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An Ethnography of Chenega Bay and Tatitlek, Alaska

by

William E. Simeone

and

Rita A. Miraglia

2000

Alaska Department of Fish and Game

Division of Subsistence



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code	AAC	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly-accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H _A
gram	g			base of natural logarithm	e
hectare	ha			catch per unit effort	CPUE
kilogram	kg			coefficient of variation	CV
kilometer	km	all commonly-accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	common test statistics (F, t, χ^2 , etc.)	
liter	L			confidence interval	CI
meter	m			correlation coefficient (multiple)	R
milliliter	mL	at	@	correlation coefficient (simple)	r
millimeter	mm	compass directions:		covariance	cov
		east	E	degree (angular)	°
		north	N	degrees of freedom	df
		south	S	expected value	E
		west	W	greater than	>
		copyright	©	greater than or equal to	≥
		corporate suffixes:		harvest per unit effort	HPUE
		Company	Co.	less than	<
		Corporation	Corp.	less than or equal to	≤
		Incorporated	Inc.	logarithm (natural)	ln
		Limited	Ltd.	logarithm (base 10)	log
		District of Columbia	D.C.	logarithm (specify base)	log ₂ , etc.
		et alii (and others)	et al.	minute (angular)	'
		et cetera (and so forth)	etc.	not significant	NS
		exempli gratia (for example)	e.g.	null hypothesis	H ₀
		Federal Information Code	FIC	percent	%
		id est (that is)	i.e.	probability	P
		latitude or longitude	lat. or long.	probability of a type I error (rejection of the null hypothesis when true)	α
		monetary symbols (U.S.)	\$, ¢	probability of a type II error (acceptance of the null hypothesis when false)	β
		months (tables and figures)	first three letters (Jan.,...,Dec)	second (angular)	"
		registered trademark	®	standard deviation	SD
		trademark	™	standard error	SE
		United States (adjective)	U.S.	variance	
		United States of America (noun)	USA	population	Var
		U.S.C.	United States Code	sample	var
		U.S. state	two-letter abbreviations (e.g., AK, WA)		
Weights and measures (English)		Measures (fisheries)			
cubic feet per second	ft ³ /s				
foot	ft				
gallon	gal				
inch	in				
mile	mi				
nautical mile	nmi				
ounce	oz				
pound	lb				
quart	qt				
yard	yd				
Time and temperature					
day	d				
degrees Celsius	°C				
degrees Fahrenheit	°F				
degrees kelvin	K				
hour	h				
minute	min				
second	s				
Physics and chemistry					
<i>all atomic symbols</i>					
alternating current	AC				
ampere	A				
calorie	cal				
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity (negative log of) pH					
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

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by

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Submitted to:

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Alaska OCS Region
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949 E. 36th Ave.
Anchorage, Alaska 99508-4302

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Alaska Department of Fish and Game
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Introduction

Tatitlek and Chenega Bay are Alu'utiq¹ villages of less than 100 people located in Prince William Sound. In 1989 the oil tanker *Exxon Valdez* ran aground about 20 miles west of Tatitlek and spilled 11 million gallons of oil. The purpose of this study is to provide an historical and ethnographic context for some of the consequences of the oil spill. It is part of larger project, prepared by the Division of Subsistence of the Alaska Department of Fish and Game and commissioned by the U.S. Department of Interior Minerals Management Service to understand the long-term social and cultural consequences of the *Exxon Valdez* Oil Spill.

Was the oil spill a significant event in the history of the Tatitlek and Chenega Bay people? According to Christopher Wooley and Paul Bohannon², two social scientists hired by Exxon, (1994:28) it was not. In their view,

[the] chief distinguishing characteristic [of the oil spill] is that blame could be attached and lawsuits filed, releasing greed into the community and causing problems that the oil spill itself could not. The spill could thus become the scapegoat for many of the changes in the Alutiiq environment (physical and cultural) that have occurred in the 20th century.

Acknowledging that the oil spill did pollute the waters and beaches of Prince William Sound, they argue that Prince William Sound was not a pristine environment to begin with. They also argue that the context in which subsistence activities take place has changed so much the oil spill produced only minor or short-term consequences (Wooley and Bohannon 1994:3).

In Wooley and Bohannon's view subsistence is something Alu'utiq people do for enjoyment, not to maintain their material existence. They argue that the harvest and distribution of natural resources is no longer organized in a "traditional" manner and that people no longer view their relationship with the natural environment as they once did. Colonialism, epidemic disease, government policies, and participation in non-traditional economic activities have transformed Alu'utiq people into an ethnic minority for which subsistence has become a symbol of their ethnic identity. While acknowledging that modern Alu'utiq people do have a distinctive culture, Wooley and Bohannon maintain that this culture has been severed from its precolonial roots, and a major consequence of the oil spill was simply to point out that fact.

Where Wooley and Bohannon minimize the effects of the oil spill, the anthropologist Joseph Jorgensen sees it as an event that deprived Alu'utiq people of their ability to pursue important cultural

¹ In the anthropological literature the Alu'utiq of Prince William Sound are known as Chugach Eskimos. Local people do not use this term but refer to themselves as Aleut. They speak a language called *Sugcestun*, which is closely related to Yup'ik, an Eskimo language spoken in southwestern Alaska. The word Alu'utiq means "Aleut" in the *Sugcestun* language. The current spelling of "Alu'utiq" is a revision of the previous "Alutiiq," which appears in some of the quotes.

² Together Wooley and Bohannon submitted a draft of an article to American Indian Culture and Research Journal outlining their view of the effects of the *Exxon Valdez* oil spill on the Alu'utiq. A final version of this article appeared in the Journal but under Wooley's name only. We have used the draft article here.

activities. Subsistence hunting, fishing and gathering, in Jorgensen's view, are central to maintaining the social vitality and material existence of contemporary Alaska Native villages. According to Jorgensen (1995:16), one of the most

revealing structural differences between Natives and non-Natives were the ways in which the subsistence activities fitted into their respective relations with wider networks of kinspersons and friends in and out of the village. These differences comprise ideas and sentiments, as well as customary acts.

As this report demonstrates, Jorgensen is correct: the harvest and distribution of wild resources in Tatitlek and Chenega Bay are culturally significant activities that were disrupted by the oil spill. The pursuit of subsistence activities, and the context in which these activities now take place, have changed in the last two centuries but the evidence shows that the harvesting, distribution, and consumption of wild foods continues to be vital to the economic, social, and cultural health of these two communities.

In presenting their arguments, Wooley, Bohannon, and Jorgensen generalize about the historical processes that have shaped Alu'utiq and Alaska Native cultures. Colonialism, epidemics and government policies do tend to produce similar results, but local histories and local responses are never exactly the same. Until 1964 the history of Tatitlek and Chenega were similar but the destruction of Chenega by an earthquake and tsunami in 1964 dramatically altered the course of history for the Chenega people and shaped their subsequent ability to respond to the oil spill. For 20 years the Chenega people lived apart and it was not until 1984 that they were able to reestablish the new community of Chenega Bay. This fledgling community was just taking shape when, five years later, in March of 1989, the *Exxon Valdez* oil spill struck. As one observer noted "since the oil spill, elders [of Chenega Bay] have expressed doubts they will be able to attain their dream of reestablishing their traditional life style" (Impact Assessment 1990a:274). By contrast the village of Tatitlek survived the earthquake intact and retained its cohesiveness as a community. In the intervening years the community continued to shape and solidify internal structures³ that provided continuity and gave the people the wherewithal to weather the vicissitudes of the *Exxon Valdez* oil spill.

This study is organized into eleven chapters and an introduction. Chapter One begins with a brief description of the geography of Prince William Sound and then lays the historical groundwork for issues that are addressed in later chapters. Chapter Two, "Epidemics and Populations" discusses some of the demographic trends in Prince William Sound and provides a short description of the infrastructures of Tatitlek and Chenega Bay as they exist today. The next four chapters provide ethnographic detail about each community. Chapter Three describes the sociopolitical organization, while chapters four and five describe the wage economy and subsistence. Chapter Six describes local beliefs as they relate to the

³ For example the president of the tribal council has been president for 24 years.

relationship between humans and nature. Chapter Seven describes expressive culture as demonstrated in religious holidays and the current cultural revival movement. Chapter Eight describes the 1964 earthquake and tsunami and their aftermath. Chapter Nine and Ten are devoted to the *Exxon Valdez* Oil Spill and Chapter Eleven provides a brief summary and conclusion.

The ethnography incorporates several kinds of materials and research strategies. Archival material and key informant interviews collected at different times, by different individuals, complement and enhance each other. Both authors spent considerable time in each community talking to people and trying to soak up the local ambiance. Taped interviews made by the Bureau of Indian Affairs ANCSA project were particularly valuable in providing historical background. The authors made extensive use of data collected by the Alaska Department of Fish and Game, Division of Subsistence for a project called *An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska* (Fall and Utermohle 1995). In that study the Division of Subsistence collected data using two survey questionnaires, a standard survey instrument used by the division to collect economic, demographic and harvest information and a "Social Effects Questionnaire" that addressed changes in social and community organization.

This study was a collaborative effort. We wish to acknowledge the cooperation of both the Tatitlek and Chenega Bay village councils in giving us the necessary permission to undertake research. We would also like to acknowledge the hospitality of the people in Tatitlek and Chenega Bay. They made our visits both interesting and fun. In Tatitlek we would like to especially thank Ed Gregorieff and his family for their kindness and warmth. We would also like to thank Larry and Gail Evanoff, Pete Kompkoff, Pat and John Christiansen, Charlie Selanoff, Ilene Totemoff, Jerry Totemoff, Roy Totemoff, Jessie Tiedeman, Irene Kompkoff, Norman Vlasoff, Ken and Laurinda Vlasoff, and Gary Kompkoff. We especially want to remember Mike Totemoff and Mike Eleshansky.

Jim Fall, William E. Simeone Sr., Don Callaway, and Rachel Mason read drafts of this report and offered critical and useful comments that have helped us to focus our thoughts and writing.

Chapter One

Prince William Sound: Geography and History

GEOGRAPHIC SETTING¹

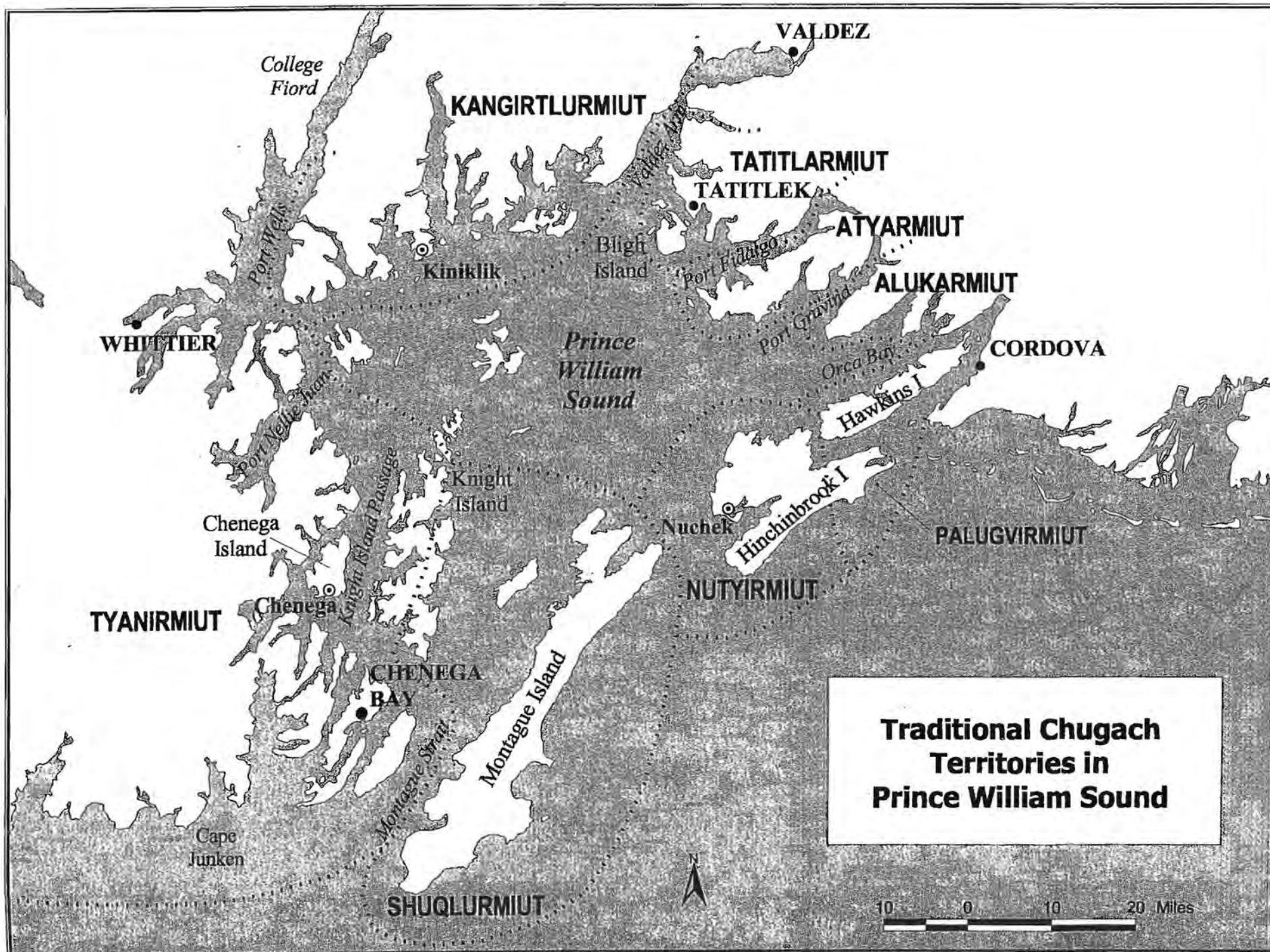
Prince William Sound indents the southern coast of Alaska and is protected from the direct force of the North Pacific Ocean by Montague, Hinchinbrook, and Hawkins islands. The village of Tatitlek is located on the north side of the Sound behind Bligh Island and on Tatitlek Narrows while Chenega Bay is on Evans Island in the Sound's extreme southwest corner. The coastline of Prince William Sound is extremely rugged and in places severely cut by fjords, inlets, and passages. A dense coniferous rain forest comprised of Sitka spruce and mountain and western hemlock dominates the lowland regions. Yellow cedar is also present but much less so than farther east in the panhandle of Alaska. The thick understory of the forest includes a variety of ferns and edible berries. In sheltered spots, protected from salt spray, the forest touches the water but in exposed areas there is a beach fringe of tough rye grass, herbs, and the occasional wild strawberry. On other shorelines are narrow bands of alder, willow, and black cottonwood trees. In many places the water table floats just below the surface and ponds and muskeg are frequent. In higher elevations alpine tundra dominates.

The climate of this subarctic maritime region is wet and mild. On three sides Prince William Sound is ringed by the glacier-studded Chugach Mountains that protect it from the extreme continental climate of interior Alaska. There is also the warming influence of the Alaska current, and precipitation varies significantly. In the eastern part of the sound Cordova receives 131 inches of rain per year while Latouche Island, near the entrance, receives 147 inches, and Valdez, located on the north side, gets 57 inches. Valdez, on the other hand, receives almost twice the amount of snow that Cordova does. At any time of the year, but especially in the late fall, winter and early spring, prevailing southwesterly winds can bring storms with high seas and rain that make travel and hunting dangerous.

There are 31 land mammals indigenous to the coastal areas of Prince William Sound including black and brown bear, mountain goat, wolf, porcupine, lynx, fox, river otter, marmot, marten, weasel, mink, ground squirrel, and muskrat. Moose are found on the northern and western periphery, while the recently introduced (1920s) Sitka black tailed deer are found on the mainland and almost every island.

At least 20 different species of sea mammals are found in the waters of Prince William Sound including baleen and toothed whales, porpoises, dolphins, seals, sea lions, and sea otters. There are 180 species of birds, including 42 species of shorebirds and 52 species of sea birds, and 287 species of fish including salmon, the most economically important, and halibut, rockfish, herring, and cod. Shellfish are

¹ Information in this section comes from Haggerty et al. 1991.



also abundant in Prince William Sound and the inter-tidal area is diverse with mussels, chitons, sea urchins, clams and cockles.

REGIONAL HISTORY

At one time the Alu'utiq population of Prince William Sound was divided into at least eight groups (Fig. 1) (Birket-Smith 1953:20-21). Each was named after their principal village or some geographical aspect within their territory. There were the Nuchek people, the Shallow Water people, and those from Sheep Bay, Port Gravina, Tatitlek, Kiniklik, Chenega, and Montague Island. These groups shared a common language and culture, entertained each other at feasts, but were politically independent, having their own chiefs or leaders. How these groups came to be is told in this story about a quarrel over a spear:

There was an old village in Two Moon Bay in Port Fidalgo. A man there had three nephews, twelve sons, and two wives. He was sick and ready to die. He had a fine spear with a throwing board which he gave to his youngest nephew. Then he died.

The nephews and the sons all went into one house. The sons were dividing the dead man's things among themselves and the nephews. They gave each some bows and arrows or spears - all the dead man's hunting implements. The nephews were talking of the throwing spear. The oldest son said that his father wanted to give it to the youngest nephew, but the oldest nephew said: "No, he gave it to me." Then they started to fight for the spear and were hitting each other with it. The oldest son seized it and threw it into the fire. Then they all quarreled and left.

They went all over [the Sound]. Some of the sons went to the Cordova side, some went to Trhetla near Taukhtyuk [at the other end of Canoe Pass?] and to all different places. Most of the nephews with their families went to Palutat in Long Bay. There they entered a big dry cave. They pulled their baidarkas up and piled their tools all together. Then they sat up against the wall of the cave with their knees doubled up under their chins - everybody, men and women, the women holding their babies. They died that way and dried up. You could see them there long afterwards.

The sons and some of their nephews went to all the different places in the Sound, I don't remember all of the names. That is how all the different villages started (story told by Stepan Britskalov to Birket-Smith 1953:135).

The Russian Presence

The Russian explorer Vitus Bering landed at Kayak Island in 1741 but did not venture into Prince William Sound. The first Europeans to visit the sound were Englishmen who arrived in 1778 under the command of Captain James Cook. It was not until 1793, however, that the Russians were able to forcibly subdue the local population and permanently establish themselves at Fort Constantine Harbor on

Hinchinbrook Island. Until the end of the 19th century Fort Constantine or Nuchek, was the focal point for European trade in Prince William Sound.

In Russian accounts the Prince William Sound Alu'utiq were understood to be similar to those Alu'utiq living on Kodiak Island, but were considered considerably more aggressive:

Because they are surrounded by peoples who are their historical enemies, they are subject to attack by the Kolosh (Tlingit) from the sea and by the inhabitants of the Copper River area from the land. They are therefore warlike, extremely wary, and energetic. When the first Russian ships visited their shores, they were completely unapproachable; in 1783 they fell upon one of Panov's company's ships and drove it off, and in 1791 they resisted landing parties of Captain Billings's expedition (Khlebnikov quoted in Tikhmenev 1978:46).

For their part the Prince William Sound people viewed the Russians as repulsive oddities,

smoke was coming out from their [the Russians] mouths, they had shining suckers all the way down their bodies like cuttlefish (the buttons), their heads were bandaged (caps), and their legs ended in hoofs (boots). When the Russians fired their guns, the Eskimos believed that the earth was bursting. They thought flour was ashes and snuff was the charred dust from the fire drill; hard tack was supposed to be dried salmon roe (Birket-Smith 1953:11).

Most of what they first received in trade from the Russians, the Native people threw away. "They would look at sea biscuits, for instance, and say: "Chips of wood - pooh" and then throw them away" (Ibid.).

The relationship between the Alu'utiq and the Russians was tenuous at best and the Russian colonial period has left a stark memory. Recently a Tatitlek man characterized this relationship by saying "the Russians held the people like slaves" but "gave them the Orthodox faith and taught people how to preserve food" (Simeone, field notes 1990). According to a man from Chenega Bay:

The Russian hunters came into the old village of Chenega and took all of the able-bodied men to the sea otter grounds without regard to how their families would be provided for in their absence. They employed methods of torture on those who dared to defy them and consequently were able to impress most of the able-bodied hunters into their service or indenture (Kompkoff n.d.).

To ensure the hunter's cooperation and negate the possibility of reprisals the Russians took young Native men and women as hostages.

In 1799 Emperor Paul I granted an Imperial charter to the Russian American Company (RAC) which gave the company the sole right to exploit the resources of Russia's American possessions (Black 1988:78). The company's poor treatment of Natives eventually led to a new charter in 1824 that recognized four categories of persons: Russians, Creoles, Islanders, and Independent tribes. All Alu'utiq were classified as Islanders and considered to be Imperial citizens with a status equal to that of free peasants in Russia (Black 1988:79). Independent tribes were those Native people outside the sphere of Russian influence. Under the charter, all "Islander" males between the ages of 18 and 50 were obligated to provide the company with three years of labor. They were to be paid, but at a rate less than Russian workers. Islanders were governed by toyons, local Natives appointed by the company and supervised by

colonial superintendents. In 1844 a second charter reclassified Alu'utiq people as "Settled Tribes." As before they were obligated to provide labor to the Russian American Company, but now the company was required to leave an adequate number of men in the community to provide for the women and children, and those men taken for service could only be separated from their wives for two of the three years. Toyons were still appointed, supervised, and dismissed by the colonial administrator.

As indicated by the provisions in the charters, the Russians relied extensively on Native labor. In part this was because the Russians needed Native people's expertise in hunting to make the colony profitable. At the same time the Russians did not want to settle Alaska so they relied on Natives and the increasing number of Creoles, who were people of mixed Native and Russian ancestry, to maintain the colony. It was, therefore, in the Russians' best interest to maintain a healthy, robust population (Black 1988:80).

With each new charter the Russian American Company became further obligated to provide for the social well being of the colonial population. Social services provided by the company included medical services, schools, and the maintenance of the church. Starting in 1818, for example, the Russians introduced smallpox vaccinations and when the smallpox pandemic of 1836-39 struck they attempted to vaccinate the entire Native population but with varying success. Because of Native theories of disease causation many Native people refused to be vaccinated and the Russians were powerless to stop the spread of the disease (Black 1988:79). The company reported better success at stopping a measles epidemic in 1849 in which no Prince William Sound Alu'utiq were reported to have died (Ketz and Arndt 1990: No. 462, F285v-287).

Although the RAC attempted to maintain control over the Native economy this control varied over time and was more effective on Kodiak Island than in Prince William Sound (Federova 1975:17). Part of the problem was that the RAC could not eliminate the competition in Prince William Sound offered by the English and Americans and Ahtna Athabaskans who came from the Copper River. All three of these groups actively sought out and traded with the Alu'utiq. An additional problem was that the Alu'utiq had limited desires and when these were met they could not be further induced to hunt. By 1860 the Alu'utiq of Prince William Sound were acknowledged to be independent (Golovin 1979) since they would only agree to hunt for the RAC close to their own communities and they refused to sell their entire catch to the company, reserving a portion for trade with other groups.

The Imperial charter of 1799 had directed the Russian American Company to sponsor the conversion of newly discovered people into the Christian religion (Case 1990:238). The Russian Orthodox religion was introduced into Prince William Sound in 1795 by Heiromonk Juvenaly, who came to Alaska from St. Petersburg as part of the first Russian Orthodox mission to America (Oleksa 1990:323). According to the priest Ivan Veniaminov, in that year Juvenaly baptized 700 Chugach in Nuchek Lake (Veniaminov 1984:235).

The first Russian Orthodox missionaries were enjoined against denigrating the cultures they came into contact with, and instead directed to teach by example. Bishop Michael of Irkutsk, whose jurisdiction included the Alaskan Mission, instructed missionaries to behave "as guests in another person's house." Missionaries were to refrain from directly criticizing the customs or traditions of the indigenous peoples, but using the personal example of their humility, patience and piety to persuade them to accept Christian standards. Preaching alone would not lead to commitment or true conversion, but a person living a truly dedicated Christian life would attract others to the Faith "by the beauty and joy of their example." This had been the traditional approach of successful Orthodox missions across Central Asia and Siberia, a history that the missionaries to Alaska had personally reviewed during their eight thousand mile journey from Finland to the Pacific (Olekse 1990:325).

Bishop Veniaminov, who served as a priest in Alaska from 1824 through 1840 (Sweetland-Smith, et al 1994), is also said to have taken a tolerant position toward Alaska Native culture. According to Veniaminov's instructions:

The missionary was never to deride local customs but, instead, had to observe and record them. He had to discourage "bad" customs that contradicted Christianity and give natives credit for the "good" ones. The "traditional" customs that were neither good nor bad could be tolerated but the natives had to be told that it was only a temporary indulgence (Kan 1990:301).

Outward signs suggest the Alu'utiq of Prince William Sound accepted Christianity. Vladimir Stafeev (n.d.), a Russian working for the Alaska Commercial Company in the late 19th century, wrote that there were no priests in the villages, but on feast days or name days the people gathered in a barabra, put up the candles they had purchased at Nuchek, and prayed together. In the 1930s Birket-Smith (1953:132) commented that "Most of the old ideas still exist besides the new doctrines, and only the ceremonies have been replaced by others." He observed that the Alu'utiq were, in their way, very religious. When a man returned from hunting or fishing he walked right from the beach to the church and the people always returned to the village to celebrate church holidays.

After Alaska was sold to the United States, Orthodox priests continued to play a role in the lives of Prince William Sound Natives. During the 1890s the church, with the support of the Alaska Commercial Company, ran a school at Nuchek and 30 students were enrolled in the fall of 1894. They were taught Russian, English, catechism, prayers in Slavonic and Alu'utiq, arithmetic, and singing (R.O. records D303-203). The psalmist Andrei Kashevarov was the teacher and his translator the Creole Alkesandrov. According to Kashevarov some local Americans opposed the Russian school saying that the Russians had no right to teach the "American Aleut" children, and that the Russian religion was an obstacle to civilization and made the Native people hostile to the American government (R.O. records D305-204). Some Americans who had married Alu'utiq women sent their children out to the "Indian School in Oregon" so they could learn "American trades" (R.O. records D303-203).

In 1895 Kashevarov established a Church Brotherhood in each of the Native communities. The aim of these brotherhoods was to maintain Church property, assist members during illness, provide food when needed, and to see to the moral improvement of the villagers (Hassen 1978:168). One aspect of this moral improvement was to curb alcohol consumption. The priest Valdimir Donskoi wrote that in Tatitlek Kashevarov was able to work with the ACC agent to encourage temperance. This was not the case in Kiniklik, where the agent made alcohol himself, nor in Nuchek where Kashevarov wrote the people were often drunk and the ACC agent could not get them to hunt. The toyon Petr Chumovitskii had explained that the people were drinking to warm themselves because they often get wet (R.O. records D305-204).

The American Fur Trade

With the purchase of Alaska by the United States in 1867, the Alu'utiq were "let go", as one elder from Tatitlek put it. This meant that Native people were no longer required to work for the Russian American Company. Now, instead of facing one company bent on the exploitation of local populations and resources, there were multiple trading companies bent on the commercialization of a wide variety of resources for export, irrespective of aboriginal or Russian conventions. The introduction of *laissez-faire* capitalism led almost immediately to a decline in fur bearing animals, particularly sea otters. It also led to the marginalization of Alu'utiq people, as their skills, knowledge, and labor were less essential in the emerging industries.

Initially American commercial enterprises retained the Russian focus on furs, and sea otter pelts remained the major export. Alu'utiq hunters were encouraged to hunt for organizations such as the Alaska Commercial Company (AC Co.) that had taken over the Russian American Company's installations at Nuchek. Competition between the AC Co. and the Western Fur and Trading Company introduced a period of prosperity for Prince William Sound Alu'utiq. To attract Native hunters the competing companies gave high prices for furs and allowed hunters unlimited credit. The competition came to an end in 1881 when the AC Co. purchased its rival. Almost immediately the Alaska Commercial Company traders at Nuchek lowered the price of furs and docked the Natives 50 percent of the price paid per pelt in order to recoup the credit owed the company (Lethcoe 1994:32).

As early as 1867 sea otters were disappearing from the Gulf of Alaska because of over hunting. Nevertheless the federal government allowed hunting to satisfy the demands of the market. Between 1870 and 1890 well over 4,000 sea otters were killed each year (Morseth 1998:63). Robert Porter, who analyzed the 1890 census, noted the decline in the sea otter population despite the fact that only Natives were allowed to hunt them. As early as 1898 American trading companies had stopped giving credit for sea otter skins and in the winter of 1897/98 the Russian Orthodox Church reported that the Alu'utiq were reduced to eating shellfish because they had spent all summer hunting otter instead of fishing and then

the trading companies had refused to give credit or to trade for the pelts (Anatolii 1899:91-92). In 1910 the federal government placed a ten-year moratorium on hunting sea otters and later expanded the ban for another twenty years. With the trade virtually shut down, companies tightened credit and closed stores. Alu'utiq hunters had to find new ways to earn money for purchasing trade goods. One alternative was the developing commercial fishing industry.

Commercial Fishing

Commercial salmon fishing began in Prince William Sound at the end of the 19th century. Pink salmon were the first species targeted but eventually the fishery was expanded to include all species of salmon, as well as herring, clams, crab, and halibut. The first salmon cannery in the Prince William Sound area opened sometime between 1887 and 1889 at Odiak near the site of present day Cordova. The force behind the development of commercial fisheries in Alaska was the Alaska Packers Association, which was founded in San Francisco in 1892. By 1900 the association owned 2/3rds of the canneries in Alaska and accounted for 72 percent of the salmon pack (Lethcoe 1994:92). Until Alaska became a state in 1959 the Alaska Packers Association maintained a firm grasp on the industry exploiting both workers and the resource (ibid. 93).

In the beginning the Chinese were the main source of labor for the canneries because they were diligent and willing to work long hours for low pay. Even after the Chinese Exclusion Act of 1904, which made it difficult to obtain Chinese labor, local Alu'utiq were not hired to work in the canneries because managers regarded Native people as lazy and unreliable (Moser 1899:25). For their part Native people resisted the discipline of cannery work, preferring to stay on the job only until they made enough money to "supply their personal wants and get a few dollars ahead." Then "the desire for hunting and fishing seizes them and they are apt to leave the cannery when they are most wanted" (ibid.). Though not hired to work in the canneries Alu'utiq fishermen were encouraged to sell their surplus salmon to the packing companies.

By the 1930s the situation had changed and Native people were fully engaged in the commercial fisheries. The National Marine Fisheries Service, who managed commercial fisheries in Alaska, reported that in 1934 "practically all of the Natives in the district [Prince William Sound] are employed by the salmon canneries during the summer months." The men were engaged in fishing and women worked in the canneries (NOAA:n.d.).

Early on the canneries owned the boats and gear, which they rented to the fishermen. The packing companies conspired to keep the price of fish low and the rents high so the fishermen became indebted to the company. As time went on more and more fishermen were able to purchase their own equipment and become independent operators, still most Native fishermen did not become independent

operators until the 1950s. Of the 94 company owned seine boats operating in Prince William Sound in 1943, Native people operated 93 (NOAA n.d.).

In 1912 the fishermen staged a strike for high prices but the packing companies responded by building more fish traps so that they would not have to pay higher prices. Fish traps were very popular with the industry because they were efficient. For example, in a typical year, such as 1937, the industry operated 41 fish traps in Prince William Sound that produced 2,646,307 salmon, or 71 per cent of the total salmon catch (NOAA n.d.). The traps were also popular with the packing companies because they did not require much labor, and the canneries owned the rights to the salmon within the vicinity of the trap. But the traps were terribly destructive to fish populations. Every kind of fish was caught in the traps, not just salmon, leading to a tremendous waste of unwanted species. Traps located near the mouths of spawning streams could destroy entire runs by not allowing for any salmon to escape and spawn. In an attempt to curb the abuses of the fishing industry Congress passed the White Act in 1924. The act did not eliminate the fish traps but provided some measure of conservation by stipulating that the packing companies allow for a 50 percent escapement to the spawning grounds. The act also regulated the type of gear that could be used but not the quantity. Despite these measures continued over harvest caused a sharp decline in salmon stocks during the late 1940s and early 1950s (Lethcoe 1994: 96).

By the end of World War II the fishing fleet in Prince William Sound had grown dramatically, and fishermen were loudly demanding more autonomy from the economic hold imposed by the Alaska Packers Association. Since the canneries owned the fish traps, which caught most of the fish, they controlled the fishery. Dismantling the traps after statehood in 1959 loosened the companies' hold, and the fishing fleet expanded (Strickland n. d.:70). This expansion produced two results. The intense fishing of earlier decades threatened the natural runs of salmon within Prince William Sound so in 1970s and 1980s fish hatcheries were introduced to increase the number of fish and ameliorate fluctuations in the natural stocks. Hatchery production not only stabilized the runs but substantially increased the runs of pink salmon so that in 1998, for example, Prince William Sound pink salmon returns were 25 million fish of which only 5 million were wild stocks (ADF&G 1999:138). To recoup their costs the hatcheries sold their fish on the market, thus competing with the independent fishermen.

The second result was that competition and crowding within the fishery made it harder for those involved to make a living, so in 1975 a system of limited entry was introduced. The State of Alaska issued permits to those fishermen who could demonstrate a sustained record of fishing over the previous four years. After this date the only avenue for entering the fishery was by purchasing a permit, obtaining one through inheritance, or working as a crewmember for those who did receive a permit. Today only a few men from Tatitlek and Chenega Bay actively participate in the commercial fishery. (See Chapter Four for more information on Native participation in the commercial fishery.)

Commercial claming began in the mid-teens and in 1915, 135 diggers dug 3.5 million pounds of clams (Lethcoe 1994:98). By 1932 Cordova was the "razor clam capital of the world" but the 1964

earthquake and over harvesting destroyed the clam population. Between 1935 and 1940 a Dungeness crab fishery developed in Prince William Sound and processed 40 to 50 thousand pounds of crab (ibid.). In the late 1980s the population of crab drastically declined in Prince William Sound and the fishery was closed by the late 1990s.

Herring fishing began in 1914 and initially the fish were processed to make oil and meal. Several herring reduction plants were built in Prince William Sound with the largest situated at Port Ashton on Evans Island. In the peak year – 1936 – Prince William Sound produced over 56,000 tons of herring, most of it was used for oil and meal. In 1939 a decline in herring stocks was noted and for the first time in the history of the PWS herring fishery a limit of 350,000 barrels was put into effect for the primary purpose of curtailing over-expansion of the fishery (NOAA n.d.). Herring remained an important commercial fishery in Prince William Sound, although the characteristics of the fishery changed. By the 1990s there were five different herring fisheries in the sound: a gillnet sac roe fishery, a purse seine sac roe fishery, a wild spawn on kelp fishery, a pound fishery in which herring spawn is gathered in pounds, and a food/bait fishery. All of these, except the wild spawn fishery and the food/bait fishery are limited entry. In 1992, two years after the *Exxon Valdez* oil spill, herring stocks were high but in 1993 returns diminished and for the following two years and again in 1998 there was no commercial herring harvest. One reason for the decline was thought to be a virus, *Hemorrhagic Septicimia* that effected young herring.

Gold, Copper, and Oil

In 1897 gold was discovered on the upper Yukon River starting a stampede and a search for an “all American route” to the gold fields. Initially gold seekers landed at Tatitlek and the Russian Orthodox priest Konstantin Pavlov thought the Native people could make a living transporting goods for the prospectors (R.O. records D304-204), but by 1899 Valdez had replaced Tatitlek as the trailhead for prospectors heading into interior Alaska. Most prospectors did not linger in Prince William Sound but the few that did prospected for local mineral wealth. In 1897, with the help of a Native guide, C. Peterseon and M.O. Gladhaugh discovered copper on the eastside of Virgin Bay. Another larger copper deposit was found on Latouche Island. The Virgin Bay strike developed into the Ellamar copper mine displacing a group of Native people who were moved to the present site of Tatitlek (see below). In 1899-1900 the world's richest copper deposit was found in the Wrangell Mountains northeast of Prince William Sound. The discovery of this deposit made it feasible to operate the smaller copper mines in Prince William Sound because ore from all the mines could be shipped on the same ore carriers to smelters in Tacoma Washington (Lethcoe 1994:56). In 1906 the town of Cordova was founded as a railhead and service center for the copper mines operating in the Wrangell Mountains.

By 1914 there were nine copper mills operating in Prince William Sound employing between 250 and 300 people. Most Native people did not work as laborers in the mines but cut "lags" or timber supports for the mines and supplied fish to the miners.

Like the salmon industry, mining in Prince William Sound received a boost during World War I. In 1916-17 the price of copper jumped from 14 to 21 cents a pound but as soon as the war was over demand slumped and the boom in copper was over. Economic declines at the end of the 1920s dealt a hard blow to those mines that had remained open after the war. The Ellamar mine closed in 1927 and by 1930 all mining in Prince William Sound had stopped, leaving commercial fishing as the primary industry of the region.

World War II increased interactions between Natives and non-Natives and further exposed Prince William Sound to the wider world. Alu'utiq men were conscripted or volunteered for military service and many left home for the first time. A flurry of construction took place as Prince William was militarized and a deep-water port was opened at Whittier and a railroad built connecting Whittier to Anchorage. For several decades after the war development slowed, then in 1975 the pace of change quickened with the construction of the Trans-Alaska Pipeline and oil terminal at Valdez. Once plied by a few freighters and many small, family owned fishing boats, Prince William Sound became an avenue for huge super tankers full of North Slope crude oil. Approximately 1.7 million gallons of oil currently arrives in Valdez every day and, because of limited storage space, most must be transferred to tankers that navigate the narrow passage of Valdez Arm that leads into Prince William Sound and the Gulf of Alaska. Currently oil tankers make between 700 and 1,100 trips across the sound annually (Davis 1996:233).

In March of 1989 the unthinkable happened when the oil tanker *Exxon Valdez* ran aground on Bligh Reef. About 11 million gallons of crude oil spilled into the sound creating a social and ecological disaster. World attention became riveted on Prince William Sound, and the small isolated communities of Tatitlek and Chenega Bay were inundated with strangers who came either to fix the situation or report on it. The oil spill was unprecedented in Alu'utiq experience and demonstrated exactly how vulnerable the Native subsistence way of life is to outside forces. As one Native leader pointed out, for the first time Native people were not free to harvest the natural resources they had depended on for generations (see Chapter 9 and 10 for an account of the *Exxon Valdez* Oil Spill and its aftermath).

The influx of non-Natives into Prince William Sound that began with the discovery of gold in interior Alaska shifted the centers of wealth and influence from the Alu'utiq communities to the non-Native towns of Valdez and Cordova. One Tatitlek elder remembers the period of the 1920s and 1930s as particularly difficult for Native people (Simeone, field notes 1990). It was "bad being an Indian in the old days," he said. Native people were "looked down upon, segregated, the last piece of dirt." They "had to know they were on their own," i.e., Native people were not going to get any help from non-Natives or the government. Outside of school the elder said he felt no overt discrimination, but in Valdez, where he lived with his parents, Native children were not allowed to go to the public school with non-Native children. And

while in school they were told not to speak "Aleut." He also believed that Native children were purposively "kept down" because they were not taught anything but "industrial arts and manual skills." According to this elder it was an explicit policy to keep Native people uneducated and to deprive them of their rights. "Alaska Natives," he said, "were not taught about their own or Alaska history."

Non-Natives also began to alter the local ecology of Prince William Sound. In 1916 the Cordova Chamber of Commerce developed a plan to transplant Sitka deer into Prince William Sound in order to attract tourists. Transplants took place between 1917 and 1923 (Burris and McKnight 1973). Deer refuges were located on Hawkins and Knight Island and along the Eyak River drainage. As late as 1941 deer were illegal to hunt and federal authorities searched fishing boats for illegal carcasses. By the end of World War II, however, deer had become an important staple for all the communities in the Sound.

A second development, already discussed, was the introduction of fish hatcheries into Prince William Sound. The increased numbers of fish attracted non-local sports fishermen from all over the world. Between 1984 and 1989, for example, the percentage of sport anglers increased 38 percent, to 26,238 rod and reel fishers, and sport fish harvests increased 131 percent to an estimated 1989 harvest of 72,292 salmon (Mills cited in Stratton 1990:131). In 2000 the State of Alaska completed a road to Whittier that greatly expanded access to Prince William Sound from Anchorage, Alaska's largest city. The state has also proposed construction of fueling stations at various locations around the sound that would increase the range of gasoline powered pleasure boats coming out of the ports of Whittier, Valdez, and Seward (Alaska DOT 1994:6-61).

The 1964 Earthquake

In March of 1964 an earthquake of magnitude 8.4 on the Richter scale struck south central Alaska. In Prince William Sound whole islands were uplifted, and underwater avalanches caused tsunamis that partially destroyed the city of Valdez and completely destroyed the village of Chenega. Minutes after the earthquake, a tidal wave destroyed all the buildings in the village except one house and the school. Twenty-three residents were lost. The village was immediately abandoned and the survivors evacuated to Cordova and then relocated in Tatitlek (Stratton and Chisum 1986:2). Survivors with close family ties stayed on in Tatitlek while others moved to Anchorage or went back to Cordova. It was not until 1984 that Chenega was rebuilt at a new site at Crab Bay on Evans Island. The new community was called "Chenega Bay" to distinguish it from the old village where so many people lost their lives. Tatitlek was left physically unscathed by the earthquake but the village grew in size after some Chenega residents who had survived the tsunami decided to stay.

In a recent interview with two local high school students Tatitlek elder Irene Kompkoff recalled what happened during and just after the earthquake.

Irene: We were just getting ready to go to a movie, House on Haunted Hill. We were just putting the frying pan on to cook to supper; we were going to have deer steaks. And we had just given (her son) a bath, so he just had a diaper on when the quake started.

Students: How long after the earthquake did you move here (to Tatitlek)?

Irene: Must of been about, we stayed in Cordova, they evacuated us to Cordova, then we stayed in a church basement - cannot remember how long we were over there - it wasn't very long until they put tents up [in Tatitlek], then we moved over here.

Students: How did you live when you came here?

Irene: We lived in a tent. We had relatives here but BIA had already come over and set up tents for all of the people in Chenega.

Students: Is there anything that stands out about the earthquake?

Irene: Even now I stop and think about what really happened. Even now when I see the moon I could remember that the tide didn't come in or go out after the earthquake struck. And the moon just stayed in one place, it didn't move, it stayed in one area all night. That's what I was thinking about, how still it was. And then before the quake struck that day, it was real still, it was like everything stopped and everybody noticed how different the atmosphere was, the air, the animals, the dogs. But we didn't think nothing about it until afterwards. It was just like time stopped, even in the morning. So that's what.

Students: Do little tremors still remind you of the earthquake?

Irene: We had little teeny boardwalks, and all I remember is crawling cause we couldn't stand and the tidal wave already hit when the earth was quaking so we had to crawl on little teeny boardwalks. When I was running I kept telling myself I'll never run from an earthquake again. So from that, as long as I know that I am high enough up, I'll just stay, I won't run (Kompkoff 1999).

The Alaska Native Claims Settlement Act and the Alaska National Interest Lands Conservation Act

In 1969 oil was discovered on Alaska's North Slope. To exploit these discoveries the State of Alaska had to first resolve the aboriginal land claims of the Alaska Native people. The purpose of the Alaska Native Claims Settlement Act (ANCSA) of 1971 was to settle these claims and in exchange for extinguishing their claims to the land, and their hunting and fishing rights, Alaska Natives received 44 million acres of land and 962.5 million dollars. Under ANCSA were formed 13 regional and over 200 village for-profit corporations. Both regional and village corporations received title to land. Village corporations, however, received only surface title to their land while the regional corporations obtained the

subsurface rights to village lands within their region and subsurface rights to land they received independently of village selections. A typical shareholder enrolled in both a village and regional corporation and received 100 shares of stock in each. No one born after December 18, 1971, the date Congress passed ANCSA, was eligible to receive shares. In the view of many people ANCSA disenfranchised these people, sometimes referred to as "afterborns," since they could not vote on corporate matters or receive dividends.

To many Native people the disenfranchisement of the "afterborns" was a grave flaw in the act, equaled only by the stipulation that after December 18, 1991 shares in Native corporations could be sold publicly, and that corporate lands could be taken to pay delinquent property taxes. In 1987 Congress amended these sections of ANCSA to give Native corporations the right to change their articles of incorporation to restrict alienation of stock for an indefinite amount of time, and allow people born after 1971 to acquire shares.

Chugach Alaska Incorporated, which included the areas of Prince William Sound and lower Cook Inlet, received 336,000 acres or 2 percent of the 44 million acres obtained in the settlement (Arnold 1976:259,261). Within the Chugach region there were five Alu'utiq village corporations: Tatitlek, Chenega, Port Graham, English Bay (Nanwalek), and the Eyak Village Corporation which was formed by the Native residents of Cordova. By 1974 there were 2,099² shareholders enrolled in the regional corporation with about half (1,062) living within the region (Arnold 1976:183). That is, they lived in one of the villages, or in Cordova, Valdez, or Seward. There were 867 village corporation stockholders and 1,232 at large shareholders (Arnold 1976:197) that had not enrolled in a village corporation but received stock in the regional corporation. Chenega Corporation had 68 enrolled shareholders, Tatitlek 215, and Eyak 323 (ibid.). Today the majority of shareholders of both Tatitlek and Chenega Incorporated do not live in their respective communities but in urban areas outside of the Chugach region.³ As a result, corporate shareholders enrolled in the same village corporation may hold divergent views about how their respective corporations should be run.

The imposition of a corporate business structure was supposed to create employment for Native people and therefore solve some of the social problems facing Native communities. For a variety of reasons Chugach Alaska Incorporated has not been able to do this. At the time of the Settlement most of the Native people living in the Chugach Region were independent commercial fishermen who had little, if any, experience or skills necessary to run a large corporation. In addition most of the shareholders lived

² In a recent Juneau Empire Special Report published in April of 1999, Chugach Alaska Incorporated was reported to have 2,007 shareholders.

³ Of those people interviewed in Chenega Bay in 1991, 40 percent (11 out of 28 people interviewed) were enrolled in the Chenega Village Corporation. Eleven were non-Natives, one person was an at large shareholder, 1 belonged to the Salamantoff Village Corporation, and 4 belonged to the Tatitlek Village Corporation. The composition of Tatitlek was similar in that just over 55 percent, or 13 out of 24 people interviewed, stated they belonged to Tatitlek Corporation. The other eleven respondents either belonged to no corporation, or to another village corporation (ADF&G 1991a & b).

in widely dispersed and remote communities that, in 1971, had little if any of the basic infrastructure needed to support business opportunities. Furthermore, the resources owned by Chugach Alaska, such as timber and coal, are in remote areas and a considerable distance from world markets. Since 1974 the corporation has paid dividends twice and currently employs only 70 shareholders (Juneau Empire 1999:23). In some people's view the regional corporation has done nothing good or positive for the villages and is insensitive to shareholders needs. Furthermore, corporations are legally compelled to make decisions for the good of all shareholders, no matter where they live or how important they consider their cultural identity. With the majority of Chugach shareholders living outside the region this can create problems.

ANCSA also created other divisions within the Native community. Some Native people, especially those involved in the corporations, support the corporate business model as a path to economic and political empowerment while others support a tribal model that centers on the village as a sovereign political entity. The tribalists view ANCSA as undermining the communal nature of Native society and an extension of the assimilationist policies of an earlier era. They believe that, despite ANCSA, Alaska Natives villages continue to have legal capacities for self-determination similar to tribes in the lower 48 states. While the impetus for tribal sovereignty has been stymied in the courts the federal government has recognized many Native villages as tribal entities. This has provided tribal advocates with an incentive to maintain their demand that the State of Alaska recognizes tribal sovereignty. In the early 1990s this provoked a reaction from the state administration that viewed tribal assertions as a threat to the state's own sovereignty.⁴

Although creating contradictory interests within the Native community, ANCSA did mark something of a turning point in the social history of Alaska Natives. Before ANCSA the relationship between Natives and non-Natives was characterized by a subordination of Native people to the dominant society. As previously stated it was "bad being an Indian in the old days." Despite gains by groups such as the Alaska Native Brotherhood in Southeast Alaska, Native people felt they were "looked down upon, segregated, the last piece of dirt" (Simeone, field notes 1990). After ANCSA there was a re-assertion of control over Native affairs, a resurgence of pride in being Native, and an increasingly assertive involvement by Natives in the general economic, political, and social life of the state (Burch 1984:657). A man from Chenega Bay put it this way "Forty years ago, Natives in Alaska were told they needed to learn politics, so we did. Thirty years ago they were told to learn business, so we have" (Juneau Empire: 1999:24).

Under ANCSA aboriginal hunting and fishing rights were extinguished but in 1980 Congress moved to protect those rights by passing the Alaska National Interest Lands Conservation Act (ANILCA). Initially, ANILCA was conceived to protect only the hunting and fishing rights of Alaska Natives, but at the

⁴ In October of 2000 the state of Alaska acknowledged the legal and political existence of federally recognized tribes in Alaska.

insistence of the State, and the generosity of Native people, protection was granted to all rural residents. Under ANILCA the state was allowed to manage fish and game on federal lands in Alaska as long as the state provided for a rural preference. But in 1989 the Alaska Supreme Court in the McDowell Case overturned the state's subsistence law because it violated aspects of the state's constitution, and the state was forced to grant subsistence rights to all Alaska residents. With the State of Alaska out of compliance, the federal government assumed control over the management of fish and game on federal lands and in waters adjacent to them. The result is a dual system of management with different regulations, depending on the status of the land. In the federal system, regulations are developed and implemented in collaboration with Regional Advisory Councils whose members are primarily Alaska Native people. Many Native people view the federal system as more responsive to their needs than the state system of management. Increased involvement in the federal system, coupled with the Department of Interior's recognition of Native villages as "tribes" heightened Native aspirations for political sovereignty and further involvement in natural resource management. Correspondingly, interest has developed in co-management of natural resources whereby tribes share decision-making power with state and federal managers. To further their roles in this arena, Native people have formed groups like the Alaska Native Harbor Seal Commission and the Chugach Regional Resources Commission which helps Alu'utiq communities in the Chugach region develop local natural resources programs.

SUMMARY

This chapter outlined some of the more significant historical events that have shaped contemporary Alu'utiq culture. For many Alu'utiq the legacy of Russian colonialism survives mainly in the Russian Orthodox religion, which is a central feature of contemporary Alu'utiq culture (see chapter seven). More broadly the Russian colonial period marks the first phase in the subjugation of the Alu'utiq people and in the systematic exploitation of Alaska's resources by non-Natives. After 1793 the Alu'utiq were no longer an autonomous people. They become enmeshed in a world economy over which they have no control and subject to the injustice and neglect experienced by most indigenous minorities within nation states.

The purchase of Alaska by the United States ushered in the second phase of colonial exploitation, but America's legacy is necessarily more complex. Where the Russians had focused solely on fur, the Americans turned a wide range of animal and mineral resources into commodities. In the beginning the Alu'utiq were largely ignored in this process because American businesses found it cheaper and more efficient to import foreign-born labor to work in the copper mines and packing companies. Eventually the Alu'utiq found a niche in the commercial fishery, which enabled them to successfully articulate with American capitalism. For almost 100 years Alu'utiq families labored in the commercial fishery, though low fish prices set against the high cost of fishing have now driven most out of the business.

The American drive to exploit Alaska's mineral resources eventually led the state and federal governments to address the aboriginal claims of the Alaska Native people. In return for relinquishing aboriginal claims to land and to hunting and fishing rights the Alaska Native Claims Settlement Act provided Native people with land and money. The effects of ANCSA are mixed and have not solved the social or economic problems of small villages. The Act has provided the larger Native community with some economic and political influence and has led to a sense of empowerment. But ANCSA did not resolve the issue of subsistence, which is one of the most pressing issues facing Alaska Natives today. In part, the Alaska National Interest Lands Conservation Act protected subsistence rights and the current federal management programs do provide Native people with a venue for participating in the management of wild resources on federal lands, but not on state or private lands. However, the sole right to manage those resources rests with the federal and state governments.

Chapter Two

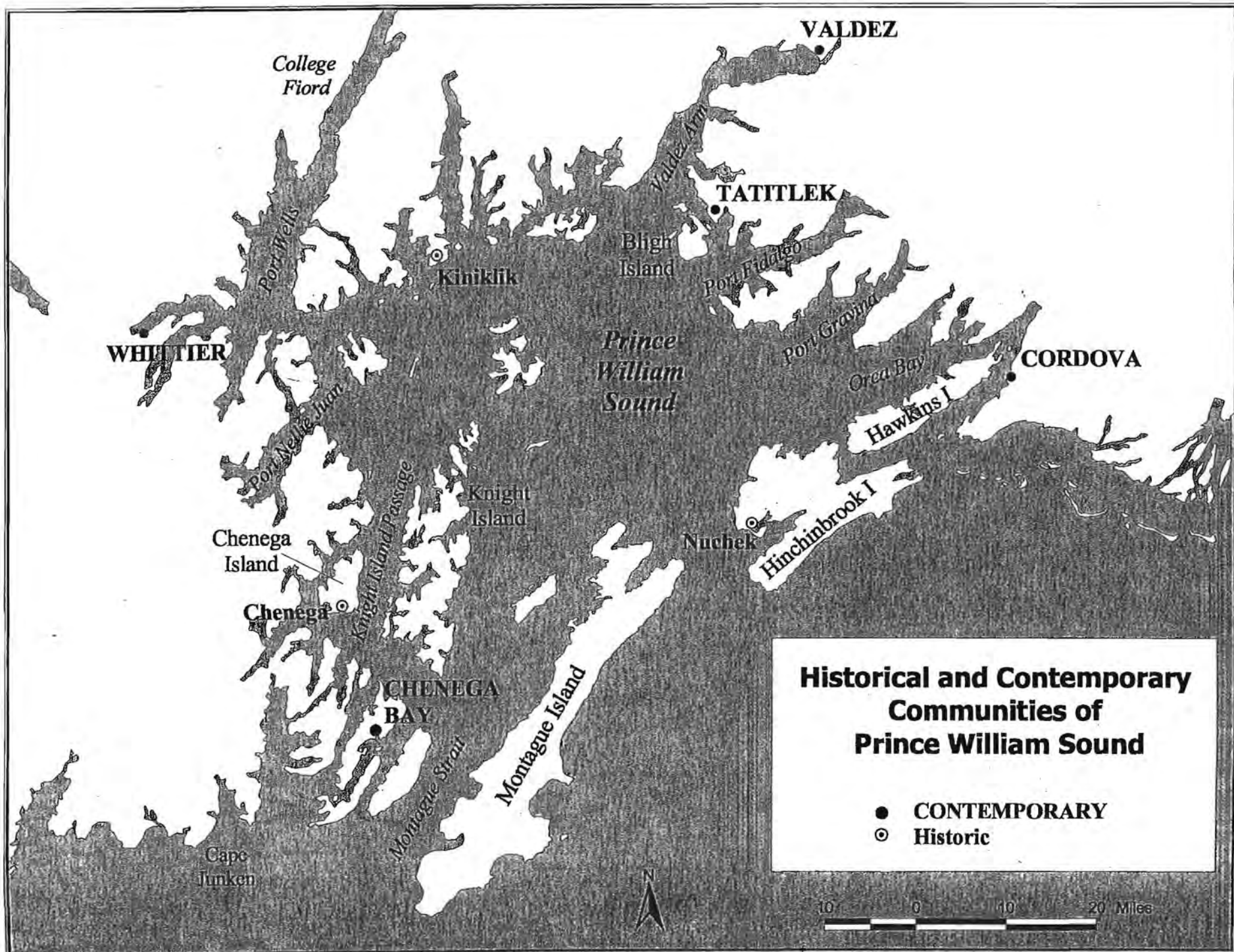
Epidemics and Populations

Certain historical events that shaped contemporary Alu'utiq culture were discussed in Chapter One. Left out of that discussion were the historical transformations in demography produced by epidemic disease and the growth of non-Native communities in Prince William Sound. Estimates for the pre-Russian Alu'utiq population in Prince William Sound range from 400 to almost 1,000 people living in approximately eight winter villages (Haggerty et al. 1991:77-78). In 1838 a smallpox epidemic reduced the population by approximately one fourth, and other diseases, such as influenza and tuberculosis, reduced it further. As a result the federal census of 1880 listed only four Alu'utiq communities: Tatitlek, Chenega, Nuchek, and Kiniklik, with a total population of 267 people (Rollins 1978) (Fig 2). A number of smaller communities, such as Gravina Bay, may have existed but were not enumerated in either 1880 or 1890. Gravina Bay was enumerated in 1900 with a population of 14 living in two households (U.S. Census 1900:roll 1750).

In the first decade of the 20th century several epidemics struck Prince William Sound. In 1906 epidemics of diphtheria and pneumonia killed an unknown number of people and in May of 1907 the publication *American Orthodox Messenger* (Serafin 1907:182-184) reported an epidemic in which eleven people, adults and children, died in Tatitlek within two weeks. Kiniklik was spared and Nuchek was not mentioned. Chenega was the "kingdom of death." Twenty-two people died within two weeks; the survivors were "thin and exhausted, lifeless people with violent fits of coughing, with burnt-out faces, sunken cheeks and eyes, with wildly beating hearts." Five people were still sick, the rest like "shadows" or "wax figures." The priest gave out what medicine he had and called the people to a meeting where they elected a toyon, and starosta or church lay reader. When the priest returned to Tatitlek one more person had died and others were dying (Serafin 1907:182-184). There were further deaths from the influenza epidemic of 1918. One Tatitlek elder recalled that the influenza, that went all over the state.

But I heard stories from people who survived it. The men, one guy was telling me, he said he and another fellow were digging graves for people [who were] just passing over every day. He and another guy were digging a grave for some people and the next day they were burying him, they were going that fast. It took a lot of people away from here, that epidemic. After that it was pretty normal, people just started raising their families, they were all young then (Simeone, field notes 1990).

At the end of the 19th century the population of Nuchek, which had been the center of commerce for the region, began to dwindle as the regional economy shifted from furs to mining and then to fishing and people moved away. Disease reduced the population further and in 1925 the Russian Orthodox Chapel closed and the icons were moved first to Makarka Point and then to Cordova. Many people



relocated to Tatitlek and Chenega or began new communities such as Makarka Point and Anderson Bay (Klashnikoff 1979). A pair of brothers named Makari and Fred Chemaviksy started these villages. Makari

Figure 2. Historical and Contemporary Communities of Prince William Sound stopped at Makarka Point, which is named after him, while Fred settled in Anderson Bay (Klashnikoff 1979). The village of Makarka Point was located on Hawkins Island and appeared in the 1910 census with 21 people living in approximately seven households. The criteria for establishing the village were a good salmon stream "with lots of dogs, humpbacks, and silvers" and "lots of halibut and cod off Makarka Point, and plenty of ducks." Makarka Point was populated until sometime into the late 1930s, but after a Russian Orthodox Church was built in Cordova in 1925, a majority of the population moved there.

The population of Kiniklik was hit hard by the flu epidemic of 1918 and many people moved to Chenega (Chemavisky 1979). Eventually the community was entirely abandoned so that by 1930 there was no longer anyone living there. By 1937 only Tatitlek and Chenega survived as distinctly Native communities.

TATITLEK

Tatitlek (Titiglikskoe) is mentioned in the Russian American Company records as early as 1847. This does not refer to the 20th century village since it has been moved several times. In an 1858 census of the Kenai Parish, Tatitlek is described as lying on a cape with a population of 39. The 1880 census map shows the village located at the southern end of Boulder Bay. By 1900 the community was located on Tatitlek Narrows, its present location. Oral history says Tatitlek people moved to their present location sometime at the beginning of this century.

When the Russians let go of them - they had them pretty well concentrated down on Hinchinbrook Island, Nuchek village, there was an awful big village. And the Russians, they were using them, you might say as slaves, they were hunters. When they didn't need them for hunting anymore they put them on their own, they released them on their own. They [the Russians] left and headed up towards Cooks Inlet area. And those people [the Alu'utiq], they started to move, and the village [Nuchek] started to break up, they relocated themselves in Anderson Bay, some of them moved to Makarka Point, some to Kiniklik, some to Chenega and this group located themselves where Ellamar is now, they got in there.

In them days, we were segregated and watched over pretty much. And there was a doctor in Cordova that was appointed by the BIA, he was a Native councilor. He was a White guy. He wasn't really doing what he was supposed to be doing. They way I heard it, he was working with the Guggenheim brothers. You've heard about them, they were the big money people that had the Northern Commercial Company, and Alaska Steamship Company, they owned all of that. They located this vein over there (Ellamar), while these Aleut people were living there. So they worked through this Native councilor, Doctor Chase, to have those people move out of there because they got to have the mine site. There is a lot of

copper ore there. So he moved them, they moved from there to here. After they moved here they were digging ground for foundation to build a church and Doctor Chase happened to be here amongst them. They found that vein, from the site over there, was running in this direction. He made a study of it while they were digging these posts and he found out there was a heavy vein. He reported back to them and the mining people came over and said these people are going to have to move again, we are finding some valuable stuff. They told them the hell with you, we were nice to you the first time and moved, but we are not going to move again so they never did (Gregorieff 1987).

Figure 3. Tatitlek Population 1858 - 1998

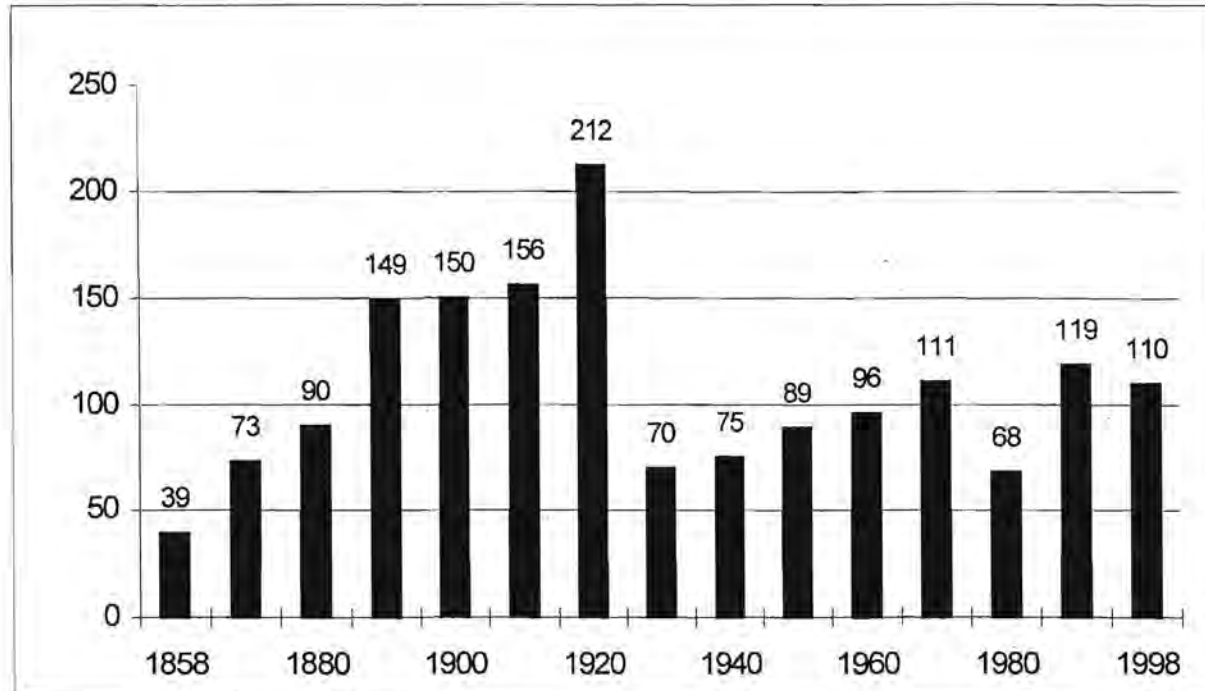


Figure 3 illustrates the Tatitlek population between 1858 and 1998. The first U.S. census of Tatitlek, conducted in 1880, lists 73 people. The 1890 census shows 90 residents (Rollins 1978), while the census undertaken by the Russian Orthodox Church gives the population as 53. According to Hassen (1978) the church only enumerated people who were Russian Orthodox, which may explain the difference. Discrepancies in the figures may also be due to the methodology of the numerator. These caveats do not fully explain the difference between Russian Orthodox and U.S. census figures for 1900. The Church counted 68 people in Tatitlek (Hassen 1978) but the U. S. census figures (U.S. Census 1900:roll 1831) showed a population of 150 people, living in approximately 41 households. Census forms indicate seven non-natives in the community along with two Tlingit women, one of whom was listed as a servant. The occupations of the non-Natives were listed as fox farmers and miners; the occupations of the Alu'utiq are not listed.

In 1910 (U.S. Census 1910:roll 1750) the U.S. census indicates that the population of Tatitlek increased to 156 people, living in approximately 44 households. Family names recorded in the census

included Tototloma, Rubloff, Jackson, Yakoff, Holland, Tutomoff, Chernoff, Levshakoff, and Foode. An additional ten people, including one Native family, one Russian man, and an "Aleut" man named Nicholas Chernoff, lived on Bligh Island opposite Ellamar. By 1920 the Tatitlek population had reached its zenith of 212 people living in about 48 households (U.S. Census 1920:roll 2031). The growth of the community between 1900 and 1920 can be traced to people moving to Tatitlek from smaller outlying communities in order to take advantage of employment opportunities offered by the Ellamar copper mine. The 1920 census included a new group of families whose names were Allen, Makarka, Vlasoff, Gregorieff, Chimiviski, and Mitivnitkoff, all of who immigrated from Nuchek. Other family names included Borodkin, who moved from Kiniklik, and Kompkoff who came from Chenega. The increase in population convinced the federal government to open a school at Tatitlek in 1907.

Demographic shifts resulting from changes in the economy are graphically illustrated by census data from 1920, 1929, and 1940. The population of Tatitlek dropped from 212 to approximately 70 people in 1929. When the Ellamar Copper Mine closed in 1926 many Native people living in Tatitlek moved to Valdez or Cordova to find work. But the decline in population was due only in part to changing economic conditions. In 1922 an influenza epidemic struck Tatitlek killing almost half the population (Hassen 1978:162). Responding to the decrease in population, the government closed the Tatitlek School in 1929-30 (Braund 1992:8). In 1934 a Bureau of Indian Affairs (BIA 1934:roll 57) census showed 60 people living in 13 households in Tatitlek. Occupations were listed as trapping and fishing. Family names included many of the same names from an earlier era: Borodkin, Allen, Gromoff, Brizgaloff, Levshakoff, Tedishoff, and Vlasoff.

In 1940 the BIA (BIA 1940:roll 57) counted 75 people living in 16 households, and similar names were listed on the census. One possible explanation for the increase may have been the opening of a salmon cannery in Ellamar, which meant that instead of moving to Valdez every summer to work in the cannery at Dayville, people could commute to work from Tatitlek. The Ellamar Packing Company operated intermittently until it burned down in 1952.

After 1940 the population slowly increased, to 89 people in 1950 and 96 people in 1960 (BIA 1950; 1960:roll 57). In 1970 the population reached 111. This increase can be attributed, in part, to an influx of Chenega people after the 1964 earthquake destroyed their community. Likewise, the decline in population between 1970 and 1980 can be partially attributed to Chenega people leaving Tatitlek. In an interview in 1981 Fred Brizgaloff (1981) said he and his family moved from Chenega to Tatitlek after the 1964 earthquake. "Houses were built for the Chenega people but they didn't live in them. All of them came to Tatitlek but only stayed a year, then some went to Anchorage to live."

In 1990, a year after the *Exxon Valdez* oil spill, the population of Tatitlek was 119 people living in approximately 33 households. Census data collected by ADF&G, Division of Subsistence indicate the population of the village was 86.6 percent Alaska Native with almost 60 percent of the population born in Tatitlek. Another 29 percent were born in other Prince William Sound communities or other parts of

Alaska while 11 percent were born outside of the state. In 1990 there were 63 females and 47 males and the median age was 26 years. The population was young, with a median age of 25 years (Fall et al. 1996:44). Household size averaged 4 people, above the national average of 2.6 persons. By comparison, between 1934 and 1946 the average Tatitlek household size increased from 4.6 to 5.4 but in 1952 dropped to the same level as 1990 (BIA 1934; 1946; 1952:roll 57).

From 1993 to the present the number of households in the community has remained relatively stable. One trend throughout this period was for couples of non-local men and local women to live in the village for a short time and then to move some place else. Another trend was for young people to go away to attend college, particularly in Valdez. Almost all the students returned to the village after a short period of time because they were "homesick." A schoolteacher pointed out that girls more often want to leave the village to pursue a college career while boys think they can stay and lead a "subsistence life style."

Tatitlek households can be divided into six categories: elders, middle-aged couples, young couples, single mothers and single men. In 1996 there were 11 elders, sixty years and older, who are not only elders in the chronological sense, but recognized by the community as having particular wisdom and experience. Of the eleven elders, four were widowed, and at least four had children or grandchildren living with them. There were seven middle aged couples, 30 to 50 years old, who in many cases had children, and in some cases grandchildren living at home. Among these couples was found the leadership of the community, the major harvesters, and people involved in commercial fishing, mainly as permit holders. There were five or six younger couples, four single mothers, and six single men (two of whom lived with their parents).

Since the population is relatively stable the question is: why people have chosen to remain? Recently one young man, responding to a question about changes he had seen in the community, said there "is more closeness in the community...." And he added, "I want to stay because it's my home. All of the people know me and they treat me like family. I do likewise." When asked why she thought the community had survived all these years one woman said: "It is probably because, the people are, how do you say, bonded together - you know like when you raise a baby, the baby is bonded to the mother. And that's how we are, even as we grow we never forget the way were raised. And it was always one close family. Unity is what's makin' the village survive, and from that you pass it down to your kids" (Irene Kompkoff 1999).

In 1991 and again in 1993 Tatitlek residents were asked why they lived in Tatitlek. The primary reasons (those given by over 50 percent of respondents) were one, they had relatives living in the village; two, there was access to hunting and fishing opportunities; and three, more personal freedoms. People also thought the beauty of the surroundings were important. Less crime was another reason people gave, and one young lady remarked that you don't have to worry about getting killed by a stranger like you do in Anchorage. Although the absence of crime was a primary reason people gave for living in the village, the

community is not free of problems. In fact, 62 percent of the respondents said that the problem with drugs and alcohol was one reason for not living in Tatitlek (ADF&G 1991a; 1993a). Other reasons for living in Tatitlek were summed up in this comment:

Well you know the thing is, when you live in a place like this you can't starve to death. It's a safe place to raise children. In 15 minutes you could find your kids. You don't have all the crime and stuff. When you're broke in a city, you're broke. Sure there's agencies to go to but what do they give you? A little flour, a little bread. Here, you can get... you used to be able to get meat any time you want it.

One reason people did not give for living in the community was the availability of services since Tatitlek (at the time) had no store and medical facilities are limited; it can be very difficult to evacuate someone out of the community in bad weather.

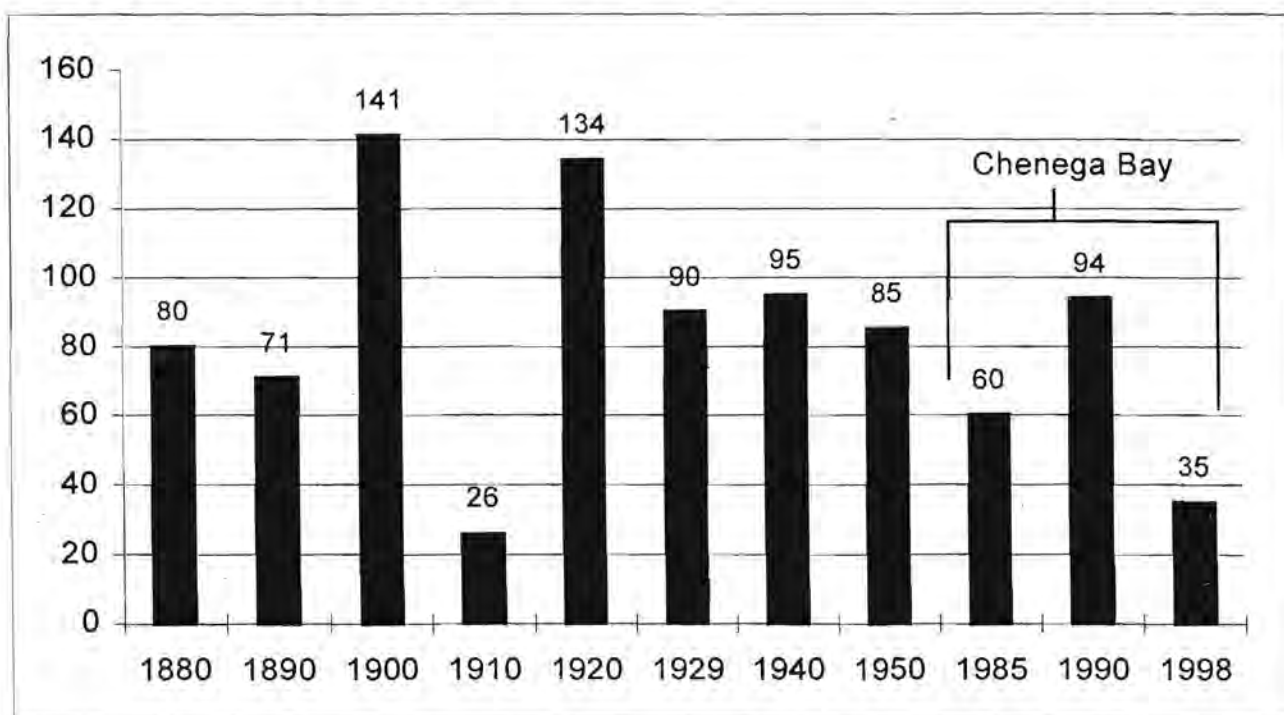
CHENEGA and CHENEGA BAY

The territory of the Chenega people or Tyanirmiut encompassed the area from Port Wells in the north to Montague Strait in the south. The original village of the Tyanirmiut was located on Knight Island and the 1880 census map shows a village on the southern tip of that island. This place was called *Uksillenquasaaq*, which means "small wintering place" (Kompkoff cited in Stratton and Chisum 1986:12). In this earlier period the ice from the Princeton, Tiger and Chenega glaciers located off of Icy Bay and Nassau Fjord filled the channels and passages as far out as the Pleiades Islands. As the ice receded the village was moved to the southern tip of what was to become Chenega Island (Kompkoff n.d.). A Russian Orthodox chapel was built in Chenega in the late 1800s and for a time the Alaska Commercial Company had a store there. Frederica de Laguna (1956:30) considered the village of Chenega, located on Chenega Island, to be, in 1930, the only ancient Alu'utiq settlement in Prince William Sound that was still inhabited.

In 1858 the Russian Orthodox Church recorded a population of 61 people living in Chenega. As Figure 4 shows, the U.S. census of 1880 census recorded a population of 80 people (Rollins 1978). There is no corresponding Russian Orthodox census for 1880. No federal census was taken of Chenega in 1890 but Russian Orthodox sources record a population of 71. In 1900 (National Archives Roll 1831), the government census listed 141 people living in about 39 households. Twenty-two non-Natives are listed as residents with occupations of fox farming, mining, and prospecting. The Russian Orthodox census listed only 67 people for the same year (Hassen 1978). A change in the Chenega population appears in the federal census of 1910 that recorded only 26 people living in the community. All of these people were listed as Native. Family names included Silianoff, Zharoff, Kumkoff, Evanoff and Sablutkin. The corresponding church census for 1909 recorded 34 people (Hassen 1978:198). The federal census was taken on April 22, which may explain the low number, since people may have left the village to start the salmon season at Port Wells that traditionally began May 1.

At any rate, by 1920 the Chenega population, according to U.S. census figures had swelled to 134 people living in approximately 15 households, including nine non-Natives connected to the cannery. This is in contrast to the church census that lists only 27 Native people in the community (Hassen 1978). The occupation of the Native men is listed as fishermen for the salmon cannery. Family names include Kumkoff, Zeranoff, Ivanoff, Kommokoff, Chernoff and Peterson. The census was recorded on February 23. At this time at least one Chenega family was living in the mining community of Latouche. The 1934 Bureau of Education (BIA 1934:roll 75) census of Chenega listed 67 residents living in 14 households. The average annual income was listed at about \$400 and the occupation of all the men was listed as fishermen.

Figure 4. Chenega and Chenega Bay Populations 1880-1989



In 1938 there were approximately 100 people living in the village in approximately 16 households (BIA 1938:roll 75). These are apparently approximate numbers because a number of people are listed as having moved either to Tatitlek or Valdez. Family names for both 1934 and 1938 include Eleshansky, Evanoff, Fleming, Jackson, Kompkoff, Selanoff, Ribaloff, Kolmakoff, Vlasoff, Stephanoff, and Stamp. In 1940 the Bureau of Education (BIA 1940:roll 75) counted only 27 people in six households but a note on the forms penciled in by the schoolteacher says 95 people lived in the community. In 1950 the Bureau recorded 85 people living in 24 households and the records indicate that of the 24 heads of household eight people were born in Chenega while the other 16 were born in Nuchek, Kinikilik, Unga, Aleution Islands, Cordova, and Tatitlek (BIA 1950:roll 75).

In 1964 Chenega was destroyed by a tsunami generated by a powerful earthquake. At the time of the earthquake there were approximately 23 households in the community with a population of between 68 and 76 people. Because there was no high school in the community at least one household and several members of other households were not in Chenega at the time but living in Cordova or Valdez.

Plans to re-establish the village of Chenega were launched in the 1970s. Provisions in the Alaska Native Claims Settlement Act allowed former residents to acquire land and those enrolled in the corporation chose a site at Crab Bay on Evans Island. In 1984 the village was re-established as Chenega Bay. The 1990 federal census indicated a population of 94. Household surveys conducted by the Alaska Department of Fish and Game, Division of Subsistence in 1989/90 indicated 74 permanent residents living in 21 households (Fall et al. 1996:43). The population was 57 percent male and 43 percent female and the average age was 26 years. The mean household size was 3.5 persons. Like Tatitlek, Chenega Bay was predominantly Alaska Native.

The population of Chenega Bay has fallen dramatically since the *Exxon Valdez* oil spill from 94 in 1990 to 35 in 1998 (Alaska Department of Labor 1999), although it has since rebounded so that the population was 69 in 1999 (Alaska Department of Labor 2000). Residents give a number of reasons for this. Some people have moved to Anchorage to seek health care in response to chronic or life threatening illnesses. A number of elders have died in recent years. Four older men have passed away since 1993, including two who had been active hunters up to 1989. The surviving extended families have been disrupted, with many family members living in Anchorage, some temporarily, some seemingly permanently.

In 1998, several houses stood empty. Their former occupants lived in Anchorage, or elsewhere, but in many cases kept their payments up and maintained homes in the village. This prevented new residents from being able to purchase homes in the community. By 1998, there were 14 resident households, plus two teacher's households, and five additional households (four of these non-native) that lie outside the community, but close by. The total resident population, not counting the teachers or outlying households, was 45 persons.

For the past two years (1997-1998), the school has been under the threat of closing, because there are less than ten children in the village. While a few families send their high school aged children away to school at Mount Edgecumbe in Sitka, many Chenega families move to larger communities, usually Anchorage, Valdez or Cordova, when their children reach high school age, so the children can attend high school without separating the family.

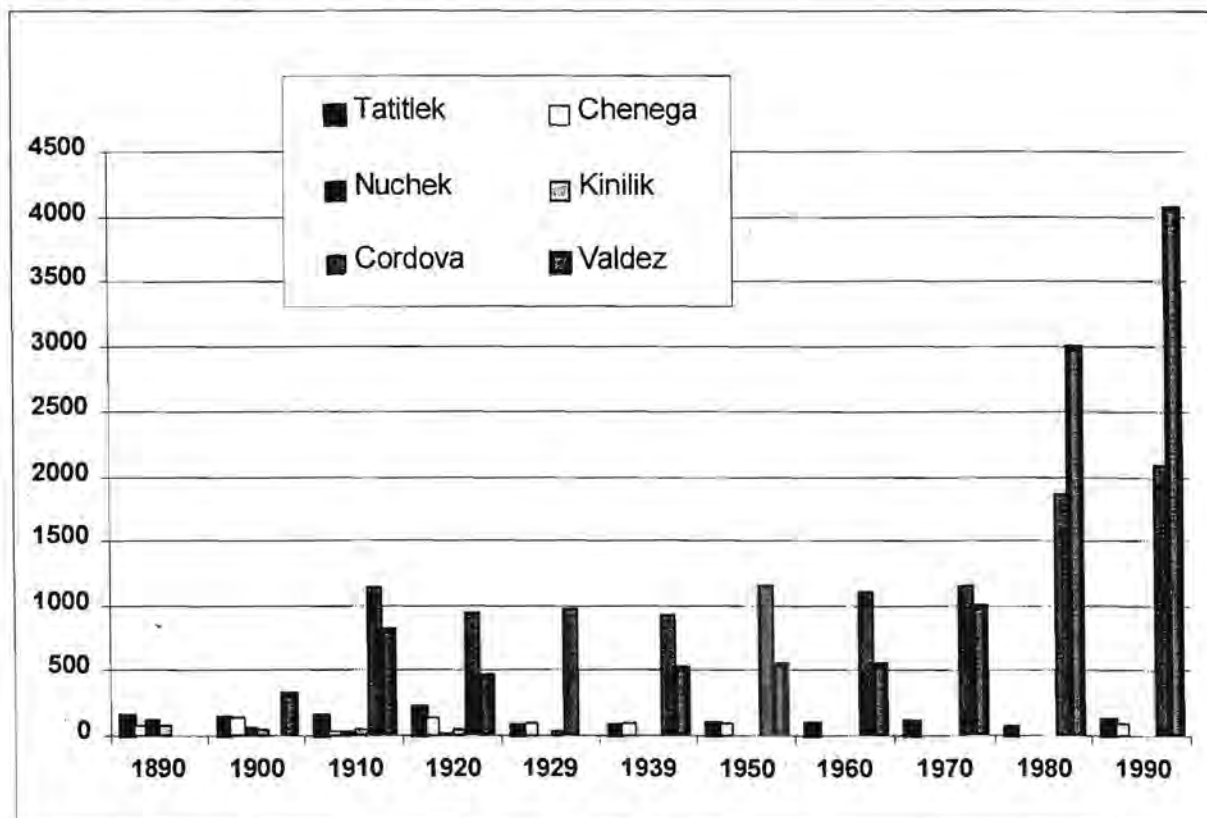
One local resident said he was considering relocating his family because he did not want his children exposed to the problems caused by alcohol abuse in the community. Few opportunities for employment exist locally, especially since the village corporation moved its operations to Anchorage. Chenega Corporation used to have its offices in Chenega Bay but closed the offices in the 1990s and terminated the employment of the sole remaining local staff member. One resident complained that

outsiders are often brought in to do what little work there is. Some residents have moved elsewhere to find work. Finally, the money paid out to Chenega Corporation shareholders following the sale of corporation land to the Exxon Valdez Oil Spill Trustee Council as part of the EVOS habitat acquisition program, provides the opportunity for people to move elsewhere (See Chapter 10 for more on the habitat acquisition program).

VALDEZ and CORDOVA

In the 19th century the village of Nuchek on Hinchinbrook Island was the major center of population and commerce in Prince William Sound. Figure 5 shows how by 1910 the towns of Valdez and Cordova had become the dominant centers of population. Valdez Arm had been the site of an Alu'utiq village or villages encountered by the British in 1786 (Braund 1992). Ahtna Athabaskans had also used trade routes over Thompson Pass and through Keystone Canyon in the 19th century, to reach Prince William Sound. The town of Valdez began as a debarkation point for prospectors using this same route to the Klondike gold fields. The population of Valdez peaked in 1910 with rumors of a possible railroad into the Copper River valley. After 1920 the population remained stable at between 400 and 500 people until

Figure 5. Prince William Sound Populations 1890-1990



1970 when it doubled with the onset of pipeline construction. By 1980 the population was just over 3,000 and in 1990 swelled to 4,068 when people were drawn to the area by employment opportunities connected to the *Exxon Valdez* oil spill. Since 1990 Valdez has slowly gained population, and the Alaska Department of Labor estimated 4,164 people resided there in 1999.

Cordova was in the territory of the Eyak people and several villages were located within the bounds of the present town. In 1990 the census reported that over half of the Native population in Cordova were Aleut or Alu'utiq, while the rest were Indians of mostly Eyak, Tlingit, and Ahtna descent. Most of the Native population living in Cordova was primarily from Prince William Sound in contrast to Valdez where the Alaska Native community was made up of emigrants from around the state (Coiley-Kenner 2000:14)

The town was founded in 1906 as a service center and railroad terminus for the copper mining industry centered in the Wrangell Mountains (Reynolds 1993: 143-145). In 1939 the copper industry crashed but the Cordova population dropped by only 4.3 percent because the town was riding high on the fisheries; salmon and razor clam production was at an all time high (Janson 1975:16). During the 1970s and 1980s the population of Cordova increased because of the construction of the Trans-Alaska Pipeline and the stabilization of the fishing industry through diversification and construction of salmon hatcheries in Prince William Sound. Part of this increase included seasonal residents who arrived in the summer with the fishing season.

Although dominated by non-Natives, Valdez and Cordova are now significant places to Tatitlek and Chenega Bay people for several reasons. Many elders and middle-aged people spent their formative years working or attending high school in either Valdez or Cordova, and many close relatives live in these communities. As such all four communities are linked through kinship. Further, both Valdez and Cordova are commercial centers for Prince William Sound. Tatitlek people especially rely on Valdez merchants to provide groceries and other products such as propane and heating oil. Finally, both Valdez and Cordova are places where people can obtain jobs or attend college and still be close to relatives and friends. This is especially important to people whose sense of place and kinship are very strong.

VILLAGE INFRASTRUCTURES

The modern communities of Tatitlek and Chenega Bay have similar infrastructures. In recent years, docks, large enough to accommodate Alaska state ferries have been built in both communities. In the mid 1990s a runway was built in Chenega Bay at a cost of 5 million dollars while the runway at Tatitlek was lighted and extended to 3,000 feet for a cost of \$3.2 million (Alaska DOT 1995:6-61). Both villages can accommodate seaplanes as well. The primary means of local transportation are boats and residents of both communities have an assortment of fishing boats, skiffs, and cabin cruisers. Chenega Bay has a floating dock and equipment to dispense marine fuel. In Tatitlek there are plans to build a small boat

harbor. The village now has a stationary wooden dock and fuel is purchased in Valdez and shipped in 55-gallon drums. Each village has a school and a community building that houses the local government offices.

Tatitlek and Chenega Bay are part of the Chugach School District. In the Tatitlek school there are three non-local teachers and three local people who work as secretary, custodian, and bilingual teacher. Both primary and secondary schooling is offered so students no longer have to move away in order to receive a high school education. Post-secondary educational opportunities are available in Valdez but because family ties are so strong, and the family continues to be important, many students feel no pressing desire to leave the community. A number of students have gone away to college but have returned to the village after a relatively short interval. Three high school seniors who graduated in 1997 are attending college at the University of Alaska in Fairbanks and the community college in Valdez.

The school is a central feature of community life, especially among families who have school age children. The Chugach School District has made an effort to garner community support and engage parents in the school. The atmosphere at the Tatitlek School is fairly relaxed and members of the community are not discouraged from dropping in for a visit. The school also plays an important role in the social and cultural life of the village. Most non-religious social events are held at the school, such as Christmas and Halloween parties, and the schoolteachers play an important role in the organization and implementation of the Tatitlek Cultural Heritage Week that occurs annually in May (see Chapter Seven for more information on heritage week).

A new school was built in Chenega Bay in 1990, and like the facility in Tatitlek, has a full gymnasium, which is used for community celebrations, potlucks, dances, and informal games. The old school building, built in the mid-1980s, consists of two prefabricated ATCO units connected by a plywood entryway and porch. The building was turned over to the village when the new school opened. The old classrooms and teachers quarters were converted into a bunkhouse sometimes referred to as the "Chenega Hilton", for visiting researchers and workers.

The government in both communities consists of an elected village council that is recognized by the federal government as a tribal entity. This recognition allows the village council to obtain and administer certain federal funds. But the state of Alaska does not recognize any tribal authority such as the ability to levy taxes. In both communities the president is an elected official who represents the interests of the village in negotiations with federal and state agencies.

In Tatitlek the village government offices are housed in the old school located at one end of the village. In Chenega Bay the village council offices are in a two-story community center, which also houses the clinic. A commercial style kitchen facility was installed on the second floor, and the meeting area has been used as dining hall for work crews during construction and oil clean-up projects.

Chenega does not have a store so residents must to obtain their groceries in Anchorage. A store with limited inventory opened in Tatitlek in 1999. In Tatitlek the village government operates three trailers

used to house visitors. A recreation center is located in the same building as the clinic. The center was recently organized and the management turned over to local teens. A fish and game processing facility is under construction. The most imposing building in Tatitlek is the Russian Orthodox Church with its three great blue onion domes. There is also a small nondenominational Protestant Church. In Chenega Bay there is a small Russian Orthodox Church. Each village has a cemetery.

Health care has improved substantially in both communities but geographical isolation makes medical emergencies difficult. In 1975 Tatitlek had one community health aide who had a minimum of training and responded mainly to accidents. The only way she could communicate with the doctor, who was located in Anchorage, was through a single side band radio located in the school. After telephone service was installed the health aide was able to communicate directly with the doctors from a telephone in her home, where the clinic was located. Eventually the clinic was moved to a tiny room in a new community building. Then, after the new school was built in the early 1980s, it was moved into two rooms of the old school. In 1997 a new clinic was built and is now staffed by two health aides whose capabilities have increased substantially and who rotate on weekly shifts. Now the village has an ambulance and health aides can now talk directly via telephone to a nurse practitioner in Seward or a doctor in Anchorage. They can also assist heart patients by transmitting EKG readings through the telephone lines.

In the mid-1980s Tatitlek voted to prohibit the transportation of alcohol into the community. According to one resident, before the vote, people "disregarded the children" and the children had trouble in school. Another resident, speaking in 1998, said that 20 years ago there was a lot of drinking and "you were looked up to if you could drink." So the community petitioned the state and held a referendum, which just "barely passed." This person commented that the "community is much healthier now." Chenega Bay, on the other hand, has not passed any laws regarding alcohol.

Both communities have electric generators that provide power to every house. In Tatitlek a dam provides water that is treated and stored in a 170,000-gallon tank. In Chenega Bay there is a surface water collection system with a dam and storage tank with a capacity of 50,000 gallons. In both communities every home has plumbing. The majority of homes in both communities have telephone and television. Some homes are also equipped with satellite television and in Tatitlek several have Internet access. In many homes the primary source of heat are oil-fired heaters, while wood stoves provide back up heat.

In 1998 Tatitlek had 32 and Chenega Bay 26 single-family dwellings. Many homes had detached wood powered steam baths and a variety of auxiliary buildings. Ten of the homes in Chenega Bay are currently vacant but former residents retain their "ownership" even though some have not visited the community in years. Chenega Bay also has a multi-plex unit, with three apartments, built in the mid-1990s.

SUMMARY

Over the last two centuries the total indigenous population of Prince William Sound has declined in contrast to the increase of the non-Native population, centered in the towns of Valdez and Cordova. During the 20th century the populations of Tatitlek and Chenega remained essentially static, averaging about 100 people in each place. Employment opportunities in the villages are negligible and there are no sustaining industries in either community so people leave to find work, often moving to the larger non-Native towns. Government programs have provided each community with an infrastructure that has improved the quality of life and may in the long run provide opportunities, especially in the budding tourist industry.

Chapter Three

The Sociopolitical Organization of Tatitlek and Chenega Bay

SOCIAL ORGANIZATION

The Historic Pattern

In the 18th century individuals in Alu'utiq society were ranked according to their social status. Evidence indicates that this status was inherited (Birket-Smith 1953: 92; Townsend 1980:138). People with high status included the leader and his close relatives, particularly his immediate family, who were considered as a kind of aristocracy. They received differential treatment from their more distant relatives, and from orphans, and widowers, all who were considered as commoners. While those of high status were treated with deference they had no power to force people to obey. Likewise high status conferred no economic advantage since everyone in society had equal access to the same basic resources.

Without wealth status was meaningless since a man could only maintain his position in society through the constant redistribution of goods. By hosting lavish feasts and ceremonies high-ranking men publicly affirmed their generosity and the cultural ideal that those of high rank ought to be generous. It also affirmed their ability to accumulate wealth and attested to their capabilities as good managers. To this end leaders often organized and led the economic activities of the village, but they did little actual labor since that was left to those of lower rank and slaves who had been captured in raids or obtained through trade (Birket-Smith 1953:92).

Vladimir Stafeev (n.d.), who worked for the Alaska Commercial Company at Nuchek between 1880 and 1895, makes it clear that in the late 19th century this hierarchy of rich and poor still existed throughout Prince William Sound. He writes that if wealthy people quarreled they reconciled quickly and settled the matter by purchasing blankets and calico, which they tore into pieces and distributed among their relatives and the poor. When a wealthy man's wife died almost everything in the house was destroyed, including the man's guns, which he broke in his grief. After the funeral the man built a wooden memorial with grave fence, and on top of the memorial he placed a whole set of tea-making utensils. Poor people did none of these things. Stafeev added that successful hunters shared with the poor by sending them tea, sugar, and hardtack. The toyon at Nuchek was the most generous because he gave the most of all, including money. He also organized funerals for the poor that included a feast. High-ranking people were also distinguished by their dress. One elder from Cordova said that high-ranking girls, whom she called "princesses", wore button blankets (Borodkin 1981).

Existing evidence indicates no pattern of unilineal descent or corporate groups such as clans and lineages (Birket-Smith 1953).¹ Instead there is evidence for a bilateral system of descent in which individuals recognized relations through both the mother and father. In this system the social structure was built up out of a group of relations, known in anthropological terms as the kindred. The kindred includes people related to the individual through both the mother and father and in principle can include individuals related lineally to all eight great grandparents and laterally to all third and fourth cousins. Since such a large group is socially impractical, an individual's personal kindred is usually reduced to a smaller circle of paternal and maternal relatives. An important attribute of a bilateral kinship system is its flexibility where families can seek aide or assistance from a wide variety of relations.

In the past the principal social and economic unit was the extended family household composed of a number of related kinsmen and one or two slaves (Birket-Smith 1953:55,81; Townsend 1980:133). These people inhabited a winter house. Early 19th century communities included both winter and summer residences (Walker 1982:140-141). Winter houses could be quite large and were made from wooden planks. Apparently a ranking man, his wife or wives, and their dependents, were the principal residents of the winter house. In two stories collected by Birket-Smith (1953:135; 137) a wealthy family is described as a man, his two wives, his 12 sons, and five nephews. In another story the chief of a village called *Atya* has two wives and three male slaves, who keep the chief from being rich because they are so lazy. It was also customary for a newly married couple to live at least temporarily with the wife's parents, so a household may have consisted of several sisters and their families (Clark 1984:192). Widows or widowers were also said to have lived in the houses of their children (Birket-Smith 1953:55, 81). Additional residents may have included poor or orphaned relatives of both the husband and wife. Since wealthy men could have more than one wife (Birket-Smith 1953:81) the number of assorted relatives living in a house could be quite large.

Within the extended family household the harvesting and processing of subsistence resources was divided on the basis of rank and gender (Birket-Smith 1953:92). As noted above, high-ranking people did little or no work. In the story about the chief of *Atya* it is the slaves who do most of the work, including trapping and rowing the baidars or big skin boats (Birket-Smith 1953:137). It should be pointed out that slaves were never the principal source of production, but they did help push production beyond that of merely using kinsmen (Townsend 1980:149). By conducting menial tasks slaves freed others for more productive labor.

The free male inhabitants of a household usually worked together on hunting and fishing trips away from the village. In the village they worked together to build houses, or to manufacture implements out of stone, wood, and bone. The woman's domain was centered on the house and she tended the fire

¹ Note also Wrangell's comment (1980:59) that the Chugach were distinguishable from Athabaskans and Tlingits because "they do not divide themselves into two main branches" i.e., moieties.

and stone lamp, gathered plant foods and shellfish, cooked, prepared skins and bark used to make garments, and boats, made thread out of sinew, and made baskets. Women did not hunt large animals.

The relationship between men and women was governed by a series of taboos predicated on the belief that a woman's body had considerable influence on human and animal interactions, particularly in hunting. The following story illustrates how the lack, or disregard, of such training affected the hunting luck of a young man.

A man used to go hunting, but whereas lots of people killed all kinds of animals he could not kill anything. The man felt bad about it. One day he took a walk around the beach and there he fell asleep. As he woke up he saw a woman standing by him. She asked: "What are you doing around here?" He told her: "I felt bad because I cannot kill any game. Other people kill all kinds of animals." The woman said: "it is your own hard luck that you can get no animals. Did you ever behave yourself as a child? I am going to tell you all about it. You used to stay among menstruating women and to eat in the morning when you were washing in the house. You used to eat even when there was all kinds of dirt in the house. You never would listen to the old people when they told you what was right. Now take off your boots." When he did so she put her hand on his head, and he saw dirt coming out from his toenails. Next time she again put her hand on his head and he saw bloody water coming from his toe nails. She said: "That comes from the women. You used to eat even when the women were menstruating. Now this stuff comes out." Again she put her hand on his head and told him: "Now take a look at your clothes." And he saw dry blood all over them. The man was wondering where it came from, and she told him, "You used to grasp the woman with your arms. That is where the blood comes from."

Then she put her right hand on the man again, and he felt better and light. She let him take all his clothes off, and piled the dirt that came from them on the beach, took him to a little creek and let him wash himself. She gave him new clothes and stood up, and the man looked over at her clothes and saw all kinds of little animals hanging on her coat. She told him to take five little animals from the coat, whatever he liked, saying: "Now if you listen to me, you take those five little animals from me and you will get them all the time. Every time you go away, put them in a safe place and do not take them home. Leave them some place where they can stay safe. If you take them home you will loose them and kill no game anymore. Now while I am here burn your old clothes and that dirt."

She told him to keep himself and his feet clean, and not to be lazy, to make steam baths and chop wood, and get up early in the morning. If he slept long he would lose all the animals he was going to kill. "If you are lazy you will not kill anything and the animals will not come to you." She said that she liked him and told him to listen to what she said. Then she stood up. "If you start hunting tomorrow you are going to get animals. I see you many times when you are hunting sea otters among the other men. Now you see what you had before. That is why the animals did not come to you. The sea otters come from me. Now I am leaving you, but listen to my words."

The woman went down to the sea, and as soon as the water came over her ankles she turned into a sea otter (story told by Stepan Britskalov to Birket-Smith 1953:175-176).

Because of the power attributed to women it was essential that young girls and boys be taught how to properly interact with one another. Adolescent training was conducted by the parents of the child as well as their maternal and paternal aunts and uncles (Birket-Smith 1953:87). In this training young people were admonished to keep themselves clean and to be industrious.

Property was owned by individuals and family groups, rather than held by a corporate group such as a clan. For instance, clothing and hunting implements were the property of an individual. Men owned baidarkas, but the women owned the home and the large skin boats called baidars (Birket-Smith 1953:96). When a man died his personal property went to his sons, or, if there were no sons, to his brothers. If they were not available then his oldest sister's husband was considered. A man's baidarka went to the oldest child, regardless of sex, but if a woman received the inheritance she would not use it but give it to her husband, if married, or to her brother if she were single. Inheritance of a woman's property followed the same order, daughter, sister, oldest brother's wife, and deceased's husband's relatives. Both salmon streams and smokehouses were associated with territorial rights that belonged to a family or an individual (Kompkoff n.d.).

Historically, group or village exogamy was preferred (Birket-Smith (1953:81). That is, men and women found spouses outside their own group. There was also an emphasis on cross-cousin marriage since parallel cousins were considered as brothers and sisters (Birket-Smith 1953:80-81). After a young man chose his prospective bride he sent his mother to ask consent from the girl's parents. They would ask if he had a house, hunting implements, and was a good provider. Informants told Birket-Smith that after the wedding there was a great feast and a dance. The couple received gifts from those attending the ceremony. Parents-in-law gave the couple gifts, a father-in-law might give some arrows while the mother might even give a baidarka. After the ceremony the son-in-law would give them presents in return.

The Russian Orthodox priest Fr. Konstantin Pavlov (R.O. records D305-204) noted in 1898 that most people got married two or three times and that children from previous marriages were often given to relatives to raise. This made it difficult for the priest to determine who the biological parents were and which rules against incest applied when such children got married themselves. According to Pavlov it was common for widows and widowers to marry very young partners, but young men were often unable to find suitable brides.

Until about the 1930s marriages were arranged and boys and girls were kept apart until the girl was 18 and the boy 21. Elders knew how to "mix blood lines" and if someone's ancestry was unclear, the older people would discuss this with the parents to be sure there was no direct link (Coiley, field notes 1989-90). When a marriage was arranged the husband's ability as a hunter overrode "softer" considerations so that parents chose prospective mates for their children on the basis of ability. One Tatitlek man said

Younger fellows were a better prospect for a husband. In them days parents chose the couple, parents would negotiate for a girl or boy from a different village, complete strangers. There were no soft feelings, no love involved. In them days

boys had to be 21 and girls 18 or 19. Families were close and boys and girls still took advice and listened to their parents. If they wanted to get married they asked permission (Simeone, field notes 1990).

Women also had to be good providers and good in the home.

[She had to] know how to take care of the home. And like the Japanese, the woman was always home to serve her husband whichever way he asked. He brought the meat home and she took care of it. She took care of it whichever way, to smoke it, salt it, or what ever way. It was respect for each other (Gregorieff 1987).

Couples married in a Russian Orthodox Church service and one elder recollected that when he got married the priest asked if he or his bride "knew" each other. While the priest would marry them if they had been intimate, couples who "knew" each other could not wear the crown usually worn by the bride and groom during the ceremony. Post-marital residence was not uniform, but according to some elders there was a tendency for the newly married couple to live close to the groom's parents (Klashnikoff 1979).

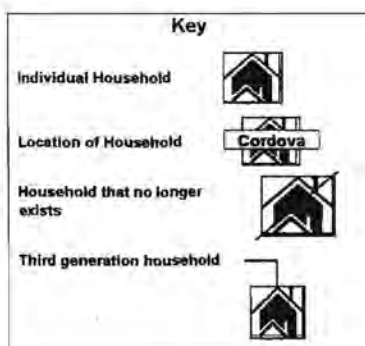
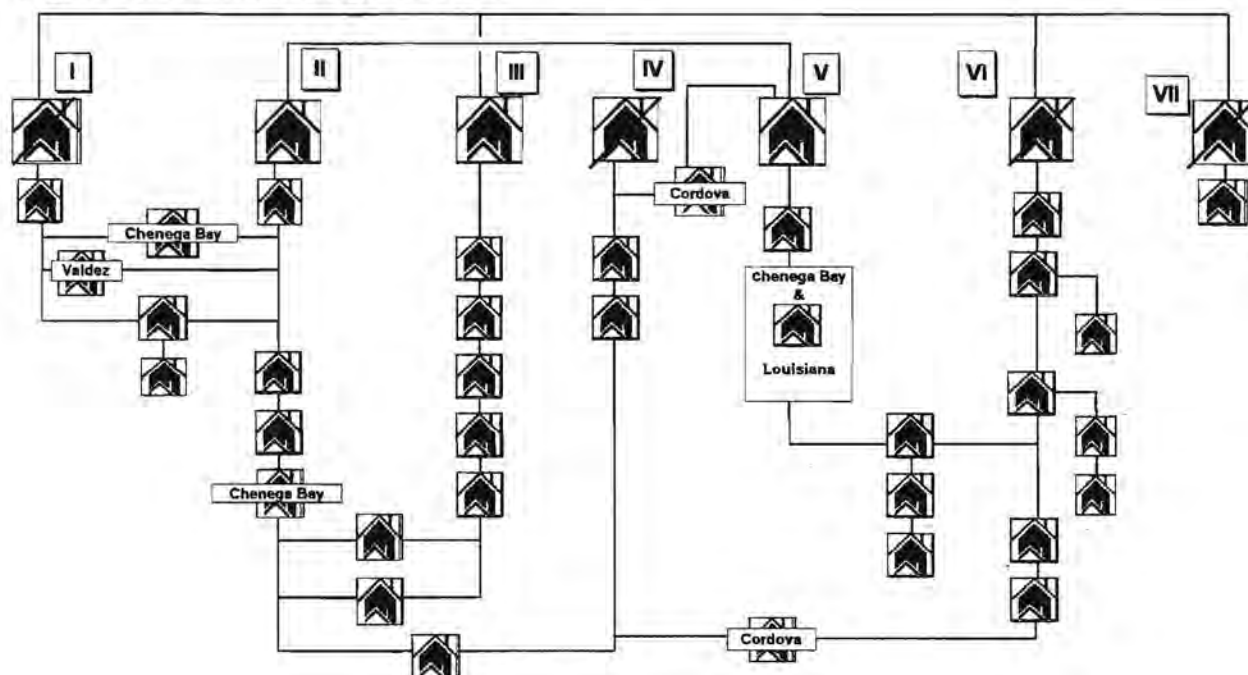
Contemporary Patterns of Kinship

Contemporary society is no longer ranked or stratified and there are no large extended family households living under one roof. Contemporary households vary in size and type. For example, of the 20 households interviewed in Tatitlek in 1993 eight were nuclear families or married couples and their children. Five were households composed of married couples without children. Two were composed of single men living alone, there was one single parent, and three households composed of multigenerational families. A similar situation held true in Chenega Bay. However, the increased emphasis on the social importance of individual households is often more apparent than real since every household in the community is linked with others through ties of kinship and avenues of exchange.

The relatedness of Tatitlek residents is demonstrated in Figure 6 that shows how households and extended families are linked through marriage. Kinship continues to define the rights and responsibilities of the individual and is the main principle of association. A person's social identity is formed within a matrix of kin relations that begin with the nuclear family and expand outward to include grandparents, paternal and maternal aunts and uncles, and finally cousins. This is a person's kindred. Within this matrix, people are categorized in terms of their age, which determines their authority and status. Kinship is also the principle around which the acts of production, distribution, and exchange are organized.

Kinship defines who can hunt on land owned by the village corporation. Kinship also delimits who can live in a village, because without the support of an extended family network it is hard to live in a small community. Certainly a single household with a large enough income could survive economically and individual households do act as autonomous economic units, but neither Tatitlek nor Chenega Bay is

Figure 6. Tatitlek Village 1993/94



Each box represents a single household defined as a group of people sharing a common residence (Fienup-Riordan 1986:175). Each line of boxes labeled with a Roman numeral depicts an extended family consisting of parents and their grownup offspring. The larger boxes at the top of the diagram represent the paternal households and the smaller boxes represent the households of children. Those boxes connected to the major family lines by a dogleg are third generation households, or grandchildren of the first generation. The households with lines connecting them to two families indicate a marriage link between those two families. The boxes with community names indicate where a household is currently located. Note that not every connection between extended families is shown in this diagram.

psychologically or socially organized in terms of single independent households. In both communities it is both socially unacceptable, and impractical, for a household not to maintain connections with other households, or not to conform to a norm that stipulates the sharing of both labor and resources.

As we can see from Table 1, most hunting, fishing and gathering is not conducted by individual nuclear families but by groups that vary in size and composition. The variety of social configurations reflects the flexibility of a system that enables a person to associate with individuals who may or may not be directly related. In other words, kinship is important but it is not the only criteria for association. Experience may also be a criterion for association. For example, a person who wants to hunt mountain goat, which requires considerable experience and planning, can join with a group of non-related men, who may have more experience, to form a goat hunting party.

Table 1. The Structure of Productive Activities in Tatitlek and Chenega Bay

Category of Activity	Participants
Goat Hunting	Groups of young and middle aged men, including relatives and non-relatives.
Seal Hunting	Brothers, fathers and sons, uncles and nephews, frequent hunting partners, husbands and wives.
Deer Hunting	Groups of hunters that include fathers and sons, brothers, partners, uncles and nephews. Husbands and wives.
Berry Picking	Mothers and daughters, husbands and wives, mothers and children, grandparents and grandchildren.
Picking Herring & Roe on Kelp	Uncles with nephews and nieces, husbands and wives, mothers and children.
Salmon Fishing	Partners, husbands and wives, fathers and sons, grandparents and grandchildren.

An important relationship is that between nephew and paternal uncle. For a man, those with whom he is most intimate, most likely to seek help, or to hunt and fish with on a regular basis, are his male relatives related through the male line, since according to one man, a man's "real uncle" is considered to be his father's brother.

As noted above, it is against the ideal not to share. In surveys conducted in Tatitlek and Chenega Bay in 1991, over 90 percent of those residents interviewed said they could not imagine not sharing wild foods. Over eighty percent in Tatitlek said that not sharing would be against tradition while 69 percent said that was the case in Chenega Bay. In addition, 25 percent of respondents in Chenega Bay and 17 percent in Tatitlek thought that not sharing would bring bad luck (ADF&G 1991a & b). These numbers point to the fact that a cultural goal is to accumulate enough resources in order to be able to redistribute them beyond the immediate family.

Each individual household, as well as extended family group, shares with a broad range of people, relatives and non-relatives, visitors, friends, and strangers. All types of goods are exchanged, but some

resources are shared within a much narrower range than others. Money, for example, is usually only shared with close immediate family, although on certain formal occasions, such as Russian Christmas, it is distributed among a wide variety of people. The distribution of the harvest is always much broader and, as we shall see later (Chapter Four), frequently includes every household in the community and extends to households in other communities. On the formal level the redistribution of the harvest takes the form of shared meals, while less formal gifts are of cooked food or fresh game.

The elders are at the top of the distribution network. A part of the harvest always goes to elders, reflecting the cultural ideal that one should respect them in recognition of their past productivity. Similarly, adult offspring often provide services to their elderly parents. For instance, a woman and her daughter often clean and cook for an elderly widowed parent, who in return passes on subsistence foods that he has received. This support for elders is a corollary to the social prescription that one supports one's parents and is in turn supported by one's children. As a son matures, and learns to hunt and fish, he often harvests for his parents, and once he has established his own household he consistently shares a portion of his catch with the paternal household.

Although kinship remains an integrating factor there have been changes in the social organization of the two communities. Most Alu'utiq kin terms are no longer used by the older generation or known by the younger generation. Young people, for example, often use the English gloss "cousin" to describe their relationship with other young people in the community. The only Alu'utiq kin terms widely used are *appa*, the designation for grandfather, and *emaa*, the designation for grandmother.

Within the household the division of labor is still largely based on gender, although the division is no longer as strict as in the past. Men hunt, cut and haul firewood, but women now fish. It is no longer considered just the women's job to process the catch, which is often done by men. Both men and women cook. Additionally, both men and women now work outside the home.

The relationship between parent and child has also changed. Parents have less control over their children. There are no more arranged marriages, and it would be hard to keep male and female children apart as was done in the past, even if people continued to believe in the old restrictions. Today, children, instead of spending all their time within the extended family, now spend much of their time at school and with their peers. For the younger generation of Alu'utiq, their peer group is increasingly important.

Extended family networks have become more and more diffuse. This is reflected in data collected by the Bureau of Indian Affairs in the 1930s and 1940s. In 1944 ten out of 16 households in Tatitlek had a spouse who came from another village, including Chenega, Nuchek, Kiniklik, and Simpson Bay. Both males and females moved to join their spouses at Tatitlek, but no couples migrated to the community. The situation was similar in Chenega. The 1939 BIA census (BIA 1939:roll 57) indicates that out of 15 households 13 had spouses from another village. In four of the households both spouses came from outside the community, i.e., Nuchek, Kiniklik, Eyak, Tatitlek, and Ellamar.

Movement out of villages, and the region in general, began after World War II and accelerated in the 1950s and 1960s when young people left to attend boarding schools and whole families moved out of the villages so children could attend high school in Cordova or Valdez. From these communities children often moved on to college or met future spouses from outside the region. Fred Brizgaloff (1981) an Alu'utiq elder, relates what happened when the children left home. He begins by saying that the

trouble with the younger generation is that they all lived on islands, like Chenega and Tatitlek and never went no place. Then the government come in, started taking the kids out and sending them to Mt. Edgecumbe, Wrangell and even to Chemawa (a BIA school in Oregon). Got an education and didn't want to come back. As a matter of fact a lot didn't come back. I was fortunate, sent me to Wrangell, stayed for a year and never went back. A lot of these younger generation, we got lots of people living in Seattle, Tacoma, Southern U.S., that's our people. All belong to the 13th region (Regional Corporation). Quite a few live in Anchorage and Cordova, all Chenega residents.

Contemporary villages now draw their members from a radius that extends far beyond Prince William Sound. Of approximately 19 Tatitlek marriages that have occurred in approximately the last 25 years, five were village endogamous while the other fourteen were regionally exogamous. Nine of those occurred between a Native and non-Native spouse. In almost every instance of exogamous marriages the couple returned to the village for a period of time and then moved away.

LEADERSHIP

The Historic Pattern

Historically, each Alu'utiq village or village group had a headman who had an assistant. Leaders were men of rank (Birket-Smith 1956:92), and although they had considerable authority, they had very little power. To maintain his authority a leader had to conform to the social ideal that he was, above all, generous. He demonstrated his generosity by frequently redistributing his wealth at lavish feasts and ceremonies attended by his kinsmen and guests from neighboring communities. A chief was often considered the richest man in the village, but not all wealthy men were leaders.

One of the most important responsibilities of a leader was to organize and deploy the labor of his kinsmen. For example, leaders organized and led hunting parties and were instrumental in conducting trade. They also mobilized their kinsmen in a time of war, but individuals were under no obligation to go to war. Another aspect of leadership was the possession of some sort of spiritual power. According to one Cordova elder, the headman often had some supernatural power or special ability, or, as this elder put it, there was "always a headman who was supposed to know" (Kalshnikoff 1979).

To facilitate cooperation, and ensure a constant source of labor, the Russian American Company (RAC) instituted the toyon² system in which they appointed a high-ranking individual to act as their representative in the village. The duties of the toyon included organizing hunting parties, encouraging the men to hunt on the company's behalf, and ensuring that all furs were turned over to the Russian America Company once the hunt was finished (VanStone 1967: 55; Hassen 1978: 134). According to company records, toyons were appointed at Nuchek, Tatitlek, and Chenega. In 1861 the Russians replaced the toyons at Chenega and Tatitlek with the *Zakashchiks* or the vice toyons (Ketz and Arndt 1990: No. 497 F140v-143).

The position of toyon survived into the American period but instead of being appointed they were elected by the local people and paid by the Alaska Commercial Company (Hassen 1978:147). According to Stafeev the toyon at Nuchek was the wealthiest person in the community and often led by setting an example. The toyon Makar, for instance, was reported by Stafeev to be at Montague Island making dried halibut and cutting wood to build a house at Nuchek and that most people followed his example. Stafeev also indicates that the company relied on the toyon to organize hunting expeditions, which it provisioned.

When able, the toyon led communal hunting expeditions, but when he became too old, the villagers chose a hunt foreman (Birket-Smith 1953:93). One important criterion for choosing a foreman was his ability to read the weather, although it appears that not all of hunt foremen were weathermen. If not trained to read the weather, the foreman deferred to the weatherman who accompanied the party and decided when to come ashore, to make camp, and when it was safe to stay out in the ocean for a day or two. As one elder explained, the weatherman "...got to know everything, the weather, the sea. They [the hunters] got to go out where they cannot see land at all, and they stay and float out there, tie the baidarkies together and float out there" (Kalshnikoff 1979). When the weatherman decided they had to land he sent the best baidarki crew ashore first while the others waited and watched. If the beached crew waved the white side of their paddle it meant that it was safe to land (Chemavisky 1979).

Prior to the 1940s, leadership in the villages remained in the hands of older, respected leaders and heads of extended family households. Decision-making was through consensus, and the social order was basically egalitarian, although woman did not have an equal voice. According to Donald Kompkoff, Sr., the chief at Chenega, for example, was selected at an annual dinner that took place in the winter and was attended only by the men. A new chief was selected each year. There was both a head chief and second chief, but according to Birket-Smith (1953:93), the real power in Chenega lay with the Russian Orthodox catechist, who was a village member. The chief's authority was respected. People asked his advice and permission on particular occasions, for example when to marry or to leave the community to work in Cordova (*ibid.*). An elder from Tatitlek said that before statehood people had chiefs "who were agreed upon by all. Even if people had to stay up all night, they would choose from maybe three or four

² Toyon is a word used by the Yakut of Siberia that means elder.

people." These chiefs were considered the "boss" and everyone listened to them. After statehood, the village elected a five-member council (Coiley-Kenner field notes, 1989-90).

New Government Structures

The development of a more formal government structure was a product of increasing interaction between the village and state and federal agencies. In 1946, for instance, Tatitlek had to ratify a constitution, draw up by laws, and create a charter before obtaining a \$10,000 loan from the Alaska Native Industries Cooperative Association (ANICA) to build a store. The village also had to elect a new council and president and a representative who would attend the ANICA board of directors meetings.

In 1934 congress passed the Indian Reorganization Act (IRA), which was extended to Alaska in 1936. Both Tatitlek and Chenega Bay have local governments that are certified as IRA councils. Certification constitutes recognition of the tribal government by the United States government. It is possible however to be a federally recognized tribe without being certified. As recognized tribes, IRA councils fall under the jurisdiction of the Bureau of Indian Affairs (BIA) and are required to follow a prescribed set of constitutional by-laws. The IRA Council administers grants and contracts that come to the community and they receive funding from the BIA to support the hiring of a Village Administrator. At various times, the Prince William Sound village councils have also employed Village Public Safety Officers (VPSO).

Under the Indian Self-determination and Educational Assistance Act (Public Law 93638), tribal governments can contract with the BIA to operate specific programs in their communities. Under an amendment to this Act, passed in 1994, tribal governments can receive, in the form of a compact, the funding allocated to federal agencies to provide services to their communities. The difference is that under a contract, the tribal government agrees to provide certain services to produce a set of products. Under compacting, the tribal government receives the funding without any strings attached.

In Tatitlek the entire village chooses council members and the council president. For nearly the last 20 years the same person has been elected president. In Chenega Bay six council members are chosen in an annual election held the first week in November. Only tribal members can vote or run for office. Tribal members include residents of Chenega Bay who are Native. To be considered a resident, an individual has to reside in the community for thirty days. Once the six council members are elected, they in turn elect the council officers, including the Village Council President, Vice President, Secretary and Treasurer from among their ranks. The council is elected for a term of one year. There is no limit to the number of terms a person can serve on the village council. In Chenega Bay the president generally will serve one or two years.

Despite formal changes the power structure of Tatitlek has remained a reflection of the social hierarchy. Today, the power to negotiate with the outside world on the behalf of the community resides with the elected council and president, all of whom are young or middle-aged heads of households, and

members of extended family groups. Elders who retain considerable authority and influence lead these extended families. In this respect, the interests of the community and extended family are closely linked so that work on the behalf of the family is work on the behalf of the village as a whole.

Although the president of the village council is an elected office, leadership in Tatitlek is still based on the cultural ideal of a generous leader who shares resources and works in behalf of the community. Yet, compared to the old chiefs, who were said to have considerable social control, contemporary chiefs have less control over the lives of individual villagers. For example, in Tatitlek, the old chief had the power to exclude other religious denominations from working in the community; something the current chief feels he cannot do. At the same time, the current village leadership is able to put considerable pressure on people to conform, particularly in regards to the consumption of alcohol. In the 1980s Tatitlek elected to become a dry village and restrictions were placed on the transportation of alcohol into the community. One elder noted that since then people are less obvious about their drinking and "things have quieted down."

Since the passage of the IRA, tribal governments have had the authority to develop tribal courts and to produce and enforce codes and ordinances to govern tribal members. Tatitlek has now begun to actively work toward putting tribal courts, and codes and ordinances in place.³ Chenega Bay has expressed interest in taking similar action, but has not yet begun to work on these goals.

SUMMARY

The social and political organization of Alu'utiq people in Prince William Sound has changed in the last 150 years. At the same time, Tatitlek and Chenega Bay continue to be kin-based societies with a strong orientation towards the extended family. Kinship is the main organizing principle for the production and distribution of the harvest, and kinship continues to define people's rights and responsibilities within the community.

Leadership in the communities has also changed. Rank is no longer a prerequisite for leadership. Shifts in leadership reflect changes in the economy and social organization. In some respects the modern elected leader is a reflection of the old toyon system since both were major conduits to the outside world. At the same time a successful modern village leader is a person who conforms to the social ideal that he is working for the good of the community and not simply to enrich himself. While village elders, as heads of extended family networks, continue to maintain and assert a certain amount of authority, they have less to do with the distribution of resources, which is now the purview of each head of household.

³ In 2000 the vice-president of the Tatitlek village council was appointed as a tribal judge and after receiving training will begin his term in 2001.

Chapter Four

The Wage Economy and Development

The development of the wage economy in Tatitlek and Chenega Bay is connected to the rise of fur trade that began in the late 18th century when Alu'utiq hunters began to integrate commercial fur trapping into their seasonal round of subsistence activities. Later, as other methods for earning cash, such as commercial fishing, became available they were integrated into the seasonal round. By the beginning of the 20th century the local economy in Prince William Sound revolved around a mix of hunting, fishing, and trapping, done for both commercial and personal use, as well as occasional wage labor. Commercial fishing was, by the 1930s, the dominant source of cash, supplemented by trapping, hunting seals for the bounty paid by the United States government, and logging. Some Native people also set up commercial fox farms on islands within the sound.

Common characteristics of these occupations were that they did not require the sustained discipline of shift work, and were basically seasonal in nature. For these reasons subsistence hunting and fishing remained important components of an economy sustained and supplemented by infusions of cash. Commercial fishing was especially amenable to an economic lifestyle based on a combination of seasonal or short-term work and subsistence, so much so that it became a "traditional" form of employment enmeshed with the people's sense of identity. Since the late 1980s, however, commercial fishing as a source of income has virtually disappeared in the two villages. Today the major source of income is seasonal employment in public sector jobs, such as the local school or construction projects funded by the state and federal governments. This change has brought a shift away from being self-employed, relatively autonomous fishermen and trappers, to an increased specialization and dependency on public sector employment.

Although money has been a vital part of village life for several generations, people express an ambivalent attitude about it. One Tatitlek elder put it this way. "Money works in a different way. Works against a culture that is not based on money. Money creates more drinking, makes people unstable, and scares older people." He went on to say that "money is powerful by itself," and he gave an example. "If you could get cash at Christmas time, instead of a present, it is worth more because with cash you can do whatever you want. A present on the other hand might not be what you want" (Simeone, field notes 1990). As he discussed the nature of money the elder pointed to a picture of the Last Supper on the wall behind him. "Judas got 30 pieces of silver, that's what money does, it makes evil, but money is handy, you cannot get along without it. "But", he added, "life is easier here in the village than in the city"[where you need money].

COMMERCIAL FISHING

Alu'utiq people's involvement in commercial fishing began in the 1890s (Hassen 1978:150). The opening of canneries in eastern Prince William Sound coincided with a general decline in the price of furs, and government regulations restricting the taking of sea otters. Initially the canneries refused to employ Native people because they were considered unreliable, but they were encouraged to sell their surplus fish to the packing companies. By 1931, however, a majority of Native people worked in some capacity for the fishing industry. As fishing grew in economic importance it became an integral part of Alu'utiq life, and figured in people's definition of the "good life."

Information from the National Marine Fisheries Service (NOAA n.d.) provides a snapshot of the commercial fishery in Prince William Sound from 1931 to 1947. During that time several resources were harvested commercially including clams, crab and herring, but the most important resource, by far, was salmon. The majority of Native people were employed in harvesting clams and salmon. Both men and women harvested clams during the spring. The salmon harvest took place between late May and August. Native men worked as fishermen while Native women worked in the canneries or packing companies.

Salmon were caught using three types of gear: purse seines, gill nets, and fish traps. The purse seine is a net used to surround a school of salmon. After the fish are enclosed in the net the bottom is pulled closed like a purse. Purse seine vessels were called double enders and powered by a single piston gasoline engine. All gear was pulled by hand, and the jitney man rowed the jitney or skiff used to pull the seine off the deck. The fish were bailed out of the seine by hand. Gill nets hang in the water from a line supported by a set of "corks" or buoys. The fish swim into the net and become entangled and the net is then pulled into the boat.

Compared to fish traps, purse seines and gill nets were of minimum importance in the fishery of 1930s and 40s. Between 1936 and 1946 the industry operated about 40 traps in Prince William Sound and these traps accounted for over 70 percent of the total salmon harvest every year (NOAA n.d.). Floating traps, belonging to the Alaska Pacific Salmon Company, were located at Chenega, Point Helen, Port Chalmers, and Squire Island. Pile traps, anchored by wooden pilings, were located on Chenega Island, Bligh Island, and Culross Island. Throughout the period from 1931 to 1947 four to five fish traps were operated on Chenega Island and employed Chenega people.

The fish trap did more to insure the economic viability of the commercial salmon fishery than other technological innovation except canning (Boxberger 2000:40) and traps work especially well with sockeye salmon because the fish pass known routes. Fish traps provided the packing companies with ultimate control over the fishery. By controlling the processing venture - canning - the packing companies removed control of the finished product from the primary producer, and by extending control from processing to production the canneries controlled the entire venture, from fish in the water to fish in the

can. By controlling the fish traps the canneries became their own primary producers and could thereby control the price of the raw material (Boxberger 200:53).

Commercial salmon fishermen were classified as either independents or company men. Independents received no advance and rented company gear. Company men, on the other hand, fished with company gear and boats and received an advance ration of coal, gas, and bread. Before 1950 most Native fishermen worked as company men for the packing companies. Because the company men received an advance they were paid less for their catch to offset the advance. For example, in 1931, company men received 15 cents a piece for sockeye and 75 cents for Chinooks, while independents were paid 27.5 cents for each sockeye and \$1.25 for king salmon. In 1937 independent fishermen received 35 cents for each red salmon, \$1.50 for kings and 5 cents for pinks. Company men were paid half that amount (NOAA n.d.).

Wages depended on the size of the harvest, the price of fish and other factors, such as strikes, but data from the National Marine Fishery Service indicate that during the 1930s wages tended to increase from year to year. Chenega men who worked on the fish traps were paid \$3.00 a day and in 1932 they earned on average about \$187 for the season. According the annual Fishery Report everyone, Native and non-Native did not average over \$200 for that season. In 1933 there was a strike Native fishermen earned more because there were less fishermen. Chenega men fished for the Copper River Packing Company and earned on average \$270 for the season. Another strike occurred in 1934, but was settled and fishermen averaged not less than \$300 for the season. In 1937 the Chenega fishermen again fished for the Copper River Packing Company located at Port Nellie Juan and averaged about \$500 for the season, which was \$200 less than the pervious year. Tatitlek fishermen fished for North Pacific Seafoods and were reported to have averaged \$480 for the 1937 season (NOAA n.d.).

Canneries in Prince William Sound paid \$150 for a seasonal wage; men received 72 cents an hour straight time and 82 cents for over time, while women got 60 cents and 70 cents respectively. Shore help received \$165 for the season, while a transporter received \$325 a season.

In 1931 the National Marine Fisheries Service listed seven Native communities within the Copper River - Prince William Sound area. These included Chilkat, Bering River, Eyak, Tatitlek, Ellamar, Makarka Point, and Chenega. There were also Native people living in Valdez and Cordova. According to the Fishery Report the Chenega fishermen had an easier time than other Native fishermen because they fished in Prince William Sound for the cannery operating in Port Nellie Juan, which was located close to the village of Chenega.

During the summer whole families from Chenega moved to Port Nellie Juan in the spring. In the following recollection a man from Chenega Bay talks about his experiences in the commercial fishery from the 1940s and early 1950s. He talks about leaving Chenega for Port Nellie Juan in the spring, the organization of the fishery and how commercial fishing was integrated into the seasonal cycle that

included not only fishing for salmon during the summer, but hunting seals for food and bounty, and picking clams.

We traveled every Spring. We'd leave Chenega and go to our fishing grounds at Nellie Juan, where we had a cabin out, [on] the Shipyard beach, which is, was called Shipyard near Nellie Juan cannery. And a lot of the heads of households of Chenega had, were running boats for Port Nellie Juan, the "NJ" boats. There was "NJ" from 31 to 39, or 42, or 43, there were like 13 or 14 boats they had, and they leased them to the heads of the households from Chenega, and the cannery took a large percentage, and then the boat share was distributed out from the Captain on down to the crew, and they went on until the humpy (pink salmon) season was over and done with, up in that area. It usually started in early June, and ended up in late August...

[M]y Ma would do berry picking and some smoking, fish smoking at that time. But most of the fish smoking was done afterwards out at fish camp which was over on the old Chenega Island itself... [C]alled Kake it was our summer, or fall fishing, where we put up silvers, and pink salmon and some reds... Prior to that we'd go up to Port Wells and do our seal hunting... go out and kill a bunch of seals and salt them down, and... at that time there was a bounty on the snout and the hide, as well... my dad did that quite often, when they took the whole family. Actually there were three families of us that would travel together, and set up camp.

[W]e lived that complete subsistence way of life, you know, when the clams were operating out of Cordova, we'd go over there with the whole families, all the different families from Chenega would go over there, and clam dig until school started.... (Kompkoff 1998).

Tatitlek people moved over to the cannery at Dayville across from Valdez. Later, in 1940, a cannery was installed at Ellamar, which was closer, and the Tatitlek people went there instead of Valdez. Ahtna from Chitina and Copper Center took over the jobs at the Dayville facility. The cannery at Dayville remained open until 1947 while Ellamar was open intermittently until it burned down in the early 1950s.

As noted in Chapter One, the abolishment of fish traps in the statehood act of 1959 loosened the grip of the packing companies on the fishery. By the 1960s Prince William Sound fishermen's union had enough political influence to persuade Governor William Egan to intervene in a strike and allow a Japanese processing ship to enter Prince William Sound. Egan agreed and during the summer of 1964 many fishermen, including some from Tatitlek fished for the Japanese. Tatitlek elder Edward Gregorieff recalled fishing for the Japanese that summer.

That was something, the fishermen had their union going, they were strong, they had a lot of members. And they stuck together and every summer they would negotiate prices with canneries from outside and this particular year the major packers refused to give the price the fishermen wanted - so they (the companies) said "you don't accept what we offer we will close our doors and go back home." The guys that was the head of the union, that was doing all the negotiations, said "go ahead, go home," they thought they were bluffing. So they did, they locked their doors and went back to Seattle. Bill Egan, he was governor of Alaska then, everyone knew him and he knew everybody, all of the fishermen. So they called him on the phone. And there was a Japanese mother ship and four catcher boats outside of us in the gulf. He asked them if they could bring them in. That was no

problem. And within four days we had all of them boats in the sound here and they agreed to, they give the fishermen their asking price, they didn't argue. So we went fishing for them. It was a good season we put in. It was a good average season.

I had my family - four girls and my wife and three boys, it was kind of crowded on the boat...It was the first time we wasn't able to use tools on the fish, jab them, they didn't like that, it was changing the quality of the fish, they didn't want it handled that way (Simeone, field notes 1990).

During the 1960s commercial fishing was the dominant form of wage employment in both Tatitlek and Chenega. Before the 1964 earthquake all 14 households in Chenega were involved in either the salmon seine or gill net fishery (Stratton and Chisum 1986:15). Household members were employed in two canneries that operated on Evans Island and in harvesting razor clams. Much of the cash economy operated on a credit basis where groceries and fuel were charged at cannery stores and later subtracted from the price of the commercial harvests (ibid:15). In some instances whole families lived on the boat during the commercial season.

By the 1980s commercial fishing began to play a much smaller role in the economy of Chenega Bay than it had before the 1964 earthquake. In the mid-1980s there were three commercial limited entry permits: one salmon seine permit and two salmon gillnet permits. Two other gillnet permits had been sold between the 1985 and 1986 season (Stratton and Chisum 1986:57-58 and 99). In 1985, 14 Chenega Bay

Table 2. Number of Commercial Fishing Permit Holders in Tatitlek, 1978-1992

Year	Pounds	Value	Permits	Species
1978	354,871	199,028	13	salmon
1979	104,735	523,269	17	salmon
1980	913,874	392,645	11	salmon
1981	1,711,090	815,516	13	salmon
1982	718,332	340,239	12	salmon
1983	430,488	141,499	10	salmon
1984	734,904	286,012	13	salmon
1985	985,221	365,705	10	salmon
1986	586,515	246,211	9	salmon
1987	1,213,580	642,046	9	salmon
1988	445,222	478,767	7	salmon
1989	278,257	175,040	7	salmon
1990	691,620	299,913	5	salmon
1991	Confidential	Confidential	2	salmon
1992	Confidential	Confidential	2	salmon

Source: North Pacific Management Council 1994, Faces of the Fisheries: Prince William Sound

people were employed as crewmembers on commercial vessels but in 1985/86 only two people were so employed. By 1993/94 only 16 percent (Seitz and Miraglia 1995:IV-5) of employed Chenega Bay adults worked in the industry as compared to 63 percent in 1984-85 and 30 percent in 1985/86 (Fall et al. 1996:56).

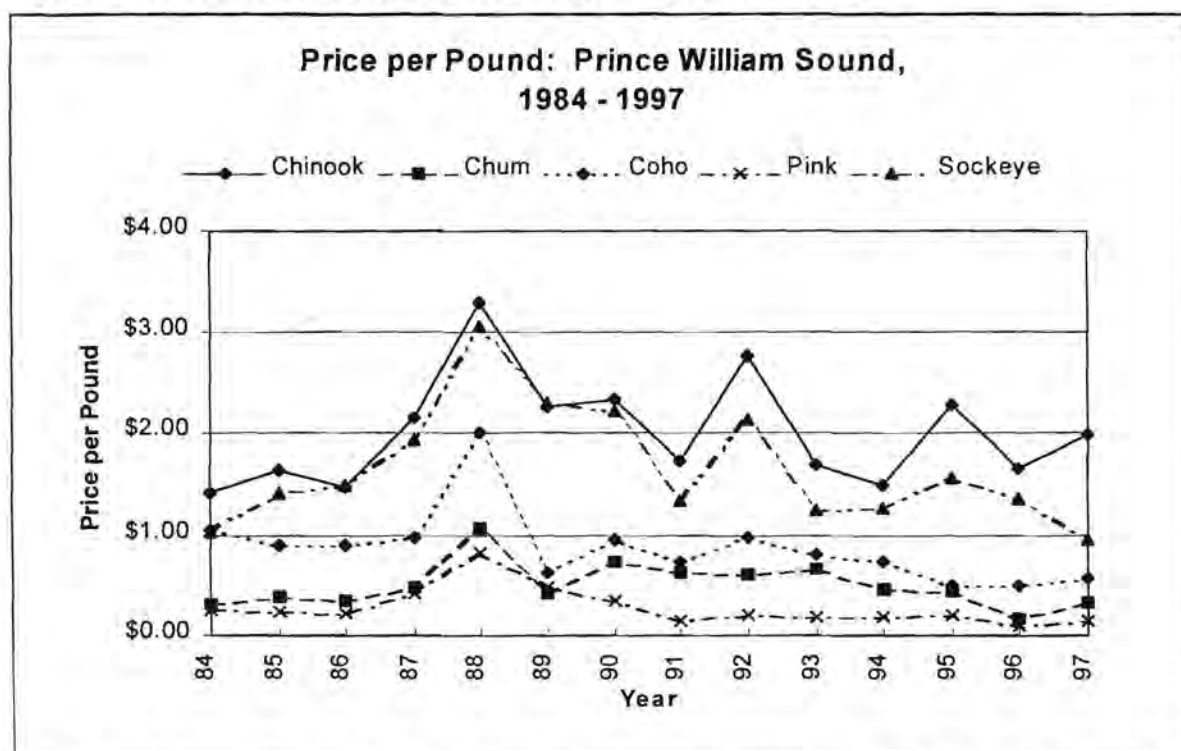
Table 2 shows the decline in commercial fishing permits held by Tatitlek residents. The table indicates a decline from 13 permits in 1978 to 2 in 1992. But data collected by the Alaska Department of Fish and Game show that employment in the fishery has varied. Between 1987 and 1989 almost half of the jobs held by Tatitlek people were in commercial fishing. No one was employed in the fish processing aspects of the industry (Stratton 1990:24). Seven limited entry permits were held by Tatitlek residents in 1989, five salmon gillnet and two salmon purse seine permits. Three other residents fished halibut and crab and 13 people worked as crewmembers on commercial vessels. In sum, over 70 percent of Tatitlek households had members involved in commercial fishing (Stratton 1990:24). The year of the *Exxon Valdez* oil spill, 1989-90, commercial fishing dropped to third place in terms of category of employment, as most people worked on the oil spill cleanup. In 1991-92 commercial fishing again became the dominant form of employment with 26 percent of the jobs (Seitz and Fall 1995: V-5), but in 1993/94 it accounted for only 5 percent of employment (ibid:V-37). In 1987-88 at least fifteen households in Tatitlek derived income from commercial fishing but by 1993/94 only one household had reported such income.

There are a number of factors contributing to the decline of commercial fishing in Tatitlek and Chenega Bay. In 1975 the introduction of limited entry salmon permits excluded some people. To qualify for a limited entry permit a fisherman had to have a sustained record of fishing over a certain number of years. One man from Tatitlek said few residents from either Chenega Bay or Tatitlek qualified for the permits because before limited entry people often fished together and many different people sold the fish to the canneries or tenders. For example, he said, a man and his sons might all fish on the same boat, but unless all the fish were sold in one of their names, none of them may have qualified for the limited entry permit (Coiley field notes, 1989/90).

Another reason for declining participation is that fishing in general has become progressively more competitive and capital intensive. For example it is estimated that in 1936 a purse seine vessel, fishing in Puget Sound, cost \$33,000. In 1960 a fully equipped boat was worth \$245,000 (Boxberger 2000:138). The increased cost is not simply due to inflation but the fact that in order to compete fishermen need larger, more powerful boats with sophisticated electronic equipment. Competition in the worldwide market requires fisherman to catch more fish, which requires better boats and equipment, which in turn requires loans, insurance, and better equipment to satisfy the insurance (Smith 1977). People in Tatitlek and Chenega unable to make the required investments have been selling their permits, and many of these sales go to non-village residents. Members of the younger generation who did not inherit permits generally do not have the money to purchase one.

Coupled with increased cost of fishing was a general decline in the price of salmon that has also influenced individuals to quit fishing. Figure 7 illustrates fluctuations in the price of five species of salmon from 1984 to 1997. At the bottom of the graph are pink salmon, which have historically been the most

Figure 7. Price per Pound of Salmon: Prince William Sound, 1984-1997



Source: Alaska Department of Fish and Game, Division of Commercial Fisheries

important commercial species in the Prince William Sound fishery. The price of pinks has ranged from 72 cents a pound in 1988 to 09 cents in 1992. Above the pinks is the line showing the price of chum salmon. These fish are caught throughout Prince William Sound but in much fewer numbers than pinks. The price for chums has varied from a high of \$1.06 in 1988 to 17 cents a pound in 1996. Coho or silver salmon are harvested in Prince William Sound and at the mouth of the Copper River and arrive late in the season. In 1988 the price for coho salmon was \$1.99, in 1995 and 1996 it had dropped to .50 cents a pound. Sockeye salmon represent the largest percentage of fish caught at the mouth of the Copper River. The harvest for sockeyes begins in late May of June and continues into early August. The price of sockeye salmon in 1988 was \$3.05 a pound. In 1996 it was .96 cents. Chinook or king salmon are probably the most valuable fish on an individual basis but only a few are caught within Prince William Sound, most are harvested at the mouth of the Copper River. Chinook prices soared in 1988 to \$3.28 a pound but dropped to \$1.49 a pound in 1994.

Finally, fishermen in Tatitlek and Chenega Bay have also been frustrated over what they see as poor management of the fishery. Several Tatitlek fishermen protested the limitations placed on where they could fish. One said he remembered when he used to be able to fish six days a week and "go all over." Now they have created "terminal fisheries" which crowd a large number of boats into small bays and estuaries and force fishermen to compete for the fish. He described what was happening today as a "politicians" fishery (Coiley field notes, 1989/90).

FUR HUNTING AND TRAPPING

Before the arrival of Europeans, Prince William Sound Alu'utiq caught a variety of fur-bearing animals for domestic use. In the late 18th century trapping took on an added dimension when trappers obtained furs to exchange for European trade goods and for most of the 19th century the trade in furs provided the only method for obtaining manufactured goods. During the early 20th century, and up until the 1980s, fur hunting and trapping was a way to supplement wages earned by commercial fishing during the summer.

Both Russian and American commercial companies were able to dictate the terms of the trade. Early on the Russians exercised strict control over Native economic life, including the trade in furs, by exacting tribute and quotas from Natives and forcing them to labor for the trading companies. But control varied by locale. It was most pronounced at the trade centers, such as Kodiak, Sitka, and in the Aleutians. It was much less strict in Prince William Sound, especially after 1820. By then Native hunters had critically reduced the sea otter population so the Russian American Company shifted its efforts southward leaving the Sound as a backwater in the trade.

In the 1860s the Russian P.N. Golovin (1979) wrote that the Prince William Sound Alu'utiq did not acknowledge Russian sovereignty. The sum total of their dependence on the Company [Russian American Company], he wrote, "is that when requested by the colonial administration they send small parties out to hunt sea otters, but only in places near their settlements." Golovin went on to say that Prince William Sound people only sold a part of their fur catch to the Company, the rest they sold to "foreigners", i.e., Americans and British traders, and to other Native people. Despite their independence Alu'utiq fur hunters and trappers often became indebted to the Russian American Company and to pay their debts they had to hunt for the company.

After Alaska was sold to the United States in 1867 two rival trading companies moved into Prince William Sound: the Alaska Commercial Company (ACC) and the Western Fur and Trading Company. To lure Native traders each company extended unlimited credit. As a result trappers often accumulated a substantial amount of debt. Then, in 1881 the Alaska Commercial Company bought out its competitor and in 1884 reigned in credit, lowered the price of fur, and raised prices on goods. To obtain outstanding debts the ACC took one half of the price for furs and applied it an individual's account (Hassen 1978:143).

This led the American military explorer Abercrombie (cited in Hassen 1978:150) to remark that "Natives found themselves charged with sums where payments were impossible for years, especially at the lower prices being offered for furs." Alu'utiq trappers became demoralized and refused to hunt except when

Sea Otter Hunting in the 19th century

Sea otters were the major species of furbearer sought by both Russian and American traders. Sea otter hunts were conducted by fleets of baidarkas composed of between five and ten craft, with three men in each craft (Klashnikoff 1979). In the early 19th century the fleets hunted in Prince William Sound, but as the sea otter population declined the hunters went further afield, to Cook Inlet, and out to sea. This was particularly dangerous because the hunters spent days floating beyond the sight of land, "over the hump of the sea." An experienced hunter and an especially trained weatherman led the fleets. The weatherman was responsible for the safety of the hunters and determined when to come ashore, when to make camp, and when to go out into the open ocean (ibid). When the hunters found a sea otter the leader organized the kill. In the following story John Klashnikoff, an elder who grew up in Chenega, talks about the techniques used in hunting sea otters in the late 19th century.

When they see it (the sea otter) the leader stops, and say[s], "Well, there's a sea otter here," and then everybody see it. What they do then, they make a circle, see. Get that sea otter in the middle. Give him plenty of room in the middle. They make a circle around them with baidarkas, keep the sea otter in the middle, and then they start coming in on it. Make the circle smaller and smaller, and when they get close enough to that sea otter where they can reach him with an arrow, and they start shooting. You don't hit it all the time, but they shoot arrows at it to keep it down. Shoot close to that sea otter, when they see that arrow, then they dive, and every time that he comes up, somebody puts an arrow on him. Keep him down, don't let him get any wind, and that's how they get him.... That's your sea otter, as long as you put an arrow in him. Somebody else can kill him for you, see. As long as he's got that arrow in him, he'll never go far. He'll keep diving. You can just forget about him, and go after others, if you get into a herd. Then after the herd is gone you start picking up the cripples. That arrow is in there, and he can only dive so far, and you can see him a long way. Just like putting a flag on him. They got feathers on the arrows that were long (Klashnikoff 1979).

necessary. The situation was further exacerbated by a general decline in fur bearing animals and sea otters in particular. To survive, Native people looked to the ACC to supply them with food.

According to the National Marine Fisheries Service reports from the 1930s and 40s, Native people living at Chenega and Tatitlek augmented their wages from commercial fishing with winter trapping and

hunting. In the winter men made extended trips to trap either going alone or in pairs. One Alu'utiq elder said he grew up hunting land otters, and seals because it "kept a few coins in our pockets" (Simeone, field notes 1990). Mink and land otter were fairly abundant and the most valuable (Stratton and Chisum 1986). Although people continued to trap into the mid-1980s trapping did not provide a primary source of income and since then the amount of income derived from trapping has declined even further. Between 1989 and 1992 no households interviewed in either Chenega Bay or Tatitlek declared income from trapping. In 1993 trapping provided income for two households in Chenega Bay and four households in Tatitlek.

BOUNTY HUNTING

Another important source of income was the bounty the Territorial government paid for seals, bald eagles, wolves and wolverines. Hunting for these animals, and especially seals, fit easily into the annual round, and is something many Alu'utiq elders like to reminisce about. Starting in 1927 the Federal Government, at the request of the commercial fishing industry, began a hair seal bounty program that included Prince William Sound and the mouth of the Copper River (Paige 1993: B-2). During the initial stages of the program hunters were paid \$3 for a seal snout. In 1949 the bounty was raised to \$6 and the estimated number of seals taken by bounty hunters in the central and southwest region, which included Prince William Sound, rose from 5,292 to 12,582. In 1951 the bounty was reduced to the original \$3. In 1972 the Marine Mammal Protection Agency suspended the program and stopped the hunting of marine mammals except by Native hunters.

One Tatitlek elder recalled that he "cut the snouts for a 2 dollar bounty, - stay out for two months on the beaches...never saw a plane or too many boats. Lived among the new growth, watch it grow, everyone was happy" (Simeone, field notes 1990). Another elder remembered a trick they played on the federal employees paying the bounty. "An old Aleut trick," he said, was that "you put all of the snouts in a barrel, and let them get real, real rank. You wait until the Fish and Game guy come over and wants to tag them. But he doesn't want to touch them, see. He tells this old timer, how much you got? "Oh, 75," when you might have 25. They get real stinky see" (Simeone, field notes 1990).

THE MODERN VILLAGE WAGE ECONOMY

Table 3 shows the percentage of adults working and the average per capita incomes in Tatitlek and Chenega Bay for the years 1987 to 1994. In both Tatitlek and Chenega Bay the majority of adults, those 16 years or older, usually has some form of wage employment during the year. However employment is highly seasonal and per capita incomes are small compared to the U. S. average. In 1993/94, for example, only 78 percent of the adults in Tatitlek were employed during the year but only 33 percent of those were employed for the full year (Seitz and Fall 1995:V6). In Chenega Bay the situation

was similar (Seitz and Miraglia 1995:IV5). During 1993/94 the average per capita income in Tatitlek in, from all sources, was \$10, 306; in Chenega Bay it was \$11,514. For purposes of comparison, in 1993 the

Table 3. Percentage of Adults Working and Per Capita Incomes; Tatitlek 1987/94 and Chenega Bay 1984/94

Tatitlek		
Year	Percentage of Adults Working	Average per capita income
1987/88	71	\$9,826
1988/89	65	\$9,356
1989/90	81	\$17,917*
1991/92	80	\$8,163
1993/94	78	\$10,306
Chenega Bay		
1984/85	73	ND
1985/86	74	ND
1989/90	87	\$21,976*
1991/92	86	\$8,183
1992/93	78	\$8,621
1993/94	84	\$11,514

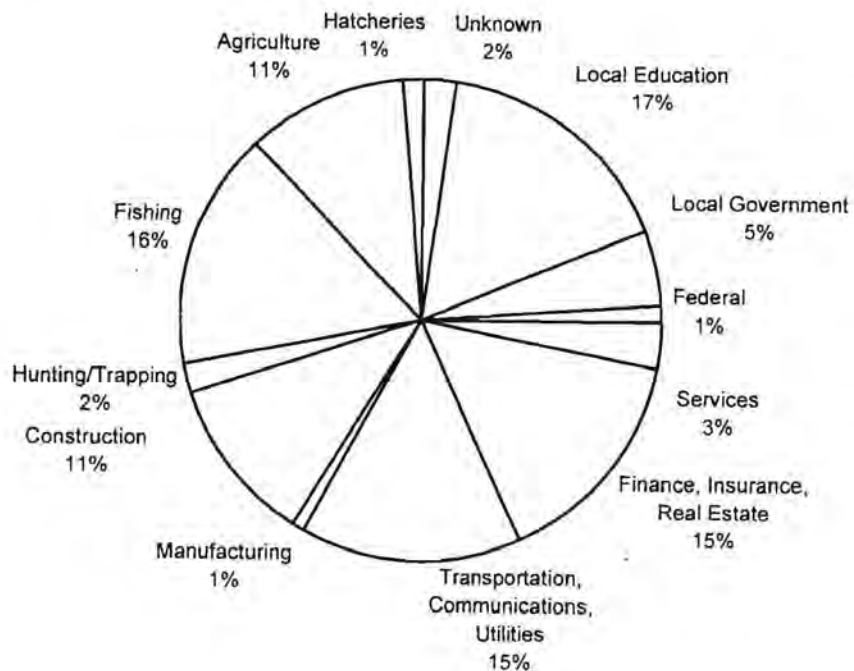
Sources: Miraglia and Seitz 1995; Seitz and Fall 1995, and Fall et al. 1996. *Denotes year of the Exxon Valdez oil spill

average household income in Valdez, with its a high percentage of oil industry related employment, was \$82,292 and the average per capita income was \$27,694. In Cordova, which relies more heavily on commercial fishing than Valdez, the average household income in 1993 was \$55,000 and the average per capita income was \$17,546 (Miraglia and Tomrdle 1995, and Seitz and Fall 1995).

The Public Sector

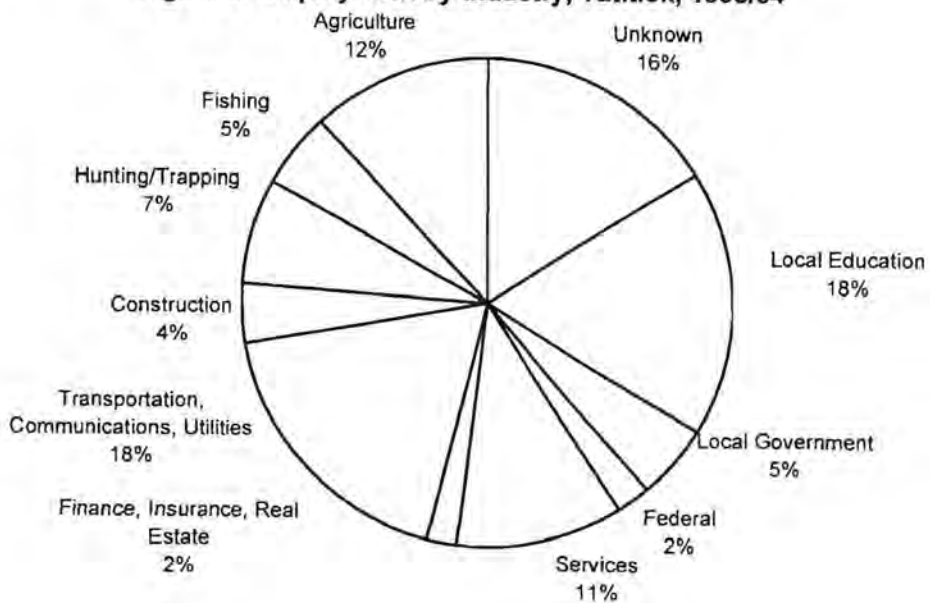
In both Tatitlek and Chenega Bay today the public sector provides the most stable employment. As indicated in Figures 8 and 9 (see below), which illustrates employment by industry, local schools provided a high percentage of jobs, 17 percent in Chenega Bay and 18 percent in Tatitlek, though in both instances teachers are brought in from outside the community. Local government accounted for another 5 percent in both villages. The Tatitlek village government employs a secretary/book keeper, power plant operator, and a maintenance man. The regional non-profit corporation Chugachmiut employs health aides in Tatitlek and Chenega Bay. In Tatitlek two people who work one week on and one week off share this job. The U.S. post office also hires part time clerks in both communities and the Alaska Department of Transportation and Public Facilities contracts with local people to maintain the airports.

Figure 8. Employment by Industry, Chenega Bay, 1993/94



Source: Seitz and Fall 1995

Figure 9. Employment by Industry, Tatitlek, 1993/94



Source: Seitz and Miraglia 1995

The growth of the public sector is not only reflected in the concentration of jobs but the growth of the village budgets. As of September 1997 the village of Tatitlek had received approximately 16 million dollars for a variety of projects including the construction of a ferry dock and the extension and lighting of runway were also built in Chenega Bay at about the same time. Other projects in Tatitlek include a mariculture and fish and game processing facility funded by money from the *Exxon Valdez* Trustee Council; a community health clinic, and community water system upgrade, which are both funded by the U.S. Department of Housing and Urban Development. There are plans to build a marine fueling facility, a new small boat harbor and a community/visitors center that will house an archeological repository, a visitor center and gift shop. As of 1999 many of these projects had been completed. While local people worked on most of these projects and the village council oversaw some of the contracts, most of the work had to be contracted out because large projects, like the construction of the ferry docks and runways, require expertise and equipment unavailable on the local level.

The Private Sector

In contrast to the public sector, employment in the private sector, which includes commercial fishing, is largely temporary, since it is often seasonal or based on specific projects, such as those mentioned above. The private sector, however, often pays more than government. A good example of this type of employment is cleanup of the *Exxon Valdez* oil spill. In 1989/90 the majority of adults from Chenega Bay and Tatitlek were employed in oil spill related jobs. The first year of the spill the average worker earned \$16.69 an hour and, as evident from the Table 3 (see above), per capita incomes soared. Those people who had boats and could lease them to Exxon made even more money per hour. As a result income in both communities was unevenly distributed in 1989/90 (Fall et al. 1996:65). Of those households surveyed in Tatitlek, 23 percent made less than \$40,000 while 14 percent, who had boats to lease, had incomes of over \$100,000. The situation was similar in Chenega Bay where 28 percent of the households made less than \$40,000 and only 17 percent made over \$100,000.

By 1993/94 oil spill employment had all but disappeared and average per capita incomes fell. In that year the major sources of private sector employment in Tatitlek were working for a timber company that was cutting timber on village corporation land, and an oyster farm. Only one person claimed income from commercial fishing. Today the logging company is no longer in operation, and the oyster farm now employs two people. Private sector employment fared slightly better in Chenega Bay because the village corporation maintained an office in the village (which has since moved to Anchorage). The village corporation also ran a mariculture project, there were several construction projects, and there was work for a logging company. In addition, nine households claimed income from commercial fishing.

The Tatitlek village council has recognized its dependency on external sources of income, especially government transfer payments, and is making a concentrated effort to develop a local infrastructure that will help the community become economically self-sufficient.

The Tatitlek Village IRA Council recognized the continuous decline in availability of state and federal funds that it has historically relied upon for provision of basic services and employment opportunities. Upon recognition of this decline, it became very apparent that the community needs to become as self-sufficient as possible under the present and predicted circumstances if it was not only to survive, but thrive in the economic climate as it exists. The first step, as identified by the village, was to develop a local infrastructure that would enable the village to provide for more economic development (Tatitlek Village Council 1997).

To this end the village put together a list of "human resources" that appears as Table 4. Note that elders

Table 4. Tatitlek Village Resources

Total Labor Force		27
Elders		14
Certified Personnel		
	HAZWOPER (certified to work with hazardous waste)	18
	HAZMAT (certified to handle hazardous waste)	2
	EMT 1	4
	ETT	6
Heavy Equipment Operators		2
	Comm. Truck Drivers	4
	USCG Licensed Operator	8
	Trained Fire Fighter	1
	Resource Abnormality Specialist	5
Trained Oil Spill Response Technicians		18

Source: Tatitlek Village Council

are listed as one of the assets, reflecting the community's belief that the elders' knowledge and experience is indispensable in determining the future direction of the community. Note also that the table is weighted towards certain types training but does not demonstrate other abilities, such as local people's capability to manage people and money. In fact the village government employs local people who manage multiple budgets and use computerized bookkeeping programs. In addition, the local school offers computer training and the computers in the school, as well a few machines in private homes, are connected to the Internet. Local people also run a store and other businesses.

In this vein local people are also looking for business opportunities. Two men in Tatitlek have guide services and take clients to hunt brown bear and mountain goat. Another man is considering

creating a business selling smoked and jarred salmon and another man is in the process of purchasing a boat that can be chartered by tourists, fishermen, and hunters. Another couple has begun a restaurant and store. Some people want tourists coming into the village "buying things and doing things", but these ideas have met with some opposition because other people do not want the village to turn into a tourist stop.

The community is also working closely with the local school to provide an education that will enable young people to pursue careers and opportunities either outside or within the community. As one resident put it, "the school is helping to develop skills so that young people can decide where they want to live and how they want to make a living." To introduce students to urban life the Chugach School District has introduced a program called Anchorage House where students stay in Anchorage for varying lengths of time. Along with an emphasis on formal education and experience in an urban center, the village and the school jointly sponsor a cultural heritage week that is now in its fifth year. Students from the various schools in Prince William Sound are invited and the emphasis is on learning traditional skills and on bringing together the diverse groups of people living in the Sound (see Chapter 7 on Expressive Culture).

While the community understands that economic development is a solution to making the village economically viable, people do have concerns about what effect such development will have on the cultural autonomy of the village. In a recent interview, conducted in 1998, the president of the Tatitlek IRA council said that development is

starting to squeeze them and will have an effect on their life style but not on their beliefs or values. In the case of Tatitlek lands there will be local control over development, the village will always be involved in development decisions. If development happens on Tatitlek lands or in Tatitlek they [the Tatitlek people] will be a part of the process and if people don't respect our traditions then it won't happen. If it cannot be done our way then it will not be done. In the past, our fathers were intimidated by the government but with self-determination, we understand our rights better and will no longer be intimidated. This is Tatitlek, it is our village and it is not going to change (Kompkoff 1998).

The Household Economy

In Tatitlek, in 1993/94, the average household income was \$35,557, with a per capita income of \$10,306. About half came from wages and half from non-wage sources of income (Seitz and Fall 1995:V6). In Chenega Bay the average household income was slightly higher at \$41,552, with a per capita income of \$11,514 of which \$7,061 came from wages (Seitz and Miraglia 1995:IV 5). The four major sources of non-wage income in both communities were, in order of magnitude: dividends from Native corporations, the Alaska Permanent Fund Dividend, Social Security, and unemployment compensation (Seitz and Miraglia 1995; Seitz and Fall 1995).

Table 5. Estimated Monthly Expenses, Chenega Bay and Tatitlek, 1989/90

	Community	Chenega	Tatitlek
	Average	Bay	
Heating Fuel	\$58.90	\$54.76	\$65.20
Transportation Fuel	\$34.50	\$28.61	\$38.12
Water/Sewer	\$13.23	\$15.00	\$12.50
Housing	\$166.67	\$149.41	\$189.23
Food	\$625.03	\$596.30	\$649.67
Electricity	\$131.18	\$118.88	\$142.11
Phone	\$130.73	\$112.08	\$146.71
Propane	\$20.41	\$19.39	\$21.16
Total	\$1,180.65	\$1,094.43	\$1,264.70

Source: Fall et al 1996:68

Table 5 represents the primary household expenses for Tatitlek and Chenega Bay residents. Not shown are other expenses such as travel and recreation. Airfare for a trip to Anchorage, for example, may cost from \$250 to \$450 dollars. The largest expense not shown on the table is the cost entailed for subsistence hunting and fishing. Harvesting requires a substantial outlay of cash for equipment and

Table 6. Subsistence Equipment, Chenega Bay, 1991/92

Equipment Type	Equipment Total	Replacement cost for each
Skiff with outboard motor	12	\$5,208
Boats with inboard motors	7	\$36,195
Skiff with oars only	2	\$2,121
Crab or shrimp pots	73	\$107
Fishing nets	2	\$1,788
Guns	35	\$408
Freezers	16	\$476
Canners	7	\$113
Vacuum sealers	4	\$620
Smokehouses/drying racks	7	\$1,191
ATVs	1	\$4,259

Source: Seitz and Miraglia 1995: IV-36

operating. The fixed costs include capital equipment: guns, boats, outboard motors, and nets, and operating costs include fuel and oil and up keep of equipment. Table 6 provides information on the different types of equipment used for subsistence hunting and fishing by Chenega Bay residents, and the replacement cost. Note that some of this equipment is used for purposes besides subsistence. For

example, boats with inboard motors are used for commercial fishing and to travel to Whittier to obtain fuel and propane.

There is no question that without cash incomes households in Tatitlek and Chenega Bay could not survive. However, subsistence harvests provide a significant boost to household economies in both Tatitlek and Chenega Bay. Table 7 illustrates what percentage of household income it would require to replace foods provided by subsistence harvests at five dollars a pound. In Tatitlek, for example, for the years 1987 to 1992, one Tatitlek household would have to use, on average, almost a quarter of its income to replace foods provided by subsistence harvesting. Conversely, if the subsistence harvest is added to household income we see a significant increase.

Table 7. Replacement Costs for Subsistence Foods in Tatitlek and Chenega Bay

Tatitlek					Chenega Bay			
Year	Household Income	Household Harvest	Replacement Cost	Percentage of Income	Household Income	Household Harvest	Replacement Cost	Percentage of Income
1985/86	N/D	N/D			N/D	1,286 lbs	\$6,430.00	
1987/88	\$33,126.00	1,406 lbs	\$7,030.00	21 %	N/D	N/D		
1988/89	\$35,990.00	2,328 lbs	\$11,640.00	32 %	N/D	N/D		
1991/92	\$32,653.00	1,383 lbs	\$6,915.00	21 %	\$30,005	1,226 lbs	\$6,130.00	20%
1992/93	N/D	N/D			\$29,984.00	1,441 lbs	\$7,205.00	24 %
1993/94	\$35,557.00	931 lbs	\$4,655.00	13 %	\$41,552.00	991	\$4,955.00	11 %

Sources Seitz and Miraglia 1995; Seitz and Fall 1995; Stratton 1990; Stratton and Chisum 1986

SUMMARY

The modern economy of Tatitlek and Chenega Bay is based on wages earned, for the most part through seasonal employment that relies almost entirely infusions from the public sector. In the early 20th century the wage sector revolved around three principal activities: commercial fishing, trapping, and bounty hunting for seals and other predators. All three activities dovetailed with the seasonal subsistence activities and drew on traditional fishing and hunting skills. Since the 1960s the public sector of the village economy has grown so that now, at the turn of the century, it overshadows the private sector. Commercial fishing no longer provides the majority of wages and the most stable employment now comes from jobs related to education and public services. As both Tatitlek and Chenega Bay have become increasingly dependent on Federal and State funds, each has undertaken efforts to develop local infrastructures that will make them economically self-sufficient, although neither is likely to become so in the near future. At the same time subsistence harvests provide a significant addition to household economies that adds to the economic well being of the communities.

Chapter Five

Subsistence

This chapter contains an account of the subsistence sector of the local economies of Tatitlek and Chenega Bay. Subsistence is defined broadly as the noncommercial harvesting and use of wild resources. In a recent interview with high school students Mike Totemoff (2000) a village elder from Tatitlek was asked, "How important is subsistence to the village life style?" He answered

I'll tell you - we don't have no means of employment - going to the store to buy these \$5.95 steaks when you feel like it - cannot go to the store any time you feel like it, when you don't have an income or a job, you know. The way people subsisted here in Tatitlek, far as I know, I am 60 years old now, and they have always lived off the land, always hunted and fished everything we got. We had no refrigerators, no freezers, we hunted when the season was due, the fish were here, we took them when the bears were here, we took them when the animals were here, we took them, its seasonal.

He added:

That's one of the most important issues ever hit Natives of Alaska, subsistence. It's very, very important that we fight. I depend on it all of the time. I eat seal meat and ducks, deer meat, bear. [It] was our subsistence way of life style before. In early spring when the bears came out, in the fall we ate goat, then the deer started swimming out to the islands in the last 30 years or so, so we started eating deer, so that's how we do now.

As Mike points out subsistence is something people have always done. Today it is considered more than an economic necessity. It is a life choice, a conscious decision to maintain a connection to the environment and the past. But subsistence has also changed as people adopt new technologies, such as firearms and outboard motors, and try to adhere to laws and regulations that govern seasons and bag limits.

THE SEASONAL ROUND

"Former Days": The Seasonal Round in the 19th Century

Subsistence activities are governed by the change in seasons. Certain animals, plants, and fish are available at only certain times of the year. For example, salmon appear only in the summer months and herring spawn only in the spring. Migratory birds are available only in the spring and fall and bears are considered best to eat in the spring before they gorge themselves on salmon.

In the 1930s the anthropologist Kaj Birket-Smith (1953:23-24) sketched out a seasonal round, using key informant interviews, for a period he called "former days." All of the elders who provided Birket-

Smith with information were born before the turn of the century. The oldest was 86; so the information probably pertains to the period after 1860.

Spring was the best time to hunt seals and sea lions that followed spawning herring deep into Prince William Sound. At this time people also harvested herring and walked the beaches to gather herring spawn on kelp. In good weather the men fished for halibut and codfish. Men also hunted returning migratory waterfowl and both men and women collected eggs from ducks, geese, and gulls. During low tides people harvested various shellfish and looked for octopus.

Summer was the season for harvesting salmon. Chinook salmon were the first to arrive but seem less significant than the later runs of sockeye, chums, pinks, and cohos. Fishing for sockeye, pink, and chum salmon began in July and was finished by the end of August. Salmon were caught after they entered the creeks because people had no method for catching them in the salt water. Fish weirs were built in the creeks and the men speared the salmon, which were easily dried because there was less fat left in them after they entered the fresh water. An elder from Chenega remembers seeing vestiges of fish weirs made out of stone walls that were located inside the mouths of creeks. Behind the walls were deep impressions that created pools of water in which salmon were trapped after the tide went out. Caught in the small pools, the fish were taken by hand or spear. One elder interviewed in the late 1970s recalled that "the smokehouse we had held one thousand fish, we filled that up four or five times and by the fall had enough dried fish to last you all winter. Besides feeding hunting dogs too." The run of coho or silver salmon commenced in late August and continued into December. These fish were usually eaten fresh, but some were dried (John Klashnikoff 1979). In mid-summer women began collecting a variety of berries that were either eaten fresh or mixed with seal oil and stored in wooden boxes for the winter. At the end of August, the men shifted their attention to hunting sea lions and mountain goat. They also fished for halibut, herring, and cod.

Through the fall and winter, except in bad weather, the men hunted seals and sea lions but stopped hunting goats when the weather turned treacherous in the high country. Shellfish were also collected through the winter and in bad weather became an extremely important part of the diet. Whales and porpoise were hunted throughout the year. The last whale reported to have been harvested by Chenega hunters was taken in about 1880. Thirty-five baidarkas towed the whale to the village where it was butchered (Simeone, field notes 1990).

During the late summer and winter people took time to attend dances and ceremonies. Before 1900 two of the most important ceremonies were the Feast of the Dead, held every August and the Bladder Festival held in December (Birket-Smith 1953:112, 114). The Bladder Festival was aimed directly at maintaining the proper relationship between animals and humans. In this ceremony all of the bladders of the animals killed the previous year were displayed and, to the beat of a drum, the hunters reenacted their most memorable kills. By the early decades of this century these ceremonies had disappeared but "potlatches" were still held in different villages (Klashnikoff 1979).

The 20th Century

Birket-Smith's aim was to reconstruct, as much as possible, the annual cycle of the pre-contact past, but he felt this was impossible because by the 1930s the establishment of the commercial fishery, and the prohibition of sea otter hunting, had caused a "complete revolution in the economy" (1953:23). "[H]ardly anybody put up winter provisions," Birket-Smith (1953:44) wrote, and the ordinary diet included flour, tea, coffee, and sugar, although he allowed that meat and fish still "seem the most relished foods." By the 1930s not only had people's diets changed, commercial trapping, commercial salmon fishing, and school had been integrated into the yearly round of activities. Yet by descriptions we can see that hunting and fishing continued to be an important part of seasonal and daily life.

In the spring men hunted black bears intensively. During the spring their flesh had not yet acquired the fishy taste that it would after a summer of eating salmon. The bears were also easy to catch because for the first week after leaving the den their feet were soft and they could hardly walk. As soon as the bears came out of their dens they ate greens so the hunters looked for places where the sun had melted the snow leaving the greens exposed (Klashnikoff 1979).

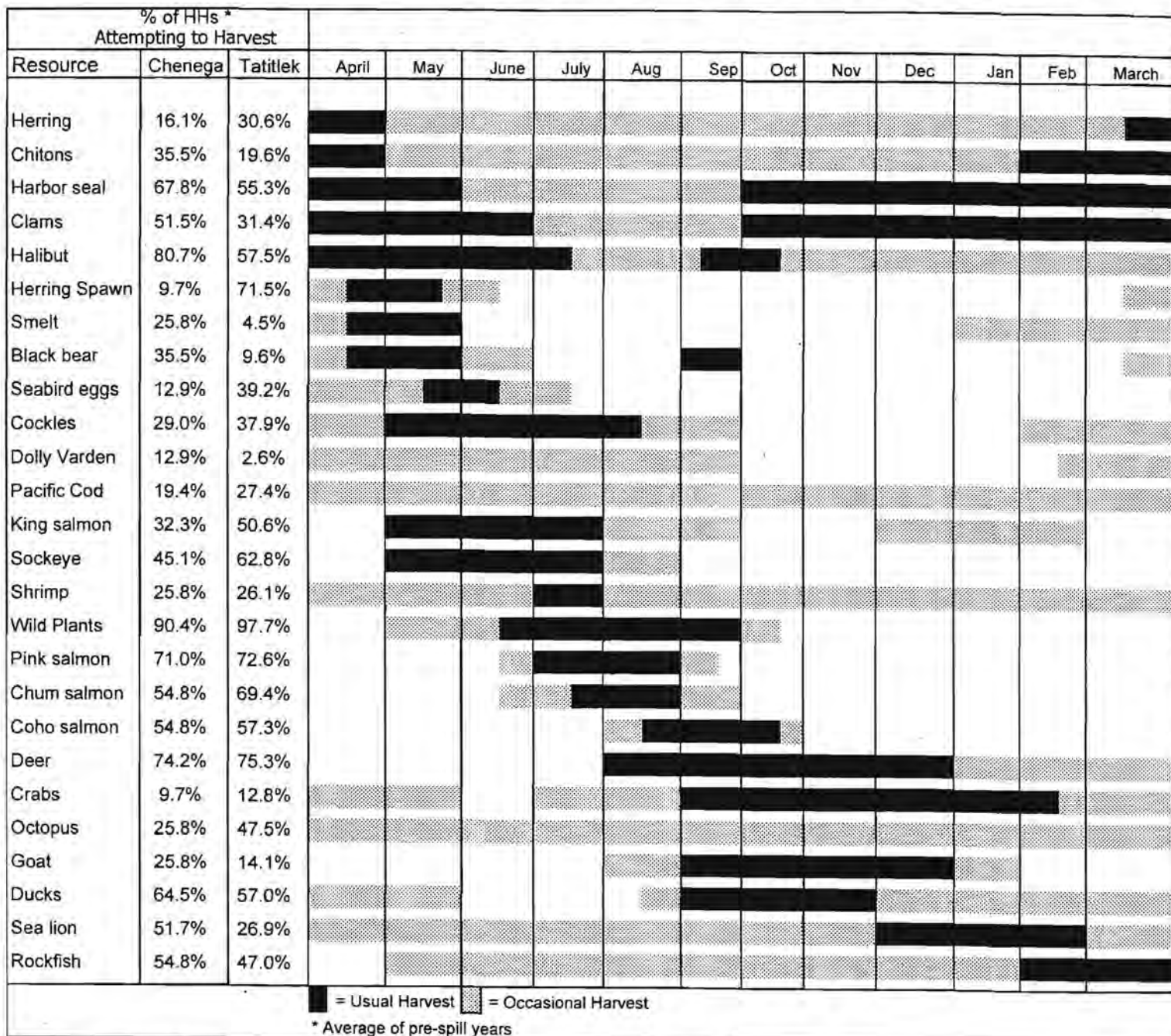
On the first day of May, after school was finished, most Chenega residents moved to Port Wells where they fished for the canneries until August 2nd when the commercial season ended. After that people dispersed to their own smokehouses where they fished and smoked salmon for their own needs. School began in early September but was sometimes postponed a week because families had not yet returned to the village.

During the fall the men hunted harbor seals, various species of ducks, black bears, and mountain goats. In the late fall they left the village to trap mink and hunt land otter, which they hunted with specially trained dogs. They also continued to hunt seals. An additional incentive for hunting seals was the federal government's bounty introduced to reduce the size of the seal population that competed with the commercial fishing industry.

In December there was an interlude when the trappers returned to the village for three weeks of celebration of Russian Christmas and New Year. After the new year they resumed trapping and continued into late winter. Red snapper, cod, and halibut were caught all year around, but the spring was the main season for catching herring.

Figure 10 illustrates the seasonal round of Tatitlek and Chenega Bay as it occurred during the 1980s. This seasonal round remains as it has been except for two notable changes. First, hunters today seldom hunt black bear preferring instead to hunt deer. Second, people no longer retire to fish camp, nor do whole families go commercial fishing. Yet people still fish for herring in the spring and at Tatitlek whole families gather on the beach to pick herring spawn. The men hunt sea lions, seals, and migratory birds that gather around the masses of spawning herring. In good weather they fish for halibut

Figure 10. Seasonal Round of Harvest Activities by Residents of Chenega Bay and Tatitlek, 1980s



SOURCE: Fall et al. 1996

and rockfish, and both men and women gather clams during low tide and spring collect gull and duck eggs (Stratton 1990; Stratton and Chisum 1986).

By the middle of May, salmon capture everyone's attention and people anticipate the first taste of fresh chinook and sockeye salmon. In late summer women harvest cranberries, blueberries, salmon berries, and raspberries that are frozen or made into jams and jellies instead of being mixed with seal oil. In August and September men shift their attention to hunting deer and mountain goat. The mountain goat season is relatively short but deer season remains open until December. Winter is the period of least subsistence activity because inclement weather along with holidays keeps the men in the village. During periods of good weather hunters will venture out to hunt for seals and octopus during low tides. In later winter people with commercial fishing boats set out crab and shrimp pots.

RESOURCE HARVEST AND USE CHARACTERISTICS IN TATITLEK AND CHENEGA BAY

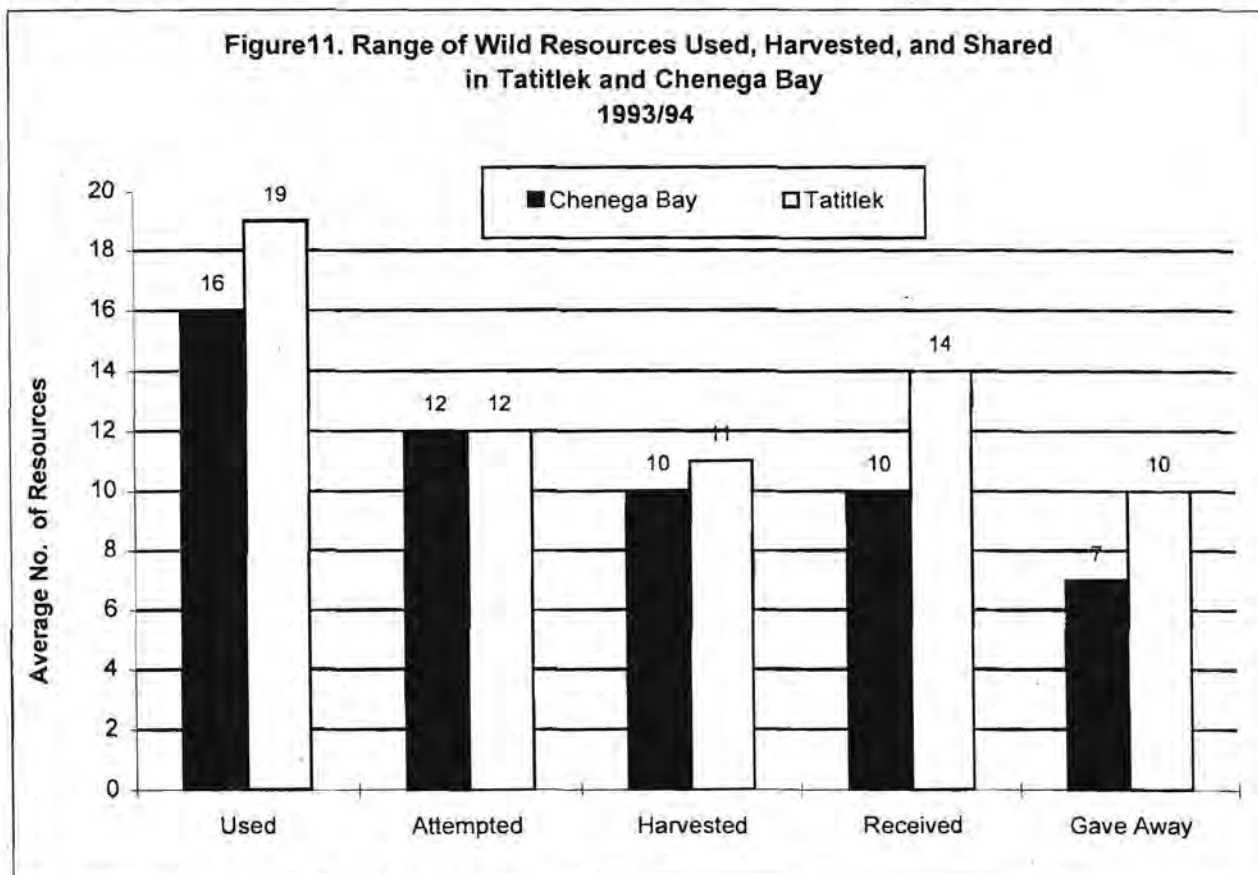
One characteristic of village subsistence economies in Alaska is the wide varieties of wild resources that households use, harvest, and share. Table 8 is a list of all the resources reported used or

Table 8. Resources Used or Harvested by Tatitlek and Chenega Bay Residents 1970/80/90s

Finfish	Crab	Seagull (Eggs)
Salmon	Tanner	Arctic Tern (Eggs)
Chinook	Dungeness	Grouse
Sockeye	King	Canada Geese
Chum	Mussels, Blue	Furbearers
Pink	Sea Urchin	Mink
Coho	Sea Mammals	Wolf
Black cod	Harbor Seal	Land otter
Halibut	Porpoise, Dall	Marten
Gray Cod	Sea Otter	Plants and Trees
Rock fish, Red	Stellar Sea Lion	Blueberry
Rockfish, Black	Land Mammals	Cranberry, Highbush
Herring	Sitka Black-tailed Deer	Cranberry, Lowbush
Trout, Lake	Mountain Goat	Crowberry
Herring Roe on Kelp	Moose	Currant
Invertebrates	Black Bear	Fiddlehead fern
Shrimp	Brown Bear	Goosetongue
Octopus	Wildfowl	Hemlock, Mountain
Clams	Ptarmigan	Hemlock, Western
Razor	Grouse, Spruce	Nagoonberry
Butter	Crane	Popweed
Gaper (Horse)	Ducks	Raspberry
Surf	Mallard	Salmonberry
Little Neck	Pintails	Spruce
Cockles	Bufflehead	Watermelonberry
Chitons (bidarkies)	Goldeneye	Wild Celery
	Scoter	

Source: Stratton and Chisum 1986 and Stratton 1990.

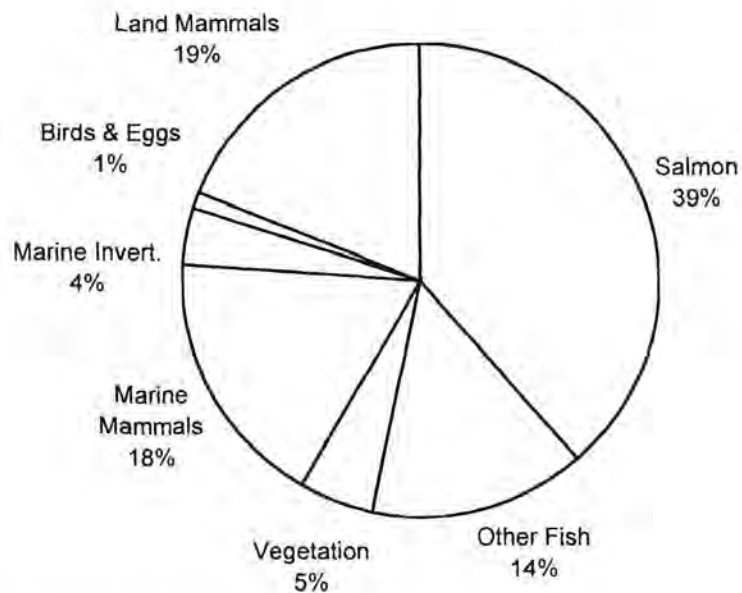
harvested by Tatitlek and Chenega Bay residents during the 1970s, 1980s, and 1990s, although not all of these resources are used or harvested every year. For example, in 1993/94 Tatitlek households said they used, on average, 19 different kinds of resources and harvested 11 or 12 kinds of resources. Households often use more resources than they harvest because they receive some resources from friends or relatives. So in 1993/94 Tatitlek households reported that on average they received 13 types or resources and gave away about 10 varieties. These figures are similar to those gathered in Chenega Bay in 1993/94 where households used 16 different kinds of resources, harvested 10 varieties, received 10 and gave away 7.



SOURCE: Seitz & Miraglia and Seitz & Fall 1995

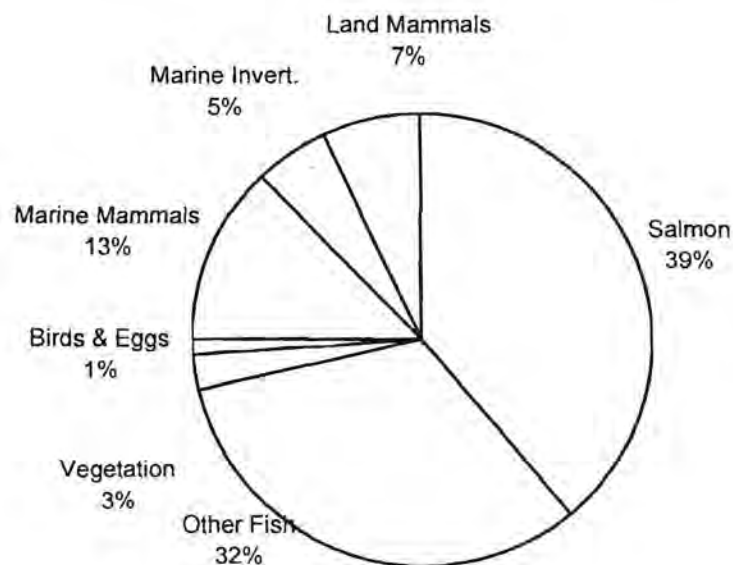
The composition of the harvest, as demonstrated in figures 7 and 8 (see below), is basically similar in both Tatitlek and Chenega Bay with only slight variation. In both communities salmon were the major resource harvested in 1993/94. In Chenega Bay, however, other fish (such as halibut and rockfish) made up a larger percentage of the catch than in Tatitlek. The percentage of marine mammals (mostly harbor seals) and land mammals (Sitka deer) is slightly higher in Tatitlek than in Chenega Bay. The percentage of marine invertebrates harvested in both communities is low, which may reflect people's fear of contamination from the *Exxon Valdez* oil spill (Seitz and Miraglia 1995 IV-21-22 and Seitz and Fall 1995).

Figure 12. Composition of Wild Resource Harvests by Resource Category, Tatitlek, 1993/94



SOURCE: Seitz & Fall 1995

Figure 13. Composition of Wild Resource Harvests by Resource Category, Chenega Bay, 1993/94



SOURCE: Seitz & Miraglia 1995

The table below illustrates household participation in subsistence activities in Tatitlek and Chenega Bay for 1993/94. It shows that in Tatitlek, 100 percent of households used, attempted to harvest and harvested, received, and gave away at least one wild resource. In Chenega Bay 100 percent of households used and received at least one wild resource. Use of resources refers to households harvesting or receiving resources. It excludes any resources purchased, or used or sold for commercial bait.

Table 9. Percentage of Households Participating Subsistence Activities

Percentage of Tatitlek Households		Percentage of Chenega Bay Households	
Using wild resources	100 %	Using wild resources	100 %
Attempting harvest of wild resources	100%	Attempting harvest of wild resources	95%
Harvesting a wild resource	100%	Harvesting a wild resource	95%
Receiving wild resources	100%	Receiving wild resources	100%
Giving Away wild resources	100%	Giving Away wild resources	87%

SOURCE: Seitz & Miraglia and Seitz & Fall 1995

High Harvesting Households

As shown above almost every household in Tatitlek and Chenega Bay harvested or attempted to harvest at least one subsistence resource. Generally in rural Alaska a small number of households often harvests the majority of subsistence foods and distributes it through sharing networks to other households in the community (Wolfe 1987). These households frequently harvest more varieties of subsistence foods, and in larger quantities, than other households. In Tatitlek, for example, of the 20 households interviewed in 1993, seven (see Table 10 below) harvested approximately 74 percent of all the resources harvested. The average harvest of these seven households was 1,990 pounds, well above the mean household harvest of 931 pounds (Seitz and Fall 1995). Furthermore, these seven households harvested half the community's salmon; over 60 percent of game and marine mammals, over 40 percent of birds, eggs, and marine invertebrates, and 20 percent of plants.

Of the six Native high harvesting households in Tatitlek in 1993/94, three were middle-aged men, with an average age of 50 (households B, C, and E, Table 10). The other three were young men with an average age of 27. All but one of the Native men were born and raised in Tatitlek. Two of the households were composed of conjugal pairs (B and G), another was composed of an uncle and his nephews (F), and three of the households were nuclear families of between 4 and 7 people.

As can be seen from the Table 10 income varied between the seven households. Household E reported the highest income of the group, and of the entire village. This was also the only household in the community to report income from commercial fishing. Household D and G reported the second and third highest incomes in the group, and they had the fourth and sixth highest incomes in the community. The other four households reported incomes below the community average.

Table 10. Tatitlek High Harvesters, 1993/94

HHID	Total Pounds Harvested	Income Rank ¹	Salmon	Fish Other than Salmon	Land Mammals	Marine Mammals	No. of Resources		
							Harvested	Given Away	Received
A	1418	18	686	40	302	340	14	10	8
B	3026	13	1894	0	43	1002	13	11	16
C	1644	15	226	419	289	643	18	11	7
D	1594	4	1033	100	216	233	12	12	7
E	2624	1	754	163	663	756	26	23	19
F	906	9	176	426	173	82	18	6	22
G	2721	6	499	367	1585	0	16	13	5

Source: Alaska Department of Fish and Game, Division of Subsistence

Financial resources are critical in purchasing and maintaining subsistence equipment; they enable hunters to finance extended trips, which are critical for successful harvesting in Prince William Sound, but it is not the only criteria for success. The harvest of a large and diverse quantity of resources also requires experience. How these factors are combined within a household influences how much that household harvests. For example, both hunters in households B and E are middle-aged men with considerable experience who own good equipment and boats that enable them to travel considerable distances to reach rich hunting grounds. The hunter in household C is also an experienced hunter, but he owns a skiff, which limits his ability to travel, and in 1993 he did not have the financial wherewithal to purchase a larger boat. In contrast to these more experienced households are households A, D, and F headed by young relatively inexperienced hunters with a minimum of equipment. Their harvests are both smaller and less varied. Household F made the smallest harvest. These young men had no boat to pursue subsistence activities but relied on others who did have the equipment.

Another point is that the aim of these high harvesters is not to make their households more independent but to maintain interdependency between households based on the cultural ideal of sharing. This is reflected in both the diversity of harvest and number of resources given and received by household B and E (see below). Although household B had, in terms of total pounds, the largest individual harvest in the community it received five more resources than it gave away. Household B also specialized in harvesting marine mammals that it distributed throughout the community. As the hunter pointed out, he was the 'killer for these other folks' and he hunted "seals to perfection" (Seitz, field notes 1992). In sum, though major acts of production could be performed within the singular nuclear

¹ This column shows the how these 7 households ranked in household income compared to the rest of the community.

household, consisting of a husband and wife, with or without children, all households are interdependent and tied into a network of distribution and exchange.

DISTRIBUTION AND EXCHANGE OF SUBSISTENCE RESOURCES

We have looked at harvesters more or less outside of their social context. In this section we look at how those hunters are tied into the community through mechanisms of distribution and exchange. The two primary mechanisms for the exchange of subsistence products within and between Alu'utiq communities in Prince William Sound are general sharing and ceremonial distribution.

Sharing

Sharing is the allocation of economic goods and services without calculating returns. Most sharing takes place within small-scale groups in which face to face interaction has occurred for a long period of time. As we saw in Chapter 3, sharing is embedded within the social framework of the community. In Tatitlek and Chenega Bay sharing is also integral to an ethical system that is characteristic of most Alaska Native villages. For example "Meat was common property, divided equally among villagers" (Birket-Smith 1953:96) and

just as the inhabitants of a house hunted together so they ate their meals in common. There were no special cuts or sections, and neither chiefs nor whale killers received a greater share than anybody else. At present all persons who come down to the beach in Chenega when a sea lion has been caught will get their share, but no others.... [T]his more or less communistic attitude is most pronounced in the winter season. In the fall when they still have their summer wages from the canneries each family lives by itself. During a starvation period it is allowed to take meat from any cache; afterward the owner of the cache will be informed, but he cannot claim payment.

A Tatitlek elder recollected that "years ago, meat when it was caught it would be given away to people here in the village. Everybody would get a taste of bear meat. Any kind of meat, seal, bear or goat" (Stratton field notes, 1990a). The conventions described by Birket-Smith and the Tatitlek elder still hold today in both villages. Catches of sea mammals and salmon are shared community-wide by the hunter or fisher. Out in the field a dead seal belongs to the hunter who shoots it (Seitz field notes, 1994). If not butchered in the field, the hunter butchers the animal on the beach in front of the village, takes the parts he wants, which he distributes to his relatives (Stratton 1990:110), and then, through word of mouth, lets everyone else in the community know they can go down and take their share. If an elder expresses an interest in a certain piece of seal or sea lion, such as the flippers, the hunter usually drops that piece at the elder's house.

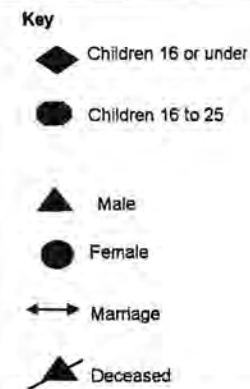
One of the prerogatives of a successful hunter, in both Tatitlek and Chenega Bay, is to give away parts of his catch and to refuse something when offered is considered an insult. In particular instances,

Figure 14, Tatitlek Households 1987-1993: Levels of Harvest, Use and Sharing

Extended Family #1

Extended Family #2

Household G			Household H			Household B			Household I			Household J			Household E			Household K			Household D			Household A			Household F			Household L			Household M			Household N			Household O			Household P			Household Q			Household R					
Elder			Elder			High Harvester 1993			Elder						High Harvester 1993						High Harvester 1993			High Harvester 1993			High Harvester 1993															Elder			Elder								
No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources			No. of Resources					
Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give	Harv	Rec	Give						
87	6	23	10			26	14	23	6	11	10	18	6	8	28	5	23	11	19	11	15	6	13	13	7	7				8	18	9	8	24	4	24	13	23	7	22	21	17	25	15	1	5	1	87					
88	5	19	12	10	21	6	22	8	18	11	12	6						13	5	7	15	5	13	13	5	10				3	1	1	10	18	16	6	2	6	4	14	1	12	4	2	3	1	2	88					
89	3	14	3	6	4	1	9	2	10	6	7	3						18	3	13	3	9	6	10	1	8	4	0	0	9	8	2	10	17	15	12	16	8	4	17	9	11	7	9				89					
90	2	11	1				12	7	12	7	9	6			22	13	18	22	13	18	12	7	12	12	5	10				15	32	14	10	27	20	10	15	14	4	13	2	9	18	20				90					
91	1	16	6			13	16	11							26	19	23	12	7	12	12	7	12	14	8	10	13	14	16	11	7	6	7	17	3	8	22	16	3	8	1	6	13	2				91					
93																																																93					
Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest			Total Harvest		
87	166					3,363			344			2,371			7,882			801			2089			1,255						485			570			4,002			288			0				87							
88	195			977		5,841			1,034									951			3546			953						1,700			1,380			1,658			198			15				88							
89	45			397		1,555			91									898						728						106			496			38									89								
90	75								258									2230			43			1,668			1636		26	197			478			1,175			46			3,330						90					
91									1,275												1593			1,418			906		405	700			648			3,491			311			703						91					
93	60					3,025									2,624															209			420			56											93						
												Limited Entry Permit						Crew License												Limited Entry Perm			Limited Entry Permit																				





such as successful mountain goat hunt, a group of hunters share the catch among themselves. The hunters then redistribute their shares to family members. There appears to be no formal way of dividing up the meat. The boat captain butchers and divides the meat equally among the hunters. Land mammals are treated differently than sea mammals. Hunters most often take land animals to their house and butcher them while sea mammals are butchered down at the beach.

To document the extent and patterns of sharing that take place in a community the Division of Subsistence asked households how much they gave away and how much they received. Figure 14 combines genealogical information with household harvest data and reports on giving and receiving resources. Two extended family networks are represented in the table. Network 1, for example, is composed of households G, H, B, I, J, E, K, D and A. The remaining households, F, L, M, N, O, P, Q, and R makeup extended family two. The residents of each house are identified by a symbol, i.e., triangle, circle etc. Each line connecting a symbol represents a connecting link between household members and different households. Households that reported high harvests, household headed by elders, and those involved in commercial fishing are also identified. The numbers below the genealogical chart represent the amount of resources each household harvested, received and gave away in a given year. Total harvests for each house are also recorded.

As is readily apparent every household illustrated in Figure 14 received at least one resource. Resources shared include salmon, deer, harbor seal, herring spawn on kelp, halibut and berries. The figure also demonstrates that elders, while no longer productive, receive the lion's share of the harvest in recognition of their past productivity and as a demonstration of respect. Note that every elder, more often than not, received more resources than they harvested or gave away. Note also that in certain years some elders, such as households P and Q, act as re-distributors. The figure also demonstrates that, as in the past, the community redistributes subsistence foods. In household N for an example, household members consistently gave away more than they harvested, indicating that they are passing shared resources.

The pattern of sharing extends to other communities within and outside the sound. For example, there is an especially close connection between Tatitlek and certain families in Cordova, whose elder members were born in the village. At certain times of the year men from Cordova use their commercial seine boats to fish for rockfish, or take shrimp and crab. When successful they bring large portions of their harvest to Tatitlek. They radio ahead to the village to announce their arrival and upon arrival most of the men in the community go down to the dock to take a share of the catch.

Ceremonial distribution

In the past the ceremonial distribution of food occurred on certain prominent occasions. There were "first event" ceremonies, such as when a boy killed his first game or someone built a baidarka or

baidar. At each of these times a feast was held (Birket-Smith 1953:110). Two annual ceremonies, the Feast of the Dead and the Bladder Ceremony attracted attendance from villages throughout the sound. Both ceremonies involved dancing, feasting and the distribution of goods. The Feast of the Dead commemorated those who had died (Birket-Smith 1953:112), while the Bladder Ceremony, as noted above, was more concerned with maintaining good relations between humans and animals (Ibid:114).

Earlier in this century "potlatches" were held at different villages in Prince William Sound (John Kalshnikoff 1979). These were organized by the chief and held in the fall once all the winter preparations were completed and before people went trapping. Other villages were invited for a celebration that lasted for a week or ten days. The participants played games, shot bows and arrows, ran races, tried to break specially treated seal bones, danced, and sang. The largest "potlatches" were held at Nuchek and attended by people from Tatitlek, Chenega Bay, and a village on Montague Island. During the ceremony "loads of stuff" including clothes, bows and arrows, and beautiful paddles were given away, but by whom and for what reason is unclear.

Today there are no potlatches. Russian Christmas and New Years are the major religious holidays when households ceremonially distribute goods and food. Non-religious feasts that involve the entire community take place at "potlucks" in the school. Ceremonial feasts also occur on birthdays and Russian Orthodox name days. On a person's birthday, for example, the host of the party will invite family and friends to share a meal and some birthday cake. On occasion the host orders a cake or Chinese food from Valdez and has it flown in by plane. Thanksgiving and Easter are other occasions for the ceremonial distribution of food.

RESOURCE HARVEST AND USE PATTERNS

Salmon

Salmon are an important source of food for the people of Tatitlek and Chenega Bay. In 1993/94 every household in both communities reported using at least one species of salmon (Fall et al.1995). The most commonly harvested species for subsistence use are sockeye and coho salmon. Most salmon are caught with subsistence nets, but some are also caught with rod and reel. Salmon for home use are also taken out of commercial catches. The majority of salmon is frozen but people also smoke, salt, can, and kipper them.

There is no formal method for distributing salmon. When a subsistence fisher brings in a large catch people are free to take as much as they want. In the summer of 1990 a fisherman from Tatitlek brought in about 200 salmon he caught in a subsistence net. These were the first fish of the season. The fisherman's cousin helped unload the fish and then took ten for himself. The only reason he took ten was because that was all that would fit into his smoker. Several elders also took fish and some of the heads. Altogether about ten people helped themselves. The fisherman's wife, her sister-in-law, and the

sister-in-law's husband worked for three days preparing the rest of the salmon. First they filleted each fish and then cut the meat into long strips, which were soaked in saltwater brine for about forty minutes before being hung up in the smokehouse. It would take up to seven days to smoke the fish. Some would later be canned after being cured for a few days.

Up until the 1960s, people left the village for fish camp, where they stayed until they had prepared enough fish for the winter. Fish camps typically included smokehouses, a tent or shack, and drying racks (Stratton 1990) and were owned by families or geographic groups (Birket-Smith 1953:96). Often two households would share a fishing site and smokehouse. Two men with families would form a partnership that consisted of a father and son, or brothers-in-laws, or two brothers, or a man and his son-in-law (John Klashnikoff 1979). Some smokehouses were used every summer while others used only occasionally, depending on the strength of the fish run. If something happened to the salmon spawn because of a drought, change in water chemistry or temperature, the run could fail. Short streams are more prone to problems of this sort than others. The timing of the runs varied from stream to stream, but with careful planning it was possible for a family to utilize the runs of several creeks in succession. A Tatitlek person remembered that his

Dad had fish camp in Landlock Bay. We would go out there and he would go hunting. We would cut fish and stay there a week. Not too many reds or kings in those days. Years ago we started kippering and canning salmon. Keep the tail on and cut them, never slashed them. When we split fish we took out the back bones and guts, cut off the fins. Years ago [we] smoked the back bones with alder or alchuk or mixed half and half. Years ago they picked up drift wood off the beaches.

Later on Native people started fishing for the companies, then they would bring home enough for a barrel at a time. We put half a dozen barrels of salted salmon away. We brought home fish at the end of the week or bring home bright salmon to salt. It was a lot of work. My dad, he would work that smoke house day and night. Dad would heat the fish with hard smoke for about three days, then take them out and sun dry them. When the fish were split they would curve in. Then he would cut the tails off and open them up, when they were dry the fat would start molding. He would smoke 400 or 500 fish. He would take them and spread them all out and my mom and younger brother and me would take a cloth and wipe off the mold and tie them into bundles for storing. We put them in the attic. In the fall they would fillet silver salmon from the head to tail and put it in a dry warm place until it was mushy and then scrape the meat off the skin and make patties out of it (Stratton, field notes 1990a).

Among traditional salmon products, rarely made today, were dried and fermented salmon eggs, called *peanuk*, and salted and pickled fish heads. To make *peanuk* a person squished salmon eggs and added water until the eggs were milky. The water was then drained off and more water added until the eggs hardened up. The eggs were then stored in seal stomachs or barrels until they fermented. The fermented eggs smelled like "limburger cheese" and could be mistaken for spoiled food as is related in this story told by a Tatitlek elder about when she was a young woman and had just gotten married.

Just after she got married a woman decided to clean out the smokehouse to please her in-laws. She found wooden barrels of *peanuk*, there were five of them, four filled up, and one half full. They were really heavy but she managed to roll them out of the smokehouse so they could be thrown away. Then she found seal stomachs full of salmon eggs hanging from the rafters. These smelled bad too and she cut them down and laid them on the barrels of *peanuk*. At this point her father-in-law came out of the house and asked what was she doing? The woman said she was throwing away all that stinky stuff that had gone bad. "Put it back!" he said. After that he wouldn't talk to her for two months. When she got back into the house her mother-in-law asked her if she would like to try some seal stomach and she loved it (Simeone, field notes 1990).

Instead of *peanuk*, people now usually make salmon strips, which are kippered.

You strip fish, hang them on "S" hooks and brine them. We hung them with the grain of the fish going up, or else they will peel off. Years ago we let the fish drip over night, smoked them about three days. If the sun was shining, we took them back out into the sun. Today we smoke the fish to kipper them. We use a special board to measure the fish and then put them up in jars. For a pint jar use one teaspoon of water, one teaspoon of Wesson oil, $\frac{1}{2}$ teaspoon of salt and put them in the pressure cooker for 90 minutes. We salted the heads in brine using rock salt (Stratton, field notes 1990a).

Herring

People in Tatitlek and Chenega harvest both herring and herring roe on kelp that is herring eggs that have been laid by the female herring on seaweed. Tatitlek and Chenega people consider herring to be special. Herring are considered the beginning of the food chain. Everything feeds on them from birds to sea lions to humans. People look forward to collecting herring roe on kelp because the harvest signals the end of winter and renewal of all life in Prince William Sound. Often the arrival of herring coincides with Russian Easter. As herring begin to spawn along the shoreline the entire village goes down, almost in unison, to the beach to pick "weeds."

Today herring are harvested using nets but in the past they were taken with a variety of gear. One Tatitlek man said,

We used to go out and snag for herring, use a treble hook on a long twine, threw it out. Starting about January the herring used to be thick out here. We used to go and dip net with a skiff, fill up a dip net with herring. Now you can't get them anymore. Now you only get herring in the springtime. Before they were ready to spawn they were real easy to get. We salted them and gave them away. Everybody had fried herring (Stratton, field notes 1990a).

Herring are a delicate fish that cannot be frozen over a long period because they get rancid. Today they are mostly eaten fresh. In the past, people salted and pickled them in brine and smoked them. One person remembered that when the herring started to spawn her grandmother "would go to the beach, pick up spawned out herring, big ones. Stay down on the beach and cut them, cut one side put the heads together." The fish were scaled, cut open, and hooked through the head, while the fillet was

left hanging to be air-dried. Driftwood was used to make smoke. After the herring were smoked people stored them in burlap bags for use later in the winter. Herring were also salted for pickling.

Today most of the herring roe on kelp harvest takes place around Tatitlek since few herring spawn in western Prince William Sound. Roe on kelp is a significant food because most people like to eat it and the roe is easy to harvest and requires no equipment except a good pair of hands. Tatitlek residents usually harvest large quantities of herring roe on kelp. In 1987/88, for example, Tatitlek households harvested 132 gallons of roe on kelp and in 1988/89 they harvested 443 gallons, or 16 gallons per household (Stratton 1990:79, 80). Roe on kelp is gathered off the rocks at low tide and salted in buckets or frozen. Most gatherers prefer to pick spawn on seaweed known as "popweed" or fucus while others pick spawn on hair kelp. Most of the spawn is eaten fresh but some is frozen and sent to relatives in Cordova or Chenega Bay (Stratton 1990:103). One man said "herring eggs are more plentiful here in Tatitlek (than around Chenega)" so people from Tatitlek shared with their relatives in Chenega. He went on to say "one time I went bear hunting and came back with herring spawn in June. Those we put in brine or in a freezer. I like them better after they have been frozen in brine. After freezing them, just thaw them out at room temperature. After they are thawed, pour boiling water over them."

Other finfish

Besides salmon other species of finfish contribute to the diet of Tatitlek and Chenega Bay people. Species harvested include rockfish (locally called snapper), halibut and cod. In the 1993/94 season Chenega Bay households, on average, harvested 115 pounds of rockfish, 129 pounds of halibut and 35 pounds of cod (Seitz and Mirgaglia 1995). Tatitlek households reported slightly lower harvests for the same time period. Harvest quantities per household were 24 pounds of rockfish, 52 pounds of halibut and 14 pounds of cod (Seitz and Fall 1995).

Today people in the village fish for rockfish and halibut using rod and reel or skates, which are lines with a number of hooks attached that lie on the bottom of the ocean. Halibut can be caught using a fishing pole off the ferry dock in Tatitlek, but people also go out in skiffs. The halibut fishing described below took place in October.

A day before fishing we baited 150 halibut hooks with partially frozen herring and hung them on the edge of a black plastic bait tub ready to be snapped on the skate. The hooks are between four and five inches long with a short piece of line and a snap used to attach the hook to the skate line. The next morning, after drinking coffee we drove down to the beach on the four wheeler, dropped off all the gear and then drove over to the dock to get the aluminum skiff. We piled line, anchors, the bait tub and hooks, a rifle, gaff, and two dogs into the skiff and took off. Although it was October, the day was sunny and bright, and the seas relatively calm. But when we got to the outside of Bligh Island the wind had picked up and the sea was starting to roll. The captain decided that was too rough to set the skate on the outside so we went around to the inside of the island and set off from a small point in fairly shallow water. First we tied a line to

an anchor and buoy and threw the anchor over the side. We then snapped the baited hooks to a line that lay on the sea floor. At the end of that line we attached another anchor. The skate was positioned so that the line ran away from the beach. We had forgotten to check the tide book so did not know whether the tide was coming in or going out. If it was coming in, the incoming surge would drag the skate back on itself and push the boat into the beach. Luckily the tide was going out.

Around 3 o'clock in the afternoon we set off to pick up the gear. The wind was now blowing from the west with small whitecaps. The captain told me to pull the gear so he could run the motor and keep the skiff headed into the wind. He insisted that I coil the line carefully, otherwise it would become tangled and takes hours to straighten out. I began to pull the anchor, while trying to keep my balance and concentrate on coiling the line neatly into the bottom of the skiff. Finally I got the anchor up, untied it and began pulling the hooks. They are fastened to the line with metal snaps, so you need one hand to hold the line and another to unsnap the hook.

At first we only got empty hooks but I could feel a strong pull on the line. Suddenly, swirling up from the green depths was an enormous halibut, its white belly glistening in the diffused underwater light. As it surfaced the halibut thrashed about and the captain leaned over and carefully placed the muzzle of his rifle on the head of the fish. He had to be careful not to shoot a hole in the boat and it took three shots from a 22-magnum rifle to kill the fish. I then gaffed it in its head and together we pulled it aboard. We also hauled in two more halibut, several rock fish, and approximately 30 sand sharks which varied in size from one to four feet. These we threw back. When we reached the end of the skate the lines were stowed and we headed home.

The captain dropped me off at the dock and I drove the four wheeler and trailer to the beach where we unloaded the skiff. We hauled the fish up the captain's house, butchered them and cut the meat into chunks small enough to fit into zip lock bags. A number of people stopped by and admired the catch. The largest halibut had a growth over one of its eyes and people commented, saying "its from the oil spill, we should take a picture and send it in." No one did and it was generally agreed that it would not hurt the meat. Throughout the rest of the day, whenever we met someone on the street, the captain promised them some fish, so by the time we had finished processing all the fish, most of it had been given away to people.

Gray cod were also caught with a hand line. One man said that black cod are good but "it is deep sea fish." The best part to eat is the stomach and the liver, which makes a cod fish poke. "Take the stomach, clean it out, turn it inside out. Clean it. Before it is inside out, take the long stuff out till it is smooth. Turn it right side again. White liver is fine. If the gall bladder is broke then it is no good. Stick it in the stomach and boil it for 45 minutes." Codfish eggs are baked in the oven with butter or bacon and seal oil.

Deer

Sitka black-tailed deer are an important source of red meat for people living in Tatitlek and Chenega Bay. In the late 1990s the deer population had increased substantially after several years of warm winters with little snow so they are fairly easy to come by. In 1993/94 average household harvests of deer amounted to 164 pounds in Tatitlek and 52 pounds per household in Chenega Bay (Seitz and Fall 1995; Seitz and Miraglia 1995).

Today all deer meat is frozen. It is fried, made into stews or braised. Before people had electricity they salted the meat in 15 or 20 gallon barrels, a layer of meat, salt, another layer of meat. Before it was eaten the meat was soaked to remove the salt. Deer meat was also canned with carrots and potatoes, "just like a can of beef stew."

Most deer are found on islands in the sound so hunters use skiffs and boats to hunt them. The former are used close to the villages, while the latter are used to travel across the broad expanse of open water to places like Montague Island. Before deep snow drives the deer down to the beach, hunters usually walk into the hills in search of animals. Once the snow comes they can patrol the beaches looking for deer.

Deer were introduced into Prince William Sound in 1916 and have expanded their range to every habitable island in the sound thus increasing the opportunities for hunting. In 1940 Hawkins Island and Knight Island were declared deer refuges by the Forest Service, as was the Eyak Lake drainage. Initially, the Forest Service did not allow deer hunting and all fishing boats were searched for illegal deer. Several elders from Tatitlek remember when they first started to hunt deer.

I came home in 1946 out of the service. There was deer on the islands, Hinchinbrook and Montague. I went over there in 1947. The Forest Service was putting big bales of hay above the high water mark, and piles of rock salt. I bought a 30 foot boat after I came home. Three of us went over and took 10 or twelve deer. Then we found out there wasn't a season. When the Forest Service quit feeding them the deer went inland. They went out on their own. Deer meat was something different. We had deer pretty much every year since then.

Another elder recounted,

The first deer hunts happened in the late 1940s or early 1950s. We deer hunt on Montague Island. There wasn't that many deer in Prince William Sound. We had power boats then, commercial fishing boats or people would use skiffs. After we got better boats more people could go in one boat than in a skiff or bidarka. We looked along the shore line or walked up in the hills. We did more of our hunting along the beaches. Now, in modern times, we still hunt along the beaches in the winter (Stratton, field notes 1990a).

Mountain Goat

Goat meat is highly prized in both Tatitlek and Chenega Bay. In 1993/94 no hunter from Chenega Bay made a successful goat hunt. In Tatitlek the per capita harvest for goat was a little over four pounds. Since then there has been a resurgence of interest in goat hunting, and hunters in Tatitlek have requested that harvest limits be increased to reflect their uses of goat in the past when more were harvested. Goat hunting today is not that much different than in the past. Hunts still take place in the fall and are always undertaken by a group of men.

In the 18th and 19th century, the Alu'utiq people of Prince William Sound utilized the goat wool for bedding and later learned from the Russians how to weave the goat wool into blankets. The ethnologist Birket-Smith (1953:23) reported that people cooked goat meat in the goat's stomach, which had been turned inside out. Hunting occurred largely in the fall and winter. While a goat occasionally wandered down to the water's edge, to be picked off from a boat, most goat hunting required considerably more effort. One elder talked about his father hunting goats.

My dad was a goat hunter. He started in the fall time, didn't hunt in the summer. Hunted in late fall until the snow brought them down. Old timers knew where the goat were. If they were down they shot them from the boat. My dad let me goat hunt when I was 11 years old. This one goat, we climbed up after it, father helped me calm down, had to be calm before I could shoot. We used to go with a skiff to hunt in Fidalgo, Landlock Bay, or Jack's Bay. I loved to climb. I went goat hunting three years ago with boys from the village. Earlier days had more goat, always had goat meat, used to salt it.

You climb the mountain after you see the goat. Got five goats one time. We didn't pack them down because the Mountain is straight up and down. After we shot them we cut the windpipe and blew into the lungs then tied up the lungs. Rolled the goats down to the river, when they got to the river they floated out to the lagoon. We brought them home and salted them for the winter.

We use the stomach lining of the goat, wash it and hang it up to dry. We put it on toast in the oven. It's white like tallow. Used to be 4 or 5 guys go hunting and bring goat into the village. Now if anyone gets it they hide and store it and don't share. Years ago we used to get goat, hang it in the wood shop and freeze it, or salt it, or smoke it, and dry it. A lot of times I remember they hung it up like beef, just kept it there. Now no matter what we have it goes into the deep freeze (Stratton, field notes 1990a).

Bears

During the late 1980s Tatitlek and Chenega hunters occasionally took black bear but in 1993/94 no Tatitlek hunter took a black bear (Seitz and Fall 1995). One Tatitlek person attributed his decline in interest to the fact that he ate a lot of black bear when he was growing up. Brown bear are not hunted for subsistence purposes but currently one man in Tatitlek has a business guiding people on bear hunts.

Despite the general disinterest in subsistence bear hunting, confrontations with bears, especially brown bears, are often a topic of conversation when men get together.

Prior to the 20th century, bears figured prominently in the Alu'utiq culture of Prince William Sound. Bear fur was used for boots and mittens, and for bedding and coats. Black bear intestines were used to make rain gear and the bones to make tools such as awls and chisels. During the early part of this century both Chenega and Tatitlek hunters hunted black bear for their meat and fat. Bears were hunted mainly in the spring and fall, when they were out of their dens, but they were also taken during the winter. Then someone had to go into the den and kill the bear. One elder remembered;

Spring was the best time we used to hunt bear because they were in better shape. They were fat and had better tasting meat, right after hibernation. We used to go to certain places, Lagoon, Galena Bay, and Jacks Bay. We went to the beach and waited for a bear to come out of the sleeping area. If you were lucky you got one. Had to sneak after it in the brush, or the bear would come down on the beaches and eat kelp. That was the easiest way. Older days we used to go out in the winter time and look for bear dens. Only once I remember getting a bear out of the den in the winter time. Go in there, shoot the bear, drag it out (Stratton, field notes 1990a).

An elder said killing a bear in the den left a scent and caused bears not use that den for years so most hunters killed them after they came out. Active dens were considered a valuable resource and a good hunter might return to the same den year after year (Stratton 1990:46). Another elder recollected;

Killed my first bear when I was 13 years old. First time I had to row 2 miles in a little skiff. Talked myself into going alone. We lived in Galena Bay, summer season, putting up fish for the winter. First bear I got we were putting up fish for the winter in the fall time. It was a sunny day and I went up to the lagoon, sat down and waited for a bear. Seen one in the lagoon. Had a 30.30 that held seven shots. Snuck up on the bear and hit it with the first shot. It ran into the bushes and started hollering. I went up to it, and it was still kicking. Emptied the other 6 shells into it and drug it out to the skiff. There was an outgoing tide and I couldn't get into the skiff. Kept trying to get into the skiff, finally got home at 11:30 that night, folks were worried, glad to see the bear (Stratton, field notes 1990a).

Almost every part of the bear was used. If a person wanted to use the stomach they had to split it open, clean, wash and boil it. People also ate the heart, liver, kidney, tongues, feet and fat. Bear grease was jarred or rendered and sometimes eaten with smoked or dried salmon.

One elder said "don't go look for bear den when your wife is pregnant. Men with pregnant wives won't catch a bear in the den". This same elder said that black bears are unusual animals, different than any other because they can fool people. The reason is that black bears don't always die when you shoot them and their bodies are not always there when you go to retrieve them.

Harbor Seals and Stellar Sea Lions

Sea mammals have consistently been an important part of the diet in both Tatitlek and Chenega Bay. During the 1980s and 1990s the sea mammal harvest in both communities was composed almost entirely of harbor seal and to a lesser extent sea lions. For 1993/94 the Tatitlek household harvest of harbor seals was 149 pounds, while the sea lion harvest was 20 pounds. In Chenega Bay the household harvest for seals in that year was 90 pounds and 35 pounds for sea lion.

Seal Hunting Techniques

An elder described the technique for sighting a rifle to hunt seal. The V of the iron sight was filed down. When the hunter aimed at the head of a seal in the water he sighted down the rifle putting the bead at the bottom of the V and the head of the seal on top of the bead. The idea was to place your shot just below the water line. This was called *Imlayuk* or "giving it a little water." Today most hunters use rifles with telescopic sites but still aim below the water level.

Today seals and sea lions are hunted from skiffs, often at low tide, "because there's more shallow water to catch the seals in, the hunting is better." During the winter and spring seals and sea lions are fat and tend not to sink once shot. If they do sink the hunter uses a weighted grappling hook to get them. Those few that are lost are usually lost during very cold and snowy weather.

One elder discussed the technique for taking seals and how those techniques changed after the introduction of outboard motors.

We would wait for the seals to swim close to the shore. We had a special point where we waited for them to come out. When they got close enough you would shoot them, row out and pick up the seal. We had to retrieve the seal before it sunk. We had a hook to tow the seal back to land. Most seal hunting occurred in the spring. Young seals are easier to catch, they stay afloat longer. Years ago hunters went over to Port Wells in the spring, Chenega too. Had camps set up all over. We hunt seals for two or three weeks then head back home and get ready for seining season. This was all with bidarkas, they were quieter to hunt with in the water and among floating ice. Wooden skiffs ran into the ice and were noisy and we couldn't get close enough to shoot. We stopped using bidarkas in the 1940s. I remember that one guy from the cannery at Ellamar had a skiff and kicker and that started skiff and kickers. Then we would zip off, faster than rowing and easier than bidarkas. Bidarkas were around at Chenega until the 1950s. In the winter we still used bidarkas because it was harder to get gas and easier to hunt short distances. But we got adjusted to hunting with skiff, didn't have to row or paddle, didn't have to camp out, come back the same day. Otherwise we would go and stay 3 or 4 days camping out under trees in the winter time. Snow and the north wind. Shooter still stays on the land, but one person can hunt seal with a skiff. With a skiff you can pick up the seal faster (Stratton, field notes 1990a).

Up until the 1971 the federal government paid a bounty on harbor seals, and the hunter had to turn in the nose or snout. One man remembered he went out "in the spring and even the winter. Got \$2 a snout. Had to go to town and fill out an affidavit. Traded it for groceries." Another man recollected that he and his dad hunted seals for the bounty and rendered the fat into oil to sell in Anchorage for \$25 for five gallons.

Preparation of Seals

Seal and seal parts are used much the same way as reported by elders when they were growing up. Besides the meat and ribs, people make use of the intestines, the fat, flippers, tongue and liver. "Grandmother would take the lungs, blow them up with seal fat that had been rendered out, and then tie the lungs up and bake them....Years ago you ate what you could get. Go on a seal diet. The young generation doesn't eat like we used to. I'll survive when the younger generation goes hungry." A few women still braid "seal gut," as it is called locally, and one woman has taught both her granddaughter and grandson. Here a woman tells how to braid seal intestine:

I learned how to braid seal guts. First you clean the guts out real good. Go a little ways, put slits in the sides of the gut and keep running water through it till it clears. Then get strips of seal fat. You work with three fingers. You work the gut around, braiding it. To me the hardest part was cleaning all that out, then getting the braiding started. It is easier with just the gut, and harder with the seal fat. You boil it and eat it, one couple in Chenega would smoke it (Stratton, field notes 1990a).

Today people still render seal fat into oil, which is sometimes used as a condiment. "Just get the fat, cut it into small pieces. After it is washed put it in a pot on the stove and let it cook slowly. If I have someone who will give it [seal oil] to me I don't do it. The first time I did that I had the biggest mess. Went through pots, pans, and jars. As it renders out scoop it into jars, put it into the fridge. Used to store it in the shop where it was cool and dark. It can get rancid after a while." Seal oil is also a commodity, which some people sell in Anchorage.

Sea Otters

Alu'utiq people do not eat sea otter, but they do harvest the animals for their skins. Because of intensive commercial harvesting, sea otter populations had, by the end of the 19th century, drastically declined throughout the American north Pacific. As a result, in 1911 the federal government ordered a total ban on sea otter hunting. Since then sea otter populations have recovered to the point that now many people living in both Tatitlek and Chenega Bay view them as pests and competitors for several marine invertebrate species. One hunter said he hunts sea otters all year round and doesn't like them

because they eat up all the clams and octopus. However, in 1993/94 no one in either Chenega Bay or Tatitlek reported taking a sea otter.

The government has lifted the ban on sea otter hunting. Now Native hunters can kill the animals, but they can only sell the furs to other Native people or use the fur for "traditional" handicrafts. They can hunt from October or November through March and April. One man said that he judges them by the color of their fur. If they are dark he'll keep them because that is "what his mother wants." She makes parkas and hats. Another man said that he hunts sea otters both to limit their predation on the mariculture project and for their furs.

Marine Invertebrates

Archaeological excavations in Prince William Sound indicate that a wide variety of marine invertebrates were used historically by Alu'utiq people, including clams, mussels, cockles, snails, chitons, sea urchins, and sea cucumbers. Like herring roe on kelp, an important attribute of invertebrates is that almost anyone can harvest them and very little equipment is needed. Today most of these same species are used in both Tatitlek and Chenega Bay. In 1993/94 marine invertebrates made up 4 percent of the total harvest in Tatitlek and 5 percent in Chenega Bay. People harvested clams, tanner crab, chitons, octopus, and shrimp; they also harvested oysters from their local oyster farm. All of these resources, except the oysters, once played a much larger role in the diet of Tatitlek people. Clams and cockles, for instance, once contributed more to the local diet but people say that predation by sea otters has made these invertebrates hard to find. Uplift during the 1964 earthquake has also had an influence on local clam beds (Stratton 1990). People say that as the land moved up the clams popped right out of their beds and lay on the surface. After the *Exxon Valdez* oil spill people tended to think the reduced abundance of invertebrates, especially octopus was due to the spill (Seitz and Fall 1995:v-18). People were also advised by the Oil Spill Health Task Force not to harvest or eat shellfish from the beaches where you could see or smell oil on the surface or subsurface. Unlike vertebrates that can metabolize hydrocarbons, invertebrates take up and retain hydrocarbons and other contaminants and retain them for long periods. In the late 1980s, octopus contributed most to the total harvest of invertebrates and was used by almost every household.

Berries

A majority of people in both Chenega Bay and Tatitlek use berries. In 1993/94 Chenega Bay households reported that on average they harvested a total of 28 pounds of plants, 26 of which were berries. In that same year Tatitlek households reported harvesting, on average, 44 pounds of plants, 43 of which were berries. In both communities the predominant berries harvested were blueberries,

salmonberries, cranberries and currants. Berries are frozen or processed in jams and jellies. In the past people used to dry them in the smoke house until "they looked like raisins." Berries are also added to "Eskimo Ice cream" which is a combination of boiled and flaked silver salmon, shortening, sugar, a bit of cold water, and berries.

Birds and Eggs

Historically the Alu'utiq people of Prince William Sound used a wide variety of birds for meat and for their skins, some of which were made into clothing. Today waterfowl continue to be an important part of the subsistence diet for Tatitlek and Chenega Bay people. In 1993/94 Tatitlek people harvested a total of about 212 pounds of birds. In Chenega Bay the harvest was about 60 pounds. Species harvested include scoters or "blackducks", golden eyes (called "copperheads"), mergansers or "sawbills", mallards, pintails, and buffleheads or "butterballs." Hunters also kill Canada geese, although they are not particularly abundant. Waterfowl are hunted in the spring and again during the fall.

In the spring when large concentrations of ducks gather to eat herring spawn, hunters drive their skiffs or boats close by and fire into the flock. Sometimes ducks are shot from shore as explained in this story. A Tatitlek man remembered that when he was young watching an old man stalk a flock of ducks feeding close in shore. He decided to follow, but when he got to the beach the old guy was gone. Then, out of the corner of his eye he saw movement and there lying on the beach was the old man with his shotgun pulled tight against his chest. Each time the ducks dived underwater the hunter rolled toward the ducks, and each time they surfaced he stopped. Finally, when he was within 20 yards of the ducks the hunter stopped, waited until the ducks dived and then stood up. When the ducks surfaced the old man let them have it with his 12 gauge shot gun.

Another man recalled that ducks were hunted as a substitute for bear or deer meat and that he used either a 22 or a shotgun. "Any kind of ducks we could get," he said "mostly black ducks and copperheads, goldeneyes, mallards, few geese. Use a skiff or just walk. Wait for a breeze to drift them ashore. That was one of our change meals, or bottomfish or codfish, halibut or red snapper. Meat wasn't the only thing we ate."

Along with ducks people harvest a variety of eggs including seagull eggs, arctic tern eggs, goose eggs, and duck eggs. In Tatitlek and Chenega Bay most of the households surveyed in the late 1980s harvested seagull eggs. During 1993/94 Chenega Bay people reported harvesting less than one dozen wild bird eggs, in contrast Tatitlek people reported a harvest of 347 eggs or just over a dozen per household.

SUMMARY

In 1998 the Alaska Department of Fish and Game, Division of Subsistence conducted another round of household surveys in Chenega Bay and Tatitlek (Fall and Utermohle 1999). This research revealed that the average per capita harvest in both communities was near or above pre-spill levels. Every household in both communities used, harvested, and shared at least one subsistence resource and the harvest remained diverse, with households using on average 21 kinds of resources (Fall and Utermohle 1999:F2, M2). In Chenega Bay salmon provided the majority of the harvest (39 percent), followed by non-salmon fish (37 percent), large land mammals (16 percent), marine mammals and (3 percent) vegetation, marine invertebrates (2 percent), and birds and eggs (1 percent). In Tatitlek the majority of the harvest was marine mammals (40 percent), followed by salmon (23 percent), non-salmon fish (16 percent), large land mammals (11 percent), marine invertebrates (5 percent), vegetation (2percent), and birds and eggs (2 percent). One reason for the low sea mammal harvest in Chenega Bay is that the expert hunters have died or left the community in recent years and have not been replaced.

But subsistence is more than harvest quantities. When a student asked why he hunted and fished Mike Totemoff (2000) replied:

We need that to live with, you know, that is the way we were brought up, that's our life style. [We] cannot go to the grocery store, super market any time we feel like. Wish we could, if there were jobs available again, but in order to subsidize for the cash flow all this that was needed to buy all this stuff we got to go out and kill our own animals and kill our own meat and stuff, you know. So its lot cheaper and better and we enjoy that, I enjoy it you know, because I am doing [it], go for a lot of the elders and every body else who needs meat. My dad he used to out and kill and load up the boat with deer from Montague and Columbia. Load up them little sea lions you know, baby sea lions, load up the whole boat up and bring it down to the beach and everyone would come down with a knife and take a sea lion. That's subsistence use.

Do you enjoy hunting and fishing or would you rather get your food in a different way?

Oh No, I enjoy hunting and fishing, it's my life style, and I like it, that's what I do.

Chapter Six

The Relationship Between Humans and the Natural World

The closest we can come to reconstructing the pre-colonial Alu'utiq view of the relationship between humans and the natural world is through reference to information collected by Birket-Smith from Alu'utiq elders in the 1930s, about 150 years after the earliest known contact with Europeans. All of the references in this section to the traditional Alu'utiq world-view are based on this retrospective reconstruction and they are part of the traditions of both Tatitlek and Chenega Bay.

THE TRADITIONAL ALU'UTIQ VIEW

In the predominant European world-view, as expressed in the Bible, animals exist to be under the dominion of humans. The traditional Alu'utiq view was very different. Power in the human-animal relationship belonged to the animals. They must be shown respect, or they would withdraw the services they provide to humans. Like other hunters and gatherers the Alu'utiq believed the world to be animate. Each animal and most other natural objects had an "owner," whom the Alu'utiq referred to as *sua*, literally "its man." The owner could appear in human form, "just like us." Animals also had a soul. When the animal died, its *sua* also died, but its soul lived and returned as a new animal provided that the remains were treated in the proper manner (Birket-Smith 1953:120). The statement that an animal's *sua* dies when the animal is killed does not seem borne out by the Alu'utiq stories concerning *sua*. It seems more likely that each *sua* owned many animals, in some cases many species and was not dependent on the survival of a single animal.¹

In the traditional Alu'utiq view, nature was cyclical. When a hunter killed a seal, for example, he was not only killing the same kind of animal his grandfather hunted and killed, he was killing the same animal. He was able to do that was because his grandfather treated the seal appropriately and respectfully. He accepted the seal when it offered itself to him; he killed it quickly and efficiently; he did not laugh at the animal's death convulsions; he treated the remains properly and did not waste any of the meat. If the hunter's grandfather had mistreated the seal, it would not now offer itself to the hunter. If this hunter did not treat the seal properly, it would not offer itself to his descendants, and they would go hungry (Birket-Smith 1953). In appropriately disposing of the remains of animals the hunter ensured that the animal would be reincarnated, and also ensured his own continued luck in hunting and fishing.

In addition to treating the animals properly, the hunter himself had to be worthy of the animals. For example, a sea otter hunter had to observe certain rules in the conduct of his own life in order to be successful in the hunt and to be the sort of man the animals will offer themselves to. Stepan Brizgaloff, a Native of Chenega, told Birket-Smith that his conduct had been judged by *Nunam-sua*, whom he had met

¹ This explanation is in line with the cosmology of other Native peoples such as Athabaskans who say that each animal species has a "boss" or guiding spirit that looks after the animals and is offended if the animals in their charge are mistreated.

three times. *Nunam-sua* was the spirit who ruled over all of the animals of the land and could give hunters all of the animals they wanted. The first time she appeared to Brizgaloff,

She told him that she saw him every time he was out hunting and accompanied him all the time. In fact, he was always hunting and got what he was after. She took him by the wrist and said that there was nothing about him that the game was afraid for and asked him if he wanted to get more game.

Brizgaloff answered that he would like to get more game. Then she turned his hand around, palm down, and wet her finger and drew a circle on the back of his hand, saying: "There is where the animals you are going to get are staying." The circle was full of animals. She told him that he would always make money and again asked him to take some of the animals from her clothes, but he declined (Birket-Smith 1953:122).

She enjoined him from speaking of her to women, or before many people, and told him he was a lucky man and lucky to have seen her. She added, "I am going to let you see me again if you take care of yourself (Birket-Smith:1953:122).

As demonstrated by this story, in the traditional Alu'utiq view, a hunter's luck is dependent upon the kind of person he is and how he lives his life. *Nunam-sua* appears to Brizgaloff because she approves of his behavior. She offers advice to help him improve himself, and to avoid pollution, and thereby improve his luck in hunting. She grants him assistance, but that assistance is dependent upon his following the rules she sets. When he pleases her by following the rules, she promises not only that he will remain lucky but that his children will have good luck in hunting as well.

A key component of being a good, and therefore worthy, hunter is showing respect for the animals. It was important that hunting not be treated as a sport. The ideal was for the animal to suffer as little as possible, and the hunter was not to make light of the animal's suffering.

As among other Eskimo groups, the animals from the land were kept strictly separate from those from the sea. Sea otters provided an interesting test of this rule, because they could be killed either on land or in the water. There were different rules for treating those killed on land rather than in the water. Once the animal died, there were rituals to be observed:

When a sea otter had been killed, the whole hunting party would not drink water till they got ashore, even though they had water with them. As soon as the sea otters had been landed, they were skinned and lined up in a row on the beach, and then fresh water was poured out in their snouts (Birket-Smith 1953:32).

Following the necessary rituals, and the butchering of the meat, the animal's remains were disposed of appropriately to ensure their reincarnation, and continued good luck in hunting. The proper treatment of an animal's remains varied from species to species. For example the skull and bones of a sea otter should be buried in the ground if the animal was killed on shore. If it was killed at sea the remains must be sunk into the water. Otherwise there would be no more sea otters (Birket-Smith 1953:33). The bones of the mountain goat were never to be used for tools. They were to be left on the spot where the animal was killed under a rock, and not buried (Birket-Smith 1953:38). The skull of a bear should be buried at the place where the bear was killed, facing inland so that the remains might turn into a new bear (Birket-Smith 1953:38).

Fish intestines should be thrown back into the water so they may turn into new fish. If they drift ashore, the soul of the fish, which remains in the guts, will die and the fish will not come to life again (Birket-Smith 1953:42). No meat of the whale should be wasted. If some meat was thrown away and eaten by maggots, the whale's soul would feel offended, and there would be no whales for a long time afterwards (Birket-Smith 1953:36).

The Alu'utiq believed that in addition to having a *sua* or guardian spirit, everything had its own song. This included animals, as well as plants, rocks, bodies of water, and even body parts. To know the song of a thing was to have some power over that thing. Knowing an animal's song ensured good luck in hunting that animal.

One means of securing good hunting luck besides the amulets were the songs, *piscrsunat'v'n*, learned from the animals themselves.... A song of this kind was kept as a deep secret, as the hunter would lose his luck if it was learned by another person. On the other hand, one could teach it to a son or a brother (Birket-Smith 1953:118-119).

The shaman had a role in ensuring the success of the hunt and also in curing the sick. They were revered by the Alu'utiq for the good they did, but also feared for their power.

...the shamans were the intermediaries between the ordinary people and the spiritual world, and to that end they had one or more spirit helpers at their disposal. However, once the connection with the spirits was established, it was founded upon a co-operation on so to speak equal terms and not upon a state of dependence of the shaman and superiority of his assistant spirits...Both sexes might be shamans, and a female shaman did not lose her power during her menstruation periods (Birket-Smith 1953:126).

THE INFLUENCE OF RUSSIAN ORTHODOXY

As pointed out by the anthropologist Ann Fienup-Riordan (1990), Alaska Native people found it relatively easy to embrace Russian Orthodoxy partly because of the compatibility of symbolism in the two cosmologies. Both Russian Orthodox teaching and the traditional Alu'utiq worldview included good and evil influences that war over the control of humans. This convergence may be one of the reasons Russian Orthodox theology was readily accepted by the Alu'utiq. Whatever the case by the later 19th century Russian Orthodoxy had become a component of Alu'utiq culture. But Christianity did not simply supplant the old animistic religion; rather the two became fused. The following story related by Ed Gregorieff, an elder from Tatitlek, links traditional ideas about the sea otter and black bear with the Biblical figures of Cain and Able and the concepts of good, evil, and temptation.

There was a story of four hunters in a bidarki. That was the biggest bidarki they ever made, was four holes, and they was outside of Montague, and the weather started to set in, and it started raining and blowing on them and they got caught in that. So, they was in the weather for quite a while before they come into shelter, into a bay. As soon as they got out of the weather it was still raining hard and they come up to a long beach, and right in the middle of the beach, above the high water mark was a fire burning, and it was out to where there would be no one else that they knew of that would be out where they was at, and the old

guy...they always had a captain on there with the knowledge of hunting [and] weather...the old man looked over the situation. He couldn't see where there could be a baidarka storage, or why anybody would want to start a fire so much in the open like this. You know, it kinda made sense. When you're building a fire, you're trying to have a sheltered areas, you know, it's pretty much not in the middle of the front of the woods, it's kind of in a bight or someplace where you could shelter yourself, but this fire happened to be right in the middle of the beach, right in the open.

He says, "Be careful with that fire up there. That isn't a fire that human beings made". The [young] guys were cold and wet and there was no way they could make a quick one of their own, so they wanted to go on up, and they were arguing with him, so he said, "Alright, if you guys wanna go on up and see the fire", he says, "when you get up there, I don't think you're gonna find it there but", he said, "if you wanna go up there, get out of the baidarka when you get on the beach, turn your back to it, and back up to that fire. Don't look at it, just back up to it, and go on up." This is the part that kind of throws it off balance a little bit, but this guy told me it was the truth.

So, these three young guys...the old man, he stayed in the baidarka and waited for 'em, because he knew they were going to come back and they'd have to find a more sheltered place to get themselves, and these guys backed up to this fire, and when they got up to where it was, they couldn't find it. Now, what he told 'em before they went up, he said..."What I think...land otters are the ones that's making this fire there, not human beings." They came down. They come back, and they were scared because they couldn't figure out where such a big fire would disappear [to] so quickly, and they come back, and the old man says...well...he didn't argue with 'em, because he'd already told them, and those people when they...they only speak once. They say it once, and that's it, if you don't believe 'em, why they ain't gonna argue with you or try to convince you no more (Gregorieff 1987).

When they returned to their village, the young men told other elders they had seen. The elders were not surprised by it. Gregorieff interprets the meaning of the story as follows:

it's kind of a way that the type of life they was leading, that the temptations are there, but not to always believe them, you know. Especially on something like that there was always the good and bad. There was always the devil and always the Lord, and the devil was always tempting you in some way or another, and that was one of the temptations that the devil had in front of 'em, and it was lucky that this old man knew what he was doing, and let 'em go their own way to find out. There's a lot of different ways you're gonna be tempted which is not to your benefit, and not good for you. He wanted 'em to learn it, he had his task there, and he let 'em go ahead and find it out for themselves. When they got home and then the other older people told them this, it pushed it a little further, about being they're gonna, during their life spans, sometime or somewhere, they are going to be tempted, this way it would maybe put 'em to an accident or maybe even lose their lives if they are not careful, and able to recognize that is a form of a temptation, coming from the bad side, from the left side, whichever way you want to put it (Gregorieff 1987).

Gregorieff then goes on to explain why it is significant that the old man in the story believed the fire to have been built by land otters in particular:

A land otter is one animal, amongst the Native hunters, was...besides the black bear...black bear was next...that was an animal that would pull tricks on you. A

lot of different ways. An animal, according to the good book...you see these two brothers...I don't know if you read the Bible or if you heard the words of the Bible about the two brothers that one killed the other, Abel and Cain...they claim a land otter will appear before you...which ever one of them that killed the other was the sinful one, and they said a land otter will appear as him a lot of times to try to throw you off some way, or tempt you where you might hurt yourself, and a black bear is another one that will do the same thing, they say a lot of times.

There was a guy here that committed suicide, and suicide according to our church is the greatest sin that a person could ever commit, and one day there was a land otter come swimming right along the beach, and I was one of them...we walked over to the point and followed him all the way back. There was two of us. I had a twenty-two hornet, and the other guy had a thirty-aught-six, and we shot at that thing just like this. We were good shots we never missed a seal, neither one of us, but we couldn't hit that animal, and it was not only us, there was guys strung all the way from that point to this point and this land otter just swimming back and forth, and one of these old guys come down to the beach and gathered us up. He says, "You'd better leave that thing alone", and this guy that committed suicide his name was [name] and the guy told us, he says "That's [the suicide] that is coming back to his homelands in the form of that land otter." He was reaching back to the same thing, [to] the story I was telling you (Gregorieff 1987).

Gregorieff goes on to say that hunters were instructed by their elders always to be careful when hunting land otters or black bears, because these animals would try to trick the hunters into harming themselves. He also said people hated to eat either of these animals because there was something evil in them. He said they ate them anyway, but not often.

In Gregorieff's story we see a blending of Russian Orthodox and Alu'utiq traditions. Animals that have a reputation for intelligence and trickery, the land otter and black bear are linked to the evil figure of Cain. These animals may appear as Cain in order to trick a hunter into doing something that is wrong or harmful. Gregorieff himself refers to these sorts of beliefs as "superstition", and he suggests Russian Orthodox teachings may be responsible for them.

They were a superstitious people in a lot of different ways. I don't know if it's because the bible was pounded into 'em so heavy by the Russian teachers down there at Nuchek. They're awful strong Catholic people. The Russian Orthodox [are] Catholic, you know. They confess and have Holy Communion, and are strong believers and those older people in them days, they really believed. They mighta drank a lot and fought a lot, and everything, but when it comes to church, well, they were strong believers (Gregorieff 1987).

CONTEMPORARY ALU'UTIQ VIEWS

People in Tatitlek and Chenega Bay no longer talk about reincarnation of animals or animal-owners. While these ideas may still exist in the background, people speak of ecology, the environment, and the food chain. This is a reflection of people's exposure to western science taught in the public schools, to science programs that appear on television, and to research programs instigated by the *Exxon Valdez* oil spill

restoration process. The injunctions against waste are still repeated, but in the context of allowing animals to thrive and reproduce, rather than treating them with respect so they will reincarnate.

Gary Kompkoff, Tatitlek Village Council President, often talks about how important herring are to the traditional Alu'utiq lifestyle in Prince William Sound. The herring arrive early in the spring, a time when the winter's stores of food are running out and people are getting hungry for fresh food. The herring spawn on the seaweed (*fucus*) in the intertidal zone close to the village of Tatitlek. The people harvest the herring as well as the herring spawn on kelp, but they are not alone. Seals, sea lions and ducks feed on the herring and are always more plentiful where herring are found. For the people of Tatitlek, the arrival of the herring signals the start of the harvest season and the continuation of the traditional way of life.

With the introduction of commercially raised and processed foods, wild resources no longer make up the entire diet of the Alu'utiq. However, wild foods are highly valued, especially by elders, for both their nutritional and cultural values. A Tatitlek elder said that switching to store bought food is less healthy. He mentioned the chemicals in commercially raised stock to make them grow faster and bigger and said that that can't be good to eat. He said "I've been craving seal, and when I get some, I know it will be like medicine to me". He talked about how in the old days, if a woman was unable to breast feed her child, they gave the baby bits of seal fat to suck on, and the baby would thrive on it (Miraglia, field notes 1991).

The Alu'utiq today still see their relationship with the wild animals of the region as quite close. This special relationship extends beyond those animals used for food or fur. In 1991, there was a lot of concern in Chenega Bay over sick and dead eagles found in and around the village. A Chenega elder talked about how there were many fewer animals around following the *Exxon Valdez* oil spill. He said that really hurt subsistence, but not only subsistence. He talked about "animal friends" that were also missed. He said that there were not as many songbirds around. He specifically mentioned a type of bird that he called "scissortails" (arctic tern) and that there used to be a lot of them on a rock down by the creek that runs through the village. He said that the year of the spill these birds ate salmon fry out of the creek, and they had not been around since (Miraglia, field notes 1991). Talking about the food chain in connection with the oil spill the elder said he was concerned about reports that the oil would be cleaned up by micro-organisms; small organisms are eaten by larger ones and finally by humans (Miraglia, field notes 1990).

The same elder, then in his late 60's, talked about things his father taught him about hunting. One of the first things he was taught was always to leave his campsite clean. He was also told never to butcher seals at a haul out. You can tell where the haul-outs are because the rocks are smooth there. If you do butcher a seal on the haul-out the seals won't come there anymore, because they can smell it. Seal hunters from Chenega say the same thing about the spilled crude oil—that the seals smell the oil and will not come back to those beaches (Miraglia, field notes 1992).

LOCAL CONCEPTS OF NATURAL RESOURCE MANAGEMENT

As just reviewed, to show respect, Alu'utiq harvesters avoided waste and never killed animals for sport. While most Alu'utiq no longer talk about respect for animals or speak of the animals as offering themselves, the principles of avoiding waste and only killing animals when needed are still very important. Ed Gregorieff, an elder from Tatitlek, talks about the importance to hunters of making every shot count:

...it was always the way the native people hunted in them days, it was a shame to waste a bullet, if you missed with a bullet even, and there was somebody else witnessed it. It was a shameful thing to [do]. They were poor, and that was something that they had to spend money for to get, so they was awful careful that they made every bullet count, for something, the meat especially to bring back. They [had] to make sure that there was something for the pot when they come home. They always got as close to what they was hunting as they possibly can have. They snuck, they rolled, they crawled, and did everything to get as close as they could to make sure that they did. They were good shots, too, all of 'em. I seen this old Fred Tedishoff kill nineteen seals out of a box of twenty [shells]. Well, most of 'em had to be that way, and they learned young (Gregorieff 1987).

What is also implied here, though not explicitly stated, is that to minimize the animal's suffering each should be killed with a single shot. Under the traditional Alu'utiq world-view, it was important that the animal be made to suffer as little as possible.

John Klashnikoff, who was raised at Nuchek and Makarka Point, expresses the relationship between the Alu'utiq people and animals of the region as a kind of stewardship.

They took care of them, they took care of the ground, they took care of the things on it, their home...the fish creeks. They wouldn't even let us hit birds, you know. I mean, even crows, "Leave them alone they're not bothering you. If it comes a time that we want them, that we have to eat it, then," he says, "we'll get one. Let 'em fly around, they want to be alive like you are. Don't destroy nothing. Let it go," he said, "we'll have more of it then. If we protect it, we'll have lots. If we destroy it, we won't have any" (Klashnikoff 1979).

While some of the principles of the traditional system are preserved in this philosophy, the idea of humans as stewards over the animals represents a significant inversion. In the traditional Alu'utiq world-view, the animals and their owners were in charge. It was necessary for humans to follow the rules set up for them by the animals or suffer the consequences. Seeing humans as stewards of the natural world puts man on top, with the power either to conserve or destroy. Makarka Chemavisky instructed Klashnikoff on how to be a steward.

At Makarka Point, now, there was about three or four smokehouses at one creek, and that's all we needed. We didn't have to go to another creek. We didn't need to, you know, and it's what they told us. Old Man Makarka, he says, 'If you have enough fish here in one creek to feed us, this whole little community here, four—five families there's no use going to another creek to get fish. Leave that fish stay there,' he says, 'we got enough in our own creek, but,' he told us, 'just take what you want. Don't kill 'em and throw 'em on the beach or just go ahead in the creeks, you kids and start clubbing 'em or anything. Don't destroy the creeks, if there's trees and boulders in a creek, then leave that stuff in there,' he says. "Nature put that there for the protection of the fish. You take the fish, what you

need, and leave the rest alone'. We used to want to pull the stumps out of the creek, so we get a better chance to get the f[ish] 'No, you don't need to do that. There's plenty of fish away from that stump or rock. 'You leave that there,' he says, 'If it's there, God put it there to protect that fish. If you start in cleaning the creek out, our fish will disappear, they won't spawn no more,' he says 'the water will wash the spawn away, and another little fish, trout [or] birds will come and pick up them eggs before they get a chance to spawn, and you're gonna kill the creek off for us. But if you just leave it alone, the fish can hide in there and their eggs will hatch. Just leave it the way it is, nature put it like that (Klashnikoff 1979).

Inherent in this particular lesson of stewardship are the boundaries and rules set by nature. While Alu'utiq elders were teaching that humans had dominion over the material world, they were also discouraging arrogance and hubris. Klashnikoff described what happened when the rules set by nature were ignored.

I watched what's happening here in Prince William Sound all over, Fish and Game [at what] they call Humpback, that used to be full of fish so they was gonna make it real good. They took tractors up there and started plowing. [It] was as smooth as this table, oh it was a beautiful creek, not a stick or a boulder in it, just clear water running down it. They were gonna clear that up...They clean 'em out, take tractors out, they pulled them stumps out. Man, that [was] something. I know now why them old people told us to leave that stuff alone. It was put there...nature put that there (Klashnikoff 1979).

The result of this hubris, according to Klashnikoff, was the decline of the run of salmon into Humpback Creek.

The ideal, as expressed in the following quote from Nick Kompkoff of Chenega, was for people to have as little impact on the land as possible.

I'd like to remind you that any site that you find that was used by the people, it has always been as far back as I can remember, and far back...my Dad and my Grandpa...is that when the people leave an area, they always try to make sure that was the way it was before we ever moved there, except for the notches on the trees, and the stumps. That's the way you will know that area, the more stumps, the more notches, you know that area was used quite extensively before, and this is one of the things you should look for in looking at any of the areas, how much they were used, historically by our people. There may not be any other evidence of us being there. If you [go] back to Chenega now, it's kind of hard to believe that there was a village there before, sixteen years ago. It's all grown over, and that's only sixteen years ago (Kompkoff 1980).

All Prince William Sound villages had defined hunting and fishing territories. For example,

Those people here, from Chenega they took in the whole Knights Island, and they went up Port Wells, clear up to the head of it, they went down this way, clear over to Port Bainbridge. They went all on the upper side of Montague. That's from Chenega country alone that's these later generations. So, when you take the older [earlier] people, they go much further (Klashnikoff 1980).

Communities defended their territory:

They had to watch that mainland. That's what they had most of these where they settled all over, kind of, you could watch. Even when this Nuchek was in full swing, they kind of watched the whole shore, you know. They watched it all the time, because...everywhere, this was all of their hunting grounds, see. They

protect it. Those people from over here, they were always coming out, I guess they were fighting over land, hunting rights and stuff (John Klashnikoff 1979).

Within the community territory, families and individuals claimed trapping territories and salmon streams for their exclusive use. The rules guiding the establishment of these trapping and fishing areas were practical, reflecting the carrying capacity of the land and the resource populations.

That was your trapping district. That way they won't be crowded, because if you and I was on a creek here together, and we put a trap line there, and we used the dead falls type...you put an awful lot of dead falls here, so we can cover a lot of territory, you and me, and then if we got another family in there, why heck, we can take up a lot of place. There wasn't any room for another person in there. That way they kept it for themselves. Each year they use that same creek, drying fish out of it. Wherever they put a smokehouse [it was] for two families, because they got a lot of fish. They got to dry a couple thousand fish to a family, but that's the fish after it goes in the creek. They don't dry fish from the salt water, because there was no way for them to catch them. They wait for the fish come in the creek, and then they go in and they fish and dry fast. [After] 'bout two days they got dried fish. Two families to a creek, why there's still plenty left. They don't clean it out (Klashnikoff 1979).

However, the hunting of other mammals was not restricted by family or personal territories:

...when you trap fur...mink, and stuff like that, but when you choose the place where you are trapping, the line there is yours, nobody else's, but like hunting...land otters, sea otter, or seal, you're free to go anywhere, and use what the other people was using. That wasn't belongs to nobody because, see the animals was travelling all the time and you hunt whatever you [see]. That kind [of] hunting was open to the whole Prince William Sound...(Klashnikoff 1979).

Today, the villages of Prince William Sound have to work within the existing framework of dual state-federal management of fish and other wildlife. Residents are seeking an active role in management decisions, representing their interests both as stewards and as users of the resources. This is demonstrated by their increasing involvement on the federal fish and wildlife advisory councils, by the formation of groups such as the Alaska Native Harbor Seal Commission and the Chugach Regional Resources Commission, and the push for co-management agreements between Alaska Native groups and the state and federal governments, including the hiring of natural resource specialists and the development of a natural resource program.

Chapter Seven

Expressive Culture

This chapter examines contemporary Alu'utiq culture as expressed in community and regional gatherings. For the most part events that the entire community participates in are related to the Russian Orthodox Church. For this reason, this chapter contains considerable information about Russian Orthodox religious celebrations. Much of this information comes from an interview with Mary Kompkoff of Chenega Bay. She talks about religious holidays as they took place in Old Chenega before the 1964 earthquake and as they take place today in Chenega Bay. The chapter concludes with a discussion of a cultural revival in the Prince William Sound villages, including a description of work in archaeology, the teaching of Alu'utiq dialects, native dance groups, and the Nuuciq Spirit Camp.

As we have said the Russians introduced Christianity into Prince William Sound in the late 18th century. Little is known about the influence of the Russian Orthodox Church during this early period. In 1867, when Alaska was sold to the United States, the Church lost vital support from the mother country and had to withdraw from many areas. Because the priests were no longer able to visit many villages on a regular basis it was left to the residents to carry on the traditions of the Church. Local people became lay readers in some cases powerful figures within the community (Birket-Smith 1953:132). Today there are Russian Orthodox lay readers in both Tatitlek and Chenega Bay, and an itinerant priest visits the villages once or twice a month.

ANNUAL CYCLE OF RUSSIAN ORTHODOX HOLIDAYS/OBSERVANCES

Most community celebrations are Russian Orthodox religious holidays. There are also secular occasions but these occasions tend to include a religious element. The majority of residents of Chenega Bay and Tatitlek are members of the Russian Orthodox faith. Even those residents who are not members of the Church participate in many of the holiday observances. The Russian Orthodox Church follows the Julian Calendar, as opposed to the Gregorian Calendar in general use in the United States. For this reason Church holidays are not observed on the same dates as they are by members of other Christian churches. There is some continuity between holiday celebrations as they were observed in the past and how they are observed today.

Lent (the 40 days preceding Easter)

Lent was strictly observed in Old Chenega:

...sometimes Lent would come early...you know...depending on when Easter's gonna be, and we didn't look forward to it much, especially us younger people. And, our reader made us know, I grew up knowing, [I] felt Lent, I knew when it

was Lent. We had a lot of people, close to a hundred maybe, when I was growing up, and it was quiet, very quiet. We observed Lent. We had to. Everything was taken away from us, especially the little boys, bow and arrows, you couldn't use your bow and arrows. You couldn't even play with your boats on the beach, your slingshot...everything that little boys played with, you know. We were not supposed to be hollering around outside. Baseball was prohibited, because you do a lot of hollering and playing around. All that had to stop, and we all looked...we always looked forward to when Easter was coming (Kompkoff 1997).

In place of the prohibited activities, children were encouraged to do more chores and help out around the village.

If any elders needed water, we'd go and pack it for 'em, or clean the village and we got used to it. It was something for the kids to do since [we] couldn't be out playing around, and of course, you'd sneak around and run and play tag or something...if you got caught doing stuff like that the reader would have you kneel down in front of the whole congregation, during service (Kompkoff 1997).

The adults also gave up things during Lent in Old Chenega:

You would never see anybody drinking, no parties, no nothing. Parties of any kind were prohibited. Which still today, I myself don't want to drink. When I used to smoke cigarettes I used to give that up too, when I could, and I remember several times I've done it for forty days. Along comes Easter and I'm smoking a cigarette again (Kompkoff 1997).

Hunting was also prohibited during the first and last weeks of Lent.

Certain foods were prohibited during Lent. Meat was number one, especially for the first week of Lent. No meat all during the first week. It was fish, just sea food and your produce, your rice, your potatoes, stuff like that (Kompkoff 1997).

Many people in Chenega Bay still observe some of the restrictions on foods during Lent, to a greater or lesser extent. Some will give up favorite activities for Lent. Today it is mostly considered a personal decision.

Good Friday

Today there is a night-time service on Good Friday. Everyone dresses in dark clothing. During this service there is a candle light procession around the outside of the church. The entire congregation circles the church three times in a clock-wise direction, following the *plaschanitsa*, which is "a large cloth icon of Christ Entombed and covered with a winding sheet" (Sweetland Smith 1994:212). The *plaschanitsa* is placed on the church altar for veneration from Good Friday through Holy Saturday.

Holy Saturday and Easter Sunday

In preparation for Easter residents of Old Chenega used to clean the village, and would spread clean gravel from a particular location around their yards "to make them pretty" and around the church to "make it real clean" (Kompkoff 1992).

Church services begin on Holy Saturday:

...starting on Holy Saturday, there's a long service...you go to church [with] your dark clothes on. During that service there, it changes. They take the dark coverings off from the church, some ladies take their dark coats off. We still do here. Change into light. I can remember this one lady that she used to help in the choir [she had a] real strong voice, and she was a real pious church-goer, and believed in everything. She dressed...even her socks were white, long white cotton socks, she was just...everything white, she'd...you'd never believe that...you know...wearing a dark bandanna, and a black coat, and black socks over her white one, she just go out to the entrance of the church, and take off all her dark clothing. When they sing a certain song during that service, that's when you change that. Take the dark coverings off from the church, and the ladies all dressed in light clothes. Then the whole church is just bright, and that's [the] beginning of Easter coming. Midnight services, Saturday. Easter midnight (Kompkoff 1997).

Once Easter came, all the Lenten restrictions were lifted:

Then Easter [would] come, oh Joy! The boys got their slingshots, and their bow and arrows and their play boats, and I finally get to chew my bubble gum. That was prohibited during Lent. Oh, the services were beautiful, all three days. Easter Sunday we'd go to church...church bells, and then after they would be ringing all day long, Easter Sunday (Kompkoff 1997).

In Old Chenega, people would bring their *caliche* and Easter eggs to the church to be blessed. *Caliche* is a traditional sweet Easter bread, which is decorated with sweet, brightly colored frosting. It is baked for Easter, and is eaten throughout the forty days following Easter. Sometimes people would also bring baskets with chocolate Easter bunnies to church to be blessed.

We used to greet each other with a red egg, [and say] "Christos dos rasietya," and then you answer "Whyistuin dos rasietya." [Meaning] "Christ is risen," and then you answer, "indeed he is risen (Kompkoff 1997)."

These Easter traditions have been continued in Chenega Bay and Tatitlek. In addition, people today bring the foods they have prepared for Easter dinner to be blessed as well. Red eggs are exchanged. This is a continuation of an old tradition. The priests require that the eggs be dyed red, but the respondent did not know what the symbolism behind that is. Nor did she know the symbolism behind the *caliche* or the eggs themselves.

Ascension (the forty days following Easter)

Ascension is the day Christ was taken up to Heaven and signals the end of Christ's time on earth and the end of the Easter season.

Easter you celebrate for forty days. Again every weekend, you go to church. And you sing the songs, all the songs if you want. Until the fortieth day that's Ascension, that's one of the twelve major feast days. On the eve of ascension we go to church and we sing all the Easter songs. They're all sung. Until next Easter you don't hear them again. You don't hear them on the Ascension Day. They're not sung any more after [Ascension] Eve (Kompkoff 1997).

Advent, "Christmas Lent" (the 30 days preceding Russian Christmas)

Just as Lent preceded Easter, there was a period of preparation preceding Christmas. However, it was not as strict as Lent.

When I was growing up...we were supposed to fast from November. Again, no meat. Of course, living in a village, what else could you do? You had to live off the land, and nobody want[ed] to eat fish all the time. But that again was supposed to be observed, prepare for the birth of Christ, we were told. No partying, no drinking. It was different [from Easter Lent]. Christmas Lent we are supposed to put aside our earthly cares, [or what] we could do without, just to be preparing for the birth of Christ (Kompkoff 1997).

Christmas

Tatitlek and Chenega Bay celebrate what is called American Christmas on December 25 but they celebrate Russian Christmas over three nights, January 7, 8 and 9. On the first day of Russian Orthodox Christmas an icon is carried around to each house for veneration. At each house, the names of the departed are read, and a song, "Many Years of Long Life", is sung. This song may be sung in English, Slavonic, or Alu'utiq. Following the veneration of the Icon, there is a brief church service and people then prepare to form a house-to-house procession. The procession follows a star that represents the star of Bethlehem. The star is an elaborate wheel that is made especially for this holiday. The center sometimes contains an icon while the outside edge of the star is adorned with garlands, and twinkling Christmas lights. There are large stars carried by the adults and a "little star" for the children. As in the past, "starring" now takes place on three consecutive nights. Each night begins with a church service at 5 PM. Everyone follows the star from house to house, singing Christmas songs, eating and competing for gifts laid out at each house. The festivities may last well into the early morning hours.

In Old Chenega, I can remember, we had three stars. There was one for the kids, and that didn't go too long. The kids went like one o'clock in the afternoon, and then the ladies started at five, then the men started at seven. There was so many people, you know, a lot of men, a lot of ladies. [So each star went to every

house], all three nights, every house. And it was fun. Sometimes we'd meet up, the ladies' star and the men's star met and we'd sing outside (Kompkoff 1997).

In Chenega Bay there is no formal procession, people are occasionally reminded they should not leave one house to go to the next until after the star had gone. There are other rules, too. People are not to smoke or drink alcohol in the presence of the star, and dogs and cats should be kept in another room while the star is in the house, because the animals might damage the star, and "that wouldn't be good."

Each night the celebration becomes a little more elaborate with more lavish giveaways. Finally it reaches a point on the third night, where people are almost wrestling with one another, fighting over the goods laid out at each home.

We serve food the first night, its kind of just a little bit quiet. The second day maybe you put out a little more food, or you give out a little more, you sing a little more songs. That's what we're supposed to do, but seem like we sing all the songs in every house all three days. Then the third day, you go all out (*laughing*), you sing all the songs all over, in every house in Chenega, and you give everything out of your house (Kompkoff 1997).

Money is often taped to the walls or floor, sometimes in denominations of fifty or one hundred dollars. Guests struggle with one another to get as much as they can. During the gift distribution, the woman of the house will often get inside the pantry, periodically opening the door and tossing out food and goods. It is important to keep your head up, because not all of the goods thrown are soft. In some houses, the ladies will open their freezer and throw out frozen roasts. This is different than in the past because, as Mary Kompkoff points out, in Old Chenega people were more isolated.

It's so modern anymore that it's not like it was when I was growing up. Everything was prepared. Not like today, [when] you [can] just go to the store and buy it, [like] a lot of the pastry stuff. And we didn't have [a] big feast like turkey and ham, it was like a big pot of soup, stew or something, if anybody fed you anything, or it could be just coffee and juice, or whatever, but not in every house. It was just giving food, giving out stuff in Old Chenega. But today, we've got more ideas. It's just a little bit different from before the earthquake. Although I think we would eventually still be [doing things] the way we do now, we'd learn, we would know more because it's different from before. We'd get our mail boat every two weeks, and there were times when we couldn't get our stuff that we want[ed], apples and oranges for instance, was the big thing. Maybe the mail boat won't be here before Russian Christmas. Today, we got Jim Air, we'll have it flown down from Anchorage (*laughing*). Not in Chenega then, our airplanes weren't flying around that much. We had to think ahead and prepare, way ahead of time, buy a whole bunch of candy, and apples, and oranges and those were the mild things to give out on [the] first day, stuff like that. And the older folks, the elderly, like my uncle and his wife were pretty elderly then, when I was small, and I didn't like going to his house, because he never gave hardly anything good. Bread wasn't goodies to me then. But as I grew older I had to learn and accept the way things were (Kompkoff 1997).

The day after Russian Christmas the stars that were used in the celebration are taken to the cemetery. Food and other goods are laid out on the graves and the star is brought out, Christmas songs are sung, and then every one tries to grab as many of the goods laid out on the graves as they can.

The tradition of starrng originated among the Eastern Orthodox in the Ukraine but in Alaska the tradition has been altered by the Alu'utiq. For example, in the Ukrainian tradition a fixed star is attached to a pole and carried at the head of a procession of carolers who went through the small villages singing Christmas songs (Fienup-Riordan, 1990). The Alu'utiq star is not fixed but is spun around and kept in motion throughout the celebration. Also, the excessive eating and elaborate gift-giving central to the Alu'utiq version is not part of the Ukrainian celebration. Nor do the Ukrainian carolers visit at each home to sing.

Masking

In Old Chenega Russian New Year's was an occasion for a celebration called masking that consisted of going house to house over three consecutive nights after the conclusion of starrng. According to Mary Kompkoff, masking was done right up until the year of the earthquake. This tradition has not been resumed in Chenega Bay nor is it practiced in Tatitlek. Mary thinks part of the reason it has not been resumed in Chenega Bay is that the younger people have been told that if they go masking they need to get blessed before they can go back to church. Since there is no priest or learned reader resident in the new village, they would have to wait for a priest to visit before they could be blessed. In the past those who had masked during the preceding weeks had to both jump in the water in front of the village, and be blessed by the priest during Theophany or Epiphany, which is the day Russian Orthodox celebrate the baptism of the Christ Child. Neither of these acts was considered sufficient alone.

In the following paragraph Mary Kompkoff describes the masking as it took place in Old Chenega.

There was masking after Russian Christmas, [it] would go on for ten days. Masking every night. Masquerading and masking. Oh, it was something, the guys would...it was always guys...ladies sometimes would [do] what they call[ed] masquerading, it was just putting a big sheet or something over their heads, but the men...the guys that went masking did the whole thing, wear different clothing, and really disguise themselves. Some bought [masks], some made their own. I could remember clearly how, when they started masking like, around the tenth of January...they would have to be disguised, really disguised. Then after the fourteenth, then they could take their covers off if they wanted to, after they were done masking in that house. They went from house to house. They danced and just do funny things, like, kind of acting. No talking, they would never talk, but it was mostly dancing. It was fun. It wasn't to frighten people. And the meaning of masking I really don't know. They didn't do it for money or whatever. Just a tradition, part of our tradition we had...and it's gone now (Kompkoff 1997).

New Year's Eve and New Year's Day (January 13th and 14th)

As with most holidays in Old Chenega, the observance of New Year's Eve and New Year's Day included Church services:

Traditionally, that I know of New Year's growing up in Old Chenega with our reader, he was a real learned reader, and of course we'd have church service. Early in the evening, like seven o'clock on New Years Eve, that's a service of some kind. A lot of reading. Midnight it was a very short service, not as long as the earlier, and to bring in the New Year they would have three gun shots after each "Mnaugaya Leita" [Many Years], to bring in the New Year. You sing the song three times and at each time, the guys with the guns would stand on three corners, and then the fourteenth it's another church service in the morning (Kompkoff 1997).

There was also a traditional New Year's play, which fell out of use before the earthquake.

We had a thing years [ago] when I was a little girl, I remember, there was a[n] Old Year and a New Year. There was a celebration. [It] was always after church, after the midnight service. The New Year would be dressed in real white or bright, beautiful colors, and just smell good and, you know, just fixed really nice, and the Old Year was just real stinky and dirty and would get thrown out. So it was a real celebration and we never did it no more after the earthquake. It kind of died down. It stopped maybe ten years before the earthquake (Kompkoff 1997).

In Chenega Bay today, New Year's is observed with church services and secular celebrations in the form of parties.

RUSSIAN ORTHODOX CHURCH TRADITIONS IN OLD CHENEGA

Mary A. Kompkoff is *Matushka* for Chenega Bay. *Matushka* means "Little Mother" in Russian. She is the Matushka because her husband, who is now deceased, was the Orthodox Priest in Chenega Bay. As Mary explains it:

...[my husband] was the Orthodox Priest, so that made me Matushka, which was explained to me, when he became Priest, what Matushka meant, it means little mother. So, everybody comes to me for advice thinking I know everything, which I don't sometimes (*laughs*), but I try to share my knowledge, especially [about] the church. That's the main thing, everybody calls and asks about the holidays, and like I say, I try to explain what I know, what I learned (Kompkoff 1997).

Currently there is no resident priest in either Tatitlek or Chenega Bay, which limits the services that can be conducted.

We go to church, and if there's a priest or a reader it's a very long service. But if not, there is nothing else that we are allowed to do. No one is allowed to lead a service, unless there's a priest there, you know. There's different ways to lead a service with a priest. No person could just open the book and start reading everything, you are not allowed to, but in our case now, we don't have a resident priest, we don't have a learned reader, [an] ordained reader so we have to do

with what we can. There's a service book for lay readers, so we do that, and there's a lot of things we have to omit on holidays which really makes it hard for us, we miss it, we have to go without it. That's why our services are so short (Kompkoff 1997).

Baptism and Churching the Mother

In the Russian Orthodox tradition, as practiced in Chenega Bay and Tatitlek, an infant is baptized and a mother churched 40 days after the baby is born. Mary Kompkoff explains that they wait 40 days because

that's the time when they want to have the baby churched, and the mother churched at the same time. If its a boy, the priest then takes the baby boy into the altar. I guess that's part of the baptism. Then the little girl they don't take [they] never go into the altar. They just go in front of the icons, up front. And they're baptized and crismated at the same time. Crismating means they unction you with oil, then they cut your hair. The priest cuts your hair [on] four corners of your head, and that's your first offering to the church, your hair (Kompkoff 1997).

As noted in chapters Three and Six purity and pollution was an important element in the traditional Alu'utiq system of beliefs. For example, interaction between men and women was governed by a series of taboos predicated on the belief that at certain times of the month the woman's body was polluted by menstrual blood. The Russian Orthodox Church also had a taboo against spilling blood inside a church building and menstruating women were not allowed in the church but had to stand in the entrance of the vestibule. Likewise after a child was born the mother was required to wait forty days before entering the Church. There was no special ceremony, the new mother simply went to the church after forty days had lapsed and was blessed by the priest before entering the church. This is called "churching the mother."

In our religion, after you have a baby, you can't say 'I'm going to church this morning,' if it's Sunday, if you had a baby less than forty days ago. Even if your baby was baptized, you know. But you have to wait. The mother has to wait for forty days before entering the church. Now, I'm just stumped with that, I know it was explained to me years ago. Something to do with [the] Mother of God. I think it's because she didn't step into the church after she had Jesus (Kompkoff 1997).

When people are baptized in, or are converted to the Russian Orthodox Church they are assigned a Big Momma or a Big Daddy, a person of the same sex who sponsors them in the Church. The position of Big Momma or Big Daddy seems to be similar to that of Godmother or Godfather in the Roman Catholic Church. Big Momma and Big Daddy take an active role in the religious education and guidance of the person they sponsor. This is seen as a lifelong special relationship.

CULTURAL REVIVAL

Cultural revival in Prince William Sound is part of a Native cultural revival that has been going on in Alaska since the mid 1980s. In part it is the result of the Alaska Native Claims Settlement Act that took some of the stigma out of being Native. ANCSA altered Native/White relations within the State and provided Native people with some political and economic power so that could no longer be ignored. At the same time people saw that ANCSA was not going to solve the problem of cultural identity nor alter the destructive patterns of behavior prevalent in many villages. This was something they had to do themselves (Pullar 1989). In the Alu'utiq region the movement toward developing a distinctive identity was begun on Kodiak Island in the 1980s. After the oil spill Alu'utiq from Prince William Sound joined the movement and sponsored a number gatherings to which they invited their Alu'utiq relatives and friends from Kodiak Island, Lower Cook Inlet and the Alaska Peninsula.

Currently a number of different local and regional groups are involved in efforts toward an Alu'utiq cultural revival. These include village councils, the village and regional for-profit corporations, the regional non-profit corporations, the school district, and local and national museums. These efforts vary greatly in their approaches, and their level of success in the eyes of the residents of the region. Most of the programs share the common goal of restoring a sense of identity and pride to the people of the region. Some of the people who devote their energies to this goal place a lot of importance on reproducing "authentic" precolonial Alu'utiq culture. Others do not see authenticity as being as important as creating something that has shared meaning for the Alu'utiq today. Both groups are in the process of re-evaluating what has been lost through the past two centuries of assimilation.

Two Chenega Bay residents were interviewed specifically on the topic of an Alu'utiq cultural revival. One person did not feel that there had been much of an effort at reviving Alu'utiq culture in Chenega Bay. She indicated that for a time there was some ambivalence within the community about the value of investing in such an effort. Up until recently, it was left to each family to teach its children about its traditions and its culture. However, within the past couple of years, there has been an increasing interest in and commitment toward community- and region-wide efforts at teaching Alu'utiq heritage and culture. She sees a lot of value in reviving the language and culture for the benefit of the children. She sees both land ownership and cultural stewardship as important to the future power base and identity of the children growing up in Chenega Bay today.

The other person interviewed moved back to Chenega Bay because he felt he was missing part of his culture. He believes like he found what he was looking for. It opened his eyes to how much of the culture and language had been lost and is now coming back, because of the efforts to teach them in the school and the community. In his opinion the cultural revival is due to the reestablishment of the village, and not to the oil spill. He said,

There was a cultural revival that began with the reestablishment of the village, people look at it [their culture] a little more closely now [since the earthquake]. The earthquake had quite an effect on the people of Chenega. Having to resettle in a strange village was hard on them. The lifestyle before the earthquake was more nomadic (Miraglia, field notes 1997).

Language and Culture

Over the years the Alu'utiq language has been made part of the school curriculum to varying degrees in both Chenega Bay and Tatitlek. The older people sometimes speak Alu'utiq to one another, but most of the young adults were not taught the Alu'utiq language, and do not understand it. While the children are receiving some instruction in the language, for the most part they do not hear it spoken at home where English is dominant.

Chugachmuit, the Alu'utiq region's non-profit corporation formed under the Alaska Native Claims Settlement Act, received a grant from the Administration for Native Americans to develop a Native language and culture curriculum for use in the schools in the Alu'utiq region. The project produced an Alu'utiq dictionary and a series of children's picture books in Alu'utiq, with English translations in the back. In 1998, Chugachmuit hired and trained local coordinators for their education project in all of the Alu'utiq region communities, including Chenega Bay and Tatitlek. The local coordinators were hired to work with designated cultural experts to develop a curriculum and experts were invited to visit participating communities to give talks for the school children as well as the adults. These were videotaped and compiled in a video library for the use of schools in the Alu'utiq region.

Archaeology

During the beach treatment efforts following the *Exxon Valdez* oil spill, archaeological sites were disturbed and artifacts removed by both clean-up workers and Exxon archaeologists. This upset the residents of Tatitlek and Chenega Bay. Prior to the oil spill, the prevalent attitude among Tatitlek and Chenega Bay residents was that archaeological sites and artifact should not be disturbed unless they were threatened. One man from Chenega Bay put it this way.

...maybe I'm superstitious, I don't...I don't like to monkey with those things, you know. They had owners, and I guess they loved what they owned the most, what little they had, so why take them away from them, maybe they buried them people with their tools. That's why I get so mad when they start digging and taking stuff out (Kompkoff 1992).

Since the oil spill residents of both communities have expressed interest in archaeology and have worked to obtain funds from the *Exxon Valdez* Oil Spill Trustee Council to build archaeological display facilities in each community. The facilities would enable the villages to obtain artifacts removed from both public and corporation lands in the Prince William Sound as part of the response to the *Exxon Valdez* Oil

Spill, currently in storage in Anchorage, Fairbanks, and Juneau. The *Exxon Valdez* Oil Spill Trustee Council had set aside 2.8 million dollars to build local display facilities in eight oil spill impact area communities, including Chenega Bay and Tatitlek, and an archaeological repository to be built in Seward, as well as for the creation of traveling displays.

Dance Groups

Both Chenega Bay and Tatitlek have Native dance groups that were formed within the last ten years. The dances and songs are imported by way of Lydia Robart, a woman from the village of Port Graham, who learned the dances and songs in Kodiak. She has taught the dances at the Nuuciq Spirit Camp, and has traveled to Chenega Bay and Tatitlek to start the groups in those communities. Membership in these dance groups has been limited to school children. Adults do not join in the dances, and when a dancer graduates High School, he or she leaves the group.

The Chenega Bay group is called on to dance at special occasions, such as the Memorial Day barbecue at Old Chenega in May 1997 and the Sobriety Conference held in Chenega Bay in September 1997. They call themselves the Chenega Bay Eagles. They wear elaborate regalia. Community members held a meeting to decide on designs then the parents of each dancer made an outfit for their child. The boys wear grey ultra-suede vests, with a sunburst design made of dentalium shells on the front, and headbands with dentalium shells hanging from them. The backs of the vests have embroidered eagles. The girls wear long dresses made of dark blue ultra-suede, with lots of dentalium shells sewn to them. Dentalium shells hang from under the arms of the dresses, giving the appearance of wings when the girls raise their arms. The girls also wear elaborate, beaded Aleut-style wedding headdresses. Both boys and girls wear boots fashioned of black ultra-suede, ornamented with shells.

Mary Kompkoff said she does not remember any Native dances being performed in Chenega when she was a child. She is glad the children are doing something they think of as traditional, but it makes her sad that the real Chenega songs and dances are lost.

The kids are trying, yeah. When I was growing up it wasn't traditional, I mean cultural. 'Cause, I've never seen or heard any Aleut dances or songs by any of the older people in Chenega. It was lost when I was a child. Their traditional dances...dancers and singers were gone. So I don't know a thing of 'em. It makes me sad to know, my grandkids now are dancing, and make[s] me sad to know they're not the true...if we had any. I wish that I knew [something] that I could have passed to them. I'm proud of how they're doing...thinking that that was my way, but I wish I knew of a way to make a song.

Spirit Camps

Spirit camps are camps in which traditional Native skills and philosophies are taught. A spirit camp has been conducted on Nuchek Island, a small island surrounded by Hinchinbrook Island in Prince

William Sound, annually since 1995. The camp began as an *Exxon Valdez* oil spill restoration project funded through a grant from Department of Community and Regional Affairs (DCRA) out of \$5 million dollars that was received from the State of Alaska in its settlement with Exxon Corporation after the oil spill. This grant supported the camp for two years. Since 1997, Chugach Alaska Corporation has funded the camp.

Children are brought to the camp from the communities throughout the Alu'utiq region, and shareholders' children are brought in from other areas, including the Lower 48 states. Activities at the camp include processing of wild foods, beading, carving of traditional items (mostly masks), basket making, story telling, instruction in the Alu'utiq language (mostly the Port Graham dialect), archaeology, and traditional dancing and singing. Despite problems, the camp appears to be serving the purpose of getting the younger generation interested and involved in the subsistence lifestyle that was disrupted by the oil spill, and in Native heritage and culture.

Tatitlek Cultural Heritage Week

Since 1994 the Tatitlek Village Council and the Tatitlek School have held a cultural heritage week during the first week of May. The Tatitlek program was started by school teachers in the village. Their model was a festival held in the Yup'ik village of Kalskag, where they had taught before coming to Tatitlek. Initially the school district sponsored the entire festival, but now the village council has taken over the financial responsibility while the teachers continue to organize it. Participants are children who come from Valdez, Cordova, Whittier, and Chenega Bay. The event is called the *Peksulineq* Festival. The organizers thought the word *Peksulineq* could be glossed as springtime or spring gathering, but according to an elder from Port Graham, the word means egg making or egg gathering.

In 1998, the village council paid for transportation to bring in the students from other communities as well as the food and supplies needed for teaching the various classes. In fact, the budget for the event is becoming so large that the village is looking for new sources of funding. In past years, funds have come from contributors such as ARCO Alaska, which paid to hire of a skin sewer and kayak builder to finish a baidarka, or skin boat, started during an earlier program. Money for the festivals is also raised through an auction, which occurs on the final night of the festival.

The week is structured around a series of classes taught during the day and a series of evening events. The classes are designed to fit the different ages of the students so that younger students undertake simpler tasks than those who are older. All of the classes have something to do with contemporary or historic Native culture, and there is an emphasis on authenticity. Both the teachers and the village council are concerned that, as one teacher put it, "Are we doing it right?" They did not want the classes to simply be "craft time" but rather wanted them to be authentic. This is also the concern of the Village Council President, who wants to keep the festival "Aleut" and regional in nature. For example,

there was a suggestion that students be taught how to make bent wood boxes, but the suggestion was rejected, because the festival planners did not consider bent wood boxes Alu'utiq.

The classes included such traditional activities as woodcarving, beading, skin sewing, pickling fish, Native dancing and singing, and building barabaras (traditional semi-subterranean houses). Classes have also been offered on archery, Native technology and artifacts, firearms safety, mariculture (Tatitlek has an oyster farm), and sewing baidarka covers. Instructors are hired from different parts of Alaska.

In 1997 and 1998, wood working classes included instruction in carving miniature wooden paddles or wooden masks. The designs for both of these items come from museum catalogs, such as *Crossroads of Continents*, published by the Smithsonian Institution. In 1997, a second instructor in woodworking taught people how to make hoop drums, and in 1998 she taught students how to make traditional-style grease bowls out of bass wood.

In 1998, students in one skin sewing class had the choice of making either a seal skin vest, or a pillow out of sea otter skin. The teacher brought a skin sewing machine, which she taught the students to use. In the other class, the students made small stuffed seals out of seal skin. For the class on Native technology and artifacts, the instructors brought local artifacts on loan from the Anchorage Museum of History and Art. The students were asked to make copies of these artifacts out of clay. A primer, describing artifact forms and materials, was provided to the students. All of the classes are taught in English, but over the years there has been an increasing emphasis on the Alu'utiq language. In 1998, the rest rooms and some of the food were labeled with signs in both English and Alu'utiq.

In addition to the classes, there are a series of evening events, including guest speakers and performers, a talent show, and on the final night a potluck dinner and fund-raising auction. The potluck features a variety of wild foods, including seal meat, deer, and fish.

During the 1997 Heritage Week, a young man, whose mother is from Tatitlek, performed with his troupe for the village. The performance included a demonstration of Alaska Native Olympic events, such as the ear pull, in which two contestants put a string around one of their ears and pull away from each other. The event is supposed to demonstrate both strength and the ability to withstand pain. Another event is the high kick in which the contestant jumps up and kicks a suspended ball. Before the demonstration, the master of ceremonies told the audience that she had read through the description of traditional games found in the ethnography of Prince William Sound by the anthropologist Kaj Birket-Smith (1953). She said the games described in there were identical to the contests in the Alaska Native Olympics. She kept telling the audience, "your ancestors did this, too." At the end of the demonstration, several members of the troupe danced in the Yup'ik style. The multicultural theme of the event was underscored by the diverse ethnic backgrounds of the members of the troupe, which included a man of African-American and Yup'ik descent, an Inupiat woman from Greenland, a man of Aleut and European-American descent, and an Athabaskan man.

The pan-Native theme continued in 1998. The first guest speaker was Willy Hensley, a prominent Inupiat leader, who talked about the importance of having values. Hensley began with a description of his childhood in the Kotzebue area and then talked about going to boarding school in the lower 48 states. When he returned from boarding school, he was intent on improving the standard of living among his people and on obtaining their political rights. Later, he learned that it was equally important to maintain traditional values, for without those nothing would mean much. It was not just a matter of survival, but rather of living with a set of values that make life meaningful. The local pastor remarked to the village chief that he had chosen the right speaker for the occasion.

Another theme of Cultural Heritage Week is respect for elders. Although there is always appreciation shown to the elders during elders appreciation night, in 1998 a particularly elaborate ceremony was held, which began with a dinner of enchiladas. Earlier, the chief had said the status of elders was not contingent on age alone but was rather something people earned. After dinner, he addressed the audience saying elders were the heart and soul of the community. This event was to emphasize and celebrate the elder's contribution to the community. The next speech was by an Alu'utiq elder from the village of Port Graham who spoke in Alu'utiq about the spread of AIDS, the use of contraceptives, and the traditional use of certain medicinal plants. She also sang a Mother Goose song in Alu'utiq.

The chief then asked the elders to step forward and be seated at a special table. He then called on several young people to recite prepared poems and essays about their elders. This was very moving, for both the elders and the children, some of whom broke down, especially when they talked about an elder who had recently died. After the children had spoken, they presented an elder with gifts, including flowers and delicatessen foods ordered from Anchorage. Then the chief presented the elders with a plaque engraved with their name and the date of presentation. He asked if any of the elders had anything to say. One man talked about the inevitability of change, and how in the future, a small airplane would replace the skin boat hanging from the ceiling of the gym. The children then donned their dance costumes and performed for the elders.

On the last evening of the festival, there is always a potluck dinner. People bring food to the school gym, and everyone eats together. This is in contrast to the other nights of the festival, when guests dine communally, and most residents go home for meals. The food at the potluck varies from elk meat brought by someone from Afognak Island, to fried chicken. There is also fried halibut, seal and a local specialty of seal and sea lion meat cooked outside over an open fire. One year, there were braided seal and sea lion intestines, a local delicacy.

Along the walls of the gym are displays of the crafts the students have made during the week. On tables are collections of stone lamps, breast plates made out of sticks, and large knives made of paper. Also displayed are necklaces made of beach combed material, small jars of pickled herring, grass baskets, and wood carvings.

The dances performed by the local school children are a prominent part of the entertainment. Over the last several years, they have developed a repertoire of Alu'utiq dances which they have learned from a woman who lives in Port Graham. As noted above, the songs and dances came originally from Kodiak Island, so may not represent dances done by Alu'utiq people in Prince William Sound. When asked, most elders do not remember this style of dance. Nonetheless, parents are very proud of their children's efforts to learn and perform the dances, and encourage them to participate.

The final event of the evening is an auction, the proceeds of which go to support the Heritage Week the following year. One measure of the pride Tatitlek people feel about hosting the festival is the amount of money they are willing to invest in the festival. In 1998, the auction raised \$28,000.

According to the Tatitlek school teachers, Cultural Heritage Week has been a positive experience for the village. One member of the community told a teacher she used to be ashamed of being Native, but now she is proud. Another person expressed pride in the children's dancing and said, "[we] have never had anything like that." Through the Cultural Heritage Week, the people of Tatitlek are reaching out to into the past and are building a bridge between themselves and other villages and communities in Prince William Sound. As one person put it, "people are not afraid of one another." In this respect Cultural Heritage week is an attempt to subvert the cultural dominance of the predominantly non-Native communities of Cordova, Valdez and Whittier. By inviting non-Native children to participate in the Cultural Heritage Week Tatitlek people are not only asserting their identity, but pointing out that they have a culture too.

SUMMARY

The Russian Orthodox Church has a long history in Prince William Sound and has been firmly integrated into community life. It should be noted that in Tatitlek the Pentecostal Church has made some inroads but this has not produced a schism within the village. Instead there appears to be mutual respect and tolerance. During the Heritage Week, for instance, both the Russian Orthodox lay reader and the local minister are invited to give benedictions, and during Russian Christmas everyone in the community participates in the celebrations. These are both very cohesive moments for the village.

Residents of the Prince William Sound villages are just beginning to learn about the richness of the Alu'utiq culture as it was at the time of contact with the Russians (Birket-Smith 1953). In the late 1990s the Smithsonian institution has organized a museum exhibit called "Looking Both Ways: Heritage and Identity of the Alu'utiq People." One feature of the exhibit is a collection of Alu'utiq objects obtained in the 1880's and 1890's by William Fisher, a German born naturalist and museum collector. The collection includes objects from Prince William Sound that range from household implements to ceremonial regalia (The Smithsonian Institution, Arctic Studies Center and The Alu'utiq Museum and Archaeological Repository 1998).

Mary Kompkoff expressed her emotions on seeing items from Chenega in the Fisher Ethnographic Collection displayed at an Elders Conference in Kodiak City.

I was amazed, shocked to see a beautiful ceremonial bowl from Chenega [In a slide presentation at an elders conference in Kodiak, sponsored by the Smithsonian Institution. The bowls are part of the Fisher ethnographic collection]. It was back in eighteen eighty-nine, only used during a feast, during a wedding. The bride would use it. Ceremonial bowl. I saw the picture of it. It's there, but they showed a picture of it. They were showing at slide presentation. Oh, it just gave me chills to see it...beautiful...from my home, and the bowl, just a plain round bowl, real pretty designed, colored...painted, or whatever. The groom used that. I guess to eat out of it during their reception. But the ladies bowl, it was shaped like a duck, a loon. That's what it looked like to me, beautiful...just beautiful bowl. Yeah, stuff like that I never saw (Kompkoff 1997).

Chapter Eight

Earthquake and Tsunami

On March 27, 1964, at roughly 5:30 PM local time, south-central Alaska was struck by a massive earthquake, with a magnitude of 8.4 on the Richter scale. The earthquake's epicenter was in Prince William Sound. The earthquake itself did little damage to the villages of the Sound, but the tsunami that followed destroyed much of the town of Valdez and the village of Chenega. At Chenega 23 people, or one-third of the population lost their lives. All of the buildings in Chenega, with the exception of a single home and the reinforced concrete schoolhouse, were destroyed.

THE DESTRUCTION OF OLD CHENEGA

Earthquakes have been common enough in the Chugach region that there is a name for them in the Alutiiq language, "*aoolu*", which literally translated means "shaking ground" (Chemavisky 1979). However, the toll this particular earthquake took on Chenega was especially devastating. Thirty-four years later, the earthquake is still too painful for most of the survivors to discuss. Some survivors still have nightmares about the earthquake. The following is a description of the earthquake and tsunami from two survivors who provided the details to researchers immediately following the event.

The earthquake shaking, which began gently, but became much stronger within 1 minute, lasted an estimated 4 ½ to 5 minutes. Understandably, there were no reports of vibration damage. Mike Elehsansky and Joe Kompkoff [sic] estimated that between 60 and 90 seconds after shaking began the first wave rose quietly but rapidly about halfway up the beach. It receded rapidly almost at once, exposing the floor of the entire cove to an estimated depth of 20 or more fathoms and for a distance of about 300 yards offshore. A second and much higher wave arrived within 4 minutes of the earthquake's onset and before shaking had ceased. This wave, which was about 35 feet high, ran up to the schoolhouse foundation, a height of 70 feet. All the buildings except one house and the school were either smashed into the trees or swept out to sea with the backwash...People who were on the beach or had not had time to join the exodus to higher ground were carried away. In addition to all its other belongings, the village lost all but three of its boats. Only one of the surviving craft was in port at the time; the other two were out with hunting parties. They were welcome additions to the rescue effort the next day. The surviving villagers spent the night huddled in the snowy woods high above the school, for fear of later and even higher waves. These did not materialize and the school, with its nearby powerplant, was unharmed except for some water in the basement (Plafker, et al, n.d.:G15-G16)."

The following account is attributed to Donald Kompkoff, Sr who grew up in Chenega but was in Valdez attending school when the earthquake hit. We may assume that his account is pieced together from what he has been told by survivors who were present at Chenega when the disaster struck.

There were seventy-six people living in the village of Chenega at the time of the earthquake. Twenty-three of those did not survive, and of the non-survivors only a few bodies were found.

Elsewhere in Alaska March 27, 1964, was Good Friday, but in Chenega the Easter weekend was still several weeks away by the Russian calendar. It was just another Friday in Chenega. Then the earth started shaking. A seventy-foot wave followed soon after the earthquake at Chenega. The spray from the seismic sea action hit as high as the schoolhouse, which is seventy feet above sea level, and one villager saw a swell that went halfway up the beach within sixty to ninety seconds of the quake's onset. Most of the victims were caught in their homes or along the beach. Many who survived escaped very narrowly.

After the waves had subsided, those who managed to reach safety sought to identify the missing. Husbands, wives and children were gone at a stroke, but there were infants, the elderly, and a few injured to be cared for. The only buildings left standing were the schoolhouse and one home, and the rest were completely demolished. At the time of the disaster some of the men were out seal hunting on a couple of fishing boats, and several young people were away attending high school. The people went to the schoolhouse, which was heated. There they got some blankets and dry clothing. However, a heavy tremor later in the evening drove them out of the school to higher ground, where they spent the night in the open, huddled around a fire, uncomfortable and chilled in melting snow. A few sleeping bags that they got from the school kept the children warm.

The survivors found cans of milk and they fed the babies even though they had no bottles, they shared the canned goods, crackers and coffee they got from the schoolhouse. And later listened to the school teachers radio receiver. The regular village transmitter had been washed out to sea. At Tatitlek another Native village located between Valdez and Cordova in the Prince William Sound, the earthquake shock was heavy, but one minor injury was reported. Waiting for a daily radio contact from Chenega when the quake hit, the call came through. At 5:30am Saturday Tatitlek radioed a message to the S.S. Chena standing off Valdez the Marpet [sic] had reported the number then missing at Chenega, the number of survivors and word that the village had been completely destroyed. Jim Osborne (now deceased) heard the news late Friday of the Chenega disaster. He was a veteran pilot that flew the mail run to the villages around the Sound. He was a veteran pilot employed by Cordova Airlines at Cordova. To fly into the Sound area Osborne needed a Grumman Widgeon (a six passenger amphibian) despite the tsunami warnings the mechanics had the plane ready to fly at 7:30 Saturday morning. Osborne, after informing Civil defense personnel of his intentions, he and Frank Eaton, a civil air patrol observer, flew to Chenega. After arriving at Chenega he was astonished at the amount of wreckage in the bay, no houses, only stub pilings of the dock, and the schoolhouse was the only building left standing.

He began calling on his transmitter and picked up an operator who promised to relay to the Cordova civil defense the conditions of Chenega. Village men came down from the hill and Osborne set up evacuation plan[s]. The injured and as many other women and children as could be safely loaded were taken out first. Fifty-three people were taken to Cordova. Most of the men came in with the fishing boats Marpet and Shamrock of Chenega. Some Chenegans at first stayed with friends or relatives, but most of them went to the Christian Center of the Cordova Community Baptist Church.

Reverend Hall, who was the local Red Cross representative, also turned over his parsonage to eight Chenega people. After all the people were brought in from Chenega, they got together and decided that the village would be moved to Tatitlek.

After deciding that they would not move back to Chenega, they agreed to settle at Tatitlek where they lived in tents at first. Then later eighteen homes were built. Now [date unknown, but prior to 1984 when the new village at Crab Bay was established] the people are scattered all over Alaska. Some still live at Tatitlek, while others live at Hoonah, Anchorage, Kenai and Seattle, although most live in Cordova (Kompkoff, n.d.:16-18)."

The following, a second-hand account related by a Alu'utiq elder who was not present at Chenega, provides a vivid sense of the immediate impact of the tidal wave on a single individual.

There was one girl still alive here, she was last one in the water. The church was way down then...then...there...her father was the...he was priest's reader...church reader. He was here in town, and her and her mother was Chenega. Earthquake...radio tell the people to get up in high hills, so they went up to the schoolhouse, pretty high. Oh gosh, higher than this place here, up on top the knoll. They had ladders that they went up. Some of 'em went up on the hill, way up on the mountain side, and she...she come out of there, told her mother, let's get up to the school house. Soon's it started, she looked over, she figure it was about...must be 90 feet...swells come like a wall, rolling cover up them little islands in front of Chenega. Cover 'em right over. Then the swell hit them, her and her mother. That's all she remembers. Next time she woke up like, she was on top the...a wreck...part of a house. Her leg was jammed up on a...like on a...between two buildings. She holler for help. Was getting in the evening time. Seal hunters from...uh...from Icy Bay...Whale...was it Icy...Icy Bay coming across this way find her way out here. Then lost her mother, they found her body though right in front of the village, twenty seven of 'em. Oh that was terrible (Chemavisky, 1979).

One elder from Chenega Bay said he was out hunting near Cordova when the 1964 earthquake hit. He said it was snowing, very large flakes, but it was warm, with no wind. He was out in a skiff. He was watching "an eagle and a sea otter fighting over some piece of fish", when the trees on shore started swaying and he felt dizzy. He hunted a while longer, and then went in to camp. He turned on his radio, and heard that Chenega had been washed away. There was no wave at Cordova, just a tide that came up slowly and just went on rising. He said,

I lost my father, I lost my mother and my brother. When we went to look for bodies, which we never found, we went through Knight Island Passage. There were giant red snappers floating everywhere. I never saw them so big.

He added that on the beach in front of the village there were octopus and squid and "all kinds of bottom things."

TATITLEK

Compared to the devastation wrought by the tsunami at Old Chenega Tatitlek suffered very little damage. Two residents, Carroll Kompkoff and Ivan D. Anten heard rumbling sounds

about 10 seconds before the onset of the earthquake vibrations, which lasted from 3 ½ to 5 minutes. The church bell rang, small objects fell from shelves, and standing was difficult to impossible, but there was no structural damage. The small village reservoir became completely empty but filled again after 2 weeks (Plafker, et al, n.d.:G30).

Because Tatitlek is located in a narrows and is protected from the open waters of Prince William Sound by Bligh Island there was no tsunami at Tatitlek.

The sea at Tatitlek withdrew "immediately" during the earthquake and came back up to 17 or 18 feet above normal mean lower low water, but did not reach above the extreme high-tide line, which had been tectonically elevated about 4 to 5 feet. High and erratic tides were noted for several hours after the earthquake, but none caused any damage.

In fact the earthquake improved the small boat harbor at Tatitlek.

Tatitlek's port facilities were actually improved somewhat as a result of the earthquake. The port, which is close to the village, depends on a natural anchorage in Tatitlek Narrows that is partly protected by rocky reefs. The normal water depth of 6 feet below mean lower low water was partially lost when the land was raised 4 to 5 feet, but the Corps of Engineers compensated for the uplift by dredging the anchorage 6 feet deeper. Because the reefs were also upraised, the basin now has more protection from storms than it originally did (Plafker, et al, n.d.:G30)."

AFTERMATH

Until the earthquake the villages of Tatitlek and Chenega were on similar historical trajectories. Both were small, geographically isolated, tightly knit communities that had been subjected to identical colonial processes. The earthquake shattered the community of Chenega. A third of the population died in the wave that inundated the town. The survivors fled the scene. Some chose to settle in Tatitlek but others moved to Cordova, Valdez and Anchorage. As a community, Chenega lost both its physical and social structure. As the sociologist Kai Erikson remarks "Individuals respond [to a disaster] by withdrawing - bonds that once held people together become seriously weakened. Survivors suffer from loss of community as well as from individual shock" (Erikson 1993:5). Mary A. Kompkoff expresses the emotional attachment survivors still feel towards the old village of Chenega eloquently.

I was born and raised in Old Chenega, and if...if it wasn't for the earthquake, it would have been sixty years my home this coming October (Kompkoff 1997).

After the shock wore off it took 20 years for the survivors of Chenega to begin the process of rebuilding. The new village of Chenega Bay was established in 1984. The site of the new village was chosen because it was on high ground and well protected from possible tsunamis. Most of those who helped establish the new community did so because they wanted to return to a village lifestyle, which they described as a quieter, simpler way of life. Economic considerations were also important in the decision

to move to the new village. Subsidized mortgages and easier access to wild resources made the cost of living in Chenega Bay lower than in Anchorage or Cordova (Stratton and Chisum 1986: 53-54).

The diaspora had lasted twenty years. The Chenega people were faced with the challenge of reconnecting with one another, and forming a new identity as a community. Some of the residents of the new community were related to one another, some were old friends, and some were strangers. They had to pull together to make the community work. Together they faced the challenge of establishing and maintaining an infrastructure including clean water, electricity, government and church in a remote, and generally isolated location. They also had to reestablish their connections to the natural environment.

Chenega Bay was far enough away from the location of the old village that using old hunting areas required a substantial amount of travel. Harvesters had to begin exploring the area around the new community to find new sites to allow them to harvest more efficiently. In addition, the earthquake changed the shorelines of the Sound sufficiently that, especially in the case of shellfish, knowing the old harvest sites did little good. Also, during the intervening years an entire generation grew up, which for the most part, was not raised with the same close connection to the land as the preceding generations. Most of the young men in Chenega, who are currently in their 20's and 30's, and who grew up in Anchorage, Cordova, and other large communities, never learned to hunt and fish. And most of them show little if any interest in learning these skills now. Some of the children are being taught to hunt by their fathers and other men in the community, who are mostly in their late 40's and early 50's.

In contrast to Chenega, Tatitlek survived the earthquake as an intact community and immediately expanded to accommodate those survivors of the tragedy who elected to stay. A new generation of Tatitlek people grew up on the land and in 1982-83 the village expanded with the addition of a new school and 17 HUD homes. At about the same time current president of the Tatitlek village council was elected. Since then the leadership of the community has been stable. Through the 1980s the population of Tatitlek grew steadily as people moved back to the village to take advantage of the new housing. By 1990 the population of Tatitlek was 119 people and that of Chenega Bay 94. At this point the historical trajectories of the two communities may have converged except for the *Exxon Valdez* oil spill.

Chapter Nine

The Exxon Valdez Oil Spill: Contamination, Cleanup, and Litigation

On March 24, 1989 the *TV Exxon Valdez* ran aground on Bligh Reef about 20 miles southwest of Tatitlek. At first people in Tatitlek thought the oil had been spilled in Valdez Narrows and would therefore be easily contained. They learned the horrible truth from the television program *Good Morning America*. Lee Stratton (Stratton 1989) a staff member for the Alaska Department of Fish and Game, Division of Subsistence, was in the area two weeks later. Her report, partially reproduced here, provides a glimpse of the uncertainty and chaos created immediately after the spill.

The immediate questions that Tatitlek residents asked were whether dispersants had been dropped close to the village, and whether the herring in the bay, the herring spawn on seaweed, and the seal in Tatitlek Narrows were safe to eat. Chenega Bay residents added to this list halibut, chitons, and sea lion. These are resources of immediate concern. The list of resources will change with the seasons.

While I feel that most agency people have been as responsive as was humanly possible, it is important to note that the first two weeks of the oil spill were perhaps the most critical for Tatitlek in terms of immediate subsistence impacts. The end of March and early April, when the herring come into the Tatitlek Narrows, bringing with them the myriad seaducks, sea lion, and seal, and also providing the highly prized spawn-on-seaweed, is in normal years a time of fresh resource abundance, at the same time that people are very short on money. Many people were frustrated that so many resources were available, but they had no way of knowing whether they were safe to consume. Some households had no financial resources to purchase other foodstuffs.

People are now receiving paychecks from VECO for clean-up work, so the immediate food shortage has been alleviated.

Like many other Prince William Sound residents, Tatitlek and Chenega Bay residents are very worried about the future of their resources, commercial and subsistence. Mothers are wondering whether their young children will grow up on traditional foods, elders are rationing frozen subsistence foods, because they don't know when they will be able to get them again. Both villages need to be tied in with informational systems, to be notified of what is being done, and what is known about damages and outlook. Channel 2 news (RATNET) is their main information source at this time.

Tatitlek: as of April 2, a few areas on Bligh Island had been noticeably oiled. Reef Island was also affected, but we did not catch a good tide for assessing the extent of the damage. Recent information indicates dead marine invertebrates are washing ashore in the Tatitlek Narrows, where there has been very little oil.

Chenega Bay: Many areas have been affected. I spent two and a half days visiting coves and shorelines important for subsistence. A video camera might

have been more appropriate than selecting "key" areas and photographing the oil damages. However, a regular camera is what I had at the time.

Stratton noted other impacts:

Lack of Information: shortly after hearing that Tatitlek was not being informed, agencies and organizations responded. Exxon also made an appearance. The next day (3/31), Emergency Services and a representative from Community and Regional Affairs met with the village, and the following day (4/1), the Governor came. Chenega Bay, which found itself in the middle of operations 8 days into the Oil spill, did not get as much formal attention. Dennis Kelso has met with them (4/5 or 4/6), and other agencies have been in touch.

Overexposure: The number of camera crews, reporters and journalists is amazing. In two days in Tatitlek, I saw 5 separate crews. "Local" traffic on the roads, even visiting from house to house, was minimal, with people stating that they would wait until after dark (when the planes and visitors had all left) to go out walking and visiting. Some Chenega Bay residents were expressing similar concerns, and telling reporters that they had already given all the interviews they intended to.

Chenega Bay Boat Dock: A steam-cleaning operation was set up for boats at the dock. The area was boomed off. Still, two villagers expressed concerns about putting oil into the water right by the village. Other villagers saw no problem. The cleaning was discontinued on April 9, apparently because of lack of workers. Two village residents observed that mussels normally on the dock have all fallen off. As soon as the contaminant testing system was set up, another resident planned on halibut fishing in the bay just out from the dock. I tried to contact DEC regarding the cleaning, but was unsuccessful in finding someone with responsibility/authority.

Handling stress: individuals in both villages have expressed concerns over how residents in the villages will handle the changes and stresses in the coming months, noting that drugs and alcohol, and in one village, suicide, have not been uncommon previously.

Chenega Bay was especially vulnerable since the oil spill hit only five years after the resettlement had begun and people are only beginning to recover and rebuild from the losses they had suffered in the 1964 earthquake.

We were just getting back to, you know, like after you move into a new house it doesn't feel comfortable for a while, but you know, a couple of years later, you can definitely call it home, so around that time we were really...feeling comfortable about the place and then all of a sudden Exxon does this thing in Bligh Reef that *turned everything upside down again* (emphasis added, quoted in Impact Assessment 1990b:274).

Many of the most heavily oiled beaches were adjacent to land owned by Chenega Corporation and those to which the people of Chenega have ancestral, cultural and traditional ties. The spill disrupted the process of settling in, of re-connecting with one another and the land. According to the anthropologist Anastasia Shkilnyk (1985:179):

An environmental disaster can be assessed in many ways. One can measure the sheer force of the impact, the extent of the damage, the effects on human health, the economic losses sustained, or the length of recovery time. Any major disruptive event, however, should also be judged by looking at the vulnerability of the people who are exposed to it. It seems logical that a community that has just suffered a traumatic upheaval in its way of life will experience the effects of yet another crisis much more acutely. In such a situation, environmental contamination can no longer be measured in isolation, for its impact interacts with previous events in a complex manner to form a pattern of cumulative injury.

THE CONTAMINATION OF SUBSISTENCE RESOURCES

Disasters involving the spread of toxins such as the *Exxon Valdez* oil spill are threatening because they "contaminate rather than merely damage; they pollute, befoul, taint rather than create wreckage; they penetrate human tissue indirectly..." (Erikson 1993:3). For communities like Tatitlek and Chenega Bay, which place a great value on harvesting and eating wild foods, the oil spill was especially horrifying. It severely contaminated the "natural envelope" (Erikson 1993:7) in which people live and cut at the very core of their identity and sense of community. The spill was unprecedented in Alu'utiq experience. There may have been times in the past when a single species, or even group of species, was scarce and the focus of the harvest would shift to compensate for the shortage. However, this was the first time the safety, health and continued availability of all the animal species was called into question at the same time.

Toxic disasters, like the *Exxon Valdez* oil spill have no clear ending. The pollution often settles into the environment leaving a lingering uncertainty not present with a natural disaster such as an earthquake. In 1990 an elder from Chenega Bay compared the earthquake with the oil spill. He said that immediately after the earthquake the Sound was red with floating, dead red snappers, and young black cod¹ were swimming around by the dock. He said that many animals died as a result of the earthquake, but things came back quickly. He said he did not think there would be such a quick recovery from the oil spill. He was skeptical of reports that things were getting better in the aftermath of the oil spill. He would get angry when it was suggested that they were. This is typical of the chronic nature of toxic disaster.

The year following the oil spill subsistence harvests in Tatitlek declined 56 percent while those in Chenega Bay declined 57 percent from averages of pre-spill years (Fall et al. 1996). Sharing of resources in both communities also declined as people gave away less quantity and fewer kinds of resources (Fall et al. 1996:115-16). As one observer concluded "Because of the oil spill, gifts of food carried an unusual health risk which made the giver and receiver feel unsettled and worried about their families' personal health and safety" (ibid.116).

Subsistence harvests were disrupted for at least five reasons. First, there was the actual contamination of resources. Second, there was fear of unseen contamination and possible detriment to

¹ Both are fish that live at great depths.

health from consuming resources. Third, because of the physical presence of so many people in the Sound following the oil spill many residents felt it was impractical to attempt to harvest wild life. Fourth, the oil spill disrupted commercial fishing, which is both an important source of income for some residents, and an important source of fish for home use in the community. Fifth, people feared that harvesting, combined with the damage caused by the oil spill, might create potential scarcities in animal populations, especially among deer, sea mammals and birds.

Edelstein(1988:48-49) refers to five "lifescape changes" that are often experienced by those exposed to contaminants in the environment.

Once victims of exposure learn of their exposure and come to accept the truth of this information, it is common for them to experience a number of changes in the way that they view life. Five consistent lifescape changes are associated with the acceptance of residential toxic exposure.

1. A reassessment of the assumption of good health.
2. A shift to pessimistic expectations about the future, resulting from victims' perceived loss of control over forces which affect them.
3. A changed perspective on environment; it is now uncertain and potentially harmful.
4. An inversion of the sense of home involving a betrayal of place. What was formerly the bastion of family security is now a place of danger. Having chosen to live there, the person is now deprived of the choice of leaving.
5. A loss of the naïve sense of trust and goodwill accorded to others in general; specifically, a lost belief that government acts to protect those in danger.

Many residents of Chenega Bay and Tatitlek to varying degrees exhibited each of these lifescape changes.

One Chenega Bay resident, having heard that heavily oiled seals suffered brain lesions, expressed the fear that eating the meat of seals contaminated by crude oil would cause him to develop brain lesions. This man had previously hunted seals to provide meat² for his family and to share with others in his community. Even though he was advised that he would not develop brain lesions if he ate the meat both he and his hunting partner stopped hunting and eating seals. These men passed away in 1998 and apparently never hunted or ate seals again. The partner once confided that he could not see any purpose in hunting if it meant giving his family and friends meat that could end up poisoning them.

² From 1990, the Oil Spill Health Task Force advised that all fish, deer, seals ducks and sea lions tested as part of the subsistence food safety testing program were found to be safe to eat, but people should not use shellfish from the beaches where oil is still present. Between 1989 and 1991, about 1,000 samples of fish and shellfish, 28 samples of deer, 19 samples of ducks, and 144 samples of marine mammals were tested. With the exception of shellfish and blubber of heavily oiled seals, levels of hydrocarbons in the edible flesh were very low, and many non-detectable. This is because fish, birds and marine mammals, and land mammals are able to rid themselves of limited amounts of contamination in their bile. While this process may cause added stress and potential harm to the organism, it prevents hydrocarbons from building up and contaminating the meat. However shellfish are different because they do not have the ability to get rid of hydrocarbons quickly. They accumulate these toxins and retain them over long periods.

This is a clear inversion, with an activity that once provided a sense of purpose and identity, turning into a source of distress, and a food once considered wholesome becoming perceived as a potential poison.

People also started looking at the condition of resources they harvested more closely. One of the foods provided by the intertidal area is the chiton, locally called bidarkies or gumboots, and considered a delicacy by the Alu'utiq. In 1991, Chenega Bay residents reported finding white spots on chitons from local beaches. A woman from Chenega Bay said that she and her father gathered some chitons during a low tide. The chitons came from the beach right in front of the village. After they cooked them, they noticed multiple white sores on the bottoms of the chitons. They didn't eat them, instead saving them in a freezer, in hopes someone could examine them and tell them what the white spots were. Two months later, there was a similar report from Tatitlek, a woman there said that she threw away eight gumboots because they had white spots on the margins of the foot. She described them as being hard, "like little barnacles, embedded in the flesh" (Miraglia, field notes 1991) (see below for the outcome of the evaluation of the chitons)

In 1993, as many as one-third of the herring returning to Prince William Sound exhibited external lesions. Scientists identified the lesions as a result of a fish virus called viral hemorrhagic septicemia (VHS). The virus was likely always present in the herring population, but some sort of stress caused it to be expressed more virulently. It has yet to be determined whether the stress was the result of the oil spill, the forcing of herring into pounds for a commercial roe fishery, or some other unidentified stressor. As long as people can remember, herring have spawned on the beaches in front of the village of Tatitlek each spring. In 1993 and 1994, coincident with the emergence of VHS, there was a near-failure of the herring to spawn in front of the village. As demonstrated by the following excerpt of a letter from the Tatitlek Village IRA Council to the Oil Spill Health Task Force, community residents were not comforted by scientists' assurances that VHS is a fish virus which cannot be transmitted to humans and that the herring with lesions were safe to eat.

Residents of the Native Village of Tatitlek were concerned with the safety of consuming any of the subsistence resources in 1989; it has been more than four years since the oil was spilled and the residents are still concerned and their concerns are growing with each failed commercial or subsistence fishing season. Prior to the oil spill, our people never had to worry about their resources, for generations we have been able to harvest whatever we wanted without worrying about the safety of consuming anything. The total failures of the herring and salmon seasons this year have made residents of Prince William Sound wonder what the true impact of the oil spill has been on the Sound. The herring are an integral part of the food chain, almost all of the subsistence resources that we rely on depend largely on herring for their sustenance. When the herring returned to the Sound with sores and lesions on them, we became extremely concerned about the safety of harvesting any and contacted the Alaska Department of Fish and Game and the Department of Environmental Conservation about their condition; we were told that while both agencies were not sure what was affecting the herring, they were safe for human consumption. This made absolutely no sense at all to us. Suppose there were meats in the American Super Markets that had sores and lesions on them, do you think that either agency would have told the consumers that the meats were safe, even before they had determined what was affecting the

meats? We very seriously doubt that. Why is this so? (Tatitlek Village IRA Council 1993a:1-2)

Four years after the oil spill took place, Tatitlek residents were still distrustful of their government, environment, and food supply. They were pessimistic about the future, and concerned about their health and the health of their families. The letter further illustrates another dilemma faced by victims of chronic toxic exposure:

Namely, they learn that they are neither sufficiently at risk to warrant definitive action by government nor sufficiently free of risk to allow for a return to life as usual. On their part the government officials working with them are also in an equally conflicting situation. They must respond to the public's concerns but without agreeing to take steps that extend beyond their regulatory authority, their budgets, professional norms or political realities (Edelstein 1988:119).

Tests done under the auspices of the Oil Spill Health Task Forces (OSHTF) demonstrated that the risk of increased cancer rates due to consumption of subsistence foods contaminated with crude oil was minimal (United States Food and Drug Administration 1990). The risk was shown to be much less than the increased risk of cancer from smoking cigarettes and eating smoked salmon. However, the risks incurred by smoking cigarettes and eating smoked fish are voluntary risks. The additional risk from eating oiled subsistence foods was involuntary, in that subsistence users did not choose to have their food sources contaminated with oil. The message was that any involuntary risk, no matter how small, was unacceptable. In addition, as Paul Slovic's (1987:17) research has demonstrated:

...the concept "risk" means different things to different people. When experts judge risk, their responses correlate highly with technical estimates of annual fatalities. Lay people can assess annual fatalities if they are asked to (and produce estimates somewhat like the technical estimates). However, their judgements of "risk are related more to other hazard characteristics (for example, catastrophic potential, threat to future generations) and, as a result tend to differ from their own (and experts') estimates of annual fatalities.

There are several other reasons why the scientists were distrusted.

1) Results of tests for contamination were often inconclusive:

A good example of this is how scientists responded to the issue of sores on chitons. Some chitons were collected and tested for the presence of hydrocarbons. The tests showed very low to non-detectable levels of hydrocarbons in the chitons, well below the levels that should be a cause of concern for the health of humans eating them. These tests did not result in answering the question of what caused the white spots on the chitons. An invertebrate pathologist also collected some chitons for examination. A biologist at The Alaska Department of Fish and Game in Anchorage examined these chitons and verified that the white spots observed by subsistence harvesters were indeed lesions. The chitons were then preserved, sectioned, and the sections mounted on slides, which were sent to an invertebrate pathologist in Seattle. Months later, the pathologist reported that he was unable to find any lesions on the slides. He suggested that subsistence users were seeing injuries caused to the foot of the chitons when they were

harvested. (Chitons adhere to rocks in the intertidal zone and are harvested by prying them off the rock, usually using a butter knife.) Scientists never answered the question of what caused the lesions observed by the ADF&G biologist and residents of Chenega Bay and Tatitlek. Part of the problem may have been that chitons have been little studied by scientists, and not much is known about them. An experienced harvester of chitons later said that such white spots were common on chitons. She suggested that people were looking at resources more closely, and noticing things that they had not noticed before; whether this is true or not, the fact remains that scientists were not able to give subsistence users a satisfactory answer to this question.

2) The scientist's advice was contradictory to traditional Alu'utiq values:

The Oil Spill Health Task Force advised that while the expending of energy to metabolize oil contamination could cause health problems for oiled animals, such as slowed growth, reduced fertility, or increased susceptibility to disease, it would prevent the contamination from getting in to the edible flesh of the animals; therefore prevent them from becoming unsafe to eat. The Alu'utiq had a fundamental problem with the idea that an animal can have something wrong with it and still be safe to eat. As one resident of Tatitlek put it: "We don't understand that. How can something be good to eat if it's sick" (Miraglia, field notes 1991)? To the Alu'utiq, if an animal has something wrong with it, it is sick. If it is sick, it is not good food.

This proscription against harvesting sick animals for food extends even to animals that might not seem sick to the Western way of thinking. For example, an elder in Tatitlek talked at great length about a deer he discarded because it had almost no fat at a time of year when it should have been plump. Other than the absence of fat, it seemed healthy. He said "I thought about that a lot after. Maybe I should have kept it. We didn't get much deer. But it should have been fat" (Miraglia, field notes 1991).

It was often difficult to predict how local residents would interpret results of the biological studies. When biologists reported that brain lesions were found in heavily oiled seals, the information was presented without any interpretation of what that meant for the health of humans eating the seals. A Chenega elder said he had gone back to eating seal meat following the oil spill. However, the reports about brain lesions found in oiled seals had made him quit eating seal again. He said he was afraid that he could also get brain lesions from eating seals with brain lesions (Miraglia, field notes 1991).

3) The motives of the scientists were considered suspect:

Despite attempts to involve local residents as much as possible, scientists were often viewed as outsiders and not trusted. When a community representative from Tatitlek reported back to the community on a trip to the laboratory where subsistence foods were tested, local people said "Let them [the scientists] come here and eat the food. Then we'll believe it's safe" (Miraglia, field notes 1994).

4) The oil remained in the environment:

The continued presence of oil in the environment has also made it difficult for people to accept the advice of the scientists. A Chenega Bay resident was initially not concerned about the spill's effects on subsistence resources. He continued eating subsistence foods, and when asked in October 1990 if he was concerned, his comment on the matter was "I'm still alive". However, by April 1991, he had changed his mind. He had not expected to still find oil in the environment a year after the spill. When he did, he became very concerned about contamination (Miraglia, field notes 1991). . In March 1999, ten years after the spill, oil persisted on and below some of the beaches in Prince William Sound.

5) The image of oiled animals persisted in the minds of the people:

Even where the oil did not remain, the image of oiled animals persisted in the minds of residents, making their traditional foods less palatable to them. A Chenega elder said, "I haven't been able to get it out of my mind, since I saw those seals dying all covered with oil on Green Island and Seal Island....can't get it out of my mind and when I eat it now, I can't get that out of my mind, I'm afraid of it, but I eat it, because I need it. That's my food. I can eat your food, your white food, but there's something missing, there's something that doesn't get full" (Miraglia, field notes 1991).

Dr. Thomas Nighswander, Chairman of the Oil Spill Health Task Forces, expressed frustration that many residents of the affected villages did not accept the Task Force's message.

[A] villager reported that "the beaches around Chenega Bay continue to ooze oil, and no one even tries to harvest clams from near the community, because they are afraid to." When I asked what could be done to convince them that their subsistence foods were safe to eat, the representative from Chenega Bay said it all, "Get the oil off the beaches.

For state and federal agencies, nonprofit groups, and private industry with vested interests in the safety of the subsistence food and the commercial values of seafood in general, the favorable food analyses were a relief. This information was also reassuring to many villagers. But for the outspoken few and the many with lingering doubts, only time will tell. Perhaps only when the environment looks safe to them, and the beaches birds and fish appear as they did before the spill, will they conclude that their food is safe to eat (Nighswander1999: 48-49)

THE CLEANUP: THE LOSE OF PRIVACY

In the spring and summer of 1989 Prince William Sound was invaded by 11,000 clean up workers (Impact Assessment, Inc. 1990:274; Piper 1993:114), government agency representatives, reporters and the curious. Hundreds of workers were housed in trailers stacked on barges, called "botels." The Alaska Department of Environmental Conservation rented a house in Chenega Bay to house its personnel who were there to organize the local response. Helicopters landed, sometimes on a daily basis, at the end of the main street, only about twenty yards away from the community cemetery. Representatives of Exxon,

VECO, state and federal agencies and members of the press, funneled through both Tatitlek and Chenega Bay. The curious also came. A Chenega Bay resident said that one morning someone parachuted into his back yard.

Archaeological and historic sites both on tribal and on public lands were disturbed and vandalized in the course of the attempts at beach treatment. Clean-up workers in the area because of the spill went fishing in their spare time. One Chenega Bay resident said that Exxon crews fishing around Sleepy Bay during the oil spill cleanup had wiped out the halibut there. Residents now say that people who first came to the Sound as part of the spill response effort, return to the area to hunt and fish, further impacting local resources.

Following the spill, Prince William Sound became the target of the international media. Journalists came from all over the world to interview local people and exotic Alaska Natives. None waited to be invited, and few asked permission to enter Tatitlek or Chenega Bay. This angered many people who felt their wishes were being ignored and that they were being intruded upon. One person from Tatitlek recalled,

It took a lot to work your way through that, to withhold the anger. To withhold the things you wanted to say to the people that needed to hear them, and to be diplomatic about it. Not to use the strong language that you really wanted to use on some people in 1989 and 90 was really hard. One of the most stressful times that I have ever been through...Nothing prepares you for something of that magnitude. There's nothing that can prepare you for the pain, the anger you feel. There's situations that come up where you get mad...that were totally uncalled for. There were so many mistakes made by so many people. Some of them were so irresponsible. It was hard to comprehend and hard to deal with (Kompkoff 1999).

One Chenega Bay resident says that the worst impact of the spill on his community has been a loss of local control and loss of privacy. He said, "Being put on the map hurt. The loss of privacy hurt."

Long after the spill Chenega Bay attained an odd sort of celebrity as the first community in the direct path of the oil spill. The village has become a destination for a particular kind of tourist, specifically journalists and officials seeking insight on the long-term impacts of an oil spill. When major spills occur elsewhere, a delegation is sent to Prince William Sound, often to Chenega Bay, on a fact-finding mission. In February 1997, for example, a Japanese journalist came to take a tour of the oiled beaches. The tour was to include an area of La Touche Island that had been experimentally treated with PES 51 (for more on PES-51 see below). The journalist was charged \$750 for the one-and-a-half hour tour. He was the second journalist that had come over to Chenega Bay from Japan. Both were gathering information to add to reports on a recent oil spill in Japan.

CONFLICTING PERCEPTIONS

In the event of a disaster conflicts often arise between groups such as scientists, officials and people of the communities. Many of these conflicts arise over contrasting perceptions about the scope and degree of the impacts. One very basic disagreement over the oil spill was whether or not human beings had been harmed by the spill. U.S. officials generally assumed that, in contrast to the views of most Native people, what was damaged were natural resources not human beings (Quam 1992:191). The images of oiled sea otters and bald eagles people saw on television reinforced this view. Furthermore, most officials did not consider, or did not know about the cultural value Native people placed on wild foods. When officials did learn that there might be a shortage of food in the Native communities they thought frozen beef, chicken and pizza should be adequate substitutes for salmon, seal meat and herring roe. This uniformed response angered many local people.

Another disagreement revolved around the extent of the clean up. Tatitlek and Chenega Bay people view the waters and beaches of Prince William Sound as their "dinner table" and the source of their most culturally prized foods. Therefore, every bit of oil has to be removed. Agency officials, of necessity, took a more pragmatic view. From the start, the federal government representatives took the view that overly aggressive clean-up actions could be more harmful to the environment than the oil itself. The state ultimately went along with this thinking, although the initial state position was that all of the oil should be removed. Eventually, the unified government position was that oil should be left alone in cases where it would do more harm than good to remove it (Piper 1993:36).

In 1989, the Interagency Shoreline Cleanup Committee decided to leave oiled mussel beds untouched because treatment might kill the mussels. It was thought that the tides would gradually leach the oil out of the mussel beds (EVOS Trustee Council 1999a:14). But a later study determined that the byssal threads attaching the mussels to the substrate, as well as the mussels themselves, kept the oil trapped (EVOS Trustee Council 1999a:14). Even after five years, there was oil present beneath the mussel beds. The oil was much fresher, that is it contained more light aromatic compounds, than had been anticipated. The mussels were taking up hydrocarbons, which in turn may have been poisoning the animals feeding on the mussels. These oiled mussels were the suspected source of continued impacts to sea otters, land otters, black oystercatchers, and possibly harlequin ducks (Rice et al. 1993:28-29). In 1994, the *Exxon Valdez* Oil Spill Trustee Council funded a clean-up of oiled mussel beds. The mussels were removed, the underlying sediments were moved down to the lower intertidal, placed on absorbent pads, and washed by the tides. The sediments and mussels were then put back in place. Most of the work was done by residents of Chenega Bay working with staff of the Alaska Department of Environmental Conservation (EVOS Trustee Council 1994).

Another decision made early in the response was to leave a group of beaches untreated. These beaches were call "set-asides". They were posted with signs to let the clean-up crews know not to treat them at all. The set-asides included beaches with different substrates and different degrees of oiling and

exposure to tides. They were intended to represent the varying condition of the beaches in the Sound. The purpose of this was to have untreated beaches to compare later with the treated beaches, allowing an evaluation of the both effectiveness, and of the damage done by the various treatment methods. It would also provide a gauge of how much "natural" oil reduction could be expected on the various substrates (Holloway 1996:110).

To residents of Chenega Bay, leaving any oil on the beaches was unacceptable. They were not interested in later comparisons or scientific studies on the oil. They simply wanted it all gone. They view the oil as a foreign substance and a toxin, and as long as it remains in the environment there will be no recovery. In the words of a community leader, "The subsistence lifestyle of the residents of Chenega was being sacrificed to benefit scientific studies, which held no interest to Chenega Bay residents" (Miraglia, field notes 1999).

During the succeeding years of beach treatment, local leaders struggled to maintain an active role in decision-making and control over the beach treatment efforts. One local coordinator, who is Native, said that the Alaska Department of Environmental Conservation (ADEC, the State's lead agency on the spill response) wanted to end Exxon's involvement in the clean up, because it could do a better job. The local coordinator believed that this would let Exxon "off the hook", something she did not want to see happen. She also said she did not trust the state to look out for village interests, and felt they had had better luck getting Exxon to respond to their concerns. Immediately after the oil spill, residents of the spill area had expected the state to champion their cause, and were disappointed whenever they did not get the support they sought. People expected little from Exxon, and got more than they expected.

Community leaders tried to participate in the response to the spill but a lack of financial resources, as well as the reluctance of agency officials to share power handicapped them. For the first few years after the spill, there were annual beach surveys conducted to document the condition of the beaches with regard to oiling. The results of these surveys were then used by the Technical Advisory Group (composed of representatives of the U.S. Coast Guard, Exxon and State and Federal Agencies) to determine which beaches would receive treatment.

In 1992, village leaders were upset over the way ADEC was handling the state beach survey. The village had fought successfully to get a Chenega land manager included on the state team, but ADEC then refused to pay a salary for the village representative. Community leaders pointed out that the salaries of the other members of the survey team were being billed to Exxon. They saw no reason the community representative should be expected to volunteer his time, or to be paid by the village (Miraglia, field notes 1992).

In the summer of 1997, the *Exxon Valdez* Oil Spill Trustee Council spent \$2.1 million to plan, implement and monitor treatment of beaches near Chenega Bay. The purpose was to try to remove persistent subsurface oil from beaches used for subsistence or recreation. A tool called an air knife was used to inject pressurized air along with a limonene based solvent agent called PES 51. The oil and PES 51 were washed to the water's edge where both were picked up by absorbent booms and towels (EVOS

1997a:2). The crew was composed mostly of Chenega Bay residents, and the Alaska Department of Environmental Conservation oversaw the work. The project was the culmination of two years of lobbying by Chenega Bay residents for additional beach treatment. A number of the resource managing agencies expressed concern that the fate and effects of PES-51 in a marine environment were unknown, and advised caution. Chenega leaders and the EVOS Chief Scientist asserted that they were satisfied that the treatment was safe. The Trustees funded the project, with an increased monitoring component in response to agency concerns (EVOS 1997a:2). The 1998 EVOS Trustee Council Status Report claimed the project a success, with an average of fifty percent of the oil removed from beaches treated with PES-51 (EVOS 1998:16). However, the 1999 Status Report states that the treatment method was largely effective in removing visible surface oil, but had little effect on subsurface oil (EVOS 1999b:32). A community leader blamed bureaucracy for the fact that the PES-51 did not have more impact on the subsurface oil, saying: "The PES-51 application process was so restrictive that the amount of oil extracted was lessened. DNR [the State of Alaska Department of Natural Resources] reduced the approved amounts of PES-51 that [could be used] and delayed operations (Miraglia, field notes 1999)."

In 1999, ten years after the spill, oil could still be found in pockets and oozing up from the substrate on many beaches. Many of the reporters who visited the beaches in preparation for writing articles on the tenth anniversary of the spill, commented on the smell of the oil on these beaches (O'Harra 1999; Romano-Lax 1999; Slavik 1999). The oil is still strongly aromatic, indicating the continued presence of some of the lighter aromatic components, not expected in weathered oil. Because the oil has persisted on the beaches, the impact of the spill on the lives of the people of Prince William Sound continues. Residents of Chenega Bay remain concerned about the long-term effects of the residual oil on the resources that they depend on.

CONFLICT WITHIN COMMUNITIES

In 1990 a consortium of mayors from the "oiled" communities commissioned a study on the social, cultural and economic effects of the spill. Known as the "Oiled Mayors Study," this research found that residents of the spill-impacted communities experienced an increase of conflict within their communities. More specifically Tatitlek residents reported "few changes" in their relations with spouses, children, relatives, and friends. In Chenega Bay 18 percent of respondents to the Oiled Mayors survey reported worsened relations with their spouses compared to before the spill (Impact Assessment, Inc. 1990a:27). In 1991, a resident of Chenega Bay noted that people in the community had been fighting a lot. He said he thought it was because of the money coming in from spill employment. "It changed people," he said (Miraglia, field notes 1991). The "Oiled Mayor's study," found a significant positive correlation between the level of an individual's exposure to the oil spill and cleanup efforts, and a decline in the quality of their relationships with family, friends, neighbors, and co-workers.

The conflict and stress took its toll on the physical health of the people as well. In 1994, the Tatitlek Village Council President said that stress related illnesses were up in the community. In this category he included high blood pressure and ulcers. He blamed this increase in health problems on the oil spill. His assertion is supported by data from the "Oiled Mayor's study". The study found a significant association between the level of exposure to the oil spill and cleanup efforts with both a perceived decline in post-spill health status and the number of physician-verified illnesses occurring since the spill. In other words, those individuals with the most exposure to the spill and cleanup were also the most likely to report health problems following the spill, and also the most likely to have these health problems verified by a physician. The conditions most frequently reported in descending order were hypertension, arthritis, skin rashes, ulcers, and emotional problems. Most of the communities (four of five) with the highest average number of medical conditions verified by a physician were small predominantly Alaska Native communities (Impact Assessment Inc. 1990b:29-33).

SPILL EMPLOYMENT

VECO, the company hired by Exxon to clean up the oil, hired thousands of workers, including many residents of Chenega Bay and Tatitlek. The workers were paid over 16 dollars an hour for a 12-hour day and they worked seven days a week. Many said they weren't sure who would be watching their children while they were at work. At the same time, parents felt that they had no choice but to participate in the clean up work both because of the importance of removing the oil from the beaches and because they needed the income to replace subsistence and other economic opportunities lost due to the spill.

Oil spill employment provided a cash windfall for many people. Per capita income for 1989/90 more than doubled in Tatitlek and Chenega Bay, and the number of working adults increased. In Tatitlek, for example, 81 percent of the adults worked during 1989/90 compared to 65 percent in 1988/89. Similarly in Chenega Bay 87 percent of the adults worked during the year of the oil spill compared to 74 percent the year before (Miraglia and Seitz 1995; Seitz and Fall 1995, and Fall et al. 1996). Beach cleanup provided other economic benefits as well. In Chenega Bay the village corporation converted classrooms in old school building into a boarding house. Local labor was used in the conversion. The space was then rented out to Exxon, or the agencies to house their personnel.

Cleanup involving local hire went on longer around Chenega Bay than in other of the spill communities; beach treatment efforts took place in 1989, 1990, 1991, 1994, and 1997, and some Tatitlek people moved in relatives to take advantage of the opportunity to work. But direct economic benefits from the oil spill were generally short-lived, and in 1991/92 average per capita incomes had fallen to pre spill levels (see Chapter 3).

In the 1990s oil spill preparedness drills continue to provide some short-term temporary employment to the communities of Prince William Sound. Alyeska Pipeline Company has a Fishing Vessel Administrator under contract in each community in the Sound. This is a year-round paid position.

The Administrator is responsible for coordinating the response of commercial fishing vessels in the event of a spill. The Administrator and selected local fishermen receive three days training, which they are paid for, each year. In addition Alyeska annually conducts a major spill drill that may or may not involve local hire.

Following the oil spill, Alyeska created the Ship Escort Response Vessel System (SERVS) in an effort to prevent future spills and reduce their impact when they do occur. Response vessels now escort oil tankers as they travel through the waters of Prince William Sound. The contract to operate SERVS was awarded to T.C.C., a consortium of the Tatitlek Corporation, Chenega Corporation, and Chugach Alaska Corporation (the regional for-profit corporation for Prince William Sound and lower Cook Inlet). A few residents of Chenega Bay and Tatitlek have jobs with SERVS. For the most part, they now live in Valdez, while keeping their homes in the villages, returning occasionally to visit. In some cases, these men were among the most active subsistence harvesters in their communities and shared their harvests with other households. The impact of their reduced subsistence harvests has not been systematically explored.

LITIGATING THE OIL SPILL

Almost immediately following the oil spill the State and Federal governments began negotiations with Exxon to recover damages to natural resources on public lands. To their consternation Alaska Natives were excluded from these negotiations. The Alaska Native Claims Settlement Act (ANCSA) had extinguished aboriginal hunting and fishing rights so, from a legal standpoint, Native people had no legitimate claim to pursue damages over public resources, even if they were subsistence resources. That right was reserved for federal and state governments. Fearing that any settlement would jeopardize their impending litigation against Exxon, Native corporations and Native villages successfully sued to halt the negotiations. The resulting settlement, or consent degree, stipulated the right of the government to recover natural resources on public lands but gave the Natives the right to pursue private claims, against any entity other than the government (Quam 1992:184). Many community residents saw this as a betrayal, leaving them with less leverage to get a settlement of their claims. This sort of conflict is common in cases of toxic contamination.

Government efforts may be dominated by "making a case" against the perpetrator to the detraction of cleaning up the pollution. Government agencies may strike out-of-court deals with the polluter, settling the case without full remedy from the victims' perspective (Edelstein 1988:80).

The consent degree cleared the way for a settlement between the governments and Exxon (Quam 1992:184) in which Exxon agreed to pay \$900 million to settle those claims. Exxon also agreed to pay a possible additional \$100 million if additional damages, not knowable in 1991, were later identified. The state and federal governments, through the *Exxon Valdez* Oil Spill Trustee Council (Swiderski 1996),

jointly administer this \$900 million. The council is composed of heads from state and federal agencies, but there is no Native representation.

Exxon also paid an additional \$100 million to the governments to settle the criminal charges against the company. The criminal settlement was split evenly between the state and federal governments (\$50 million each) (Swiderski 1996). The state portion of the criminal settlement is administered by the state legislature. According to the settlement decree, the Exxon settlements are for the restoration, enhancement, or replacement of the injured resources and lost services, not to restore individual losses. As result a substantial portion of the money from the settlement has gone to purchasing land to protect habitat and to restore natural resources. Some community leaders think this money should have gone to the residents of the spill area to restore their losses. This remains a point of contention between the communities and the EVOS Trustee Council (Miraglia, field notes 1990 through 1999).

In addition to pursuing private claims, which will be discussed below, another source of recompense for Natives was the Trans-Alaska Pipeline Liability Fund (TAPL). However, the type of damage the fund would compensate for included only those damages that the fund administrator deemed as economic. Damages to subsistence were not considered economic and therefore excluded. Of the awards paid by the fund, much of it went to the village corporations for damage to their lands. Very few individuals received anything from this fund, some money went to those involved in fish processing operations (Fortier 1996).

The issue of putting a price on the damage done by the spill was itself problematic for many residents of Tatitlek and Chenega Bay. A resident of Chenega Bay said that lawyers for the village had advised her not to fill out the Trans-Alaska Pipeline Liability Fund claim forms, but to instead put in for a quarter of a million dollars per man, woman and child. She was bothered by this because, on the one hand, she felt that \$250,000 was a ridiculously large sum of money, when compared for example to her annual family budget. At the same time, she also saw it as putting a price on something she considered priceless, the loss of culture, and therefore not enough money to compensate for the loss.

Eliminated from statutory solutions, Alaska Native plaintiffs turned to common law. In the case of the *Exxon Valdez*, remedies for damages were brought under maritime tort, which fall under the Admiralty Extension Act, and thus lie within federal jurisdiction. Private claims are limited by established case law and in this instance that was *Robins Dry Dock & Repair Co. v. Flint*. This is the most prohibitive case for private parties attempting to recover for loss of subsistence resources or business profits without showing physical damage to property interests. In *Robins Dry Dock* the court held that there could be no recovery for private individuals who have suffered indirect economic loss. Exceptions to this rule are *Open v. Aetna Ins. Co.* and *Burgess v. M/V Tomano*. In both cases commercial fishermen were allowed indirect damages because they could demonstrate a special relationship with marine resources and consequently suffered "damages different in kind...from that sustained by the public generally."

Initially, Alaska Natives pursued claims against Exxon for damages to their subsistence lifestyle or culture. These were eventually separated into claims for non-economic and economic damages. The economic damages will be discussed first.

Exxon attempted to obtain a summary judgment against the Native economic claims based on two points. First, the Native Class did not, nor did it intend to provide individualized proof of any loss. Exxon argued that because individuals within the class differed in terms of their harvest and consumption of wild resources it was impossible to fairly assess damages based on community harvest data. In response plaintiff's attorneys argued that any claims relating to the damage of subsistence foods are communal in nature and can only be understood as such. Second, Exxon argued that plaintiffs looked to recover economic damages, which were unrelated to any physical injury, or to property, which was a requirement of Robins Dry Dock. In this regard Exxon pointed out that plaintiff's allegations of injury were not tied to an injury of property that they owned but to a way of life.

The judge in the case refused Exxon's request for summary judgment. On the matter of individual proof of claim, he concurred that individuals must provide an account of their losses "because only those who suffered losses may share in the recovery." However, he noted that the law provides that proof of individual loss does not have to be provided immediately but only at the appropriate time. On the matter of whether the Native economic claim fit under the rules of Robins Dry Dock, the judge disagreed with Exxon. The judge ruled that Native subsistence harvesters fit within the Oppen exception. The court concluded, "whereas the spill reduced the commercial fishermen's profits because they could not sell the resource to a third party, it directly reduced the subsistence harvesters' immediate ability to consume that resource." The result of the judge's decision was that Exxon settled the Native economic claim out of court for 20 million dollars. The money was not distributed to the plaintiffs but used to maintain the Native's position within the general class action that continued against Exxon.

In regard to their non-economic claims, the Native Class fared less well. Exxon asked and was granted summary judgment against the Native claim for compensatory damages for injury to "culture" or the "subsistence way of life." Exxon argued, and the judge agreed, that such "non-economic claims" are precluded by the rule of Robins Dry Dock. Exxon contended that the law allows claims only for private individuals who have suffered a direct physical harm. It also asserted that in this case Oppen did not apply because Native subsistence harvesters were not commercial fishermen but more "closely analogous to sports fishermen or others deprived of a non-commercial right to fish as a result of the oil spill."

Plaintiffs asserted that the oil spill caused damages to Alaska Native culture and the subsistence way of life that went beyond simple economic loss. They argued that Alaska Native claims are recognizable under maritime nuisance law where a private individual can show a special injury, different in kind from that suffered by the general public. In essence, Alaska Natives argued that their subsistence culture was different in kind from that of non-Native Alaskans who practiced subsistence. Exxon, on the other hand, argued that Alaska Natives suffered the same damages as a "fervent environmentalist who

adores nature" or an avid sport fisherman or hunter. The judge agreed with Exxon saying that while cultural differences do indeed exist between Alaska Natives and non-Natives this difference does not mean that Alaska Natives suffered damages different than non-Natives. All Alaskans, according to the judge, have the right to a subsistence lifestyle and the attributes of the Alaska Native lifestyle only make it different in degree from the same lifestyle available to all Alaskans. In sum, the judge ruled that Natives could not sue on the basis of nuisance theory and could not claim a subsistence injury because this injury was not unique to the Native class.

The judge went on to say that Exxon has already paid and will likely pay more and these funds are in trust arrangements designed to restore, augment and rehabilitate the natural resources damaged by the spill. Alaska Natives "should derive direct benefit from this effort." Furthermore, Alaska Native culture has changed, and if the Alaska Native subsistence lifestyle was lost it was lost before the grounding of the *Exxon Valdez*. In conclusion the judge noted, "[d]evelopment of the Prudhoe Bay oil fields..." was "in all probability, a much greater and certainly longer lasting incursion into Native Culture than the *Exxon Valdez* Oil Spill, yet the Inupiat have thrived."³

The private plaintiffs' case against Exxon in state court produced small judgements (a total of \$9 million) against the company for the village corporations of Chenega Bay, Port Graham, and Nanwalek for damage to their lands and archaeological resources. This judgement is being appealed by the plaintiffs who contend the judge misinterpreted the Oil Pollution Act of 1990 (OPA 90) and improperly instructed the jury not to consider damage to lands, which had been selected by the village corporations under ANCSA but had not yet been conveyed (Fortier 1996).

In November 1992, Alyeska Pipeline Service Company (Alyeska), the company that operates the Trans-Alaska oil pipeline, paid the state government \$30.7 million to settle charges against the company. This money went towards building oil spill response docks at Chenega Bay and Tatitlek (\$14.5 million); to purchase and install equipment to enhance communication in Prince William Sound (\$200 thousand); to build a road from Cordova to Shepard Point (\$6 million); to partially fund the purchase of Seldovia Native Association holdings within Kachemak Bay State Park (\$7.5 million), and to place oil spill response equipment at Chenega Bay, Tatitlek and Cordova (Swiderski 1996).

Alyeska also reached an out-of-court settlement with the private plaintiffs against the company. These claims were based on the assertion that between 1977 and 1989, Alyeska reduced its spill response capability with "reckless indifference" to the interests of the plaintiffs. In July, 1993, Alyeska agreed to pay \$98 million to settle with the private plaintiffs. Of this \$11.5 million went to settle with individuals in the Native class, 9.8 million for village corporations (less 30 percent in attorneys fees) (Enge 1993:A-1; Fortier 1996).

³ See Order No. 190 Exxon's Motion for Summary Judgement on Native Class Claims for Non-Economic Injury.

Chapter Ten

Oil Spill Restoration

THE EXXON VALDEZ TRUSTEE COUNCIL

The *Exxon Valdez* Oil Spill Trustee Council administers the settlement between Exxon and the state and federal governments. The council is composed of three federal and three state trustees. The federal trustees represent the Departments of Agriculture, Interior, and Commerce. The three state trustees represent the Departments of Environmental Conservation, Fish and Game, and Law. All actions of the Trustee Council require unanimous approval by all six council members. The \$900 million dollars from the settlement are to be used first to reimburse the federal and state governments for the costs of cleanup, damage assessment and litigation, the remaining funds are to be used for restoration (*Exxon Valdez Oil Spill Trustee Council* 1998:1).

The mandate handed to the Trustee Council centers on restoration of the natural environment, scientific research, monitoring, direct restoration and habitat acquisition. In this respect the Trustee Council has come to reflect the interests of natural scientists and environmentalists who cast the oil spill as primarily an ecological or environmental disaster. Native people insist that the oil spill not only damaged the natural environment, but also had an effect on their communities and that this should be taken into account in any restoration program. They also argue for a more comprehensive approach to the restoration of subsistence that would take into account their knowledge of the environment. As long term residents of the area Native people feel they have knowledge that is useful to science and the restoration of the natural resources.

Community Involvement

In April 1994, the Trustees held their first Restoration Workshop. At that meeting the residents of Chenega and Tatitlek repeatedly made the point that the people who live, hunt, fish and gather in the spill area have knowledge that could help in the effort to understand and restore the damage from the spill. They also expressed the desire to be better informed of the EVOS research and restoration effort and to be more involved in decision making. As a result of this meeting the Trustees funded a Community Involvement Project in October 1994, with local Community Facilitators hired in Chenega Bay, Tatitlek and Port Graham. Among other duties, the Community Facilitators were expected to communicate traditional knowledge and local interests to project researchers. In October 1995, the project was expanded to include local Community Facilitators for five additional communities: Nanwalek, Cordova, Valdez, Seward, and Seldovia, as well as the two other regions within the oil spill impact area, Kodiak Island and the Alaska Peninsula. A Spill Area Wide Community Involvement Coordinator was hired to serve as a primary contact between the EVOS researchers and staff on the one hand, and the

communities in the spill area on the other. In an effort to improve communication between scientists and local people the Trustee Council also funded two conferences on subsistence and the oil spill. The first conference took place in Anchorage in 1995, and the second in 1998 in Cordova.

Beginning in 1994, funding was provided for a study of the status of harbor seals and sea lions. This project led to the establishment of the Alaska Native Harbor Seal Commission and a biosampling program that continues to the present. In response to community concerns, the Trustee Council funded a study of octopus in Prince William Sound (1995-1996). Since 1996, funding has been provided for a Youth Area Watch Program in Prince William Sound through the Chugach School District. This project allows students from spill area communities to participate directly in Trustee Council funded research.

In addition, the Prince William Sound villages have benefited from several other projects funded by the Trustee Council. The Subsistence Food Safety Project (1993-1994) paid for the testing of subsistence resources from the spill area for hydrocarbon contamination, continuing the work of the Oil Spill Health Task Force. This project was followed by a Resource Abnormality Study (1995) in which training and sampling kits were provided to train local residents so they could take samples of resources that appeared abnormal to them, and send the samples in to be examined by pathologists.

The Traditional Ecological Knowledge Project

Recommendations made by a panel of community representatives for improving community involvement included the creation of forum in which those with expert local knowledge and principal investigators could exchange information to plan, implement and evaluate future restoration projects. The panel also recommended that a set of protocols be developed to assist principal investigators in making contact with the communities and collection of traditional ecological knowledge. The protocols should cover issues of methodology, data ownership, compensation, and data coordination (EVOS Trustee Council 1996a: 6 & 7).

Following these recommendations efforts to bring traditional ecological knowledge (TEK) into the EVOS restoration process were initiated as part of the Community Involvement Project. The TEK effort was subsequently expanded into a separate project. A Traditional Ecological Knowledge Protocols Work Session was held in Anchorage, on April 9, 1996. Participants included community representatives and the Trustee Council and agency staff. The work session produced a set of TEK protocols, which were adopted by the Trustee Council in December 1996. The protocols read in part:

As astute observers of the natural world and as repositories of knowledge on the long-term changes in their biophysical environment, practitioners of TEK can provide western biologists and ecologists with systematic and analytical observations that cover many years. While the differences between indigenous and scientific ways of knowing must be understood, restoration projects which successfully incorporate both perspectives will improve our collective understanding of the natural processes involved in the EVOS-affected region (EVOS Trustee Council 1996b: 1).

The protocols are intended to:

- Provide guidelines for restoration project planning and review
- Identify a set of ethical principals that establish the parameters for a research partnership between Alaska Native communities and restoration scientists
- Establish procedures for facilitating the collection of indigenous knowledge in restoration projects, and
- Provide guidance on the development of research agreements between Alaska Native communities and researchers (EVOS Trustee Council 1996b: 2).

Another result of the TEK project was Training Workshops. Their purpose was to help each community think through the issues surrounding TEK, and help them to make decisions about how they want to handle TEK. One message has come across clearly; the people in the spill area want an active role in the collection, interpretation and use of their traditional knowledge; they want to be involved in making decisions regarding EVOS restoration. They are not interested in being a passive source for information or subject of research.

Community Based Projects

The Trustee Council adopted a policy that projects designed to restore an injured service "must have a sufficient relationship to an injured resource." To qualify for funding from the civil settlement, all projects must directly restore a natural resource damaged by the spill. This meant that a comprehensive approach to all aspects of subsistence restoration was not possible under the civil settlement funding alone. For example, in 1994, a project proposed to restore subsistence uses through the development of a "spirit camp" at the old village of Nuuciq in Prince William Sound could not be funded. Although the camp was designed to transmit traditional skills and knowledge disrupted by the spill it could not be funded under the civil settlement because it would not directly restore injured natural resources. Fortunately, proposals developed through this planning process, which were not funded under the civil settlement, could be considered for funding through grants from the "DCRA five million".

In June 1993, the Alaska Legislature set aside \$5 million of the state's portion of the Exxon criminal settlement for Subsistence Restoration grants to the unincorporated communities in the oil spill impact area. Both Chenega Bay and Tatitlek were eligible for these grants. Responsibility for administering the grant program was assigned to the Department of Community and Regional Affairs (DCRA). The legislature authorized the DCRA to award grants to unincorporated rural communities in the oil spill area in order to restore, replace, or enhance subsistence resources or services damaged or lost as a result of the spill. The legislation required that selection of grant recipients be made after consultation with the state members of the Trustee Council. However, DCRA was prohibited from using any of the \$5 million to pay for staff time on the grant program, and no funding was provided to implement

the program. The grant program was stalled until the Trustee Council provided funds for a subsistence restoration planning effort.

In June 1994, the Trustee Council funded a project to design a coordinated approach to subsistence resource restoration. The project was a joint effort by the Alaska Department of Fish and Game, the Alaska Department of Community and Regional Affairs, the U.S. Department of the Interior, and the U.S. Forest Service, with assistance from the Alaska Department of Law, Trustee Council staff and representatives of spill-area communities (Fall 1995b). The restoration plan adopted the following recovery objective for subsistence:

Subsistence will have recovered when injured resources used for subsistence are healthy and productive and exist at prespill levels, and when people are confident that the resources are safe to eat. One indication that recovery has occurred is when the cultural values provided by gathering, preparing, and sharing food are reintegrated into community life (EVOS Trustee Council 1999a:27).

Meetings to solicit ideas and priorities for restoration of subsistence resources and lost or reduced subsistence uses were held in spill area communities. Agency staff worked with the communities to develop project proposals that were then evaluated, and the recommendations were presented to the Trustee Council. A first round of meetings and project proposals were completed for Prince William Sound and the lower Kenai Peninsula in the fall of 1994. Since that time, the Trustee Council has, out of the civil settlement, funded a number of community-based projects. Two projects have been funded for Chenega Bay, a chinook salmon remote release program (1993-1997) intended to serve as a replacement for lost subsistence resources, and a salmon stream restoration feasibility study (1996). The latter study determined that the stream restoration the community sought was not feasible. Tatitlek received funding for a coho salmon release project (1995-1998) and clam restoration project (1995-1998). The community also received funding to produce two documentary films. The films were aimed at government agencies and were to show how vitally important subsistence was to the communities.

Since 1994, a total of sixteen projects have been approved for funding from the DCRA \$5 million. Six of these projects were for the Prince William Sound communities. Tatitlek received funding to support the development and operation of an oyster mariculture project, the other to fund the design and construction of an oyster processing and storage building. Funding was also provided for a fish and game processing facility for Tatitlek. The combined funding for these three projects was \$1,180,600. In addition, Tatitlek received funds for a spirit camp to include all the communities of the Chugach region. Chenega Bay also received funding from DCRA for a mariculture project, but on a much smaller scale. The community also obtained funding to allow residents to travel to unoiled areas to harvest subsistence resources. The total funding for these two projects was \$437,300.

Additional State criminal settlement dollars were allocated by the state legislature to pay for new airports for Chenega Bay and Tatitlek, and Alyeska settlement dollars have been used to fund oil spill response docks for both communities. These improvements to the village infrastructure make it much

easier and less expensive to get in and out of these communities. Prior to the construction of the new airport, Chenega Bay was only accessible by boat, float plane, or helicopter. With the larger docks, Tatitlek and Chenega Bay have been added to the regular schedule for the state ferry, and the ferry now visits the communities three times a month.

According to the Village Administrator for Chenega Bay, the funding coming into the community has placed a burden on the village government. The grants and projects generally come with paperwork and reporting requirements, which puts a strain on the time of the small office staff. The Chenega Bay Village Council President has also pointed out that grants and contracts from the State of Alaska come with the requirement that the Village Council sign a waiver of sovereign immunity. Community officials are uncomfortable with this requirement, but at the same time, want the grant money (Miraglia, field notes 1997/1999).

It is also an issue for the communities that they can only get funding for projects that fit into very specific criteria established by the courts, the state legislature, and government attorneys. A lot of time and effort has gone into writing proposals for projects the communities want, which are subsequently denied funding because attorneys say the projects are not sufficiently related to the restoration of an injured resource. This has led to a great deal of frustration on both sides of the issue. The Trustee Council, DCRA, and agency staff are constrained by the conditions of the settlement. The community representatives, on the other hand, often see a clear link between the oil spill and projects they would like to see funded, but which do not fit into the established categories.

The Habitat Acquisition Program

A major facet of the EVOS Trustee Council's restoration program is habitat protection. This program has a larger share of the civil settlement dollars allocated to it than any other part of the restoration effort. According to the EVOS Trustee Council 1998 Status Report, \$392 million is committed to habitat protection including, "large parcel and small parcel habitat protection programs (past expenditures, outstanding offers, estimated future commitments and parcel evaluation costs (*Exxon Valdez* Oil Spill Trustee Council, 1998:28)." In addition, the Trustees have decided to commit \$55 million of the estimated \$170 million that will be in the restoration reserve (a fund set aside out of the civil fund to pay for restoration actions needed after Exxon makes its final payment in 2001) in 2002 to be spent on additional habitat protection (EVOS Trustee Council 1999c:1, 10).

The goal of the program is to protect the habitat of resources injured in the spill from further degradation by development, including logging and mining. There are two components of the habitat protection program; the large parcel program involving blocks of land in excess of 1,000 acres, and the small parcel program involving blocks of land smaller than 1,000 acres (*Exxon Valdez* Oil Spill Trustee Council, 1998:19). In practice, the large parcel program has involved the transfer of lands from Native ownership to federal or state ownership. Lands purchased in fee simple with funds from the civil and

criminal Exxon settlements are conveyed to the state or federal agency managing adjacent lands. The Trustee Council has a policy of only considering large parcel land packages if they include a significant proportion of fee simple land sales (Barnes 1999). The village corporations of both Chenega Bay and Tatitlek have completed land deals with the Trustee Council.

In February 1997, Chenega Corporation signed an agreement with the Trustee Council covering 59,520 acres. Chenega Corporation sold about half of its land holdings in fee simple. It sold conservation easements in perpetuity on much of the remaining land, including nearly all of Chenega Island. In exchange, the corporation received \$34 million, \$10 million of which came from Exxon's criminal settlement with the federal government, with the balance coming from the civil settlement funds (EVOS Trustee Council 1997). Some of the money was distributed to shareholders in an initial disbursement in January 1997 (rumored to be between \$30,000 and \$47,000 per 100 shares) (Miraglia 1997). Fourteen million dollars of the proceeds of the land deal were placed in an irrevocable trust that will provide shareholder dividends in perpetuity (Chenega Corporation Board of Directors 1999:G-4). Chenega Corporation retained the northern third of LaTouche Island, its holdings on Evans Island, and the site of the former village on Chenega Island, with no easements or restrictions.

In the Spring of 1998, Tatitlek Corporation and the EVOS Trustee Council reached agreement on a habitat protection package. The corporation received \$34,550,000 (\$10 million of it from Exxon's criminal settlement with the federal government, the balance from the civil settlement) in exchange for a combination of conservation easements, timber easements, and fee simple land transfer on 68,914 acres. Roughly half of the acreage was transferred in fee simple (EVOS Trustee Council 1997d:5).

Each of these land agreements contains a clause reserving subsistence rights for community residents on the lands sold in fee simple to the United States. The clause from the Chenega agreement is summarized as follows:

Reserved for the residents of Chenega Bay is a subsistence access easement, which authorizes the residents to enter upon and travel across the land conveyed for the purposes of engaging in subsistence. The reservation of this right does NOT [emphasis in original] mean that Chenega Bay residents have exclusive rights to use the land for subsistence; it DOES mean that, if Congress amends Title VIII of ANILCA, the residents of Chenega Bay have the right in perpetuity to use the land for subsistence in the manner that currently exists under Title VIII (Lisowski 1998:2).

The habitat acquisition process has its critics, among them most of the Community Facilitators hired by the Chugach Regional Resources Commission on behalf of the Trustee Council to act as liaisons between the Council and the villages. The Community Facilitators expressed their concerns in a letter addressed to the Trustee Council Executive Director in January 1997:

As you know, many of us are opposed to the Habitat Acquisition Program. The reasons for this are many, but the main concerns are: a) Tribal Governments are not consulted in this process. The creation of for-profit corporations who are tasked with making a profit for their shareholders has created this belief that Tribal Government[s] have no say in this process since the contract is negotiated between the Trustee Council and the corporations. The philosophies of tribal

governments and for profit corporations are at odds due to the profit making nature of the corporations. The Trustee Council must take this "tribal philosophy" into consideration when negotiating land sales through the habitat acquisition program; b) the land sales are based upon a vote by the corporation shareholders, many of whom do not live in the villages or have any ties to the village, so are more readily apt to vote for such a proposal [than] those of us who live here and depend on these resources for our livelihood; c) many of the village councils in the oil spill affected area are establishing traditional natural resource management programs to manage the resources utilizing traditional knowledge and western science. We feel that the habitat acquisition program is a slap in the face of these efforts in that this is a statement that we do not have the knowledge or capability to manage these resources wisely, so the federal/state government must purchase these lands back so that they can managed properly. It seems to be quite ironic, since we, as traditional managers, were not the ones who created the oil spill. The real tie to restoration, in our opinion, is ensuring that these natural resources upon which we depend are managed at the local level, thus providing meaningful employment opportunities in the communities and providing a sense of contributing to the restoration process (Community Involvement Facilitators, et al. 1997)

As we see in the letter, shareholders in the village corporations are not all community residents and conversely, not all community residents are shareholders. Under ANCSA, all eligible Alaska Natives who were living in 1971 were issued shares in the regional and village corporation in which they enrolled. Shares were not issued to anyone born after December 18, 1971, the day Congress passed ANCSA (Berger 1985:25). Individuals born since 1971 can only obtain shares through inheritance, or pursuant to a court decree of separation, divorce or child support (ANCSA 1971). These limitations on transfer of stock were extended in 1991. Therefore, an Alaska Native resident of a village born after 1971, unless he had inherited stock in the village corporation, would not have shares and would not have a say in village corporation transactions. This also means that proceeds from the land sales are unequally distributed. For example, less than half of Chenega Corporation shareholders were residents of Chenega Bay at the time of the Chenega land sale, and not all residents of Chenega Bay were shareholders. This issue divided those who wanted to keep the land from those who wanted to sell. It also divided shareholders from the younger members of their own families who do not own shares because they were born after 1971.

In Tatitlek there was little criticism of the land sale. The village council president remarked that it was the fiduciary responsibility of Tatitlek Corporation to put the option before the shareholders. The shareholders approved the Trustee Council's offer to buy the land, in part because, as one man said, they wanted to get some money to their elders. Furthermore, people believed that selling the land protected it from development and provided the community with a buffer against further development. People were also comfortable with selling the land because their rights to subsist on it are protected in the agreement.

In Chenega Bay there was dissension over the land sale. Some residents asserted that the land sale was carried out without proper consultation with the tribal government, the Chenega Bay IRA Council

(Miraglia 1997). This assertion is based, in part on ANCSA section 3(j), which defines a "Village Corporation" as:

...an Alaska Native Village Corporation organized under the laws of the State of Alaska as a business for profit or nonprofit corporation to hold, invest, manage and/or distribute lands, property, funds, and other rights and assets for and on behalf of a Native Village in accordance with the terms of this act (ANCSA 1971:3).

These residents contend that the phrase "for and on behalf of" indicates the intention of Congress that the village corporation be responsive and responsible to the village government, and therefore should not have sold village lands without the approval of the village government. They also point to the 1991 amendments to ANCSA, in which Alaska Land Bank provisions are automatically extended to include lands conveyed under ANCSA. Section (d)(3) of Title 43, Public Lands state that:

Action by a trustee: (A) Except as provided in this paragraph and in section 14(c)(3) of the Alaska Native Claims Settlement Act no trustee, receiver, or custodian vested pursuant to applicable Federal or State law with a right, title or interest of a Native individual or Native Corporation shall; (i) assign or lease to a third party; (ii) commence development or use of, or; (iii) convey to a third party, and right, title, or interests in land, subject to the exemptions described in paragraph (1) (United State of American 1991:2-3).

Chenega Bay residents who opposed the land sale also assert that the trust role of the Federal government in relation to Native lands did not end with ANCSA. They charge that the Federal government's purchase of lands conveyed under ANCSA was a violation of their trust responsibilities and prohibited under the Alaska Land Bank provisions (Miraglia 1999).

A community leader in Chenega Bay, who was opposed to the land sale, thought that the primary reason so many shareholders were for the land sale was that their finances were in bad shape and they were being told they would still have use of the land after selling it. She said they seemed to think they would get a lot of money and not really lose anything. She said the land deal was being sold to shareholders with the line, "You will never need money again." According to her the corporation was told that the Trustee Council would fund a Chenega Bay Cultural Center if they agreed to the land sale, and funding for additional beach cleanup was also made contingent on support for the land sale (Miraglia 1996).

This respondent was concerned that once the land was gone, Chenega would become part of the Valdez-Cordova borough, in the process losing much of its power to make decisions affecting the daily lives of community residents. For example, the Chenega Bay school and its budget would then fall under the control of the borough government, rather than the village government. In her opinion, the only reason Chenega had a voice at all in the oil spill and its aftermath was because of the residents' status as landowners. She saw a landless Chenega as voiceless and powerless. She feared a future in which the U.S. Forest Service could change the rules with regard to subsistence uses of the National Forests (much of the land sold by Chenega Corporation in fee simple has been made part of the Chugach National Forest). If this happens, in her view, Chenega would have no say. She is of the opinion that some recent

immigrants to Chenega came to take advantage of the post-spill boom and to take part in any settlement. She partly blamed this group for the land sale.

Another resident, who supported the land sale, stated that in his view, the land sale was done to preserve the land and stop the logging. He thought logging would have been detrimental to tourism, and also would have had an adverse effect on wildlife. The opening of the road to Whittier will open the western side of the Sound to tourism, and he wanted the community to be in a position to take advantage of that opportunity. In his vision, by selling the land rather than logging it, the value of the land for tourism is preserved, and shareholders could obtain the capital needed to get a start in the tourism industry. He pointed out that under the terms of the land deal, the community residents retain the right to subsistence hunt and fish on the lands they sold. He said the preservation of subsistence is better than it would have been if those lands had been logged. Further, he stated that regardless of land ownership, the voice of the village will still be heard. "Even if we had a million acres of land, if what we were saying went against the rest of society would they listen to us then? If what we have to say is pertinent, we will be heard, whether we own land or not."

A third resident said he believed that the sale of Chenega Corporation lands and the invasion of the community by outsiders will have more of an effect on the community than the spilled oil. He did not think the full impact of the land sale can be seen yet. He thought the younger generation, who do not themselves own shares in the corporation, and will not have the free income their parents are receiving, will return to the village. He pointed out that the money Chenega Corporation received from the EVOS Trustee Council and the Federal government in exchange for the land deal, \$34 million, amounted to roughly \$.5 million per shareholder. He said "The government offered so much money, shareholders felt they couldn't refuse the offer." This man said he thinks that the influx of cash will have a significant impact on the community, but he does not think the loss of ownership of the land is significant. He said, "They [the land managers] are too far away to make a difference. I'll still do whatever I would have done anyway" (Miraglia 1998).

As of this writing [May 1999], the population of Chenega Bay was down roughly one-third from what it was prior to the oil spill. Following as it did on the heels of the tsunami, the diaspora, the re-establishment of the village, the oil spill and the subsequent uncertainty, the land sale further broke down residents' connection to the land. It also provided disaffected community members with the money they needed to move away. None of these factors can be viewed in isolation; the effect is cumulative.

Chapter Eleven

Summary and Conclusion

The *Exxon Valdez* oil spill was a catastrophe unprecedented in the history of Tatitlek and Chenega Bay. Years later a village leader recalled that it suddenly felt as if the weight of the world had descended on Prince William Sound. He asked, what were we going to do after 11 million gallons of crude oil had spilled? As a rule, disasters like the oil spill invoke a sense of loss, blame, and anger as individuals and groups strive to contend with the event. All of this is often prolonged by litigation. But the grounding of the *Exxon Valdez* also demonstrated the particular vulnerability of indigenous minorities who live within a heavily industrialized nation state. As one researcher put it

...the Exxon Valdez spill may be reproducing an existing or latent social reality - in a sense playing an "old script" - that is now characterized by underdevelopment in rural regions, dominance in urban centers that are able to mobilize great resources, and marginalization of Native and un- or underemployed residents who lack substantial power. Because similar patterns have emerged in many accounts of great technological disasters (Bhopal, Chernobyl, etc.), this is not surprising (McNabb cited in Davis 1996: 245)

This vulnerability was revealed in a number of ways. First, because of their need for wild resources the Alu'utiq are particularly vulnerable to toxic disasters. The oil had contaminated their "dinner table" and threatened the very fabric of their communal life, and there was nothing they could do about. Even when it came to the cleanup the decisions made by government entities and private companies involved in the cleanup frequently conflicted with the Tatitlek and Chenega Bay people's overwhelming need to have the oil eradicated from the Sound.

Second, the effect of the oil spill on the Alu'utiq became a matter of debate from which the Native people were largely excluded. This debate not only shaped Exxon's but the court's view of subsistence in the villages. Christopher Wooley and Paul Bohannon (1994:28), anthropologists hired by Exxon, argued that the oil spill was simply a "scapegoat for many of the changes in the Alutiq environment (physical and cultural) that [had] occurred in the 20th century." Severed from their traditional roots by two and a half centuries of colonialism contemporary Alu'utiq people were, in Wooley and Bohannon's view, an ethnic minority. Subsistence hunting and fishing were symbols of that ethnicity, something Alu'utiq people do for enjoyment but not to maintain their material existence. In effect Wooley and Bohannon reduced modern subsistence activities to the level of sports hunting and fishing.

In sharp contrast, the anthropologist Joseph Jorgensen argued, and as this study demonstrates, that subsistence was not something done simply for enjoyment but is central to maintaining the social vitality and material existence of contemporary Alaska Native villages. As such the oil spill deprived Alu'utiq people of their ability to pursue important cultural activities.

Native culture, in Jorgensen's view (1995:16), differed from non-Native culture in the way subsistence activities fit into a wide array of relationships that encompass kinspersons and friends in and out of the village. Jorgensen also maintained that these "differences comprise ideas and sentiments, as well as customary acts."

Third, because of the Alaska Native Claims Settlement Act, and despite their need for wild resources, Tatitlek and Chenega Bay had no legal standing when it came to suing for damages over those resources on public lands. This also excluded the Alu'utiq from participating in any place in developing the goals and objectives of the restoration process (see below). As village corporations the Alu'utiq could sue for damages to corporate property and as individual claimants they were successful in litigation because the court agreed that the oil spill had directly reduced their immediate ability to consume the resources. However, the court, following Wooley and Bohannon's logic, did not allow the Alu'utiq to sue for non-economic damages to their subsistence way of life. Exxon had argued that Alaska Natives suffered the same damages as a "fervent environmentalist" or an avid sportsmen and the judge agreed saying that while cultural differences do indeed exist between Alaska Natives and non-Natives all Alaskans had the right to a subsistence lifestyle and the attributes of the Alaska Native lifestyle only make it different in degree from the same lifestyle available to all Alaskans.

Fourth, the Alu'utiq were, in the beginning, excluded from the restoration process itself. The mandate of the Trustee Council was shaped by the state and federal governments and reflected the interests of natural scientists and environmentalists who cast the oil spill as an ecological or environmental disaster. For their part the Alu'utiq insisted that the oil spill not only damaged the natural environment but affected their communities. Native people have been most successful in this arena and have been able to insert a community focus. To this end they have insisted on community involvement in the restoration process and on collaboration between scientists and local people.

In presenting their arguments, Wooley, Bohannon, and Jorgensen generalized about the historical processes that have shaped Alaska Native cultures, and while colonialism tends to produce similar results, responses to an event like the *Exxon Valdez* oil spill have to be understood in the context of local history. In Chenega Bay the oil spill disrupted the process of settling in, of reconnecting to the land, and making a community. The oil fouled beaches that people used to gather traditional foods such as clams, chitons and octopus. As in Tatitlek, Chenega people came to suspect the wild resources, the use of which was one of the main reasons they had reestablished the village in the first place. The privacy sought by many residents disappeared when the village served as a staging area for cleanup activities. Because the community was in the direct path of the oil the cleanup went on longer in Chenega Bay than anywhere else as people tried for four years to eradicate the oil from their land. Controversy over the habitat acquisition program erupted as some people believed selling lands acquired through

ANCSA meant dissolution of community power and self-determination. These feelings may have been exacerbated because people were still trying to rebuild a community lost in the earthquake.

In Chenega Bay an entire generation grew up away from western Prince William Sound. Members of that generation lacked the skills to subsistence hunt and fish and a commitment to the land. Problems in the community with alcohol have also created a situation where some decided to leave. Money from working on the oil spill enabled people to leave the village. In 1990, a year after the oil spill the population of Chenega Bay was 94 people, ten years later it is 69. At this point whether Chenega Bay survives as a community remains open to question.

In Tatitlek people weathered the fear of uncertainty. They had never lived anywhere else and their ties to the land and community are strong. Behind the people is a resolute and stable leadership that has been able to take advantage of programs created by Exxon after the company settled claims with the state of Alaska and the Federal government. Using the money from the Habitat Acquisition program of the *Exxon Valdez* Trustee Council Tatitlek people have invested in their community by building new steam baths, remodeling their homes, and purchasing boats and firearms to continue with their subsistence way of life.

References

Alaska Department of Fish and Game

- 1999 Prince William Sound Management Area: 1998 Annual Finfish Management Report. Regional Information Report No. 2A99-20. Division of Commercial Fisheries, Central Region, Anchorage, Alaska.

Alaska Department of Fish and Game, Division of Subsistence

- 1991a Responses to Social Effects Questionnaires, Tatitlek. Unpublished survey data in the possession of ADF&G, Division of Subsistence, Anchorage, Alaska.
- 1991b Responses to Social Effects Questionnaires, Chenega Bay. Unpublished survey data in the possession of ADF&G, Division of Subsistence, Anchorage, Alaska.
- 1992 Responses to Social Effects Questionnaires, Chenega Bay. Unpublished survey Data in the possession of ADF&G, Division of Subsistence, Anchorage, Alaska.
- 1993a Responses to Social Effects Questionnaires, Tatitlek. Unpublished survey data in the possession of ADF&G, Division of Subsistence, Anchorage, Alaska.
- 1993b Responses to Social Effects Questionnaires, Tatitlek. Unpublished survey data in the possession of ADF&G, Division of Subsistence, Anchorage, Alaska.

Alaska Department of Labor

- 1999 Alaska Population Overview: 1998 Estimates. Alaska Department of Labor and Workforce Development.
- 2000 Alaska Population Overview: 1999 Estimates. Alaska Department of Labor and Workforce Development.

Alaska Department of Natural Resources and Alaska Department of Fish and Game

- 1988 Prince William Sound Area Plan for State Lands.

Alaska Department of Transportation and Public Facilities and Federal Highway Administration

- 1995 Whittier Access Project. Revised Draft Environmental Impact Statement and Revised Draft Section 4 (f) Evaluation. Chapter 6 Indirect and Cumulative Environmental Impacts.

Alaska Native Claims Settlement Act (Public Law 92-203, December 18, 1971), United States Statutes at Large 85.

Anatolii

- 1899 From the Report of the Dean's Journey for the Inspection of the Parishes in 1898. *American Orthodox Messenger* 3(3): 91-92

Arnold, Robert D.

- 1976 *Alaska Native Land Claims*. The Alaska Native Foundation, Anchorage, Alaska.

Barnes, Nancy

- 1999 Habitat Protection Following the *Exxon Valdez*: A Lasting Treasure. Paper presented at Legacy of an Oil Spill: 10 Years After *Exxon Valdez*, March 23, Anchorage, Alaska.

- Berger, Thomas R.
1985 *Village Journey: The Report of the Alaska Native Review Commission.* Hill and Wang, New York.
- Birket-Smith, Kaj
1953 *The Chugach Eskimo.* Nationalmuseets Publikationsfond. Kobenhavn.
- Black, Lydia
1988 *The Story of Russian America.* In: *Crossroads of Continents: Cultures of Siberia and Alaska*, pp 70-82. Ed. By William W. Fitzhugh and Aron Crowell. Smithsonian Institution, Washington, D.C.
- Borodkin, Sophie
1981 Audio Tape Labeled: 81CACO11, 10/20/81, Interviewers: Jim Ketz, Jim Marcotte, Location: Cordova, ANCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska
- Boxberger, Daniel
2000 *To Fish in Common: The Ethnohistory of Lummi Indian Salmon Fishing.* University of Washington Press, Seattle, Washington.
- Braund, Stephen R. & Associates
1992 *Valdez Native History and Continuity.* Report prepared for the Valdez Native Association.
- Brizgaloff, Fred
1985 Audio Tape Labeled: 81CACO19, 10/20/81, Interviewers: Jim Ketz, Jim Marcotte, Location: Cordova, ANCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska
- Bryner, William M.
1995 *Toward a Group Rights Theory for Remedying Harm to the Subsistence Culture of Alaska Natives.* *Alaska Law Review*, pp. 293-334.
- Bureau of Indian Affairs
Chenega Census, Tribal Census Rolls: 1934-1971; National Archives Microfilm Role 9; Records of the Bureau of Indian Affairs, Record Group 75; National Archives, Anchorage, Alaska.

Tatitlek Census, Tribal Census Rolls, 1934-1971; National Archives Microfilm Role 57; Records of the Bureau of Indian Affairs, Record Group 75, National Archives, Anchorage, Alaska.
- Burch, Ernest S. Jr.
1982 *The Land Claims Era in Alaska.* In: *Handbook of North American Indians*, Vol. 6, pp. 657 - 661. Ed. by June Helm. Smithsonian Institution, Washington, DC.
- Bureau of the Census, Department of Commerce
1900 *Tatitlek and Chenega Census.* National Archives Microfilm Publication roll 1831; Twelfth Census of the United States, 1900. Records of the Bureau of the Census; National Archives, Anchorage, Alaska.

- 1910 Tatitlek and Chenega Census. National Archives Microfilm Publication roll 1750; Thirteenth Census of the United States, 1910. Records of the Bureau of the Census; National Archives, Anchorage.
- 1920 Tatitlek and Chenega Census. National Archives Microfilm Publication roll 2031; Fourteenth Census of the United States, 1920. Records of the Bureau of the Census; National Archives, Anchorage, Alaska.
- Case, David
1990 The Russian Legacy of the Alaska Native Land Claims. In *Russian America: The Forgotten Frontier*, ed. Barbara Sweetland Smith and Remond J. Barnett. Washington State Historical Society, Tacoma, Washington.
- Clark, Donald
1984 Pacific Eskimo, Historical Ethnography. In: *Handbook of North American Indians*, Vol. 6, pp. 185 - 204. Ed. by June Helm. Smithsonian Institution, Washington, DC.
- Coiley, Philippa
1989/90 Unpublished Field Notes in the possession of the Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.
- Coiley-Kenner, Philippa
2000 Cordova and Exxon Valdez Oil Spill. Technical Memorandum 6, Division of Subsistence, Alaska Department of Fish and Game, Anchorage, Alaska.
- Chemavisky, Theodore
1970 Audio Tape Labeled: 79CAC008, Cont., Ted Chemavisky, 08/25/79, Interviewers: Jim Marcotte, Bill Mitchell, Location: Cordova, Side B, Part 4, ANCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska.
- Chenega Corporation Board of Directors
1999 Chenega Working Together, in Anchorage Daily News, Sunday, April 11, 1999. Community Involvement Facilitators, Local Community Representatives, other Regional Representatives.
- 1995 Letter to Molly McCammon, Executive Director, Exxon Valdez Oil Spill Trustee Council, dated January 25, 1997.
- Davis, Nancy Yaw
1996 The Exxon Valdez Oil Spill, Alaska. In *The long road to recovery: Community responses to industrial disaster*, ed. by James K. Mitchell. United Nations University Press, New York.
- de Laguna, Frederica
1956 Chugach Prehistory: The Archaeology of Prince William Sound. University of Washington Press, Seattle, Washington.
- Duffield, John
1995 Nonmarket Valuation and the Courts: The Case of the Exxon Valdez, in *Contemporary Economic Policy*, Volume XV, October 1997.

- Edelstein, M.R.
1985 Contaminated Communities: The Social and Psychological Impacts of Residential Toxic Exposure. Westview Press, Boulder and London.
- Enge, M.
1993 Faces in a Big Crowd Wait for Spill Money, in Anchorage Daily News, July 26, 1993.
- Erikson, Kai
1994 Social Effects of the Exxon Valdez Oil Spill on the Native Villages in Alaska. Prepared for Cohen, Milstein, Hausfeld and Toll and Sonosky, Chambers, Saches, Miller and Munson.
- Exxon Valdez* Oil Spill Trustee Council.
1994. Restoration Update, Volume 1, Number 5. September 1994. Anchorage, Alaska.
- 1995 March 24. Invitation to Submit Restoration Projects for Federal Fiscal 1996 and Draft Restoration Program: FY 96 and Beyond. Anchorage, Alaska.
- 1996a February 15. Invitation to Submit Restoration Proposals for Federal Fiscal Year 1997. Anchorage, Alaska.
- 1996b December 6. Protocols for Including Indigenous Knowledge in the *Exxon Valdez* Oil Spill Restoration Process. Anchorage, Alaska.
- 1997a Restoration Update, Volume 4, Number 2. June-July 1997. Anchorage, Alaska.
- 1997b Invitation to Submit Restoration Proposals for Federal Fiscal Year 1998. February 15, 1997. Anchorage, Alaska.
- 1997c Restoration Update, Volume 4, Number 3. August-September 1997. Anchorage, Alaska.
- 1997d Restoration Update, Volume 4, Number 1. March 1997. Anchorage, Alaska.
- 1998a 1998 Status Report. Anchorage, Alaska.
- 1998b Restoration Update, Volume 5, Number 3. May, June, July 1998.
- 1999a *Exxon Valdez* Oil Spill Restoration Plan: Update on Injured Resources and Services, March 1999. Anchorage, Alaska.
- 1999b 1999 Status Report: Legacy of an Oil Spill 10 Years After *Exxon Valdez*. Anchorage, Alaska.
- 1999c Restoration Update, Volume 6, Number 2. March-April 1999. Anchorage, Alaska.
- Fall, James
1999 Oil Spill Long Term Consequences of the Exxon Valdez Oil Spill. A paper presented at the symposium, Legacy of an Oil Spill: 10 years After the Exxon Valdez Oil Spill. Technical Session on Subsistence, Communities, and Human Dimensions.

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

- 1995 *Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska*. Report prepared for the U.S. Department of the Interior, Minerals Management Service. Alaska Department of Fish and Game, Division of Subsistence. Technical Report Number 160. Anchorage, Alaska.

Fall, James A., et al.

- 1995a *Subsistence Harvests and Uses in Chenega Bay and Tatitlek in the Year Following the Exxon Valdez Oil Spill*. Technical Paper No. 199. Alaska Department of Fish and Game, Division of Subsistence, Juneau Alaska.
- 1995b Subsistence restoration planning and implementation, Exxon Valdez Oil Spill Restoration Project Final Report (Restoration Projects 94428 and 95428), Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.
- 1996 Annotated Bibliography and Integrative Overview, Technical Memorandum 2. Prepared by: Division of Subsistence, Alaska Department of Fish and Game. Prepared for: United States Department of the Interior, Minerals Management Service. Cooperative Agreement No. 14-35-0001-30788. October 15, 1996. Revised with addendum, December 3, 1996. Files of the Division of Subsistence, Anchorage, Alaska.

Fall, James, and Charles Utermohle

- 1999 *Subsistence Harvest and Uses in Eight Communities Ten Years After the Exxon Valdez Oil Spill*. Technical Paper 252. Alaska Department of Fish and Game, Division of Subsistence, Juneau, Alaska.

Fedorova, Svetlana G.

- 1975 *Ethnic Processes in Russian America*. Anchorage Historical and Fine Arts Museum. Occasional paper No.1 Translated by Antoinette Shalkop.

Fienup-Riordan, Ann

- 1986 *When Our Bad Season Comes: A Cultural Account of Subsistence Harvesting and Harvest Disruption of the Yukon Delta*. Alaska Anthropological Association Monograph Series, # 1.
- 1990 *Eskimo Essays: Yupik Lives and How We See Them*. Rutgers University Press, New Brunswick and London.

Fortier, S.

1995. Personal Communication. Notes on Conversation, November 1, 1996. Files of the Division of Subsistence, Alaska Department of Fish and Game. Anchorage, Alaska.

Golovin, P.N.

- 1979 *The End of Russian American: Captain P.N. Golovin's Last Report, 1862*. Ed. By Basil Dytryshyn and E.A.P. Crownhart-Vaughan. Oregon Historical Society, Portland.

Grant, U.S. and D.F. Higgins

- 1910 *Reconnaissance of the Geology and Mineral Resources of Prince William Sound*. U.S.G.S. Bulletin 443. U.S. Government Printing Office, Washington.

- Gregorieff, Edward
1987 Audio Tapes Labeled: 87CHU003 & 87CHU004, Edward Gregorieff, 07/19/87, Interviewers: Mark McCallum, Steven Street, Location: Tatitlek, ANCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska.
- Haggerty, James C. Christopher Wooley, Jon M. Erlandson and Aron Crowell.
1991 *The 1990 Exxon Cultural Resource Program: Site Protection and Maritime Cultural Ecology in Prince William Sound and the Gulf Alaska.* Exxon Shipping company and Exxon Company USA, Anchorage.
- Hassan, Harold
1978 *The Effect of European and American Contact on the Chugach Eskimo of Prince William Sound, Alaska 1741-1930.* Ph.D. dissertation, University of Wisconsin, Milwaukee. University Microfilms, Ann Arbor.
- Holloway, M.
1996. Sounding Out Science. *Scientific American* 275(4). October 1996.
- Impact Assessment, Inc.
1990a Interim Report #3: Social and Psychological Impacts of the *Exxon Valdez* Oil Spill. For the Economic, Social, and Psychological Impact Assessment of the Exxon Valdez Oil Spill. Prepared for Oiled Mayors Subcommittee, Alaska Conference of Mayors. August 13, 1990. Anchorage, Alaska.
1990b *Final Report. Economic, Social, and Psychological Impact Assessment of the Exxon Valdez Oil Spill.* Prepared for Oiled Mayors Subcommittee, Alaska Conference of Mayors. November 15, 1990. Anchorage, Alaska.
- Janson, Lone
1975 *The Copper Spike.* Alaska Northwest publishing Company, Anchorage, Alaska.
- Jorgensen, Joseph
1995 Ethnicity, Not Culture? Obfuscating Social Science in the Exxon Valdez Oil Spill Case. *American Indian Culture and Research Journal* 19 (4): 1-124.
- Juneau Empire
1995 *Between Worlds: How The Alaska Native Claims Settlement Act Reshaped the Destinies of Alaska's Native People.* Morris Communications Corp.
- Kan, Sergei
1989 Recording Native Culture and Christianizing the Natives—Russian Orthodox Missionaries in Southeastern Alaska, in *Russia in North America: Proceedings of the 2nd International Conference on Russian America*, Sitka, Alaska, August 19-22, 1987. The Limestone Press, Fairbanks, Alaska.
- Ketz, James and Katherine Arndt
1990 *Calendar of Russian American Company and Alaska Commercial Documents Relating to Nuchek (1818-1905).* Prepared for Chugach Heritage Foundation.

Klashnikoff, John

- 1979 Audio Tape Labeled: 79CAC003, Parts 1 & 2, John Klasknikoff, 05/17/79, Interviewers: Jim Ketz, Jim Marcotte, Location: Cordova, ANCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska.
- 1980 Audio Tape Labeled: 80CDV006, Parts 1 & 2, John Klasknikoff, 07/19/80, Interviewers: Eric Kuntz, John Johnson, Jim Marcotte, Location: Cordova, NCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska.

Kompkoff, Donald Sr.

- n.d. Draft Report: Chenega History and Culture. Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

Kompkoff, Gary

- 1999 Interview conducted for the video *Tatitlek, Changing Tides*. Tatitlek Village Council and the Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

Kompkoff, Irene

- 1997 Interview in the Tatitlek Jukebox. Alaska Department of Fish and Game, Division of Subsistence and the Tatitlek Village Council.

Kompkoff, Joe

- 1980 Audio Tape Labeled: 80CDV001, Joe Kompkoff, 06/15/80, Interviewers: Bill Mitchell, J. Johnson, G.B. Lewis, Location: Cordova, Side A, Part 1, ANCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska.

Kompkoff, Mary A.

1996. Transcript of Audio Tape Labeled: Chenega Bay Project Jukebox, 9-27-97, Mary A. Kompkoff, R. Miraglia—Interviewer. Files of the Division of Subsistence, Alaska Department of Fish and Game. Anchorage, Alaska.

Kompkoff, Mary A.

- 1998 Transcript of Audio Tape Labeled: Chenega Bay Project Jukebox, 9-27-97, Mary A. Kompkoff, R. Miraglia—Interviewer. Files of the Division of Subsistence, Alaska Department of Fish and Game. Anchorage, Alaska.

Kompkoff, Nicholas

- 1981 Audio Tape Labeled: 80CAC003, Parts 1 & 2, Nick Kompkoff, 11/04/80, Interviewers: A.J. Lynch, Linda Medlock, John Johnson, Location: Anchorage, ANCSA 14(h)(1) Oral History. U.S. Department of the Interior, Bureau of Indian Affairs, ANCSA Office. Anchorage, Alaska.

Kompkoff, Pete, Sr.

- 1991 Transcript of Audio Tape Labeled: Chenega Bay, 2-13-92, Paul Kompkoff Sr., Place Name Interview, Site Descriptions, R. Miraglia—Interviewer. Files of the Division of Subsistence, Alaska Department of Fish and Game. Anchorage, Alaska.

- Kompkoff, Pete
1999 Transcript of Audio Tape Labeled: Chenega Bay Project Jukebox, 9-18-96, Pete Kompkoff, R. Miraglia—Interviewer. Files of the Division of Subsistence, Alaska Department of Fish and Game. Anchorage, Alaska.
- Lethcoe, Jim and Nancy
1999 Brief History of Prince William Sound, Alaska. Prince William Sound Books, Valdez, Alaska.
- Lisowski, M.
2000 Acquisition of Chenega Land Interests, in Summary: Agreement For Sale and Purchase of Lands and Interests in Land Among Native Village Corporations, the United States of America, and the State of Alaska. Kathleen Bartu. Chugach National Forest, 3301 "C" Street, Suite 300, Anchorage, Alaska, September 9, 1998.
- Miraglia, Rita A.
1990 Field Notes. Files, Alaska Department of Fish and Game, Division of Subsistence. Anchorage, Alaska.
- 1991 Field Notes. Files, Alaska Department of Fish and Game, Division of Subsistence. Anchorage, Alaska.
- 1992 Field Notes. Files, Alaska Department of Fish and Game, Division of Subsistence. Anchorage, Alaska.
- 1993 Field Notes. Files, Alaska Department of Fish and Game, Division of Subsistence. Anchorage, Alaska.
- 1996 Transcript of interview with Pete Kompkoff. Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.
- 1997 Field Notes. Files, Alaska Department of Fish and Game, Division of Subsistence. Anchorage, Alaska.
- Morseth, Michele
1998 *Puyulek Pu'irtuq!: The People of the Volcanoes: Aniakchak National Monument and Preserve Ethnographic Overview and Assessment*. National Park Service, Anchorage, Alaska.
- Moser J.
1899 *Salmon and Salmon Fisheries of Alaska. Report of the Operation of the U.S. Fish Commission Steamer Albatross for the Year Ending June 30, 1899*. Bulletin of the U.S. Fish Commission, Volume XVIII. Government Printing Office, *Washington. D.C.
- National Oceanic and Atmospheric Administration
n.d. National Marine Fisheries Service, Alaska Region 1884-1975, National Oceanic and Atmospheric Administration Annual Reports 1925-1966, Record Group 370, Box 6; National Archives, Anchorage.

Nighswander, Thomas S.

- 1999 Role of the Alaska Oil Spill Health Task Force Following the *Exxon Valdez* Oil Spill, in *Evaluation and Communicating Subsistence Seafood Safety in a Cross-Cultural Context: Lessons Learned from the Exxon Valdez Oil Spill*. SETAC Press, Pensacola Florida.

North Pacific Management Council

- 1994 Faces of the Fisheries: Prince William Sound, Anchorage, Alaska.

O'Brien, Jerry

1994. Letter to Staff of the Division of Subsistence, dated January 14, 1994. Files of Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.

O'Harra, Douglas

- 1998 Sound Battles Back, But Threats Linger. Anchorage Daily News, March 21, 1999.

Oleksa, Michael

- 1990 The Death of Heiromonk Juvenaly, in Russia in North America: Proceedings of the 2nd International Conference on Russian America, Sitka, Alaska, August 19-22, 1978. The Limestone Press. Fairbanks, Alaska.
- 1999 Address given at Eyak Youth-Elders Conference, August 20, 1998. Cordova, Alaska.

Paige, Amy W.

- 1993 History of the Hair Seal Bounty and Predator Control Programs in Alaska. Addendum to Appendix B in Wolfe and Mishler, The Subsistence Harvest of Harbor Seal and Seal Lion By Alaska Natives in 1992. Technical Paper No. 229, Part 1. Alaska Department of Fish and Game, Division of Subsistence, Juneau, Alaska.

Payne, James T.

- 1982 The Effects of the 1964 Alaska Earthquake on the Cordova, Alaska, Commercial Salmon Fishery: An Anthropological Perspective. Ph.D. Dissertation, Washington State University.

Phillips, Natalie

- 1994a. Exxon Settles Lawsuit: Natives get \$20 million for subsistence losses, in Anchorage Daily News, Tuesday, July 26, 1994.
- 1994b. \$5,000,000,000: Jury sets oil spill damages, in Anchorage Daily News, Saturday, September 17, 1994.

Piper, Ernest

- 1994 The Exxon Valdez Oil Spill: Final Report, State of Alaska Response. Alaska Department of Environmental Conservation. June 1993. Anchorage, Alaska.

- Plafker, G., R. Kachadoorian, E.B. Eckel, and L.R. Mayo.
N.D. Date unknown. Effects of the Earthquake of March 27, 1964 on Various Communities: A description of the damage, principally from waves, vertical tectonic movements, and seismic vibration, to inhabited places throughout the earthquake-affected part of Alaska. Geological Survey Professional Paper 542-G. U.S. Department of Agriculture, Forest Service.
- Pullar, Gordon
1989 Ethnic Identity, Cultural Pride, and Generations of Baggage: A Personal Experience. *Arctic Anthropology* 29 (2): 198-209.
- 1996 Aleut pp. 19-21. In *Encyclopedia of North American Indians*. Edited by Frederick E. Hoxie Houghton Mifflin Company, Boston.
- Quam, Darrin J.
1991 Right to Subsist: The Alaska Native's Campaign to Recover Damages Caused by The *Exxon Valdez* Oil Spill. *Georgetown International Law Review* 5(1):177-213.
- Reynolds, Stephanie
1992 Effects of the 1989 *Exxon Valdez* Oil Spill on Cordova, Alaska. Social Indicators Study of Alaskan Coastal Villages. Postspill Key Informant Summaries. Schedule C Communities, Part 1. Minerals Management Service.
- Rice, S.D., C.C. Brodersen, P.A. Rounds, and M.M. Babcock
1993 Oiled Mussel Beds: A Lasting Effect. The Magazine of the Alaska Department of Fish and Game: Alaska's Wildlife, Special Issue 25(1). January/February 1993.
- Romano-Lax, A.
2000 Paradise Regained?: An Oil Spill Retrospective. *Alaska: The Magazine of life on the Last Frontier* 65(2). March 1999.
- Rollins, Alden M.
1978 Census Alaska: Number of Inhabitants, 1792-1970. University of Alaska, Anchorage Library. Anchorage, Alaska.
- Russian Orthodox Church Records translated by the Arctic Studies Center, Anchorage, Alaska.
- D303-203, Nuchek: Buildings-property: Transfiguration Chapel, school building.
- D303-203, Nuchek: Education management, Kashevarov, Andrei Petrov
- D303-203, Nuchek: education-students: Transferred to Oregon
- D304-204, Nuchek: matrimony-illegitimacy: children by unmarried Orthodox Native women.
- D303-204, Nuchek: Reports/records: Kashevarov, Andrei.
- D305-204, Nuchek: Reports/records: Pavlov, Konstantin.
- D305-204, Nuchek: Travel journal: Donskoi, Vladimir.
- D304-204, Nuchek: Travel reports: Pavlov, Konstantin.
- D305-204, Nuchek, Tatitlek: Parish records confessional list: St. Nicholas Church.

- Serafin, Ieromonk
1907 "The Kingdom of Death" *American Orthodox Messenger* 11(10), pp.182-184.
- Seitz, Jody
1994 Field notes on file, Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.
- Shkilnyk, A.M.
1985 *A Poison Stronger Than Love: The Destruction of an Ojibwa Community*. Yale University Press, New Haven and London.
- Simeone, William E.
1990 Field notes in possession of the author.
- Slavik, L.
2001 Sound Recovery: Ten Years After North America's Worst Oil Spill, Alaska's Prince William Sound Shines Again. Approach. March 1999.
- Slovik, P.
1987 Perception of Risk, in *Science*, Volume 236, 17 April 1987.
- Smith, Estellie
1977 Introduction, In: *Those Who Live From the Sea: A Study in Maritime Anthropology*, pp. ed. by Estellie Smith. West Publishing Company. St. Paul.
- The Smithsonian Institution, Arctic Studies Center and The Alutiiq Museum and Archaeological Repository 1998. An Alutiiq Gathering and Exhibit: Rebirth of a Nation. Unpublished flyer.
- Stafeev, Vladimir
n.d. Manuscript Journal 1880/1895. Alaska State Historical Archives, Juneau, Alaska. Unpublished Translation courtesy of Sonia Luehrmann.
- Stratton, Lee
1989 Memo from Lee Stratton to Steve Behnke, Director, Division of Subsistence, dated April 14, 1989. Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.
- 1990 *Resource Harvest and Use in Tatitlek, Alaska*. Technical Paper 181. Alaska Department of Fish and Game, Division of Subsistence, Juneau, Alaska.
- 1990a Unpublished Field Notes. Alaska Department of Fish and Game, Division of Subsistence. Anchorage, Alaska.
- Stratton, Lee and Evelyn B. Chisum
1986 *Resource Use Patterns in Chenega, Western Prince William Sound: Chenega in the 1960s and Chenega Bay 1984-1986*. Technical Paper No. 139. Alaska Department of Fish and Game, Division of Subsistence, Juneau Alaska.
- Strickland, Dan
n.d. Prince William Sound Fisheries: An Overview. In: *Alaska Geographic, Prince William Sound* 20 (1) pp.70-72. Anchorage, Alaska.

- Sweetland Smith, B., D.J. Goa, & D.G. Bell.
1994. *Heaven on Earth: Orthodox Treasures of Siberia and North America*. Anchorage Museum of History and Art. Anchorage, Alaska.
- Swiderski, Alex
1995. Personal Communication. Notes on Conversation, November 1, 1996. Files of the Division of Subsistence, Alaska Department of Fish and Game. Anchorage, Alaska.
- Tatitlek Village IRA Council.
1993a. Letter to Exxon Valdez Oil Spill Health Task Force, dated May 4, 1993. Files of Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.
1993b. Letter to Exxon Valdez Oil Spill Health Task Force, dated August 24, 1993. Files of Alaska Department of Fish and Game, Division of Subsistence, Anchorage, Alaska.
- Totemoff, Mike
2002. Interview in the Tatitlek Jukebox. Alaska Department of Fish and Game, Division Of Subsistence and the Tatitlek Village Council.
- Townsend, Joan
1980. Ranked Societies of the Alaska Pacific Rim. In *Alaska Native Culture and History*. ed. Yoshinobu Kotani and William B. Workman. Senri Ethnological Studies. National Museum of Ethnology, Osaka, Japan.
- United State District Court For the District of Alaska
1995. Order No. 190 Exxon's Motion for Summary Judgement on Native Class Claims for Non-Economic Injury.
- United States of America
1990. United States Code, Title 43 Public Lands, Chapter 33a Implementation of Alaska Native Claims Settlement and Alaska Statehood. 1636 Alaska Land Bank (43 USC 1636).
- University of Alaska Fairbanks Archives
n.d. Marie McDonald Papers: School Letters and Vouchers, University of Alaska Archives, Fairbanks, Alaska.
- VanStone, James
1967. *Eskimos of the Nushagak River: An Ethnographic History*. University of Washington Press, Seattle, Washington.
- Veniaminov, I.
1983. *Notes on the Islands of the Unalaska District*, translated by L.T. Black and R.H. Geoghegan, edited, with an introduction by R.A. Pierce. The Limestone Press. Kingston, Ontario, Canada.
- Walker, Alexander
1981. *An Account of a Voyage to the Northwest Coast in 1785 & 1786*, edited by Robin Fisher and J.M. Bumstead. University of Washington Press, Seattle.

Wolfe, Robert J.

- 1987 The Super-Household: Specialization in Subsistence Economies. Paper Presented at the 14th annual meeting of the Alaska Anthropological Association, Anchorage, Alaska.

Wooley, Christopher and Paul Bohannon

- 1994 Alutiiq Culture Before and After the Exxon Valdez Oil Spill. Paper Submitted to *American Indian Culture and Research Journal*, April 1994.

Wrangell, Ferdinand Petrovich

- 1979 *Russian America: Statistical and Ethnographic Information*. Translated from the 1839 edition by Mary Sadouski and edited by Richard A. Pierce. Materials from the Study of Alaska History No. 15, Kingston: The Limestone Press.