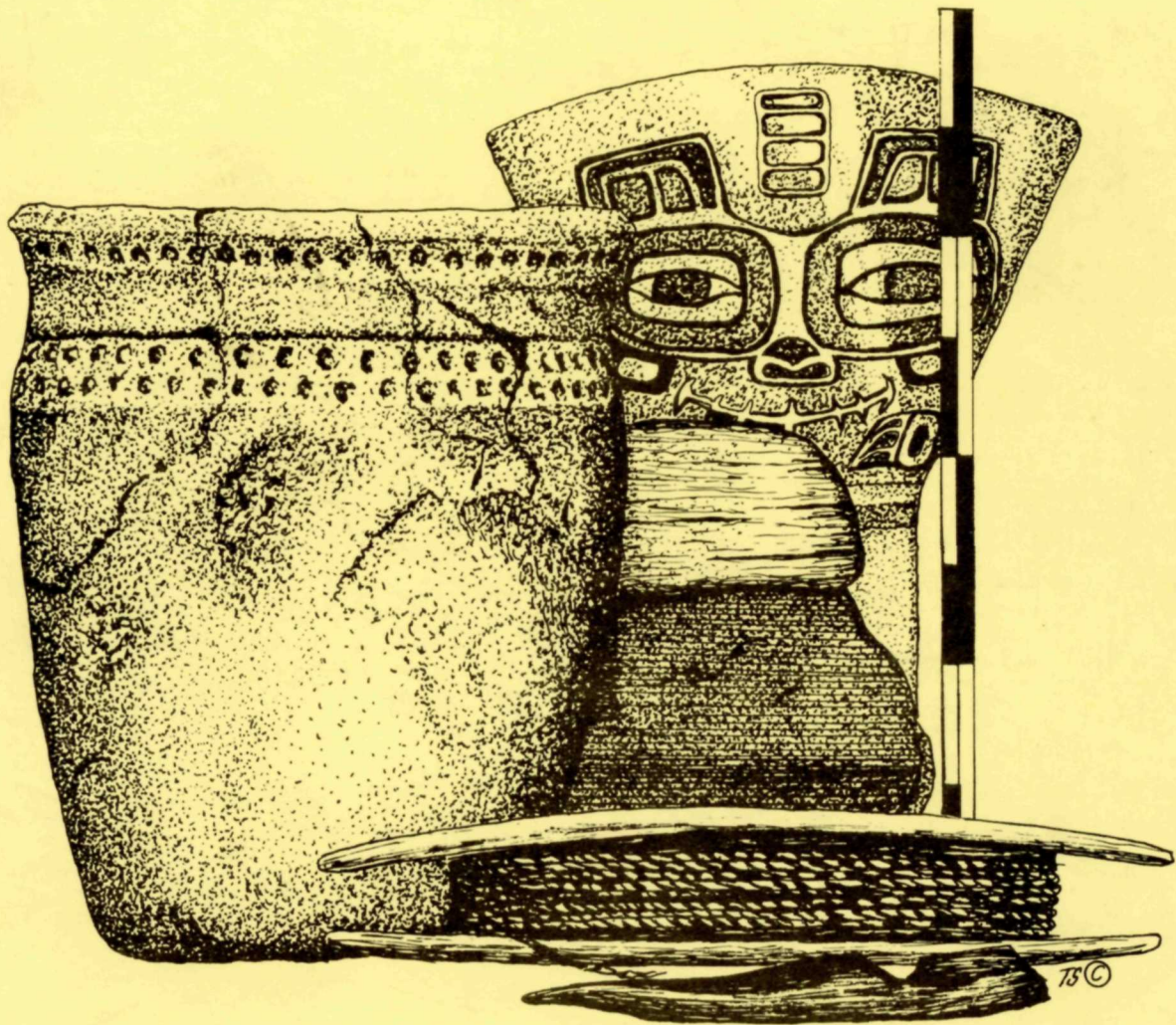


A PRELIMINARY STUDY OF  
SUBSISTENCE ACTIVITIES ON THE PACIFIC COAST OF THE  
PROPOSED ANIAKCHAK CALDERA NATIONAL MONUMENT

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Occasional Paper Number 4  
1977

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## ACKNOWLEDGEMENTS

I am grateful to all the residents of the villages I visited, for without their hospitality, kindness and cooperation none of this research would have been possible. Special thanks to Father Harry Kaiakokonok and his wife Jenny, Ignatius, Frieda, Harry W., Harry O., and Janet Kosbruk, all of Perryville; Mike and Olga Sam of Chignik Lagoon; Sonia and Sam Stepanof and Julia and Andy Kalmakoff of Chignik Lake; and Axel and Alva Carlson of Chignik Bay. These people took me into their homes as a complete stranger and taught me a great deal about life on the Alaska peninsula; indeed, about life itself.

Jim Faro, Alaska Department of Fish and Game, Unit 9 Game Biologist, was most helpful in assisting in the compilation of fish and game data as well as taking me along on a moose survey in the fall of 1976. Hubert Jansen at the University of Santa Clara was also gracious in letting me persue the Hubbard Collection and reprint some of the photographs in this report. Dr. Gary Stein and Dr. Wayne Thomas, both with the University of Alaska, reviewed the final manuscript and offered valuable criticisms and helpful suggestions. Their time spent carefully reading this manuscript is greatly appreciated.

I am particularly indebted to Zorro Bradley for enabling me to undertake this study, Arturo Frizzera for the map work, and Ilyne Miller for her many hours of typing.



## PREFACE

This is a rather superficial treatment of subsistence activities. Historic and anthropological aspects of subsistence are not treated in depth, nor is there any attempt to assess the economic values of subsistence. It is not possible for an investigator to present a comprehensive report about subsistence having spent only a few weeks at the villages in question. Readers should recognize these limitations and inadequacies and value the report for what it is: an introduction. Very little research about the people on the south side of the Alaska peninsula has been conducted and this report is valuable in pointing out the need for further research in this area.

The report contains detailed information (ie. harvest data, historic site locations) for particular use by National Park Service planners and managers.

## I. INTRODUCTION

The 1971 Alaska Native Claims Settlement Act (ANCSA) divided and redistributed Alaska's land among the newly incorporated natives of Alaska and agencies of the federal and state government. As a result of the ANCSA provision to allow selection of additions to the existing park system<sup>1</sup>, the National Park Service (NPS) has proposed that a new national monument be established on the Alaska peninsula. If designated by the Congress this new area, which comprises approximately 580,000 acres of Pacific coastline, river, creeks, lowlands and a six mile wide volcanic caldera, would become the Aniakchak Caldera National Monument (Figure 1).

Recorded history has often portrayed the Pacific coastal section of the proposed monument as merely a section of the landscape to be observed while traveling on the way to someplace else. Seemingly unnoticed beneath the cloudy grey skies of the Alaska peninsula, the temporary commercial successes and failures, sparse and fluctuating populations, and sporadic scientific discoveries have left little visual or archival evidence of the coastline's history. This is unfortunate, for the resources of this coastline have provided food and clothing as well as a supplemental cash income for past and present residents of the area.

Forty miles south of the proposed national monument on the Pacific coast are the three "Chignik villages"- Chignik Lake, Chignik Lagoon, and Chignik Bay- whose residents have relied upon land and water

<sup>1</sup>  
P.L. 92-203, 92nd Congress, H.R. 10367, Section 17 d (2),  
December 18, 1971

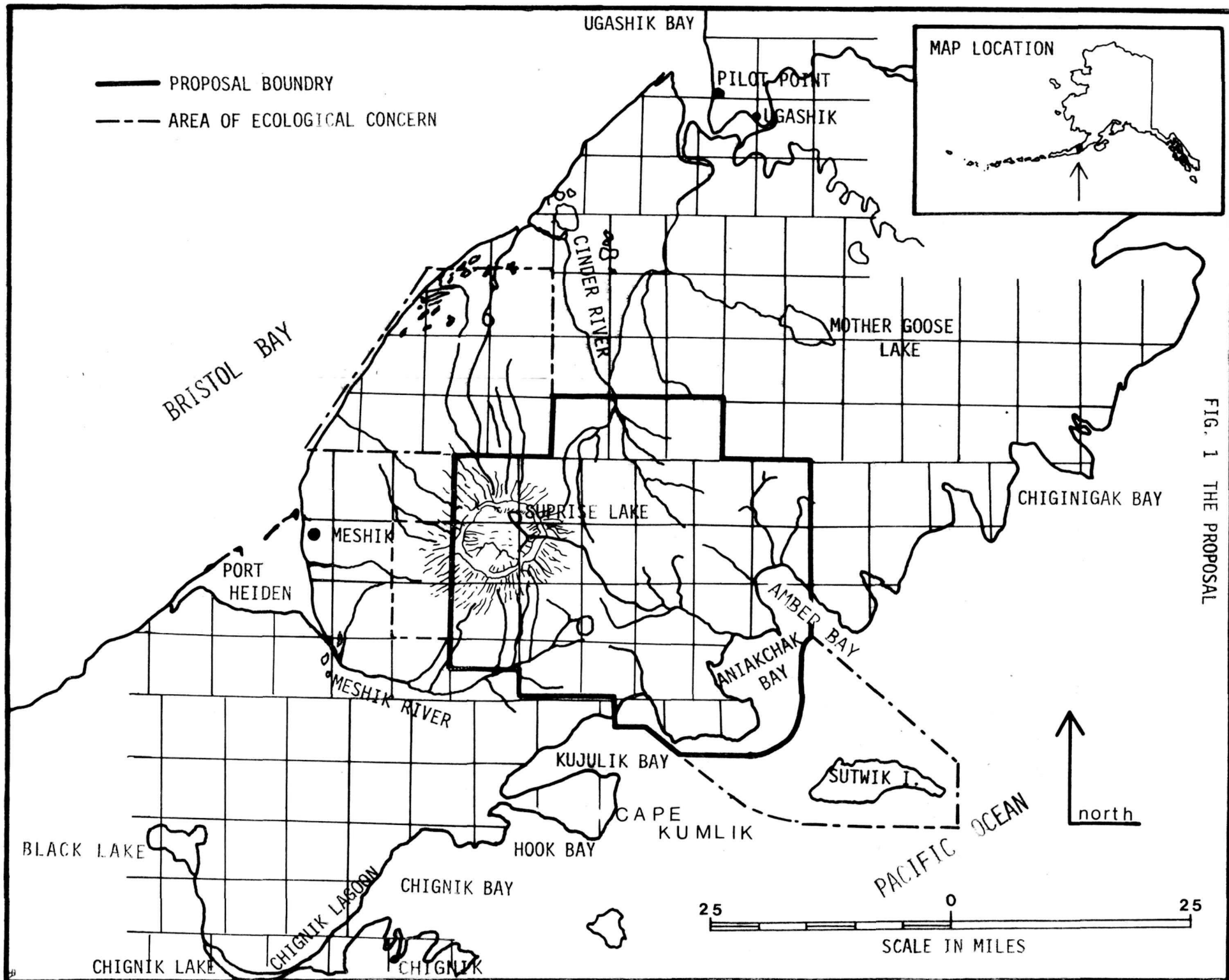


FIG. 1 THE PROPOSAL

resources of the coastline to meet a variety of physical, social and economic needs. The values and merits of the proposed Aniakchak Caldera National Monument are buried not only deep within the scientifically mysterious caldera, but also in the more subtle interactions between residents of the Chignik villages and the Aniakchak coastline.

People who support themselves by utilizing local natural resources rather than working for a monetary income are often considered to be living a "subsistence" lifestyle. Very few, if any, Alaskans live completely from the resources of the land. However, many residents of Alaska still depend on their surrounding environment to provide some portions of their sustenance. This partial dependence upon resources is particularly complex and confusing in Alaska where there are diverse cultures, an inequitable distribution of natural resources and the lack of a stable economic base. There cannot be, therefore, a single, all-purpose definition of subsistence. Each region in Alaska is unique and must be viewed in light of the forces affecting the residents' reliance upon natural resources that are specific to that region.

For the purposes of this report, "subsistence" is defined as the taking of customary or traditional wild foods and other renewable biological resources from the lands and waters for personal or family consumption, and not solely for sale or commercial enterprise. Customary trade or barter between subsistence users for personal or family consumption, as well as the making of traditional native handicrafts for sale is also considered to be consistent with this definition of subsistence.

Subsistence foods and raw materials, if denied, would result in undue and unreasonable hardship to the user and/or family. Such



consumable items are not meant as a mere addition to the family larder, but rather, as the central supporting source for an individual's or family's subsistence; i.e. the pivotal means of well-being without which an unacceptable decline in human welfare would ensue.

Many people of rural Alaska retain a dependence upon traditional subsistence resources to a degree which no longer exists elsewhere in the United States. Due to the character of Alaskan environs, lands conveyed to native people as part of the Alaska Native Claims Settlement Act (ANCSA) cannot alone sustain a subsistence livelihood. Lands and waters of critical importance to the harvest of fish, game, and wild plantlife often fall outside of native selection lands. Subsistence uses occur in regions of the state administered by the state of Alaska, within private holdings, and upon federally owned lands and waters-- including areas proposed as additions to the national system of parks, wildlife refuges, forests, and wild and scenic rivers. Equitable and consistent management policies for subsistence uses of renewable resources under all jurisdictions will be necessary. Comprehensive NPS regulations for the management of subsistence practices within park lands proposed under ANCSA must be created in each of the new areas.<sup>2</sup>

## II. PURPOSE

This report focuses on the hunting, fishing, trapping and gathering activities of Chignik village residents on the coastline of the proposed Aniakchak Caldera National Monument. Baseline data and an introduction to a few of the forces that can alter this data are presented in an attempt to begin to understand what constitutes a subsistence lifestyle on the south side of the Alaska peninsula.

<sup>2</sup>Robert Belous, S. Newman. Draft Subsistence Policy, National Park Service, 1976.

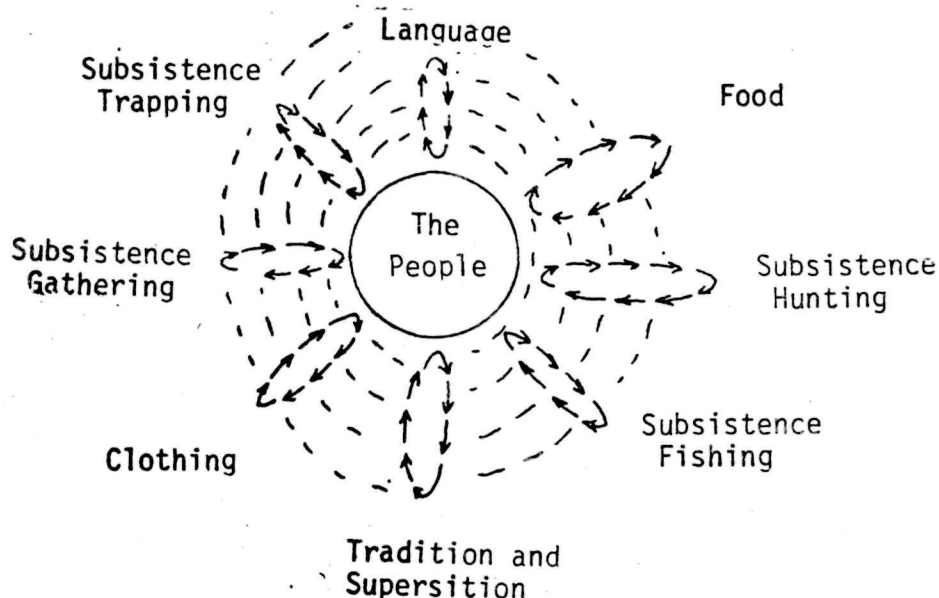
This information is presented in the following manner:

- a) a description of the physical environment
- b) a brief history of resource harvesting activities in and around the proposed monument
- c) when and where resource harvesting activities occurred in 1975 and the quantities taken for local consumption
- d) historic sites on the coast of the proposed monument
- e) preliminary recommendations for subsistence management and the need for further research in this area.

Information within this report should prove useful for public officials considering the proposed Aniakchak Caldera National Monument, Bristol Bay and Koniag Native Corporations with potential land-holdings in the area, NPS planners and managers should the land become a national monument, and for the people of the Chignik villages.

### III. APPROACH

There are various methods of looking at subsistence as a dynamic as opposed to a static, way of life. One approach is to view subsistence as the sum of cultural and social forces affecting a way of life. In Kuuvangmiit<sup>3</sup>, a study of the subsistence activities on the Kobuk River, this type of "internal" method was used:



<sup>3</sup>  
Douglas Anderson, R. Bane, R. Nelson, W. Anderson, N. Sheldon,  
Kuuvangmiit: Traditional Subsistence Living in the Latter 20th Century.  
Unedited, prepublication draft. National Park Service, 1976.

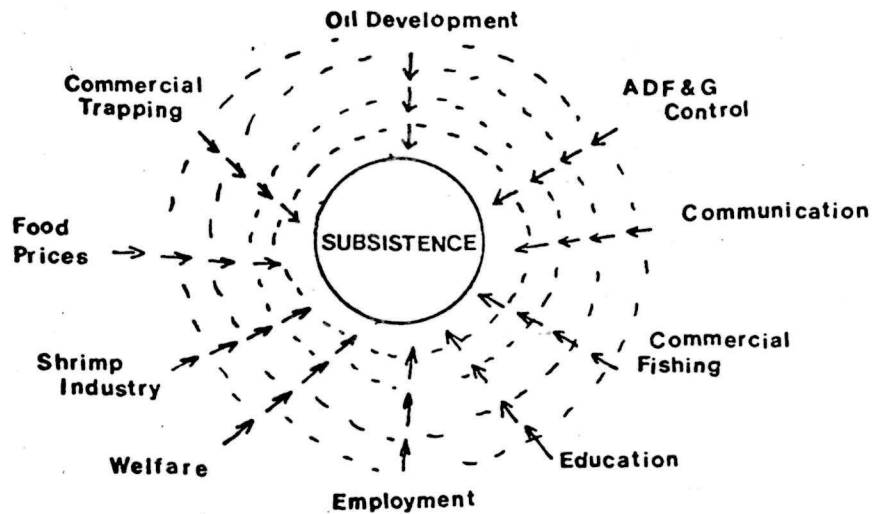
This view is perfectly attuned to the Kobuk environment because these people maintain strong visible ties to their traditional way of life.

The inhabitants of the Alaska peninsula, however, have had a longer period of contact with outside, or "external" forces that have greatly influenced their way of life. As the kneecap of a long leg kicking out from Anchorage across the Aleutians to Asia, the Chignik-Aniakchak coast of the peninsula is an important pivotal point in the commercial fishing industry and a major trade route for Aleutian-bound traffic. Technology, foreign interests and the cash economy have rapidly traversed this leg greatly altering the traditional lifestyle of the native inhabitants.

Superficially, the Chignik villages might seem "non-native" because they do not visibly manifest strong ties to their Eskimo-Aleut heritage. Modern conveniences are available throughout parts of each village, English is spoken by all but the oldest residents and many have spent time in the lower-49 states. Despite the adoption of some modern methods, these people have not relinquished their dependence upon the natural environment.

The relationship between the Chignik villagers and the Aniakchak coast is constantly changing and fluctuates because of both internal and external forces. Insight into both of these forces will explain the dynamic relationship between the residents of Chignik and the proposed monument, the role of subsistence in the overall land use pattern off the peninsula, and in turn, how such activities relate to Alaska and the outside world.

Until more time can be spent in the villages, my research has been conducted on a few of the outside, or "external" forces shaping the Chignik-Aniakchak relationship:



The people of the Alaska peninsula are much more acculturated than many people of northern Alaska. That these villages do not seem "traditionally native", however, does not mean they should be overlooked.

#### IV. METHOD

Four major approaches were used to gather information; living for short periods of time in the Chignik villages, visiting the proposed monument, meeting with the Alaska Department of Fish and Game (ADFG) and library research. Each method offered a distinctively different data base which, when integrated, helped to provide a more holistic interpretation of activities along the Pacific coastline.

Letters were written in advance to each village council president announcing a forthcoming visit and requesting assistance in locating housing and contacts in the villages. Bristol Bay Native Association sent a letter to each council explaining that the purpose of the visit was to conduct a resource-subsistence survey. I also visited Dillingham and



spoke with representatives of both Bristol Bay Native Corporation and Bristol Bay Native Association.

I spent one week in May and one week in August living in each of the three Chignik villages, and briefly visited Perryville and Ivanof Bay. Interviews were conducted somewhat formally at first with a guideline questionnaire (Figure 2) and a U.S.G.S. 1:250,000 map which was covered with plastic to allow residents to trace their subsistence harvesting locations. As time passed, however, more information was obtained by participating in various activities and by simply absorbing local knowledge rather than by direct questioning. I resided in private homes, was included in community functions, and traveled in locally owned skiffs, fishing boats, three-wheeled Hondas, and the Peninsula Airways mail plane from King Salmon, Alaska.

Historical information was obtained through oral interviews with local residents, visits to sites around the villages, and through research at the Bancroft Library (University of California, Berkeley), the Hubbard Collection (University of Santa Clara, California) and the University of Alaska (Fairbanks, Alaska).

Information about sport hunting was obtained from ADFG's limited guide data for a three year period, and by visiting some guide camps on the Alaska peninsula during an ADFG fall moose survey. Conversations with the hunting guides provided much insight into the hunting pressure on the coastline.

Commercial fishing spokesmen were away from the villages during my visits and information about the salmon fisheries is limited. Numerical fish harvest data, although available in the

NOTE: These questions were incorporated into everyday conversations  
as much as possible

Figure 2

Guideline Questionnaire

Village\_\_\_\_\_

Date\_\_\_\_\_

1. How long have you lived in this village?
2. What village did you live in before this one? For how long?
3. Including yourself, how many people do you support? State age and sex. How many of these people live with you or in the same village?
4. If you are a commercial fisherman, are you normally 1) a boat captain, 2) partner, 3) crew member?
5. Do you operate a commercial drift gill net or set net?
6. How many fish did you and your family catch for subsistence from breakup last year to breakup this year?

salmon	grayling	Dolly Varden
char	rainbow trout	crab
whitefish	smelt	shrimp
pike	herring	others

7. How was this subsistence fishing conducted? (private boat, family on commercial craft, etc.)
8. How many fish were eaten by your family? Smoked for sale?
9. What animals and how many of each kind did you and your family harvest for meat, hides and furs, from breakup last year until breakup this year?

moose	seal	cranes
caribou	sea lion	ptarmigan
brown bear	ducks	beaver
black bear	geese	others

10. How many berries (blue, black, cran, salmon and wine) do you put away each year (approx. gallon)?\*
11. What uses do you make from the hides and furs of the animals you harvest?
12. Can you show on a map how much of the land and water around your village is used by the people of your village for hunting, fishing, gathering wood, eggs, berries and other natural products of the land? Also include those areas far away from your village that you reach by airplane or extended snowmobile or boat trips.

Guideline Questionnaire (continued)

13. In your own estimation, what percent of the total land/water resources are used by your family for subsistence (not for sale) vs. store bought?

\*Information gathered while in the area during berrypicking season.

4

Environmental Impact Statement (EIS) for the proposed monument, does not discuss the relationships between foreign and domestic fishing interests, the potential for tanker traffic on the peninsula, or patterns of boat activity off the coast in general. These should be taken into consideration when viewing the commercial fishing industry and its future on the peninsula.

## V. LIMITATIONS

The effects of the Alaska Native Claims Settlement Act (ANCSA) can already be seen in the Chignik villages as more and more unfamiliar and uninvited people visit the villages asking a multitude of questions. Occasionally, tense situations arose from the fear and distrust which had been growing in the villages in response to the recent influx of researchers, planners, managers and agency officials with their ANCSA-related paperwork. There was no attempt to retrieve information when situations seemed to provoke hostility or aggravation and, therefore, some of the statistical harvest data is rounded to the nearest figure.

Chignik area residents are particularly sensitive to the powerful role of the ADFG which regulates their commercial salmon industry and local bear, moose, caribou and waterfowl populations. During initial attempts to compile numerical fish and game harvest data, some local residents would occasionally adjust their answers. This cautious attitude seemed to subside as I spent more time in the villages, but harvest data should be considered as having a fairly high margin of error. It is important to note, also, that my observations spanned only part of three seasons and did not visit the villages in winter.

4

Alaska Planning Group, U.S. Department of Interior Final  
Environmental Impact Statement Aniakchak Caldera National Monument  
(Washington: U.S. Department of Interior, 1974).



Resource studies of this nature require time to establish a rapport with the local people. Residents can only withstand so much inquisition and then often become immune to the seemingly endless array of questions. Equally limiting, a researcher can only assimilate so much insight into a different way of life before also becoming immune to further information. It is essential for interested readers to realize that complete resource harvesting data cannot be obtained in one or two visits. Similarly, the attitudes and feelings of the local residents toward these resources, the conflicts of competitive resource use, or reactions to proposed NPS management plans cannot be completely understood in such a short period of time.

Relevant written accounts of the history of southwestern Alaska deal primarily with the southern tip or northernmost portions of the peninsula. Very little has been written about the central portion of the peninsula around the proposed national monument or the Chignik villages. This report offers a brief introduction to the history of the coastline recognizing that a comprehensive history would require research in Russian archives, extensive searching in scattered primary sources, and much more time in the villages. Hunting and fishing harvest data is marginal at best, for monitoring subsistence and sport activities is a massive undertaking not sufficiently implemented at the present time. Lack of an even superficial data base makes research in this geographic area difficult.

As stated earlier, this report is by no means complete - the economic aspects of subsistence have not been discussed and the villages on the north side of the peninsula, although visited<sup>5</sup>, will require further historical land use studies to determine their relationship with the

<sup>5</sup>See Anthony Gasbarro, A Study of Subsistence Activities in Bristol Bay, Institute of Social, Economic and Government Research, University of Alaska, 1975. Numerical harvest data for Port Heiden is tabulated in this report.

Aniakchak environment. Longer studies of the Chignik villages and Perryville and Ivanof Bay are also necessary. These studies need Time: time to wait--for weather to fly, boats to be fixed, people to be home--and then more time to get to know the local residents, hunting guides and commercial fishermen in the region. Until then, this report offers a point from which to begin to understand the many intricacies of establishing a new park area on the Alaska peninsula.

## VI. PHYSICAL ENVIRONMENT

One of the most important factors influencing life around the proposed national monument is the weather. The Alaska peninsula struggles to become free from its shackles of clouds, rain, jagged peaks and foggy harbors and clearly be seen as a viable part of Alaska. Fighting against such an unveiling is the powerhouse of the peninsula--the natural environment. After thousands of years of habitation only six major settlements survive along the 425 miles of Pacific coastal mainland between Cape Douglas and Cape Pankof.

The mountains of the Alaska peninsula are relatively high for a coastal range and peak at 2,000 to 9,000 feet into the cold Aleutian air. With irregular shape, varying size and extreme vertical drop, these mountains meet the churning Pacific Ocean currents to form a wildly beautiful and rugged environment. Along the Aniakchak coastline the mountains slope more gently to reach the ocean's rocky beaches but offer no less a majestic scene. Islands closely bordering the mainland create a navigational maze during stormy weather, making the run from Shelikof Strait to the Shumagin Islands and as far south as Aniakchak one of the most difficult in Alaska.

Winds are particularly variable around Aniakchak and the Chignik villages. According to local knowledge and navigational sources, the

wind generally blows from northwest and west in the early winter, southwest in January and February, and south to southwest from March to September. Autumn finds the wind shifting from west to west-northwest by November, and gales are frequent in winter. Strong winds frequently blow from the Bering Sea through the mountain pass over the Aniakchak and Chignik Rivers, the primary airplane routes across this range.

Considerable cloudiness covers the Chignik villages with surprising amounts of rainfall. Annual accounts of 151 inches of rain and 60 inches of snow are not uncommon, with the latter falling at the water level until June and on the peaks until late summer.

Annual mean air temperatures in the area are at about 37° F and water temperatures are usually 1°-2° warmer than the air in winter, and slightly lower than the air in mid-summer. Generalizing about the weather in the area, seafaring men of the Pacific note that with the exception of an occasional fine summer, the weather of the Alaska peninsula is classified as bad and the difficulties of navigation are many.

For a general overview of the plant and animal resources along the Aniakchak coastline interested readers should look at portions of the Environmental Impact Statement.<sup>6</sup>

## VII. BRIEF HISTORY OF THE CHIGNIK-ANIAKCHAK COASTLINE

It is generally agreed that Aleut-speaking people occupied the Aleutian Islands and the southern tip of the Alaska peninsula, while Eskimo-speaking people resided on the northern portion of the peninsula. Despite the fact that Aleut and Eskimo language families are related,

<sup>6</sup>Alaska Planning Group, EIS p.31-59.

some anthropologists believe that a fairly pronounced linguistic boundary must have existed between Eskimos and Aleuts during a substantial period of the prehistoric past, and glotto-chronological estimates are as high as 6,000 years.<sup>7</sup> Wherever the boundary existed, hunters, trappers and fishermen from several linguistic groups traveled along the Chignik-Aniakchak coast in search of food and shelter. Although the valleys would seem to have provided poor shelter, the Aniakchak River is an excellent salmon stream supporting brown bear and other animal populations. Offshore, Sutwik Island would have afforded protection from unfriendly neighbors although it would have been distant from necessary land resources. It is difficult to hypothesize about prehistoric activity around the proposed monument, for there have been few archaeological excavations along the central portion of the Pacific coastline. We simply know that until the time of western contact, people of the peninsula relied exclusively upon the natural resources of their environment for sustenance: a truly subsistent lifestyle. With the advent of Russian explorers, however, native inhabitants were exposed to a monetary economy which they have not since completely abandoned or adopted.

Rather than restate existing written accounts of prehistoric southwestern Alaska, interested readers should look to Bandi, Dumond, Oswalt, and Hussey for an introduction to this area.<sup>8</sup>

<sup>7</sup>Don Dumond, L. Conton and H. Shields, "Eskimos and Aleuts on the Alaska Peninsula: A Reappraisal of Port Moller Affinities" Arctic Anthropology 12 (1975):49.

<sup>8</sup>See Hans-Georg Bandi, Eskimo Prehistory, translated by Ann E. Keep (College, Alaska: University of Alaska Press, 1969); Don E. Dumond, "Prehistoric Cultural Contacts in Southwestern Alaska" Science vol. 166 (Nov. 28, 1969); Wendell Oswalt, Alaskan Eskimos (San Francisco: Chandler Publ. Co., 1967), and John Hussey, Embattled Katmai: A History of Katmai National Monument, (U.S. Department of Interior, National Park Service, 1971).



## 1740-1790: Russia and the Fur Trade

The last half of the eighteenth century was a time of tremendous change along the Pacific coast of the Alaska peninsula. Russian explorers discovered the coast of Alaska in 1741 while endeavoring to increase geographical knowledge about northwestern America and eastern Siberia. Returning to Russia with stories of abundant sea otter and other fur-bearing animals, hunters, or promyshleniki, of the Kamchatka Peninsula eagerly set sail for the Alaskan coast in search of these valuable furs. Pushing eastward along the Aleutians and up the peninsula to Kodiak Island, the Russians exploited these fur-bearers so thoroughly that by 1770 they were hard to find on the lower peninsula. Traders also exploited the native inhabitants by forcing them to hunt these animals. Although there is no specific mention of native people around the Chignik-Aniakchak coast, people were probably living in the area during these years and were greatly affected by the onslaught of the Russian hunters.

Recognizing the need to establish fur trading on a more orderly and permanent basis in Alaska, the ambitious merchant, Gregory Shelikov, founded the first European settlement on Kodiak Island in 1783. For the next sixteen years his firm of Shelikov-Golikov dominated the fur trade, and the fur trade dominated the lives of native inhabitants of the peninsula.

Although Russian hunters often forced the native inhabitants to hunt sea otter, it has been noted that the natives on the south side of the peninsula did not allow the Russians to settle and were quite hostile toward their intrusion.<sup>9</sup> It is possible that

<sup>9</sup>Petr Aleksandrovich Tikhmenev, The Historical Review of the Formation of the Russian-American Company and Its Activity Up to the Present Time (trans. Dimitri Krenov, Seattle: Works Progress Admin. 1939-40) I, p. 35.

Russian hunters moved to areas where the natives were more passive until they securely established their fur enterprises on Kodiak Island. If this is true, then natives around the Chignik-Aniakchak coast were not contacted by Russian hunters until later years.

Bancroft has suggested that the natives grew accustomed to the Russians, who actually fared quite well in establishing a rapport that allowed fraternizing and intermingling with the natives on the most intimate terms.<sup>10</sup> Such intermingling probably occurred along the Aniakchak coastline and a mix of Russian-Eskimo (and perhaps Aleut) creoles emerged during this period. As trading increased and native inhabitants grew accustomed to the items they were able to obtain from the exchange of furs, populations on the peninsula became increasingly "Russianized". Ancestors of present Chignik residents surely were Russian, or part Russian, and were involved in hunting sea otter and other animals for the promyshleniki probably within the proposed national monument.

Native people on the coastline were occasionally visited by explorers representing countries other than Russia. Captain James Cook, an Englishman, was sent to the peninsula in 1778 and succeeded in mapping the general shape of Alaska and also brought to the attention of other countries the potential for great wealth in Alaska. Although Spanish efforts to reach the Alaska peninsula failed in 1774 and again in 1775, explorers did reach the area in 1779. The French government also sent explorers on a tour of the world which included finding out about the fur potential in Alaska. There were numerous exploring parties which hoped to geographically chart the coastline and hunt its fur-

<sup>10</sup>Hubert H. Bancroft, History of Alaska (Halfner Publishing Co. 1886: 1970) p. 168-70.

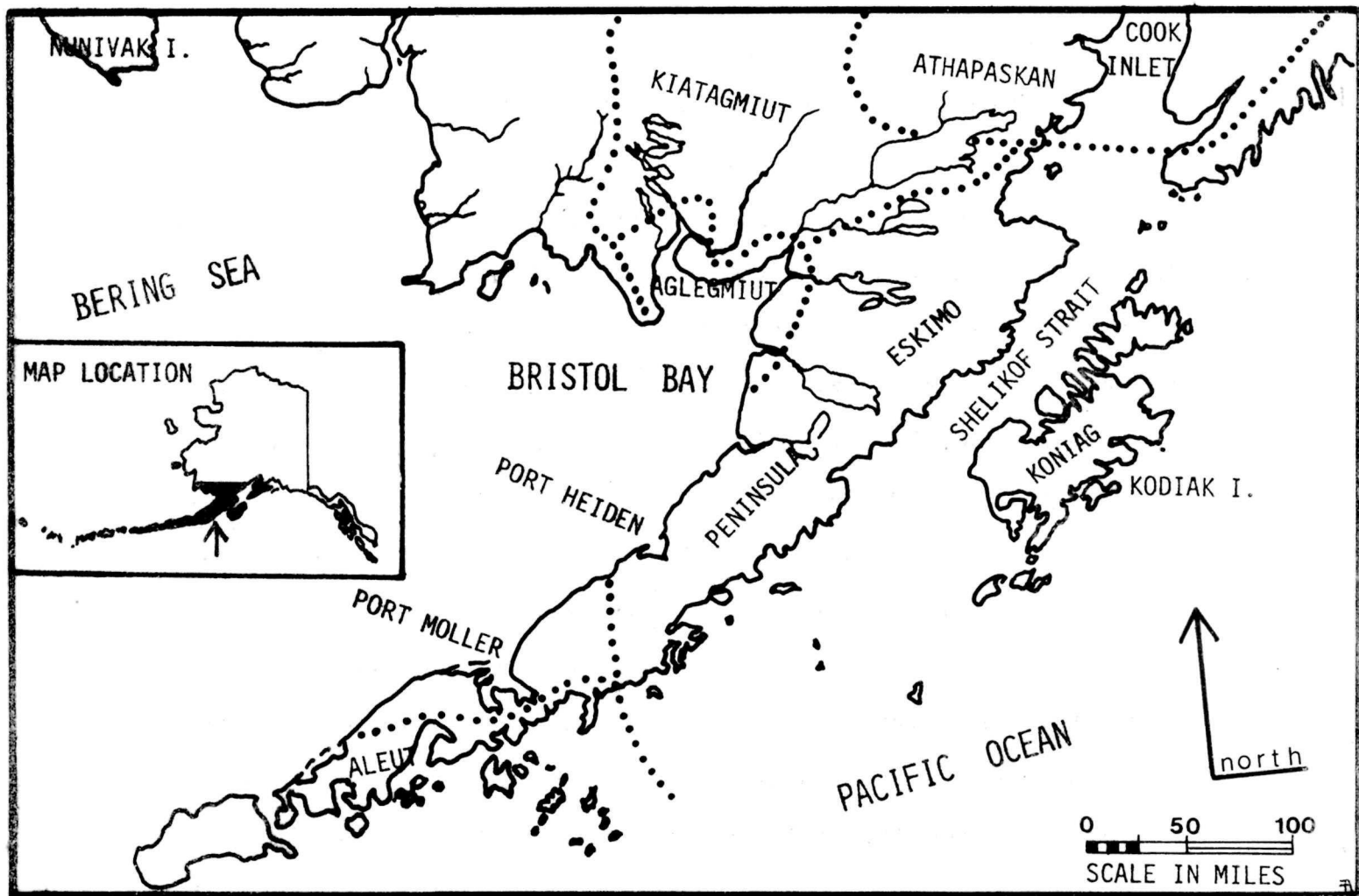
bearing waters, but none appear to have had as much impact upon the written knowledge of the area as Captain Cook. It is doubtful that many exploring parties from countries other than Russia had much contact with the inhabitants of the peninsula.

Russian explorers and hunters came in contact with many peninsula residents but exactly which linguistic group intermingled with these hunters around the proposed area is not exactly clear. The boundary between Aleut and Eskimo people remained hazy as late as the eighteenth and nineteenth centuries because natives were often broadly categorized by the Russian hunters into a very few linguistic groups. After previewing earlier reports, Dumond set the southwestern Eskimo boundary slightly west of Port Moller on the Bering Sea and somewhat east of Kupreanof Point on the Pacific coast (Figure 3). The easternmost Aleut boundary reaches this on the south side of the Pacific coast but may not necessarily reach the northern proposed Eskimo boundary. This would have occurred if no permanent habitations existed on the Bering Sea coast between Port Moller and the tip of the peninsula.<sup>11</sup> If one supports Dumond's theory, it would appear that any population around the proposed national monument would have been Eskimo-speaking people during this time.

Whether of Eskimo or Aleut descent, the native inhabitants of the south side of the peninsula were dramatically affected by the influx of Russian explorers and hunters, and occasionally other foreign explorers between 1740-1790. Material items were introduced, some of the peninsula's population was decimated by ruthless hunters, new diseases were introduced, and a new bloodline was created which will long stand as a living legend of Russian occupation in Alaska.

<sup>11</sup>Dumond, "Eskimos and Aleuts" p. 50-54.

FIG. 3 LANGUAGE BOUNDRIES DUMOND, 1975



This was the first major wave of culture change in southwestern Alaska. The presence of Russian hunters and traders altered the complete dependence upon natural resources by forcing the inhabitants of the peninsula to participate in the trade economy. Natives became more and more Russian and their settlement patterns, religion and growing dependence upon a partial cash economy reflects the very essence of Russian occupation in Alaska.

#### 1790-1867: More Furs, More Explorers and Missionaries

The years between the end of the eighteenth century and the mid-nineteenth century found the natives on the Pacific coast of the peninsula governed by the Russian imperial government. Coerced by one means or another, the natives of the peninsula were involved in the fur business, "civilized" by the disciples of the Russian Orthodox Church, and watched from afar as ships flying different flags passed by their coastline in search of scientific knowledge and, of course, furs.

Spearheading Russian activities in Alaska for over twenty years was Alexander Baranov, manager of the Shelikov-Golikov firm which became the Russian-American Company in 1799. Baranov had planned to conquer the hostile natives on the Pacific coast of the peninsula, but his plans frequently fell short of reality as he faced the more important problems of food shortages and the establishment of a Russian settlement at Sitka. Despite the problems facing Baranov during his long rule, he was able to expand the fur trade and control large native populations along the Alaskan coast. Trade flourished under Baranov's division of the trading business into two districts, one at Unalaska and another on Kodiak Island. In 1805 the colonial government was shifted from Kodiak to Sitka, taking notoriety away from the original station on

Kodiak Island. By the 1830s, six trade districts were established which were divided again in the 1860s into two: Kodiak and Sitka.<sup>12</sup> Throughout these administrative reorganizations the Chignik-Aniakchak coastline remained within Kodiak's jurisdiction, evidencing the beginning of strong commercial ties between the central portion of the peninsula and Kodiak Island.

According to Hussey, "the manager of a fur district such as Kodiak exercised a large degree of control over the natives who lived within the area under his jurisdiction", also, "there was scarcely a phase of native life that was not strongly influenced by the district manager."<sup>13</sup> The Russian government regulated the natives lives by exempting them from taxes, military service and tribute, but requiring them to serve as company hunters. The natives were furnished clothes, food and boats by the Russian-American Company and were paid for the animals they caught. The Russian-American Company maintained control of local populations by paying for furs with the store's trade items rather than cash, and although natives' property rights were respected, they were not allowed to acquire too many material goods. Even with a supplemental income, the Russian government allowed the native Alaskan to hunt and fish around their homes when not employed by the company.<sup>14</sup>

Trading station locations during the years between 1790-1867 are not completely known. In the late 1800s, however, there were two stores in the area, one on Sutwik Island, and one at Mitrofanina, a small

<sup>12</sup>John Hussey, Embattled Katmai, p. 131.

<sup>13</sup>Ibid.

<sup>14</sup>Ibid, p. 140

village south of the Chignik villages.<sup>15</sup> It is not likely that these stations were in existence in the early 1800s or that residents of the Chignik-Aniakchak coast came in direct contact with the powerful district managers during these early years--unless they were forcibly moved to Kodiak Island. Trading was successful in southwestern Alaska since Russian traders kept the otter population near a sustained yield for many years.<sup>16</sup> This, in turn, kept the natives employed--by force at first and later through cooperative trade--and kept the Russians in Alaska.

Beginning in 1794, missionaries of the Russian Orthodox Church attempted to introduce religion to the natives of the peninsula.<sup>17</sup> Due to hostile responses from the natives and lack of support from their native Russia, they abandoned their efforts shortly thereafter. A resurgence of interest in christianizing the natives occurred in the 1820s and missionaries were again sent by the Russian-American Company to some Pacific coastal villages. Christianization was an important factor in determining the status of many natives, and residents of the Chignik-Aniakchak coast probably came in contact with these civilizing forces. Very little specific information is available about the central portion of the coastline, although extensive missionary activities were centered around Katmai and Unalaska. Christianization of the native populations appears to have been an effort on the part of the Russian government to help the natives keep from hurting themselves through laziness, warfare, and overhunting, all seen as intolerable aspects of primitive

<sup>15</sup>Alaska Commercial Company Records: Sutwik Bay Store and Mitrofanina Station, University of Alaska Archives, Fairbanks, Alaska.

<sup>16</sup>Robert Porter, Report on the Population and Resources of Alaska Eleventh Census, (Washington, 1890) p. 203.

<sup>17</sup>Bancroft, History of Alaska p. 352-360.



life.<sup>18</sup>

Missionaries and hunters were not alone in traveling the peninsula around the proposed national monument between 1790-1867. Explorers from foreign ports continued to cruise the area in search of navigational information. Captain Joseph Billings did not find much for his native Russia, but did bring to the attention of his government the need to conduct indepth scientific research. Although Baranov sent out hunting parties to locate new sea otter areas, he did not organize scientific explorations of the peninsula. Shelikov's attempt to have his crew make a survey around Kodiak Island in 1786, and some charting by the Russian Navy were the only significant contributions by Russia during this time. Ivan Vasilef surveyed the lower portion of the peninsula to Chignik Bay soon afterward; his results, together with foreign mappings, offer valuable information about the peninsula between 1826-32.

By the mid-1800s, Russia was having trouble maintaining a stronghold in the Pacific and the sale of Alaska to the United States in 1867 ended a long, rich history of Russian occupation. One can only hypothesize as to the impact Russian fur trading, christianizing and occasional exploratory attempts had upon the native inhabitants, but it seems evident that the impact was great. Descendents of Russian hunters, accustomed to the material trade goods provided by the Russian-American Company, "civilized" by the Church, and surely with somewhat tortured memories, probably comprised much of the native population which became part of the United States purchase in 1867.

<sup>18</sup>For more detailed accounts of missionary activity in Russian America, see Hector Chevigny, Russian America: The Great Alaskan Venture 1741-1867, (New York: The Viking Press, 1965), Tikhmeneff's account, and James W. VanStone, Eskimos of the Nushagak River: An Ethnographic History (University of Washington Publications in Anthropology, vol. 15) U.Washington Press, 1967.

## 1867-1900: The United States and the Fishing Industry

The transfer of Alaska's ownership in 1867 did not instantly change the lives of the Pacific peninsula natives. In many ways, the monopoly of the Russian-American Company was merely replaced by the new monopoly of the Alaska Commercial Company. What appears to have been different was the lack of a strong central force in the life of the native Alaskan. Where the Russian-American Company had dominated their economic, social and spiritual lives through the missionaries, the fur trade and social intermixing--there became a great void. What Hussey described as the role of the fur station manager<sup>19</sup> was replaced by representatives of competing firms and individual merchants. Like the early promyshleniki, the hoards of United States sea otter hunters proceeded to wipe out these marine mammals, but unlike the Russian fur hunters, did not consciously try to alter the lives of the peninsula natives.

The Alaska Commercial Company was awarded a contract to harvest seals from the Pribilof Islands in 1870.<sup>20</sup> For the next two decades many peninsula residents were probably actively involved in this business. The cancellation of the contract in 1890 left the company with only the fur trade and its small mercantile business, while the discovery of gold in northern Alaska took away much of its remaining work force. Despite problems within the company, the addition of cash to the otherwise trading economy and the lack of direct involvement in native life surely affected the inhabitants of the peninsula.

During the transition years between Russian and United States ownership,

<sup>19</sup>Hussey, Embattled Katmai, p. 140.

<sup>20</sup>Oswalt, Alaska Commercial Company Records; 1868-1911: Register, (University of Alaska, Fairbanks, 1967).

Voronoffski reported a village called Sutkhum in Kidjulik (Kujulik) Bay at 56°31.9' and 157°28'.<sup>21</sup> Since the natives were mobile in their bidarkas<sup>22</sup>, travel was probably common along the peninsula and Sutwik Island and the mainland coast might well have supported both populations. Ivan Petroff later reported two settlements flanking Chignik Bay. The village of Kaluiak supported a small population of natives involved in hunting deer (caribou) back in the mountains near what is presently Chignik Bay. The other settlement was located at Mitrofanina, to the south around the peninsula separating Chignik and Kuitka Bays, where a small group of creole (Russian and native) sea otter hunters lived (Figure 4).<sup>23</sup> Mitrofanina was reported to have been founded in 1880 by a man named Pavloff and peopled with immigrants from Kodiak Island.<sup>24</sup> These residents might have lived in the area for centuries or been part of the Katmai trading operation under Russian rule; it is difficult to ascertain their origins.

The demise of the sea otter and the end of sealing on the Pribilof Islands nearly put an end to the availability of material conveniences on the Alaska peninsula. However, the salmon canneries arrived just in time to replace the faltering marine mammal activities. The salmon fisheries on the Pacific coast of the peninsula greatly affected the lives of native inhabitants--perhaps even more than Russian occupation.

In the very early 1880s fishermen's parties were sent from the Pacific northwestern states and California to extensively canvas the

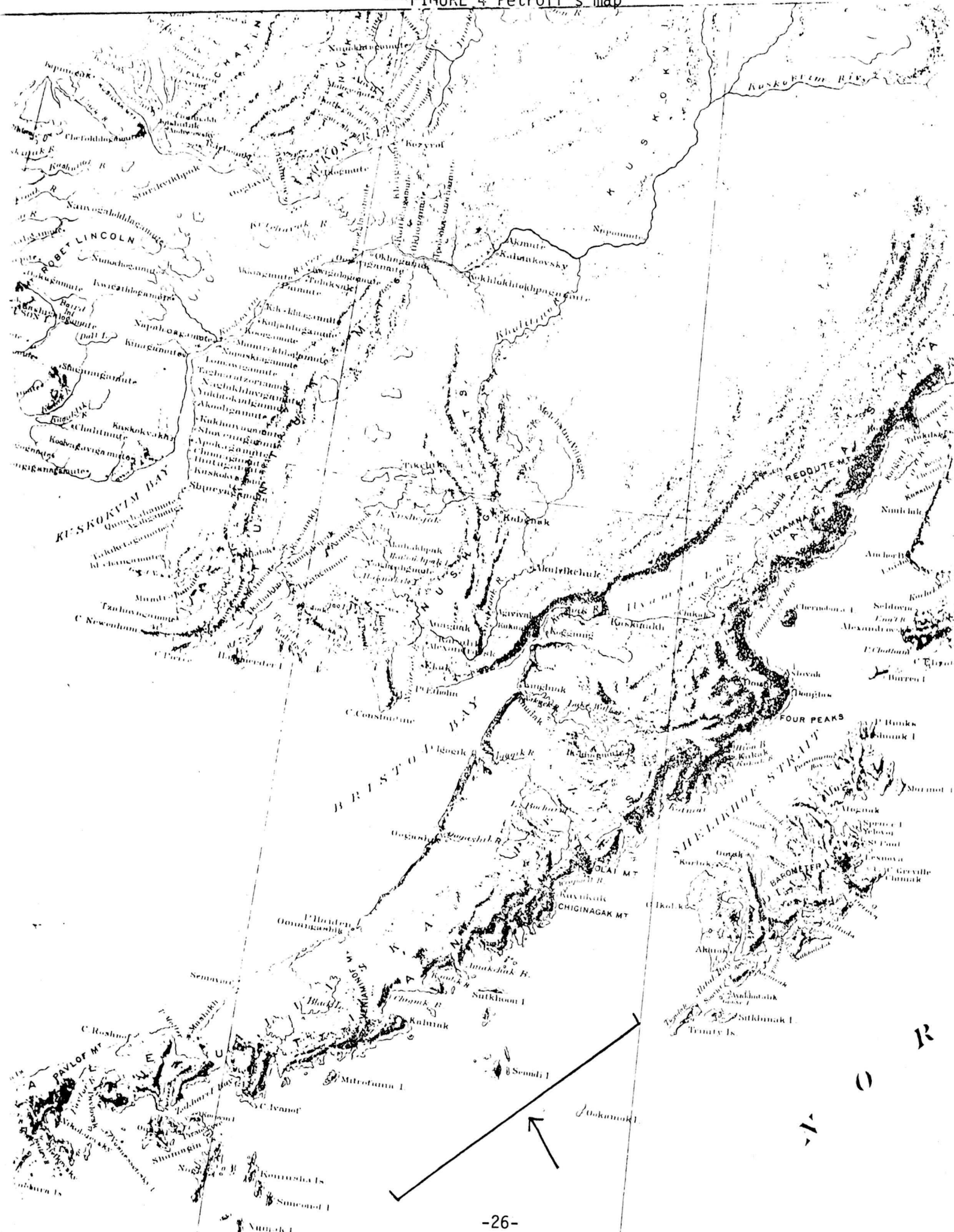
<sup>21</sup>Voronoffski as referenced in Pacific Coast Pilot Southern Boundary To Cook Inlet 1869 (Washington, 1869).

<sup>22</sup>a bidarka is a skin boat similar to a kayak.

<sup>23</sup>Ivan Petroff, Population and Resources of Alaska, U.S. Congress, House Executive Document No. 40, 46th Congress, 3rd Sess., 1881, p. 28.

<sup>24</sup>Z.L.Tanner, Explorations of the Fishing Grounds of Alaska, Washington and Oregon During 1880, Bulletin of the U.S. Fish Commission, vol.8 (Washington, 1881)p.36.

FIGURE 4 Petroff's map



southwestern and southeastern coastlines of Alaska for salmon. Few vessels scanned the Chignik-Aniakchak coast during these years, concentrating instead upon Sitka, Karluk, and Bristol Bay. Fishing began cautiously in Alaska for a variety of reasons. Primarily, Alaska was an "out of the way place" which required large capital investments and high payments on machinery with the payment for transportation and wages being made at least five months in advance. Fishing equipment had to be repaired often, fresh supplies were not always available and the price of canned salmon was generally low. Success of the salmon industry in Alaska was contingent upon the failure of the already existing salmon fisheries in the western United States.<sup>25</sup> Despite such discouragement, a few farsighted firms endeavored to open the door to a future of fishing in southeastern Alaska.

This was the beginning of the **second** great wave of change along the Pacific coastline. In 1888, Fishermen's Packing Company of Astoria, Oregon, sent a party to Chignik Bay in search of salmon. They returned home with 2,160 barrels of salt salmon. The following year the fishing company returned to Chignik and established a cannery on the east side of Chignik Lagoon, 2<sup>1</sup>/<sub>2</sub> miles from its entrance to the Pacific Ocean. Two other canneries moved into the area and by 1892 the three had merged with the Alaska Packers Association (APA), which has since become a major cannery operation in Alaska.<sup>26</sup>

Coal was necessary to support the cannery operations in Chignik Lagoon and the steamers engaged in the fisheries. A few sea otter hunters discovered coal on the bluff of the Chignik River in 1885 but having no capital or stock for sale, dropped the enterprise.<sup>27</sup> The Alaska

<sup>25</sup>H.W.White on the Status of ALaska Fisheries, Cutting Packing Company Records,(Bancroft Library, University of California Berkeley, Ca. 1885).

<sup>26</sup>Jefferson Moser, "Salmon and Salmon Fisheries of Alaska" Bulletin of the U.S. Fish Commission, vol. 18, (Washington, 1898) p. 105.

<sup>27</sup>Ibid.

Packers Association (APA) rediscovered and began to mine this coal in 1893. Short prospecting tunnels were driven at Hook Bay, just south of Kujulik and Aniakchak Bays, as well as Chignik Lagoon, and the mine was worked throughout the year by two men without machinery. The coal was blasted, undercut and transported to the cannery and steamers by wheelbarrows. Coal mining for large commercial use did not prove to be a profitable occupation in the region.<sup>28</sup>

Although canneries were established in Chignik, the fishing industry did not immediately provide employment opportunities for the native residents. Many natives remained fur hunters. White hunters and sixty-two Kodiak Eskimo were reported to have hunted sea otter to the north of Aniakchak on the Pacific coast between Katmai and Wrangell Bays around the turn of the century. These hunters lived in sod huts on Sutwik Island in the summer and traded at Wrangell Bay, often hunting caribou or bear which were available in great numbers.<sup>29</sup> There are few records of sea otter trading around Aniakchak and virtually none describing the relationships between the residents of Chignik and the sea otter hunters. Certainly white hunters settled in and around the Chignik area, taking native women for their wives so as to be legally allowed to hunt sea otter in Alaska at the turn of the century.

Between 1890-1897, while fishermen were busy establishing salmon canneries on the shores of the Chignik River, the Alaska Commercial Company operated a store on Sutwik Island at which furs and other goods were traded. Using bidarkas, dorys or the mail steamer Dora, which began to service the cannery operations, furs from wolverine, mink, red fox, caribou and otter were brought to Sutwik for sale or

<sup>28</sup>Ibid.

<sup>29</sup>Porter, Report on the Population, p. 73.

trade by native inhabitants. Another store was located near Mitrofanina and from the traders' names on both registers it seems that there was travel between the two stores.<sup>30</sup>

The commercial fishing industry - which offered a cash alternative to the barter economy, and the sale of Alaska from Russia to the United States in 1867 - which resulted in less direct interference in native lifestyles, brought much change to the inhabitants of the Amiakchak coastline. Moser aptly describes the scene in southwestern Alaska in the late 1800's:

...there are small scattered villages, mostly Aleut probably belonging to the Eskimo race/sic/. They live in small villages scattered along the islands and hidden in numerous bays. With them are a few white traders and miners who have married native women to avoid the law which prohibits all except natives or white men with native wives from hunting sea otter...twenty years ago they were affluent from the sale of sea otter pelts which now are scarce, and the industry has just about disappeared. In recent years, cod and salmon fisheries have become important.<sup>31</sup> Bear, fox, land otter and caribou on the peninsula are also important sources of food and income.<sup>32</sup>

#### 1900-1930: Fish Traps and Fox Farms

The fishing industry was the focal point of all activity in the Chignik area by the 1900s. Although available to foreign immigrants, employment in the canneries was minimal for the native population. In 1900 the canneries at Chignik employed only twelve natives. Reports by census-takers and coastal travelers of the time attributed this to the laziness and irresponsibility of the natives who would work only

<sup>30</sup>

Alaska Commercial Company Records: Sutwik Bay Store and Mitrofanina Station.

<sup>31</sup>

Cod fisheries were active in the mid-1800s around the Shumagin Islands not around the Chignik-Aniakchak coast.

<sup>32</sup>

Jefferson Moser, "Arctic Salmon Investigations in 1900 and 1901" Bull. of the U.S. Fish Commission vol. 21, (Washington, 1902).



as long as needed to secure a few possessions. The natives would then return to their more traditional hunting, fishing, trapping and gathering activities and, to a lesser extent, fur trading.

Although only slight changes in the economic situation around Chignik affected the natives, the new fishing industry brought cultural diversity to the area. Chinese, Mongolians, Hawaiians, Filipinos and other foreigners arrived in great numbers to work in the salmon canneries during the summer months. Many of these immigrants married local native women and settled in the Chignik region.<sup>33</sup> Descendents of Scandanavian, Italian and other foreign fishermen are living in the Chignik villages today.

Population consolidation was another result of the salmon fishing industry in the early twentieth century. The village at Mitrofanía folded when its residents moved to Chignik to work. Kodiak natives probably did not move to Chignik, for their salmon canneries were quite successful and the Chignik canneries offered few employment opportunities.

To supplement the unstable salmon season employment, many natives trapped small land animals in the early 1900s. The Alaska Commercial Company established fox farms on the islands off the Alaska peninsula in 1880 and sent small parties of natives to hunt seal and sea lions during the summer months, leaving the carcasses behind for fox. The islands to the south of Aniakchak around the Semidi Islands were held in lease by the Semidi Propagating Company which stocked St. Paul and Jacob islands off of present-day Perryville, with blue and black fox from the Aleutian Islands.<sup>34</sup>

Fox farming was common around Chignik, particularly on Nakchamik and

<sup>33</sup>Gerald Estep, "Chignik" Alaska Sportsman, Vol. IX, September, 1938, p.15-18.

<sup>34</sup>Alaska Commercial Company Records: Semidi Propagating Co., 1889.

Chankluit islands.<sup>35</sup> Families lived on nearly all the islands off the Chignik-Aniakchak coast and raised foxes. Helen Neilson, resident of Chignik for twenty years, recalls fox farming with her family on Natchimak, or "Fox" island between 1925-1935. Her family brought a couple of foxes from a nearby island and the entire family raised foxes. A box trap was used to capture the foxes and long wooden tongs with a round end were used to haul them out of the trap. So as not to mark the skins, the foxes were killed by laying on their hearts. As fur prices dropped during the 1930s, Helen's family moved to the mainland to trap a greater variety of land animals.<sup>36</sup> The pattern of trapping in the winter and fishing in the summer took its roots hundreds of years ago, and continued since both activities proved to be successful economic endeavors.

The salmon fisheries grew rapidly in Chignik. Fish traps were the most common method used to catch salmon, and between 1900-1905 Chignik Lagoon was so crowded with these huge log pilings that people questioned whether or not salmon would be able to get up the river to lay their eggs. Employment opportunities for native inhabitants around Chignik improved as the canneries grew so that by the 1920s local people had sources of income from both fishing and fox farming.<sup>37</sup>

Fishing and trapping coexisted along the Aniakchak coast throughout the 1920s and 1930s. The Alaska Packers Association built a fish

<sup>35</sup>Bureau of Commercial Fisheries, Alaska Fisheries and Fur Seal Industries, 1918, (Washington, 1919) p. 68.

<sup>36</sup>Personal communication, Helen Neilson, Chignik Lagoon, July, 1976.

See George Tingle, Alaska Salmon Fisheries Statistical Review, 1896-1904 (Washington, 1905) and yearly volumes of Alaska Fisheries and Fur Seal Industries for further accounts of these years.

trap and adjoining bunkhouse at the mouth of the Aniakchak River in 1917 and the Carlson family lived on Kumlik Island and ran the tender between the trap and the canneries at Chignik. The Carlsons spent the winter months trapping red fox, wolverine, mink, lynx and wolf inside the proposed monument during the 1920s and 1930s. Subsisting mainly on red salmon, caribou, ptarmigan, rabbits and ducks, this family represented the typical lifestyle along the Chignik-Aniakchak coast during these years. Living was hard, for there were few facilities and most families stayed on their islands or on the mainland in trapping shacks throughout the winter, returning to Chignik in the summer to work or buy cows, pigs and other supplies which were available from the canneries.<sup>38</sup>

Many trappers scoured the coastline between Chiginaga and Perryville for furs. Three trappers are known to have lived in shacks within the proposed monument. Adolph Von Hemmel lived at the mouth of the Aniakchak River and trapped the coastline. Charlie Olsen, often called "Ball-Eyed Charlie", lived in a cabin at the head of Amber Bay and trapped the interior lowlands. Charlie Weederman had two cabins, one at Aniakchak lagoon on the western shore of Aniakchak Bay, and another halfway shack midway to the caldera. Furs were usually bundled up in burlap sacks and sent out to major fur companies on the monthly mail steamer, Dora, which serviced the canneries. Trappers would often send their furs directly to Sears and Roebuck in exchange for goods.<sup>39</sup> Maas and Steffins Fur Company of St. Louis, Missouri, was a major fur buyer on the peninsula during the 1920s and 1930s, and maintained a profitable exchange with the local residents.<sup>40</sup>

<sup>38</sup>Personal communication, Axel Carlson, Chignik Bay, May, 1976.

<sup>39</sup>Helen Neilson, "It was a Simple Life I Led" ELWANI, Kodiak Regional Aleutian High School, May, 1976, p. 110.

<sup>40</sup>Personal communication, Ed Steffin, Maas and Steffins Fur Co, July, 1976.

Mobility was the key word during this thirty-year period.

Fishermen from around the world flocked into the Chignik villages for the summer and left in the fall. Local residents fished part of the summer, either for their own needs or worked the traps for the canneries. A Russian Orthodox Church was built at the lagoon and summer schools were established both at the bay and the lagoon. Priests and school-teachers came and went as rapidly as the fishermen and a statement by one teacher in 1919 lends much insight into the feeling of instability during these years:

The population here [Chignik] will not be on the increase for there's nothing to keep them except work in the cannery. It's very seldom that men from the outside bring their families up to remain, nor do I think Natives from other places will move in because those who are here are all the Native labor this cannery will employ, of course. Many of the children are too young to go to school and in 15 years, should the river be fished out, there will be nothing to keep anyone here. They all have homes elsewhere where they can get wood, meat and do some trapping. Gardens will not grow and there can be an eight foot snow level all winter until the month of May.<sup>41</sup>

Yet the people remained, through high and low salmon years and beneath the heavy clouds of the Alaska peninsula.

#### 1930-Present: Clams, Seines, Volcanoes and Change

Harry Crosby established a cannery on the west side of Chignik Lagoon in 1932 and brought with him the moving seine.<sup>42</sup> Until that year, fishermen used beach seines and only caught salmon from the sides of Chignik Lagoon; unable to fish the middle channels. Quite different from beach-seining- the new method consisted of closely meshed webs which were lowered from moving rowboats or dorys. Seining greatly increased the efficiency and productivity of the salmon fishermen.

<sup>41</sup>

Letter from Alyce Anderson, Chignik teacher, to Commissioner of Education, Alaska, June, 1919. Lois M. Morey Collection, University of Alaska Archives.

<sup>42</sup>

A seine is a large net with sinkers on one edge and floats on the other that hangs vertically in the water and is used to enclose fish. A moving seine is a seine which is set off the back of a moving boat.

A few industrious individuals, believed to have been from Kodiak, tried to begin a clam cannery on the shores of Aniakchak lagoon sometime between 1932 and 1937. Razor clams were gathered from Aniakchak's beaches and carried to the cannery in an automobile. The cannery only lasted a few years and local sources have suggested that the cannery failed because the clams were too sandy, transportation costs too high, and that the clam population declined under heavy harvesting pressure.

The people of Chignik recall hunting caribou along the Aniakchak coastline and picking berries from its shores. They also remember Father Bernard Hubbard, the "Glacier Priest", who visited Aniakchak during its eruption in the early 1930s. Hubbard flew into Kujulik Bay, stayed at a small cabin alongside a creek and hiked inside the caldera.<sup>43</sup> He also flew inside the erupting volcano to photograph the geologic phenomenon and climb inside its burning walls (Figures 5-7 )

During the 1930s the Carlson family continued to trap along the coastline and run the APA tender between the fish trap at the mouth of the Aniakchak River and the canneries at Chignik. Aniakchak's coastal resources most visibly provided natural resources to a variety of people during the 1920s and 1930s.

By the 1940s, trapping had disappeared. Fur prices had dropped, local residents were able to make enough money by fishing during the summer months, and the local schools began to stay open all year, greatly influencing residents to remain in Chignik during the winter to keep their children in school. The salmon fishing industry became more stable with only two canneries, and seining dominated all fishing activities, particularly when the fish trap was outlawed in 1959.

<sup>43</sup> Robert P. Douglas, In the Land of the Thunder Mountains (Brewer, Warren and Putnam, 1932) p. 31. This cabin is now on the boundary of the proposed monument and owned by a resident of Chignik Lagoon. For more information about the Aniakchak eruption see, "Hubbard, "A World Inside A Mountain: National Geographic Magazine 60 (1931); p. 319-345, Hubbard, Cradle of the Storms (New York: Dodd Mead and Co. 1935).



Figure 5

Hubbard Photograph of Chignik Villagers In Front of Barabera

Photo Credit: Hubbard Collection, Archives  
University of Santa Clara  
Santa Clara, California





Figure 6

Father Hubbard Lands At Surprise Lake Inside Caldera

Photo Credit: Hubbard Collection, Archives  
University of Santa Clara  
Santa Clara, California





Figure 7

Steaming Vent, Aniakhak Caldera

Photo Credit: Hubbard Collection, Archives  
University of Santa Clara  
Santa Clara, California

Moose began migrating to the area during the 1940s and added a new source of fresh meat for the village residents. Although bear was eaten in the villages for years, residents preferred caribou and moose as the stable protein source.

Dog teams were never common although a few did exist in the villages until 1960. People from Chignik Lagoon and Chignik Bay began moving to Chignik Lake in 1960 and established a new village on the edge of the lake. The new village was established to gather the more traditional families together, move away from the congested cannery operations and build a stronger school for the children of the villages.

Over the last ten years the Chignik villages have remained relatively stable. The Alaska Packers Association and Columbia Ward Fisheries operate canneries in Chignik Bay and Chignik Lagoon, respectively. Small scale improvements have been made on the residents homes through a variety of native improvement funds and welfare, as well as from the residents' salaries.

#### VIII. THE CHIGNIK VILLAGES: 1976

The three Chignik villages are still centered around the salmon canneries at the Chignik River. Russian and Scandanavian history lives in the villages and can be seen in the Russian Orthodox Church, the names of creeks and bays, and the names of the people themselves. Foods, customs, and seasonal patterns of resource utilization all reflect their multi-ethnic heritage. There can be no doubt that Russian occupation during the mid-eighteenth to mid-nineteenth centuries, and the development of salmon canneries and influx of foreign fishermen in the late nineteenth century greatly affected the lifestyle of the native inhabitants (Figure 12).

The Chignik River runs a twenty- nine mile course from Black

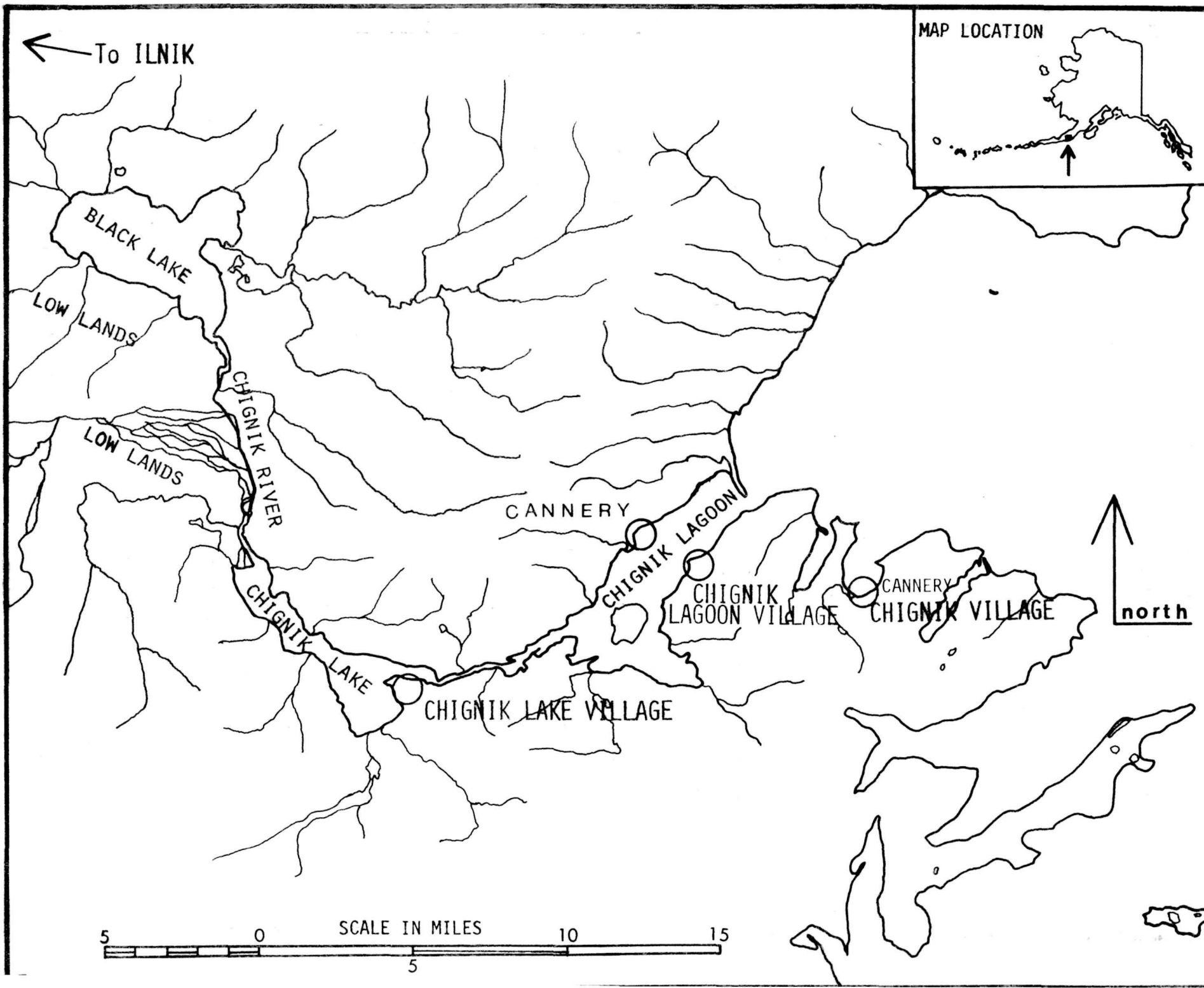


FIG. 12 THE CHIGNIK VILLAGES

Lake to the Pacific Ocean, and still dominates the three Chignik villages.

The communities do share the same physical environment, communication difficulties and often inter-married bloodlines; all depend to varying degree upon the resources of the surrounding environment for sustenance. These people are first and foremost, fishermen, and their ties to the sea are rooted in a deep respect and dependence upon the ocean's resources.

### Chignik Lake

Farthest from the ocean, this village is located at the edge of Chignik Lake where the water narrows to again become the Chignik River. Mountains hug the village on all four sides offering protection from the elements, or a funnel for freezing air depending upon which way the wind is blowing. The village is small and comprised of twenty-one overcrowded, somewhat dilapidated and extremely weathered homes. These houses are stretched across the southern corner of the lake in no real pattern or configuration (Figure 13).

Facilities within the village include an airstrip, a post office, storage tanks for diesel fuel, several communication radios and a grade school. Weather permitting, mail is delivered twice a week to the lake during the winter months and to Chignik Lagoon during the summer. There is no store at Chignik Lake; an effort to begin one in 1974 reportedly failed due to the mismanagement of supplies and funds by local residents. Sewage disposal facilities are not available at the lake and electricity is limited to a few individually owned and operated power plants. Many residents have a "banya"; a Russian steamhouse, for bathing.

The people of Chignik Lake usually own two homes, a winter house at the lake and a summer house at the lagoon. In late May or early June, the residents of Chignik Lake move by skiff down the Chignik River to

Figure 13  
CHIGNIK LAKE VILLAGE



their second homes on the north side of the lagoon across from the permanent residents who live on the south side.

Nearly all lake residents are involved in the commercial fishing industry and either own, lease, or crew fishing vessels. This is the primary source of cash income, although several people supplement their income with occasional work outside the area, welfare, unemployment, and by working at limited local jobs.

Travel between Chignik Lake and the rest of the Chignik villages is by skiff in the warmer months and snowmachines during the winter. The Chignik River and the lagoon become large mud flats during low water and traffic is restricted to the discretion of the tides. The store is located at Chignik Lagoon and residents at the lake must wait for high tides and fair weather to buy their supplies.

#### Chignik Lagoon

Facilities are few along this waterway. Some residents have individual power plants, sewage disposal and running water while others have none. There is an airstrip on each side of the lagoon and a post office and grade school on the southern shore. On the northern shore there is a small boat harbor and Columbia Ward Fisheries which also operates a small store (Fig. 14). Like residents of Chignik Lake, the people who live at the edge of the lagoon must cross the lagoon to buy their supplies and are also subject to transportation problems.

#### Chignik Bay

Away from the river but no less a part of the Chignik village system is the settlement at Chignik Bay, often called Anchorage Bay or simply, Chignik. The village is clearly dominated by the presence

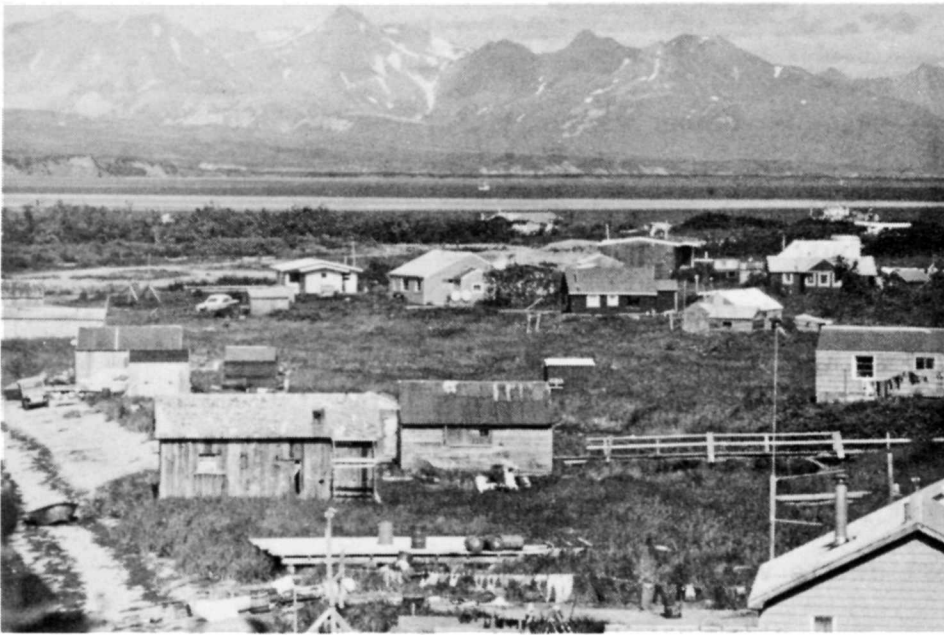
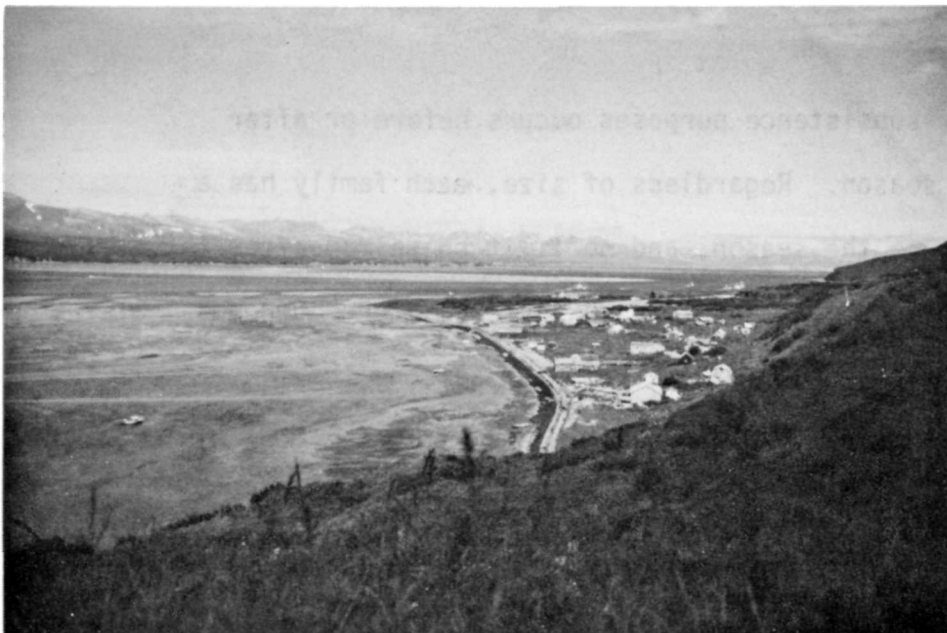
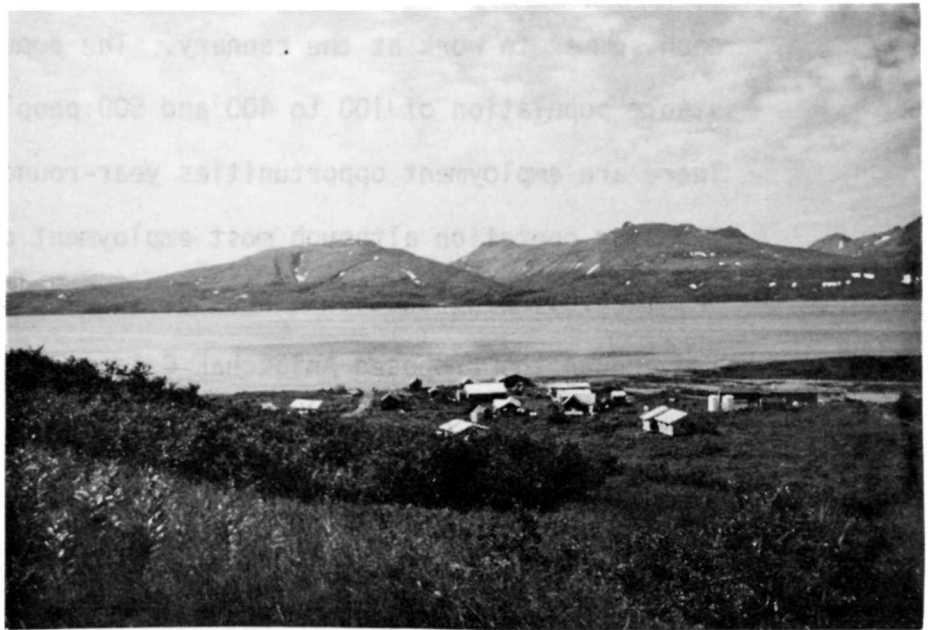


Figure 14

CHIGNIK LAGOON VILLAGE





of the Alaska Packers Association canneries located at the head of Anchorage Bay. Two wharves jut out into the bay supporting a relatively large fleet of salmon, halibut, shrimp and crab boats and their tenders, making Chignik the center for all fish processing in the three Chignik villages (Figures 15-16).

Electricity is supplied free to all residents from the Alaska Packers Association power plant and there is running water and sewage disposal throughout most of the village. Filipino, Aleut, Eskimo, Japanese, and people from many other nationalities migrate to Chignik each summer to work at the cannery. The population can swell from a stable population of 100 to 400 and 500 people during the summer. There are employment opportunities year-round in the shrimp and crab freezing operation although most employment occurs during the summer.

The following section discusses some subsistence activities in and around the proposed Aniakchak Caldera National Monument by the residents of the three Chignik villages.

#### IX. SUBSISTENCE ACTIVITIES IN THE CHIGNIK VILLAGES: 1975

##### FISHING

##### Salmon

Salmon fishing for subsistence purposes occurs before or after the commercial fishing season. Regardless of size, each family has a limit of 200 salmon before the season, and no limit on salmon after the season. At what time of year the people fish for subsistence depends completely upon the time of the commercial fishing season, the availability of tools and materials to repair boats after the long winter, and the weather. Residents occasionally catch fish for subsistence purposes in Aniakchak and Amber Bays, within the proposed monument, after

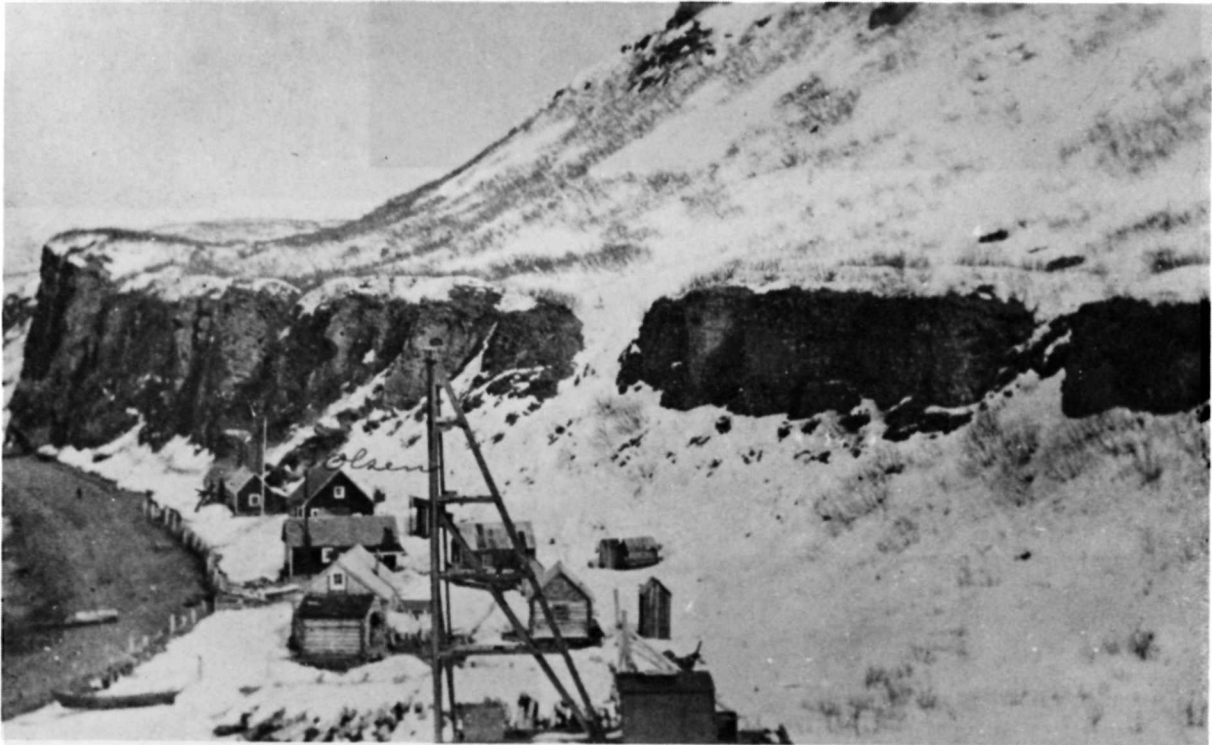


Figure 15

Chignik Bay Village Between 1920-21

Photo Credit: Lois M. Morey Collection, Archives  
University of Alaska  
Fairbanks, Alaska



Figure 16

Chignik Bay Village



Alaska Packers Cannery



Figure 17

## ETHNICITY, POPULATION AND SAMPLE SIZE

	White	Eskimo	Indian	a Aleut	b 1970 Totals	c 1976 Totals	Number Occup. Households	Household Interviewed	Percent Sampled
Chignik	16	1	0	66	83	112	26	(e) 14	54%
Chignik Lake	2	3	1	111	117	105	21	18	75%
Chignik Lagoon	-	-	-	-	-	(c) 56	19	11	57%

(a) Determined in the University of Alaska ISEGR Age and Race by Sex Characteristics of Alaskas Village Population September, 1973 Vol X No. 2

(b) Ibid

(c) Personal tabulation with assistance from local residents

(d) Full time year round residents: transience is high in these areas

(e) Low number due to Kodiak fishermen weathered enroute to Chignik for fishing

Figure 18  
Household Distribution

	Chignik Lake	Chignik Lagoon	Chignik
Total Number of Heads of Households	21	19	26
(S)	4	8	21
(Y)	17	11	5
Total Interviewed	16	12	13
(S)	1	3	0
(Y)	15	9	13
Of Residents Interviewed Number Hunted 1975			
(S)	1	2	0
(Y)	12	7	10
Additional Information Available on Absent Residents			
Total Absent	5	7	13
Hunted 1975			
(S)	3	4	5
(Y)	1	2	5
Possible Hypothetical Total Hunting in 1975 If Additional Information Is Reliable	<u>17</u>	<u>15</u>	<u>20</u>

S = Seasonal Resident

Y = Year-Round Resident

Additional Information Available on Absent Residents: Information about absent residents by local people.

commercially fishing the area. Residents do not travel specifically to these bays to fish for subsistence.

Subsistence fishing is a family affair and often serves to bring families together before, but more often, after, the commercial fishing season. Putting up fish for the winter is a time consuming process and residents of the Chignik villages smoke, salt, pickle, dry, freeze and can their salmon. Preserving fish also serves as a gathering mechanism for the local people. Although all five species of salmon enter the Chignik River, most residents seem to prefer the red and silver salmon for their personal use.

In 1975, Chignik Lake residents caught 1220 salmon for their own use. Of these, approximately 500 were smoked, 300 dried, and the rest pickled, salted, canned or frozen. Chignik Lake is known to be the best place to catch silver salmon which have lost their fat by the time they reach the lake and are perfect for drying. Residents of all three villages often spend October catching and drying their fish for their own use at Chignik Lake.

Chignik Lagoon residents reported 2025 salmon taken for subsistence. Of these, approximately 500 were frozen; 500 dried and the rest were pickled, salted, smoked or canned. The availability of freezers in the lagoon greatly aids in the preservation of the residents' salmon.

Chingik Bay residents reported 1900 salmon taken in 1975 and of these, 1000 were frozen, 500 smoked, 300 dried at Chignik Lake during October, and 100 were pickled, salted, or canned. Electricity from the cannery allows year round refrigeration in Chignik Bay.

#### Dolly Varden

Most residents fish for Dolly Varden during the winter months, although occasionally a few nets or fishing poles can be seen along the waters edge during the summer. The most common method used to catch Dolly Varden appears to be to cut a hole in the ice, toss in a handful of

salty salmon eggs preserved from the previous summer, and use a three-pronged hook to pull the fish out of the water. This commonly occurs at Chignik Lake during December and January.

During 1975, most everyone participated in catching Dolly Varden during the winter. Approximately 100 were taken for subsistence purposes by Chignik Lake residents.

Chignik Lagoon residents fish for Dolly Varden in the fall and winter months in the lagoon. Only twenty were taken in 1975. During May, the investigator observed a beach seine set at the edge of the lagoon by eleven residents to see if the salmon were swimming upriver. They weren't, but at least eight other varieties of fish appeared in the net but were thrown back due to their small size.

Chignik Bay residents rarely fish for Dolly Varden although occasionally a few residents try to catch them in Chignik Bay during the spring. Twenty were reported taken in 1975.

Residents did not fish for Dolly Varden within the proposed monument during 1975, nor do they seem to have fished for Dolly Varden there in the past.

### Halibut

Few residents have the equipment to enter the halibut industry, but those who do--or those having access to someone who fishes for halibut--are generous with these large fish. Twenty halibut were taken by Chignik Lake residents during 1975.

Chignik Lagoon residents are interested in becoming involved in the halibut industry, but as yet only a few have the proper gear. Those who do have caught most of their halibut in Kujulik Bay during May. Since an average halibut can easily weigh 100 pounds, these fish provide meals for many families and are shared among the villagers. Ten were taken for subsistence during 1975 by lagoon residents.

Halibut fishing occurs more frequently by residents of Chignik Bay.



Fifty were taken for subsistence in 1975. Most were received from local fishermen and other halibut workers who fish along the coast of the proposed monument and points south and stop over in Chignik Bay enroute to Kodiak or Unalaska, the major fishing centers of southwestern Alaska.

#### Crab and Shrimp

Only a few residents in all three villages have crab pots. I was on a salmon fishing boat during July, 1975, when a pot was pulled from the entrance to Anchorage Bay. The owner, from Chignik Lagoon, gave five of the fifteen crab in his pot to his friends at Chignik Bay, and took the remaining ten home to his family and relatives at Chignik Lagoon. Twenty crab were reported taken for subsistence in this village during 1975.

Thirty tanner, dungeness and king crab were harvested by the residents of Chignik Bay, or accepted as gifts from transient fishermen. No figures were available for crab harvests by Chignik Lake residents.

Although shrimp is plentiful around the area, none of the residents are equipped to harvest these shellfish. Until recently, excess crab and shrimp were given away free from the processors at Chignik Bay. This practice has been curtailed and affected the level of crab and shrimp consumption in all the villages. Chignik Lagoon villagers estimate that 50 pounds of shrimp were harvested; Chignik Bay residents estimate 100 pounds of shrimp taken during 1975. Figures were not available for Chignik Lake residents. The people of Chignik do not travel to the coast of the proposed monument to specifically harvest any fish for subsistence, although if they are commercial fishing the area when the season ends, they may harvest fish for subsistence in the bays of the proposed monument.

#### Hunting

#### Caribou

Most residents own a gun and hunting is common

common and moose and caribou are generally the predominant species sought. During 1975, Chignik Lake residents secured most of their caribou northwest of their village in the Black Lake lowlands. They are more isolated than the other Chignik villages and do not travel extensively to the coast to hunt except during the commercial fishing season. Remaining in the interior of the Alaska peninsula, lake hunters coordinate their subsistence activities within easy travel of their homes. During 1975, caribou provided the greatest amount of meat in the village. Of the 57 reported, 42 were shot in the Black Lake lowlands from September through February. Hunters traveled by foot, three-wheeled Hondas and snowmachines, although the latter appeared to have been in a constant state of disrepair throughout all three villages. Fifteen caribou were taken at the end of the fishing season at Ocean Beach which is located near the proposed monument, just south of Hook Bay. The northern coastline around the monument has been hunted in the past, but ever since the ADFG began closing the bays around Aniakchak during the commercial season, lake residents have relied more upon the Chignik area lowlands for their caribou. Occasionally, small hunting parties traveled to the interior, sometimes as far as Ilnik on the Bristol Bay coast, to secure game for their families.

Although caribou patterns fluctuate each year, there are certain areas "known" by local residents where caribou can be found. Two areas commonly referred to by Chignik Lagoon residents were from Kujulik Bay to Amber Bay--the coastline of the proposed monument--and the southern lowlands around Black Lake. Twenty-five caribou were reported taken for subsistence during 1975. Twelve of these were taken in Kujulik Bay and three were shot along the southern coast of Cape Kumlik during the fall; both locations are just south of the proposed monument. In previous years, lagoon residents harvested caribou in both Amber and Aniakchak Bays when the two areas were open for the commercial fishing

season. Chignik Lagoon residents, like the people at the lake, have moved southward for their game. The northern shore of Chignik Lagoon supplied the local people with one caribou in the spring, and four in the fall. Several village residents traveling by snowmachine on the frozen Chignik River shot five caribou in the interior of the peninsula in the Black Lake-Chignik Lake lowlands during January and February. Those hunting in the spring say that caribou are found on the coasts during March and in the mountains in June. Some residents occasionally travel to Ilnik in the winter, but they are substantially less in number than the lake residents. Caribou are not harvested along the coastline south of Chignik Bay nor in the northwest interior of the peninsula. One lagoon resident explained that it would take at least seven caribou to feed his family of seven for the year if he could not secure any additional game. This is a substantially higher average caribou figure than the reported 1.3 animal average for 1975. Caribou meat is usually frozen and the skins are not utilized by any of the Chignik villagers.

Chignik Bay residents hunt caribou at Ocean Beach in the fall months and six were taken in September, 1975. Further north at Cape Kumlik, caribou are said to be especially good and Chignik Bay hunters killed nine caribou along its southern shores. Aniakchak Bay supplied only three caribou and no animals were taken at Amber Bay. Residents explain that this is an unusually low number of caribou taken within the boundaries of the proposed monument and attribute this to the long distance required to travel after fishing around the Chignik area. Since Chignik Bay residents do not have local lowlands to hunt as do residents of Chignik Lagoon and Chignik Lake, they rely upon the northern coastline for their game. Most residents prefer to hunt

caribou sometime between August 10 and September 10.

### Moose

Moose were first reported along the northern coastline of Aniakchak in the early 1940s. Continued presence of these herds and the ease with which they are taken has made Aniakchak and Amber Bays well known for their moose populations. According to local sources, moose walk right down to the water and are usually killed while hunters are in their skiffs, traveling up the Aniakchak River, and always within two or three miles of the waters edge. Of the nine moose reported by Lagoon residents four were shot in the Chignik Lake lowlands and two came from the Black Lake lowlands. On the coast, one moose from Cape Kumlik and two from Amber Bay, the latter within the proposed monument during the spring. The moose taken at Amber Bay was taken by a local resident enroute from Kodiak Island to Chignik Bay. Six lagoon families leave the village as do several from Chignik Bay each winter, to spend the colder months in Seattle, Anchorage or Kodiak, often hunting along the coastline as they make their way north.

Patterns of harvest are controlled by the ADFG for sport and subsistent and the moose season usually runs from September through October and again in December. The late moose season in 1975 greatly restricted moose harvests for subsistence purposes because the animals were in rut and tasted poorly. Residents complained about the moose season, and estimate that they harvested about half as many moose during 1975 because of the restrictive season.

Chignik Bay residents killed eight moose in 1975, of which two were taken in Amber Bay, two in Aniakchak Bay; both within the proposed monument, and two on Cape Kumlik and two along Ocean Beach. Residents

note that moose have been heavily harvested along the northern coastline during the past several years and that there has been a decline in the population. Chignik Bay residents also considered their moose harvests to be about half as much as normal due to the poorly timed season.

Chignik Lake residents took five moose, all from the lowlands around Chignik Lake. Sentiments about the set season are shared by residents of this village as well.

### Bears

Very few bears are taken for subsistence. Some residents explain that it is due to the ADFG setting the season too early when the bears are fishy and thin, others suggest that they simply don't like bear meat because it's too tough, and still others admit they are frightened to hunt these large animals. Bears of the Alaska peninsula are brown and known to be ferocious when bothered.

No bears were taken in Chignik Bay or Chignik Lagoon during 1975. Two were shot by residents of Chignik Lake; one, for protective purposes in the village during January, and another, by a father and son during a hunting trip together. Bear meat is salted, dried and eaten as a type of "corned beef" but the skins are not used.

### Ducks and Geese

Chignik Lake residents reported taking 178 ducks during 1975, and 15 geese. All ducks and ten of the geese were shot at Chignik Lagoon. Five geese were taken at Ilnik on the Bristol Bay coast. Three hundred and fifty ducks were reported harvested by Chignik Lagoon residents and 45 geese were taken for subsistence purposes. Most of the ducks and geese were taken around Chignik Lagoon, although a few ducks were killed as far north as Hook Bay, and thirty geese were shot at Ilnik.

Chignik Bay residents estimated that 160 ducks were taken within a three mile radius of Chignik Bay and twenty geese were taken along Ocean Beach and around Chignik Lagoon. Ducks are very popular, and although geese are considered to be fine eating, the best geese can be found at Ilnik which is too far to travel by most Chignik villagers.

#### Ptarmigan and Rabbits

Ptarmigan constitutes a fair portion of the Chignik Lagoon residents diet, and few people could even calculate how many ptarmigan they shot and ate during 1975. An estimated 280 ptarmigan were reported killed in 1975

Some residents of Chignik Lake find ptarmigan meat "boney" but 710 were taken for subsistence during 1975. They are abundant all around the villages and December is known to be the month these birds taste best. Chignik Bay residents shot fifty ptarmigan around their village.

Rabbits, or "snowshoe hares" are very large and fifteen were taken by residents of Chignik Bay. Chignik Lagoon residents reported fifty shot for subsistence, as did Chignik Lake. Most residents go hunting for waterfowl and take rabbits as a second choice when ducks and geese cannot be obtained.

Ducks, geese, ptarmigan and rabbits have all been taken within the proposed monument while residents were hunting caribou or moose, or fishing in Aniakchak and Amber Bay. Figures for harvests within the monument during previous years were not available. Because few moose and caribou were taken within the monument during 1975, residents did not hunt these other species in the area.

#### Seal

Once a major part of the Chignik diet, seals no longer play a

major role as a food source. Seals travel up the Chignik River and one<sup>44</sup> was taken at Chignik Lake during April, 1975. Four more seals were shot farther down the river at Chignik Lagoon and although the skins were not utilized, seal oil was shared among the villagers.

Twelve seals were taken by Chignik Lagoon residents, of which several were not recovered, and one seal was taken by residents of Chignik Bay during 1975. Skins were not sold or utilized, only the oil and small portions of the meat were taken.

Seal oil is commonly used in the making of "Eskimo Ice Cream" which is known as "agoo-duk", and consists of berries, grease, sugar and seal oil. Before Crisco and other store-bought grease was available, all agoo-duk was made with seal or bear fat.

### Gathering

#### Berries

Chignik Lagoon residents occasionally gather "Indian rice" which is an all-white berry cooked like a vegetable; wild parsley for use in fish chowder; and wild rhubarb, which looks like spinach when it is cooked and made into rhubarb pie. Basically, villagers prefer to buy their vegetables at the store, particularly since gardens are very difficult to grow around Chignik. Lagoon residents gather berries as do all Chignik village residents, and they estimate that at least 150 gallons of low bush cranberries, blackberries, salmon-berries, strawberries, and wine-berries were picked during the fall of 1975, and used to make jelly, "agoo-duk" pies and other baked goods.

<sup>44</sup>The seal was pregnant and the local residents carefully retrieved the newborn seal pup, raised it on evaporated milk with an eyedropper until the pup was strong enough to play around the lakeshore, and then kept it as a pet for the children of the village.



A favorite berry-picking spot is across the lagoon on the long sand-spit which nearly crosses the entrance to Chignik Bay.

Lake residents estimate that a twenty gallon container might be an average vessel filled with berries each fall. September is the best month and although residents harvest berries all around their village, they also travel down the river to pick berries on the Chignik Lagoon sand-spit. The total number of gallons estimated to be consumed by lake residents was 150 per family. The discrepancy between average container size and total indicates the problem of measurement for this subsistence activity. Berry-picking is another family activity when groups of people from all three villages can get together.

Chignik Bay residents do not pick berries as much as residents of the other villages. They estimated 100 gallons per family were taken during 1975.

### Clams

Clams are harvested in large amounts, but like berries, are in such abundance that they remain difficult to quantify. Chignik Lake people estimate that 100 clams were taken during 1975, primarily from Mud Bay and Chignik Lagoon.

Chignik Lagoon residents reported that approximately 100 clams, primarily butter clams from Mud Bay and within the shallow areas around the lagoon. Razor clams are reported to be good but on the decline again at Aniakchak Bay.

Chignik Bay residents also dig clams at Mud Bay. Average clam harvests per family were approximately 100. Some clams were taken at Aniakchak lagoon, on the south side of Aniakchak Bay within the proposed monument during the fall by Kodiak fishermen, but these figures were not available.

### Trapping

Once a very important aspect of the Chignik lifestyle, trapping has been on the decline for the past thirty years. Several residents, however, still trap at local spots within a half hour of Chignik Bay. During 1975, five fox and one mink were taken by Chignik Bay residents. Wolverines are reported to be scarce and none were taken in 1975. The last four wolverine were trapped in 1965 as was the last land otter. Poor prices, the 1975 Bristol Bay rabies scare, and ties to staying in the village during the winter for children to remain in school, helps explain why trapping has all but disappeared.

Two younger residents of Chignik Lagoon trapped around their village in 1975 and caught six fox and three mink.

Chignik Lake residents note that beavers are entering the area and that they have not been trapped in the past because no one knew how to trap them. Several residents expressed an interest in learning to trap if beavers were a marketable fur. Two wolves were caught by Chignik Lake residents during the past five years, and four fox were taken in 1975 and sold at \$40.00 each. Six wolverine were taken and sold at 200.00 each, and one lynx was taken and sold at an unrecalled price.

Trapping has been done for the past seventy-five years as a source of supplemental cash income. The skins of the animals are not used for clothing or any other purposes.

### Transportation

Several residents in each village own snowmachines, and three-wheeled Hondas. Without directly participating in these subsistence activities, it was difficult to determine the extent that these machines were used for subsistence purposes.

Figure 19

1975

## Reported Resource Harvests

	Chignik	Chignik Lake	Chignik Lagoon
Moose	8	5	9
Caribou	15	57	25
Brown Bear	0	2	0
Seal	1	5	12
Ducks	160	178	300
Geese	20	7	15
Ptarmigan	50	710	280
Rabbit	15	50	50
Salmon	1900	1220	2025
Halibut	50	20	10
Dolly Varden	20	100	20
Shrimp	100 lb	---	50 lb
Crab	30	---	20
Clams	$\pm 100^*$	$\pm 125^*$	$\pm 100^*$
Fox	5	4	6
Mink	1	0	3
Lynx	0	1	0
Wolverine	0	6	0
Berries	100 gallons**	150 gallons**	150 gallons**

\* Average approximation

\*\* Blue, black, cran, salmon and wine berries -- approximate total

- KEY
- X Caribou
  - o Moose
  - Bear

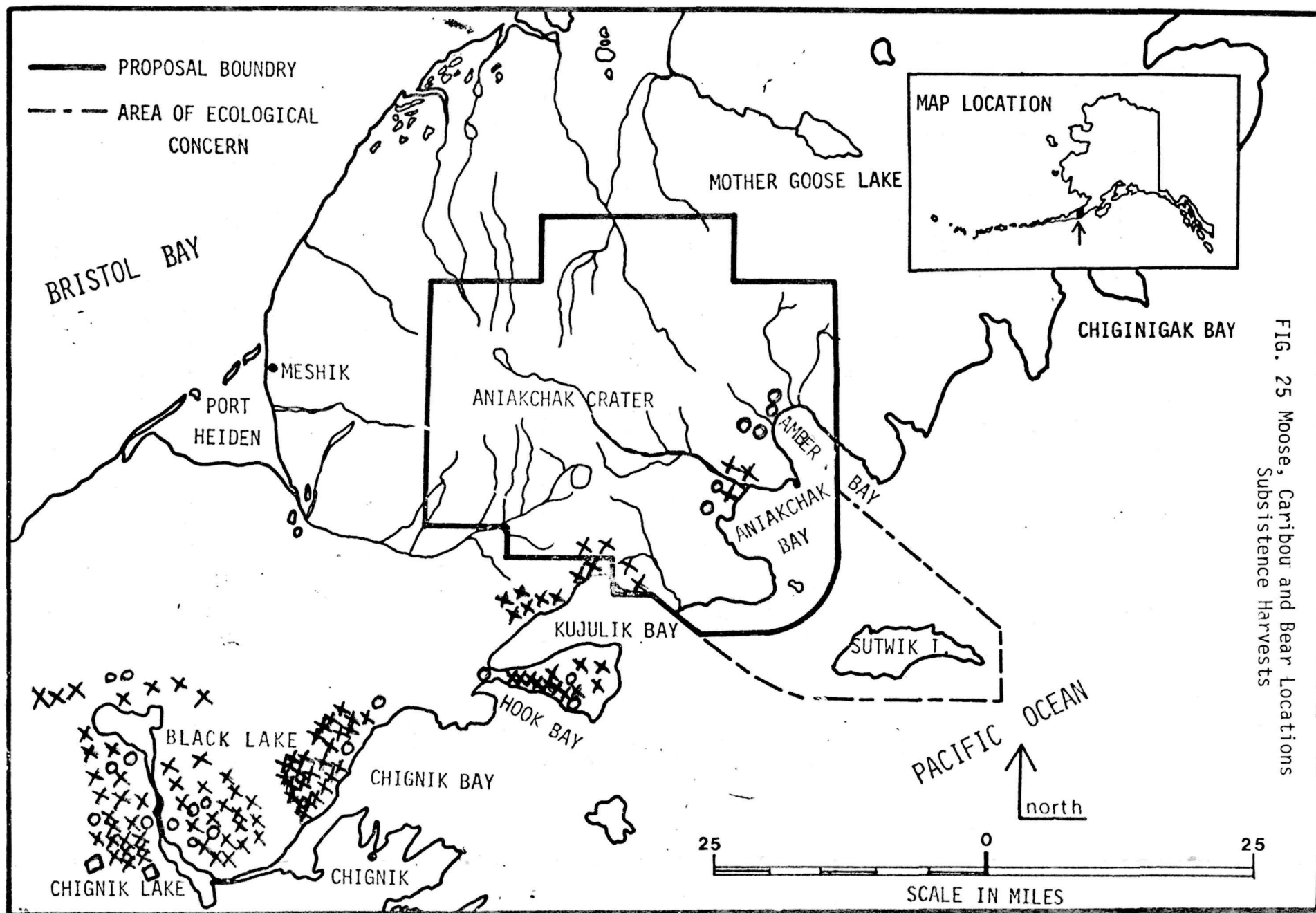


FIG. 25 Moose, Caribou and Bear Locations  
 Subsistence Harvests

## Subsistence Overview

It appears that subsistence activities in the Chignik villages supplement the seasonal fishing income for most residents, for 1975, however, were lower than average according to the local people for several reasons. Primarily, because the fishing season opened late and the people did not have time to hunt as they were busy trying to catch up on fishing. The success of the commercial fishing industry greatly affects the amount of time and financial necessity for hunting. Another reason cited for the decline was the poorly timed hunting seasons established by the ADFG.

It is impossible to quantify the psychological and traditional dependence upon wild foods. I did not live in the villages during the winter months and therefore have no idea how scarce natural resources become, how often residents hunted, or how much of the summer fish supply was consumed. Halibut, salmon, crab, clams, moose, caribou, and shrimp were eaten as a steady diet in the homes where I resided in the summer. From such a brief encounter, I can only speculate that subsistence fishing was an important food source as well as village activity during the summer. It is possible that subsistence hunting also provides emotional relief for local residents during the long winter months.

Subsistence activities are considered to be enjoyable by most residents. Older people teach younger members of the community about hunting, fishing, and gathering. Families participate in many subsistence harvests and develop stronger friendships and inter-village communication.

All residents of the villages indicated that their lives had always

centered around the salmon, caribou and recently moose, and that they would face hardships if subsistence activities were not permitted. Residents who appeared to not be plagued by financial worries; i.e. owned large fishing boats and lived in Seattle during the winter, were equally supportive of this claim.

There are many forces affecting subsistence (the "external" approach) which have not been covered in this preliminary look at subsistence. For example, residents who depend upon welfare must wait for their checks to come in the mail. Oftentimes, the mail is delayed for weeks on end, forcing residents to hunt, fish, or gather local resources. Education within the village is minimal and few younger residents are trained for occupations other than fishing. The limited entry laws coupled with the expense of commercial fishing equipment will force some residents either to return to living off the land or move elsewhere. Oil development and other employment opportunities within the area may provide short term employment but may not enable residents to become fully dependent upon the cash economy. There are various other forces affecting the dependence upon local resources. Two major forces, sport hunting and commercial fishing, will be mentioned later in this report.

The Department of Fish and Game Board has the opportunity to adopt regulations providing for subsistence hunting based on biological evidence or the majority vote of the active local advisory committee. These provisions would regulate transportation methods, establish open and closed seasons and areas, limit hunting to one sex of the animal and also establish local subsistence advisory committee. The committee,

45

Alaska State Statutes, Legislative Committee Report, Ch. 199, 1975, (SCS HB 369 am S) see House Journal, p. 733.

composed of well informed local residents, would recommend regulations regarding fishing and hunting around their villages. The committees would be empowered to close the season during an emergency, but only the commissioner (ADFG) would be allowed to open the season.<sup>46</sup>

When the advisory committee was established at Chignik in 1975, the residents made certain recommendations regarding the game resources, particularly moose and caribou around their villages. Their recommended changes did not materialize and feeling that their small voice had little effect and unfamiliar with procedures, the council did not reorganize during 1976. The National Park Service should consider the ADFG advisory process and its problems should it continue to support the plan for subsistence councils in the area. One reason the committee structure failed in the Chignik villages is that, although joined through common bonds, the three villages are comprised of distinct ethnic groups with varying economic backgrounds. Quite often, this diversity makes organization and consensus agreement difficult to reach in these villages.

One resident expressed the views of many villagers when he discussed the bureaucratic structure of decisionmaking as it related to subsistence activities around the villages:

There's too much red tape. I used to hunt bears, no more. Used to hunt seal commercially too.. but not anymore. Too many regulations. Aniakchak is busy with hunters...I like to hunt and I go whenever I need meat. I used to hunt up there a lot but no more, now the headhunters compete. The moose season was unfair. It doesn't matter if WE want an area open or not. Too much red tape. Too much bureaucracy.<sup>47</sup>

46

Ibid.

47

Personal communication, anonymous Chignik Lagoon resident, July, 1976.



### Subsistence: Elsewhere

Subsistence hunters from Kodiak, Chignik and Bristol Bay all hunt along the Pacific coast of the peninsula. Residents of Chignik estimate that approximately twenty boats from Kodiak, nine from Sand Point, two from Seward and two from Seldovia pass by and possibly anchor in Aniakchak Bay each year. These boats, usually thirty-five to forty feet in length, travel by Aniakchak Bay in the spring and fall, and occasionally, winter, and fishermen often hunt within the proposed monument. Small boat travel is difficult along this coastline during the winter because boats "ice up" and are dangerous to maneuver. This keeps many fishermen and hunters from entering the bays of the proposed monument during the winter.

During the fall and spring, usually between May 1 and June 15 Kodiak residents, bound for Chignik and the start of the salmon season, travel by and often anchor in Aniakchak Bay. If the crew desires fresh meat, they will hunt along the coastline for caribou, moose and any other available game. It is more common, however for Kodiak fishermen to lay over in Aniakchak and Amber Bays during September and October as they make their way back to Kodiak. Because Kodiak does not support caribou or moose, Chignik residents feel that these fishermen secure most of their game from the mainland coast. Aniakchak Bay is situated such that it is one of the last areas to obtain meat before crossing Shelikof Strait and is, therefore, an important part of the coastline for Kodiak residents who fish Chignik during the summer.

## X. FORCES AFFECTING SUBSISTENCE

### Sport Hunting

Subsistence hunting in the Aniakchak region is incidental when

compared to sport hunting. Estimated game populations supporting subsistence and sport hunters in this region are.

Moose-----appx. 3,000

Brown Bear-----appx. 3,000

Caribou:

King Salmon to Port Moller appx. 15,000

Port Moller to False Pass appx. 6,000<sup>48</sup>

The ADFG describes hunting to be good in the area for it appears to be little altered by man and therefore, provides a highly aesthetic environment for hunting. Hunting guides are plentiful and camps dot the peninsula around the Chignik villages and throughout the proposed monument (Figure 21). The EIS for the Aniakchak proposal suggested that only a few sport hunters would be affected should the monument be closed to sport hunting. Several permanent camps are established, but most hunting still occurs from temporary camps and guides commonly traverse the entire peninsula in search of game. It is difficult to determine exactly how many guides and hunters utilize the proposed area since many fly into the monument for short periods of time. Figure 21 indicates the location of moose and bear camps on the peninsula.

Hunting for brown bear is extremely popular in the area and the peninsula accounts for 25 percent of all brown bear harvests in the state. Brown bear guides change their camp location quite often (Figure 22) and this indicates the transiency of hunting on the peninsula. Multi-species hunts are popular with both Alaskan residents and non-residents and sport and trophy hunters seeking brown bear and

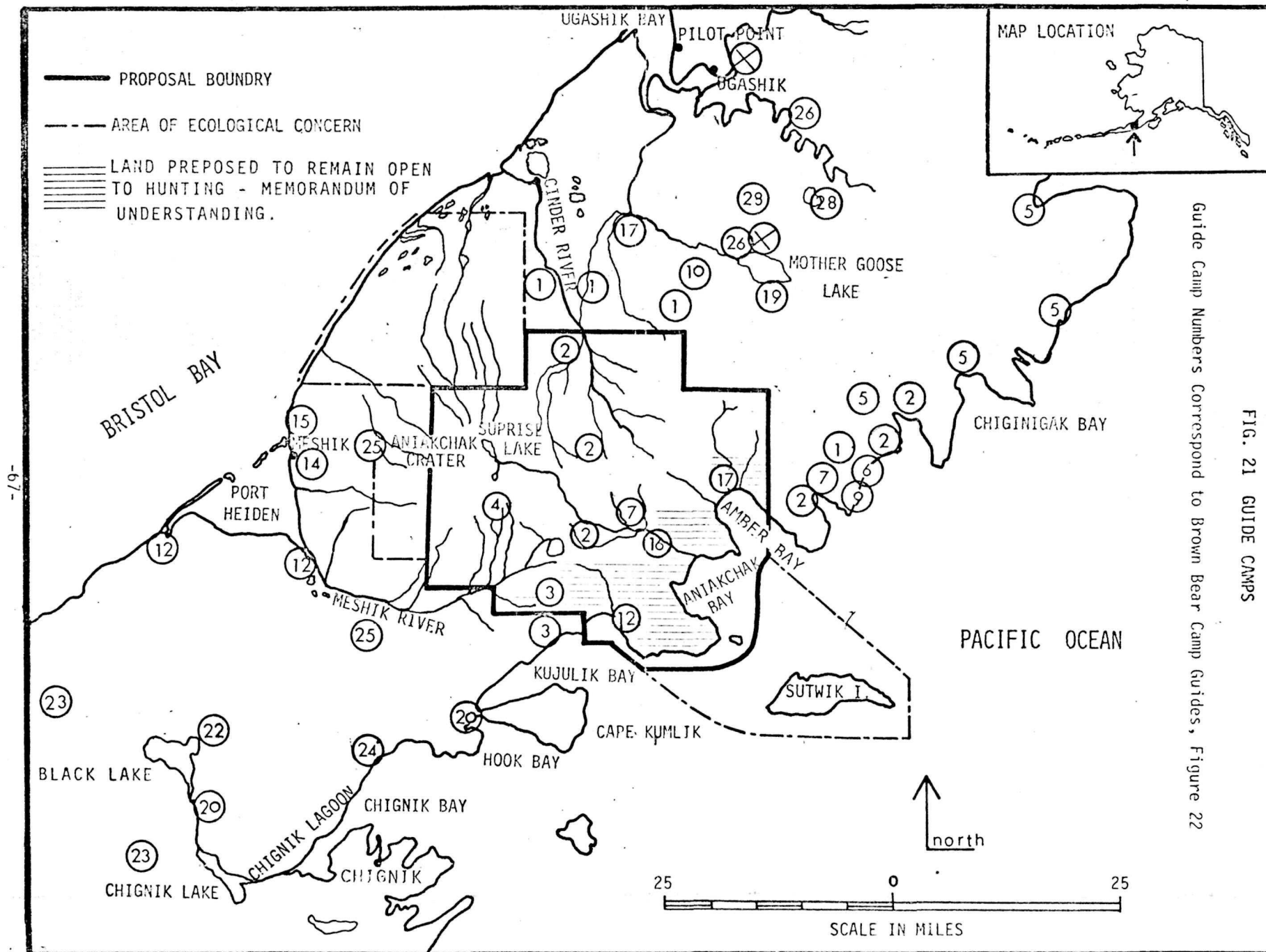


FIG. 21 GUIDE CAMPS  
Guide Camp Numbers Correspond to Brown Bear Camp Guides, Figure 22

Figure 22

## Brown Bear Camps

Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
1. Lee Holen Box 6-145 Anchorage, AK	F(1973)	<u>Cinder River</u> camp approx. 18 miles SW of Cinder River approx. 24 mi. from mouth	56° 37'	156° 30'
	F(1974)	<u>Amber Bay</u>	56° 22'	156° 20'
		<u>Nakakilac Bay</u> Upper River	57° 01'	156° 56'
		<u>Amber Bay</u> 5 mi. up- stream from mouth	56° 55'	157° 27'
	S(1973)	<u>Misery Creek</u> 3 miles from mouth	56° 56'	157° 02'
		<u>Farthest East Creek</u> Draining into Nakolilok Bay	56° 58'	156° 54'
2. Ray McNutt Sterling, AK	F(1973)	<u>Cinder River</u> Camp 2 miles up Lava Creek from Cinder River	57° 03'	157° 28'
	F(1975)	<u>Amber Bay</u> 5 miles up main creek	52° 02'	157° 52'
		<u>Amber Bay</u> About 3 miles up main stream	56° 52' 05"	157° 26'
		<u>Misery Creek</u>	56° 56'	157° 02'
	S(1976)	<u>Amber Bay</u> 3 miles up main stream	56° 52'	157° 32'
		<u>Misery Creek</u>	56° 56'	157° 02'

Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
3. David L. Lazer SRC Box 36 Palmer, AK	F(1974)	<u>Kujulik Bay</u> Cinder beds 3 miles from shore	56° 42'	157° 48'
		<u>Yantarni Bay</u> Approx. 8 miles from head of Bay	56° 57'	157° 19'
	F(1975)	<u>Kujulik Bay</u> Cinder bed and beach on river NW corner of Bay	56° 40'	157° 46'
		<u>Chignik</u> Bay, Lagoon, Lake	56° 17'	158° 25'
		<u>Meshik</u>	56° 37'	158° 30'
4. Jack Lewis Box 511 Kenai, AK	S(1973)	<u>Braided Creek</u>	56° 46'	158° 06'
		<u>Meshik River</u> North of, on side stream	56° 77'	158° 30'
	F(1973)	<u>Braided Creek</u> South of, on side stream	56° 48'	158° 06'
		<u>Meshik River</u> Garden wall	56° 37'	158° 30'
	F(1974)	<u>Meshik River</u> Braided Creek	56° 46'	158° 6'
		Same As Above		
	S(1975)	<u>Braided Creek</u>	56° 37'	158° 30'
		<u>Meshik</u>	56° 48'	158° 06'
	F(1975)	<u>Meshik</u>	56° 47'	158° 05'
		<u>Plenty Bear</u> <u>Meshik</u>	56° 47'	158° 13'
5. Ken Oldham Box 3-127 Anchorage, AK	S(1973)	<u>Dog Salmon</u> <u>River</u> Small cabin and tent frames	57° 13'	156° 57'

Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
Ken Oldham	S(1973)	Wide Bay Small cabin	57° 29'	156° 16'
	F(1973)			
	F(1974)			
	S(1975)	Same As Above		
	S(1976)			
Mary Oldham	S(1976)	Wide Bay (Confluence Cr)	57° 26'	156° 20'
		Chiginagak Bay	57° 03'	156° 45'
6. Harry Pederson Box 6504 Anchorage, AK	S(1973)	Yantarni Bay	56° 56'	157° 03'
		Yantarni Creek Near Yantarni Bay 10 mi. NE on Creek (3rd one from Yantarni Creek going NE)	56° 52'	157° 12'
	F(1974)	Yantarni Creek	56° 53'	157° 12'
		Yantarni Creek	56° 57'	157° 20'
	S(1975)	Same As Above		
	S(1976)	Same As Above		
7. John Pangborn Box 8859 Anchorage, AK	S(1973)	Yantarni North on long beach	56° 50'	157° 03'
		Agripina	57° 08'	156° 27'
	F(1973)	Imuya Bay Mouth of river	57° 15'	156° 20'
		Yantarni River Sand Bar up river	55° 50'	157° 10'
	F(1974)	Aniakchak Cinder Patch N. side valley	56° 40'	157° 40'
		Cinder River Spit on s. side of Bay	57° 20'	158° 10'

Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
John Pangborn	S(1975)	<u>Iniskin</u>	59° 45'	153° 29'
	F(1975)	<u>Illiamna Bay</u>	59° 42'	153° 35'
		<u>Aniakchak Bay and River</u>	56° 45'	157° 40'
		<u>Cinder River Mouth</u>	57° 20'	158° 08'
	S(1976)	<u>Iniskin Right Arm Bay</u>	59° 45'	153° 29'
		<u>Illiamna</u>	59° 42'	153° 35'
		<u>Dog Salmon R. Cappas Ella's Cabin</u>	57° 14'	156° 52'
		<u>Wide Bay NE end Largest lake in the valley</u>	57° 29'	156° 15'
9. Joe Ed Hendricks Box 2104 Anchorage, AK	F(1973)	<u>Meshik River</u>	56° 47'	158° 00'
		<u>Amber Bay</u>	56° 53'	157° 25'
	F(1974)	<u>Amber Bay Main creek</u>	56° 53'	157° 23'
		<u>Wide Bay Long beach</u>	56° 53'	157° 04'
	F(1975)	Same As Above		
	S(1976)	Near Same As Above		
	S(1973)	<u>Clark Bay cabin</u>	55° 47'	160° 00'
		<u>Meshik River- Braided Cr. Tanding strip cabins</u>	56° 35'	158° 29'
	F(1973)	<u>King Salmon River</u>	57° 15'	157° 30'
		<u>Cub Lake, cabin</u>		
10. Joe Mankins Port Heiden		<u>Meshik</u>		
		Same As Above		



Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
Joe Mankins	F(1974)	Same As Above		
	F(1975)	<u>King Salmon R.</u> Same As Above		
		<u>High Creek</u> West of Aniakchak	56° 58'	158° 00'
	S(1976)	<u>Amber Bay</u> Main creek	56° 53'	157° 25'
		<u>Nakalilok Bay</u> Long beach	56° 54'	157° 01'
12. Ed King Box 26 Naknek, AK	S(1973)	<u>Meshik River</u> Cabin	56° 44'	158° 35'
		<u>Battle Lake</u>	59° 19'	154° 46'
	F(1973)	<u>Amber Bay</u> Cabin	56° 52'	157° 26'
		<u>Braided Creek</u> Cabin	56° 33'	158° 29'
13. George Thiel	S(1973)	<u>Cathedral River</u> Cabin on river	55° 28'	162° 12'
	F(1973)	<u>Morzhovoi Bay</u> Site of old cannery	55° 03'	162° 57'
	F(1973)	<u>Pacific/Iniskin</u> <u>Strip</u>	59° 45'	153° 14'
		<u>Pacific/Sutwik</u> <u>Island</u>	56° 32'	157° 10'
	(1974)	<u>Pacific/</u> <u>W. Glacier</u> <u>Creek Forks</u>	59° 57'	153° 18'
		<u>Pacific/</u> <u>Kamishak River</u>	58° 57'	154° 11'
	S(1975)	<u>Morzhovoi Bay</u>	55° 2'	162° 58'
		<u>Bechevin Bay</u>	55° 5'	163° 22'
	F(1975)	<u>Pacific/Douglas</u> <u>River</u>	59° 00'	153° 43'
		<u>Pacific/Sutwik</u> <u>Island</u>	56° 32'	157° 10'

Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
14. Jeff Graham Port Heiden, AK	S(1976)	<u>Morzhovoi</u>	55° 03'	162° 57'
		<u>Hook Bay</u>	55° 05'	163° 23'
	S(1973)	<u>Sandy River</u>	56° 08'	159° 50'
		<u>Cabin</u>	56° 48'	158° 22'
	F(1974)	Same As First Camp		
	F(1975)	Same As First Camp		
		<u>Stepovak Bay</u>	55° 50'	159° 45'
	S(1975)	<u>Volcano Bay</u>	55° 17'	162° 05'
		<u>Balboa Bay</u>	55° 32'	160° 39'
	F(1975)	<u>Sandy River</u>	56° 07'	159° 47'
		Cabin on sand bar, middle of river		
		unnamed river between sandy and muddy rivers	56° 40'	157° 46'
	S(1976)	Same As Above		
15. Macarlo Christensen Port Heiden, AK	S(1973)	<u>West Fork River</u>	56° 20'	159° 05'
		Black Lakes Knife Peak Mt.		
		<u>Chignik Lake</u>	56° 14'	158° 47'
		Clarks River 3 mil SW village		
	F(1973)	Same As West Fork		
		<u>Grub Gulch</u>	55° 47'	160° 00'
		<u>Cabin</u>		
		<u>Head Kagayan</u>	55° 35'	160° 48'
		<u>Flats</u>		
	S(1975)	<u>Beaver River</u>	55° 35'	160° 56'
	F(1975)	<u>Ocean River</u>	56° 35' 05"	159° 37'
		Old village		
		<u>West Fork</u>	56° 12'	159° 03'
		Creek		

Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
Macarlo Christensen	S(1975)	<u>West Fork Creek</u>	56° 19'	159° 05'
	S(1976)	Same As Above		
16. Stephen Black RFD North Road Kenai, AK	S(1976)	<u>Aniakchak drainage</u>	56° 54'	157° 58'
		<u>Yellow Bluff</u>	56° 35'	158° 41'
17. Gary LaRose SRA Box 175 Palmer, AK	S(1973)	<u>Wide Bay air strip- Short Creek</u>	57° 23'	156° 25'
		<u>Pumice Creek Cinder bed located near ADFG camp</u>	57° 10'	157° 43'
	F(1973)	Same		
	F(1974)	<u>Pumice Cr. Same</u>		
		<u>Wide Bay Near oil co. docks</u>	57° 18'	150° 27'
	F(1975)	<u>Yantarni River</u>	56° 52'	157° 11'
18. Charles McLaughlin 3840 Robin Anchorage, AK		<u>Wide Bay Same</u>		
	S(1976)	Same As Above		
	S(1975)	<u>Cathedral R./ Angel R.</u>	55° 29'	162° 7'
		<u>Volcano Bay</u>	55° 9'	161° 58'
	F(1975)	<u>Long Beach</u>	56° 51'	157° 04'
19. Marlin Grasser Box 475 Palmer, AK		<u>Long Beach</u>	56° 55'	157° 00'
	F(1973)	<u>Painter Creek Painter strip</u>	57° 07'	157° 24'
		<u>Amber Bay beach</u>	56° 53'	157° 20'

Name and Address of Guide	Season	Location of Camp	Latitude	Longitude
Marlin Grasser	F(1974)	<u>Kejulik River</u>	57° 51'	155° 30'
		<u>Kejulik River</u>	57° 48'	155° 47'
20. Rick Herscher Box 8376 Anchorage, AK	S(1973)	<u>Clark River</u>	56° 12'	158° 50'
		<u>Kuiukta Bay</u>	56° 09'	158° 43'
	F(1973)	West Fork <u>Rapid Creek</u> Cabin on river	56° 23'	159° 04'
		<u>Stepovak Bay</u>	55° 54'	160° 27'
	F(1974)	<u>Stepovak Bay</u>	55° 54'	160° 22'
		<u>Portage Bay</u>	156° 20'	159° 22'
	S(1975)	<u>Canoe Bay</u>	55° 33'	161° 33'
		<u>Volcano Bay</u>	55° 17'	162°
21. Brad Langvardt Box 4-588 Anchorage, AK	F(1975)	<u>Painter Creek</u>	57° 09'	154° 24'
	S(1976)	Same As Above		
		<u>Amber Bay</u> Main Creek Delta Amber Bay	56° 52'	157° 25'

Guides Without Extensive Recorded Camp Locations:

- 22. Swiss
- 23. Hays
- 24. Cerami
- 25. Garton
- 26. Flynn
- 27. Gay
- 28. Payne

Ø Temporary camps not known during survey

moose are frequent visitors to the proposed monument.

The Pacific watersheds have a record of light hunting pressure because weather frequently makes travel to, from and within the area difficult, and until recently, other lightly harvested moose populations with good trophies were more readily available. The Meshik River drainages have also had light hunting pressure because access, even by aircraft, is limited. Float landings are possible in some locations around the proposed monument. Other access for aircraft is restricted to wheel landings on pumice patches or abandoned mining strips. The Aniakchak River, although shallow, can be floated by raft. Boats can be used on the lower river and a few air boats exist that can travel the river and many of its larger tributaries. Track vehicles are banned from hunting in the Pacific coastal area which encompasses a portion of the  
50  
proposed monument area.

Exact harvesting locations are difficult to determine because hunters report their kill locations by general area rather than by specific site. It would be easy for sport hunters to kill a moose or bear within the proposed monument and report the site as "Pacific Coast, Alaska Peninsula".

#### Commercial Fishing

The commercial fishing industry continues to exert tremendous influence upon Chignik residents' relationship with the Aniakchak coastline. When fishing is poor, residents must put up larger amounts of fish and game to tide them through a cashless winter. The length

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Personal communication, Jim Faro, ADFG, King Salmon, July, 1976.

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Personal communication, Jim Faro, ADFG, King Salmon, July, 1976 and portions of the ADFG Pacific Moose Management Plan, unedited, pre-publication draft, ADFG,

of the commercial fishing season is important, for if drawn into late summer, it does not allow residents enough time to put fish away for the winter. Lagoon and lake residents do not have the refrigeration services that Alaska Packers cannery has made available to the bay villagers, and require adequate drying and smoking time for their fish.

Equipment and boat ownership play an important role in determining which fishermen will be able to travel to certain areas to secure their fish. Those owning boats have the freedom to fish the coastline, whereas a crew member must find a boat upon which he can fish, and possibly hunt, in areas outside his village. Those with halibut and crab gear will be able to harvest those resources and share them with the village.

Those owning boats, however, are faced with the high maintenance costs and unavailable materials to keep their boats in working order. Planes and boats that supply local people with parts and materials can often be delayed for weeks and waiting for materials occupies a large portion of boat-owners' time that might otherwise be spent fishing or hunting.

The fishing industry provides some additional employment at the Chignik Bay canneries during the winter months. Since housing is limited, few lake or lagoon residents move to the bay during the winter and remain unemployed or move to points outside the village for additional employment.

## XI. OVERVIEW OF HISTORIC REMAINS AND PRESENT ACTIVITIES ALONG THE COASTLINE OF THE PROPOSED ANIAKCHAK CALDERA NATIONAL MONUMENT DURING 1975-6

Remnants of previous land-use patterns that indicate the partial-cash partial subsistence economy, can be seen along the coastline of the monument. Figure 23 indicates some of the major landmarks in the area:

#1: Ball-Eyed Charlie's cabin at the head of Amber Bay stands

as a skeletal memoir of trapping activities during the 1920s and 1930s. The cabin is rumored to have been used by sport hunters until several years ago when a few harsh storms caused much destruction. Without immediate reconstruction the frame will probably survive only a few more years.

- 2: Alaska Packers Bunkhouse (Figure 24) still stands but is difficult to reach by foot due to the tides. Salmon trap pilings from the Aniakchak River trap have all but disappeared. Remains from other smaller structures, perhaps additional cabins or part of the APA operation can be found along the bluff near the bunkhouse.
- 3: Aniakchak Clam Cannery (Figure 25) is a pile of wood and machine parts in the grass along the coastline. The boiler still remains but should be protected from theft. The remains from the automobile used to transport the clams is also a part of the rubble and the frame is still somewhat intact.
- 4: Carlson's cabin on Kumlik still stands but is extremely weatherbeaten.
- 5: Brandal's cabin- visited by Hubbard in the 1930s- is in good shape and often used by the Brandal family of Chignik Lagoon. Brandal has applied to the state for ownership of 160 acres around the area as his homesite. His property directly borders, and is somewhat within, the proposed monument.
- 6: Nielson's cabin, previously Charlie Weederman's cabin, is no longer standing.

The interior of the proposed area, throughout the lowlands and inside caldera, appear to have few material landmarks of either cultural or historical significance. Remains from the Nielson halfway shack should be evident, as well as other trapping activities. A thorough, on the ground inventory will be necessary in this area to locate these other sites.

### Activities

At present, sport hunters from Alaska and the lower-49 visit the peninsula during the fall and spring to hunt bear, moose and caribou, as well as waterfowl within the proposed national monument. During 1976, seven guide camps were known to have been within the boundaries, or on the

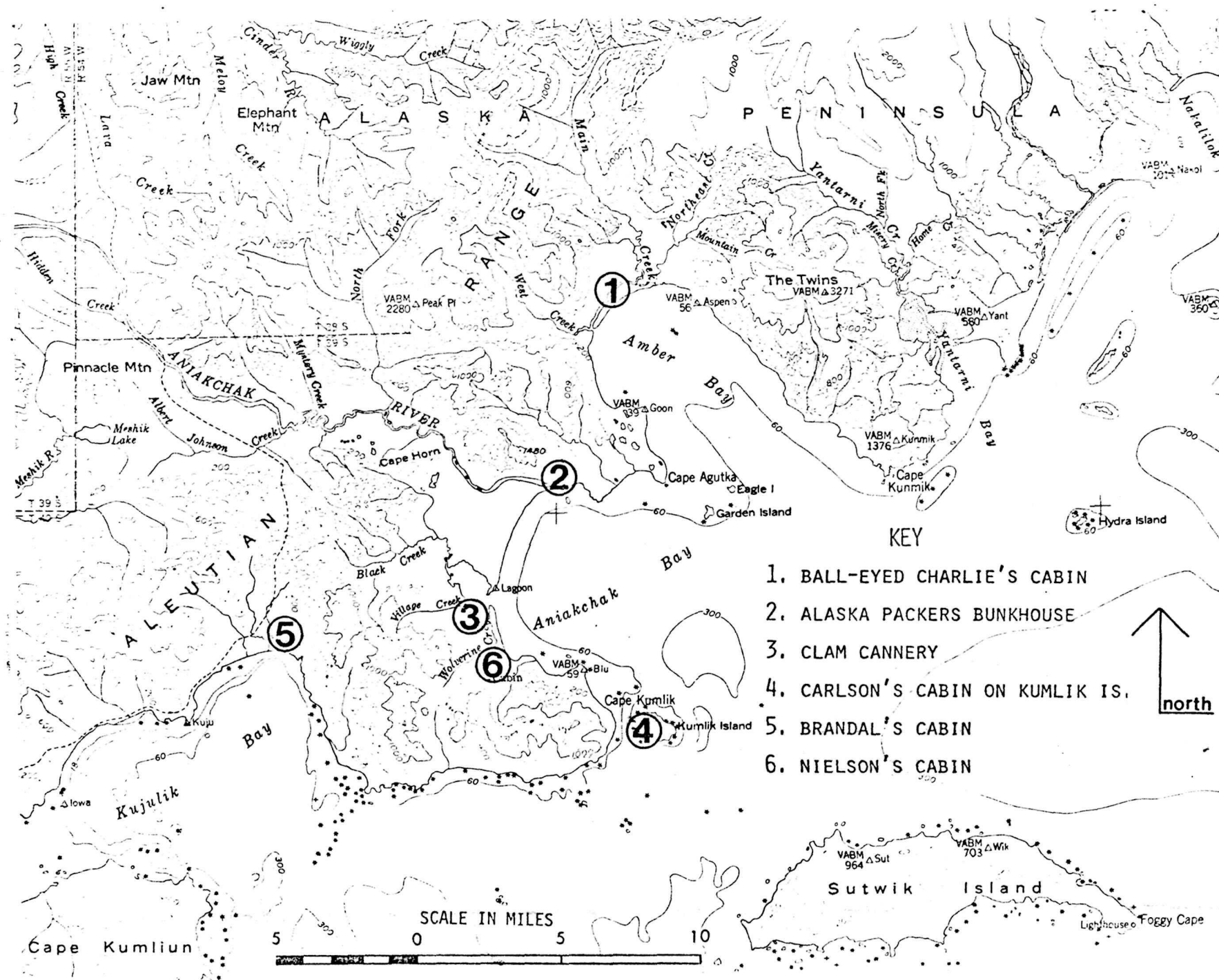


FIG. 23 PRESENT LAND MARKS



Figure 24

Clam Cannery, Aniakchak Lagoon



Figure 25

Alaska Packers Bunkhouse, Aniakchak Bay



border, of the coastal portion of the monument.

Subsistence hunters from the Chignik villages harvested 67 caribou, 36 moose and a limited amount of waterfowl and clams from the Aniakchak coastline. These resources were taken either in the spring before the beginning of the salmon season, or in the fall, at the end of the season.

Commercial fishermen from the Chignik villages travel up and down the peninsula all summer (See Figure 25 for boat and owner names). It is impossible to determine whether these fishermen take resources from the Aniakchak coastline without direct observation.

Residents from Kodiak are known to stop by the Aniakchak coast and hunt while enroute to Chignik to fish during the summer, or on their return to Kodiak. Crab and halibut and shrimp fishermen may also stop along the coastline at all times of the year and harvest resources. Oil and mineral exploratory crews may also harvest resources, although this is somewhat unlikely. Few recreationalists have visited the proposed area with the exception of photographers and members of the Bureau of Outdoor Recreation.

All these activities make Aniakchak sound like a very busy place. It is not on the surface, because natural time and weather barriers have kept conflict at a minimum. With the designation of the area as a national monument, however, there is potential for increased visitation. Although concern about multiple-use management problems may seem premature, increased need for petroleum may hasten the development of the area, should the State go through with its plan to build a road down the peninsula, or oil companies construct such a transportation corridor, and/or the lure of Alaska and the new parks causes increased interest in Alaska.

Figure 25

Boats in the Vicinity of Propos:

Leased 1976

Columbia Ward Fisheries

Alice A. -- Harold Anderson P.O. Box 595 Kodiak	Geraldine -- Elia Yagie, Sr. Perryville
Angeline -- Nick Shangin Box 2738 Kodiak	Gypsy -- David Anderson (in charge)
Anna Marie -- Art Pederson Box 2513 Kodiak	Helene B. -- Edwin Beck 10516 Midvale North Seattle
Aquarius -- Walter Stepanoff Chignik	Jeannette Sue -- Alex Pederson Box 275 Kodiak
Bucaneer -- Clements Shangin 1601 Nelchina Sp 42 Anchorage	Julius A. -- Peter Kalmakoff Lagoon
Cheryl Ann -- Morries Pederson Lagoon	June Ellen -- Ronald Anderson Box 534 Kodiak
Chignik Maid -- Gruneits (partners) Lagoon	Kitten -- Fred Shangrin Perryville
Chignik Rose -- Edwin Carlson 21244 Tyee St. Castro Valley, CA	Kristy Kay -- Hans Pederson
Chignik Star -- Kenneth Erikson Lagoon	Louise A. -- Algot Anderson
C - ola -- H. Gary Anderson P.O. Box 595 Kodiak	Lynda M. -- Charles McCallum 2900 Elm Bellingham
Echo -- Donald Bumpus Box 934 Kodiak	Marilyn S. -- Floyd Suydan 103 Seldovia 99665
Eleanor -- Alexander Kosbruk Perryville	Marquay -- Raymond Anderson 335 Seward
Ella Mae -- Nick O'Diomin Jr. Lake	Millie Jo -- Alvin Pederson Lagoon
	Nakchamia -- Knud Olsen 16712 37th NE Seattle
	Nana T. -- Afonie Takak Box 2564 Kodiak

Figure 25 continued

Boats in the Vicinity of Proposal

Nomad -- Julius Anderson

Norman L. -- Elliot R. Lind  
Lake

Oasis -- August Pederson  
Box 2873  
Kodiak

Pixie -- George Harris  
2317 Walnut SW  
Seattle

Princess -- Morris Jones  
Decatur, WA

Rebecca May -- Angus Campbell  
4751 Terrace Dr.  
SD

Rhonda B. -- Alec Brandal  
Box 2422  
Kodiak

Sandra Jean -- Nick Aleck  
Lake

Seven Brothers -- Marvin Yagie  
Perryville

Sherrie Marie -- Paul Teuber  
5045 S. 178th  
Seattle

St. George -- Larry Lind  
Box 52  
Pilot Point

\* There are between 8-9 boats fishing Aniakchak and Ivanof exclusively all summer for PAF from Sand Point.

Figure 25 continued  
Alaska Packers Association  
Boats Fishing 1976 Season

Christine K. -- Frank Kashevarof	Neptune -- Andy Stepanoff
Condor -- Bill Anderson	Northern Sea -- Axel Carlson
Crane -- Rudy Carlson Jr.	Oriole -- Tony Gregonio
Curlew -- Aloys Kopen	Osprey -- Tom Munson
Eagle -- Harry Kalmakoff	Rosalie -- Calvia Skonberg
Ern -- Gene Carlson	Saturn -- Johnny Constantine
Fairy -- Terry Lind	Scorpion -- Roy Skonberg
Finch -- Harold Skonberg	Scoter -- George Orloff
Grebe -- Boris Kosbruk	Sharon Lee -- Clarence Erikson
Judy C. -- Rudy Carlson Sr.	Starling -- LeRoy Harris
Karen Marie -- Gunner Anderson	Susan Rae -- Raymond Johnson
Kathleen Noel -- Al Anderson	Swift -- Harry Kaiokonshok
Lois M. -- Henry Munson	Sylvia Rose -- Carl Carlson
Marc Anthony -- Bill Lind	Tempest -- Andy Endresen
Mais -- Frank BatisheII Jr.	Venture -- Henry Minaker
Michelle Lee -- Guy Skonberg	

It would be very easy to discredit the activities of the Chignik village residents as "non-native-subsistence", because the people appear to have additional cash income upon which to exist, not advocating that the people of the Chignik villages are, or are not, leading a "subsistence" lifestyle. Rather, that before any decisions regarding hunting, fishing, trapping and gathering activities be made about the Aniakchak environment, more time should be spent determining the use of the area by the local residents. It is very possible that both sport and subsistence activities that are on the boundaries of the area will move inside the monument over time.

Figure 26  
Proposed Area, 1976

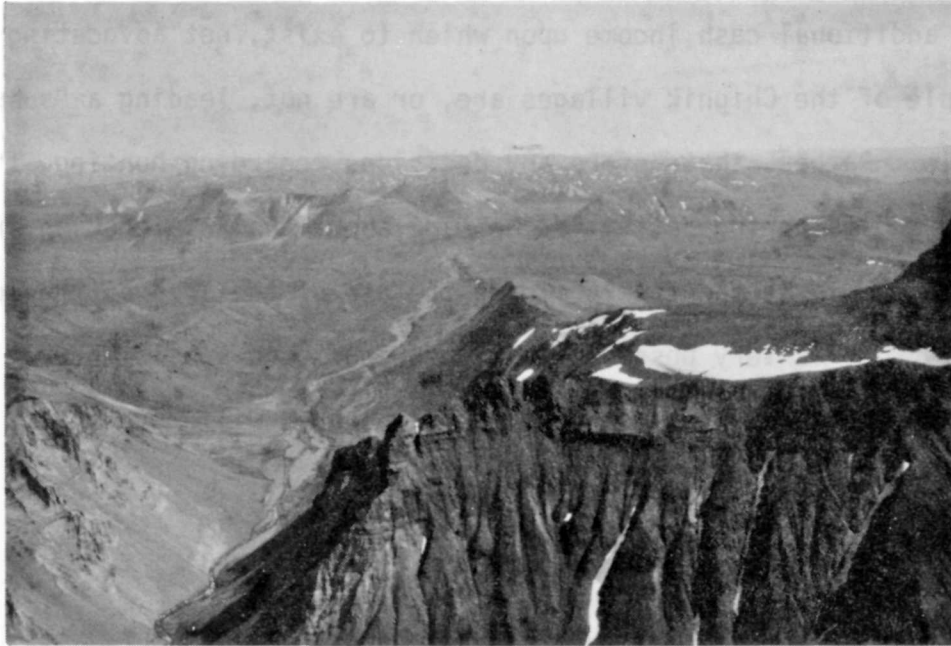
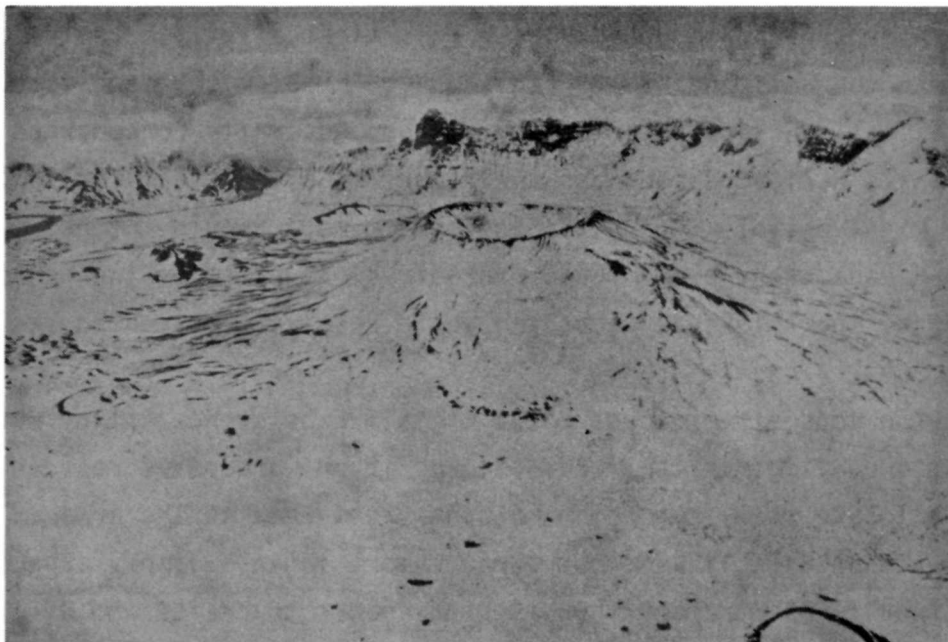


Figure 27

Proposed Area 1976





## XII. PRELIMINARY RECOMMENDATIONS

1. The area might be time-zoned for each use, rather than according to customary use or geographic boundaries. This might alleviate the problems of having both tourists and hunters in the same area at the same time. Since Chignik villagers harvest few animals and generally concentrate on the coasts while hunting guides and their parties often stalk the lowlands, both groups might be able to hunt at the same time. Should the game decline, ADFG management plans would probably close parts of the peninsula and, therefore, the Aniakchak coastline would receive less hunting activity.
2. Subsistence councils proposed under the NPS Subsistence Policy would probably cause conflict in the local village if one groups of residents were allowed to allocate permits to hunt to other residents in the area. These councils should be established, but perhaps more in an advisory capacity as an informational liason rather than with the power to decide who will or will not hunt.
3. Consideration should be given to the present proposed boundaries. With the current plans for multiple-use activities, the NPS might want to re-evaluate the need and desire for the coastal section, interior lowlands and tundra around the river and caldera. Perhaps it might be best to designate the caldera a national monument, the river as a wild and scenic river, and allow sport hunting and subsistence hunting to continue more easily in the area under another agency's jurisdiction. The researcher suggests this as an alternative and does not advocate such a change in boundaries.
4. Steps should immediately be taken to preserve and further study the landmarks within the area (clam cannery, bunkhouse, trappers shacks etc.). Since many of the older residents who know the area extremely well have either died or moved, contact should be made with the village residents as soon as possible.
5. A more thorough subsistence study must be undertaken to determine the real demand upon the Aniakchak coastline for bear, moose, caribou and waterfowl. Although it appears that the people of Chignik do not hunt much in the area, their dependence upon the coastline is directly linked to their social and economic environment. These are touchy issues, indeed, but must be discussed.

This report does not attempt to quantify economic or psychological information-- a full year subsistence study needs to be conducted in the Chignik villages as well as villages along Bristol Bay.

6. Plans for development should not begin until demand requires that accommodations be built. Although these plans are often for "future management" they can sometimes accelerate development.

7. Communication with sport hunters and guides and the National Park Service should be strengthened. Many guides, upset with the NPS for fear that the hunting policy for proposed new Alaskan areas are merely "paper-tigers", are concerned that once new areas are established the NPS will close the hunting option. Better communication would facilitate greater understanding between hunters and the NPS.

## VIII. BIBLIOGRAPHY

Alaska Commercial Company Records: Sutwik Bay Store and Mitrofanina Station, University of Alaska Archives, Fairbanks, Alaska.

Alaska Commercial Company, Semidi Propagating Records, University of Alaska, Archives, Fairbanks, Alaska.

Alaska Department of Fish and Game, Pacific Moose Management Plan, Unedited, Pre-publication draft, 1975.

Alaska, Governor's Study on Limited Entry, Juneau, 1975.

Alaska Planning Group, U.S. Department of Interior. Final Environmental Impact Statement Aniakchak Caldera National Monument, Washington, D.C. 1974.

Alaska State Statutes, Legislative Committee Report, Ch. 199, SLA, 1975, (SCS HB 369 am S), see House Journal, p. 733.

Anderson, Douglas, Richard K. Nelson, Ray Bane, Wanni Anderson, Nita Sheldon, Kuuvangmiit: Traditional Subsistence Living in the Latter 20th Century, Unedited, pre-publication draft, National Park Service, 1976.

Arborgast, Dean. Labor in the Alaska Salmon Industry, MS Thesis, Columbia University, New York, 1947.

Bandi, Hans-Georg. Eskimo Prehistory, translated by Ann E. Keep, College, Alaska: University of Alaska Press, 1969.

Bancroft, Hubert H. History of Alaska 1730-1885, Halfner Publishing Co. 1886; 1970.

Belous, Robert and Stell Newman. Draft Subsistence Policy, National Park Service, 1976.

Browning, Robert. Fisheries of the North Pacific, Alaska Northwest Publishing Company, 1975.

Bureau of Fisheries. Alaska Fisheries and Fur Seal Industries, Washington, D.C. volumes 1910-1928.

Chevigny, Hector. Russian America: The Great Alaskan Venture 1741-1867. New York, The Viking Press, 1965.

Dall, William Healey, "Report on the Coal and Lignite of Alaska" in U.S. Geological Survey, Seventeenth Annual Report, 1895-6, Washington, D.C. 1869, appendix no. 1, pp. 193-202.

Davidson, George. Coast Pilot of Alaska, First Part From Southern Boundary To Cook's Inlet, Washington, D.C. U.S. Coast Survey, 1869.

Douglas, Robert P. In the Land of the Thunder Mountains, Brewer, Warren and Putnam, 1932.

Dumond, Don E. Leslie Conton, and Harvey Shields, "Eskimos and Aleuts on the Alaska Peninsula: A Reappraisal of Port Moller Affinities" Arctic Anthropology, 12, 1975, p. 49-53.

Estep, Gerald. "Chignik", Alaskan Sportsman, Vol. IX. September, 1938, pp. 15-18.

Gasbarro, Anthony. A Study of Subsistence Activities in Bristol Bay, Institute of Social and Economic Government Research, University of Alaska, 1976.

Hubbard, Bernard. "A World Inside a Mountain" National Geographic Magazine, Vol. 60, 1931, pp. 319-345.

Cradle of the Storms, New York Dodd Mead and Col, 1944.

Mush You Malemites, New York American Press, 1943.

Hussey, John A. Embattled Katmai: A History of Katmai National Monument, U.S. Department of Interior, National Park Service, Washington, 1971.

Maxfield, Galen. Pacific Salmon Literature Compilation; 1900-1959, Seattle Bureau of Commercial Fisheries Biological Laboratory, 1967, 645 Sheets.

Morey, Lois M. Collection, University of Alaska Archives, Fairbanks, Alaska.

Moser, Jefferson. Salmon and Salmon Fisheries of Alaska, Report of the Alaskan Salmon Investigations of the U.S. Fish Commission Steamer Albatross in 1900 and 1901. Washington Government Printing Office, 1902.

Salmon and Salmon Fisheries of Alaska, Report of the Operations of the U.S. Fish Commission Steamer Albatross for the Year Ending 1898, Washington Government Printing Office, 1899.

Neilson, Helen. "It Was a Simple Life I Led", ELWANI, Kodiak Aleutian Regional High School, May, 1976.

Oswalt, Wendell. Alaskan Eskimos, San Francisco: Chandler Publishing Co., 1967.

Petroff, Ivan. Report on the Population and Resources of Alaska, 46th Congress 3d Session, House of Representatives Executive Document No. 40, Ser. 3895, Washington, D.C. 1900, pp. 53-281.

Porter, Robert. Report on the Population and Resources of Alaska, Eleventh Census, Washington, D.C., 1890.

Public Law 92-203, 92nd Congress, H.R. 10367, Section 17 d (2), December 18, 1971 (Alaska Native Claims Settlement Act).

Rich, Willis H. Statistical Review of the Alaska Salmon Fisheries, Washington Government Printing Office, 1928.

Scudder, H. The Alaska Salmon Trap: Its Evolution, Conflicts and Consequences. Juneau, Alaska Department of Education, Division of State Libraries, 1970.

Tanner, Z.L. Explorations of the Fishing Grounds of Alaska, Washington and Oregon During 1880, Bulletin of the U.S. Fish Commission, Vol.8, Washington, 1881.

Tikhmenev, Petr Aleksandrovich. The Historical Review of the Formation of the Russian-American Company and Its Activity Up to the Present Time (translated by Dimitri Krenov, Seattle) Works Progress Administration, 1939-40, I.

Tingle, George. Alaska Salmon Fisheries Statistical Review, 1896-1904, Washington, 1905.

VanStone, James W. Eskimos of the Nushagak River: An Ethnographic History, University of Washington Publications in Anthropology, Vol. 15, Seattle, University of Washington Press, 1967.

White, H.W. Status of Alaska Fisheries, 1885, Cutting Packing Company Records, Bancroft Library, University of California, Berkeley, California.

