hunting, nor the means of "taking". At the time of the Treaties, Indians utilised fish and wildlife resources for food, clothing, shelter, tools, ceremony, and trade. The language encompasses both subsistence and commercial activities. The rights as written were intended to provide a base for continued sustenance, cultural enrichment, and economic support for the Tribes, and help maintain tribal social structure and stability by permitting gainful employment in traditional and desirable occupations.

Sadly, the intention of these treaties were indeed abrogated in the main throughout most of the succeeding century, with the inevitable disastrous social consequences for the Indian people manifesting themselves in loss of spirit, chronic alcoholism and high rates of suicide.

In recent decades abrogation of hunting and fishing rights granted under the Indian Treaties has been challenged in the U.S. courts. A basis for determining the nature and extent to which these rights may be exercised in the context of overall resource allocation and conservation is now emerging from direction received from the courts. Central to most cases has been interpretation of the words "all accustomed grounds and stations" and "in common with the citizens of the territory".

A consistent interpretation from the courts has construed Indian Treaties not as grants of rights to Indians from the Federal Government, but as reservation by the Indian negotiators of pre-existing rights. The Tribal elders were quite clear that they were trading away land for peace and other entitlements but they specifically withheld for their people their traditional hunting and fishing rights. Federal courts have strongly affirmed that position.

Some State Governments and non-Indians have argued that "in common with" means that Indians have equal rights to non- Indians with respect to hunting and fishing, and are subject to the same conditions and regulations. This interpretation has been firmly rejected by successive court decisions, pointing out that the treaties were entered into between the United States and Indian tribes 'on the basis of formal equity'. In other words, the Indian Tribes as entities have the right to a half share of any particular resource, and the right to distribute that share among their members in their own ways. States may not pass laws or make regulations determining how the Indian share of the resource is allocated or managed.

The treaties are construed to permit hunting and fishing rights off reservations, unencumbered by State regulation, licensing and taxation. (No-one has disputed the rights of the Tribes to control and regulate hunting and fishing rights on reservations.)

In the case of the North West salmon fishery, the courts resolved that Indian fishermen have the right to a "fair share" of the harvestable stock. This was set by the courts at 50%. The harvestable stock has been ruled to mean those fish above the numbers needed to assure adequate escapement for spawning. This includes the stocks at sea, and not merely those which have returned to the accustomed fishing location. In addition, Indians may take <u>all</u> the harvestable stock from waters within their reservations.

The courts have qualified this ruling for situations where there is a demonstrated threat to conservation of the stocks. In those circumstances States may legislate for control of Indian fishing for conservation purposes. However, the State must show that conservation cannot first be achieved through restriction on non-Indian users. In a very recent case (March, 1989) the U.S. District Court enjoined the State of Wisconsin from interfering with the regulation of an Indian tribe's rights to harvest walleye and muskellunge fishes in the Great Lakes, ruling that such regulation is reserved to the tribe in accordance with designated conditions and principles adopted by the court. In that situation the stocks had become depleted to the extent that there was not sufficient for the purposes of both Indian and non-Indian users and the court directed that the entire harvest should be reserved to the Indians.

These court rulings assume that the Indian Tribes have the capacity for regulating and controlling the fisheries themselves. This has become the normal situation among the Indian Tribes, most of which employ their own biologists and and enforcement officers and maintain comprehensive research and management programs. Consortiums of Tribes have

established Fish and Wildlife Commissions with responsibilities for proper response to the challenges provided by the courts. They run research laboratories and fish hatcheries, collectively employing and contracting over 1,000 professional staff with expertise in these fields. A proportion of these staff are Indians.

The tribal Fish and Wildlife Commissions make a major contribution to fish and wildlife management in the United States. They contribute significantly to fishery enhancement programs (i.e. maintaining stocks by adding young fish produced in their hatcheries) and add a loud and legally effective voice to the increasing public demand for environmental safeguards and resource conservation. Consequently there has been a major turn around in the attitudes of State Governments and State fish and wildlife management agencies towards Indian fishing and hunting rights.

In 1975 the Circuit Court of Appeals upheld a U.S. Supreme Court ruling maintaining Indian fishing rights against a challenge from the State of Washington. The extent of the bitterness prevailing at that time can be assessed from the following remarks by the judge:

"The record in this case . . . . . make it crystal clear that it has been the recalcitrance of Washington State officials (and their vocal non-Indian commercial and sports fishing allies) which produced the denial of Indian rights requiring intervention by the district court. This responsibility should neither escape notice nor be forgotten."

And in another case at about the same time, also involving Washington State:

"The State's extraordinary machinations in resisting the [1974] decree have forced the district court to take over a large share of the State's fishery in order to enforce its decrees. . . . the district court has faced the most concerted official and private efforts to frustrate a decree of a federal court witnessed in this century."

From that situation characterised by litigation, acrimony, and frequent violence in the 1970s, the position has been reached where the Governor of Washington State recently (Jan. 1989) announced that the State would henceforth deal with the Indian Tribes on an equal government to government basis. At a symposium on Indian Fishing Rights held in Seattle, Washington State, in July, 1989 involving Indian and non-Indian fishermen, and Indian and State Government officials, the in-word was "co- management". At that time no-one was sure what this term means in practise but there was an obvious desire of all parties to "bury the hatchet" and get on with the business of managing and conserving the resource as allies in the face of environmental degradation caused by non-fishing interests.

Although litigative actions continue, there is now a more friendly attitude by the litigants who generally agree to take differences which can't be negotiated to the courts for resolution. However, non-Indian commercial and sports fishermen are still prone to argue and resent what they see as racially based privileges for Indians. The sport fishing community, and the equipment and guiding industries which support them, are particularly vocal and strident in their condemnation of Indian fishing rights.

Another problem is that although the Treaties deal with both fishing and hunting rights, most of the legal direction from the courts has dealt with cases involving only fishing. It seems clear that the same legal principles will apply to hunting but that has not yet received much attention in the courts. Whether or not State Governments, State game management agencies, and sport hunting interests will learn from the recent fishing litigation is yet to be seen.

There are Treaties only for the major Indian Tribes of the "lower 48" States. In 1871 the U.S. Congress put a stop to the signing of Treaties and there are many smaller tribes which have no rights granted in this way. Indians who are members of those non-treaty tribes have no special hunting and fishing rights off reservation, except where these are provided under Federal and State legislation. This is the situation in the State of Alaska where there are no treaties (with one minor exception) and very few reservations.

5.2. Federal Legislation

During the past two or three decades the U.S. Government has recognised the needs of native people with respect to hunting and fishing. Provision is made for it in several Federal Acts dealing with wildlife conservation and management in Alaska.

5.2.1 Alaska Natives Claims Settlement Act (1971) [ANCSA]

This legislation does not in itself contain provision for subsistence hunting and fishing rights in Alaska. However, subsequent Federal and State legislation which deals with subsistence issues was greatly influenced by the quite far-reaching consequences of ANCSA.

With one exception in south-west Alaska, no treaties were signed between the U.S. Government and the Indian, Eskimo and Aleut tribes of Alaska prior to the cut-off in this process in 1871.

Native land claims date back to 1867, after the sale of Alaska to the United States by Russia. Tlingit Indians of the south- west disputed the sale arguing that they were the owners of the land they occupied. Subsequently there was a succession of legal claims, but it was not until 1959 that the Tlingit and Haida Tribes secured a judgement in action initiated in 1935. In that ruling the U.S. Court of Claims explicitly declared that the Treaty of Cession in 1867 did not extinguish aboriginal title.

When the State of Alaska was created in 1958 aboriginal title to land was not recognised. Land claims became a major issue in later years, in spite of the 1959 ruling which was largely ignored. The matter came to a head in 1968 with the discovery of the vast oilfields of the North Slope and the desire of the oil companies to have the land claims issue settled to avoid disputes and conflicts during development.

ANCSA, passed by U.S. Congress in 1971, was an attempt to settle the matter permanently. In doing so it created Native Regional and Village Corporations, granted them title to 44 million acres of land, paid them $962.5 million in compensation for the land taken, and extinguished all other aboriginal title to land in Alaska. It also extinguished aboriginal rights to fish and hunt on land not held in title by the Native Corporations.

It is said that ANCSA was a deliberate attempt at social engineering, forcing Native people into business and to participate in the economic development of Alaska. The social effects of this Act continue to be extremely contentious but, with the exception of Native subsistence rights, they are outside the scope of this discussion. The extinction of native subsistence hunting and fishing rights in Alaska by the enactment of ANCSA made supplementary legislation necessary. Hence, the inclusion of subsistence provisions in another Federal Act, ANILCA, in 1980, and in other subsequent Federal and State legislation.

One feature of ANCSA which is important because it is adopted by subsequent legislation is its definition of 'Native', viz:

"Native means a citizen of the United States who is a person of one-fourth degree or more of Alaska Indian . . . . , Eskimo, or Aleut blood, or combination thereof. The term includes any Native as so defined either or both of whose adoptive parents are not Natives. It also includes, in the absence of proof of a minimum of blood quantum, any citizen of the United States who is regarded as an Alaska Native by the Native village or Native group of which he claims to be a member and whose father or mother is (or, if deceased was) regarded as Native by any village or group."

5.2.2 Alaska National Interest Lands Conservation Act (1980) [ANILCA]

ANCSA left many aspects of Native land and subsistence living unresolved. Following statehood the pristine wilderness of vast areas of Alaska, the diverse and abundant wildlife, and the spectacular scenery drew the attention of conservationists. The U.S. Congress resolved to reserve large tracts of selected lands for conservation purposes and declared that:

"In order to fulfil the policies and purposes of the Alaska Native Claims Settlement Act and as a matter of equity, it is necessary for the Congress to invoke its constitutional authority . . . . . and provide the opportunity for continued subsistence use on the public lands by Native and non-Native residents."

ANILCA is a federal statue by which many new national parks and reserves were created and existing ones expanded, adding substantially to the federal conservation lands system. After its passage 197 million acres, about 60% of the state, were reserved in various categories of national reserve. In addition to establishing reserves, and defining their purposes, ANILCA also spelled out a legal basis for subsistence on federal lands.

The purposes of ANILCA are given as follows:

"(a) In order to preserve for the benefit, use, education, and inspiration of present and future generations certain lands and waters in the State of Alaska that contain nationally significant natural, scenic, historic, archaeological, geological, scientific, wilderness, cultural, recreational, and wildlife values, the units described in the following titles are hereby established.

(b) It is the intent of Congress in this Act to preserve unrivaled scenic and geological values associated with natural landscapes; to provide for the maintenance of sound popuplations of, and habitat for, Wildlife species of inestimable value to the citizens of Alaska and the Nation, including those species dependent on vast relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems; to protect the resources related to subsistence needs; to protect and preserve historic and archaeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing, and sport hunting, within large arctic and subarctic wildlands and on freeflowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems.

(c) *It is further the intent and purpose of this Act consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established, designated, or expanded by or pursuant to this Act, to provide the opportunity for rural residents to engage in a subsistence way of life to continue to do so."*

The term "Native" in ANILCA has the same meaning as it does in ANCSA (see 5.2.1).

"Family" means "all persons related by blood, marriage, or adoption, or any person living within the household on a permanent basis."

"Barter" means "the exchange of fish or wildlife or their parts, taken for subsistence uses for other fish or game or their parts, or for other food or non-edible items other than money, if the exchange is of a limited and non-commercial nature."

National Parks System

Title II of ANILCA established large areas of land as part of the National Parks System by declaring new reserves and adding to existing reserves. The reserves of this system include National Parks, National Preserves and National Monuments.

Both sport hunting and subsistence hunting are permitted in National Preserves. Subsistence hunting by local residents is permitted in some National Parks and National Monuments, by specific provisions in the respective sections of the Act. Where there are no such provisions even subsistence uses are prohibited.

Section 205 of this title prohibits the Secretary [Dept. of Interior] from taking any action to unreasonably restrict commercial fishing in those National Monuments and National Preserves, where those activities were established prior to the Act (ie. 1980).

Section 206 specifically withdrew all land reserved under the Act from all forms of disposal or appropriation for mining and other purposes.

National Wildlife Refuge System

Title III of ANILCA established large areas of land as part of the National Wildlife Refuge System, declaring new refuges and enlarging others. After ANILCA the total area dedicated as National Wildlife Refuge in Alaska is 77,355,607 acres. Both sport hunting and subsistence uses are permitted.

Section 304 of this Title requires the Secretary to permit validly authorised existing commercial fishing in the waters of National Wildlife Refuges provided that it is not inconsistent with the purposes of individual reserve units, and does not represent a significant expansion beyond the levels of such activities during 1979.

Limiting clause

ANILCA contains a clause that after declaration of the new reserves provided for by that Act, no further conservation reserves would be established in Alaska.

Subsistence provisions

Title VII of ANILCA deals with "Subsistence Management Use". Subsistence use rights on public lands are not restricted to Native people and apply to any rural residents, but only Native people have such special rights on Native lands.

"Subsistence uses" are defined in ANILCA (Sec. 803) to mean:

"the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of non-edible by-products of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption and for customary trade".

This definition closely follows principles established in earlier Federal and State legislation. In the introductory sections (801 and 802) of Title VII there is an important statement by Congress about the purpose and intentions of the subsistence provisions, and they are quoted here in full.

"Sec. 801. The Congress finds and declares that-

(1) the continuation of the opportunity for subsistence uses by rural residents of Alaska, including both natives and non-Natives, on the public lands and by Alaska Natives on Native lands is essential to Native physical, economic, traditional and cultural existence and to non-Native physical, economic, traditional, and social existence;

(2) the situation in Alaska is unique in that, in most cases, no practical alternative means are available to replace the food supplies and other items gathered from fish and wildlife which supply rural residents dependent on subsistence uses;

(3) continuation of the opportunity for subsistence uses of resources on public and other lands in Alaska is threatened by the increasing population of Alaska, with resultant pressure on subsistence resources, by sudden decline in the populations of some wildlife species which are crucial subsistence resources, by increased accessibility of remote areas containing subsistence resources, and by taking of fish and wildlife in a manner inconsistent with recognized principles of fish and wildlife management;

(4) in order to fulfil the policies and purposes of the Alaska Native Claims Settlement Act and as a matter of equity, it is necessary for the Congress to invoke its constitutional authority over Native affairs and its constitutional authority under the property clause and the commerce clause to protect and provide the opportunity for continued subsistence uses on the public lands by Native and non-Native rural residents; and

(5) the national interest in the proper regulation, protection, and conservation of fish and wildlife on the public lands in Alaska and the continuation of the opportunity for a subsistence way of life by residents of rural Alaska require that an administrative structure be established for the purpose of enabling rural residents who have personal knowledge of local conditions and requirements to have a meaningful role in the management of fish and wildlife and of subsistence uses on the public lands in Alaska.

Sec. 802 It is hereby declared to be the policy of Congress that -

(1) consistent with sound management principles, and the conservation of healthy populations of fish and wildlife, the utilization of the public lands in Alaska is to cause the least adverse impact possible on rural residents who depend upon subsistence uses of the resources of such lands; consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes of each unit established, designated, or expanded by or pursuant to titles II through VII of this Act, the purposes of this title is to provide the opportunity for rural residents engaged in a subsistence way of life to do so;

(2) non-wasteful subsistence uses of fish and wildlife and other renewable resources shall be the priority consumptive uses of all such resources on the public lands of Alaska when it is necessary to restrict taking in order to assure the continued viability of a fish or wildlife population or the continuation of subsistence uses of such population, the taking of such population for nonwasteful subsistence uses shall be given preference on the public lands over other consumptive uses; and

(3) except as otherwise provided by this Act or other Federal laws, Federal land managing agencies, in managing subsistence activities on the public lands and in protecting the continued viability of all wild renewable resources in Alaska, shall cooperate with adjacent landowners and land managers, including Native Corporations, appropriate State and Federal agencies, and other nations."

Priority of "non-wasteful" subsistence uses over other hunting and fishing uses is given in Section 804. It says that whenever it is necessary to restrict the taking of fish and wildlife in order to protect the continued viability of the populations priority for subsistence uses shall be given based on the following criteria:

" (1) customary and direct dependence upon the populations as the mainstay of livelihood;
(2) local residency; and
(3) the availability of alternative resources."

Public participation

In keeping with Congress' policy that subsistence management should involve adequate consultation with and input from the subsistence uses, Section 805 provides that the Secretary shall establish a Statewide system of "subsistence resource regions", Local Advisory Committees and Regional Advisory Councils.

Regional Advisory Councils are to be established in each subsistence resource region, and are composed of residents of their respective regions. They have the following authority:

"(A) the review and evaluation of proposals for regulations, policies, management plans, and other matters relating to subsistence uses of fish and wildlife resources within the region;

(B) the provision of a forum for expression of opinions and recommendations by persons interested in any matter related to the subsistence uses of fish and wildlife within the region;

(C) the encouragement of local and regional participation pursuant to the provisions of this title in the decision making process affecting the taking of fish and wildlife on the public lands within the region for subsistence uses;

(D) the preparation of an annual report to the Secretary which will contain -

(i) an identification of current and anticipated subsistence uses of fish and wildlife populations within the region;
(ii) an evaluation of current and anticipated subsistence needs for fish and wildlife populations within the region;
(iii) a recommended strategy for the management of fish and wildlife populations within the region to accommodate such subsistence uses and needs; and
(iv) recommendations concerning policies, standards, guidelines, an regulations to implement the strategy. The State fish and game advisory committees or such local advisory committees as the Secretary may establish pursuant to paragraph (2) of this subsection may provide advice to, and assist, the regional advisory councils in carrying out the functions set forth in this paragraph.

Section 808 of ANILCA requires that a Subsistence Resource Commission be established for each national park or national monument within which subsistence uses are permitted by the Act. Each commission has 3 members appointed by the Secretary (Department of Interior) and 3 representing the Regional Advisory Council or Local Advisory Committee for the area in which the reserve occurs. The latter 3 members must *"engage in subsistence uses within the park or monument"*. The Commissions are administered by the National Parks Service or Dept. of Fish and Wildlife, depending on the reserve category.

Section 805 requires that there be a system of local advisory committees and regional advisory councils to provide input to policy-making and ongoing management decisions relating to subsistence activities on public lands. The Secretary (Dept. of Interior) is empowered to establish these consultative and advisory bodies, in consultation with the State, if the State fails to do so. In fact the State has met these requirements. The advisory committees are serviced by the State Dept. of Fish and Game and reporting to the federal authorities is done via the State. Details of these committees and councils are given in the section of this report dealing with State legislation.

The Act contains a provision for the Secretary to reimburse the State for reasonable costs relating to the establishment and operation of the Regional Advisory Councils.

5.2.3 Marine Mammal Protection Act (1972) [MMPA]

This legislation was enacted *"for the purpose of protecting and encouraging the growth of marine mammal populations to the greatest extent feasible, commensurate with sound policies for resource management."* The Act was re-authorised in November, 1988 until 1993.

With some exceptions, the Act places a moratorium on taking or importing marine mammals or their products into the United States. To "take" means to hunt, capture, kill or harass, or to attempt these actions.

The U.S. Marine Mammal Commission, consisting of 3 part-time Commissioners appointed by the President, is established under the Act, charged with responsibility for developing, reviewing, and making recommendations on actions and policies for all Federal agencies

with respect to marine mammal protection and conservation and for carrying out a research program. The Commission is supported by a small executive staff and a part-time Committee of Scientific Advisors on Marine Mammals. The Commission reports annually direct to Congress.

Responsibility for administration of the Act is divided between the Secretary for Commerce, under whom the National Oceanic and Atmospheric Administration (NOAA) operates, and the Secretary for the Interior who is responsible for the U.S. Fish and Wildlife Service (FWS). The former deals with whales, sea-lions, seals, dolphins and porpoises, the latter with polar bear, walrus and sea-otters. This curious division of responsibility has an historical basis.

NOAA and the FWS are authorised in their respective areas to issue permits under the exceptions provision of the Act for taking marine mammals for scientific research, public display, and incidentally to commercial fishing.

Amendments to the MMPA (and to the Endangered Species Act) in 1986 allowed additional "small" takes of endangered, threatened and depleted species of marine mammals, provided the action is shown to be likely to have negligible effects on the populations. The amendments are intended to provide for situations where activities by the military or oil exploration may disturb marine mammals.

The Act does not permit the killing of any marine mammals for commercial purposes, although species managed under international agreements are exempt as long as the agreements further the purposes of the Act.

However, the Act contains exceptions in the case of mammals taken for subsistence purposes by Alaskan Natives. While much of this Act is relevant and of interest in the Australian context, only those sections dealing with the subsistence take of marine mammals are considered in this report.

Exemptions for Alaskan Natives

Any Indian, Aleut or Eskimo who resides in Alaska and who dwells on the coast of the North Pacific or the Arctic Ocean *"may take any marine mammal, if such taking:*

(1) is for subsistence purposes; or

(2) is done for purposes of creating and selling authentic native articles of handicrafts and clothing provided, That only authentic native aartilces of handicrafts and clothing may be sold in interstate commerce: And provided further, That any edible portion of marine mammals may be sold in native villages and towns in Alaska for native consumption. For the purposes of this section, the term "authentic native articles of handicrafts and clothing" means items made wholly or in some significant respects of natural materials, and which are produced, decorated, or fashioned in the exercise of traditional native handicrafts without the use of pantographs, multiple carvers, or other mass copying devices. Traditional native handicrafts include, but are not limited to weaving, carving, stitching, sewing, lacing, beading, drawing and painting; and

(3) in each case, is not accomplished in a wasteful manner."

These Native subsistence rights are qualified by a provision enabling the Secretary to prescribe regulations prohibiting or limiting the take of any species or stock of marine mammals which he determines to be depleted.

"Alaskan Native" in the MMPA is defined in the same way as in the Alaska Native Claims Settlement Act, i.e. as any citizen of the United States who is *"one-fourth degree or more Alaskan Indian, Eskimo or Aleut, or combination thereof"* (see sect. 5.2.1).

"Authentic native articles of handicrafts and clothing" are further defined in the Regulations as meaning items made by an Alaskan Native which:

"a) were commonly produced on or before 21 December, 1972; and
b) are composed wholly or in some significant respect of natural materials; and
c) are significantly altered from their natural form ..... Improved methods of production utilising modern tanning techniques at a tannery ..... may be used so long as no large scale mass production industry results."

"Wasteful manner" means *"any taking or method of taking which is likely to result in the killing of marine mammals beyond those needed for subsistence or for the making of authentic articles of handicrafts of a substantial portion of the marine mammal and includes, without limitation, the employment of a method of taking which is not likely to assure the capture or killing of a marine mammal, or which is not immediately followed by a reasonable effort to retrieve the marine mammal."*

Transfer of management authority to the State or Alaska.

Prior to the passage of the MMPA in 1972, the hunting of coastal marine mammals in Alaska had been managed by that State's wildlife authorities, and in 1976 the State expressed a desire to return to that situation. Subsequently, amendments to the MMPA were passed in 1981 providing for transfer of management authority, provided that the State meets certain conditions, especially in relation to subsistence hunting rights.

The 1981 amendments included a definition of 'subsistence' which is essentially the same as that of ANILCA (see sect. 5.2.2), i.e. subsistence rights are reserved for "rural Alaskan residents" and not solely for Alaskan Natives. In this respect the amendment made a significant change to the intention of subsistence provisions in the original Act. However, the definition in the amendment clearly relates strictly to the matter of transfer of authority to the State. Since the State has not yet put forward proposals which meet the required conditions, no transfer has taken place. This matter is highly controversial in Alaska, both between State and Federal wildlife agencies, and among and between the rural villages involved. An early resolution does not seem likely and in the meantime subsistence rights to take marine mammals in Alaska are restricted to Native people.

Optimal sustainable population (OSP). For the purposes of setting management goals, regulations introduced under the MMPA defined this interesting term. It has not been widely accepted by international agencies but has some currency in the United States. It is defined as:

"a population size which falls within a range from the population level of a given species or stock which is the largest supportable within the ecosystem to the population level that results in maximum net productivity. Maximum net productivity is the greatest net annual increment in population numbers or biomass resulting from additions to the population due to reproduction and/or growth less losses due to natural mortality."

5.2.4 Endangered Species Act (1973) [ESA]

The Act is intended to provide special protection measures for species deemed to be "endangered" (i.e. in danger of extinction throughout all or a significant portion of their range) and those which are "threatened" (i.e. likely to become endangered in the foreseeable future throughout all or a significant portion of their range). A list of such species is maintained and the Secretaries of the respective Federal agencies are required to direct that "recovery plans" be developed for them. As in the case of the MMPA, the ESA prohibits the take of any listed endangered or threatened species, but with similar exceptions.

There are provisions for non-wasteful subsistence take of endangered and threatened species by Alaskan Natives and non-Native permanent residents of Alaskan native villages. There are provisions for manufacture of "authentic Native articles" which may be sold but not mass produced. The term subsistence is defined to include selling any edible portion of fish or wildlife in native villages and towns in Alaska. These provisions may be nullified by Secretarial regulation if it is determined that subsistence take would "materially and negatively" affect the population status of any particular species in part or the whole of its range.

5.3 International Treaties and Conventions

The United States is a signatory to several international agreements providing special protection to species of wildlife. For the most part these agreements have been negotiated at Federal level with little, if any, participation by traditional users. As the agreements themselves have no regulatory power they are supplemented by Federal legislation establishing the authority and mechanisms for implementation.

Since international agreements entered into by the U.S. Congress are the "supreme law of the land" (see sect. 5.1) they are superior to other Federal legislation and State legislation where there is any conflict. Therefore, international agreements covering species which are the legitimate resource of subsistence users under other legislation, may have profound effects on subsistence laws. Generally, the domestic laws giving effect to international agreements contain exemption for subsistence users but there are many anomalies.

The international agreements which primarily affect subsistence laws in Alaska are summarised in the following accounts gleaned from secondary sources.

5.3.1 Migratory Bird Treaty Act (MBTA)

This Act implements a number of different treaties dealing with protection of migratory game birds, each of which has different language pertaining to subsistence uses in Alaska.

a) <u>Treaty with Great Britain and Canada (1916)</u>
Prohibits harvest of migratory game birds from 10 March to 1 September. There are no exemptions for Alaskan Natives. The treaty language was modified by the Alaska Game Association Act. [See Section 7.3 on the Arctic Geese controversy for further details.]

b) <u>Treaties with Mexico and Japan (1974)</u>.
The Japanese treaty contains exemption for Alaskan Natives to take migratory birds and their eggs for food or clothing.

c) Treaty with the U.S.S.R. (1976).
Contains no specific provisions for subsistence uses by Alaskan Natives but allows the Secretary (Dept of Interior) to issue regulations and accommodate the "nutritional and essential needs" of "indigenous inhabitants".

5.3.2 International Convention for the Conservation and the Regulation of Whaling (1946)

The Convention established the International Whaling commission with authority to regulate the commercial and subsistence harvest of whales. The U.S. Whaling Convention Act (1946) gives effect to it in the U.S. In the context of the report this Convention has relevance to the subsistence harvest of bowhead whales in Alaska and is discussed in detail in Section 7.1.

5.3.3 Convention on the Conservation of the North Pacific Fur Seal (1957)

Commercial harvest of the North Pacific Fur Seal at the Pribilof Islands by Native Aleuts has been a traditional activity since the islands were colonised in the 18th century. It was governed under various international treaties since 1911, and revised in 1957 as an agreement between the U.S., Canada, Japan and the U.S.S.R. The Treaty and the U.S. Implementing Act were amended again in 1976, and last extended as a Protocol in 1981.

The Fur Seal Convention Protocol was due again for extension in 1984, but the matter became controversial in the U.S. due to intervention by conservation and animal rights groups and negotiations failed. Consequently, the Fur Seal Act lapsed and the Marine Mammal Protection Act has been the operative legislation since 1984.

Under that legislation commercial harvest is not permitted and the harvest is now limited to subsistence uses. The matter is discussed in detail in Section 7.2.

5.3.4 Convention for the Conservation of Polar Bears (1976)

The Arctic nations (U.S.A., U.S.S.R., Canada, Denmark and Norway) are the signatories to the agreement. The convention contains clauses granting exemptions for subsistence uses but the language is ambiguous. It limits the exemptions to "traditional methods" of hunting, subject to "accordance with the laws of that party" [i.e. the particular signatory nation in question], and links the exemptions to "the exercise of . . traditional rights." There is no specific domestic legislation in the U.S. and it can be argued that the "traditional rights" are those provided in the subsistence clauses of ANILCA and the State of Alaska game laws.

5.4 Alaska State Legislation

The State Constitution allows no distinctions to be made between citizens on the basis of race, religion, gender or ethnic origin; State law may not make any special provisions for native Alaskans which are not common to all citizens. Consequently, the special provisions of State legislation for subsistence relate to all citizens living in rural areas where it makes a necessary contribution to local economy, nutrition and cultural activities.

Prior to agreeing to the transfer to the State of management authority for fish and game on Federal lands in Alaska, the Federal Government insisted that State laws for subsistence must meet at least the standards set in ANILCA. After some difficulty this has now been achieved.

Under the State Fish and Game Statutes, there are two Boards, one for management of fisheries and the other for game. They comprise "knowledgeable and informed" citizens appointed by the Governor and are responsible for development and overseeing implementation of fishery and game regulations. The regulations are ratified by the State parliament.

The Department of Fish and Game services the Boards and conducts the necessary research, monitoring and administrative programs. (Enforcement of the regulations is the responsibility of the Division of Fish and Wildlife Protection within the Department of Safety.)

Conflicts over resource use became apparent several decades ago, with respect to competing sports, subsistence and commercial users. Sports fishing and hunting have become a major component of Alaska's tourist industry and economy. By tradition and training wildlife management in the U.S. is strongly directed towards managing the resources for sports use. This has manifested itself as a bias against subsistence use and users in Alaska, a bias which is still in evidence.

The insistence by Federal authorities on adequate provision by the State legislature and administration for subsistence uses has been the subject of somewhat bitter dispute. The subsistence laws eventually introduced by the State were administered tardily by the Boards until several court decisions in favour of subsistence users forced the issue. Even now these laws are resented and opposed by a large proportion of the non-Native community, especially those involved in the sports fishing and hunting industries. On the other hand, the laws are regarded by many Native subsistence users as inadequate and lacking credibility.

Three major requirements of the Federal Government were that priority should be given to subsistence over other uses, that there should be a set of criteria to determine whether or not a particular use is subsistence or not, and that there should be adequate mechanisms for ensuring input into policy and implementation by subsistence users.

State definition of subsistence

The Alaska Statutes Sects. 16.05.257(h)(l) and 16.05.940(22) define subsistence as:

"the customary and traditional uses in Alaska of wild, renewable resources" .... *"for direct personal or family consumption as food, shelter, fuel, clothing, tools or transportation, for the making and selling of handicraft articles out of non-edible byproducts of fish and wildlife resources taken for personal or family consumption, and for the customary trade, barter, or sharing for personal or family consumption; for the purposes of this paragraph "family" means all persons related by blood, marriage, or adoption, and any person living within the household on a permanent basis."*

Taking fish or game under the authority of these sections is subject to reasonable regulation of seasons, catch or bag limits, and methods and means. In the legislative history of these provisions it was clear that they were intended to apply to both aboriginal and later immigrant users.

It will be noted that this State concept of subsistence is essentially the same as that in ANILCA for federal lands (Sect. 5.2.2).

Identification of legitimate subsistence users.

Following court proceedings in which it was found that the Board of Fisheries had improperly denied subsistence fishing rights to a group of Cook Inlet salmon fishermen, the Boards established a set of criteria for subsistence use. After considerable debate the following set of criteria were adopted in 1981:

1. long-term, consistent pattern of use, excluding interruption by circumstances beyond the users control such as regulatory prohibitions;

2. a use pattern recurring in specific season of each year;

3. a use pattern consisting of means and methods of harvest which are characterized by efficiency and economy of effort and cost, and conditioned by local circumstances;

4. the consistent harvest and use of fish or game which is near, or reasonably accessible from, the user's residence;

5. means of handling, preparing, preserving and storing has been traditionally used by past generations, but not excluding recent technological advances where appropriate;

6. a use pattern which includes the handing down of knowledge of fishing or hunting skills, values and lore from generation to generation;

7. a use pattern in which the hunting or fishing effort or the products of that effort are distributed or shared among others within a definable community of persons, including customary trade, barter, sharing and gift-giving ... a community may include specific villages or towns with a historical preponderance of subsistence users, and encompasses individuals, families, or groups who in fact meet the criteria described in this subsection;

8. use pattern which includes reliance for subsistence purposes upon a wide diversiy of the fish and game resouces of an area, and in which that pattern of subsistene uses provides substantial economic, cultural, social, an nutritional elements of the subsistence user's life.

Priority for subsistence uses. A 1987 amendment (Sect. 16.05.258) spells out in detail the requirement for priority to be given to subsistence uses of fish and game in the following way:

"(a) The Board of Fisheries and the Board of Game shall identify the fish stocks and game populations, or portions of stocks and populations, that are customarily and traditionally used for subsistence in each rural area identified by the Boards.

(b) The Boards shall determine
- *(1) what portion, if any, of the stocks and populations identified under (a) of this section can be harvested consistent with sustained yield; and*
- *(2) how much of the harvestable portion is needed to provide a reasonable opportunity to satisfy the subsistence uses of those stocks and populations.*

(c) *The Boards shall adopt subsistence fishing and hunting regulations for each stock for which a harvestable portion is determined to exist under (b)(1) of this section. If the harvestable portion is not sufficient to accommodate all consumptive uses of the stock or population, but is sufficient to accommodate subsistence uses of the stock or population, then non-wasteful subsistence uses shall be accorded a preference over other consumptive uses, and the regulations shall provide a reasonable opportunity to satisfy the subsistence uses. If the harvestable portion is sufficient to accommodate the subsistence uses of the stock or population, then the Boards may provide for other consumptive uses of the remainder of the harvestable portion."*

Note that to give effect to these provisions a great deal of technical information is necessary for each of the harvested species in each of the defined "rural areas". They also require a substantial body of technical information on the level of harvest "needed" for subsistence, i.e. basically sociological and economic information.

Note also that these provisions apply only to the use of stocks and populations in "rural areas identified by the Boards". In other words subsistence uses do not have priority in areas which the Boards have not identified as "rural". This has brought sharp focus onto the Boards' identification of "rural" and "urban" areas and has become a major point of dispute and litigation.

Priority among subsistence users

Sect. 16.05.258 also provides criteria for deciding on preferential use among subsistence users when the harvestable resource is shown to be insufficient to meet total subsistence demand, viz:

"If it is necessary to restrict subsistence fishing or subsistence hunting in order to assure sustained yield or continue subsistence uses, then the preference shall be limited, and the Boards shall distinguish among subsistence users, by applying the following criteria:

(1) customary and direct dependence on the fish stock or game population;
(2) local residency; and
(3) availability of alternative resources."

Game Management Units

As discussed in Section 5.2.2, ANILCA required the State to establish "at least six Alaska subsistence resource regions." In the event the State has established twenty six regions referred to as Game Management Units. Some of these are classified by the Boards as "rural" and some "urban".

The Boards of Fish and Game have had difficulty in determining which areas of the State should be determined 'urban'. Originally they defined as 'non-rural' those communities with populations over 7,000 and those within a road-connected zone of an organised borough. A more precise definition is still being developed, but at this stage the areas containing the communities of Anchorage, Juneau, Fairbanks and Ketchikan are declared non-rural, i.e. "urban" for the purposes of the regulations. Citizens, including Native people, living in those urban areas have no subsistence hunting or fishing rights, and the hunting and fishing regulations make no provision for subsistence in those areas.

From the point of view of Native people resident in urban areas but with family and traditional ties in rural areas, this situation places them at a disadvantage. Also, some of the defined urban areas, eg. Anchorage, take in large areas of surrounding land where lifestyles are actually rural.

In a very recent case Kenitzie Native people living on the Kenai Peninsula not far from Anchorage in an urban area, defied the law and fished for salmon, claiming subsistence rights. the Federal Court of Appeals ruled in their favour, saying that their lifestyle was traditional and their place of living obviously rural, and that the Boards were wrong in including it within an urban zone. The area in question is one of the best sport fishing localities within reasonable access of Anchorage, and the Court appears to have doubted the State's motives in declaring it an urban zone.

Advisory Committees

Even prior to ANILCA the State Boards of Fish and Game had initiated a system of advisory committees intended to provide input into the policies and regulations of the Boards. Section 16.05.260 of the Alaska Fish and Game Statutes provides that the Boards: *"may ... establishing advisory committees to be composed of persons well informed on the fish and game resources of the locality."* Recommendations from the committees are made to the relevant Board for consideration. If the Board chooses not to follow the recommendations of a committee, then it must notify the committee giving its reasons. Power may be delegated to the committees for emergency closure of fishing or hunting on a local basis if necessary.

Since the passage of the Federal ANILCA, the State Boards of Fish and Game have established Advisory Committees in each of the Game Management Units, complying in detail with the requirements of that legislation (see Section 5.2.2).

However, it should be noted that the Boards and their Advisory Committees are responsible for all regulations pertaining to fish and game, and their considerations are said to be biased in favour of recreational fishing and hunting. The credibility of this system as a means for input from subsistence users is low, especially among Native people. This is so much so that, in attempting to resolve at least one major subsistence hunting issue (geese on the Yukon Delta - see Section 7.3) the Dept. of Fish and Game itself was obliged to turn to a committee of local Native people from the Tribal Government system, rather than to the appropriate Advisory Committee.

5.5 Tribal Regulations

At present it is assumed that the State of Alaska has jurisdiction over fishing and hunting on the Native Corporation lands designated by ANCSA, including subsistence activities. Although these lands are not 'reservations' equivalent to those of the 'lower 48' States established under the Indian Treaties, the question of their status in our present context has been raised recently.

One of the possible solutions to problems created by ANCSA may be the establishment of Tribal Governments and the transfer of the Native Corporation lands to them. That would create an unprecedented legal situation as Federal law interprets "Indian country" as including not only the Indian Reservations but also "any dependent Indian community". The jurisdiction of the State over fishing and hunting would then be in doubt. It seems likely that legal authorities representing Native interests in Alaska may soon explore this situation by litigation.

5.6 Summary

Although the major State and Federal legislation in the U.S. which deal with Indian subsistence fishing and hunting rights are varied in their approach and detail, there appear to be some common threads.

1. In the 'lower 48' States where Indian Treaty Rights apply, fishing and hunting is managed by Indian Tribal governments both on reservations and off-reservations at 'traditional and customary' places, but in collaboration with State authorities in the latter case. In the event that the harvestable resource becomes depleted below the level needed to meet demands, then Indian Tribal members have priority over other users. These principles apply to both commercial and subsistence operations.

2. In Alaska where Indian Treaty Rights do not apply (with one minor exception) State and Federal laws recognise that subsistence hunting and fishing has fundamental importance, not only as a valid economic base in remote rural communities, but also as an important factor in sustaining Native societies through its impacts on cultural values and belief systems.

3. The Federal Alaska National Interest Land Settlement Act (ANILCA) provides for subsistence hunting and fishing on federal lands in Alaska, including most National Parks. Now that Alaskan State Law complies with ANILCA, authority to manage these activities is delegated to State agencies.

4. ANILCA recognises the importance of subsistence by giving it priority over other uses but, in conformity with the State Constitution, no distinction is made between Native and non-Native rural residents.

5. ANILCA recognises that involvement of subsistence users is essential in the decision making process, by providing for advisory commissions for management of these activities on Federal lands, including National Parks and National Refuges.

6. State of Alaska Fish and Game statutes also recognise the importance of subsistence by giving it priority over other uses, but the State Constitution permits no distinction to be made between Native and non-Native rural residents.

7. The State of Alaska statutes, and Boards of Fish and Game regulations, identify rural areas where the subsistence provisions apply (to all residents therein), and urban areas where they do not.

8. The State of Alaska statutes and Boards of Fish and Game regulations, establish advisory committees for the rural and urban regions, to provide local input and advice on all matters relating to fish and game management, including subsistence uses.

9. Native interests tend to regard the State provisions for subsistence, and the implementation thereof, as lacking credibility, in view of perceived bias by State authorities in favour of sport hunting and fishing.

10. Native interests tend to regard the Federal provisions for subsistence, and the Federal authorities' 'track record' in this regard, as superior to those of the State, but there is some resentment about perceived Federal acquiescence to the demands of conservation groups for limitations on the take of marine mammals.

11. Federal and State laws and regulations take a broad view of subsistence, including within it the use of byproducts for handicraft manufacture and other practical and cultural uses. However, there is some inconsistency about application of the term "traditional" in regard to these secondary uses of materials from fish and game taken for subsistence purposes.

12. The Federal Marine Mammal Protection Act (MMPA) prohibits the taking of marine mammals, with a few exceptions including subsistence take by Native people.

13. The MMPA recognises that involvement of Native subsistence users is essential in the decision-making process, by providing for advisory committees or commissions with a direct role in regulating the take of subsistence species of marine mammal.

14. Federal and State laws do not require the method of subsistence take to be "traditional", i.e. that only traditional weapons and means of transport should be used. Rather, the method of take is preferred to be efficient and humane, and the ecological impact of subsistence hunting is controlled by management of the level of harvest.

6

PROVISION FOR HUNTING FISHING AND GATHERING IN THE FAR EAST OF THE USSR

Colonization by Europeans of what is now the Far East of the Soviet Union followed similar patterns to that of Alaska. Probably the greatest attraction was the wealth of furred mammals and the oil to be obtained from North Pacific marine mammals. European culture and a cash economy were superimposed on the subsistence life styles of the indigenes.

Few Far East communities, even in the Arctic north, retain native traditions; most are characterized by extensive intermarriage between natives and whites. Some traditional mythology is retained but traditional religious and ceremonial practises are not maintained except as an art form. Subsistence is not recognised officially as having anything more than nutritional relevance.

Since the revolution assimilation seems to have been official policy.

"The cultures of the native peoples of Kamchatka and Chukotka ... underwent dramatic changes in the 20th century. In 70 years of Soviet administration these groups advanced from patriachal social and economic organization to contemporary socialism."
V L Lebedev, in "Siberian Peoples: A Soviet View" (1988)

There are a number of oriental "small nations" (we would call them ethnic minorities) in the Far East including Chukchi, Koryak, Itelemen, Even Kerek, Aleut, Nanai and Udighai. These groups have representation in the local soviets (councils). For the most part they are integrated into the modern society.

In remote communities where there is a lack of agriculture and secondary industry, hunting, fishing and reindeer ranching provide the main sources of employment. These activities are much more tightly structured and controlled than their equivalents in Alaska, and involve both native and white people, and their mixed progeny.

In the 1930s 'collective farms' were established in the Arctic areas for reindeer ranching. Later these evolved into 'State farms' which process the products as well as rear the animals. Many of them have evolved more complex activities involving fur-trapping and fishing. They are managed according to rather rigid rules determined by centralized government agencies. More recently 'cooperative farms' have emerged which have a much greater degree of autonomy in management and marketing.

There are also 'State hunting and fishing farms' and cooperative equivalents. These are essentially wilderness areas operated as hunting and fishing precincts. Furs from forest mammals and salmon from the rivers are the main products.

Through the generous assistance of the Soviet Academy of Science I was able to visit a remote "State Hunting and Fishing Farm" occupying the catchment of the Samarga River in the extreme north of the Primorsky province. The centre of activity is the village of Agzu which has a population of about 400 people with a mix of native Udigai and Nanai, and eastern European ancestry. The village of Samarga at the mouth of the River, some 500 km north of Vladivostok is the administrative centre.

The whole of the Samarga catchment is mountainous virgin forest (taiga). Several species of anadromous salmon migrate up the river. There is a rich mammal fauna including many species with valuable furs, e.g. bear, marten, fox, ermine.

Salmon are caught by net and line during the summer spawning migration. They are salted for export. Fur-trapping is mainly a winter activity.

In the village of Agzu most adult males are hunters. They are employed under contract by the State Farm. As far as I could ascertain they are paid a flat rate. In this respect the State farm operates like a last century fur-trapping precinct and the Director in Samarga functions like the old-fashioned 'trapper'. Prices are set by a central agency (in Moscow).

The State Farm also employs several professional wildlife scientists. Their function is to gather data on population numbers of the prey species. Their reports are forwarded via Vladivostok to Moscow where the central agency determines what the seasonal quota for each species shall be.

The State Farm Director visits Agzu regularly (by canoe up the river as there are no roads) to direct operations. He informs the hunters what their quotas are and arranges for the products to be transported down the river to Samarga and subsequent export.

As far as I could determine consultation is minimal and there is no procedure for involving the hunters in the major decisions concerning their operations.

Each person in the village is permitted a quota of 50 salmon per year for personal consumption. The hunters and their families are permitted to eat the meat of the animals caught. They are allowed to take a small specified number of skins, in addition to their quota, for their own use but not for sale (except through the State Farm system). I understand that the Cooperative Hunting and Fishing Farms are more liberal in these respects, and hunters can individually market a proportion of their skins if they wish, at the prices they choose.

Endangered species, such as the Asian tiger, may not be killed. In any case, elements of traditional native mythology remain and the tiger is regarded as taboo. If a tiger causes trouble in the village permission must be sought from Moscow before it may be killed. (My joke about whether the tiger must get permission from Moscow before it eats a villager was not well received by the Director.)

Sportsmen may hunt wildlife on State Farms but require permits. These are issued by the Director and there is a significant fee.

Conclusion. Very little of the indigenous hunting and fishing traditions remain in Agzu, and I assume the Far East generally. Remote villages still depend almost entirely on these activities but they are organized as cash economy enterprises. There is a high degree of centralized control and little participation by the villagers in the decision-making process.

Villagers are entitled to hunt and fish to provide food for themselves and families, but within limits.

Nevertheless, it seemed that all the villagers were engaged in the State Farm operations, and hunting prowess and success obviously had a high status in village value systems.

Alcoholism is a serious problem among Far East native people, as it is in Alaska, and probably attributable to the same causes.

7

SINGLE SPECIES CASE STUDIES OF SUBSISTENCE HUNTING IN ALASKA

To illustrate how the legal and administrative systems in Alaska described in Section 5 are applied, a selection of species are briefly discussed below. These are by no means full accounts. Only points relevant to the conservation and subsistence issues are considered.

7.1 THE BOWHEAD WHALE *(Balaena mysticetus)*

The Bowhead is a large baleen whale which has populations in the North Pacific and North Atlantic, both migrating into the Arctic Ocean in summer. The species was hunted by Europeans in the 18th and 19th centuries to a level leading it close to extinction. Recovery of the Atlantic population has apparently been minimal but the Pacific population appears to have come back reasonably well during this century.

The Pacific Bowhead population inhabits the Bering Sea and Okhotsk Sea in winter, migrating through the Bering Straits into the Chuckotka and Beaufort Seas of the Arctic in summer, following retreat of the pack ice. In pre-European contact times it was hunted by Eskimo people during the spring northward and autumn southward migrations as it passed through narrow "leads" between the pack ice and the shore, on both the Asian and Alaskan sides of the Bering Straits.

The traditional hunting method was from small, seal-skin boats crewed by 6-8 men. Crews maintained watching stations on the ice beside the leads and put to sea when whales were sighted. The technology was quite sophisticated with toggle-headed harpoons and seal-skin floats; there is archaeological evidence that such technology was several thousand years old.

Coastal eskimo cultures of the traditional whaling villages located on the Alaskan side of the Bering Strait (from Lawrence Island to Point Barrow) were closely linked to the bowhead whale and the whaling process. The whales were used for food and various building and clothing materials. Little was wasted. There were complex ceremonial procedures to be followed in the preparations before the whale migrations began, during the watching period, during the hunting itself, during the butchering and sharing of the product, and after the whole affair was over. To be a successful whaling captain was, and still is, the most prestigious position in village society.

Eskimo men were employed by the European whalers when they arrived in the latter half of the 19th century and the Native people tended to establish larger villages at key positions along the coast, deserting the smaller settlement sites. (Except that some smaller sites are still maintained as seasonal seal-hunting camping areas.) By the time the bowhead whale stocks were exhausted by the European whalers early in the 20th century, the Eskimo populations were also decimated by disease, alcoholism and various social factors, and their cultural traditions practically destroyed.

Today Eskimo population numbers are increasing, although there are many White people living in the coastal villages and some degree of inter-marriage.

The economy of the North Slope Borough villages is now dominated by the oil and gas industry and there is a reasonable wealth among the people, many of whom have part-time employment in the industry or associated support and administrative services. Nevertheless,

and although most of the ceremonial tradition has been lost, the people still regard the bowhead whale and whaling as the central and most meaningful focus of village life. Subsistence hunting of the whale contributes very substantially to the nutrition of the whaling village people and is a strong socially integrative and supportive activity.

The seasonal subsistence cycle on the Alaskan Arctic coast

The following information is taken from a consultancy report prepared for the Dept. of Interior by Stephen Braund & Associates (1988).

The coastal villagers of Arctic Alaska hunt several marine mammals under the authority of the subsistence provisions of the Marine Mammal Protection Act. These are bowhead whale, walrus, bearded seal, ringed seal, spotted seal and polar bear. In addition a variety of terrestrial mammals are taken, of which by far the most important is the caribou. Fish and birds are also significant in that they are used in the winter months when marine mammals are rarely available.

Establishment of the Alaska Eskimo Whaling Commission

In 1976 the International Whaling Commission, to which the United States (and Australia) is a signatory, considered data provided by its Scientific Committee on the bowhead whale populations and hunting levels by Alaskan Eskimos. At that time the best data available suggested a population of between 600 and 1800, compared with an estimate of about 18000 in the pre- commercial era. The Scientific Committee recommended that the bowhead should be declared "endangered" and that there should be a moratorium on even subsistence hunting of the species. The recommendations were adopted by the Commission.

Until that time Eskimo harvest of the bowhead in Alaska was authorised under the subsistence provisions of the Marine Mammal Protection Act, and NOAA (the Federal agency responsible) had been conducting a monitoring program. But the whaling communities had not been warned of the perceived difficulties and they were surprised (outraged) by the 1976 IWC decision to ban bowhead hunting.

Prior to this there had been in existence a Whaling Captains' Association comprising whaling captains from all of the 11 whaling villages. This group initiated a new body in August 1977 called the Alaskan Eskimo Whaling Commission (AEWC) which promptly began a program of litigation and lobbying against the International Whaling Commission moratorium on bowhead whaling. As a result of this a co-management agreement was negotiated between NOAA and the AEWC which formed a basis for a new approach by the U.S. Government to the IWC and eventual lifting (in 1977) of the moratorium on the proviso that strict management procedures would be followed and quotas set.

The agreement is based on a management plan for bowhead whaling drawn up by the AEWC in collaboration with NOAA and remains in force until 1992. These two documents, taken together, are of great interest as they appear to provide an exemplary model for management of subsistence hunting and fishing with authority and responsibility delegated to the users themselves.

The Co-operative Agreement

This is a legal document signed by the Chairman of the AEWC representing the whalers, and the Under Secretary for Oceans and Atmosphere representing the U.S. Government under the authority of the Marine Mammal Protection Act. The purposes of the agreement are:

"to protect the bowhead whale and the Eskimo culture, to promote scientific investigation of the bowhead whale, and to effectuate the other purposes of the Marine Mammal Protection Act, the Whaling Convention Act, and the Endangered Species Act, as these Acts may relate to Aboriginal whaling".

The agreement provides for:

"a) Co-operation between members of the AEWC and NOAA in management of the bowhead whale hunt for 1981 through 1992; and
b) an exclusive enforcement mechanism that shall apply during the term of this agreement to any violation by whaling captains (or their crews) ....."

Authority to manage the bowhead whale hunt is delegated to the AEWC but limited to the provisions of the agreement and the management plan. However, "if the AEWC fails to carry out its enforcement responsibilities or meet the conditions of the agreement or of the management plan ..... NOAA may assert its federal management and enforcement authority ....." Procedures for consultation and appeal are specified in the case of such action.

The agreement also provides for monitoring and inspection by NOAA and reporting by the AEWC. Within 30 days after the spring and fall hunts the AEWC must report to NOAA with the following information:

1) number, dates, and locations of every strike or landing;
2) size, sex and other details of whales landed;
3) an explanation of circumstances associated with any unsuccessful strike, i.e. whereby a whale is struck and wounded but not landed.

Each year NOAA and the AEWC negotiate a quota of whales for the Alaskan whaling villages. The quotas set an upper figure for strikes and a lower figure for actual landings. (The season closes as soon as either one of these figures is reached.) NOAA then attempts to get agreement to the quota from the IWC. The annual quotas are authorised by amendments to the agreement.

The AEWC holds meetings of the whaling captains both before and after the quota negotiations to ensure their input. When a quota is agreed, the AEWC is responsible for allocating the quota among the villages. Naturally, this is a difficult and contentious process, but so far it has been achieved with general agreement. During the course of a season, the AEWC may reallocate available strikes in the event that whaling ceases at a village before its quota is reached.

Enforcement is also the sole responsibility of the AEWC, which is empowered by the agreement to impose fines or bans on captains and crews who breach the terms of the agreement and management plan. There has been one such case wherein a whaling captain at Barrow was fined a total of $20,000 and banned from whaling for 5 years.

The AEWC Management Plan

The Management Plan is actually a prior AEWC document upon which the Co-operative Agreement is based, so that its terms are repeated in the latter. It says: *"It is the purposes of the regulations contained herein to:*

a) insure an efficient subsistence harvest of bowhead whales;
b) provide a means within he Alaska Eskimo customs and institution of limiting the bowhead whale harvest in order to prevent the extinction of such species; and
c) provide for Eskimo regulation of all whaling activities by Eskimos who are members of the Alaska Eskimo Whaling Commission."

Whaling captains must register with the AEWC and indicate their willingness to abide by the regulations and require their crew to do the same. They must also provide reports to the AEWC on strikes, landings, sightings, and details of circumstances of any failed strikes. During the days of the harvest communication among the crews are maintained by radio so that all are fully aware of the number of strikes and landings in their areas and are notified promptly by the AEWC when quotas are reached.

The management plan specifies the harvest methods to be used. "Traditional weapon" is defined to mean *"a harpoon with line attached, darting gun, shoulder gun, lance, or any other weapon approved by the AEWC as such a weapon in order to improve the efficiency of the bowhead whale harvest".* This definition of `traditional' may seem hardly compatible with the usual sense of the word but it is intended to permit the development of new technology which will reduce loss and wastage of wounded whales and be more humane.

The management plan also sets out the procedures for determining propriety claims to whales landed when more than one crew is involved. The rules are simple: the whale belongs *"to the captain and crew which first strikes the bowhead whale in the manner described".* However, protocol requires other crews to assist, and there are traditional systems for dividing the whale among participating crews and other village residents. There is also considerable prestige for a successful captain who gives away most of his own share. The current Chairman of the AEWC, Mr Eddie Hopson, drew the following diagram for the author.

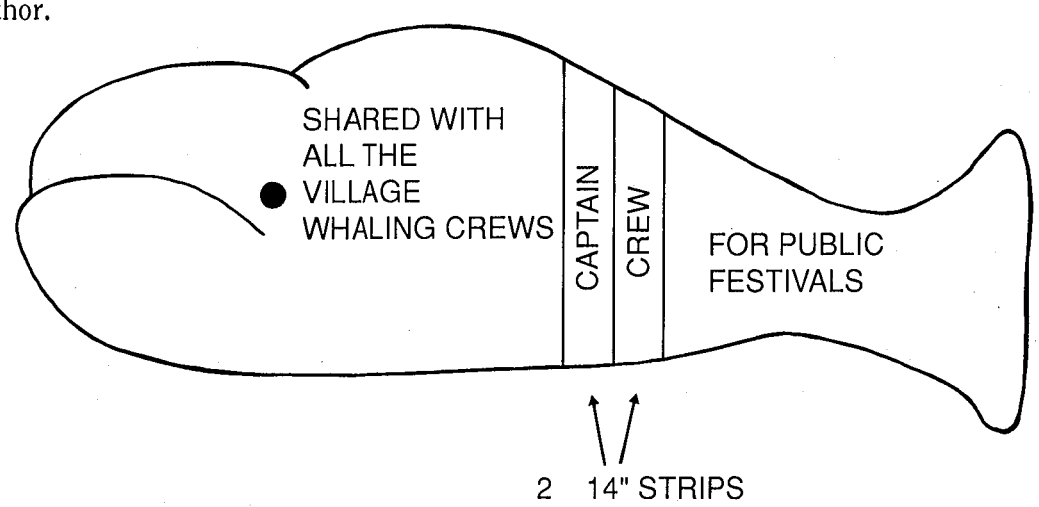


Diagram provided by whaling captain and Alaska Eskimo Whaling Commission Chairman Eddie Hopson, illustrating how a bowhead whale is divided.

The Quotas

Following objections by the AEWC to the moratorium, the U.S. authorities obtained agreement from the IWC for continuance of subsistence harvesting of bowhead whales subject to a quota. Since 1978 a progressively larger quota has been negotiated as the bona fides of the AEWC became accepted.

However, the whalers were unsatisfied by the very small size of the quota. They were convinced that the Scientific Committee's estimates of the population size were far too low and were based on inadequate sampling methods. In particular, they argued that visual sightings from the shore side of the leads gives a serious under-estimate because whales may travel far off-shore, including beneath the ice.

The AEWC, through the scientific programs of the North Slope Borough, developed an acoustic method for counting whales passing by. These estimates indicate a population size of 7-8,000. There is still dispute about the accuracy of the acoustic method but NOAA scientists now agree that the population size is certainly much greater than they had previously estimated. The scientists I spoke to seemed to have a common view that 5-6,000 whales is a more reasonable estimate.

Nevertheless, there is still difficulty in determining the size of a 'safe' i.e. sustainable level of harvest, because other necessary parameters in the equation, i.e. recruitment rates, growth rates, natural mortality rates are unknown. The IWC also expressed concern about the open-endedness of any system based on "need" when the Eskimo population is increasing.

In response to this latter matter the North Slope Borough engaged Stephen Braund & Associates of Anchorage to carry out a study of subsistence activities in the Borough, and the historical harvest of bowhead whales in particular. The preliminary report (Braund pers. comm.) estimates the whale harvest over past decades and computes an average per capita over that period. This figure becomes the basis for a calculation of "need" on the ground of historical harvest levels. The figure for 1989 was calculated at 41 bowhead whales for the 9 whaling villages. NOAA scientists conceded that this figure is likely to be well within the sustainable harvest level, given a bowhead population of 5,000 or more. Consequently, this was the quota size sought by the AEWC for 1989 and agreed to by the IWC.

In response to the concern expressed by the IWC about future Eskimo population growth and the consequential growth of per capita "need", Braund & Associates further considered current data on Eskimo population growth. Using standard census data and applying the historical harvest estimates they estimate a total harvest need for the Alaska Eskimo community of 49 whales by the turn of the century.

Conclusion

The importance of subsistence hunting of bowhead whales in both the subsistence economy and cultural life of Alaskan Eskimos is now recognised. A level of harvest based on need can now be estimated.

Recent efforts to obtain estimates of the North Pacific bowhead whale population have been moderately successful and have established that the population remains much lower than the levels before European commercial harvest began in the 19th century. Nevertheless, it seems clearly established that the population is large enough to sustain subsistence harvest at the level estimated to be needed for sustaining Eskimo economy and traditions, without risk of extinction.

Management of the bowhead whale subsistence harvest is sound. It is run by the local community, in consultation with scientists and U.S. Federal authorities. Although the history of establishing this situation has been far from harmonious over the past decade, the consultative, management an enforcement processes now in effect appear to be working well to the satisfaction of all parties.

Unless there is an unexpected decline in bowhead whale numbers there is no reason the present arrangement cannot continue indefinitely. Disruption could occur if the whalers breach the rules thereby invoking Federal intervention, or if animal rights lobbyists persuade federal politicians that whaling is unacceptable in any circumstances. Neither scenario seems likely given current attitudes among the Eskimo people and the U.S. community at large. My own enquiries with Greenpeace and Audobon Society officers in Anchorage indicated agreement to subsistence whaling by Eskimos provided it is properly managed along present lines.

The practical experience, intelligence and common sense of the whalers themselves have played a key role in successful resolution of the matter. The principles of consultation, scientific research, and self-regulation embodied in the current arrangements in Alaska are a model possibly applicable to other subsistence harvests by aboriginal people.

N.B. My enquiries in the U.S.S.R. were inconclusive but I understand that bowhead whales are harvested also on the Soviet side of the Bering Strait. I am not informed of the quota or management regime. However, I was informed by a Chuckcha person from Anadyr that the whales are not harvested in the traditional manner and that only a portion of the meat obtained is made available to the Chuckcha people. If this is true it is doubtful whether the Soviet harvest of bowhead whales is consistent with the spirit of subsistence hunting.

7.2 THE NORTH PACIFIC FUR SEAL (Callorhinus ursinus)

Fur seals have a thick waterproof underfur which, when the skin is processed, forms a deep, soft pelt. Consequently these seals were once prized for the fur trade.

The North Pacific Fur Seals of the eastern Bering Sea were not hunted in pre-contact times because of their off-shore habits and the fact that the Pribilof Islands were uninhabited. They were "discovered" by Georg Wilhelm Steller in 1742. Commercial exploitation quickly followed, first by Russian and later by American sealers. The seals were caught at sea (the "pelagic fishery") and on land at the rookeries.

During the latter part of the 18th century the Russians forcibly established a colony of Aleut natives on the Pribilof Islands to provide labour for the fur seal harvest. The commercial industry was based on the skins but seal meat became a staple item of the Pribilof community. At the rookeries it was the young males without harems which were harvested.

Distribution and Life History

The North Pacific Fur Seal is found from about 32° N latitude to the central Bering Sea, and on both the Asian and American coasts. On the American side it is found as far south as the Mexican border. A small breeding colony occurs on an island in the Channel Islands Marine Park off southern California. Small breeding colonies also occur in the Kurile Islands. The major breeding colonies are in the Commander Islands off the Kamchatka Peninsula in the U.S.S.R. and the Pribilof Islands in the eastern Bering Sea where about 2/3 of the population breed.

These seals spend most of the year at sea. They feed on squid and fish, diving to great depths (as much as 300m) along the continental shelf edge. During the winter months fur seals from the Pribilof colonies travel as far south as California.

At the Pribilofs, large males begin to arrive at the rookeries in May and fight to establish territories. Younger and unsuccessful older males "haul out" on peripheral areas of the rookeries. Pregnant females begin arriving in June. They aggregate in groups of 20-60 within the male territories and give birth within 48 hours of arrival. For the next 3-4 months the females suckle their young, periodically returning to sea for lengthy periods to feed. The seals leave the rookeries in November. The rookeries are deserted from December until May. Fully mature males weigh 450-600 pounds while the females usually weight only about 100 pounds. There is significant mortality of pups in the rookery resulting from accidental crushing and suffocation by the males, especially during territorial disputes.

Population Status of North Pacific Fur Seals

Prior to the beginning of commercial exploitation in the 18th century, the Pribilof Islands fur seal population is estimated to have numbered between 2 and 2.5 million animals. The population in the early 1950s was at about this level. Commercial exploitation does not appear to have had any substantial effect on the population status.

Since 1950 there has been a steady decline in numbers. A similar decline is evident in the western Pacific population. (Estimates of population numbers are made by pup counts in the rookeries.)

The cause of the decline is problematical. Since the late 1970s harvests at the Pribilofs have averaged 25,000 sub-adult males annually and this is down to below 2,000 since commercial harvesting ceased. Population biologists are convinced that the sub-adult male harvest at the rookeries is not the cause of the decline. Nor does it appear to be related to reproductive success of the females as pupping rates remain steady. Rather, the decline is believed to be due to mortality of sub-adults or adults at sea. There are two current theories to explain the decline.

It is an observed fact that many young animals become entangled in fishing net and plastic binding floating in the sea. These materials are derived mainly from the greatly expanded North Pacific fishing industry. There is no doubt that this is a significant cause of mortality at sea (Fowler, 1987). The U.S. National Marine Mammal Laboratory is currently gathering statistical data on the frequency of entanglement, including counts of animals at the rookeries encumbered by such materials.

At one time it was suggested that entanglement could be the cause of the population decline. Consequently, there has been an international effort to reduce the amount of entangling material discarded from fishing vessels. However, there is increasing scepticism among biologists that entanglement is more than a contributory factor to the problem.

The second explanation blames major disturbance to the Bering Sea ecosystem by the fishing industry. During the period of the fur seal decline there has been very great expansion of the North Pacific fisheries. The fish and squid species harvested include those which are the food of the fur seals. Biologists point out that there is no evidence of starvation or other physiological stress in the fur seals studied at the rookeries. Nevertheless, there is a growing suspicion that the enormous fishing effort in the area may be affecting the oceanic ecosystems and, directly or indirectly, the fur seal populations. However, this is an extremely difficult matter to research and this theory remains speculative.

Whatever the cause of the decline, it is obvious that harvest levels, even of the non reproductive males, need to be set cautiously so that the trend is not exacerbated. Scientists of the National Marine Mammal Laboratory have recommended that the North Pacific Fur Seal should not be placed on the "endangered" list at this time but it has been agreed by the management authorities that a management strategy should be developed which treats the species as if it was endangered.

Management

In recent years management of the North Pacific Fur Seal, in areas under US jurisdiction, including the harvesting of this species at the Pribilof Islands, has been the responsibility of the National Oceanic and Atmospheric Administration (NOAA).

In 1911, in an attempt to stabilise the fur seal population and achieve maximum harvests, the governments of Japan, Great Britain (for Canada), Russia, and the U.S.A. established the North Pacific Fur Seal Commission, under the terms of the Convention for the Preservation and Protection of Fur Seals. In the U.S. this Convention was given effect by the Fur Seal Act. The treaty was interrupted by World War II but in 1957 it was replaced by the Interim Convention on Conservation of North Pacific Fur Seals.

The objectives of the convention were:

- *to achieve the maximum sustainable productivity of the fur seal resources of the North Pacific Ocean so that the fur seal populations can be brought to and maintained at the levels which will provide the greatest harvest year after year;*
- *to co-ordinate necessary scientific research and co-operate in fur seal investigations,*
- *to review research data and recommend management measures.*

The Convention banned pelagic sealing. Harvesting was confined to the rookeries where young males were culled out from the non-territorial male haul-out areas and clubbed. The principle of this practise was that, given the natural history of the species, there is a surplus of males which can be harvested without affecting the reproductive success of the population.

The 1957 Fur Seal Convention was extended by means of protocols in 1963, 1969, 1976 and 1980. Its signatories were Canada, Japan, the U.S.S.R. and the U.S.A.

The last period of the Convention expired in 1984. A protocol was signed to extend it until 1988, subject to ratification by all parties. However, the matter was taken up in the U.S. by the non-government animal rights and conservation organisations, which did not approve of the method of harvest, or indeed the commercial harvest of seals at all. The U.S. Senate was heavily lobbied on both humane and conservation grounds. An effective conservation argument was presented by the lobbyists in view of the dramatic population decline of the species. After much heated debate the U.S. Government declined to ratify the Convention.

(In passing I should note that organisations such as the Humane Society oppose seal harvesting of any kind for any purpose, while conservation groups like the Audobon Society and Greenpeace oppose commercial harvesting of seals but accept the principle of "subsistence" harvests provided the method is humane and the level of take does not threaten the population.)

The authority of the U.S. Fur Seal Act depended upon the existence of the international Convention. When the Convention was not ratified the Act lapsed and the only U.S. law which now applies is the Marine Mammal Protection Act. This Act prohibits commercial take of marine mammals but provides for subsistence harvest. Consequently, commercial harvesting of fur seals at the Pribilof Islands has been prohibited since 1985. Seals are taken now only for subsistence purposes under the subsistence provisions of the MMPA (see 5.2.3).

The subsistence take of fur seals

There were subsistence provisions in the Fur Seal Act. The Act allowed for Alaskan Indians, Aleuts or Eskimos to take fur seals and dispose of their skins after they were officially marked and certified, provided that they were used for subsistence purposes, taken only by Natives not employed in the commercial trade, only in canoes propelled by oars or sails, and only "in the way hitherto practised and without the use of firearms". Needless to say, these provisions were little used.

At the Pribilofs most people were employed in the commercial harvest which produced skins for the fur trade. The subsistence needs of the Pribilovians for seal meat have traditionally been met from seals taken in the commercial skin harvest. That is, using 'traditional' not in the aboriginal sense but referring to the traditions relating to the commercial industry established since the Aleuts were placed on the Islands in the late 1700s.

Since 1985 when the Fur Seal Act lapsed, NOAA, the Federal agency responsible for seals under the MMPA, has issued Notices and promulgated Regulations prohibiting the commercial harvest of fur seals and determining harvest quotas and conditions under the subsistence provisions.

By April 1 each year, NOAA publishes in the Federal Register a summary of the preceding year's harvest and a discussion of the number of seals expected to be taken that year to satisfy the subsistence requirements of the island people. A final notice is published following a 30-day public comment period. The final notice sets the period during which the subsistence harvest may take place (usually June - August) determines the rookeries to be harvested, and specifies that the seals may be taken only by experienced sealers using the clubbing (called "stunning") method followed immediately by ex-sanguination. Only sub-adult males may be taken. NOAA may suspend the harvest when "the subsistence needs of the Pribilovians on the island(s) have been met", or if the harvest is being conducted in a wasteful manner.

Except for transfers to other Alaskan Natives for barter or sharing for personal or family consumption, no part of a fur seal taken for subsistence uses may be sold. The exception to this is if the part is a non-edible by product made into an item of handicraft.

The harvest is organised by the Tribal Governments as a voluntary operation. Eligible citizens are invited to participate and "orders" for meat are taken from people unable to take part personally.

Young male seals are culled out of the male herd, driven onto the killing fields and clubbed. They are immediately skinned and butchered on the spot. On most harvest days something in excess of 100 animals are taken until the season's harvest quota is reached. NOAA scientific and veterinary staff attend to monitor the affair.

Although the islands' Tribal Governments and individuals have an opportunity to comment on the preliminary notice there is no direct consultative process and no formal involvement of the subsistence users in the decision-making process. Communication between the users and the management authorities comes about through personal contact at officer level (where there are good relationships) and contracts with the Tribal Governments for assistance with the harvest monitoring programs.

In this respect, management of the fur seal subsistence harvest is very different to that of other animals where advisory committees of one sort or another have been so successful. It is not surprising, therefore, that there is more contention and bad will in this case than in any other I investigated. There is disagreement within the island community on the value in continuing the subsistence harvest and resentment against NOAA and the Federal Government at the closure of the commercial harvest.

Quantified studies have been done by NOAA staff on the proportion of the seals taken for consumption (Zimmerman and Letcher, 1986). This has shown that 43.8% of the body weight is taken. The total edible seal meat consumed per person is less than fish and game consumed in other Alaskan communities which depend on subsistence lifestyles. However, other resources (eg. fish, seabirds and eggs, reindeer) are also utilised which may make up the difference.

At present the seal skins are discarded and there is no attempt to use them for handicraft manufacture. This would seem to be wasteful although there is some question whether it would be economical to process the skins, and whether there would be a market for skin products. Male penal bones ("seal sticks") are taken and privately sold.

It is this writer's opinion that insufficient attention has been given by the Pribilovians to the opportunities for development of a handicraft cottage industry based on seal products. A byproduct harvest of 2-3,000 skins is a significant resource. Although the commercial tannery has been closed and the equipment removed, a small scale unit should be economical, or skins could be shipped out for processing.

It could be argued that the Pribilovians have no "traditional" handicrafts as defined in the legislation, given their unhappy history. However, in the spirit of the legislation the peculiar historical circumstances should be accommodated in order to prevent waste.

The Federal Government's action in closing the commercial harvest naturally has had a severe impact on the Pribilof community's economy and employment opportunities. Efforts to compensate for this are focusing on the construction of a boat harbour and the development of the fishing industry. A handicraft industry based on skins which are a by-product of the subsistence seal harvest could make a small though significant contribution to the island economy, and avoid criticism of waste.

Within the Pribilof Tribal Government there are also strong feelings about the loss of the sealing traditions. Sincere efforts are being made to involve young people in the subsistence harvest in order to maintain skills. But the operation is now voluntary and I observed that there is some difficulty in maintaining interest. During my visit several harvests were cancelled or delayed because enough volunteers did not turn up. Some of the young men doing the stunning were certainly not very skilled at it.

My impression was that there is some danger of the voluntary program failing through lack of community support. It would be easy to suggest that this could be solved by the Tribal Government paying the harvest team but, of course, this would immediately bring into question the applicability of the subsistence concept to this harvest.

7.3 ARCTIC NESTING GEESE

Four of the species of North American native geese which nest in the Arctic have declined in numbers during the last few decades. The vast wetlands of the Yukon and Kuskokwim deltas in Western Alaska are their primary summer breeding habitat. For thousands of years the Yup'ik Eskimos of the region have taken what they needed of these birds for meat, eggs and feathers. The geese were hunted in the summer months when other game was scarce and they played a small but very significant part in the people's annual subsistence cycle.

Emperor Geese

Are year-round Alaskans. They winter in the Aleutian Islands. Most of them breed on the Yukon-Kushkokwin Delta in summer but some nest on the coast of Siberia. In 1964 there were an estimated 139,000 emperor geese. By 1984 the numbered only abaout 70,000 and have declined by 10% or so each year until very recently.

Pacific Black Brant

Migrate south in winter to feeding grounds along the shores of Baja California and California. About half their adult number nest on the Yukon-Kuskokwim Delta in mid-summer. Their population numbers slid from about 180,000 in 1964 to a low of about 110,000 in 1984.

Pacific White-fronted Geese (speckle belly)

Are also migrants. They fly in V-formations each fall to staging grounds in Northern California and then on to the wetlands of Southern California and Mexico. These birds were estimated to number about 500,000 in 1960 but had dwindled to less than 100,000 by 1984.

Cackling Geese

Are a subspecies of the Canada Goose. The Western Alaskan population fly direct from their sole breeding area on the Delta to the winter feeding grounds in California. In 1965 they were estimated to number about 380,000 but had crashed to a critical 26,000 by 1983, and 21,000 the following year.

Naturally the decline in the numbers of these birds is of great concern to conservationists, to Alaskan Eskimos who depend upon them for subsistence during summer, and to sportsman in California and Mexico who hunt them for recreation during winter.

Broadly speaking there have been three factors contributing to the decline of the four Arctic nesting geese:

i) progessive loss of winter feeding habitat in the wetlands of California and Mexico;

ii) increasing hunting pressure by sportsmen in those southern winter feeding grounds;

iii) continuing hunting by Eskimos, and predation by foxes etc, in the nesting areas of Alaska.

Until recently the Eskimo subsistence hunters were hardly aware of the winter sports hunting of their prey in the south, but having become so they have tended to blame the sports hunters for the decline of the geese. The southern sportsmen, on the other hand, have vigorously blamed the Eskimos for taking the birds and eggs during the summer nesting season.

The Migratory Bird Treaties

In 1916 the United States signed a treaty with Britain (representing Canada), and in 1936 another with Mexico, prohibiting the harvest of waterfowl in the north during the March-September breeding season. The Migratory Bird Treaty Act was passed to implement this law in the United States. The Treaties and the Act contain no exceptions for Eskimo subsistance hunters. The Eskimos affected were neither consulted nor informed of this action.

Additional Migratory Bird Treaties were signed between the United States and Japan (1974) and the U.S.S.R. (1978). The Japanese treaty permits summer hunting by Eskimos and Indians for "food and clothing," while the U.S.S.R. treaty permits summer hunting by Alaskan Natives for "nutritional and essential needs."

In 1979 Protocol amendments were proposed to the Canadian and Mexican treaties, making them consistant with the U.S.S.R. treaty with respect to subsistence hunting. But this was opposed by sports hunting interests and failed in the Senate.

Given the remoteness of the Yukon-Kuskokwim Delta, the lack of consultation with Eskimo subsistence hunters, and the political lobbying on behalf of the Eskimos, the Federal authorities have not been able to enforce the prohibition on summer hunting.

In 1961 an infamous incident occurred when two officers of the Federal Fish and Wildlife Service apprehended an Eskimo at Barrow for hunting geese in the prohibited summer season. The next day 138 men "turned themselves in" to the officers, all exhibiting birds or eggs as evidence of their crimes. This affair stimulated much political activism on behalf of the Eskimos. The matter was allowed to drift into a tacit mode of non-enforcement.

However, when the decline in the geese population became alarmingly evident in the 1970's the southern sports hunting lobby became politically active, along with conservation interests. At this late stage efforts began to bring the opposing interests together to find a solution.

Yukon-Kuskokwim Delta Goose Management Plan

In 1979, the U.S. Fish and Wildlife Service introduced restrictions on the take of Arctic nesting geese in the southern states. Consequently, representatives of Californian sport hunting interests visited Alaska to confer with Eskimo hunters. A workshop was held in Anchorage but it failed to achieve any solution.

A few years later Alaskan Fish and Game authorities tried direct negotiation with the Eskimo Association of Village Council Presidents. From this came recognition by the Eskimos that there was a problem and establishment of a permanent Eskimo Waterfowl Conservation Committee.

In 1983 another workshop produced the Hooper Bay Agreement which proposed total protection for Cackling Geese, and a 50% reduction in the take of the other species. However, this agreement also provided for continued hunting of geese by Eskimos, albeit at reduced levels, in the summer nesting season. The Alaska Fish and Wildlife Federation filed suit in the Federal court requesting that the Migratory Bird Treaty Act be enforced and the Hooper Bay Agreement invalidated. The effect of this, if successful, would have been to totally ban Eskimo subsistence hunting and reserve the reduced harvest solely for southern sports hunters. The Court of Appeals ruled that although the Migratory Bird Treaty Act was superior to State Acts enforcement powers delegated to the Secretary are discretionary. The consequence of this ruling is that the courts are precluded from interfering with the Fish and Wildlife Service practise of non-enforcement of the Act. The Court emphasized the need for co-operation between the interested parties to effect a workable Management Plan.

One of the primary U.S. conservation agencies, The National Audobon Society, had become involved in the matter, and was instrumental in passage of legislation to protect wetland habitat in California. It also participated in further development of the Hooper Bay Agreement, which eventually evolved into the Yukon-Kuskokwin Delta Goose Management Plan which is now operative.

The Goal of the Management Plan is to restore and maintain the four populations of geese at prescribed levels to provide for hunting and other beneficial uses throughout their range.

These optimal levels, based on three year averages of index surveys are:

Cackling Canada Geese	250,000
Emperor Geese	150,000
Pacific White-fronted Geese	300,000
Black Pacific Brant	185,000

The Objectives are

- to provide opportunity for informed public involvement in programs for recovery of the geese populations;
- to reduce mortality and increase production to provide for minimum population increases of 5-10% annually until optimum levels are reached;
- to provide opportunity for regulated harvest at levels commensurate with acceptable levels of population increases;
- to maintain and enhance nesting, migration, and wintering habitats of the affected species.

The Strategies to Achieve Objectives include:

a) Information and Education Programs (The Audobon Society has played a major role in this, especially in Eskimo schools.)

b) Reduce Mortality and Increase Production.

- liaison among sports hunters, Eskimo hunters and government agencies to implement the management plan;
- establishment of new nesting areas by translocation;
- enhancement of existing nesting areas;
- predator control;
- law enforcement;
- research and monitoring on population dynamics;
- harvest monitoring;

c) Legislative Review (i.e. amendments to the Canada and Mexico Treaties and Migratory Bird Treaty Act to provide for regulated subsistence harvest by Eskimos).

d) Maintain and Enhance Habitats (i.e. reserve management).

Implementation of the Management Plan

Having established the legality of exercising the Secretary's discretionary powers for permitting subsistence hunting of geese during the summer season, and following further negotiations with sports and Eskimo groups, the Fish and Wildlife Service issued the management plan as a document for public comment in 1987. The U.S. Environmental Protection Authority ruled that implementation of the plan was in the best interests of the geese in that the compromises in it would make its objectives achievable. The management plan was adopted formally in 1988.

But in the meantime, through co-operation between the Federal Fish and Wildlife Service, the Alaskan State Department of Fish and Game, the Eskimo Association of Village Councils, the sports hunting associations, and the National Audobon Society, the primary regulatory and educational programs recommended in the plan were already in place. There is evidence that all of the four species, with the possible exception of the Black Brant, are already showing signs of recovery as a result.

Conclusions

Here is a classic example of conflict between diametrically opposed interest groups, i.e. conservationists, sports hunters, and Eskimo subsistence hunters, competing for control of the same declining resource.

Initial legislation intended to protect the resource was unenforced and unenforceable, because one of the two "consumer" groups (the Eskimos) had not been consulted. It failed to take proper account of the Eskimo's legitimate interests and unjustly gave the whole resource to the other consumer group (the sport hunters).

Decline of the geese numbers resulted (in part) directly from over exploitation. Appropriate regulatory control to halt the decline failed because of human politics.

The problem was corrected only when all competing interest groups came together and resolved their differences in a proper democratic manner, creating a climate where management agencies could get on with the job.

Both the consumer groups, the sports hunters and the Eskimos, have recognized the legitimacy of the other's claim to a fair share of the resource, while the conservationists, in this case represented by the National Audobon Society, recognized the legitimacy of hunting geese for both sports and subsistence purposes, provided it is done on a sustainable basis. The Audobon Society's educational program played a major role in eventually turning the situation around from one of conflict to one of co-operation.

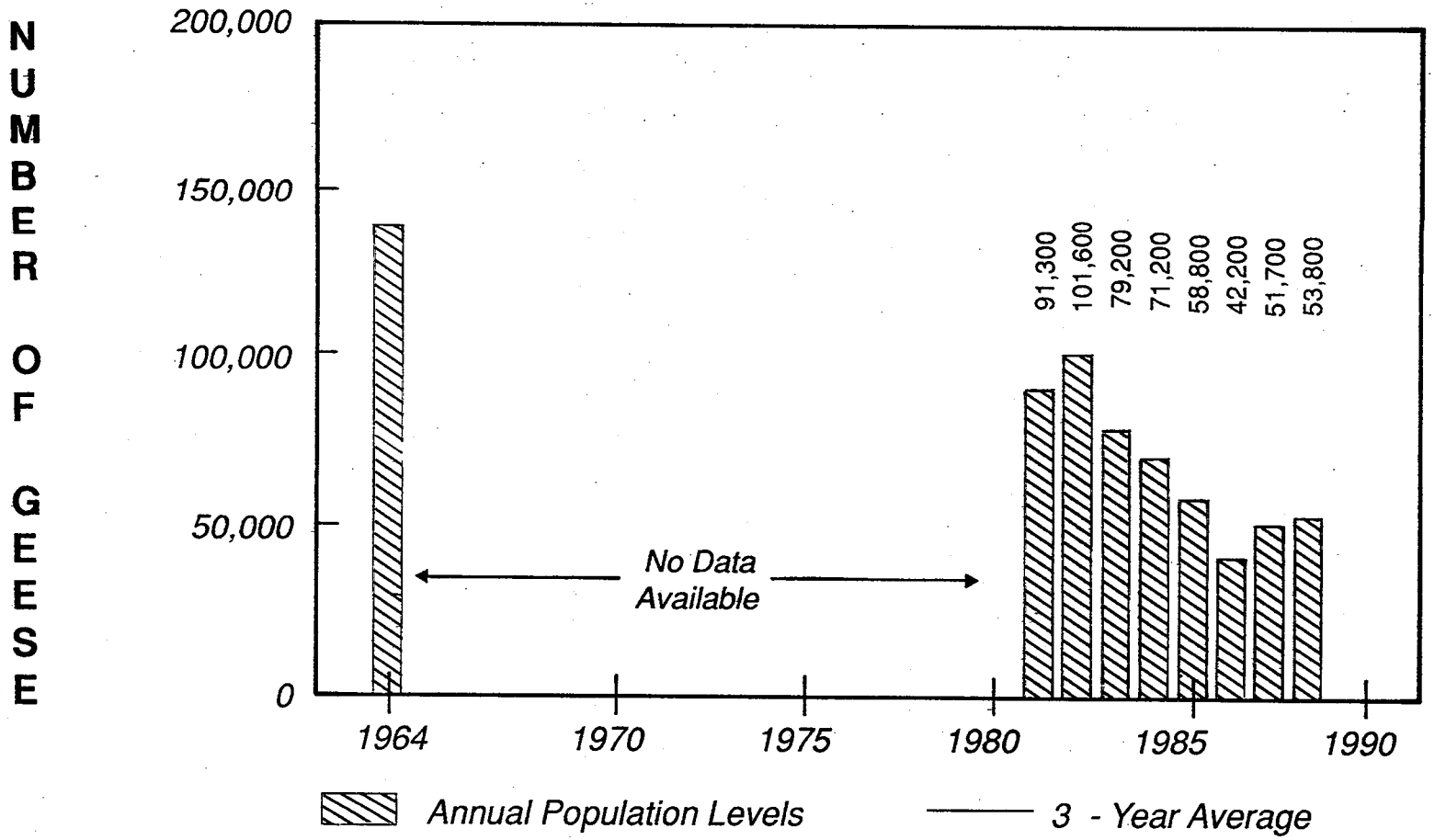
Implementation of the management plan involves a high degree of constraint and self regulation on the part of the two consumer groups. The Eskimos, particularly, participate directly in the supervision of the harvests, and authority to control and enforce harvest restrictions has been delegated to Tribal Government groups to good effect.

The present apparent recovery of all four geese species can be attributed to the success of the social, political and educational processes which (eventually) led to successful implementation of a management plan.

Population Levels in Alaska

Emperor Geese

(Nacaullget)

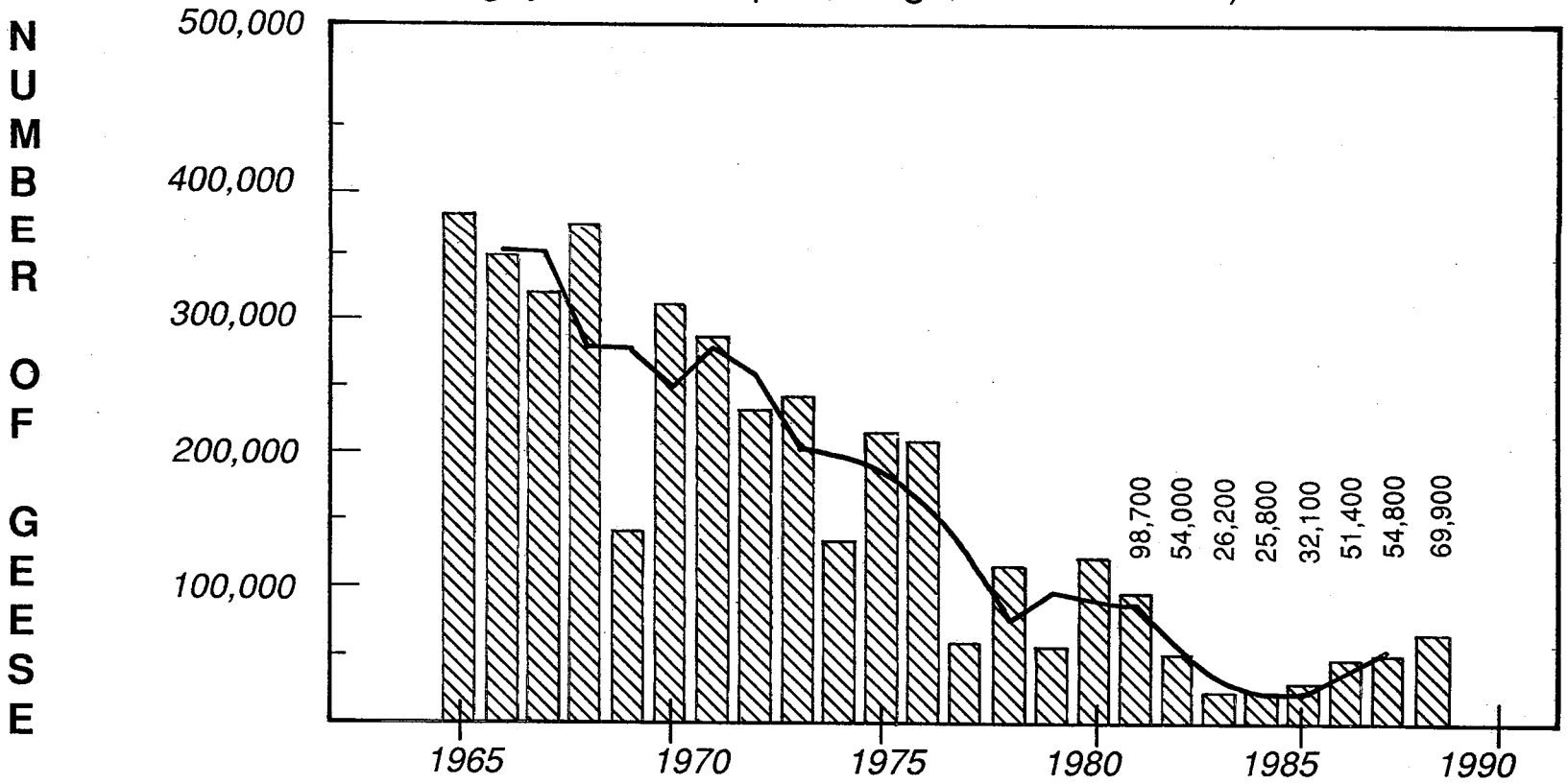


Data Based on spring counts from Alaska Peninsula and Bristol Bay

Population Levels of Pacific Flyway

Cackling Canada Geese

(Tuutangayiit, Tuutaalqucit, 'Lagit,' Lakcakcaraat)



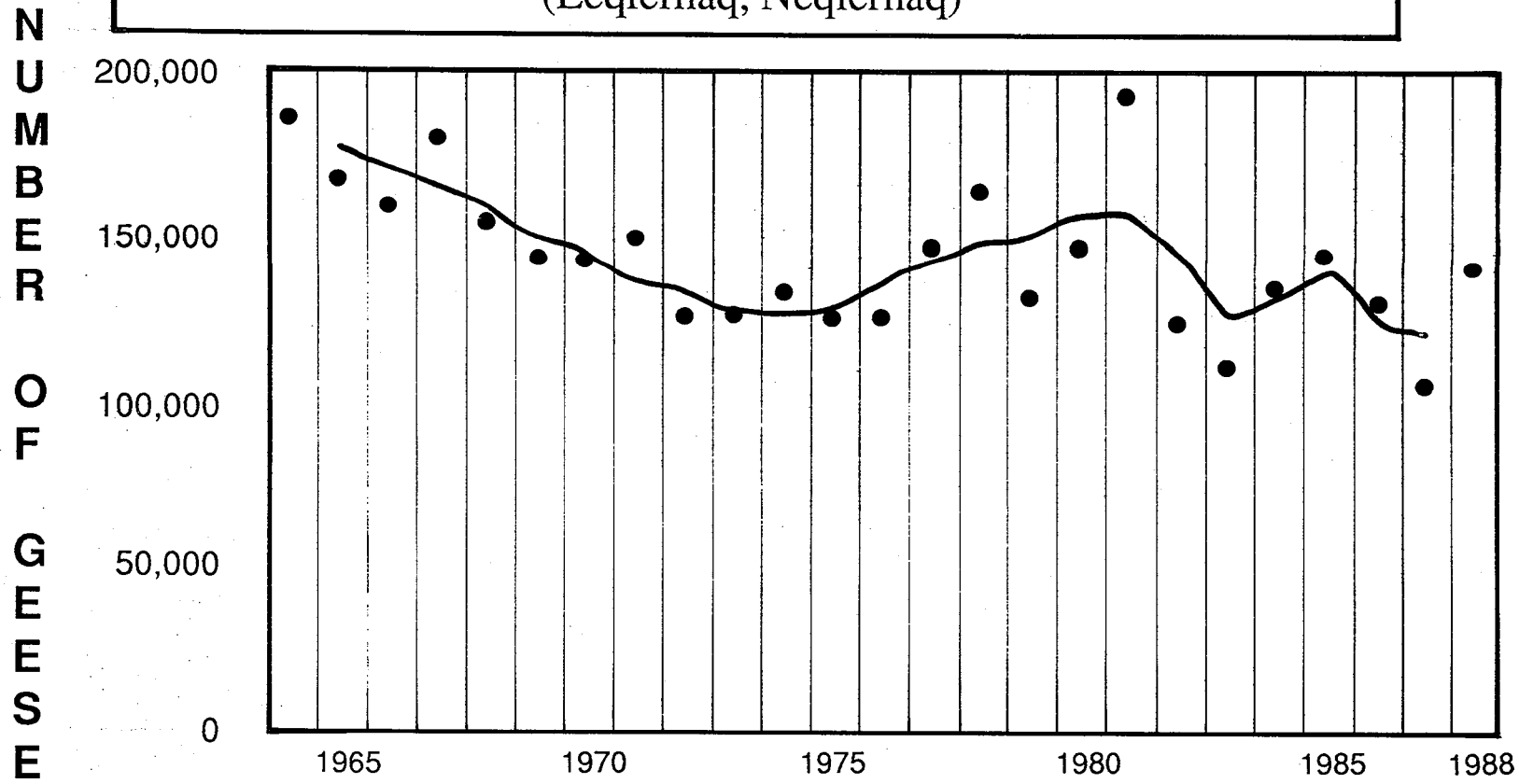
Annual Population Levels ——— *3 - Year Average*

Data Based on peak autumn index counts in the Klamath Basin 1965-81, and Klamath Basin, Sacramento Valley and Oregan 1982-88.

Population Levels of Pacific Flyway

Black Brant

(Leqlernaq, Neqlernaq)



— 3-Yr Average

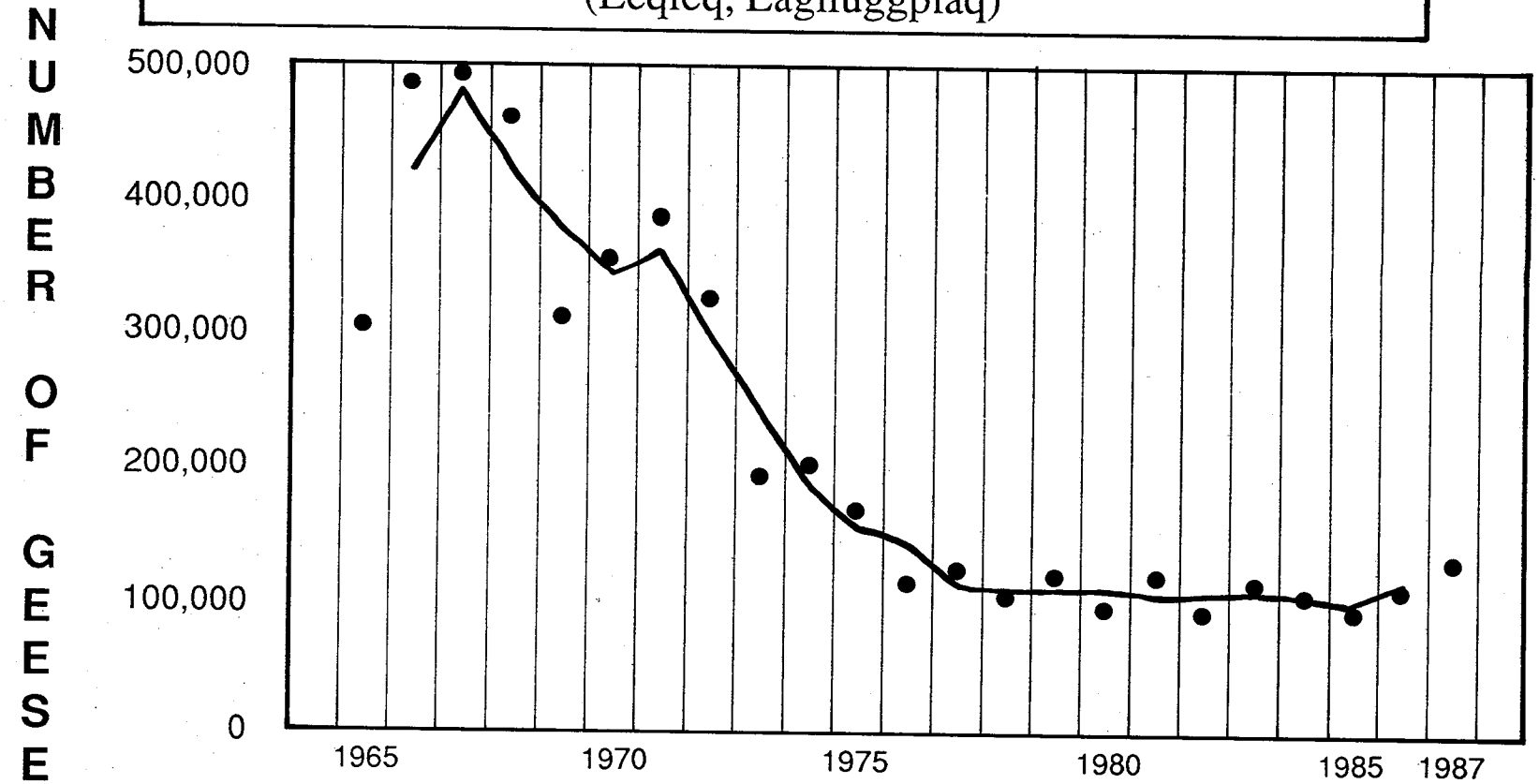
● Population Levels

(Data based on peak numbers in midwinter waterfowl surveys in the Pacific flyway, includes Washington, Oregon, California, and Mexico)

Population Levels of Pacific Flyway

White-fronted Geese

(Leqleq, Lagiluggpiaq)



— 3-Yr Average

• Population Levels

(Data based on peak autumn and winter index counts in California, 1965-1980 Klamath Basin only 1981-88 Klamath Basin and Sacramento Valley)

8

REFERENCES

Angelovic, Joseph, W. 1986. Subsistence taking of North Pacific Fur Seals. Federal Register, 51 (131): 23233-23235.

Anon. 1976 Background Information on Indian Fishing Rights in the Pacific Northwest. US Department of Interior, Portland, Oregon.

Anon. 1985. Environmental impact statement on the Interim Convention on Conservation of North Pacific Fur Seals. US Department of Commerce: 1-196

Anon. undated. Chippewa Treaty Fishing Rights - hunting fishing and gathering on ceded territory. Great Lakes Indian Fish and Wildlife Commission. Odanah, Wisconsin.

Berger, Thomas R. 1985. Village Journey - Report of the Alaska Native Review Commission. Hill and Wang, New York. 202pp.

Blondin, Carmen J. 1985. Subsistence taking of North Pacific Fur Seals. Federal Register. 50 (130): 27914-27922

Braund, Stephen R. 1980. Cook Inlet Subsistence Salmon Fishery. Report submitted to the Alaska Department of Fish and Game Division of Subsistence

Braund, Stephen R. 1984. Subsistence Study of Alaska Eskimo Whaling Villages. Report submitted to US Department of Interior.

Braund, Stephen R., Stoker, Sam W. and Kruse, John A. 1988. Quantification of Subsistence and Cultural Need for Bowhead Whales by Alaska Eskimos. Report to North Slope Borough.

Douglas, James E. 1988. Subsistence taking of North Pacific Fur Seals. Federal Register, 53 (96): 17733-17735.

Fowler, Charles W., 1987. Marine debris and Northern Fur Seals: a case study. Marine Pollution, 18 (6B): 326-335

Kemmer, Andrew. 1989. subsistence taking of North Pacific Fur Seals. Federal Register, 54, (103): 23233-23235.

Langdon, Steve, J. 1985. Alaskan Native Subsistences: Current Regulatory Regimes and Issues. Submission to Alaska Native Review Commission. Hearings, Oct. 1984, Anchorage, Alaska.

Laycock, George. 1985. Doing what's right for the geese. Audobon, 87 (6): 119-133.

Madson, Pamela K. and Koss, William. Washington Salmon: Understanding allocation. Office of Program Research, Hose of Representatives: 1-29.

US Mammal Commission, 1989. Annual Report on the Marine Mammal Commission, Calendar Year 1988. Report to Congress.

Zimmerman, Steven, T., 1985. The Northern Fur Seal in Alaska. Alaska Department of Fish and Game Wildlife Notebook Series.

Zimmerman, Steven, T., and Letcher, James D. 1986. The 1985 subsistence harvest of Northern Fur Seals Callorhinus ursinus, on St Paul Island, Alaska. Marine Fisheries Review, 48 (1): 10-14.

9

EXECUTIVE SUMMARY

The purpose of this study was to investigate legislative and administrative arrangements for native people of North America and the Far East of the USSR to continue traditional hunting and gathering activities, and to assess the operation of these arrangements in terms of effectiveness and community acceptance.

The study program included:

(i) discussions with officials of wildlife management and Indian affairs agencies in Washington DC and Alaska;

(ii) participation in a 3 day symposium on Indian Fishing Rights in Seattle;

(iii) field studies and discussions with native people on specific issues in Alaska; and

(iv) a visit to a "State hunting and fishing farm" in the Primoria province of the Soviet Union Far East.

[In addition visits were made to marine research agencies, marine parks, and zoos in both California and the USSR to study matters relevant to my responsibilities in CALM but not part of the central study program.]

The most general conclusion reached was that aboriginal hunting and fishing rights, known as 'subsistence' rights, have become officially acknowledged in the US and provided for by detailed and specific legislation, although there remain many problems with community acceptance. In particular, white American sports hunting and fishing groups, and the commercial interests which support them, remain opposed to native and remote community subsistence rights.

Subsistence hunting and fishing is taken in the US to include cultural aspects of the processes as well as the nutritional values of the products. It is recognised that traditional hunting and fishing, and associated ceremonial and social activities, play an important function in sustaining and re-establishing social values in native communities.

A second principal conclusion was that implementation of native subsistence provisions, which generally require control of the level of harvesting, are ineffective unless the native people concerned are directly involved in the policy-making and management processes. This, too, is provided for in some, but not all, of the relevant US legislation.

In the USSR there is no concept of 'subsistence rights' in the American sense. No distinction is made between people of indigenous origin and those of European origin, living in remote areas of the Far East. Remote communities are mixed and integrated. Hunting and fishing in remote areas are run on a commercial basis with little direct involvement of the hunters and fishermen in resource management decisions, except through the political system of soviets (councils).

Specific points of relevance are as follows:

Indian Treaty Rights

1. In the 'lower 48' States where Indian Treaty Rights apply, fishing and hunting is managed by Indian Tribal governments both on reservations and off-reservations at 'traditional and customary' places, but in collaboration with State authorities in the latter case. In the event that the harvestable resource becomes depleted below the level needed to meet demands, then Indian Tribal members have priority over other users. These principles apply to both commercial and subsistence operations.

Subsistence rights in Alaska

2. In Alaska where Indian Treaty Rights do not apply (with one minor exception), State and Federal laws recognise that subsistence hunting and fishing has fundamental importance, not only as a valid economic base in remote rural communities, but also as an important factor in sustaining Native societies through its impacts on cultural values and belief systems.

3. The Federal Alaska National Interest Land Settlement Act (ANILCA) provides for subsistence hunting and fishing on federal lands in Alaska, including most National Parks and Wildlife Refuges. Now that Alaskan State Law complies with ANILCA, authority to manage these activities is delegated to State agencies.

4. The subsistence provisions of ANILCA permit the use of byproducts from harvested animals in manufacture for handicrafts for sale.

5. ANILCA recognises the importance of subsistence by giving it priority over other uses but, in conformity with the State Constitution, no distinction is made between Native and non-Native rural residents.

6. ANILCA recognises that involvement of subsistence users is essential in the decision making process, by providing for advisory commissions for management of these activities on Federal lands, including National Parks and Wildlife Refuges.

7. State of Alaska Fish and Game statutes also recognise the importance of subsistence by giving it priority over other uses, but the State Constitution permits no distinction to be made between Native and non-Native rural residents.

8. The State of Alaska statutes, and Board of Fish and Game regulations, identify rural areas where the subsistence provisions apply (to all residents therein), and urban areas where they do not.

9. The State of Alaska statutes and Board of Fish and Game regulations, establish advisory committees for the rural and urban regions, to provide local input and advice on all matters relating to fish and game management, including subsistence uses.

10. Native interests tend to regard the State provisions for subsistence, and the implementation thereof, as lacking credibility, in view of perceived bias by State authorities in favour of sport hunting and fishing.

11. The Federal Marine Mammal Protection Act (MMPA) prohibits the taking of marine mammals, with a few exceptions including subsistence take by Native people in Alaska.

12. The MMPA recognises that involvement of Native subsistence users is essential in the decision-making process, by providing for advisory committees or commissions with a direct role in regulating the subsistence take of marine mammal species.

The Endangered Species Act

13. Federal agencies maintain a list of species deemed to be 'endangered' or 'threatened' and prepare special recovery plans for the listed species. The legislation provides special protection for listed species but there are exceptions for non-wasteful subsistence take by Alaskan natives and non-native permanent residents of remote Alaskan villages.

14. Subsistence provisions of the Endangered Species Act are similar to those of ANILCA. Meat may be sold any by-products may be used for manufacture of authentic native articles (but not mass produced).

15. Subsistence hunting and fishing of endangered and threatened species may be revoked by Secretarial regulation if it is determined that the species populations are materially and negatively affected.

International Treaties and Conventions

16. US legislation giving effect to international treaties for protection of wildlife generally includes provisions for subsistence take by native people, but there are many inconsistencies.

Bowhead Whale Harvest

17. Harvesting bowhead whales is a traditional activity of Alaskan Eskimos. Commercial harvesting is banned by the International Whaling Commission but a limited subsistence take is permitted.

18. The Federal management authority, NOAA, has collaborated with the Alaskan Eskimo Whaling Commission and the North Slope Borough on a population study of the whale, demonstrating that the numbers can support a moderate subsistence harvest.

19. The Alaskan Eskimo Whaling Commission has prepared a Management Plan and there is a Cooperative Agreement with NOAA under which authority for management is delegated to the Commission. The Commission, comprising Whaling Captains from each of the Whaling Villages, determines distribution of the quota and controls harvest operations, with authority to penalize offenders.

20. Although harvest technology is modern and the traditional ceremonies once associated with whaling activities are no longer practised, the subsistence bowhead harvest remains a central feature of Alaskan Eskimo culture. It plays a significant role in social cohesion and the current cultural revival.

North Pacific Fur Seal Harvest

21. Commercial harvest of Fur Seals at the Pribilof Islands has been a traditional activity since the islands were colonized by Aleut Natives working for Russian fur-traders in the 18th century. It was administered under the US Fur Seal Act which lapsed in 1984 when the Senate failed to ratify the international Fur Seal Convention. Since that time only subsistence harvesting has been permitted, under the subsistence provisions of the Marine Mammal Protection Act.

22. The current subsistence harvest is administered by the federal agency NOAA and there is no formal participation by the Native people in the decision-making process.

23. The local Tribal Government seeks to continue the fur seal harvest for traditional, cultural reasons but there is difficulty in sustaining community interest.

24. The population of fur seals is in decline. The cause of the decline is not known but does not appear related to the harvest. An ecological cause, perhaps relating to ecosystem effects of the expanding North Pacific fisheries, seems more likely.

Arctic Nesting Geese

25. Four species of Arctic nesting geese have been in decline during the past few decades. The causes seem to be loss of winter wetland habitat in the southern winter feeding areas of California and Mexico and excessive hunting.

Eskimos hunt the birds on the Arctic summer nesting grounds and have done for many generations. Sportsmen hunt the birds on the southern winter feeding grounds. Each group blames the other for the decline. Conservationists blame both hunter groups.

26. Federal and State wildlife management agencies have banned or limited sports hunting for these birds but early attempts to ban Eskimo hunting failed. Initial bans on taking the birds on the Arctic nesting grounds were promulgated without consultation with Eskimo hunters and were impossible to enforce.

27. The problem has now been resolved by involving the Eskimo Association of Village Council Presidents in the preparation of a management plan, and devolving to them management and enforcement responsibility. The management plan has been in place for several years and the goose populations are already showing signs of recovery.