

DOC I 29.58/3:B 45

historic resource study

Clemson University



3 1604 019 678 251

DEPOSITORY

OCT 30 1986

~~Library~~
Federal Documents

BERING LAND BRIDGE



NATIONAL PRESERVE / ALASKA



FEDERAL
PUBLICATION



Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

<http://archive.org/details/historicresource00will>

"It is a hard country, though":
Historic Resource Study
Bering Land Bridge National Preserve

by

G. Frank Williss

U.S. Department of the Interior / National Park Service



CONTENTS

LIST OF ILLUSTRATIONS	iv
PREFACE	v
Chapter One: European Exploration of the Seward Peninsula	1
A. Russian Knowledge of the Seward Peninsula Before Contact	1
B. Exploration in Northwest Alaska Waters: The Alaska Voyage of James Cook	6
C. Russian Response to the Voyage of Captain Cook	12
D. The Voyage of Otto Von Kotzebue, 1811-1817	13
E. Gleb Shishmarev	18
F. Search for the Northwest Passage: Frederick William Beechey in Northwest Alaska	21
G. The Search for Franklin, 1848-1854	27
H. Recommendations	35
I. Sites Relating to Exploration	35
Chapter Two: Coming of the Americans	37
A. Yankee Whalers in the Bering Sea	37
B. Western Union Telegraph Expedition on the Seward Peninsula, 1865-1867	46
C. American Administration	55
D. Recommendation	63
Chapter Three: Early Missions/Schools and Reindeer	67
A. Missions/Schools	67
B. Sheldon Jackson and the Introduction of Domesticated Reindeer	72
C. After Jackson	85
D. Non-Native Ownership	100
E. Return to Private Ownership, 1940-Present	105
F. Sites Related to Native Reindeer Herding	113
G. Sites Related to Missions/Schools	117
H. Recommendation	117
Chapter Four: Mining on the Seward Peninsula	119
A. The Nome Gold Rush	119
B. Mining Outside Nome	126
C. Ditches	170
D. Decline	191
E. Sites Related to Mining	197
F. Recommendations	203
EPILOGUE	205
RECOMMENDATIONS	213
APPENDIXES	215
Appendix A: Journal of Proceedings of Mr. W.R. Hobson . . .	217
Appendix B: Serpentine Hot Springs	245
BIBLIOGRAPHY	249
HISTORICAL BASE MAP	261

LIST OF ILLUSTRATIONS

1.	James Cook in the Bering Sea	10	
2.	"Chart of Bering Strait on Mercators Projections, August 1816"		16
3.	"Chart of Part of the North West Coast of America"	24	
4.	"P.M.D. Collins' Proposed Overland Telegraph via Behrings Strait and Asiatic Russia to Europe, under Russian and British Grants," 1864	48	
5.	"Sketch Map of Cape Nome Mining District and Adjacent Territory, 1900."	64	
6.	Reindeer Corral, Goodhope River	92	
7.	Cabin, Goodhope River	94	
8.	Shishmaref Corral, 1928	98	
9.	Cape Espenberg Reindeer Corral Complex	110	
10.	Nome, 1900	128	
11.	Record City, 1903	130	
12.	Candle City, 1903	132	
13.	Birds eye view of Deering, 1903	134	
14.	Detail of Sod house on Flood Plain of Goodhope River, 1985		140
15.	Mining Camp on Goodhope River, 1985	140	
16.	Arctic Gold Fields of Alaska," 1903	142	
17.	Mining Camp Near Mouth of Esperanza Creek, 1985		144
18.	Sod House Near Esperanza Creek, 1985	144	
19.	"Old Hot Springs," 1985	148	
20.	"Old Hot Springs," 1985	148	
21.	"Old Hot Springs," 1985	150	
22.	Serpentine Hot Springs, 1984	154	
23.	Along Dahl Creek - Candle Trail, n.d.		156
24.	Trail Marker, 1985	156	
25.	Cottonwood ARC Shelter Cabin, May 1926		158
26.	Cottonwood Shelter Cabin, 1985	158	
27.	Frame of Berry Creek Shelter	160	
28.	Ruin of Aurora Shelter Cabin, 1985	160	
29.	ARC Shelter Cabin, "Sinrazat," n.d.		162
30.	Sinrazat Shelter Cabin, 1986	162	
31.	Map of Nome District, 1923	166	
32.	Route from Deering to Taylor Highway, 1985		168
33.	Route from Deering to Taylor Highway, 1985		168
34.	Advertisement for C.L. Morris, March 4, 1906		172
35.	Map of Fairhaven Precinct	178	
36.	Fairhaven Ditch at Outlet of Kugruk River from Imuruk Lake, 1985		180
37.	Pipe, Fairhaven Ditch, 1985	180	
38.	Fairhaven Ditch (upper section) and Cabin, 1985		182
39.	Remains of Water Control Device, Fairhaven Ditch, 1985		182
40.	Fairhaven Ditch (upper section) and Cabins, 1985		184
41.	Fairhaven Ditch (upper section), 1985	184	
42.	Cabin at Mile 1 from Imuruk Lake, 1985	186	
43.	Cabin at Mile 3-5/8 from Imuruk Lake, 1985	186	
44.	Cabin at Mile 3-5/8 from Imuruk Lake, 1985	188	
45.	[Walsh] Cabin, Humboldt Creek, 1985	192	
46.	Cabin on Humboldt Creek, 1985	192	
47.	Plane Wreck - Lane Mountain	210	

PREFACE

This Historic Resource Study has been prepared in accordance with the approved Task Directive for Package 103--Cultural Resources Inventory (Addendum). It is oriented toward the identification and evaluation of the historical resources in the park to accomplish compliance with the National Historic Preservation Act as amended in 1980. It also provides basic reference material for planners, managers, and interpreters to facilitate the proper care and management of cultural properties. The report attempts to document the history after European contact in 1732; the prehistory of the area will be chronicled in a companion volume by Jeanne Shaaf.

This study depended upon the efforts of a number of people. Special thanks go to Ken Schoenberg and Regional Historian Bob Spude of the Alaska Regional Office. As project manager of the Bering Land Bridge Cultural Resources Survey, Ken was responsible for funding and Bob read drafts. His incisive comments strengthened the final product. Larry Beal, also of the Alaska Regional Office, willingly shared his knowledge of Bering Land Bridge National Preserve and spent considerable time locating information about Serpentine Hot Springs. Bering Land Bridge National Preserve Superintendent Larry Rose and his small staff, Ken Atkinson and Rosalie McCreary, provided information and logistical support which made field work a success. John Latschar, Chief, Western Team, Denver Service Center, provided encouragement and arranged for the funding necessary to complete the study. Joan Manson once again turned my scrawling into a readable document.

Special thanks, finally, goes to the Bering Land Bridge Archeological Survey Team--Jeanne Shaaf, Ann Worthington, Dale Vinson, and Wil Gilmore--whose assistance and generous welcome made my all-too-short stay in Bering Land Bridge National Preserve a most memorable experience. Jeanne has continued to provide information and assistance. She answered all-too numerous questions with never a sharp word--even when my phone call interrupted the thawing of frozen pipes.

CHAPTER ONE: EUROPEAN EXPLORATION OF THE SEWARD PENINSULA

A. Russian Knowledge of the Seward Peninsula Before Contact¹

On August 21, 1732, some nine years before Vitus Bering officially laid claim to Alaska, Mikhail Gvozdez and Ivan Fedorov brought their tiny ship Gabriel close enough to shore to see huts in the vicinity of what is now the village of Wales, on the westernmost point of Alaska's Seward Peninsula. Gvozdez and Fedorov carried orders "to sail around Kamchatka Cape to the mouth of the Anadir and opposite Anadirski Cape to what is known as the large country, examine and count the islands there, and gather tribute from the inhabitants." Rising winds prevented their going ashore, however, and forced them out to sea. They did reach a "fourth island" (King Island), where an inhabitant told of "Chukchi" (Eskimos) who "lived in the Large Country, where there were forests, streams, and animals."²

Although Gvozdez and Fedorov were the first Europeans known to have seen Alaska, it is not likely they would have been surprised by the existence of the "Large Country." The Native tribes of Siberia--Chukchi and Eskimo--and Eskimos of Northwest Alaska had traded and made war with one another since time immemorial. The

1. Contact is used here advisedly. The first Russians who traveled eastward sailed in ill-fitted ships, and had only the vaguest idea of where they were (Fedorov was sick and apparently didn't care). To describe their approach to a land that had been occupied for millennia as 'discovery' seems to smack of unnecessary ethnocentrism.

2. Dorothy Jean Ray, The Eskimos of Bering Strait, 1650-1898 (Seattle: University of Washington Press, 1975), pp. 21-25. Also see Hubert Howe Bancroft, History of Alaska, 1730-1885, vol. 33, The Works of Hubert Howe Bancroft (San Francisco: A.L. Bancroft & Co., 1886), p. 41; Frank A. Golder, Russian Expansion on the Pacific, 1641-1850. An Account of the Earliest and Later Expeditions Made by the Russians Along the Pacific Coast of North America; Including Some Related Expeditions to the Arctic Regions (1914; reprint ed., Gloucester, Mass.: Peter Smith, 1960), p. 161; and U.S., Department of the Interior, National Park Service, "A Historical Overview of the Seward Peninsula-Kotzebue Sound Area," by Melody Webb (Grauman), (National Park Service, 1977), pp. 2-4.

records are scanty, subject to differing interpretations, and were often slow in coming to light--the Admiralty College in St. Petersburg did not receive Gvozdez's report of the sighting of Alaska until 1738, and then only by accident. Nevertheless, there is little question that the Russian Cossacks had learned of the existence of a separate land to the east and something of the people who lived there during their long march of conquest across the Siberian frontier.³ As early as 1642-43, for example, Mikhail Stadukan, who commanded a detachment of Cossacks sent overland to the upper Indirgirka, reported seeing snowy mountains to the north.⁴ Six years later, in 1648, Semen Deshnez (or Simeon Ivanof Deshnef) claimed to have made an incredible 2,000-mile-long voyage along the Arctic coast from the trading center of Nizhne-Kolymsk to a point somewhere south of the Anadyr River. If true, Dezhnez would have taken a flotilla of seven small boats (four of which were lost) around the Chukchi Peninsula and into the strait between Asia and North America sixty years before Vitus Bering sailed into the waters that today bear his name.⁵

3. The story of the Russian conquest of the Siberian frontier is not often included in general histories of the Age of Exploration. It is a pity, for that story is certainly as dramatic as any during that exciting period. One solid history in this respect is George V. Lantzeff and Richard A. Pierce, Eastward to Empire: Exploration and Conquest on the Russian Open Frontier to 1750 (Montreal: McGill-Queens University Press, 1973).

4. Lantzeff and Pierce, Eastward to Empire, p. 50.

5. Bancroft, History of Alaska, pp. 24-25; Ray, Eskimos of Bering Strait, pp. 11-13; Svetlana G. Fedorva, The Russian Population in Alaska and California, Late 18th Century - 1867, trans. by Richard A. Pierce and Alton S. Donnally (Kingston, Ontario: Limestone Press, 1973), p. 41; N.N. Oglobin, "Semen Dezhnez (1638-1671)," offprint of article first published in December 1890; and Viacheslav A. Samoilov, Semen Dezhnev i ego vremia [Semen Dezhnev and his times] (Moscow, 1945). The last two references were translated for the author from the Russian by Denver Service Center Historian James Mote.

Deshnev dictated a report in 1655 purportedly describing his exploits as well as the people of Diomed Islands.⁶ Unfortunately he did not write as well as he claimed to have sailed. The report was so brief and the language vague enough to invite a number of different interpretations. Gerhard Muller, a historian who accompanied Vitus Bering, accepted Deshnev's claims, as did Albert von Chamisso, a naturalist who sailed with Otto Von Kotzebue in 1815-1818.⁷ Others have not been as sure. Gavrilla A. Sarychev, who sailed with Joseph Billings in the latter part of the eighteenth century, disagreed, suspecting that Deshnev's information came secondhand from Siberian Natives.⁸ In 1838 the Russian historian Petr A. Slovtsov suggested that such a voyage was at best improbable, and in 1914 Frank A. Golder argued forcibly, if not vehemently, that Deshnev did not sail into the strait, but traveled overland.⁹ Whatever the case, and this is certainly not the place to

6. Deshnev's report was apparently unknown to contemporaries, and only came to light in 1736 when Gerhard Muller discovered it in the Yakutak archives. One translation is available in Golder, Russian Expansion, pp. 286-87. The people of these two islands, Deshnev wrote, "have pieces of walrus tusks in their lips." The reference to labrets, which were not used by Siberian Chukchi should not be taken as proof that Deshnev sailed through Bering Strait, warns Dorothy Jean Ray. Alaskan Eskimos were sometimes taken prisoner by the Siberians. Deshnev would have had the opportunity to learn of them while on the Kolyma. Ray, Eskimos of Bering Strait, p. 13.

7. "Muller's account of Deshnev's Voyage," in Golder, Russian Expansion, pp. 270-71; Albert von Chamisso, "Remarks and Opinions of the Naturalist of the Expeditions," in Otto von Kotzebue, A Voyage of Discovery into the South Sea and Beerings Straits for the purpose of Exploring a Northeast Passage, undertaken in the years 1815-1818. . . ., 3 vols. (1821, reprint ed., New York: Da Capo Press, 1967), 3:226-27.

8. Gavrilla A. Sarychev, Account of a Voyage of Discovery to the North-east of Siberia the Frozen Ocean and the North-east Sea (1806; reprint ed., New York: Da Capo Press, 1969), p. 36.

9. Ray, Eskimos of Bering Strait, p. 12; Golder, Russian Expansion, 67-95. Using documents unearthed since Golder wrote, Raymond H. Fisher disputed Golder's conclusions. "Semen Dezhnev and Professor Golder," Pacific Historical Review 25 (August 1956): 281-92. The Russians have accepted his claims. The easternmost point of the Chukchi Peninsula (formerly East Cape) is called Cape Deshnev today.

attempt to resolve a controversy that has divided historians of Russian expansion into Siberia since the nineteenth century, there is sufficient evidence of Russian knowledge that a separate land to the east existed well before Vitus Bering sailed on his official voyages of exploration and discovery.¹⁰

Even if Deshnev's report were untrue, the Admiralty College in St. Petersburg had received, after 1738, Mikhail Gvozdez's report of the Gabriel's approach to the "Large Country." More than twenty years earlier, in 1711, moreover, Peter I. Popov wrote that in the land, which was only twenty-four hours away, lived a people with a different language and different way of life than that of the Chukchi tribes of Siberia. These people, who numbered over 6,000, Popov said, waged war against the Chukchi, a fact substantiated by the presence of prisoners of war. A 1700 map of Kamchatka in S.V. Remezov's atlas showed a land opposite the Siberian shore. Although it is not clear whether the land depicted was Saint Lawrence Island or Alaska, it did mention "Kyaynsty," which may have been the Eskimo village of Kingigan, or Wales, on the Seward Peninsula. Ten years later, Ivan Lvov completed a map that showed a land that was unquestionably Alaska, upon which he noted, "the land is big (or the Big Land?)."¹¹

Mikhail Gvozdev and Ivan Fedorov were not, apparently, the first Russian Cossacks to have attempted to travel to Alaska. According

10. Raymond H. Fisher claims that the purpose of Bering's first voyage was not to settle the question of the existence of a strait between Asia and America. Rather, he argues, the purpose was based on the knowledge that a separate land existed east across the strait. Bering's purpose was to reconnoiter the coast of that land. He did not, of course, approach the Alaskan coast. Bering's Voyage: Whither and Why (Seattle: University of Washington Press, 1977), p. 152.

11. Ray, Eskimos of Bering Strait, pp. 14-18. Lvov showed a large island-like mass of land apart from Siberia. Between were two sausage-shaped islands, one a Diomedede island, the other St. Lawrence Island, according to Ray. Popov also wrote that his description of the land and its people was supported by "the Tschuktschi, who has often been there."

to Svetlana Fedorva, at least three attempts preceded theirs. Prokoppii Nagolin tried in 1725, Alfansai Melinkov tried and failed in 1728, and unsuccessfully attempted to persuade "the toothed Chukchi" to take him across the ice in 1729-30.¹²

There are, even, legends of early Russian settlements on the Alaska mainland. In 1944 Theodore S. Farrelly claimed that a U.S. government survey party working in a previously unexplored area on the western Kenai Peninsula stumbled upon the remains of a settlement that was "nothing else than those of the long lost colony, founded by subjects of Ivan the Terrible."¹³ Farrelly's "lost colony," which Dorothy Jean Ray branded as "pure fiction," was simply another version of the long-popular lost colony of "Kheuveren," supposedly located somewhere in the heart of the Seward Peninsula. Mentioned in a report prepared by a Captain Spanburg (Vitus Bering's assistant on the first expedition), again by Ivan Koblev in 1779, and depicted on a map prepared by the Chukchi-turned-Cossack Nikolai Daurkin in 1765, Kheuveren reportedly was a Russian military garrison on the banks of the Kheuveren River, established by men purportedly lost from Ivan Deshnez's expedition in 1648.¹⁴

No matter how improbable they might be, lost colonies seem always to have been a siren's song. The Russians made several attempts

12. Fedorova, Russian Population in Alaska, p. 43.

13. Theodore S. Farrelly, "A Lost Colony of Novogorad in Alaska," Slavonic and East European Review 22 (American Series III) (1944): 33-34.

14. Fedorova, Russian Population, p. 40; Ray, Eskimos of Bering Strait, pp. 26-28, 34-38; Ray, "Kauwerak Lost Village of Alaska," Beaver (Autumn 1964): 4-13. Daurkin included several Alaska place names on his map--Point Hope, King Island, and Kheuveren. For the latter he drew a typical Eskimo dwelling. Later copies of his map transformed the dwelling into a Russian military garrison, complete with people in European-style clothing. Koblev traveled across the Bering Strait to the Seward Peninsula in a Chukchi skin boat in 1791. His 1779 map, however, was made without a personal survey of the American mainland. He seems to have been the first to tie Deshnez's men to the "lost colony."

to locate the colony over the years--Joseph Billings (1791), Petr Korsakovskii (1818), and Mikhail N. Vasilev and Gleb S. Shishmaref in 1821. All attempts failed, however, and Dorothy Jean Ray has presented convincing evidence that the 'Russian Military garrison' was actually the Eskimo village of Kauwerak, located east of Port Clarence on the Kuzitrin River.¹⁵ Proving once again the staying power of such legends, however, Svetlana Fedorova argued that Ray only proved that no Russian fort existed in the Kuzitrin River region, but did not disprove the existence of such a fort elsewhere--most probably along the middle course of the Koyuk River.¹⁶

B. Exploration in Northwest Alaska Waters: The Alaska Voyage of James Cook

The fact that the Russian Cossaks had early on acquired a secondhand knowledge of the land and peoples east across the sea from Siberia does not, of course, detract from the real accomplishments of that almost reluctant discoverer, Vitus Bering. Both in planning and execution, Bering's voyage of 1741 was one of almost epic proportions, one that overshadowed the accomplishment of Mikhail Gvozdez and Ivan Fedorev in 1732.¹⁷

Despite the tragic consequences of Bering's second voyage--crews of his two ships suffered terribly and Bering himself perished on a lonely, windswept island (named after him)--the voyage was a success. Survivors returned with the promise of an unbounded source of furs, something that had underlain the whole Russian drive across

15. Ray, "Kauwerak," p. 5; Ray, Eskimos of Bering Strait," pp. 26-28.

16. Fedorva, Russian Population, pp. 47-51, 62, 98-99.

17. Hubert Howe Bancroft called Bering's second voyage the "most brilliant effort toward scientific discovery which up to this time had been made by any government." History of Alaska, pp. 42-43. For Bering's voyages see Frank A. Golder, Bering's Voyages: An Account of the Efforts of a Russian to Determine the Relation of Asia and America, 2 vols., (New York: American Geographical Society, 1922). Bering did not travel to Northwest Alaska. He hugged the Siberian coast on the first voyage and sailed south of the Aleutian Islands on his second.

Siberia in the first place. As the Russians followed the lure of furs along Alaska's south rim, seeking to establish dominion there, Northwest Alaska remained unknown to the outside world. More than thirty years passed before Europeans again approached those shores, spurred by imperial and commercial rivalry as well as competition for discovery.

The first Europeans who came to chart the waters of northwest Alaska after Bering's voyage of 1741 were British, not Russian. They came not for furs, but searched instead for the Northwest Passage, a will-o-wisp that men had pursued since Europeans first encountered the New World. From the voyage of John Cabot in 1497 until 1776 some fifty voyages had been made in search of the fabled waterway through the new continent, one that would avoid the lengthy and dangerous trips around Cape Horn and Cape of Good Hope.¹⁸ The passage had remained elusive, true, but hope did not die. In 1776, while war with the rebellious colonies was just underway, the British Royal Navy commissioned Capt. James Cook to "find out a Northwest Passage by sea from the Pacific to the Atlantic Ocean."¹⁹

The forty-eight-year-old Cook, who has been called "the greatest explorer of his age, the greatest maritime explorer of his country in any age," was something of an anomaly in the British Royal Navy--an officer of humble birth who had served in the ranks. He had served during the siege of Quebec in 1763 and had already completed two voyages of exploration to the South Pacific when he sailed in 1776. His third voyage would end tragically with his death at the hands of Natives of the Hawaiian Islands.²⁰

18. James Cook, The Journals of Captain James Cook on His Voyages of Discovery, vol. 3, The Voyages of the Resolution and Discovery, 1776-1780, ed. by J.C. Beaglehole (Cambridge: Published for Hakluyt Society, 1976), part 1, p. 33. In addition, charters given colonists often contained orders to search for the passage.

19. Ibid., p. 220.

20. James Williamson, quoted in Bernard De Voto, The Course of Empire (Boston: Houghton Mifflin Co., 1952), pp. 283-84; Andrew Kippis, A (Continued)

Cook set sail aboard the Resolution on July 12, 1776.²¹ After making a number of stops at islands in the South Pacific, he explored Nootka Sound, Prince William Sound, and Cook Inlet. When none of these proved out, he sailed north through the Aleutian Islands, and past Bristol Bay, where a combination of weather and shoals caused him to miss both the Yukon and Kuskokwim rivers. On August 3 he reached St. Lawrence Island, which he named Anderson, after a ship's surgeon who had recently died. On August 5 he anchored off Sledge Island, named after a Russian-like sledge found there. Sailing north into Bering Strait, he saw and named Point Rodney, King Island, and Cape Prince of Wales, where "we thought we saw some people upon the coast and it is likely we were not mistaken, as some elevations like stages and others like huts were seen at the same place."²²

He next sailed past the Diomede Islands and north along the Siberian coast, where he encountered and described Natives of the area, and tested and found wanting Jacob Von Staehlin's 1774 map. He continued north as far as Icy Cape, where ice forced him to turn back.²³

20. (Cont.) Narrative of the Voyages Round the World Performed by Captain James Cook with an Account of His Life During the Previous and Intervening Periods (1788, reprint ed., Philadelphia: Porter and Coates, n.d.), p. 11. Admiral Adam Johann Von Krusenstern, himself no mean maritime explorer said of Cook, "If the passage had not been explored by him, he would have demonstrated the impossibility of exploring it [had he lived]; for which was impossible to Cook could hardly be possible for another." Kotzebue, Voyage of Discovery, 1:3.

21. A second ship, the Discovery, commanded by Captain Charles Clerke, followed a short time later. With Cook were as a remarkable group of officers as ever served on an English voyage. Among the dozen future captains and an admiral were men whose names stand out in the history of sailing ships and maritime exploration--William Bligh, George Vancouver, and Joseph Billings.

22. Beaglehole, ed., Journals of James Cook 3, part 1, entries for August 3, August 5, and August 9, 1778. Illustration 1 is a map of Cook's Alaska voyage.

23. Ibid., Entries for August 9, 10, 21, 1778. Staehlin's map had been published in 1774 and purported to show results of recent explorations in the north Pacific. Stuart A. Tompkins, "After Bering: Mapping the North Pacific," British Columbia Historical Quarterly 19 (1955), p. 24.

As he sailed south, he stopped to explore Norton Sound (named for Fletcher Norton, speaker of the House of Commons), and on September 11 became the first European known to have stepped ashore on the mainland of northwest Alaska. The next day, he made the first contact with Alaskan Natives:

Several people were seen on the Peninsula and one man came off in a small Canoe, I gave him a knife and a few Beads with which he seemed well pleased. I made signs for him to bring us something to eat, he immediately left us and paddled for the Shore, but meeting another man coming off, returned with him with two dried Salmon he had got from the other man, which he would give to no one but me whom we thought he asked for by name of Capitan, but in this we were probably Misstaken [sic], because I do not see how he could know that I was the Captain. Some others came off afterward and exchanged a few dried fish for such trifles as they could get, or we had to give them; Knives they were the most desirous of and they had no dislike to Tobacco.

They met other Natives over the next several days. Lieutenant King, who would succeed to command following Cook's death, left the first description of Eskimos of the Bering Strait:

This man was about 5 ft 2 In in height, well made & good limbs, his Colour was a darkish Copper, his hair black & short, & a little beard; he had two holes in his under lip, but no ornaments in them, although some we saw had bones in theirs.

The Woman was very short & squat, with a plump round face, & little sore Eyes; she wore large boots, & a large hood to her Jacket; both the teeth of the Man & woman were black, & seemingly by art filed down close to the Gums. I did not understand that this was a general custom²⁴ amongst them; she was punctured from the lower lip to the Chin

Cook left Norton Sound for the south on September 29, planning to return the following year.²⁵ He had failed, of course, to

24. "King's Journal," in Beaglehole, ed., Journals of Cook, III, part 2:1440.

25. Captain Clerke did return the next July, but ice prevented his going further north than Cook had the previous year.

Illustration 1.

James Cook in the Bering Sea. From the J.C. Beaglehole, ed., The Journals of Captain James Cook on His Voyages of Discovery, vol. 3, The Voyages of the Resolution and Discovery, 1776-1780 (Cambridge: Published for the Hakluyt Society, 1976).

find the Northwest Passage on his last great voyage. He did sail farther north than anyone would for the next fifty years, and he had charted considerable parts of the Alaskan coast for the first time. Yet, and it seems to be almost inexplicable for him, he missed some of the most significant features of the northwest coast--Port Clarence, Kotzebue Sound, and Yukon and Kuskokwim rivers--and he noted only a single Native place name--"Chaktoole."

C. Russian Response to the Voyage of Captain Cook

Cook's voyage in search of the Northwest Passage had one unintended effect--it contributed to a rekindled Russian interest in northwest Alaska. In 1785 Catherine II appointed Joseph Billings, who had sailed with Cook, to "A Secret Astronomical and Geophysical Expedition for navigation and ascertaining the situation of the Islands in the Seas between the two continents of Asia and America."

Billings left St. Petersburg for Okhotsk to build ships in 1785 and explored Prince William Sound in 1790. In 1791 he returned to Siberia, then sailed for Cape Rodney on the southwestern Seward Peninsula. On July 28 he anchored near what is thought to have been the mouth of the Sinuk River.²⁶ Billings left no report of the four days he anchored off Cape Rodney, but the observations recorded by Gavriil Sarychev, Martin Sauer, and Karl Merck provide us with the most complete information we have of the Bering Strait Eskimos at the arrival of Europeans.²⁷

26. Apparently, Billings originally planned to sail for the Seward Peninsula in 1792. There has been some disagreement as to why he changed his mind. His subordinates ascribed it to egotism. Whatever the reason for leaving so abruptly, he seems to have sailed for Cape Rodney to check out rumors of the lost Russian garrison (Kheuveren). Ray, Eskimos of Bering Strait, p. 48.

27. Ray, Eskimos of Bering Strait, pp. 47-49; Gavriil Sarychev, Voyage of Discovery, pp. 44-45. Sarychev served as expedition lieutenant, Sauer as secretary, and Merck as naturalist.

The Natives described by Sauer, Sarychev, and Merck came from a nearby hunting and fishing camp. Sauer described them as "well limbed, rather tall, had fine open countenances, and were handsome and healthy" and eagerly sought trade for the Europeans' iron, metal buttons, knives, and blue glass beads. The men wore caribou or sealskin trousers, leather boots with sealskin soles, and parkas decorated with muskrat or marten fur. Their hair was "almost as short as if shaven," and they wore labrets of ivory or blue grass. The women wore a hooded skin garment that reached almost to the floor, tattooed their chins, forearms, and wrists and wore copper or iron bracelets. Their tents were of conical construction and were covered with untanned seal skin. Their winter homes had stone-lined sunken fireplaces and they cooked in round clay pots. The Eskimos had armor of wood and bone and they used bows and arrows, spears, and harpoons.²⁸

D. The Voyage of Otto von Kotzebue, 1811-1817

Billings returned to Russia without having found the lost Russian garrison supposedly located in the interior of the Seward Peninsula. He did, however, report on abusive conduct of Russian fur traders toward the Natives in the south. Partially as an effort to curb these abuses, the Russian government guaranteed, in 1799, a twenty-year charter to the Russian-American Company that also extended the privilege of exploring and occupying lands not claimed by another nation.²⁹

The company was occupied in the south, however. Taking advantage of the peace which had recently ended the Napoleonic Wars, Count Nikolai P. Rumiantsev, Grand Chancellor of the Russian Empire, financed the first of a new series of voyages to locate that still-elusive all-water route between the Pacific and Atlantic oceans. Planned by

28. Ray, Eskimos of Bering Strait, pp. 47-52; Webb, "Seward Peninsula-Kotzebue Sound," p. 10.

29. Ray, Eskimos of Bering Strait, pp. 56-57; Webb, "Seward Peninsula-Kotzebue Sound," p. 10.

Admiral Adam Johann von Krusenstern, and commanded by a young German, Otto von Kotzebue, the expedition left Kronstadt on July 30, 1815, and arrived off Cape Prince of Wales the next year.³⁰

Although they observed people, dwellings, and whalebone frames for drying fish at Cape Prince of Wales, Kotzebue's ship, Rurick, did not stop, but continued north until it reached the small village known today as Shishmaref.³¹ The residents had fled the Rurick's approach, but Kotzebue and a shore party explored a number of the semi-subterranean houses they found. When exploring the inlet behind the village, named after Lt. Gleb Shishmarev, Kotzebue first encountered Bering Strait Eskimos. Interestingly, unlike Billings in 1791 (and Cook in 1778), Kotzebue's contacts with Natives at Shishmaref and elsewhere were characterized by suspicion, with overtones of hostility. The reasons are not clear. Kotzebue certainly was quite different than Billings and Cook. He was more suspicious, and seems to have been less willing to accept cultural differences. It may be, also, that the Natives Kotzebue encountered may have had some previous, unrecorded contacts with Russians that left them more suspicious.³²

In any case, after determining that Shishmaref Inlet was not the object of his search, Kotzebue continued north along the coast. On August 1, the Rurick rounded a cape (Cape Espenberg), and sailed into

30. Ray, Eskimos of Bering Strait, pp. 56-57; Kotzebue, Voyage of Discovery, 1:3-6. Among the ship's complement were Gleb Semenovich Shishmarev (lieutenant), Louis Adelbert von Chamisso (naturalist), and Louis Choris (artist). The Russian-American Company did send an expedition north in 1818 that reached the Kuskokwim and Nushagak Rivers.

31. Illustration 2 is a chart of "Beering's Straits" made by Kotzebue in 1816. Kotzebue, Voyage of Discovery, 1:198-199; Albert A. Ningeulook, "Shishmaref, Alaska," (Heritage Conservation and Recreation Service, undated draft), pp. 2-3. The village is located on an island named Sarychev, after Gavriil Sarychev, then Vice-Admiral of Russia.

32. Kotzebue, Voyage of Discovery, 1: 203, passim.

the body of water known today as Kotzebue Sound. The quest for an all-water route through North America perhaps strikes a strange chord to the modern ear. Yet, it was something that drove Europeans from the 16th to the 19th centuries. If we understand something of the importance of that dream to sailors like Kotzebue, we may also understand something of the emotion he felt when he viewed the broad expanse of water before him:

I cannot describe the strange sensation which I now experience, at the idea that I now perhaps stood at the entrance of the so long sought N.E. passage, and that fate had chosen me to be the discoverer. I felt heart oppressed; and at the same time, an impatience, which would not let me rest, and was still increased by the perfect calm.³³

He went ashore and, from a small hill, described the land that is now the far northwestern part of Bering Land Bridge National Preserve:

From the eminence on which I stood, I had a very extensive view into the country, which stretched out in a large plain, here and there interrupted by marshes, small lakes, and a river, which flowed, with numerous windings, and the mouth of which was not far from us. As far as the eye could reach, every thing was green; here and there were flowers in blossom, and no snow was seen but on the tops of the mountains at a great distance; yet one had to dig but half a foot deep to find nothing but frost and ice under this verdant carpet.³⁴

The moment of his discovery prevented Kotzebue's sleeping that night; he stayed on deck until morning. With "our expectations at highest pitch" he sailed east, anchoring near a small island he named Chamisso, after his naturalist. As he explored Eschscholtz Bay he grew

33. Ibid., 1:207

34. Ibid., 1: 207-208. Kotzebue intended to survey the coast in the vicinity, but the appearance of a number of Natives dissuaded him. He did comment that although these people had not been visited by Europeans, "they prize tobacco highly, and are as fond of chewing as of smoking it." He wrote that they received this, as well as other European goods from the Siberians.

Illustration 2.

"Chart of Beering's Strait on Mercators Projections August 1816." From Otto Von Kotzebue. A Voyage of Discovery into the South Sea and Beering's Straits for the Purpose of Exploring a North-East Passage, undertaken in the Years 1815-1818, . . . 3 vols. 1821; Reprint. New York: DaCapo Press, 1967.

pessimistic, and by August 4, he wrote, "I was obliged to give up my fairest hopes of finding a passage."³⁵

Although Kotzebue failed to find a northwest passage, his ship's physician found mammoth teeth and bones in a mountain of ice that would excite scientists everywhere. Sailing west between Cape Deceit and Goodhope Bay, he named two mountains in the interior of present-day Bering Land Bridge National Preserve that served as survey fixes--Asses Ears and Devils Mountain--and sailed into a bay that he named Good Hope, where he hoped to "make a very remarkable discovery" the next year. He sailed north from Cape Espenbeg, where he sighted Cape Krusenstern, defining the limits of Kotzebue Sound. With plans to return the next year, he then sailed south.³⁶

Kotzebue did return the next July, but ice prevented his sailing through Bering Strait. Ill health forced him to give up. On July 10, he signed a paper ordering the ship to return to Oonalaska. That moment, he said, "was the most painful in my life, for with the stroke of the pen, I gave up the ardent and long-cherished wish of my heart."³⁷

E. Gleb Shishmarev

Competition from foreign fur traders along Alaska's south rim had long been a concern to both the Russian-American Company and the Russian government. Kotzebue warned that recent successes of the British-owned North West and Hudson's Bay companies posed a threat as well, and he urged the Russians to take advantage of the opportunities in Northwest Alaska:

This sound must in time afford essential advantage to the trade in furs, as they are in abundance; we ourselves should have returned home with a rich cargo, if trade had been part of our

35. Ibid., 1:212, 213.

36. Ibid., 1: 217, 219-20, 222-23, 232-33, 236-37.

37. Ibid., 2: 175-77.

plan. In my opinion, our government might establish several settlements on the coast of Bering's Straits to the north, like the English Hudson's Bay Company. It possesses colonies in the interior of the country, at a very little distance from the new-discovered sound, and will, without doubt, take advantage of trading there.³⁸

Following Kotzebue's voyage the imperial government and the Russian American Company determined to increase their knowledge of the area and take a firmer control of Northwest Alaska to stave off encroachments from foreign powers. In 1818, for example, the company sent Petr Konsakovskii to establish a redoubt on the Nushagak River, and in 1821 sponsored a voyage by Vasillii S. Kromechenko in the Golovin and Adolph Etolin in the Baranov to explore in the Bering Sea and to determine Native trade routes across the strait.³⁹

In the same years, the Imperial Navy underwrote what was perhaps Russia's most ambitious exploring expedition--a multi-ship search for the Northwest Passage. Two ships went to the Arctic, while Mikhail N. Vasiliev in the Discovery and Gleb S. Shishmarev in the Good Intent explored in the north during 1820 and 1821.⁴⁰ The explorers failed, once again, to locate the mysterious passage, but their accomplishments were significant, if often overlooked. Their ships sailed north beyond Icy Cape, and they became the first Europeans to locate Cape Romanzof. They also visited Golovin Bay and Nunivak Island, learned definitely of the existence of the Yukon River, and discovered Point Hope. When

38. Ray, Eskimos of Bering Strait, pp. 64-65; Webb, "Seward Peninsula-Kotzebue Sound," pp. 14-15; Kotzebue, Voyage of Discovery, I: 228-39.

39. Ray, Eskimos of Bering Strait, p. 65. Showing just how little was yet known of northwest Alaska 100 years after Mikhail Gvozdez and Ivan Feborov first approached the coast of the Seward Peninsula, the company also ordered Korsakovskii to search for Russians on the "Kheuveren" River. The two areas are 500 miles apart.

40. Ray, Eskimos of Bering Strait, pp. 65-66. A smaller ship also sailed in the waters of the strait in those years, bringing the total of Russian ships in the area to five.

sailing in Kotzebue Sound, moreover, Shishmarev wrote of the use of firearms by Natives in northern Alaska, nearly thirty years before the generally accepted date.⁴¹

On July 10, 1820, having dropped anchor half-way into the sound, Shishmarev encountered Natives who traded marten and otter skins for cast iron pots, knives, and needles. The Natives took almost no interest in tobacco, he said, but wanted, primarily, "big knives, guns, powder, and lead."⁴² On July 14, while anchored near Chamisso Island, Shishmarev decided to explore the ice mountain described by Kotzebue in 1816. Midshipman Karl Hillsen reported that a shore party saw about 150 Natives "armed from head to foot with spears, bows, and long rifles." The next day, while returning from what certainly must have been a terrifying night ashore, Hillsen reported that the Natives shot "a whole cloud of arrows at us" and "started to shoot their guns." The Russians repulsed the attack by hitting a Native baidar (boat) with a cannon.⁴³

Historians have generally argued that American whalers introduced firearms to Arctic Alaska in the mid-nineteenth century. Yet the evidence presented by Dorothy Jean Ray--the journal of Midshipman Hillsen--is convincing. So, too, is her argument that the firearms were introduced by an American Captain Gray (not the Robert Gray of Columbia River fame), something long argued, and often denied by American historians. Interestingly, acquisition and use of firearms prior

41. Dorothy Jean Ray, "Early Maritime Trade with the Eskimos of Bering Strait and the Introduction of Firearms," Arctic Anthropology 12 (1975), p. 1.

42. Midshipman Karl K. Hillsen, quoted in Ibid., p. 6. The Russians refused to trade for the latter, which were "forbidden goods," said Hillsen, whereupon the Natives returned to shore. Lack of interest in tobacco is interesting when one recalls the Kotzebue's experience.

43. Ray, "Introduction of Firearms," pp. 3-5; Webb "Seward Peninsula-Kotzebue Sound," pp. 16-17.

to 1820 seems to have had little lasting effect on the lives of Bering Sea Eskimos. Only seven years later, Beechey recorded that Eskimos used only bows and arrows, and did not seem familiar with firearms.⁴⁴

F. Search for the Northwest Passage: Frederick William Beechey in Northwest Alaska

The Russian government and Russian-American Company responded to a challenge to its supremacy in Alaska. Part of that response had been a new search for the Northwest Passage. Their effort, ironically, had the effect of stimulating a renewed British effort to find the elusive waterway. The primary focus of the latest British search would be in the east. Nevertheless, during the next several years, the British would make significant contributions to the knowledge of the Seward Peninsula and of all of Northwest Alaska.

In 1817 Sir John Barrow, the powerful Secretary of the Admiralty, made a new search for the Northwest Passage a matter of British national honor when he wrote, "It would be mortifying if a naval power but of yesterday should complete a discovery in the nineteenth century, which was so happily commenced by Englishman in the sixteenth."⁴⁵ In 1823, following a series of voyages which had failed in their objectives, Capt. John Franklin proposed combining an eastward and westward search in one expedition. According to the plan accepted by the Admiralty, Franklin would descend the MacKenzie River and proceed west and south along the Arctic coast to Kotzebue Sound. There he would meet Capt. Frederick William Beechey, commanding HMS Blossom. Beechey would carry supplies necessary for the return trip to England.⁴⁶

44. Ray, "Introduction of Firearms," pp. 3-5.

45. Quoted in Gary Stein, "History of the Northwest Arctic Coast," (typescript draft in preparation for publication).

46. Additionally, it was hoped that a third party under William Edward Parry would rendezvous with Beechey. Parry's group left in 1824, hoping to travel to the Pacific by way of Regent's Inlet. Frederick W. (Continued)

Both Franklin and Beechey were experienced Arctic travelers in 1825. The thirty-eight-year-old Franklin had served as second in command of David Buchan's unsuccessful expedition in 1818, and had survived incredible hardships during his own North American expedition in 1821-22. Nearly ten years younger at twenty-nine, Beechey, too, had taken part in the unsuccessful North Pole expedition of 1818, and had sailed with Parry on the voyage to Melville Island in 1819-20. A careful observer, Beechey was a scientist, artist, and ethnographer. He was, as his description of the Blossum's entrance into Bering Strait shows, a sailor who had the soul of a poet:

We approached the strait which separates the two great continents of Asia and America, on one of those beautiful still nights, well known to all who have visited the arctic regions, when the sky is without a cloud, and when the midnight sun, scarcely his own diameter below the horizon, tinges with a bright hue all the northern circle. Our ship, propelled by an increasing breeze, glided rapidly along a smooth sea, startling from her path flocks of lummies and dovekies, and other aquatic birds, whose flight could, from the stillness of the scene, be traced by the ear to a considerable distance. . . .⁴⁷

His disposition better suited him to the rigors of arctic travel than most of his contemporaries. The mission failed--Beechey and Franklin did not meet in Northwest Alaska. In terms of geographical information compiled, and ethnographical information recorded, however, Beechey's voyage outshined any other made during the period of Russian occupation of Alaska.

46. (Cont.) Beechey, Narrative of a Voyage to the Pacific and Beering's Strait to Cooperate with the Polar Expeditions: Performed in His Majesty's Ship Blossum, under the command of Captain F.W. Beechey, . . . in the years 1825, 26, 27, 28, 2 vols. (1831, reprint; New York: Da Capo Press, 1968), 1:2-3; Ray, Eskimos of Bering Strait, pp. 77-78; Webb, "Seward Peninsula-Kotzebue Sound," pp. 16-17; Leslie Neatby, The Search for Franklin (New York: Wollen & Co., 1970), pp. 58-64. Illustration 3 is a chart of the Northwest Coast of Alaska made by Beechey.

47. Stein, "Northwest Arctic Coast," p. 14; Ray, Eskimos of Bering Strait, p. 78; Webb, "Seward Peninsula-Kotzebue Sound," p. 16; Quoted in William E. Brown, This Last Treasure: Alaska National Parklands (Anchorage: Alaska National History Association, 1982), pp. 122-23.

Beechey left in May 1825, sailing around Cape Horn to Pitcairn Island, Hawaii, and St. Lawrence Island before reaching the Alaska Coast near Cape Prince of Wales in July.⁴⁸ Sailing north he stopped to trade with the inhabitants of Shishmaref--he was the first to call them "Esquimaux"--who came out in their skin boats.⁴⁹ Interestingly, when he described the clothing Beechey explained a probable basis for an old (1718) Chukchi description of Alaskans--that they had tails like dogs:

Besides the shirt, they have breeches and boots, the former made of deer's hide, the latter of seal's skin, both of which have drawing strings at the upper part, made of sea-horse hide. To the end of that which goes round the waist they attach a tuft of hair, the wing of a bird,⁵⁰ or sometimes a fox's tail, which, dangling behind as they walk.

On July 22, 1826, Beechey entered Kotzebue Sound, sailing into an inlet on the northeast that he named Hotham, after one of the Lords of Admiralty. Again he met a group of people whom he described as "Esquimaux"--he compared them with the "eastern Esquimaux" of Canada--who came to trade "skins, fish, fishing implements, and nic-nacs."⁵¹

48. Beechey did not follow Cook's route through the Aleutian Islands, but took a more direct route to Bering Strait.

49. Beechey compared the villagers of Shishmaref with the Natives of King Island. The former, he wrote, were darker, their features were more angular and harsh, and they were "deficient in the tattooing of the face." He described in detail the lip ornaments worn by the Americans (labrets), something he considered to be a more distinguishing characteristic than tattooing. Voyage to the Pacific, 1:338-341. Beechey indicated that the villagers especially wanted "tawac" (tobacco) and iron knives. For these, they would even part with their bows and arrows.

50. Beechey, Voyage to the Pacific, 1:340. The 1718 description was published by Gerhard Muller in 1761. Ray, Eskimos of Bering Strait, p. 15.

51. The "nic-nacs", many of which were collected and are today in Pitt Rivers Museum, Oxford University, included small wooden bowls and cases and small ivory figures, some "not more than three inches in length." Ibid., pp. 344-45.

Illustration 3.

Chart of Part of the North West Coast of America, from Point Rodney to Point Barren by Captain F.W. Beechey RN. FRS . . . 1826 & 1827. from Frederick W. Beechey, Narrative of a Voyage to the Pacific and Beering's Strait to Cooperate with the Polar Expeditions: Performed in His Majesty's Ship Blossum, under the command of Captain F.W. Beechey, . . . in the Years 1825, 26, 27, 28, 2 vols. (1831, reprint; New York: Da Capo Press, 1968).

Leaving Master Thomas Elson to explore Hotham Inlet in the ship's barge, Beechey sailed on to Chamisso Island where he hoped to meet Franklin, arriving on July 25, ten days behind schedule. While waiting in the area Beechey visited the mountain of ice described earlier by Kotzebue, naming it Elephant Point. On July 30, he weighed anchor, sailing out of Kotzebue Sound to explore north along the coast and leave pre-arranged signals for John Franklin.⁵² When he returned to Kotzebue Sound, Beechey continued to reconnoiter, finding evidence of the Russian visits of 1816 and 1820, and of, he believed, "the communication that must exist between Alaskan Eskimos and tribes on the coast of Asia."⁵³

While near the Choris Peninsula, Beechey encountered a group of people he found were from King-a-ghe (Wales) and left the first ethnographic information on the people from the first village sighted by Mikhail Gvozdoz and Ivan Fedorov just over 100 years before. Beechey completed a survey of the southern coast of Kotzebue Sound, and turned to survey the northern shore. On October 14, following a series of "sharp frosts" at night, Beechey sailed out of Kotzebue Sound, having stopped long enough to bury a cask of flour for Franklin and to examine an Eskimo burying ground at Cape Espenberg.⁵⁴

Beechey returned to northwest Alaska the next summer. While awaiting Franklin's arrival, he continued to chart the shores and waters in Kotzebue Sound, north along the coast to Icy Point and Point Hope, and south in Port Clarence-Grantley Harbor, which he had learned about

52. Beechey sailed as far north as Cape Beaufort and a crew in the barge reached Point Barrow, named for the Secretary of the Admiralty who had supported so strongly the northern voyages. As it turned out, Sir John Franklin had traveled along the far north coast from the east, turning back only ten days east of Pt. Barrow.

53. Evidence of the Russian exploration was a board that carried the inscriptions, "Rvrick, July 28, 1816" and "Blaganome eringy, 1820." Evidence of communication with Asia were a small Russian coin of Empress Catherine and "the head of a halberd which had been converted into a knife." Natives owned the latter. Voyage to the Pacific, 1:408-409, 393.

54. Ibid., 1:408-409, 459, 462, 463.

from the Wales villagers the previous year. The wait for Franklin proved futile, however, and on October 6 Beechey sailed out of northern waters for the last time.⁵⁵

Beechey's contribution to the knowledge of Northwest Alaska was enormous. He and his crew charted the coast from Cape Prince of Wales to Point Barrow, filling in great gaps left by earlier explorers. His ethnological descriptions of the Natives of the area proved equally important. Beechey was the first to recognize that the people of Northwest Alaska were Eskimos. Of greater immediate impact, however, was his description of the large number of whales in the area. Only four years after his report was published the first of hundreds of whaling ships entered Alaskan waters.⁵⁶

G. The Search for Franklin, 1848-1854

The closest Sir John Franklin came to the western coast of Alaska was ten day's travel east of Point Barrow. Yet his name is associated with two of the most important exploring expeditions to Northwest Alaska during the Russian occupation of Alaska. Beechey's enormously important voyages had been designed to render material aid to Franklin in his attempted march from the Mackenzie River. From 1848-1854 the British government sponsored a massive search for Franklin, who had disappeared on yet another voyage seeking the Northwest Passage. The men who searched for Franklin along the coast of Northwest Alaska added to the geographical and ethnological accomplishments of Beechey and became the first Europeans to travel overland in the Seward Peninsula.⁵⁷

55. Ibid., 2:290. The Blossum arrived in England in October 1828, after a voyage of three years. Franklin had arrived in Sept. 1827.

56. Ray, Eskimos of Bering Strait, pp. 85-86, Webb, "Seward Peninsula-Kotzebue Sound," p. 22; Stein, "Northwest Arctic Coast," p. 93.

57. For example: "Observations of the Western Esquimaux and the country they inhabit; from notes taken during two years at Point Barrow, by Mr. John Simpson, Surgeon, R.N., Her Majesty's Discovery Ship 'Plover,'" Great Britain Sessional Papers, 1854-1855, vol. 35, no. 1898.

In May 1845 Franklin left England with the Erebus and Terror to look for an eastern entrance to the Northwest Passage. By late 1847, when no word had been received from Franklin and his 183-man crew, the British government ordered a massive three-pronged search for the missing ships. One followed his route in the Atlantic, another went overland to the Mackenzie River, and the third concentrated on the waters of Northwest Alaska in the hope that Franklin had succeeded in finding a passage from the Atlantic to the Pacific Ocean. In all, eight ships and one private yacht sailed in the waters off Northwest Alaska from 1848-1854--Herald, Plover, Enterprise, Investigator, Amphrite, Daedalus, Rattlesnake, Tricomalee, and Nancy Dawson.⁵⁸

Much of the effort to find traces of Franklin in Northwest Alaska concentrated on the north, past Icy Cape, and east along the Arctic coast to Point Barrow and on to the Mackenzie River.⁵⁹ Nevertheless, the Franklin searchers did provide more information about the Seward Peninsula. While wintering at Chamisso Island in Kotzebue Sound in 1849-50, for example, the crew of the Plover received word from local Eskimos that there were white men in the interior.⁶⁰ Hoping that these were from Franklin's expedition, Lt. Bedford Pim volunteered to travel overland to Saint Michael to investigate. Accompanied by a

58. Ray, Eskimos of Bering Strait, pp. 140-41; Stein "Northwest Arctic Coast, p. 23. The first four were search ships and the second four were supply ships. Robert Sheddon personally financed the Royal Thames Yacht Club schooner, Nancy Dawson.

59. Stein, "Northwest Arctic Coast," pp. 55-117.

60. The Plover had been unable to reach Alaska as soon as it was supposed to, and spent the winter of 1848-49 at Emma Harbor, Siberia. The ship, under different commanders and crews, would spend six consecutive winters in the north. Wintering over in the north placed severe strains upon men and ships. C.S. Mackinnon has provided an interesting description of the effects on the British in the Canadian arctic, and describes ways the British Navy used to keep crews mentally and physically fit during the long winters. "The wintering-over of Royal Navy ships in the Canadian Arctic, 1819-1876," Beaver (Winter 1984/85), pp. 12-21.

mixed-blood Eskimo named Paolo Oclagook, Pim left on March 17. The round trip took forty-three days, and proved considerably more difficult than anticipated. They had troubles with sleds and guides and nearly ran out of food. Pim did not mention the name of a single village, but it is clear that he traveled up the Kiwalik River, and over to the Koyuk, crossed the ice to Cape Denbigh, Shaktoolik, Unalakleet to St. Michael. It was the first trip across the Seward Peninsula by a white man.⁶¹

While wintering at Port Clarence the next year, members of the crew of the Plover traveled to St. Michael. Although their itinerary is not given, it is possible they traveled along the Kuzitrin, Niukluk, and Fish Rivers to Golovnin Bay and across the ice to St. Michael.⁶² In 1853, Capt. Henry Trollope tried to cross the ice to Siberia from Wales to find if the Natives there traveled far to the north and if they had information about Franklin. He found that the ice in the strait was so broken as to make it impassable, but he did leave the first, detailed description of the village of Wales.⁶³

That same winter Trollope ordered Mate William R. Hobson to cross from Port Clarence to Kotzebue Sound to gather information and

61. The narrative of Pim's trip, and of the wintering-over of the Plover is in Great Britain Sessional Papers, 1851, vol. 33, no. 97, no. 4(A) and 4(B); 1856, vol. 41, no. 2128, inclosure 3 in no. 58. See also Ray, Eskimos of Bering Strait, p. 143; Webb, "Seward Peninsula-Kotzebue Sound," p. 24.

62. Ray, Eskimos of Bering Strait, p. 146; Webb, "Seward Peninsula-Kotzebue Sound," p. 25. While at Port Clarence the crew of the Plover constructed the first frame building north of Unalakleet. In 1853 the crew of Rattlesnake found this house to be "wet and inconvenient for communicating from Port Clarence," and replaced it with one constructed of drift wood on the dry, gravelly soil on the northern spit from Grantley Harbor. Captain Horton to Secretary of the Admiralty Sept. 30, 1853. Great Britain Sessional Papers, vol. 35, no. 1898, 1854-55.

63. "Journal Kept by Commander Henry Trollope During a Trip from H.M. Sloop Rattlesnake in Port Clarence to King-A-Ghee, a village four or five miles round Cape Prince of Wales, January 9, 1854-January 27, 1854," Great Britain Sessional Papers, Vol. 35, No. 1898, 1854-55, pp. 868 and passim.

check on the condition of provisions left for Franklin on Chamisso Island in 1850.⁶⁴ Hobson's trip, the first into the interior of what is now Bering Land Bridge National Preserve by an European, covered a total of 560 miles and lasted forty-seven days, from February 9 to March 27, 1854.⁶⁵

Hobson and his companions left the Rattlesnake on February 9, travelling with two sleds, nine dogs, and provisions for thirty-eight days.⁶⁶ Picking up an Eskimo guide, Tudig, at the village of Too-cut-atawne, the party traveled through the Tuksuk Channel, across the ice of Imuruk Basin, and up the Kuzitrin River past the village of Kauwerak and on to the village of Show-e-yok (Soiyuk).⁶⁷

Hobson carried orders to follow the Spafarief (Kiwalik) River to the southern coast of Kotzebue Sound and on to Chamisso Island. He mistakenly crossed the mountains to the Goodhope River, which he called

64. Ibid., p. 865. Henry Toms and William Lee accompanied Hobson.

65. "Journal of the Proceedings of Mr. W.R. Hobson (mate) and Party under His charge, whilst Traveling from Port Clarence to Chamisso Island and Returning to the ship, Between February 9 to March 27, 1854 (inclusive)," Great Britain Sessional Papers, vol. 35, 12 December 1854-14 August 1855, pp. 884-888. A copy of Hobson's account is included as Appendix I.

66. Ibid, entry for February 9. Hobson named and described the tiny villages he visited or passed by on his journey. A map of the trip has apparently been lost, however. The route that follows was reconstructed by Dorothy Jean Ray from field research.

67. Hobson, "Journal," entry for February 9 and passim. Their guide deserted them at Soiyuk. After some difficulty Hobson convinced an old man, Ow-wock, to take his place. Hobson gave him a "double-barrelled gun." Ibid, entry for February 19. According to Katherine Koutsky, Soiyuk (Sauyaq) was located on a drum-shaped lake near the mouth of Bonanza Creek on the upper Kuzitrin River. Katherine Koutsky, Early Days on Norton Sound and Bering Strait, An Overview of Historic Sites in the BSNC Region, Vol. III, The Port Clarence and Kauwerak Areas (Fairbanks: University of Alaska [Cooperative Park Studies Unit], 1981), p. 32.

"Pittock," its Native name.⁶⁸ On February 26, he reached the village of Kip-lik-tok on the Goodhope River, which was probably Pittuk (Pittakpuk):

a village of four huts; the only people there are two women and some children, who are particularly dirty and ill clothed; the men are all out hunting. There seems to be a good supply of venison in the place. There are very few dogs about. I observed that before we entered the village the women lit a small fire in the track we were to pass over; they hailed the guide to stop until it was done; I was unable to discover the meaning of this, but conclude it is some superstition regarding the arrival of strangers. We purchased a hare, about 15 lbs. of venison, and some dogs' food, for a little tobacco and some needles. They would by no means permit us to chop the dogs' food with the edge of an axe, but had no objection to its being broken up with the back;⁶⁹ I have noticed the same thing at other villages.

Leaving Kip-lik-tok, the party descended the Goodhope to the coast, traveled eastward to the vicinity of Deering, where they crossed the ice to Chamisso Island. They reached the island on March 5 and left a message for Franklin that included the route taken and distances between stops:

	<u>Miles</u>
Tup-cut-a-tam	10
Snow near Tocsuc	11
Cuv-vi-e-rook	18
Shung-e-ow-ru	09
Noo-kui row-i lik	16
Hut near Ko-gru-pack	15
Snow near Obell	12
Obell	06

68. The most direct route from Soiyuk to the Goodhope is by what Hobson called the "Cug-i-oe-uk" (Noxapaga). One possible route is depicted on the Historic Base map. It is speculative, however.

69. Hobson, "Journal," entry for February 26; Ray, Eskimos of Bering Strait, p. 153. Another village in the vicinity which Hobson did not describe was, according to Ray, Mitliktoghuik. Ray, "Nineteenth Century Settlement and Subsistence Patterns in Bering Strait," Arctic Anthropology, Vol. 2 (1964), p. 83.

Poc-loc-low-rel-ec	14
Show-e-Yok	07
Delayed for a guide	
Snow	14
Deserted Hut	13
Delayed by weather	
Snow	18
Snow	14 or 15
Snow	14 or 15
Snow	12 or 13
Snow	13 or 14
Snow	15 or 16
Snow	13 or 14
Kip-pel-lek	10
On sea ice, near Chamisso	20 ⁷⁰
Chamisso Island	05

Hobson left Chamisso Island the next day, and, after a twenty-one day trip, reached Port Clarence on March 27.

By the time Hobson prepared to make his trip, Captain Trollope had learned enough about the interior of the Seward Peninsula from local Eskimos that he could name virtually all villages that Hobson would pass through. Nevertheless, a winter trip across the Seward Peninsula is, even today, a formidable undertaking. Temperatures dropped as low as forty degrees below zero--on February 13, Hobson noted that brandy he had taken along had frozen, and the next day the cold caused his watch to stop. Strong winds and drifting snow made traveling difficult, causing his dogs to wear out. Not surprising, the villagers he encountered proved reluctant to trade theirs. They took along food for only twenty-eight days. They were generally able to trade for or kill what they needed, although on March 12, Hobson wrote that they ate for the first time in sixty hours. Lack of firewood in some locations resulted in considerable discomfort--on February 15, for example, he wrote, "we were obliged to content ourselves with some frozen pork and tea boiled by the spirit lamp" for dinner.⁷¹

70. Hobson, "Journal," entry for March 6, 1854.

71. Ibid., entries for February 12, 13, March 12, and passim.

Despite the difficulties, their mission was a success, and the men suffered nothing more serious than a mild case of frostbite for their efforts.⁷² Hobson's journal provides the only first-hand description of the interior of the northern part of the Seward Peninsula or of the Native villages there in the first half of the nineteenth century.⁷³

Reports received from Natives in the region continued to fuel hopes that some trace of Sir John Franklin would be found--as late as 1852 Cmdr. T.E.L. Moore wrote that Natives of the Buckland River reported that "northern people" had seen ships resembling Franklin's Erebus and Terror east of Point Barrow in 1848.⁷⁴

By 1854, however, Franklin had not been seen for ten years. The British government lost interest in continuing search operations that had already cost \$4,000,000. When the Plover and Enterprise sailed out of northern waters on September 16 of that year, the greatest search in the history of sailing ships was at an end.⁷⁵

The search for Franklin in northwest Alaska had been doomed to failure from the beginning--Franklin had perished on King William Island in the Canadian Arctic.⁷⁶ Nevertheless, the men who searched for

72. Ibid., entry for February 21.

73. There are, according to Dorothy Jean Ray, few Eskimo stories regarding early contacts with Europeans. One tale does describe an early contact on the Kuzitrin River which may have been Hobson, or a combination of all trips taken by English sailors into the interior between 1849 and 1857. Eskimos of Bering Strait, p. 183.

74. "Abstract of information obtained by Commander Moore relating to white men and ships having been seen by Natives in the Polar Sea," Great Britain Sessional Papers, vol. 50, 1852, p. 67.

75. Vilhjalmur Steffansson, Unsolved Mysteries of the Arctic (New York: MacMillan Co., 1939), p. 59; Stein, "Northwest Arctic Coast," p. 114. In 1856, Franklin's widow, raised enough money to outfit one last effort to clear up the mystery of Franklin's disappearance.

76. Steffansson, Unsolved Mysteries of the Arctic, pp. 36-129; Neatby, Search for Franklin, p. 15; Stein, "Northwest Arctic Coast", (Continued)

traces of his expedition in Northwest had made important contributions to the knowledge of that area. They had carefully charted the entire coast, had made the first penetrations into the interior of the Seward Peninsula, and had left valuable descriptions of the land and of the people who lived there. They had proven, too, that it was possible to winter-over in those waters, a fact not lost upon the whalers who were coming in rapidly increasing numbers.

The men who searched for Sir John Franklin had made trips into the interior of the Seward Peninsula. Yet European exploration of the Seward Peninsula and all of Northwest Alaska had been confined primarily to coastal waters. The men of the Franklin search had wintered-over, but the European explorers did not stay--the nearest permanent outpost was at St. Michael, south across Norton Sound. In the journals and records of the Franklin searchers are hints of the beginnings of changes forced upon the lives of the Natives. In large, however, the goods the explorers brought with them--iron knives and pots, tobacco, even the guns introduced briefly before 1820--do not seem to have wrought significant change on the people who lived there for thousands of years. The journals and reports of Frederick William Beechey and of the Franklin search had made the land and peoples of the Seward Peninsula known to the outside world. Even as the ships searching for Franklin plied northwest Alaska waters, it was clear that changes were on the way. Other men were coming to exploit the opportunities they had been told existed in Northwest Alaska. These men would bring about changes to the land and people that are still being felt on the Seward Peninsula.

76. (Cont.) pp. 113-114. Skeletons and the records of the lost expedition were found in 1859. In 1984 physical anthropologists found the near-perfectly preserved bodies of three members of the expedition on Beechey Island, as well as bones on King William Island. "Trapped in Time," Time, October 8, 1984, p. 69; "Answers From an Icy Grave," Newsweek, October 8, 1984, p. 89.

H. Recommendations

The European explorers who came to the Seward Peninsula did not leave their mark on the land. There is, as a result, no tangible evidence of their presence in Bering Land Bridge National Preserve today. Nonetheless, their story is an important part of the long history of human occupation of the Seward Peninsula. It is recommended that the history of European exploration and contact with Bering Strait Natives during the period of Russian occupation of Alaska be interpreted in any displays or park publications.

I. Sites Relating to Exploration

A number of archeological remains of villages along the coast visited or seen by European explorers remain:

a. Ikpek (Ikpik) (Historical Base Map No. 1). Located on the westernmost corner of Arctic Lagoon, the former village was reported to have had four or five houses.

b. Ennaghruk (Historical Base Map No. 2). Remains of a small Eskimo village located about nineteen miles NE of Shishmaref on a barrier island.

c. Kividluk (Historical Base Map No. 3). A former village believed to have consisted of seven houses in 1892.

d. Ungmalaukuk (Historical Base Map No. 4). Remains of a late prehistoric/historic Eskimo Camp on the Nugnugaluktuk River.

e. Likliknuktuk (Historical Base Map No. 5). A former seasonal camp and possibly winter village located at the mouth of Pish River.

f. Tugmagluk (Historical Base Map No. 6). Remains of a late prehistoric/historic site located approximately two miles northeast of the mouth of the Pish River.

g. Pittak (Pittakmuit) (Historical Base Map No. 7). Remains of a former village located at the mouth of the Goodhope River.

h. Uyauks (Historical Base Map No. 8). Remains of a small village at the mouth of Clifford Creek.

i. Siknaugrurak (Historical Base Map No. 9). Remains of a former village located at the mouth of Rex Creek.

j. Pittakpuk (Historical Base Map No. 10). Located on a narrow strip of land on the floodplain of the Goodhope River. This site is the remains of a village visited and described by W.R. Hobson in 1854.

k. Route of W.R. Hobson, 1854 (Historical Base Map No. 11). The route shown is speculative, and indicates only one possible route that could have been taken through present-day Bering Land Bridge National Preserve.

CHAPTER TWO: COMING OF THE AMERICANS

Americans were not strangers to northwest Russian America by the mid-nineteenth century. Gleb Shishmarev met an American trader, William J. Pigot, while exploring in Kotzebue Sound in 1820 and reported that an American sea captain had sold guns to the Natives there the previous year. Certainly to the consternation of Russian officials, an ever-increasing number of Americans sailed in northwest Alaskan waters by mid-century. Those first Americans who came to northwest Alaska did not come to explore or to search for anything as ephemeral as a Northwest Passage. Rather, they came to exploit the resources of the sea. They and their countrymen who followed them would, for better or worse, leave their mark on the lives of the people who lived on the Seward Peninsula.

A. Yankee Whalemen in the Bering Sea

The eighteenth century witnessed the rise of the American whaling industry and the twentieth its extinction. During the intervening period, the American whaling industry greatly out-distanced that of any other country. Whaling was of economic importance to the entire nation and was vital to the economic life of New England. In Massachusetts, where the ports of New Bedford and Nantucket were pre-eminent in the American whaling industry, only the manufacture of cottons and shoes were of greater value before the Civil War.¹ The products Yankee whaleman brought with them filled a variety of needs at home and abroad--sperm oil, used wherever bright, clean lights were needed; spermacetti for candles; whale oil for use as a cheaper illuminant and as a universal lubricant; whalebone for stays, corsets, whips, and umbrellas;

1. Elmo P. Hohman, The American Whaleman: A Study of Life and Labor in the Whaling Industry (1928; reprint ed., Clifton, New Jersey: August M. Kelley, 1972), pp. 3-4. The sources available on whaling, both primary and secondary, are voluminous. Time and funds did not allow a definitive search of those records for this overview.

and ambergris (a gray, waxy substance in the intestines) for perfumes or as an aphrodisiac.²

The European explorers who traveled to the northwestern coast of Russian America noticed and wrote of the presence of large numbers of whales in northern waters as early as the middle of the eighteenth century.³ Yet, although American whalers had plied their trade in the Pacific Ocean since 1791, it was not until after the 1831 publication of William Frederick Beechey's account of his voyage to Northwest Alaska that they entered the waters there.⁴ In 1835 Capt. Barzillai T. Folger, commanding the Nantucket ship Ganges, sailed into the waters off Kodiak Island where he took a right whale, the first in northern Pacific waters.⁵

Other American whalers followed, sailing along the Northwest Alaska coast in 1836 and 1837. Yet, it was nearly a decade after Folger sailed in the Kodiak Grounds before Americans began to hunt north of the Aleutian Islands. In 1843 two New Bedford whalers, the Hercules and Janus, took bowhead whales off the coast of Kamchatka. In 1848 Arctic whaling began in earnest when a Captain Roys sailed the Sag Harbor whaler Superior through Bering Strait into the Arctic Ocean.⁶

2. Ibid.; Clifford W. Ashley, The Yankee Whaler (4th ed. Garden City, New York: Halcyon House, 1942), p. 67.

3. Don Charles Foote, "Exploration and Resource Utilization in Northwestern Arctic Alaska Before 1855," Ph.d. dissertation, McGill University, 1965, pp. 149-50. The whale that would draw Yankee whalers to northern Alaska waters was the bowhead, which feeds along the southern edge of Bering Sea ice in winter, then migrates north through Bering Straits to Point Barrow and on to the Beaufort Sea. The bowhead is more sluggish in its movements than the right and sperm whales, its thicker coat of blubber return more oil per animal, and it supplied longer and heavier whalebone. Ibid., p. 152; Hohman, American Whaleman, p. 43.

4. Foote, "Resource Utilization," pp. 146-47.

5. Ibid., p. 147; Hohman, American Whaleman, p. 43.

6. Ibid. The ships that sailed along the northwest coast in 1836 and 1837 seem to have been on reconnaissance trips rather than hunts. The (Continued)

Captain Roys reported of his adventure in the Arctic:

On account of powerful currents, thick fogs, the near vicinity of land and ice, combined with the imperfection of charts and want of information respecting this region, I found it both difficult and dangerous to get oil, although there were plenty of whales.

Roys did not exaggerate the hazards of Arctic whaling. Yet it seems unlikely that there would have been a whaling master anywhere who would not have happily traded places with him. Roys entered Arctic waters with an empty ship. Six weeks later the ship had a full cargo of 4,000 barrels of oil--something that normally took two or more full seasons to accomplish.⁸

It did not take long for word of the Superior's success to spread through the American whaling industry. By 1849 at least twenty American whalers, including Captain Roys' new ship Sheffield, spent the season in Arctic waters. By 1850 the center of gravity of the world's whaling industry had dramatically shifted to the North Pacific. In that year Richard Collison of the Franklin search ship Enterprise estimated that 200 ships sailed in the Bering Strait region and Berthold Seemann's estimate was even higher--299 ships manned by 8,970 sailors. Two hundred fifty ships returned from Northern Alaska waters with full cargos of whale oil in the first three years following the initial voyage of the Superior. Between the time Captain Folger sailed the Ganges into the Kodiak grounds in 1835 and 1890 Yankee whalers made an estimated 3,500 voyages into the North Pacific. They brought home more than

6. (Cont.) reports in 1837 were more optimistic, but those in 1836 indicated that dense fog would make whaling there difficult. A more important reason for the delay between Folger and the Hercules and Janus, however, is probably that the south Pacific grounds were still viable.

7. Quoted in Webb, "Seward Peninsula-Kotzebue Sound," p. 51.

8. Foote, "Resource Utilization," p. 151.

\$100,000,000 in whale products in those years, contributing to the greatest production of whale oil and baleen in the history of whaling.⁹

The first decade following the opening of the Arctic marked the apogee of American whaling. During the 1850s, whalers from grounds around the world returned to New England each year with 2,323,512 pounds of whalebone and 215,913 barrels of oil with a value of \$8,000,000.¹⁰ By the middle of the 1860s, however, the industry was already in sharp decline. The most obvious immediate cause was the dramatic loss of tonnage during the Civil War--between 1861 and 1866 tonnage in the whaling industry fell off fifty-seven percent.¹¹ The federal government purchased and sunk forty old, stone-laden whaling ships in Charleston harbor in an effort to stop blockade runners.¹² Of greater impact to the Arctic whaling, however, was the loss of whaling ships in the Bering Sea to the Confederate raider Shenandoah in spring 1865. Within a matter of days the Shenandoah sunk twenty-five whalers in the Bering Sea, and took more as transports--all taken without the knowledge that the Southern armies had surrendered more than a month earlier.¹³ If losses to Confederate raiders were not enough, the Arctic

9. Ibid.; Hunt, Arctic Passage, p. 131; Hohman, American Whaleman, p. 152; Ray, Eskimos of Bering Strait, p. 198; Webb, "Seward Peninsula-Kotzebue Sound," p. 49. Initially, an added stimulus for whaling north of Bering Strait was the British government's reward of 10,000 pounds for the rescue of Sir John Franklin and his party.

10. Webb, "Seward Peninsula--Kotzebue Sound," p. 52.

11. Hohman, Yankee Whaleman, p. 290.

12. Ibid., p. 291. "The Great Stone Fleet," as it was known, proved of questionable value in preventing blockade runners. There seems to be little doubt, however, that it damaged the New England whaling industry.

13. Ibid., pp. 290-91; Webb, "Seward Peninsula-Kotzebue Sound," pp. 52-56. In all, the Shenandoah took thirty-eight ships and 1,053 prisoners. Damage was estimated to be \$6,488,320. In 1872 the Geneva Tribunal awarded the United States \$4,000,000 for damages inflicted by the Shenandoah. In Atlantic Ocean, the raider Alabama inflicted similar damage to the whaling fleet.

whaling fleet lost a total of forty-five ships to Arctic ice in 1871 and 1876.¹⁴

In addition to loss of vessels, the whaling industry suffered from increased costs, as well as a continually declining whale population. Most important, however, was the fact that the products they offered were no longer needed. After the Civil War use of petroleum and its by-products for lighting and lubrication rendered the use of whale-oil virtually unnecessary. Continued high prices for whalebone partially offset this loss, and supported a steam whaling fleet in the Arctic after 1879. It would not do so for long, however. By the early twentieth century, the same market forces--the introduction of new and better products--that led to the decline of whaling after the Civil War existed. When spring steel replaced the need for whalebone after 1907, the age of the whaler had passed.¹⁵

Prior to the introduction of steam ships, whaling voyages generally lasted two, three, or more years. During that time whalers hunted in the South and Central Pacific in the winter months, and, in the spring, turned north. There they might hunt right whales in the Gulf of Alaska, bowheads in the Okhotsk Sea, or follow the retreating ice pack north along the Siberian Coast through Bering Strait to East Cape and into the Arctic Ocean. In September or October, depending on the weather, they sailed south for the Hawaiian Islands. Following refitting,

14. Hohman, American Whaleman, p. 295; Webb, "Seward Peninsula-Kotzebue Sound," p. 57; John A. Cook, Pursuing the Whale: A Quarter Century of Whaling in the Arctic (Boston-Houghton-Mifflin Co., 1926), pp. 36-37. In 1871 thirty-four ships were lost, but the 1200 men aboard were rescued without the loss of life. In 1876 twelve ships were abandoned. This time, however, 50 men died.

15. Hohman, American Whaleman, pp. 289-97; Ashley, Yankee Whaler, pp. 42-43; John R. Bockstoce, Steam Whaling in the Western Arctic (New Bedford: Old Dartmouth for the New Bedford Whaling Museum, 1977), pp. 14, 17-18, 20, 52; Webb, "Seward Peninsula-Kotzebue Sound," pp. 57-60.

the cycle was repeated.¹⁶ With the advent of steam whaling in 1879, this pattern changed. In an effort to take advantage of the late fall and spring months, the steam ships wintered-over at Herschel Island, east of Point Barrow.¹⁷ In order to supply the ships that had wintered over, the Pacific Coast Steam Whaling Company established a coal-deposit site in Port Clarence.¹⁸ Each year dozens of ships arrived in early summer to supply the fleet in the Arctic.

Before the era of steam whaling, whalers normally followed the Siberian Coast on their way through Bering Strait to the Arctic becoming much more familiar with the Natives there than on the eastern side.¹⁹ Later, when supply ships rendezvoused in Port Clarence, Natives came to trade, sometimes staying on board the ships the entire time they were anchored. The whalers did have, however, a significant impact on the lives of the Natives of Northwest Alaska almost from the time they arrived in the area.

Most of the contacts were friendly, if for no other reason than it was in the whalers' own interest to establish friendly relations with a people who might be called upon in an emergency. One incident--the

16. Bockstoce, Steam Whaling, p. 20; Foote, "Resource Utilization," pp. 152-56. San Francisco had been used as a port for refitting before 1849. During the California gold rush, captains found they could not keep their crews from deserting to the gold fields. As a result they avoided San Francisco until after the gold rush, and until the advantages of the transcontinental railroad became obvious.

17. Bockstoce, Steam Whaling, pp. 36-40; Webb, "Seward Peninsula-Kotzebue Sound," pp. 59-60. The first ships, Mary D. Hume, Nicoline, and Grampus, first wintered-over in 1890. Three years later, one-fourth of the entire fleet wintered at Herschel Island. For a good description of the wintering over of a whaling ship see Hartson H. Bodfish, Chasing the Bowhead (Cambridge, Mass.: Harvard University Press, 1936).

18. Ray, Eskimos of Bering Strait, pp. 200-201.

19. Ibid. Ray indicates that only a single American whaler stopped at Port Clarence between 1850 and 1854.

"Gilly Affair," in which a number of Eskimos from Wales were shot and clubbed to death after they allegedly tried to seize George Gilley's vessel--would have repercussions long after the event, however.²⁰

Trading with the Natives became a much more significant part of whaling when profits declined. Yet from the beginning, whalers doubled as traders, whether to make an extra profit, or to help establish friendly relations.²¹ There is little doubt, as Dorothy Jean Ray avers, that the overwhelming preponderance of whalers were above reproach, trading such goods as listed by Capt. Hartson Bodfish in 1902:

49 rifles, 5 shotguns, 39,000 cartridges, reloading tools, powder, lead, shot, thousand of yards of ticking, drill, denim, calico, flannelette, foot sewing machines, hand sewing machines, needles for same, thread, thimbles, chewing gum, combs, canvas, twine, tobacco, matches, flour, bread, molasses, sugar, tea, baking powder, dried apples, prunes, rice, 3 phonographs, 110 records, phonograph needles, clocks, oak boards, boat anchor, brass kettles, primus stoves, dish pans, mail pans, enamelled pails, tablespoons, serge cloth, coffee pots, canned milk, shovels, tacks, mirrors, scissors, darting-irons, cutting-spades, knives, harmonicas, files, drills, bits, brest drills, planes, hammers, hatchets, saws, axes, awls, coal oil, spy glasses, opera glasses, darting-bombs, shoulder-bombs, boat compasses, boards, screw drivers, cigars, beads, caps, suspenders, boys' clothes, leather belts, lady's coats, . . .²²

It is just as certain that a significant number of whalers and the traders who followed them, indulged in a widespread traffic in liquor, and, after 1854, in firearms, that continued unabated, at least until the

20. Ray, Eskimos of Bering Strait, p. 191.

21. Additionally, independent traders followed the whalers into the area from the very first. Ray, Eskimos of Bering Strait, p. 199; Foote, "Resources Utilization," p. 187. Foote indicates, for example, that as many as six American ships were trading north of St. Michael in 1849.

22. Ray, Eskimos of Bering Strait, p. 189; Webb, "Seward Peninsula - Kotzebue Sound," p. 65. In return, they received furs, baleen ivory, fresh food, and clothing. The rifles, shotguns, and cartridges, if used for trading, should have been illegal.

Revenue Marine patrols in the 1880s.²³ As early as 1851 the English captain Thomas Moore described one impact of the whalers on the Native peoples of the northwest Arctic:

I am sorry to inform their Lordships that the whalers have been the means of doing the natives (along the coast on both sides of the straits) a vast deal of injury, by the introduction of a large quantity of spirits with which they have supplied them, and the barter has been so much cut up by the profuse and extravagant manner in which they have given them tobacco that I feel certain the supplies of venison, etc., which I have hitherto been able to procure for the crew will be most materially curtailed, besides which, we shall have to travel considerably further for what little we may procure²⁴

Moore wrote from Plover Bay. In the autumn of that year he wrote that Natives around Grantley Harbor were almost "constantly drunk," and in 1854 Captain Collinson indicated Natives he met at Shishmaref Inlet and Kotzebue Sound were most interested in trading for rum and brandy.²⁵ From those early dates, virtually every visitor to the area described the debilitating effects of liquor on the Natives of Northwest Alaska.²⁶

Contemporaries believed that the introduction of alcohol and firearms, along with other accoutrements of nineteenth century life, was

23. See, for example, the description by William Fish Williams of the voyage of the Florence in 1873-74, in Hunt, Arctic Passage, pp. 130-31. The Confederate raider Shenandoah played the certainly unintended role of prohibition agent, for example, when she took the Abigail in May 1865. Among the goods captured were over fifty barrels of whiskey, rum, brandy, and gin, as well as a plentiful supply of wine and champagne. Much of the liquor was intended for trade with the Natives. Webb, "Seward Peninsula-Kotzebue Sound," p. 53.

24. Quoted in Foote, "Resource Utilization," p. 184. Moore was a member of the Franklin search.

25. Ibid., p. 186. Only four years earlier, in 1850, Collinson visited Natives between Port Clarence and Wainwright. He said that none were interested in rum until he reached the Diomed islands.

26. For example, Daniel Libby of the Western Union Telegraph Expedition (see following), described several instances of effects of alcohol on Natives of the Bering Strait. In Ray, Eskimos of Bering Strait, pp. 165-66.

secondary. Of more profound significance, they insisted, was the toll that nearly a half-century of Arctic whaling took on traditional food sources.²⁷ It was not only the slaughter of the bowhead whale that concerned these people.²⁸ From the 1860s whalers routinely hunted the walrus to make up for declining prices of whale products.²⁹ From that decade, the walrus provided additional profits for the whalers--first in oil, then later, in ivory. While hard figures are not available, Ray indicates that three-fourths of the walrus population in the northwest Arctic may have been destroyed by the 1870s.³⁰

Scholars today disagree regarding the magnitude of effect of depletion of traditional food sources on the Natives of Northwest Alaska. Yet, taken as a whole, few would argue that from the mid- to late-nineteenth century the extensive contact between races in the Bering Strait resulted in severe dislocation of Native life.³¹

27. U.S., Congress, Senate, Report on the Introduction of Domestic Reindeer into Alaska, 1895, 54th Cong., 1st sess., 1896, p. 9; H.R. Thornton and W.T. Lopp to Sheldon Jackson, July 25, 1891, in Ibid., p. 18. In 1866 Natives from Unalaska had petitioned President Cleveland asking for the right to use firearms, because they were no longer able to kill sufficient seals by traditional means. George S. Ulibarri, Documenting Alaskan History: Guide to Federal Archives Relating to Alaska (Fairbanks: University of Alaska Press), pp. 38-39.

28. Any estimate of the number of whales taken over the more than fifty years of Arctic whaling would be guesswork. In the 1840s, however, the total number of whales taken worldwide by New England whalers was at least 10,000 annually. It is not too much to say that only the decline in prices saved the bowhead. Hohman, American Whalers, p. 6.

29. Ray, Eskimos of Bering Strait, p. 199. There is some disagreement in primary sources as to when the first walrus were taken. But all agreed that the practice dated from the mid- to late-1860s.

30. Ibid.; Bodfish, Chasing the Bowhead, pp. 20-21. Bodfish indicated that his ship took 600 in 1880, 250 of them on a single ice flow. Three years earlier, L.C. Owen described killing 700 in a two hour period. Whalers generally used the same rifle for walrus as did buffalo hunters in the American west.

31. See, for example, Ray, Eskimos of Bering Strait, and "Nineteenth Century Subsistence Patterns"; Foote, "Resource Utilization"; Ernest S. (Continued)

The whalers led the way. Others would follow to exploit the sea and land of the Seward Peninsula. Even as the whalers enjoyed continued success in Arctic waters, men were coming to make use of the land.

B. Western Union Telegraph Expedition on the Seward Peninsula, 1865-1867

The Americans who came to Arctic waters in search of whales had a profound affect on the lives of the people who lived on the Seward Peninsula. Like the explorers who preceded them, however, the whalers remained primarily off the coastal fringes, and did not travel into the interior. The first American expedition into the interior of the Seward Peninsula, and all of Alaska for that matter, came in 1865-1867, when men came to lay an international telegraph line.³²

The Western Union Telegraph Exploring Expedition was part of a grandiose scheme to connect the Americas with Europe by a telegraph

31. (Cont.) Burch, Jr., Eskimo Kinsmen: Changing Family Relationships in Northwest Alaska (San Francisco: West Publishing Co., 1875); Richard O. Stern, Edward L. Arobio, Larry L. Naylor, and Wayne C. Thomas, Eskimos, Reindeer, and Land (Fairbanks: University of Alaska, 1980); Richard O. Stern to T. Stell Newman, April 16, 1978, History/Archeology, Box 26, Records of the National Park Service, Record Group 79, Federal Archives and Records Center, Seattle, Washington. Michael E. Krauss, whose interest is in Native languages, concluded in his 1980 study that before 1887, "there was at least no interference with the maintenance or cultivation of Alaska Native languages, and relatively little disturbance of Native culture." Alaska Native Language: Past, Present, and Future (Fairbanks: University of Alaska [Alaska Native Language Center Research Paper No. 4], 1980), p. 18.

32. Focus here is on activities on the Seward Peninsula. A number of sources are available which describe the larger expedition. Morgan B. Sherwood's Exploration of Alaska, 1865-1900 (New Haven: Yale University Press, 1965) is the latest, and probably the best. In addition, a number of primary sources, published and unpublished, deal with all aspects of the expedition. See, for example, William H. Dall, Alaska and Its Resources (Boston: Lee and Shepard, 1870) and Frederick Whympfer, Travel and Adventure in the Territory of Alaska (New York: Harper and Brothers, 1869).

line that would run from the terminus of the American transcontinental line in San Francisco along the Pacific coast, across Alaska to Cape Prince of Wales, under the water at Bering Strait, then nearly 4000 miles across Siberia and the Amur Basin where it would finally connect with a Russian wire that ran into western Europe.³³ The whole thing was the brainchild of Perry McDonough Collins, an American entrepreneur who served as United States commercial agent on the Amur. Collins approached both the Russian and British governments, winning concessions and promises of cooperation and on July 1, 1864, with the help of Secretary of State William H. Seward, won Congressional approval for the project and guarantees of U.S. government cooperation.³⁴

The expedition to explore possible routes and string wire was organized along military lines, complete with rank, uniforms, and its own flag. Initially the more than 300 young men operated in three divisions--Canada, Yukon River-Norton Sound area, and along the Amur River in Siberia. In September 1866 a group of 40 men led by Daniel B.

33. As indicated, in Illustration 4, a future line would run into Latin America. J.H. Cotton, "P.M.D. Collin's Proposed Overland Telegraph, via Behring's Strait and Arctic Russia to Europe, under Russian and British Grants," 1864, Rare Map Collection, Alaska and Polar Regions Department, Rasmussen Library, University of Alaska-Fairbanks, Fairbanks, Alaska (Illustration 4); Harold F. Taggart, ed., "Journal of William H. Ennis, Member of Russian-American Exploring Expedition," California Historical Society Quarterly, 33 (December 1956), pp. 1-2; "The Collins Overland Telegraph-Western Union Extension via Behring Strait." November 17, 1932, Box 1, Folder 1, Collins Telegraph Papers, Rasmussen Library, University of Alaska - Fairbanks.

34. Taggart, "Journal of Ennis," p. 2; "Collins Overland Telegraph," Collins Telegraph Papers, Rasmussen Library, University of Alaska - Fairbanks; Webb, "Seward Peninsula-Kotzebue Sound," p. 28. After winning Congressional approval of the project, Collins approached Western Union Telegraph Company with a merger proposal. Discouraged by problems experienced by Cyrus Field in his effort to lay an Atlantic cable, the board of directors accepted Collin's proposal, paying him \$100,000 and forming a subsidiary known as the Western Union Extension. Congress authorized the secretary of the navy to detail a naval vessel to assist the expedition, and the secretary of war to provide any necessary forces to protect the line.

Illustration 4.

"P.M.D. Collins' Proposed Overland Telegraph via Behrings Strait and Asiatic Russia to Europe, under Russian and British Grants," 1864. Rare Map Collection, Alaska and Polar Regions Department, University of Alaska, Fairbanks.

PROPOSED OVERLAND TELEGRAPH

VIA GREAT BRITAIN
 VIA RUSSIA
 ADRIATIC RUSSIA TO EUROPE
 UNDER RUSSIAN & BRITISH GRANTS
 (1871-1872)

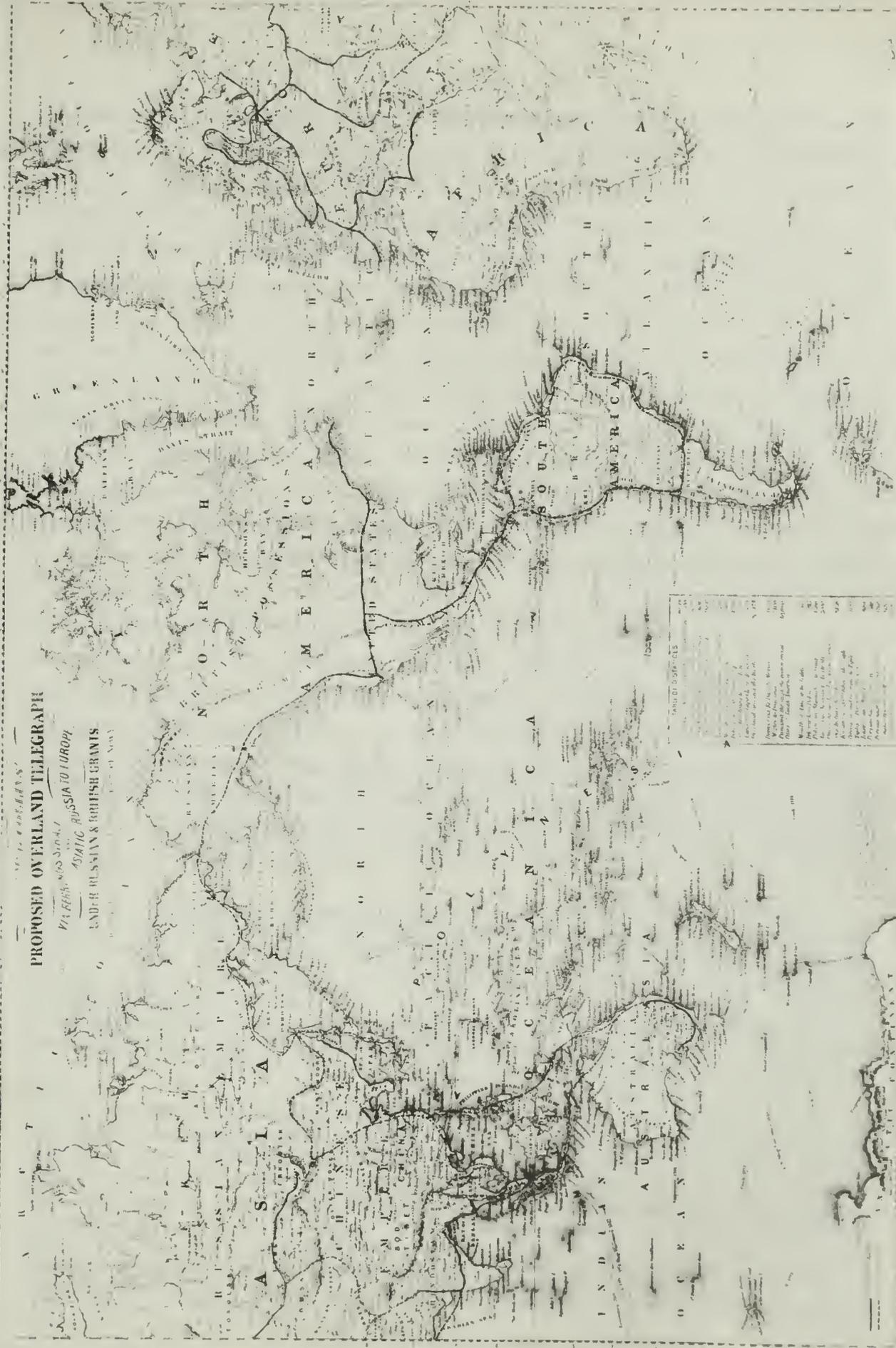


TABLE OF DISTANCES

From	To	Distance
London	Paris	210
Paris	Rome	1,100
Rome	Constantinople	1,100
Constantinople	Amoy	4,500
Amoy	Shanghai	1,000
Shanghai	Yokohama	1,000
Yokohama	Manila	1,000
Manila	Cebu	1,000
Cebu	Singapore	1,000
Singapore	Batavia	1,000
Batavia	Sourabaya	1,000
Sourabaya	Calcutta	1,000
Calcutta	Rangoon	1,000
Rangoon	Bombay	1,000
Bombay	Madras	1,000
Madras	Colombo	1,000
Colombo	Suez	1,000
Suez	Aden	1,000
Aden	Perth	1,000
Perth	London	1,000

Libby arrived to begin operations out of Port Clarence on the Seward Peninsula.³⁵

In September 1865 the Golden Gate, carrying members of the Norton Bay contingent, arrived at the old Russian post of Saint Michael. Almost immediately the men threw themselves into the business of exploring possible routes and scouting for trees that could be used as poles. During the two years they were in the area, Western Union men thoroughly explored the area that includes Saint Michael, Nulato, Unalakleet, and Port Clarence. In December 1865, for example, William Ennis, five Western Union men and "quite a train of Esquimaux" traveled from headquarters in Unalakleet to "Chauk-talik-mute [Shaktoolik]" and on to Koyuk. Men from the Port Clarence group traveled to Tuksuk Channel, Kauweruk, Wales, and Kalulik at Cape Douglas.³⁶

In the spring of 1866, Ennis, who had been given charge of all explorations between Grantley Harbor and the Yukon River, left Unalakleet for Port Clarence. They reported back that they had traveled through some of the "most desolate" land ever seen. Wood was so scarce, they said, that it would be necessary to bring poles by water to Grantley Harbor to be carried up river. F.M. Smith wrote in his diary that Ennis and Bendeleben even had to purchase wood for cooking.³⁷

35. "Collins Overland Telegraph," Collins Telegraph Papers, Rasmussen Library, University of Alaska-Fairbanks; Report of Major S. [Senga] Abasa, Chief of the Asia Division, February 15, 1886, ibid; Report of the British Columbia and Stekine Exploring [__], May 5, 1866, ibid.; Sherwood, Exploration of Alaska, p. 18. Additionally, Robert Kennicott organized a "Scientific Corps" to gather information as their duties permitted. The Smithsonian Institution and Chicago Academy of Sciences contributed to this group.

36. Ennis to Robert Kennicutt [sic], December 3, 1865, in Taggart, ed., "Journal of Ennis," pp. 153-157; Ray, Eskimos of Bering Strait, pp. 161, 165-66. Among the Western Union men who accompanied Ennis on the trip from Unalakleet was Otto von Bendeleben, whose name was given to the mountains along the southeastern border of Bering Land Bridge National Preserve.

37. Taggart, "Journal of Ennis," pp. 164-65; Ray, Eskimos of Bering Strait, p. 162; Entry of June 15, 1866, Diary of F.M. Smith, Charles S. (Continued)

Nevertheless, they recommended that headquarters be established at Grantley Harbor for an area that would run east along the northern shores of Grantley Harbor and "Immorizook Bay [Imuruk Basin]"; eighty miles east southeast through what Daniel Libby described as "low swampy land and divides, bleak, desolate, uninhabited"; to the Neukluk [Niukluk] and Erathilwack [Fish] Rivers into Golovnin Bay.³⁸

Charles S. Bulkley, expedition engineer-in-chief, agreed with the recommendation to establish a post at Grantley Harbor.³⁹ Five months later, on September 16, 1866, Daniel Libby and the men under his command arrived to establish a post they called Libbysville on the spit across from present-day Teller. Although they soon heard rumors of completion of the Atlantic cable and possible termination of their own project, they constructed four buildings in their tiny town--Main Building, Smithsonian Institute, Tower Cottage, and West End Hotel--and

37. (Cont.) Hubbell Papers, Manuscript Library, Suzzallo Library, University of Washington, Seattle, Washington. Ennis and Bendeleben generally followed, according to Ray, the route taken earlier by the Franklin searchers, traveling along the coast and passing through the mountains to the Kuzitrin River.

38. Ray, Eskimos of Bering Strait, p. 162; Daniel Libby to Charles S. Bulkley, June 20, 1867, Charles S. Bulkley Papers, Suzzallo Library, University of Washington. Libby wrote that the eighty-mile-long middle section would present "the most formidable difficulties we have to contend with along the whole route. The weather there near the mountains is extremely cold and stormy the greater part of the year, and it is not uncommon to see the thermometer down to 70° below zero. It is certain that to build this part of the line we must have lumber to build shelter stations on it for the men, and we must be furnished better means of transportation than we have yet had or are able to get in this part of the country. I hardly know what kind to recommend, but I think Siberian horses would answer the purpose well."

39. "Collins Overland Telegraph," Collins Telegraph Papers, Rasmussen Library, University of Alaska-Fairbanks, Bulkley, who sounded Bering Strait, determined that Grantley Harbor would be the best cable landing on the Alaskan side, with Penkagne Bay the best spot on the Siberian side.

commenced publication of the Esquimaux, the first newspaper printed in any language in Alaska.⁴⁰

On December 18, 1865, Charles S. Bulkley wrote that "the most northern regions through which our lines will pass form no serious obstacles--neither in the construction nor operation of the telegraph. . . ."41 Despite his optimism, the effort to install the Russian-American telegraph line through the Alaskan wilderness faced severe problems. Anyone who has ever visited the Seward Peninsula can surely sympathize with George Russell Adams when he wrote in frustration that he would prefer "fifty degrees below zero" to the mosquitos and other insects that nearly drove him and his companions wild.⁴² However Adams might long for cold weather when the mosquitos "have been perfectly fearful," the expedition was clearly unprepared for the rigors of an Arctic winter. The very idea of trying to dig holes for telegraph poles by hand when the temperature was as low as 58° below zero seems almost preposterous. Yet, they did just that. F.M. Smith described digging fourteen holes on a day that the wind blew so hard the snow filled the holes as fast as they could dig and George Adams complained of the difficulty of digging in ground frozen so hard that "It is just like digging in granite." With temperatures outside hovering near fifty degrees below zero, Adams wrote "building telegraph lines with dogs and sleds only for transportation in the frigid zone is not so much fun as it is cracked up to be". "I believe," he concluded, "if the directors

40. Edquimaux, January 6, 1867, Alaska State Library, Juneau, Alaska; Ray, Eskimos of Bering Strait, pp. 158, 162, 164-5. The men constructed the West End Hotel for "the numerous neighborly Esquimaux."

41. Entry for December 18, 1865, Journal of Charles S. Bulkley, Microfilm, Suzzallo Library, University of Washington.

42. Entry for June 26, 1864, in Harold F. Taggart, ed., "Journal of George Russell Adams, Member, Exploring Expedition in Russian America, 1865-67," California Historical Society Quarterly, 35 (December 1956), p. 302. Adams went on to report that "for three nights Fred and I have not slept a wink" because of mosquitos.

could see the difficulties we labor under at every move they would abandon this enterprise in despair."⁴³

Organizational problems compounded the difficulties imposed by time and place. The lightweight uniforms were inadequate, and had to be replaced with Native dress. Daniel Libby feared for the very lives of some of the Port Clarence men who had only tents to protect them from the wind and cold. As has so often been the case with outsiders in the Arctic, the kinds of food provided did not meet the daily caloric requirements. At Port Clarence, Daniel Libby reported that even these rations had run out, and "I endeavored to do the best I could for them and supply them such food as the country affords, but I could not purchase enough of the natives from the fact that they were short and living from hand to mouth as they generally do they could spare us little."⁴⁴

For all this, and for the home sickness that plagued them all, Daniel Libby proposed, in 1867, raising the wages of "good constructors" to \$45.00 a month and that of clerk, hospital steward, and foreman to \$60.00 if they would sign contracts for another year. It is little wonder that he reported that "none would sign, however, for the majority of them are determined to leave the country this year."⁴⁵

43. Entry for February 14, 1867, Diary of F.M. Smith, Suzzallo Library, University of Washington; Entries for February 4th and 5th, 1866, in Taggart, ed., "Journal of Adams," pp. 296-97. Never one to suffer in silence, Adams wrote on February 6, 1866, that he "could not get near fire at night to eat supper, my beans were all frozen before I had half eaten my supper. Tea frozen tight. One Hundred dollars to be in Frisco at home for half an hour. Therm. -59."

44. Taggart, ed., "Journal of Adams," p. 152; Libby to Bulkley, June 20, 1867. Short rations were not confined to the Port Clarence contingent, but seems to have been a fairly wide-spread problem. See, for example, Entry for April 26, 1867, "Journal of Adams," p. 300.

45. Libby to Bulkley, June 20, 1867. William Ennis indicated that pay was secondary. It was the adventure of it that brought men to the company. Taggart, ed., "Journal of Ennis," p. 2.

Despite the difficulties faced, Western Union men in the Norton Bay region began to install poles in January 1867. By that spring they had managed to put in twenty-eight miles at Unalakleet and seventeen more out of Koyuk. The Port Clarence contingent had completed twenty-three miles of poles out of Grantley Harbor and optimistically predicted:

if we are furnished with good working men, if they are properly fed and clothed, and if we are furnished the right kind of tools, building materials for stations, and the proper means of transportation I see or know of no good reason for not constructing a good line in a short time from this station to Golovine Sound⁴⁶

The chance would never come. On June 27, 1867, George Adams reported that the bark Clara Bell had arrived from San Francisco and had confirmed earlier rumors of the success of the Atlantic cable. The company suspended all operations of the Russian-American extension, he wrote, and "we are all ordered home (much joy)." On July 7, John L. Harrington, editor of the Esquimaux announced suspension of publication at Libbysville. The newspaper concluded with an analysis of the accomplishments of the Western Union men, which had cost \$3,000,000 and left two Port Clarence men dead:

The natives around here, will make a good thing by our leaving, numerous things will have to be left which will be of use to them, and the clothes, boots etc., that are thrown away by the party is enough to make a nation rich. At the Yankee Jims station are a couple of coils of wire which, together with what is on the poles will make bracelets enough for all the fair esquimaux damsels in the country. The houses, too, will undoubtedly be appropriated by them, and furnish fine quarters. . . . Old Darby Gougan, whose exertions to supply us with food during winter are well known to all, just arrived in time to receive a reward for his labors. Captain Libby gave him six dogs and a sled, and the whole party presented him with goods sufficient to make him an umablik among his tribe.⁴⁷

46. Webb, "Seward Peninsula-Kotzebue Sound," p. 29; Libby to Bulkley, June 27, 1867.

47. Taggart, ed., "Journal of Adams," p. 303; Esquimaux, January 7, and July 7, 1867; Quoted in Ray, Eskimos of Bering Strait, p. 167.

For the men who had worked and suffered on the Russian-American Extension, the sudden end must have been accompanied by a sense of wasted effort. There is, however, no question of the long-range significance of what they had accomplished. The Western Union Telegraph Expedition made the first systematic exploration of interior Alaska.⁴⁸ Men of the Port Clarence contingent more thoroughly explored the southern half of the Seward Peninsula than ever before. While traveling along the Niukluk River, moreover, Daniel Libby had found evidence of gold. He did nothing then, but he would return later in the century to establish one of the richest mining districts in Alaska. The expedition had employed Alaska Natives as cooks, guides, and post-hole diggers, giving them an experience with Americans who were quite different than the whalers many had met.⁴⁹ Members of the expedition's scientific corps produced a large number of reports on a variety of subjects--geography, paleontology, archeology, geology, zoology, and botany, for example. Most of these, as well as the various journals and accounts kept by expedition members were not published until later. Descriptions of the territory written by expedition members were made available to the men who were then negotiating with Russian officials for the purchase of Alaska, however, and were used by supporters of the treaty. Western Union men did not effect policy concerning the American purchase of Alaska, but they had contributed in their own way to the news also brought by the Clara Bell in 1867--that Alaska was no longer Russian, but now belonged to the United States.

C. American Administration

By 1867, more than 125 years after Vitus Bering officially claimed title to Alaska for Russia, less than a thousand Russians and

48. For example, Western Union men explored and mapped the Lower Yukon, explored the Upper Yukon and established travel routes between Nulato and Bering Strait, sounded Bering Strait, and explored the country along the Stikine River.

49. Daniel Libby established strict rules of conduct regarding treatment of the Natives. His men were not, for example, to disturb any grave, were to adhere to one price in trading, and not to forcibly eject a Native from a building. Ray, Eskimos of Bering Strait, p. 165.

foreigners lived in Russian America.⁵⁰ The Russian presence, such as it was, consisted of a few small settlements scattered primarily along the south rim. Russian occupation had little meaning for Natives of the Seward Peninsula, as for a considerable segment of all Natives in Alaska. No more than a handful of Russians lived in Saint Michael, and none lived north of Unakaleet. In 1867 Russian officials did not even consider the land north of the Yukon and Norton Bay to be within the control of the northern administrative district.⁵¹

With only a tenuous toehold on its American possessions to tell for an occupation of 125 years and desperately needing money as a result of its war with Great Britain and her allies in Crimea, it is not surprising that Russia agreed to sell Alaska to the United State.⁵² Twice, once during the Crimean War and a second time in 1860, discussions regarding the possible purchase of Russian America had been held. It was not until March 30, 1867, however, that a Treaty of Cession was signed. A notably unenthusiastic Senate ratified the treaty on April 9, and six months later ceremonies in Sitka marked formal transfer of the land. Senator Charles Sumner called "Alaska." One measure of the unpopularity of the purchase of what the press and opposition of the purchase came to call "Seward's Icebox" or "Seward's Folly" was that the

50. Fedorova, Russian Population, p. 277. Fedorova provides no breakdown of the nationality of the "foreigners".

51. Ray, Eskimos of Bering Strait, p. 185. Russian America had been divided into five districts--Alka, Unalaska, Kodiak, Sitka, and Northern.

52. One explanation sometimes advanced for Russian eagerness to sell her American possession was a fear of Great Britain resulting from the Crimean War. Hector Chevigny argues, however, that the original impetus laid down in 1853 by Nikolai Muraviev was an assessment that the "United States are bound to spread over the whole of North America. . . . Sooner or later we shall have to surrender our North American possessions." Russian America: The Great Alaska Venture, 1741-1807 (New York: Viking Press, 1965), p. 223.

House of Representatives did not authorize payment of the \$7,200,000 price of Alaska until mid-July 1868, ten months after formal transfer.⁵³

Neither country expressed concern about the people who lived on the land. The treaty did provide that Russian citizens (including Natives who had settled and adopted Christianity) who returned to Russia within three years would retain their citizenship. Those who stayed would be allowed to become American citizens. Others--"uncivilized native tribes" in the language of the treaty--would be "subject to such laws and regulations as the United States may, from time to time, adopt in regard to aboriginal tribes in that country."⁵⁴ It would not be the last time that Alaska Natives' claims to the land would go unrecognized. Not for more than a hundred years, in 1971, would their claims finally be addressed. When they were, it would bring change to all of Alaska that is still being felt today.

While anticipating establishment of civil government, Secretary of State Seward secured an executive order that provided for military control over Alaska in an apparent effort to facilitate transfer from Russia.⁵⁵ It would be seventeen years before civil government would be established. The War Department administered Alaska as a military district from 1867 to 1877, when control was transferred to the Navy. The Navy retained control until the establishment of civil government in 1884.⁵⁶

53. Ibid., pp. 229, 235, 241-44. Another reason for the lengthy delay was that the House was involved in the attempted impeachment of President Andrew Johnson.

54. Quoted in Robert D. Arnold, et. al., Alaska Native Land Claim (Anchorage, Alaska Native Foundation, 1976), p. 26.

55. Chevigny, Russian America, p. 254.

56. Ray, Eskimos of Bering Strait, p. 186; U.S. Army, Alaska, The Army's Role in the Building of Alaska (USARAL Pamphlet 380-5, December 1965), pp. 13-21.

Although the military district included all of Alaska, troops were stationed only in Southeast--Sitka, Wrangell, and Tongass--and Southcentral, at Fort Kenai. For the Eskimos of the Bering Strait, as a result, the purchase of Alaska had little immediate effect. In fact, the Eskimos of northern Alaska seem to have been of official concern only in carrying out prohibitions on the sale of liquor and firearms.

The problems associated with the sale of liquor to the Natives were certainly not new. As early as 1850, members of the Franklin search parties had begun to comment on the debilitating effects of liquor which had been brought in ever-increasing amounts by whalers and traders coming into the region.⁵⁷ On March 3, 1873, Congress amended the Customs Act of 1868 to add sections of the Indian Trade and Intercourse Act of 1834 that included prohibition of liquor in Alaska.⁵⁸

In June of the same year, Charles S. Hall, recently appointed special Indian agent, arrived at Saint Michael with instructions to enforce the prohibition.⁵⁹ Hall's tenure lasted only a single year. During the time, however, he identified those responsible for the liquor traffic--chiefly whalers and Siberian Natives. His experiences in trying to confiscate liquor, moreover, convinced him that the job was too big, as well as dangerous, for one man. The Natives, he wrote, were well-armed and they were not yet so impressed with the power of the United States that anyone confiscating liquor could do so without facing the threat of retribution. After Eskimos at Unakaleet forcibly prevented the confiscation of liquor, Hall recommended that either a military post be

57. Foote, "Resource Utilization," II: 183-87. The liquor trade flourished in the face of treaties prohibiting the trade of "spirituous liquors" in areas not occupied by Russia.

58. Ray, Eskimos of Bering Strait, p. 188; The Army's Role in Building Alaska, p. 14. The amendments were apparently the result of concerns expressed over the excessive use of alcohol by Indians in southeast Alaska.

59. Ray, Eskimos of Bering Strait, p. 188. Hall was given permission to establish his headquarters any place he wanted. He chose Saint Michael.

established at Saint Michael or Unakaleet or that a Revenue Marine patrol be established in the area.⁶⁰

The Revenue Marine (presently Coast Guard) would play an important role in Alaska that dated to the very beginning of American sovereignty over Alaska. A branch of the Treasury Department, the service was responsible for collection of customs, regulation of firearms and liquor traffic, police duties connected to management of fur seals on the Pribilof Islands, and, after 1887, surveillance of salmon fisheries.⁶¹

In 1868, five years before Charles Hall raised the possibility of a Revenue Marine patrol in the Bering Strait, the revenue cutter Wayanda sailed in those waters.⁶² A second cutter, the Reliance, sailed into the strait in 1870. After a gap of nine years, the Revenue Marine returned to the area when Capt. George W. Bailey brought the Richard A. Rush as far north as Kotzebue Sound. Bailey reported that the liquor trade went on unabated--Natives told him that no less than eleven vessels sold liquor in the northwest in 1878. The next year, Capt. C.L. Hooper, who commanded the Thomas A. Corwin, recommended annual cruises as the only way of stopping the trade in contraband goods. The Treasury Department accepted Hooper's recommendations, and the annual cruises began the next year.⁶³ Although all would certainly not have agreed, Capt. M.A. Healy of the steamer Corwin declared, in 1884:

60. Ray, Eskimos of Bering Strait, p. 189.

61. Sherwood, Exploration of Alaska, p. 120

62. Ibid. The Wayanda sailed from the waters of Bering Strait to the very southern tip of Alaska.

63. Sherwood, Exploration of Alaska, pp. 120-21; Ray, Eskimos of Bering Strait, p. 190-91; Webb, "Seward Peninsula-Kotzebue Sound," p. 32. The Revenue Marine operated under an annual appropriation of \$25,000 for its cruises in Bering Strait. Logbooks of the annual cruises are in Records of the Coast Guard, Record Group 26, National Archives, Washington, D.C. Printed reports for 1880, 1881, 1884, 1885, and 1889 are also available.

Owing to the continued and determined efforts of the Corwin, and notwithstanding the lax enforcement of the law regarding liquor permits to vessels clearing for the Territory, I am happy to state that the whiskey traffic in northern Alaska has almost ceased.⁶⁴

Hugh McCulloch, secretary of the treasury in the mid-1880s, declared, "To thousands of half-civilized natives she represents the majesty and power of the nation, and dispenses such justice as humanity and the needs of the people call for."⁶⁵ However we might cringe at McCulloch's unabashed boasting and ethnocentrism, he was correct in his assessment of the Revenue Marine in Bering Strait. Until 1897, when Saint Michael became a military district, the Revenue Marine was the only symbol of the law and of the power of the United States in the Bering Strait.

The Revenue Marine steamers quickly assumed a much broader role than simply enforcing prohibitions on selling guns and liquor to the Natives. The cutters assisted stricken vessels and searched for missing ships; provided assistance to whites and Natives alike; served as mail boats; provided passage home to ship-wrecked or stranded sailors and penniless miners; transported people and supplies; and provided information for the census-takers of 1880 and 1890. As far as possible, commanders of revenue steamers dispensed justice, although they clearly could do little in inter-tribal disputes and in cases involving crimes between races.⁶⁶ Although the Revenue Marine confined its efforts to the coasts of the Seward Peninsula, the explorations into the interior elsewhere by Revenue Marine officers John C. Cantwell and S.B.

64. U.S., Department of Treasury, Revenue Marine, Report of the Cruise of the Revenue Marine Steamer Corwin in the Arctic Ocean in the Year 1884, by M.A. Healy (Washington, D.C.: Government Printing Office, 1889), p. 17. For a qualification on Healy's declaration, see Ray, Eskimos of Bering Strait, pp. 190-94.

65. Quoted in Sherwood, Exploration of Alaska, p. 121.

66. Ray, Eskimos of Bering Strait, p. 190.

McLenegen helped to make the Kobuk region one of the best-known in the interior of Alaska.⁶⁷

Revenue steamers carried Sheldon Jackson, government education agent, on his inspection tours of the Seward Peninsula, and in the 1890s the Bear brought domesticated reindeer from Siberia as part of Jackson's effort to assist destitute Eskimos.

The reports of the cruises of the Revenue Marine in Bering Strait provide us with much of the information we have on the area during the 1880s and 1890s. The service played, moreover, no little role in the expansion of knowledge of Northwest Alaska in the closing decades of the nineteenth century. The Wayanda carried the first official United States government scientific party to Alaska on her cruise of 1868. Thomas T. Minor, who served as ship's surgeon, also collected natural history specimens and examined resources for the Smithsonian museum.⁶⁸ Scientists accompanied virtually every annual cruise following. On the 1881 cruise of the Corwin, for example, E.W. Nelson studied and wrote on birds and natural history; Dr. Irving C. Fosse compiled medical and anthropological notes relating to the Natives of Alaska and the northwestern Arctic region; and John Muir collected and described plants along the coasts of Alaska, Siberia, Saint Lawrence, Wrangel, and Herald Islands.⁶⁹

67. In addition, Naval Lieutenant George B. Stoney explored there in the same years. Intra-service rivalry, in fact, was a significant factor in the four expeditions to the area. Reports of the Cantwell expeditions are in Healy, Report of the Revenue Steamer Corwin, 1884, and U.S. Department of Treasury, Revenue Marine, Report of the Cruise of the Revenue Steamer Corwin in the Arctic Ocean in the Year 1885, by M.A. Healy (Washington, D.C.: GPO, 1887). Good summaries of the Revenue Marine expeditions are found in Stein, "History of the Northwest Coast," Webb, "Seward Peninsula-Kotzebue Sound," and William E. Brown's forthcoming historical resource study of Gates of the Arctic National Park and Preserve.

68. Sherwood, Exploration of Alaska, p. 120.

69. E.W. Nelson, "Birds of Bering Sea and the Arctic Ocean"; Irving C. Fosse, "Medical and Anthropological Notes on Alaska"; and John Muir, "Botanical Notes". All in U.S. Department of Treasury, Revenue Marine, (Continued)

Muir had little opportunity to examine inland geology, but he proposed a geological hypothesis regarding glaciation, which Morgan Sherwood has described as "amazing" as it was incorrect:

(1) that the regions traversed were covered with a mantle of ice that moved south to discharge into the Pacific below the Aleutians; (2) that after the period of universal glaciation the coastal mountains of Bering Sea and the Arctic Ocean were freighted with distinct glaciers many of which had only recently disappeared; (3) that the main features of the region were due to glacial action; and (4) that the Bering Sea and nearby Arctic Ocean basin were simply those parts of the ice-sheet's bed which were deeply eroded and over which the ocean gradually extended as the ice retarded, "thus separating the continents of Asia and America, at the close of the Glacial period."⁷⁰

From the mid-nineteenth century, outside contacts with Natives of the Seward Peninsula grew both in frequency and intensity. Only the men of Western Union Telegraph Expedition traveled beyond the coasts, and they did not venture beyond the southern third of the peninsula. Indeed, a 1900 map of the Nome mining district and adjacent territory (Illustration 5) indicates that much of the southern area was considered to be unexplored territory. Regardless, contacts between the races had begun to have a telling effect on the Native culture. As early as the 1850s, as indicated, British explorers initially described dislocations in Native life similar to that which had occurred everywhere whites and Natives met in America. The early reports described the debilitating effect of alcohol on the Natives of the Peninsula. Scientists traveling aboard the Corwin on her annual cruise in 1881 confronted something else--widespread death from starvation among the Natives at Saint Lawrence Island.⁷¹

69. (Cont.) Cruise of the Revenue Steamer Corwin in Alaska and the N.W. Arctic Ocean in 1881, by C.L. Hooper (Washington, D.C.: GPO, 1883).

70. Sherwood, Exploration of Alaska, p. 181.

71. Fosse, "Medical and Anthropological Notes," p. 20, in C.L. Hooper, Cruise of the Corwin, 1881. John Muir's graphic account is in Herbert (Continued)

Fosse ascribed the tragedy to excessive use of alcohol--he argued that people in northern areas had a greater desire for liquor than those in more temperate zones. Others argued that encroachment of whites had depleted traditional food sources. For the latter, the tragedy on St. Lawrence Island was only convincing proof that contact between the races in the Arctic threatened the very existence of the Natives. Whether this was true, or whether they failed to understand Native life is, in a very real sense, irrelevant. While some came to the area to exploit resources, others would make it their business to guarantee and "improve" the existence of the original inhabitants of the Bering Strait.

D. Recommendations

As was the case with the explorers who came before them, the first non-Native Americans who came to Northwest Alaska did not venture into what is now Bering Land Bridge National Preserve. They did have a significant impact on the lives of the people who lived in the area, however. The men of the Western Union Telegraph Exploring Expedition and the scientists who traveled with the Revenue Marine patrols made significant contributions to the knowledge of the Seward Peninsula. Their story is part of the historical development of the area, and should be told in park publications.

71. (Cont.) R. Smith, John Muir (New Haven, Conn.: Twayne Co., 1965) pp. 119-21, and Edwin Way Teal, The Wilderness World of John Muir, Boston: Houghton-Mifflin Co., 1954), p. 300.

Illustration 5.

"Sketch Map of Cape Nome Mining District and Adjacent Territory, 1900." Map Collection. Center for Cartographic and Architectural Archives. National Archives, Washington, D.C.

CHAPTER THREE: EARLY MISSIONS/SCHOOLS AND REINDEER

A. Mission/Schools

The outsiders who traveled to the Seward Peninsula before 1890 had little conscious intention of changing the lives of the people who lived there, although they did have a significant impact. In 1890, when the revenue steamer Bear sailed into northwestern Alaska waters on her annual cruise, she brought with her a man who most certainly intended to do just that. Dr. Sheldon Jackson, the general agent for education in Alaska and ardent Presbyterian missionary, came in response to reports on the degraded condition of Eskimos to establish schools for the Natives at Cape Prince of Wales, Cape Hope, and Point Barrow.¹

All three schools Jackson established in Northwest Alaska in the summer of 1890 were, as many other government schools in Alaska, known as contract schools. These schools, which had been conceived of by

1. J. Arthur Lazell, Alaskan Apostle: The Life Story of Sheldon Jackson (New York: Harper & Brothers, 1960), pp. 82-96; Glenn Smith, "Education for the Natives of Alaska: The Work of the United States Bureau of Education, 1884-1931," Journal of the West, 6 (July 1967), 442-43; Theodore Charles Hinckley, Jr., "The Alaska Labors of Sheldon Jackson, 1887-1890," Ph.D. diss., Indiana University, 1961, p. 236; Hinckley, The Americanization of Alaska (Palo Alto: Pacific Books, 1972), pp. 113-114, 118-19. Sheldon Jackson is a most important, if enigmatic, figure in Alaska history. In him burned a fire for carrying the gospel that certainly matched that of others who came from the same area of religious upheaval in upstate New York--Charles Finney and Joseph Smith, for example. He was educated at Union College and Princeton Theological Seminary and had served as a parish minister in Minnesota, chaplain in the Civil War, and teacher at a reservation school in Oklahoma. In the 1870s he oversaw Presbyterian home mission work in an eleven-state area from the Canadian boundary to the Rio Grande River--for which the never terribly modest preacher like to be called "Rocky Mountain Superintendent." In 1877 he traveled to Alaska with Mrs. A.R. McFarland, who took over the school for Natives at Wrangell. Finding in Alaska a fertile field for his endeavors, Jackson quickly became one of the best-known publicists for the territory. He was appointed to the position of general agent for education in Alaska on April 11, 1885, and when he made his first trip to the Arctic in 1890, he was, in the words of Glenn Smith, "Napoleon of the United States government in all matters cultural and educational in Alaska."

Jackson to overcome a too-small annual appropriation (\$25,000-50,000) for education in Alaska were, according to Charles Pinckney Poole, a unique experiment in the history of American education.² The contract schools, in which the government and various missionary societies active in Alaska contracted to share the cost of educating the Natives, allowed for a more rapid expansion of the school system in Alaska than would have been the case otherwise and gave the schools the religious foundation Sheldon Jackson desired.³ The government supplied the money for school maintenance and paid the salaries of teachers, in most cases, while the missions supplied the school buildings. In 1892, for example, the government paid \$2,000 toward the upkeep of the school at Cape Prince of Wales, and the denomination paid \$4,107.⁴ Although the schools were

2. Charles Pinckney Poole, "Two Centuries of Education in Alaska," Ph.D. diss., University of Washington, 1948, p. 59. In 1893-94 there were nine contract schools in Alaska. In 1895, government aid to those schools came to an end.

3. Russian Orthodox missionaries had, of course, been active in various parts of Alaska from the earliest days of Russian occupation. American churches showed little interest in entering the Alaska mission field for a decade after purchase. By 1901, however, eleven denominations (including the Russian Orthodox church) operated more than sixty missions in Alaska. In an effort to avoid denominational bickering, representatives of the various groups had worked out a division of mission fields--the Moravians on the valleys of the Kuskokwim and Nushagak rivers, the Congregationalists at Cape Prince of Wales, for example. By 1901, however, the Episcopalians operated a mission at Nome, the Congregationalists were at Cape Prince of Wales and Nome, the Norwegian Evangelical Lutheran Church were at Teller as were the Presbyterians, and the Swedish Evangelical Lutheran Church had opened a mission at Golovin. The Society of Friends (Quakers), who operated a mission at Kotzebue would soon open a mission at Deering and the Catholics would open a mission at Pilgrim Hot Springs in a converted roadhouse in 1906. Ibid., p. 39; U.S., Bureau of Education, "Report on Education in Alaska, 1907," in Report of the Commissioner of Education, 1907 (Washington, D.C., Government Printing Office, 1908), p. 373; C.J. Ryder, "Congregational Missions in Alaska," in Ibid., 1898, p. 1769; "A Few Facts concerning the mission of Our Lady of Lourdes now located at the Krusamapa Hot Springs, Nome, Alaska," n.d., Reel 23, Oregon Province Archives of the Society of Jesus Alaska Mission Collection, Gonzaga University, Spokane, Washington; Hinckley, Americanization of Alaska, p. 53.

4. Poole, "Education in Alaska," p. 68.

government schools, established to provide secular education, Jackson demanded that the teachers be affiliated with a church, and be able to produce evidence that they had been involved in Christian activities.⁵

Jackson contracted with the American Missionary Association (Congregational), then, to establish the school at Cape Prince of Wales in 1890, and the Protestant Episcopal Church assumed responsibility for the school further north along the arctic coast at Point Hope. Because he could convince no one else to take the job, Jackson tricked his own financially strapped Presbyterian Board of Home Missions into undertaking the establishment of the school at Point Barrow.⁶

Today, when it is possible to fly from the "Lower 48" to Nome and on to the outlying areas of the Seward Peninsula in a single day, it is sometimes difficult to appreciate the commitment of the people who went to teach there in the latter part of the nineteenth century. Because their only contact with the outside world often came only with the yearly visit of the Revenue Marine, teachers found themselves isolated in one of the harshest environments imaginable among a people who spoke little, if any, English.⁷ The teachers had little guidance, moreover, for

no official course of study has been marked out for the various schools. The experience of the two years during which public schools have been in operation, and the experience of the mission schools for nearly twelve years, have demonstrated the fact that it would not be wise to hamper the teachers with a course of study that would not fit the surroundings of the school. Attendance is so irregular, the pupils of such different ages (from 6 to 60), with such varying aptitudes for acquiring the English language, and all ages in the primary grades, that

5. Ray, Eskimos of Bering Strait, p. 207.

6. Hinckley, "The Alaska Labors of Sheldon Jackson," p. 248.

7. In 1891-92 W.T. Lopp was the only white man at Cape Prince of Wales. So great was his loneliness, that when he found a dog that obeyed commands in English, he visited it every day, "for companionship of some animal that had heard the English language." Education Report, 1892, p. 874.

a uniform plan would be impossible. It must be left necessarily to the tact and originality of the teacher.⁸

The teachers not only taught reading, writing, and arithmetic, but also had to have an understanding of such things as health, sanitation, carpentry, home arts, shoe-making, boat-making, and according to Truman Northrup, medicine.⁹ Teaching was not without its personal danger, either. In August 1893, in fact, three young Eskimos from the village of Wales killed Harrison R. Thornton, who Jackson had hired to teach in the school there.¹⁰ For all this, Chester C. Pidgeon agreed to teach for \$100 a month in 1909 and his wife taught household arts for \$25 a month.¹¹

There seems to be little doubt that a number of the early teachers who went to Northwest Alaska were ill-equipped for the task they faced, and the records indicate that the rate of turnover was exceedingly high. Nevertheless, there was no dearth of ready applicants for the positions. When Jackson advertised "for volunteer teachers to go to the barbarous Eskimo of Arctic Alaska" in 1890, those chosen had to leave for Alaska only two months after they read the advertisements. Nevertheless, twenty-four people applied for the jobs, twelve of them women.¹²

8. Education Report for the Year 1886-1887, quoted in Poole, "Education in Alaska," p. 103.

9. Truman Northrup to Commissioner of Education, May 1, 1907, Reel 22, School Files, Records of the Bureau of Indian Affairs, Record Group 75, Microfilm in Alaska State Library, Juneau. Although he was no physician, Northrup indicated, "books in the library have been helpful."

10. The three who killed Thornton were themselves killed by their elders for the murder. The story of this complex affair is discussed in Education Report, 1893-94, pp. 1733-34; Ray, Eskimos of Bering Strait, pp. 218-220; Maurice Montgomery, "Murder of Missionary Thornton," Pacific Northwest Quarterly, 54 (1963), pp. 167-74.

11. Acting Chief, Alaska Division to Chester C. Pidgeon, July 16, 1909, Reel 26, School Files, RG 75, Microfilm in Alaska State Library, Juneau.

12. Ray, Eskimos of Bering Strait, p. 214.

The teachers, under Sheldon Jackson's direction, were not merely to teach a curriculum, but were expected to do everything possible to change the lives of the Eskimos. Jackson was not one to appreciate other cultures. He saw the Eskimos as barbarians and savages, who lived near the bottom of the scale of human existence. Students were not allowed to use their own language, indeed were punished for doing so. In 1888, Jackson outlined the language policy in the schools:

The Board of Home Missions has informed us that government contracts for educating Indian pupils provide for the ordinary branches of an English education to be taught, and that no books in any Indian language shall be used, or instruction given in that language to Indian pupils. The letter states that this rule will be strictly enforced in all government Indian schools. The Commissioner of Indian Affairs urges, and very forcibly too, that instruction in their vernacular is not only of no use to them but is detrimental to their speedy education and civilization. It is now two years and more since the use of the Indian dialects were first prohibited in the training school here. All instruction is given in English. Pupils are required to speak and write English exclusively; and the results are tenfold more satisfactory than when they were permitted to converse in unknown tongues.

The aim of the education system in Alaska was, wrote Jackson, ". . . not only to teach reading, writing, and arithmetic, but also how to live better, how to make more money in order to live better, and how to utilize the resources of the country in order to make more money."¹⁴ Native children would be given industrial training so their people would be raised to a higher level of civilization. On the Seward Peninsula, a cornerstone of that policy would be the introduction of domesticated reindeer.

13. Quoted in Krauss, Alaska Native Languages: Past, Present, and Future, 95.

14. Quoted in Poole, "Education in Alaska," p. 103.

B. Sheldon Jackson and the Introduction of Domesticated Reindeer

Sheldon Jackson's first trip to the Arctic came in 1890 when he traveled to establish schools at Cape Prince of Wales, Point Hope, and Point Barrow. Although he had experienced Native cultures as a reservation teacher in Oklahoma and in previous trips to Southeast Alaska, Jackson was nevertheless quite unprepared for and appalled by the conditions he found among the Natives of Alaska's northwest coast. He described a people who lived in the worst kind of degradation, amid widespread starvation that robbed them of their dignity and threatened their very survival. How poorly they compared to the "Koraks and Chuchees" of the Siberian coast, who were "good-sized, robust, athletic, fleshy, [and] well-fed. . . ." The difference between the two was easy to see. The Siberians relied on domesticated reindeer for food and clothing while the Natives of the Alaskan coast relied primarily on steadily declining resources of the sea. The only way to avoid the tragic extermination of a race, he concluded, was to provide them with a new resource base through the introduction of domesticated reindeer.¹⁵

Scholars continue to debate the validity of Jackson's observations. It is true that he failed to put what he saw in the proper cultural context--the semisubterranean houses, which Jackson saw as wet and dirty, actually offered excellent protection from the cold, for example. Jackson's arguments were emotional and overdrawn and his facts quite often wrong. There is little question, moreover, that Jackson had other motives in proposing the importation of reindeer. It would, he wrote, elevate the Eskimos from "barbarism to civilization," assure the permanence of the mission stations in Northwest Alaska, and would "open

15. Sheldon Jackson to W.T. Harris, November 12, 1890, in U.S., Congress, Senate, Letter from the Secretary of the Interior Transmitting Report Relative to the Condition of the Natives of Alaska, 51st Cong., 2d Sess., 1890; U.S., Bureau of Education, U.S., Congress, Senate, Report on the Introduction of Domesticated Reindeer into Alaska, 1895, 53rd Cong., 1st Sess., 1896, pp. 9-10; Stern, et al., Eskimos, Reindeer, and Land, p. 24; Dorothy Jean Ray, "Sheldon Jackson and the Reindeer Industry of Alaska," Journal of Presbyterian History, 63 (June 1965), pp. 72-3.

up a vast and almost inaccessible regions of northern and central Alaska to white settlers." Nevertheless, and however we today might cringe at such precepts as the "white man's burden," the Natives of Northwest Alaska had suffered from fifty years of extensive contact. Jackson responded to what he saw as a tragedy of near epic proportions in the best tradition of nineteenth century humanitarianism. The introduction of domesticated reindeer would offer relief, he hoped, while avoiding the degrading and pauperizing effects of programs designed for Native Americans elsewhere.¹⁶

The idea of importing reindeer from Siberia for use by Natives in Alaska did not originate with Jackson. Charles Townsend, the naturalist who traveled to the region aboard the revenue steamer Corwin in 1885, seems to have been the first to broach the subject.¹⁷ Capt. M.A. Healy, who commanded the Corwin on the 1885 voyage as well as the revenue steamer Sheldon Jackson traveled on in 1890, had considered the possibility for some years, and discussed it with Jackson.¹⁸ In 1880, moreover, the Alaska Commercial Company had actually taken deer to Bering Island.

16. Jackson to W.T. Harris, November 12, 1890; U.S., Congress, Senate, Message from the President of the United States, Transmitting Pursuant to Senate Resolution No. 137, Copies of Reports of Special Agent Frank C. Churchill Regarding the Condition of Educational and School Service and the Management of Reindeer Service in Alaska, . . ., 59th Cong., 1st Sess., 1906, pp. 1441-42; Education Report for 1890-91, pp. 956-59; Ibid., 1895, pp. 141-42. Additionally, Jackson hoped that the reindeer would become the standard mode of transportation in the Arctic. It was a rather unfortunate hope that resulted in much wasted energy in the next years.

17. Report of the Cruise of the Corwin, 1885, p. 88. Townsend saw the importation of reindeer not only as a way of helping the Eskimo, but as an atonement for history of mistreatment of American Indians: "In our management of these people, purchased from the Russians, we have the opportunity to atone, in a measure, for a century of dishonorable treatment of the Indian."

18. Ray, "Sheldon Jackson and the Reindeer Industry," p. 74. W.T. Lopp, who along with H.R. Thornton, had made his own, independent plans to import reindeer from Siberia to their mission at Wales, indicated that Healy's suggestion may have actually been nothing more than a quip. (Continued)

Nonetheless, Sheldon Jackson, who attacked with his usual single-minded determination, gave reality to the earlier musings. He immediately launched an effective publicity campaign to drum up support for his plan, and when Congress refused to appropriate funds for the purchase of reindeer, personally raised \$2,146 from eighty-seven individuals and organizations for that purpose.¹⁹

In 1891, while W.T. Lopp and B. Gibson conducted a range reconnaissance to determine if the amount of lichen (reindeer moss) on the Seward Peninsula were sufficient to sustain forage, Jackson was able to overcome considerable Siberian opposition to convince a herder named Ranenka to sell him animals.²⁰ Jackson purchased 16 reindeer that summer--far less than his expected total of 200--and Captain Healy transported them aboard the Bear to Amaknak and Unalaska islands. Although all died from lack of care that winter, Jackson had proven, at

18. (Cont.) It seems unlikely, however, that Healy would have been anything but serious. Ibid.; "Interview with Captain M.A. Healy, U.S., Revenue Service," San Francisco Chronicle, December 12, 1890. Reprinted in U.S., Bureau of Education, Report on the Introduction of Domestic Reindeer into Alaska, 52nd Congress, 2d Sess., 1893, pp. 87-88.

19. Report on the Introduction of Domestic Reindeer, 1893, pp. 9-20. Although Congress refused appropriations for Jackson's scheme, several federal agencies gave virtually unlimited support. The commissioner of education approved combining reindeer herding with the on-going educational program, the secretary of treasury allowed the use of the revenue steamer Bear to transport reindeer from Siberia (sometimes at the near exclusion of other duties), and the secretary of state won Russian approval of the sale of Siberian reindeer. Ray, Eskimos of Bering Strait, pp. 228-29.

20. Herbert C. Hansen, "Importance and Development of the Native Reindeer Industry in Alaska," January 30, 1952, typescript in Division of Trust Services, Bureau of Indian Affairs, Juneau, Alaska; Report on the Introduction of Domestic Reindeer, 1893, p. 8. Siberians, who had herded reindeer for hundreds of years, were apparently concerned that selling live deer would destroy their monopoly in the sale of skins. Sarychev, Travels, pp. 14, 31; Webb, "Seward Peninsula-Kotzebue Sound," p. 70; Ray, "Sheldon Jackson and the Reindeer Industry," p. 79.

least, that it was possible to successfully transfer live deer across Bering Strait. Success did not convince Congress of the need to appropriate money, however. In 1892, using the remainder of the money donated the year before, Jackson paid \$623.30 for 171 deer and transported them to a newly constructed station--Teller--at Port Clarence, the only sheltered port on the Seward Peninsula.²¹

In March 1893, after the first successful winter at Teller Reindeer Station, Congress finally appropriated funds--\$6,000--for the introduction of domesticated reindeer into Alaska. By 1902, when the Russian government prohibited the continued exportation of Siberian reindeer, some 1,280 deer had been transported to Alaska.²² Despite this small success--small because the numbers fell far short of Jackson's original estimates--some of the contentiousness and chaos that would characterize much of the history of the Alaskan reindeer industry was already very much in evidence. Although Captain Healy commented that "it would not take much of a man to care for the business," neither of the two men--Minor Bruce and W.T. Lopp--who headed operations at Teller Reindeer Station in the first two years had the experience necessary to successfully manage a budding industry.²³ Ignoring centuries-old enmity between Siberian and Alaskan Eskimos, moreover,

21. Education Report for the Years 1890-91, p. 949; U.S., Congress, Senate, Report on the Introduction of Domestic Reindeer into Alaska, 1894, by Sheldon Jackson, 53rd Cong., 2d Sess., 1895, pp. 11-13, 21; Reindeer Supervisor to Chief of Alaska Division, September 27, 1926, Folder 10, Box 16, Ben B. Mozee Papers, Rasmussen Library, University of Alaska--Fairbanks. Teller Reindeer Station was named after Senator Henry Teller of Colorado. Senator Teller was one of Jackson's strongest supporters, leading the fight to secure congressional support for the reindeer experiment.

22. Reindeer Supervisor to Chief of Alaska Division, September 27, 1926, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks.

23. Actually, Lopp, who had succeeded Minor Bruce to the position of reindeer supervisor after the first year of operations, did not want the position, but preferred to remain at his mission at Wales. He returned there to become one of the most successful, and popular, reindeer supervisors in the history of the industry.

Jackson brought over four Siberians to teach reindeer herding. Villagers from Wales threatened to kill the Siberians. Not surprisingly, the four herders proved to be too sullen, disobedient, and temperamental to be of much help--they even refused to divulge everything they knew about reindeer herding.²⁴ Jackson offered young men (one or two selected from each village) the opportunity to move to the reindeer station to learn, at government expense, reindeer herding and attend the station school. At the end of two years the herders could return to their villages, the owners of the reindeer. Belying Jackson's claim of widespread starvation, however, the Eskimos proved noticeably reluctant to give up their traditional ways for the more sedentary life of reindeer herding. At the end of two years, only five of the seventeen apprentices were over twenty years of age.²⁵

In summer 1894 Jackson took the first steps to solve the problems facing the fledgling industry when he hired William J. Kjellmann to superintend Teller Reindeer Station. Unlike his predecessors, the Norwegian-born Kjellmann was something of a reindeer expert, having once been a herder and salesman of reindeer products in Lapland.²⁶

24. Dean F. Olson, Alaska Reindeer Herdsmen: A Study of Native Management in Transition (Fairbanks: University of Alaska, 1969), p. 15; Report on the Introduction of Domestic Reindeer, 1893, p. 58. Olson indicates that the problem was not only one of traditional enmity, but that the introduction of live reindeer represented a threat to the Wales village's political and economic hegemony. As a result, villagers threatened not only Siberians, but white superintendents as well.

25. Olson, Alaska Reindeer Herdsmen, pp. 22, 29. The apprenticeship program changed yearly for the next ten years. Olson points out that most of the apprentices came from the village of Wales and, where documentation is possible, it is known that they came from families who were already wealthy. Because many of these first apprentices were related, moreover, by the turn of the century, Sheldon Jackson commented on the development of an incipient "Kingegan (Wales) Reindeer Aristocracy."

26. Report on the Introduction of Domestic Reindeer into Alaska, 1895, p. 15; Report on the Introduction of Domestic Reindeer into Alaska, 1894, p. 155; Ray, "Sheldon Jackson and the Reindeer Industry," p. 89. (Continued)

Jackson had made it clear from the very beginning, moreover, that he preferred to use Laplanders as herders/teachers.²⁷ Because funds were not available to recruit and transport Lapps, he had used the four Siberian herders on what he considered to be a temporary basis. Again using privately donated funds, Jackson sent Kjellmann to Norway to recruit Lapp herders. On May 12, 1894, Kjellmann arrived at Teller Station with seven Lapp herders, their wives, children, and five specially trained herding dogs.²⁸ At the same time the Norwegian-speaking T.L. Brevig arrived to minister to the spiritual needs of the Lapps, and to relieve Kjellmann of teaching chores at the station school.

The arrival of the Lapps would, in time, help to erase some, but certainly not all, of the residue of bitterness left by the Siberian herders. A more significant problem, however, was a growing conception among the Eskimo apprentices that, in spite of promises made, Sheldon Jackson never intended to provide them with their own reindeer. Jackson and his subordinates had, unfortunately, reinforced their belief. Certainly the more generous contracts given the newly arrived Laplanders played a role.²⁹ Of particular concern were provisions that allowed the Laplanders all the reindeer necessary for food and clothing. Although the original justification for the program of importing reindeer had been to prevent starvation among the Eskimos, they were prohibited, and

26. (Cont.) Kjellmann had responded to a circular letter Jackson had sent to editors of various magazines and newspapers advertising the position. Kjellmann served until 1895, when he resigned following a disagreement with Captain Healy. He returned the following year, however.

27. Report on the Introduction of Domestic Reindeer into Alaska, 1895, p. 15.

28. Report on the Introduction of Domestic Reindeer into Alaska, 1894, p. 17; Report on the Introduction of Domestic Reindeer into Alaska, 1895, p. 47.

29. Yearly changes in the Eskimo apprenticeship program between 1892 and 1907 was a problem in itself. A summary of the changes is in Olson, Alaska Reindeer Herdsmen, p. 24.

would be for some time to come, from killing reindeer for their personal use.³⁰ Five years after the importation of the first reindeer, Jackson went so far as to request the arrest of Eskimos who had killed reindeer to give "them as much of a scare as is possible. We must do something to cause them to leave the reindeer alone: if the first offenses are punished it will deter others from interfering with the reindeer."³¹

Jackson had made it clear, moreover, that the missions were to be the agencies responsible for the distribution of deer. When Jackson took the first step toward the distribution of deer from the Teller herd, then, the 119 deer did not go to Eskimo apprentices. They were, rather, an outright gift to the American Missionary Association (Congregational) Mission at Wales.³²

Jackson recognized the growing skepticism among the Eskimo apprentices. In 1894 he indicated that as a "good faith" gesture he had made arrangements to loan a herd of 100 deer to Charley Antisarlook, a thirty-year-old apprentice from the village of Ayasayuk who previously had been a trader, traveler, and interpreter between St. Michael and

30. Ibid., p. 72; Report on the Introduction of Domesticated Reindeer, 1894, pp. 59-61. J. Sidney Rood to Unit Managers, Teachers, and Reindeer Owners, May 10, 1945, Natural Resources Branch, Division of Trust Services, Bureau of Indian Affairs, Juneau. The reason for the prohibition was to increase the size of the herds. More important factors in growth at this time, however, were probably abundant graze and relative lack of predators.

31. Jackson to Captain Francis Tuttle, April 22, 1897. Quoted in Ray, "Sheldon Jackson and the Reindeer Industry," p. 85.

32. Report on the Introduction of Domestic Reindeer in Alaska, 1895, p. 17; Reindeer Supervisor to Chief of Alaska Division, September 27, 1926, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks; Stern, et al., Eskimos, Reindeer and Land, p. 27. In 1895, moreover, Jackson left instructions to furnish similar herds to the Swedish Evangelical and St. James Protestant Episcopal missions at Golovnin Bay and a Catholic mission on the Yukon River. The first two received 50 deer each in January 1896, but the Catholic mission at Nulato did not receive its deer (100 animals) until March 1901. In all three cases, the deer were a loan, payable in five years, not an outright gift.

Point Barrow. On January 1, 1895, Antisarlook and four assistants--Iziksic, Koktowak, Iupuk, and Sookwhasie--took 115 deer (15 of which belonged to Antisarlook and his brothers as apprenticeship payment) to the Sinrock River on Cape Nome. After a period of five years, Antisarlook was to return 100 deer to the government (75 of which were female). He and his two brothers died during the epidemic of 1900. His half-Russian wife, Mary inherited his herd. Known as Sinrock Mary, she became owner of one of the largest Eskimo herds on the Seward Peninsula.³³

In the closing years of the nineteenth century, two events diverted efforts to build reindeer herds on the Seward Peninsula. The first of these--the effort to provide relief for "suffering miners on the Yukon" in 1897-98--was as bizarre as it was impractical. When reports filtered out of the Yukon gold fields that miners faced near certain starvation in the upcoming winter, Sheldon Jackson jumped at the chance to demonstrate the value of reindeer, borrowing 100 deer back from Charley Antisarlook to drive to St. Michael and on up the Yukon River. When that 1,000-mile-long trip appeared impractical, Jackson, operating under congressional authorization, sailed to Norway to purchase deer and recruit drivers for a herd to take to the Yukon gold fields. With a \$200,000 congressional appropriation, Jackson and William Kjellmann (who was already in Norway to recruit Laplanders for reindeer herding) recruited sixty-eight herders with their wives and children and purchased 539 deer, 418 sleds, 511 sets of harnesses, and 500 tons of moss for feeding. The expedition (dubbed "Dr. Jackson's Wild West Show" by New York newspapers) left Boscop on February 4, arrived in New York on the 27th, traveled by train to Seattle, and on to Haines, Alaska, by boat. The "suffering miners" were fortunate indeed that they had long ago learned to get along on local food. The expedition did not arrive

33. Report on the Introduction of Domestic Reindeer, 1894, pp. 14-15, 59-65; Report on the Introduction of Domestic Reindeer, 1895, p. 17; Ray, "Sheldon Jackson and the Reindeer Industry," pp. 84-85; Olson, Alaska Reindeer Herdsman, pp. 29-30; Stern, et al., Eskimos, Reindeer and Land, p. 26.

in Circle City until May 1898, nearly three-fourths of a year after the alarms had first gone out. Only 144 deer were left alive.³⁴

If "suffering miners" were not enough to tax the imagination, that same fall (1897) reports of another "disaster" came out of the Arctic--this time of some 300 stranded and soon-to-be-starving whalers whose ships had been crushed by ice in the Arctic Ocean. While Lt. E.P. Bertholf of the Revenue Marine traveled ahead carrying food by dog-sled, Lt. David Jarvis and Ship's Surgeon Dr. Samuel Call collected reindeer at Teller, Golovnin Bay, and Wales for an overland drive to Point Barrow. By the end of January they had collected 448 deer, nearly one-third of the 1,466 reindeer then in Alaska. The number included 292 deer from the mission herd at Wales and 133 from Charley Artisarlook, virtually all that remained in his herd after 100 head had gone to rescue miners on the Yukon. Along with W.T. Lopp, Artisarlook and an Eskimo herder named Utenna, Lt. Jarvis and Dr. Call pushed the herd to Cape Espenberg, made a perilous crossing of the ice at Kotzebue Sound, crossed through the mountains, across the frozen tundra east of Point Hope, and up the coastal region past Icy Cape, Cape Collier, and Franklin Point, arriving at Point Barrow on March 29, 1898. Theirs had been a remarkable trip, covering more than 500 miles across mostly uninhabited land during a harsh Arctic winter. The trip took just over two months, and they lost only 66 deer along the way. When they arrived they found the whalers living in substandard housing, but with

34. P.P. Claxton to Bo Sweeney, April 23, 1917 [with enclosure--"Importation of Reindeer from Lapland"], File 6:4, February 1, 1917-March 10, 1922, Alaska Reindeer Service, Bureau of Education, Records of the Office of the Secretary of the Interior, Record Group 48, National Archives, Washington, D.C.; "Relief for Suffering Miners" in U.S., Congress, Senate, Report on the Introduction of Domestic Reindeer into Alaska, 1897, 55th Cong., 2d Sess., 1898, pp. 35-38; Statement of John W. Braned, December 1, 1897, Box 491, Records of the Office of the Adjutant General, Record Group 94, N.A.; Ray, Eskimos of Bering Strait, pp. 238-39; Stern, et al., Eskimos, Reindeer and Land, p. 26. The 144 deer remaining were exchanged with the Episcopal Mission at Tanana for an equal number of deer belonging to them at the Eaton Reindeer Station.

sufficient, if necessarily meager, rations to carry them through the winter. They did slaughter 180 animals to supplement the food supply and the remaining 247 deer went to start herds at the Presbyterian mission at Point Barrow and at Point Hope.³⁵

During the late spring and early summer of 1900 a deadly combination of measles and pneumonia ravaged the entire region from the Aleutian Islands into the Arctic. Everywhere on both sides of the sea, Natives and non-Natives alike perished--Reverend T.L. Brevig, who opened an orphanage at Teller Station, for example, reported that thirteen herders or members of their families perished in a matter of days and that some fifty percent of the Natives in the vicinity eventually lost their lives. The epidemic decimated the ranks of the reindeer herders and apprentices, killing, among others, Charle Artisarlook.³⁶

In spite of the ravages of epidemic, diversions of the "rescue missions," and continued management problems, the reindeer industry showed steady, if slow, growth. With the establishment of herds at Point Barrow and Point Hope in 1898, Eaton Reindeer station in 1897, Norwegian Mission (Teller) in 1900, and Catholic Mission at Nulato (1901), nearly 3,500 reindeer were distributed from Point Barrow on the north to the Kuskokwim River on the south.³⁷ On the Seward Peninsula the number

35. "Report of Lieutenant D.H. Jarvis, Revenue-Cutter Service to Captain F. Tuttle, Revenue-Cutter Service," August 16, 1898 and "Relief Expedition to the Arctic Ocean," in U.S., Congress, Senate, Report on the Introduction of Domestic Reindeer into Alaska, 1898, 55th Cong., 3rd Sess., 1898; Ray, Eskimos of Bering Strait, pp. 239-40; Stern, et al., Eskimos, Reindeer, and Land, pp. 28-29; Lazell, Life of Sheldon Jackson, p. 156.

36. U.S., Congress, Senate, Report on the Introduction of Domesticated Reindeer into Alaska, 1900, 56th Cong., 2d Sess., 1901, pp. 10-11; A.H. Brooks, "Miscellaneous Notes on Seward Peninsula, 1900," Field Notebook 19½, Alaska Field Notebook Collection, Technical Data Unit, U.S. Geological Survey, Menlo Park, California, U.S., Congress, Senate, Report on the Introduction of Domestic Reindeer, 1901, 57th Cong., 1st Sess., 1902, pp. 13, 123.

37. Reindeer Supervisor to Chief of Alaska Division, September 27, 1926, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks.

of deer had increased from 1,100 in 1896 to 1,466 in 1897 to 2,336 in 1900.³⁸ The herds there--Teller, Wales, (mission), Golovin (two--both mission), and those owned by fifteen Natives--were confined to the lower half of the peninsula, south, generally, of what is now Bering Land Bridge National Preserve. The Cape Prince of Wales herd, for example, grazed some forty miles northeast of the cape. Although the description of the range does not give a precise location, it was certainly in the general vicinity of the far southwestern portion of the preserve.³⁹ The herd may have been located near Tuviquik (place to put a tent), a site on the Nukluk River that Katherine Koutsky has identified as an early reindeer camp, and it is possible that the names inscribed on the stone cairn at the traditional landmark, Avanaq, may be those of early Wales herders.⁴⁰ The Teller herd grazed on the grounds along the north side of Port Clarence, extending east as far as the Agiapuk and American rivers and west to the vicinity of California Creek.⁴¹

The discovery of gold at Nome at the end of the nineteenth century held the promise of expanded opportunities for the reindeer industry.⁴² As indicated earlier, from the very beginning Sheldon

38. U.S., Congress, Senate, Report on the Introduction of Domestic Reindeer into Alaska, 1896, 54th Cong., 2d Sess., 1897, pp. 12-13; Report on the Introduction of Domestic Reindeer into Alaska, 1897; Report on the Introduction of Domestic Reindeer into Alaska, 1900, pp. 22-23.

39. U.S., Congress, Senate, Report on the Introduction of Domestic Reindeer into Alaska, 1902, 57th Cong., 2d Sess., 1903, p. 13.

40. Koutsky, The Shishmaref Area, p. 53; ANCSA Site Survey, July 9, 1982, Folder F21957, Box 2, Cooperative Park Studies Collection, Rasmussen Library, University of Alaska-Fairbanks. Koutsky indicates that Laplanders taught animal husbandry at Tuviquik. If the camp was used by Wales herders, this is unlikely. Dean Olson indicates that W.T. Lopp, herd superintendent at Wales consistently refused to employ Laplanders. Alaska Reindeer Husbandry, p. 33.

41. Reindeer Supervisor to Chief of the Alaska Division, September 27, 1926, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks.

42. The gold rush was not an unmixed blessing, however. The lure of gold drew administrators, Lapps, and Eskimos alike away from the more mundane pursuit of reindeer herding. Miners sometimes illegally killed (Continued)

Jackson had predicted that the reindeer would become the standard mode of Arctic transportation. That dream did not seem quite so far-fetched as reindeer began to answer the miners' demands for transportation. Frank Schrader and Alfred H. Brooks, who undertook a reconnaissance of the Cape Nome gold region for the United States Geological Survey in 1899, reported that a trained draft reindeer in Nome was worth about \$150 and that in some places they had replaced dogs in popularity.⁴³ Although the supply was limited, reindeer steaks helped appease the appetites of miners in boom towns around the Seward Peninsula.⁴⁴ As the search for gold extended to all parts of the peninsula, the rapid growth of mining camps prompted the demand for mail service to the isolated areas. Reindeer carried mail on routes that ran from St. Michael to Unalakleet, Golovin, and Kotzebue and from Nome to Teller, York, Wales, Shishmaref, Candle, and Deering. Reindeer carried supplies, moreover, for the construction of a military telegraph line from Nome to Saint Michael.

Within a decade of the arrival of the first reindeer from Siberia in 1892, Sheldon Jackson could write of the success of the Alaska reindeer experiment and predict an even brighter future. The figures seemed, at first glance, to bear out his prediction. In the next five years (between 1902 and 1907), for example, the number of deer in all of western Alaska would increase three-fold, from 5,148 to 15,839. During the same period, the number of herds increased by seven, including

42. (Cont.) reindeer, moreover, and caused fires that destroyed valuable grazing land.

43. Report on the Introduction of Domestic Reindeer into Alaska, 1894, p. 16; Alfred H. Brooks, Blazing Alaska's Trails (Fairbanks: University of Alaska and Arctic Institute of North America, 1953), p. 412; U.S., Department of the Interior, Preliminary Report of the Cape Nome Gold Region Alaska, by Frank C. Schrader and Alfred H. Brooks, United States Geological Survey Special Publication (Washington, D.C.: Government Printing Office, 1900), p. 38.

44. Because of the growing number of reindeer, the slaughter of male deer for the markets in the towns was permitted. A portion of the reindeer meat sold in Nome in 1899-1900 was imported from Siberia, however. Stern, et al., Eskimos, Reindeer and Land, p. 29.

Shishmaref and Deering herd no. 1 (or Lane River herd), which grazed from their camp near the mouth of Rex Creek within the present-day boundary of Bering Land Bridge National Preserve.⁴⁵

Yet, even in the face of continued growth, Jackson's critics could quite correctly point out disturbing tendencies, suggesting that the reindeer experiment had strayed from its original purpose and that the policies Jackson established were not designed to profit most the people for whom it was intended--the Natives of Northwest Alaska. In 1902, for example, mission herds totaled 1,671, five Laplanders owned 499, the government herd at Teller included 369 animals remaining to be distributed, and 44 Eskimos owned 2,609 reindeer, or some 48 percent of the total.⁴⁶ The size of the herds belonging to the Eskimos ranged from 4 to 269 head, with an average of 59.⁴⁷ Laplanders, on the other hand, owned an average of 100 deer. The disparity in size of herds became worse as time passed--in 1905 the average Lapp owned 238 deer, while seventy-eight Eskimos owned an average of only 49.

45. U.S., Congress, Senate, Annual Report on Introduction of Domestic Reindeer into Alaska, 57th Cong., 2d Sess., 1903, p. 15; Reindeer, September 3, 1941, Frd: History-General, Box 33, Records of the Alaska Reindeer Service, RG 75, FARC, Seattle; Reindeer Supervisor, Seward Peninsula District to Chief of Alaska Division, September 27, 1966, Folder 10, Box 16, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks. W.T. Lopp formed the Shishmaref herd when he drove 389 deer from the herd at Wales in 1904 and a January 18, 1905 loan of 100 deer from the Teller herd to the Friend's (Quaker) mission formed the Deering or Lane River herd. Other herds established during this period were Sinuk (1907), Golsovia (1907), Shaktoolik (1907), Egavik (1907), Igloo (1907), and Council (1907).

46. Report on the Introduction of Domestic Reindeer into Alaska, 1902, p. 15. Transfer of reindeer to Laplanders began in 1901, following expiration of their contracts. Reindeer Supervisor, Seward Peninsula District, to Chief of Alaska Division, September 27, 1926, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks. The figures given here differ from those shown elsewhere. But the general idea--that Eskimos owned roughly half of the reindeer in Alaska--does not differ.

47. Stern, et al., Eskimos, Reindeer and Land, p. 28; Olson, Alaska Reindeer Herdsmen, p. 34. Stern points out that most authorities agree that an economically viable herd must number between 1,000 and 2,000 animals.

Sheldon Jackson did not seem to be unduly concerned by this trend. By 1900, in fact, he had overcome his earlier opposition and had come to openly advocate non-Native ownership of reindeer, negotiating with at least two people interested in establishing private herds.⁴⁸ It was, however, of concern elsewhere. Dissatisfaction with the management of the reindeer industry, as well as a longstanding concern over Sheldon Jackson's blurring of the separation of state and religion in education in Alaska prompted Secretary of the Interior Ethan Hitchcock to send Frank Churchill to Alaska with a broad mandate to investigate education as well as reindeer management. Churchill, an Indian agent and experienced investigator, found much wrong with what he observed. He especially criticized Jackson for drawing a salary as agent of the Presbyterian Board of Home Missions while serving as general agent of education. While praising the "self-sacrificing missionaries and their families who voluntarily isolate themselves on the pitiless shores of northern Alaska," Churchill, who firmly believed in a strict separation of church and state, wrote that he found himself "at a loss for suitable words with which to discuss appropriately" Sheldon Jackson's support for the interconnection of missions and reindeer. Churchill argued, over Jackson's protests, for a general reorganization of education and reindeer management.⁴⁹

C. After Jackson

Agent Frank Churchill's reports and subsequent resignation of Sheldon Jackson would result in a new direction of the reindeer industry. W.T. Lopp succeeded Jackson, and emphasis shifted from missions to schools as agencies responsible for the distribution of reindeer. District superintendents of school and village school teachers became, in addition to their other responsibilities, administrators in what was now called the Alaska Reindeer Service. Provisions of the 1907 "Rules and Regulations Regarding the U.S. Reindeer Service in Alaska," provided for an

48. Ray, "Sheldon Jackson and the Reindeer Industry," p. 99; Webb, "Seward Peninsula-Kotzebue Sound," p. 79.

49. Reports of Special Agent Frank C. Churchill, pp. 1441-42.

accelerated distribution of reindeer among the Natives, an effort that would go beyond the apprenticeship system designed by Sheldon Jackson to loan deer to any Native who wanted them.⁵⁰

Less than a decade after reorganization, the policy which grew out of Frank Churchill's investigation resulted in widespread Native ownership of reindeer. In 1905, according to figures compiled by Richard Stern, Natives owned 4,859, or forty-one percent of the 10,234 reindeer in Alaska. Six years later, sixty percent, or 20,071 of the 33,629 reindeer belonged to Natives, and in 1915, 1,293 Natives owned 46,683 or sixty-six percent of 70,243 reindeer. The average size of Native herds remained about what it had been ten years earlier--50.⁵¹

In order to achieve greater distribution of ownership, it was necessary to take herds to the Natives rather than convincing young Eskimos to leave their villages for the reindeer station. By the middle of the second decade of the twentieth century, in fact, reindeer were so widely distributed on the Seward Peninsula that virtually all available grazing land was occupied. In 1916, for example, Harry Karman, who owned reindeer at Cape Prince of Wales as early as 1902 and along the Lane River after 1910, took a herd to graze at Imuruk Lake, in the southeastern portion of present-day Bering Land Bridge National

50. J. Sidney Rood to Unit Managers, Teachers, and Reindeer Owners, May 10, 1945, Natural Resources Branch, Division of Trust Services, Bureau of Indian Affairs, Juneau, Alaska; "Preliminary Inventory of the Records of the Alaska Reindeer Service (Record Group 75)," compiled by Frederick H. Klunder, 1979, typescript in Federal Archives and Records Center, Sattle, pp. 2-3; Olson, Alaska Reindeer Herdsmen, pp. 37-38. With some minor changes, the organization remained the same until November 1, 1929, when the governor of Alaska assumed jurisdiction for reindeer operations.

51. Stern, et al., Eskimos, Reindeer and Land, p. 33 (from material in Frank Churchill's reports), and Education Reports, 1912, 1915-16, and 1917. During the same period government ownership declined from twenty-four to five percent (2,500 to 3,408 animals), mission from eleven to ten percent (1,163 to 6,890). Lapp and other non-Native herd increased from sixteen to nineteen percent.

Preserve. At that time he kept his summer camps on the north and south shores of the lake, as well as a boat "at the point that extends into the lake on the northwest."⁵² Karman, along with Wheeler Douglas, and Charley Goodhope, who in 1916 established a herd along the Goodhope River, would later join with others to form the Deering Reindeer Company.⁵³

Elsewhere, an Eskimo named Ahwinona maintained deer in the Bendeleben Mountains (along the southeastern border of Bering Land Bridge National Preserve) where he constructed a cabin maintained by Deering Reindeer Company as a range cabin in 1928.⁵⁴ Stanley Kiuyeruk operated a herd in the vicinity of Lane River, and, while the records are not site-specific, the fifteen men who brought a herd from Wales to Cape Espenberg may have established a winter reindeer's herder's camp at Ullugsaum (Historical Base Map no. 12).⁵⁵

52. Report on the Introduction of Domestic Reindeer, 1902, p. 17; "Statement of Harry Karman," n.d. [pre-1942], Grazing permits and Range Description, 1929-42, Deering Reindeer Company, Box 38, Records of the Alaska Reindeer Service, Record Group 75, FARC, Seattle; Description of Deering Reindeer Range, [after March 1928]. *Ibid.*; Ben B. Mozee to C.C. Mayer, October 21, 1929, *Ibid.*; Reindeer Supervisor Report, January 16, 1929, Folder 52, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks. Karman also used an old cabin, given him by "two white men" prospecting on Theresa and Independence creeks. The cabin was used into the 1940s. The general location of that cabin would have been just east of present-day Bering Land Bridge National Preserve.

53. "Description of Deering Reindeer Range," n.d. [after March 1928].

54. Ben B. Mozee to C.D. Mayer, October 21, 1929, Grazing Permits and Range Description, Deering Reindeer Company, Box 38, Records of the Alaska Reindeer Service, RG 75, FARC, Seattle.

55. Thomas Mukituk, et al., "History of the Cape Espenberg Herd of Reindeer," July 18, 1929, typescript in Nulugukluk, Box 47, Records of the Alaska Reindeer Service, RG 75, FARC, Seattle; Koutsky, The Shishmaref Area, p. 17. Mukaktik (only one of a variety of spellings used) Barr purchased the first five deer that would become part of the Espenberg herd from James Keok of Wales on August 14, 1905. Purchase price was five fox skins and \$100 cash. Most of the rest of the animals that became the Espenberg herd seem to have been purchased from the mission herd at Wales. Several other sites, identified by members of the (Continued)

Several federal agencies acted to assist the growing number of Native owners. In an effort to expand markets for example, the Bureau of Education provided a ship--USS Boxer--to transport reindeer carcasses to the continental United States.⁵⁶ After July 1920, moreover, the Bureau of Biological Survey (later U.S. Fish and Wildlife Service) undertook a broad program designed to improve the physical condition of the reindeer and develop improved methods of range management and control of herds. Investing an estimated \$300,000 between 1921 and 1934, the bureau established, among other things, a reindeer experiment station at Fairbanks to study herd control, determination of proper seasonal ranges, economy of feeding in reindeer management and natural revegetation of depleted areas. In cooperation with the Department of Agriculture and Nunivak Development Company, the bureau undertook a proposed twenty-year investigation of cross-breeding between reindeer and caribou.⁵⁷

55. (Cont.) Bering Land Bridge archeological survey in 1985--[Reindeer Camps], west shore, Imuruk Lake (Historical Base Map nos. 13 and 14); Reindeer Herders Camp, east shore, Devil Mountain Lake (Historical Base Map no. 15); Small sod structure northeast shore Devil Mountain Lake (Historical Base Map No. 16); Reindeer Herders Camp, northeast shore, Killeak Lake (Historical Base Map no. 17)--may have been used by Native herders at this early date. These sites are discussed at greater length on pages 113-117.

56. Stern, et al., Eskimos, Reindeer and Land, p. 46; Klunder, Records of the Alaska Reindeer Service, p. 8. The Boxer originally had been acquired from the U.S. Navy to transport school supplies to Alaska. After 1932, a Bureau of Indian Affairs ship, the North Star, would perform the same function.

57. Acting Chief of Bureau to the Secretary, May 12, 1925, Alaska Reindeer, General Information, General Correspondence, 1890-1940, Bureau of Biological Survey, Records of the U.S. Fish and Wildlife Service, Record Group 22, N.A.; E.W. Nelson to J.G. Ruthford, June 12, 1920, Big Game--Reindeer, 1920-21, Ibid.; Expenditures for Reindeer by the U.S. Biological Survey, Lomen Family-Business, File 566, Box 38, Lomen Family Papers, Rasmussen Library, University of Alaska-Fairbanks; L.S. Palmer to Mr. Snodgrass, November 16, 1925, Alaska Reindeer, General Correspondence, 1890-1940, Bureau of Biological Survey, Records of the U.S. Fish and Wildlife Service, RG 22, N.A.; Experiment Station, 1926, Ibid.; Cooperative Agreement Between the Bureau of Biological Survey and the Bureau of Animal Industry on the Study of the Feeding of Reindeer, April 25, 1929, Ibid.; Report on the (Continued)

Later, in the 1930s and early 1940s, funds from federal programs designed to help the nation work its way out of economic depression, would be used to assist Native reindeer owners. Public Works Administration funds were used to enlarge and repair the Shishmaref corral and construct range cabins, for example. The Civilian Conservation Corps funded construction of an engine room at the Teller reindeer plant, and on March 25, 1942, CCC administrator MacDonald authorized employment of ten men for thirty days on the construction of a new community reindeer corral located thirty miles south of Deering. What was certainly a unique program in the history of the CCC was established in 1937 and 1938, when CCC officials agreed to hire wolf hunters to protect herds from ever-increasing numbers of predators.⁵⁸

In January 1915, moreover, the Bureau of Education held the first reindeer fair at the Seward Peninsula village of Igloo. Certainly one of the most successful programs ever associated with the reindeer industry, the reindeer fairs took place annually until suspended (never to be revived) in the face of the disastrous influenza epidemic of 1918-1919. Held at central locations--Igloo, Noatak, Noorvik, and Unalakleet--the

57. (Cont.) Reindeer Feeding Project, June 10, 1973, Station Reports, Ibid.; Cooperative Agreement Between the Bureau of Biological Survey, U.S. Department of Agriculture, and Nunivak Development Company, May 21, 1930, Ibid. The Nunivak Development Company was a Lomen family company. The role of the Lomen family in the reindeer industry is developed on pp. 100-105.

58. Carl T. Stevenson to Lyman Brewster, September 29, 1934 and Brewster to Lester W. Troast, August 21, 1934, 156.8-Shishmaref, Records of the Alaska Reindeer Service, RG 75, FARC, Seattle; Brewster to Harry G. Watson, July 15, 1935, 405-Bldgs.-Teller, Box 52, Ibid.; Carl J. Lomen to Lomen Commercial Company, April 17, 1937, Correspondence, January-May 1937, Box 12, Lomen Papers, Rasmussen Library, University of Alaska-Fairbanks; Sam S. Kendrick to John W. Fults, March 21, 1942, 405-Bldgs.-Teller, Box 52, RG 75; Glenn G. Briggs to F. Hirsch, Deering Herd, 1937-60, Box 38, Ibid.; Glenn Briggs to Sam Kendricks, March 19, 1942, Reel 7, Reindeer Program Records, Rasmussen Library; Construction of Deering corral, February 25, 1942, Ibid.; J. Sidney Rood to Unit Managers, Teachers, and Reindeer-Owners, May 10, 1945, Natural Resources Branch, Division of Trust Services, Bureau of Indian Affairs, Juneau.

reindeer fairs afforded friendly competition, encouraged cooperation between owners, encouraged improved methods of herd management, and provided a forum for discussion and the dissemination of information.⁵⁹

The idea of cooperative management advanced by the Bureau of Education at the reindeer fairs was not new. Charles Thomson and Dr. James Hamilton advanced such a scheme to W.T. Lopp as early as 1911 and Lopp, himself, had come to advocate consolidation of herds by 1918. In the face of rapidly growing numbers of deer--estimates would reach 259,000 in 1922 and 600,000 by the end of the decade--multiple small holdings, problems of inheritance that resulted from the disastrous epidemic of 1918, decline in local markets, and rising number of disputes over range and handlings, the Bureau of Education re-examined its policies. An attempt to resolve some of the issues came with the introduction of joint-stock companies or reindeer associations.⁶⁰

Under the joint stock system, reindeer from one village, or a number of villages, were combined under the direct management of a paid chief herder. Members drew up and signed articles of association, and each owned shares equal to the number of reindeer owned.⁶¹ By 1933,

59. Stern, et al., Eskimos, Reindeer and Land, p. 46; Olson, Alaska Reindeer Herdsmen, pp. 41-43; Webb, "Seward Peninsula-Kotzebue Sound," p. 83; Carl J. Lomen, Fifty Years in Alaska (New York: David McKay Co., 1954), p. 99. Among the contests included at the fairs were (deer) races, snowshoe races, shooting matches, snow melting contests, and craft judging. A program for one reindeer fair is in Olson, Alaska Reindeer Herdsmen, pp. 143-47.

60. J. Sidney Rood to Unit Managers, Teachers, and Reindeer Owners, May 10, 1945, Natural Resources Branch, Division of Trust Services, Bureau of Indian Affairs, Juneau; Stern, et al., Eskimos, Reindeer and Land, p. 47. Survey of the Alaska Reindeer Service, 1931-33, Natural Resources Branch, Division of Trust Services, Bureau of Indian Affairs, Juneau; Report on Education for the Year 1924, p. 29.

61. Cape Reindeer Co. of Wales, Alaska, Articles of Agreement, 1924, Stock Companies and Stores, Herd Values, Folder 117, Box 12, Mozee Papers; Articles of Association Igloo Native Reindeer Association, April 13, 1925, Box 42, Records of the Alaska Reindeer Service, Box 75, FARC, Seattle.

one writer estimates, there existed some seventy-eight Native reindeer associations with 5,878 members.⁶² The Nuglinuktuk Reindeer Company, for example, formed by owners of the Stanley (Lane River) and Espenberg herds, claimed to have as many as 10,000 deer on their range that included most of the far northwestern corner of the Seward Peninsula. The company constructed a camp and corral about eight or nine miles west of Cape Espenberg.⁶³ Among the deer in the Deering Reindeer Company's herd, according to Alfred Karman's March 30, 1924 estimate were 1,469 in the Imuruk Lake herd and 2,621 in the Goodhope herd. Although no descriptions are available, it is known that the Deering Company maintained eight cabins on its range. Included were two within the boundaries of present-day Bering Land Bridge National Preserve--one at the mouth of Humboldt Creek and another that had been

62. Hanson, "Importance and Development of the Native Reindeer Association," p. 7. Records regarding organization and membership of associations are often confusing. It does seem that membership is a shifting thing. In 1924 or 1925, for example, William Allocheok separated from Shishmaref Association. In 1939 the ownership list of Teller Reindeer Association included most of the individual herds and Associations on the northern part of the Seward Peninsula: Allocheok (4.5%), Cape Co. (17.27%), Deering Co. (38.72%), Espenberg Co. (10.01%), Igloo Association (1.99%), Inland (5.86%), Shishmaref (17.28%), and Teller Natives (4.3%). Albert Schmidt to General Reindeer Supervisor, June 13, 1929, Reel 1, Reindeer Program Papers, Rasmussen Library, University of Alaska-Fairbanks; V.P. Dickinson to General Reindeer Supervisor, February 25, 1929, Folder 52, Box 7, Mozee Papers, *Ibid.*; Teller Reindeer Association, April 13, 1939, Reel 7, Reindeer Program Papers, Rasmussen Library; Glenn C. Briggs, Circular letter, May 1, 1940, *Ibid.*

63. Thomas Mukituk, *et al.*, "History of Cape Espenberg Herd of Reindeer," July 18, 1929, Nulugokluk, Box 47, Records of the Alaska Reindeer Service, Box 47, RG 75, FARC, Seattle; Marking and Counting Report, April 4, 1934, *Ibid.*; Corral Report, August 10, 1932, *Ibid.* There is some question as to the exact location of the camp and corral. The 1929 history indicates that the corral was located on the Nunagayok River; the 1934 report mentioned Envinuk. Neither name is listed in U.S. Department of the Interior, U.S. Geological Survey, Dictionary of Alaska Place Names, by Donald J. Orth, U.S. Geological Survey Professional Paper 567 (Washington, D.C.: Government Printing Office, 1967). It is likely, however, that the corral was located on the Nugnugaluktuk River. Remains of a corral were mapped by the Bering Land Bridge Archeological Survey Team in summer 1986. Information was received too late to be included in this report, but will be described in a companion volume by Jeanne Shaaf.

Illustration 6.

Reindeer Corral, Goodhope River, NPS Photo by staff, Bering
Land Bridge National Preserve, 1986.



Illustration 7.

Cabin, Goodhope River Reindeer Corral, NPS photo by staff,
Bering Land Bridge National Preserve, 1986.



built by Charley Goodhope somewhere near the mouth of the Goodhope River.⁶⁴

The company maintained a spruce-tree corral on Teresa Creek, just east of present-day Bering Land Bridge National Preserve.⁶⁵ Because of the location, the corral deteriorated rapidly, requiring the expenditure of additional funds each year. In spring 1938 the decision was made to construct an additional corral on the Goodhope River.⁶⁶ Material was ordered on May 28 of that year, but work did not begin until 1939. Although the corral was used in that year, the facility was not completed until 1940. In that year a messhall for herders was also

64. Entry for March 30, 1924, Diary of Alfred Karman, Reindeer Stock Company Papers, Rasmussen Library, University of Alaska-Fairbanks; Harry Karman, Description of Deering Reindeer Range [After March 1, 1928], Grazing Permits and Range Description, 1927-42, Deering Reindeer Company, Box 38, Alaska Reindeer Service, RG 75, FARC, Seattle; Ben B. Mozee to C.D. Mayer, October 21, 1929. Among the other cabins owned by the Deering company were ones near the head of Gold Run, near a tributary on the west side of First Chance Creek, at the mouth of Knowles Creek (purchased from Ahwinona), on Holtz Creek, on Teresa Creek, and a cabin built west of Sullivan Lake for use during fawning season. Such specific locations as those listed for the Deering Company are unique. Most often there are only indications that cabins existed. Fred Goodhope, for example, indicated that two cabins constructed by Teller unit still existed on his range in 1956. That only leaves some 1,000,000 acres in which to search. In an effort to encourage constant herding, moreover, the Reindeer Service introduced cabins on skids that could be moved around with the deer. Application for loan of Reindeer-Fred Goodhope, March 13, 1956, Reel 3, Reindeer Program Records, Rasmussen Library, University of Alaska-Fairbanks; J. Sidney Rood to Unit Managers, Teachers, and Reindeer Owners, May 10, 1945, Natural Resources Branch, Division of Trust Services, Bureau of Indian Affairs, Juneau.

65. Karman, Description of Deering Reindeer Range; Annual Report, Deering Reindeer Company, April 1931, Herd Reports, 1931, Folder 1, Box 14, Mozee Papers, Rasmussen Library, University of Alaska-Fairbanks.

66. Records regarding ownership of the Goodhope River Corral are confusing and inconclusive. Some indicate Deering Reindeer Company owned the facility; others that Teller Association was the owner. Description of the corral built at this date is unavailable.

constructed. The Goodhope River Corral was apparently in continuous use until the latter part of the 1970s.⁶⁷

In 1928 Shishmaref Reindeer Association constructed a corral twenty-five miles northeast along the coast from the Village of Shishmaref (Illustration 8). Apparently constructed primarily of driftwood, the corral was in a state of disrepair only four years later. At that time, it was disassembled, transported by skin boat, and reconstructed at the mouth of the Serpentine River, where it was used until 1940. It is one of the few outlying facilities used by the Native reindeer associations for which we have a clear location and description. For most we have only a vague location and description. Some of the facilities were clearly temporary-- such as the corral built of ice blocks by C.L. Andrews in 1926. Elsewhere we do know that the Cape Reindeer Company maintained a "substantial corral and holding pasture at Lopp Lagoon," Alloceok had his corral on the Arctic River, Upper Igloo Association built a brush corral on the Noxapaga River just before a general round-up conducted by five Seward Peninsula units in 1932, and Lower Igloo Association maintained a corral at Salt Lake.⁶⁸

67. J. Sidney Rood to Shirlie Forrester, May 28, 1938, Fdr:156.2, Correspondence, Box 7, Records of the Alaska Reindeer Service, FARC, Seattle; Minutes of Shishmaref Reindeer Convention, Teller Reindeer Association, April 13, 1939, Reel 7, Reindeer Comapny Program Papers, Rasmussen Library, University of Alaska-Fairbanks; Cost in Shares of Operation--Teller Unit Herds for year endng April 1, 1939, Ibid.; J. Glen Briggs to J. Sidney Rood, June 3, 1940, Ibid.

68. V.P. Dickinson to General Reindeer Superintendent, February 25, 1929, Folder 52, Box 7, Mozee Papers; Items of Interest Regarding this Part of Alaska, November 26, 1926, Seward Peninsula District, School Files, RG 75, Microfilm in Alaska State Library, Juneau; Annual Report of Teller Unit, July 1, 1933-July 1, 1934, Reel 7, Reindeer Program Papers, Reel 7, Rasmussen Library, University of Alaska-Fairbanks; Ben B. Mozee Papers, Ibid. The 1932 Shishmaref Corral could hold 4,000 deer in one large and two small pockets. A new corral was constructed on the Serpentine River in 1938-1940. It was part of a larger program that included construction of the Goodhope River corral, warehouse and range cabin at Wales, warehouse at Teller, range cabin and warehouse at Shishmaref, and range cabins and warehouse at Deering. J. Sidney Rood to Shirlie Forrester, May 28, 1938, Fdr:156.2, Correspondence, Box 7, Alaska Reindeer Service, RG 75, FARC, Seattle.

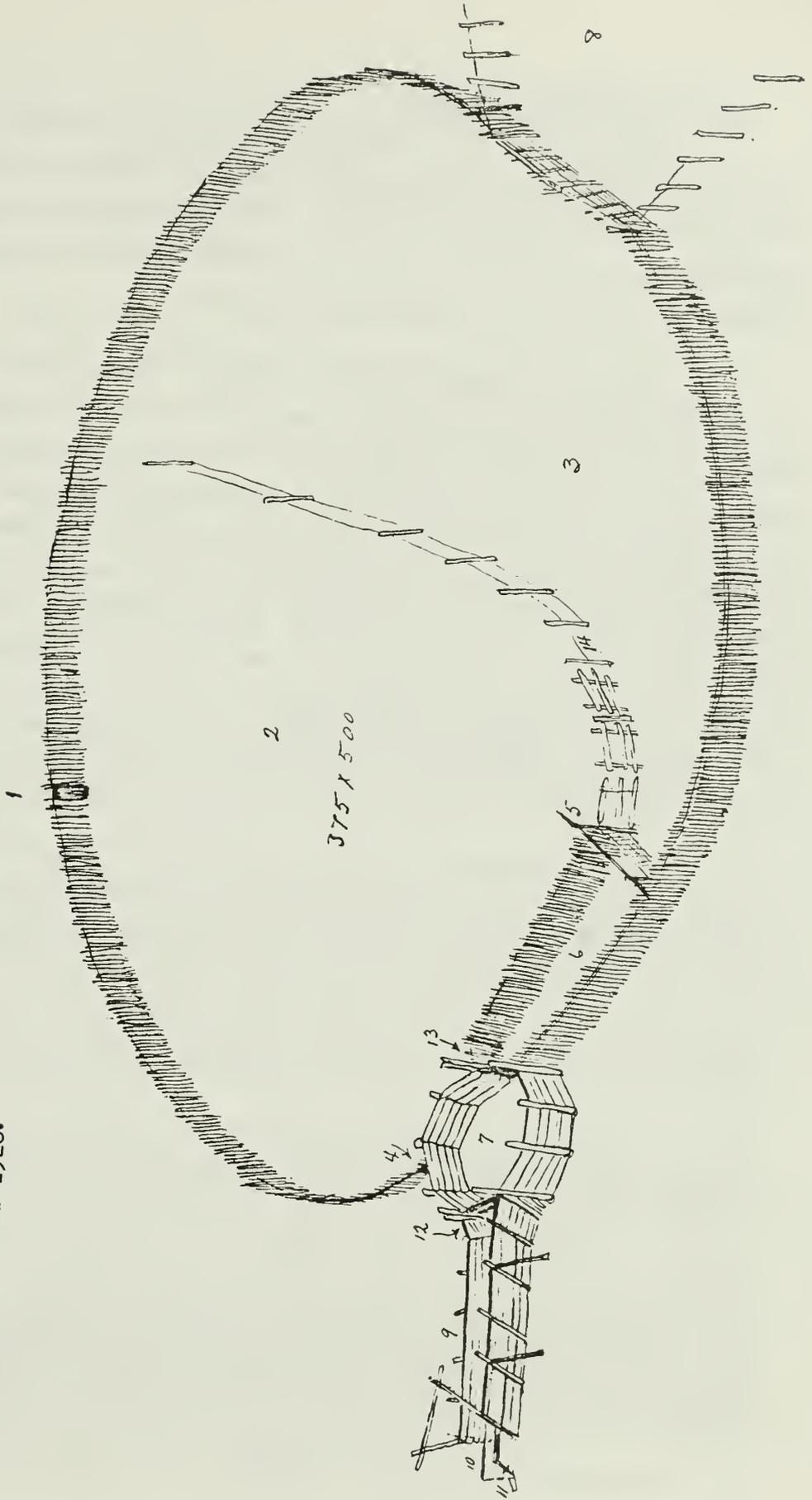
Illustration 8.

Shishmaref Corral, 1928. Ben B. Mozee Papers, Alaska and Polar Regions Department, Rasmussen Library, University of Alaska-Fairbanks.

Shishmaref Corral

Located about 25 miles northeast of the village of Shishmaref, on the coast.

Constructed summer of 1928.



D. Non-Native Ownership

Establishment of cooperative management during the 1920s addressed, but did not necessarily solve, a number of the problems facing the Native reindeer industry. What the policy did not address, however, was a continued irritant to reindeer service administrators and Natives alike--non-Native ownership of reindeer.

Although Sheldon Jackson brought reindeer to Alaska for the expressed purpose of providing a new resource base to the Natives, the first private owner was non-Native--the Congregational mission at Wales. After 1898, moreover, Lapp herders had received reindeer rather than cash for their services and, after their contracts had expired in 1901, had begun to build herds. Frank Churchill had argued strongly against non-Native ownership and the rules adopted following his investigation had prohibited it. Nevertheless, large scale non-Native ownership of reindeer as a commercial venture began in 1914, when the Lomen family of Nome purchased 1,200 deer from Alfred and John Nilima, Lapp herders in the Kotzebue area.⁶⁹

The Lomen family arrived in Nome in 1900 when Carl and his father (Gudbrand), a lawyer of Norwegian ancestry, visited the booming mining camp on a summer vacation. Arriving in an atmosphere clouded by quarrels over conflicting claims the elder Lomen's vacation quickly turned into a day and night effort to sort things out. The two stayed in Nome and in 1903 the rest of their numerous family came to join them.⁷⁰

The Lomens quickly became one of the most respected families in the growing city of Nome. Gudbrand would become the Federal

69. Instruction Book for Managers, February 1931, Folder 158, Box 38, Lomen Family Papers, Rasmussen Library, University of Alaska-Fairbanks. Jafet Lindsberg, a former client of the elder Lomen's and one of the most successful miners in Nome, joined in the enterprise known as Lomen and Company.

70. From Lomen, Fifty Years, in Alaska.

District Court judge for the Second Judicial District and the family's business would grow to include a photo studio and drugstore in Nome. Carl's friendship with Walter Shields, one of the most respected of reindeer supervisors, played no little role in the family's decision to invest in the reindeer industry.⁷¹

Walter Shields might welcome non-Native investment in the reindeer industry but others certainly had their reservations, pointing out that reindeer had been imported for the benefit of the Natives. Commissioner of Education R.P. Claxton wrote that the 1915 sale of 319 reindeer by the Norwegian Evangelical (Lutheran) Mission at Teller to the Lomens is in "direct violation of the spirit and letter of the contract entered into October 20, 1909." Claxton declared the action "null and void" and demanded that the reindeer be taken back. Should the mission refuse, he concluded,

Such action on the part of the Synod for the Norwegian Evangelical Lutheran Church will obviate the necessity of legal action through proper Departmental channels to enforce compliance with the terms of the contract, which is still binding and in force.⁷²

Commissioner Claxton's threats proved to be of little avail, however. The deer were not returned and the same was true for the 100

71. Hunt, Arctic Passage, pp. 216-17; Lomen, Fifty Years in Alaska, p. 73.

72. R.P. Claxton to Rev. V. Koren, October 11, 1916, Sales, Teller Mission-Lomen, Box 45, Records of the Alaska Reindeer Service, RG, FARC, Seattle. When Roy Nash, who investigated the reindeer industry in the 1930s wrote his report, he entitled the section regarding sale of the Teller Mission herd "Lutheran Treason," calling it "not only avarice, double-dealing, chicanery, but treason to a sacred trust." Report adverse to the Lomen Corporation, January 11, 1934, File 9-1-33, Alaska-Game-Reindeer-Investigations, Classified Files, Records of the Office of Territories and Island Possessions, Record group 126, N.A. In 1921, however, U.S. Attorney Fred Harrison wrote that the government would not be able to prove that it had property rights in the deer at Teller. Stern, et al., Eskimos, Reindeer and Land, p. 40.

purchased from the Swedish Mission at Golovin the year before. In 1917 the Lomens bought 1,717 deer from Andrew Bahr, John Nilima, and M.I.K. Nilluka; bought out Nils Klementzen and Ole Bahr at Egavik in 1918 (2,032 animals); added 819 from Peter Bals and others at Egavik in 1919; and 1,060 from Peter and Isaac Hatta at Buckland in 1921. By that time they had purchased nearly 8,700 deer that would become the basis for herds at Buckland, Egavik, Kotzebue, and Teller. Continuing to purchase from missions and other non-Natives, the total would reach 14,083 by 1929.⁷³

Additionally, the family would purchase a cold-storage plant at Nome, and construct others at Egavik, Elephant Point, and Golovin; establish stores at Teller, Egavik, Baldwin, and Candle; operate lighterage and towing operations at Nome, Teller, and Golovin; and own and operate four coastal vessels--Silver Wave, Donaldson, Sierra, and Arthur J. Baldwin.⁷⁴

The Lomens certainly brought a wealth of energy to the reindeer industry and worked hard to make a success of their reindeer operations. Carl, who earned the title "reindeer king," was a whirlwind

73. Instruction Book for Managers, February 1931, Folder 158, Box 38, Lomen Family Papers, Rasmussen Library, University of Alaska-Fairbanks; Stern, et al., Eskimos, Reindeer and Land, p. 40. Additionally the family would, by 1931, own a herd on Nunivak Island.

74. Instruction Book for Managers, February 1, 1931, Folder 558, Box 38, Lomen Papers, Rasmussen Library, University of Alaska-Fairbanks; N. Lester Troast, Appraisal, Cold Storage Plants, Abattoirs, Chilling Houses, Corrals, Range Equipment, Fixed Equipment & Machinery of Northwestern Livestock, Corporation at Baldwin, Egavik, Golovin, Teller, January 17, 1935, File 9-1-33, Reindeer-Administration, Central Classified Files, 1907-1951, Records of the Office of Territories, RG 126, N.A. The appraisals give an interesting description of the range cabins used by Lomen operatives. Some at Teller (California Creek, Agiapuk River, American River, Swanson Creek, for example), were of single wall construction with tar paper or corrugated iron roofs. The exterior walls of several were covered with malthoid paper. Others were igloos constructed of sod over a frame of logs or drift wood and had a skylight of seal or bear intestines.

of activity as he sought to create a market for reindeer in the cities on the "outside." He gave speeches, wrote articles, even dressed an actor to appear as Santa Claus, complete with an Eskimo driver and six reindeer.⁷⁵ He had some success--despite considerable opposition from cattle interests.⁷⁶ The sale of carcasses grew from 624 in 1918 to more than 14,000 in 1930. In that year Carl Lomen proudly wrote that 579 Natives and 70 whites on the Lomen companies' payroll earned a total of \$219,000.⁷⁷

Nonetheless, in spite of the appearance of success, hard work and enthusiasm were not enough. It may well be, as Dean Olson has suggested, that the Lomen reindeer enterprise was destined for failure. The only activities associated with the reindeer industry that would ever produce a steady income for them were those limited to freighting and

75. See, for example, Carl Lomen to Miss W. Ferguson, March 3, 1932, Correspondence, January-May 1932, Box 11, Lomen Papers, Rasmussen Library, University of Alaska-Fairbanks; Webb, "Seward Peninsula-Kotzebue Sound," p. 84. While Carl gave speeches, his wife often conducted cooking demonstrations.

76. The Great Northern, North Pacific, and Milwaukee railroads agreed to serve reindeer in their dining cars. What seemed to be a significant breakthrough came abruptly to an end, however, when the cattle industry representatives issued an ultimatum that no beef would be sold to any railroad that sold reindeer. Souvenir menus describing reindeer dishes were destroyed and reindeer meat withdrawn. Vilhjalmur Stefansson to Carl Lomen, March 26, 1940, quoted in James and Catherine Brickley, "Reindeer, Cattle of the Arctic," Alaska Journal 5 (Winter 1975), p. 19; 50 Years in Alaska, p. 213. An interesting, but little known side affect of Lomen's publicity campaign was the growth, albeit short-lived, of interest in the possible use of reindeer elsewhere in the country. See, for example, "Report of the Examination of the Norwegian Reindeer Shipped to the United States for the State of Michigan," March 28, 1922, Box 41, General Correspondence, 1890-1940, Bureau of Biological Survey, Records of the U.S. Fish and Wildlife Service, RG 22, N.A.; E.A. Goldman [Nebraska] to Roy Keep, August 10, 1936, Ibid.; W.H. Jackson to H.E. Hughes [Laytonville, California], July 30, 1936, Ibid.; W.B. Bell to W.H. Wooley, March 26, 1931, Ibid.

77. Stern, et al., Eskimos, Reindeer and Land, p. 42; Carl J. Lomen to Ernest W. Sawyer, May 9, 1930, Lomen Reindeer Co., (1930-Previous), Reindeer, 1920-1930, L-R, Files of E.W. Sawyer, Records of the Office of the Secretary of the Interior, RG 48, N.A.

lighterage. Try as he might, Carl Lomen was never able to secure adequate funding to overcome the very real problems facing the reindeer industry.⁷⁸ From the beginning, the Lomens had sought to build outside markets, while leaving the local one to Native reindeer owners. For a brief time, this helped to calm fears that they posed a threat to Native owners. As the number of reindeer grew, and as local markets shrunk with the decline of mining on the Seward Peninsula, it became clear that the Lomens had achieved a vertical integration of the reindeer industry by controlling the supply, storage, and distribution of reindeer products. Whatever their motives and there is no reason to suspect they had acted with malicious intent, the resulting monopoly of commercial slaughtering facilities, lighterage, and ocean freighting services had been achieved at the expense of Native reindeer herdsman.⁷⁹

The situation was one which would have, even in the best of times, been difficult; in the economic climate of the 1930s it proved intolerable. The Lomens found themselves the target of a protest movement that extended far beyond the borders of the Seward Peninsula.⁸⁰

Harking back to an earlier day of open range warfare in the American West, Native herdsman and their supporters charged the Lomens with taking range lands which belonged to Native herdsman; unfair range

78. The efforts by the Lomen family to build a successful reindeer business are far too complex to be treated here. See Olson, Eskimo Reindeer Herdsmen, pp. 45-49, and Stern, et al., Eskimos, Reindeer and Land, pp. 60-69.

79. Olson, Alaska Reindeer Herdsmen, pp. 46-49; Stern, et al., Eskimos, Reindeer and Land, p. 43.

80. See, for example, Laura Lomen to L.P. Town, [editor, Women and Mission], April 15, 1932, File 6, Box 2, Mozee Collection, Rasmussen Library, University of Alaska-Fairbanks; Dr. Ryan, "The Alaska Reindeer Industry," June 7, 1933, Reindeer, part 2, 9-1-33, Central Classified Filed, Records of the Office of Territories, RG 126, N.A.; Harold Ickes to J.N. Steene, December 9, 1934, Ibid.; E.B. O'Connor to Louis R. Glass, February 9, 1934, Reindeer, part 3, Ibid.

practices, which sometimes amounted to rustling; and encroaching on an enterprise established solely for the benefit of the Natives of Northwest Alaska.⁸¹ It was, it must be said, a controversy which often reflected little credit on either side. But the protestors were effective. Virtually every year for ten years federal investigators traveled to Northwest Alaska to study the reindeer industry.⁸² On September 2, 1937, President Franklin D. Roosevelt brought years of controversy to an end when he signed a bill authorizing the Secretary of the Interior to extinguish all non-Native interest in the reindeer industry.⁸³

E. Return to Private Ownership, 1940-Present

With the purchase of non-Native reindeer in 1940, the industry moved into a new phase, one which lasts through the present--the return to private ownership. Controversy regarding non-Native ownership drew attention away, generally, from another important development--the failure

81. Robert Otilituk, et al., to Secretary of the Interior, April 10, 1932, Game, Administrative, part 2, 9-1-33, Central Classified Files, 1917-1950, Records of the Office of Territories, RG 126, N.A.; Fred Toppok, et al., to Dan Sutherland, April 11, 1930, Reindeer 1929-30, S-W, Files of E.W. Sawyer, Records of the Office of the Secretary of the Interior, RG 48, N.A.; Stern, et al., Eskimos, Reindeer and Land, pp. 53-54.

82. Lomen, Fifty Years in Alaska; Stern, et al., Eskimos, Reindeer and Land, pp. 53-69. The reports filed by the investigators are located in RG 126, National Archives.

83. U.S. Department of the Interior, Press Release, September 2, 1937, Part 5, File 9-1-33, Central Classified Files, 1907-50, Records of the Office of Territories, RG 126, N.A. Congress authorized \$2,000,000 for the purchase. Three years later, however, when it finally appropriated funds, only \$720,000 was made available. The Lomens, who claimed to have invested \$2,500,000, had to share this amount with more than fifty other non-Native owners. Carl Lomen to B.W. Denison, June 10, 1943, Correspondence, 1943, Box 13, Lomen Papers, Rasmussen Library, University of Alaska-Fairbanks; Lomen, Fifty Years in Alaska, p. 287. Webb, "Seward Peninsula-Kotzebue Sound," p. 88; Stern, et al., Eskimos, Reindeer and Land, pp. 53-69. An interesting postscript to the controversy which brought the end to non-Native ownership of reindeer came in 1962 when Horace Albright wrote Carl Lomen: "I have often cited the treatment you received as one of the most brutal interferences with and confiscation of private property by government that ever happened." Horace Albright to Carl Lomen, July 20, 1962, H.M. Albright, Box 8, Lomen Papers, Rasmussen Library, University of Alaska-Fairbanks.

of the Native stock companies that had been instituted in the 1920s to meet problems facing the reindeer industry. Because herders were paid in shares or animals by the companies, the falling meat prices during the 1930s made it difficult to get herders, and owners themselves too often showed little inclination to take on the duties. As a result, the companies, with few exceptions, gave up constant herding. As the reindeer herds roamed unattended, they overgrazed and became more susceptible to disease and weather; fell prey to a rapidly increasing wolf population; and in the area north and east of Kotzebue, strayed into caribou herds. Although the company records, based as they were upon estimates rather than corral counts, showed increases in the number of deer, the actual number had dropped so precipitously, that J. Sidney Rood, General Reindeer Supervisor, described them as "snowballs, melting in the sun." From 1931-41 the number of deer in Alaska dropped from 600,000 to 205,000, to a low of only 25,000 in 1954. In 1944, when owners elected to return to individual ownership at Deering, they could find less than a tenth of their recorded herds. Three years earlier, Shishmaref herders reportedly had been unable to find even a single deer on their range.⁸⁴

In May 1945, J. Sidney Rood, general reindeer supervisor, made a thorough analysis of the struggling reindeer industry. In that analysis, he observed that "it had become apparent to me that the reindeer associations would not undertake efficient herd and pasture management. The defects were fatal." For the future, he concluded, the reindeer service, administered since 1937 by the Bureau of Indian

84. J. Sidney Rood to Unit Managers, Teachers, and Reindeer Owners, May 10, 1945, Natural Resources Branch, Division of Trust Services, Bureau of Indian Affairs, Juneau; Ningeulook, "Shishmaref, Alaska," p. 24; Webb, "Seward Peninsula-Kotzebue Sound," pp. 88-89; Olson, Alaska Reindeer Herdsmen, pp. 57-61; Reindeer in Alaska, September 3, 1941, Fdr:History-General, Box 33, Records of the Alaska Reindeer Service, FARC, Seattle; Kathleen McCoy, "The Life of a Reindeer Herder: Winter Corraling at West Camp," We Alaskans (Anchorage Daily News Magazine), February 9, 1986; Stern, et al., Eskimos, Reindeer and Land, pp. 77-78, 102-103. Stern indicates that the number of reindeer on the Seward Peninsula in 1951 was only 6,570.

Affairs, would return to the policy established by Sheldon Jackson in 1892 and would strive to create a

reindeer industry which is similar to Lapland's, namely individual enterprisers and their partner herders, maintaining vigilant custody of such breeding stock as they can manage, grazing their stock within natural grazing units. The number of deer they will attempt to manage with a single herding crew will be 3,000 or less, because they will find the law of diminishing returns operative as they attempt handling. . . . This will cause some to fail, others to thrive. Competition between herding crews will exist. We must create a class of stockmen.⁸⁵

In order to carry out the new policy, the Bureau of Indian Affairs initiated a payment in kind program similar to that employed earlier. The government would loan deer from its herds to individuals. After a period of years, the same number of animals would be returned, with the increase belonging to the herder. By 1948, among the individuals who owned herds in varying stages of development toward private ownership were Fred Topkok at Teller (650 animals), Mickey Thomas at Kilwalik (650), and Sigfried Aukongak at Golovin (1,152).⁸⁶

By 1968, eleven individuals owned a total of 16,871 reindeer.⁸⁷ All private herds in Alaska were now located on the Seward Peninsula, or

85. J. Sidney Rood to Unit Managers, Teachers, and Reindeer Owners, May 10, 1945.

86. Olson, Alaska Reindeer Herdsmen, p. 70; Stern, Eskimos, Reindeer and Land, pp. 82-84. The government also loaned equipment to herders. When Fred Goodhope and Howard Dimmick established a herd at Cape Espenberg in 1958, for example, they received materials for building a corral that included wire, other building material, and tools. It was made clear, however, that "the tent, tools and even the corral remain US Government property. But it is expected that as long as you are using and taking care of it is yours to use." Vern C. Hirsch to Fred Goodhope and Howard Dimmick, August 7, 1958, Reel 3, Reindeer Program Records, Rasmussen Library, University of Alaska-Fairbanks.

87. Olson, Alaska Reindeer Herdsmen, p. 73; Stern, et al., Eskimos, Reindeer and Land, pp. 88-89. The total number of deer excludes 10,843 animals in the government herds at Nunivak Island and Nome, and community herd at St. Lawrence and Stebbins.

in close geographical proximity, and several were centered in what is now Bering Land Bridge National Preserve. Fred Goodhope, who worked as a stock company herder in the 1920s, maintained a herd of 2,086 deer on Cape Espenberg.⁸⁸ Goodhope and Howard Dimmick had constructed a 190-foot diameter corral (Historical Base Map no. 19) in 1959. There is some evidence to suggest that it was located in the general vicinity of the old Nuglinuktuk Reindeer Company corral.⁸⁹ At the same time Alfred Karman and James Moto, Jr., maintained a herd of 1,914 animals on the north central part of the Seward Peninsula. Karman maintained the old Goodhope River corral until the latter part of the 1970s, when he constructed a new camp eleven miles up the Immachuk River from

88. *Ibid.*; Application for loan of Reindeer--Fred Goodhope, March 13, 1956, Reel 3, Reindeer Program Records, Rasmussen Library, University of Alaska-Fairbanks; Agreement to reimburse for Reindeer, November 24, 1958, *Ibid.*; Vern C. Hirsch to Fred Goodhope and Howard Dimmick, August 7, 1958, *Ibid.* Goodhope and Howard Dimmick had formed the Cape Espenberg herd in 1958 with a loan of 1,572 animals received in loan from the government herds at Escholtz Bay and Buckland. The two dissolved their partnership in 1961 and Dimmick took 550 deer to Koyuk. He apparently returned to Cape Espenberg, but quit the reindeer business in 1963.

89. Alaska Native Allotment Applications and Evidence of Occupation--Fred Goodhope, January 31, 1961, Bureau of Land Management, Fairbanks; Vern C. Hirsch to Fred Goodhope and Howard Dimmick, August 7, 1958, Reel 3, Reindeer Program Papers, Rasmussen Library, University of Alaska-Fairbanks. Built with material supplied by the government, the corral was patterned after the Goodhope River corral and valued at \$2,000 in 1961. Other structures at Goodhope's Cape Espenberg complex in 1961 were a two-room house measuring sixteen by twenty-eight feet constructed in 1954 and valued at \$1,500; two caches, measuring six feet square, built in 1954 and valued at \$500; one screen meathouse also measuring six feet square, built in 1960 and valued at \$1,000. Goodhope grazed deer approximately twenty-five miles southeast of Shishmaref on the Serpentine River. In 1973, he completed a house (Historical Base Map no. 20) that he indicated would be used for reindeer headquarters. In 1985, steps were taken, moreover, to construct a new corral in section 31, T13N, R29W, Field Report--Fred Goodhope, May 3, 1977, Native Allotment Files, Bureau of Land Management, Fairbanks; "Archeological Inventory, Reindeer Corral Site, Bering Land Bridge National Preserve," by S. Neal Crozier, 1985.

Deering.⁹⁰ The western boundary of Charlie Clark's range ran from the southeastern shore of Imuruk Lake north along Fairhaven Ditch.⁹¹

There are, at the present, some 24,000 domesticated reindeer in Alaska. Of these, approximately 17,000 are found in twelve herds on the Seward Peninsula. Nearly 10,000 deer in six herds--Goodhope (Shishmaref), Karman (Deering), NANA Regional Corporation (Kotzebue), Ongtawasruk (Wales), Tocktoo (Brevig Mission), and Weyiounna (Shishmaref)--operate within or adjacent to Bering Land Bridge National Preserve.⁹²

Unlike most stockmen in the "Lower 48," Native reindeer herdsmen are engaged in a variety of activities. Traditional subsistence activities, lack of sufficient income from reindeer herding, and the nature of the land itself combine to make reindeer herding on the Seward Peninsula a part-time occupation. Only one owner, according to Richard

90. Reindeer Grazing Permits--Alfred Karman, 1974, Northwest Resource Office, Bureau of Land Management, Fairbanks; Reindeer Grazing Report--Alfred Karman, January 4, 1978, Ibid.; Range Application and Grazing Permits--Alfred Karman, August 31, 1977, Ibid.; Reindeer Grazing Permit-Environmental Assessment--Alfred Karman, January 19, 1979, Ibid. In 1964, Karman indicated he would construct two frame cabins, one 12x16 feet, the other 10x12 feet, on his range. The application does not indicate the location of these cabins, one may have been the "little house on ridge" mentioned in a 1967 grazing report. Grazing Lease and Permit Application--Alfred Karman, July 19, 1965, Ibid.; Reindeer Grazing Report, January-December 1967--Karman, Northwest Resource Office, Bureau of Land Management, Fairbanks.

91. Stern, et al., Eskimos, Reindeer and Land, pp. 88-89; Grazing Permit--NANA, January 6, 1976, Box 26, Alaska Task Force Files, Records of the National Park Service, RG 79, FARC, Seattle.

92. U.S. Department of the Interior, National Park Service, Draft General Management Plan/Environmental Assessment, Land Protection Plan, Wilderness Suitability Review (Denver: National Park Service, 1985), pp. 60-63. The number of reindeer on the Seward Peninsula has dropped nearly 3,000 since 1980. The major reason, apparently, has been straying into the caribou herds that have been slowly moving further westward onto the Peninsula. Section 201(2) of the Alaska National Interest Lands Conservation Act of 1980 provides that continued reindeer grazing, including necessary facilities and equipment.

Illustration 9.

Cape Espenberg Reindeer Corral Complex. NPS photo by Bering Land Bridge Archeological Survey Team, 1986.



Stern, herds his reindeer on a year-round basis. The rest spend varying amounts of time with their herds. Generally, however, during the winter months, from October until May, when snow cover makes for easier travel, herds are monitored more or less continuously. Calving, or fawning time--from April to as late as mid-June--is the most critical time of the year for herders, when the presence of predators makes continuous herding a necessity, even when it conflicts with important spring subsistence activities. During the summer months, the wet, hummocky land renders constant herding well-nigh impossible, and the herds are generally left to roam free and unattended. Most herds are handled, or corralled, twice a year. In March the deer are counted, unmarked deer marked, and nonbreeding bulls castrated. In late June or early July, when antlers are in velvet, the deer are corralled to remove the antlers for sale to oriental medicinal markets. Slaughtering, which is a festive occasion involving the herder, his entire family, and much of his village, occurs in the winter months, generally from November to February.⁹³

Sheldon Jackson reflected the dominate educational and social philosophy of his time--that in this great "melting pot" of a nation all vestiges of the cultures of the diverse nationalities were to be destroyed to assimilate the Anglo-Saxon Protestant ideal. The introduction of domesticated reindeer was unique in the long effort to force Native Americans into that scheme.

By itself, however, reindeer herding as an agent of social change was a failure in the long run. As Dean Olson has pointed out: "Reindeer ownership has not basically altered Eskimo society, but instead

93. Information on herding is from Olson, Alaska Reindeer Herdsmen, and Stern, et al., Eskimos, Reindeer and Land. For an interesting description of winter slaughtering, see also, McCoy, "The Life of a Reindeer Herder." Given the nature of the reindeer's hair and skin, branding is not a possible way of marking the deer. Rather, they are marked by specific notches cut in the ears.

has been fitted to it."⁹⁴ It was, however, the interconnection of reindeer herding, education, and religion that impacted Native society at the turn of this century. The schools, missions, and reindeer herding together undermined traditional village life and subsistence cycles--Katherine Koutsky indicates, for example, that residents abandoned the village of Ikpik to move to Shishmaref and Brevig Mission so their children could attend school.⁹⁵

All three influences--of-times embodied in a single individual--fought to destroy vestiges of Native culture. Although social traditions, language, and Native leadership all experienced profound change, they did not succeed. But, while traditional subsistence lifestyle was by no means destroyed, Natives on the Seward Peninsula certainly faced new choices as they entered into the twentieth century.

F. Sites Related to Native Reindeer Herding

A number of sites in Bering Land Bridge National Preserve clearly relate to Native reindeer herding. The records are rarely site-specific. It is, as a result, most often difficult to connect a site with a specific individual, event, or period. It is quite possible, even likely, moreover, that sites identified were used by different people over a relatively long period of time. Because of the nature of the records, this list should not be considered to be necessarily inclusive.

1. Ullugsaum (Historical Base Map No. 12). Identified by Katheryn Koutsky as a winter reindeer herders' camp, this site may have been established by the men who first brought a herd to Cape Espenberg after 1905.⁹⁶

2. [Reindeer Herders Camp] (Historical Base Map No. 13). This site may have been a seasonal reindeer camp, occupied as early as

94. Olson, Alaska Reindeer Herdsmen, p. 139.

95. Koutsky, The Shishmaref Area, p. 20.

96. Ibid., p. 17.

1916, when Harry Karmen took his reindeer into the Imuruk Lake region. Remains include stove and stove pipe parts, utensils, a blue-green "everlasting" canning jar with a clamp-type lid reading "Aug. 22, 05," and a reindeer rack. The site lies within an area selected as a cemetery/historic site under ANCSA 14(h)(1).⁹⁷

3. [Reindeer Herders Camp] (Historical Base Map No. 14). Located on the west shore of Imuruk Lake, this site includes a possible remains of a reindeer herding camp and an undated component of six stone features. Among the historic scatter is a concentration of more than 35 rusted cans, scraps of a Peterborough, New Hampshire newspaper, broken bottles, metal bell, wire loop, three wooden stakes, and reindeer skulls with racks attached. The site may have been used as early as 1916 by Harry Karman.⁹⁸

4. [Reindeer Herders Camp] (Historical Base Map No. 15). Located on the east shore of North Devil Mountain Lake, this site consists of reindeer skulls scattered over a 30 by 40 meter area. There are, as well, wooden planks, pieces of a wooden crate, fuel cans, a rusted 55 gallon drum, a "chopping block" (a section of a tree trunk with deep, oblique cuts), and an unidentified wooden object 36 centimeters long with a cylindrical handle and cone-shaped end. The site may have been used by any number of Native herders who moved into the area after 1907.⁹⁹

97. Bering Land Bridge Archeological Site Survey, Ben-103, 1985. See also the companion volume by Jeanne Shaaf for a more complete description and map of the site and pp. 86-87 here for a description of Karman's activities.

98. Ibid., Ben-105.

99. Bering Land Bridge Archeological Site Survey KTZ-047. See companion volume for a more detailed description and site map and pp. 86-87, 90-99, 105-111 for history of Native reindeer activities after 1907.

5. Small sod structure and scatter of historic artifacts, Devil Mountain Lake (Historical Base Map No. 16). The sod walls are 30 centimeters high and have bases of five posts and one verticle plank set in walls. There is a small entry or storage room, 80 by 90 cm in interior size and a larger room, 2.4 x 2.0 meters.¹⁰⁰

6. [Reindeer Herders' Camp] (Historical Base Map No. 17). Located on the northeast shore of South Killeak Lake, the site includes remains of a tent support structure, reindeer antler and bone, bird bone fragments, two pipe tobacco tins, and blazo can lid. The ends of four wooden poles protruding from a vegetated mound may be the remains of a shelter. The site may have been used by Native reindeer herders after 1907.¹⁰¹

7. Goodhope River Reindeer Corral and associated structure (Historical Base Map No. 18). Located near the mouth of the Goodhope River, this reindeer corral complex consists of remains of corral and messhouse.

The corral and messhouse were built between 1938 and 1940, and a second cabin may have been constructed in 1965. The corral was used from 1939 until the mid- to late 1970s.¹⁰²

8. Espenberg Reindeer Corral Complex. (Historical Base Map No. 19). Located at the mouth of the Espenberg River, the reindeer corral complex consists of the corral, chute, and holding pen.

Fred Goodhope and Howard Dimmick built the present Espenberg corral in 1959, using the plan of the Goodhope River corral. A

100. Ibid., KTZ-048.

101. Ibid., KTZ-059.

102. For a description of construction and history of herding in the area see pp. 90-97.

two-room house (16' x 28') and two caches (6' x 6' each) were built in 1954, and a screened meathouse (6' x 6') was built in 1960.¹⁰³

9. Cabin-Reindeer headquarters (Historical Base Map No. 20). Located 25 miles southeast of Shishmaref on the Serpentine River, the cabin was constructed in 1973 by Fred Goodhope, who indicated that it would be used as a headquarters site for reindeer herding. The cabin is on Native allotment application land F-30127B.¹⁰⁴

10. Reindeer Corral and Fences (Historical Base Map No. 21). Located on the north bank of the Serpentine River, this reindeer corral is on Native allotment application land F-18775--Easu Weyiouanna.¹⁰⁵

11. Reindeer Herders Cabin - Kokeok allotment application. (Historical Base Map No. 22). Described on a native allotment application as a "reindeer herders cabin" this structure is a gable-roofed frame building near the Serpentine River.¹⁰⁶

12. Warehouse and corral (Historical Base Map No. 22). Located on the Espenberg River, the warehouse was constructed in 1945 and the corral in 1959. The site is located on Native allotment application F031720--Fannie Goodhope.¹⁰⁷

103. See pages 108-111.

104. Field Report--Fred Goodhope, May 3, 1977, Native Allotment Application Files, Bureau of Land Management, Fairbanks.

105. Field Report--Esau Weyiouanna, May 8, 1977, Native Allotment Application Files, Bureau of Land Management, Fairbanks.

106. Field Report--Benjamin Kokeok, File F18537, Native Allotment Application Files, Bureau of Land Management, Fairbanks.

107. Native Allotment Application Files, Evidence of Occupancy, F031720--Fannie Goodhope, Native Allotment Files, Bureau of Indian Affairs, Nome.

G. Sites Related to Missions/Schools

There were no schools or missions located within the boundaries of present-day Bering Land Bridge National Preserve. According to Katherine Koutsky, however, Ikpik (Historical Base Map No. 1) is the site a village abandoned so children could attend school in Shishmaref and Bering Mission.¹⁰⁸

H. Recommendation

1. Existing records contain no information regarding several sites that relate to reindeer herding (Reindeer Herder's Camps - Imuruk Lake, Reindeer Herder's Camp - North Devil Mountain Lake, and Reindeer Herder's Camp - South Killeak Lake). Others--Cape Espenberg Reindeer Corral Complex, Cabin - Reindeer headquarters, Reindeer corral and fences, warehouse and corral--are on Native allotment application land. No special treatment of these is recommended.

It is recommended that a thorough on-site investigation be made of the Goodhope River Corral and associated structures to determine integrity. If the site retains integrity the site should be nominated to the National Register of Historic Places because of its significance as representative of reindeer herding on the Seward Peninsula.

2. Ullugsaum, which has been identified by Katheryn Koutsky as a winter reindeer herders' camp, will be visited by NPS archeologists during the 1986 field season. A site description and recommendations for treatment will be included in their report.

3. Ikpik, a village abandoned in the twentieth century in favor of villages located near schools, will be visited by NPS archeologists in the 1986 field season. Site descriptions and recommendations for treatment will be included in the report.

108. Koutsky, The Shishmaref Area, p. 20.

4. The Alaska National Interest Lands Conservation Act of 1980 provides for continued reindeer herding in Bering Land Bridge National Preserve. Park visitors should be cautioned regarding use of cabins which may be owned or used by herders as well as proper behavior toward reindeer they might encounter while in the park.

CHAPTER FOUR: MINING ON THE SEWARD PENINSULA

A. The Nome Gold Rush

The outsiders who came to the Seward Peninsula after 1732 had a significant impact on the lives of the Native peoples there. However, few had come to stay. At the end of the nineteenth century only a handful of whites were resident there. That would soon change. The discovery of gold near Nome in 1898 would bring thousands upon thousands of fortune-seekers to the peninsula. The land and the people would never be the same. Mining would impact nearly every aspect of life on the peninsula, and the changes it brought are still being felt today.

Gold had been discovered on the Seward Peninsula as early as 1866 or 1867, when Daniel Libby of the Western Union Telegraph Expedition found strong evidence of the precious metal on a tributary of the Niukluk River.¹ In 1881 the Alaska Mining Company organized the first mining district in all of northern Alaska--the Fish River Mining District that included all of the Seward Peninsula--to exploit a silver find at Omilak Mountain in the Darby Mountain Range.²

1. T.H. Carlson, "The Discovery of Gold at Nome, Alaska," The Pacific Historical Review, 15 (September 1946), p. 260; Alfred H. Brooks, "The Development of Mining," in U.S. Department of the Interior, U.S. Geological Survey, Gold Placers of Parts of Seward Peninsula, Alaska, Including the Nome, Council, Kougarok, Port Clarence, and Good Hope Precincts, by Arthur H. Collier, et. al., USGS Bulletin 328 (Washington, D.C.: Government Printing Office, 1908), p. 13. Brooks indicated that Otto von Bendeleben actually found gold at that time.

2. Ore from Omilak Mountain, which had been found by a whaler-trader, William P. Gallagher, as a consequence of his trading with Natives at Golovnin Bay in 1879, assayed at \$6,000 to the ton in silver. There was no continuous vein of ore, however, and the difficulty of transporting ore to the coast--it was first floated down to Golovnin Bay in Native skin boats--the excessive cost of developing and mining, and the distance to San Francisco proved prohibitive, however. The Alaska Mining Company failed, and although successor companies tried in the 1890s, between 1906 and 1910, and again in 1922, the mine never proved (Continued)

The San Francisco Chronicle reported the discovery of silver at Omilak Mountain, and predicted that it was "only the beginning of vast discoveries which will soon be made in Alaska."³ Nevertheless, Daniel Libby had returned to California, seemingly little interested in returning to Alaska, and, although John Dexter, a former Alaska Mining Company employee remained in the area to prospect, the discoveries on the Seward Peninsula sparked little interest.⁴

A fabulous strike nearly 600 miles away in the Canadian Klondike soon changed all that. When news of George Carmack's and Slocum Jim Mason's discovery on Bonanza Creek filtered down the Yukon River to the outside, adventurers, prospectors, and dreamers from all over the world flocked to find their fortune in the north.⁵ In California Daniel Libby caught what the governor of Alaska called "klondicitis," and organized a group in San Francisco that included his brother-in-law, L.F. Melsing, A.P. Mordaunt, and H.L. Blake to pursue his thirty-year-old discovery on the Seward Peninsula. Using notes and a rough map that

2. (Cont.) profitable. Webb, "Seward Peninsula-Kotzebue Sound," pp. 94-95; U.S., Department of the Interior, Bureau of Land Management, Alaska's Northwest Region: A History, by James H. Ducker (Anchorage: Bureau of Land Management, 1985), p. 32. See also Dorothy Jean Ray, "The Omilak Mine," The Alaska Journal, 4 (Summer 1974), pp. 142-48. The Omilak Mine was the scene of one of the few violent encounters between Natives and white men in northern Alaska. During the winter of 1882 four miners who had stayed behind to take care of the mine killed two Eskimos in a quarrel.

3. San Francisco Chronicle, December 4, 1880. Quoted in Ray, Eskimos of Bering Strait, p. 201.

4. Dexter established a trading post at Cheenik (Golovin) and taught local Natives how to prospect. In 1897 one of those Eskimos, Tom Guarik or Quarik, discovered gold on Ophir Creek. Jafet Lindeberg to Frank Hess, n.d. In Brooks, "Development of Mining."

5. There were several routes to the Yukon gold fields. Thousands of men and women traveled through Saint Michael and up the Yukon River. That village suddenly became a metropolis as hotels, storehouses, bakeries, and mercantile establishments of all kinds sprang up to serve the needs of the would-be prospectors.

Libby had made earlier as well as the services of John Dexter's former guide, an Eskimo named Napauk, they prospected the Niukluk and Fish rivers in 1897, found gold, and staked claims on Melsing and Ophir Creeks in April 1898. On April 28 they, along with N.O. Hultberg, P.H. Anderson, J.S. Tornensis, and Dr. A.N. Kittilsen, organized the Discovery and Council City mining districts, and established Council City.⁶

News of any new discovery of gold generally has a way of traveling a considerable distance in the shortest possible time, even from the most isolated of places. When news of the Seward Peninsula strike reached Saint Michael, however, it failed to spark much enthusiasm among the thousands of disappointed and discouraged Klondikers there who could only think of home or of a way to get to the newly rumored bonanza to the north on the Kobuk River.⁷ Nevertheless, as many as 400 prospectors spent the summer and fall in the Golovnin Bay area, staking numerous claims on the Fish River and its tributaries. By the winter of 1898-99 several mining companies had been organized and the population of Council was 150. The equipment available to these first miners was crude, but by the end of summer of 1898, they were able to bring out gold with an estimated value of \$30,000 to \$100,000.⁸

6. Carlson, "Discovery of Gold at Nome, Alaska," pp. 260-61; Brooks, Blazing Alaska's Trails, p. 373. Hultberg and Anderson were missionaries at the Swedish Evangelical Mission at Cheenik, Tornensis a Lapp reindeer herder, and Kittilsen the government doctor for the reindeer herders.

7. As many as 1,500 miners streamed into Kotzebue Sound and on to the Kobuk in 1898. By fall the more than 800 would-be miners who remained had established thirty-two camps along the river. Most did little prospecting for gold, and that they did do proved unrewarding. By spring, when most left for home, their venture a failure, some 80 had lost their lives. Ducker, "Alaska's Northwest Region," p. 32; Webb, "Seward Peninsula-Kotzebue Sound," p. 96.

8. Brooks, "Development of Mining," p. 16; Ray, Eskimos of Bering Strait, p. 203. Brooks later placed the value of the 1898 effort at \$75,000. Blazing Alaska's Trails, p. 373.

In the summer, while hundreds of miners were streaming into the Kobuk, and others were staking claims in the Golovnin Bay area, some who had staked their claims there decided to try their luck west, along the Sinuk River. There are conflicting claims as to who actually discovered the gold north of present-day Nome that sparked the Seward Peninsula gold rush--the editors of the Nome Nugget in 1900 threw up their hands over the question, printing several different versions and leaving it up to "future historians to settle the dispute."⁹ All those future historians have by no means agreed either. Evidence suggests however, that it was one of the Cheenik missionaries, Reverend Nels Hultberg, who first discovered a prospect on Anvil Creek in August 1898. Hultberg made his discovery when a storm forced his party to seek safety in the Snake River while enroute to the Sinuk River. He had a disagreement with another of the party so did not reveal his discovery until they returned to Cheenik.

Too ill to return to the Snake River, Hultberg passed his information on to Jafet Lindberg, a former reindeer herder; Eric Lindblom, who had deserted from his whaling ship in Port Clarence that spring; and John Brynteson, a miner from Michigan who had come to the Seward Peninsula at the behest of the Cheenik missionaries. The "three lucky Swedes," as they became known, had formed a partnership at Council earlier that July. They traveled to pan and stake claims on the rich tributaries of the Snake River--Anvil, Glacier, Rock, and Dry Snow Gulch creeks. Although it was late in the year, they used heated water and two crude rockers to extract some \$1800 worth of coarse gold. Joined by other men from Golovnin Bay and Ophir Creek in October, they organized the Cape Nome Mining District with Dr. A.N. Kittleson as recorder. Using, and certainly abusing the power of attorney, no less than 7,000 acres of land were soon claimed by forty men.¹⁰

9. Nome Nugget, January 1, 1900. See also, Terrance Cole "Nome-City of the Golden Beaches," Alaska Geographic 11 (1984), p. 19.

10. Ducker, Alaska's Northwest Region, p. 33 (Ducker's conclusion is based upon information in Terrance Cole, "A History of the Nome Gold (Continued)

The navigation season had closed when the "three lucky Swedes" and their compatriots organized the Nome Mining District. Although the Seward Peninsula was effectively cut off from communication with the outside world, word soon reached St. Michael, swept up the Yukon River to Dawson City, and even reached the men on the Kobuk River. By the end of December 1898, 300 claims had been recorded and others located. Four months later that total had reached 1,200 and by July, Dr. Kittleson had recorded no less than 2,000 claims. In May the miners in Anvil City (soon to be renamed Nome) numbered 250. Less than six weeks later about 1,000 men were living in tents and a few driftwood cabins. After ships arriving from Kotzebue Sound, Golovnin Bay, St. Michael, Seattle, and San Francisco dropped off their passengers in July the population jumped to about 3,000. The Alaska Commercial Company, North American Transportation and Trading Company, Daffin Brothers, and Pioneer Mining Company erected frame buildings and a galvanized-iron warehouse from material transported from outside. On July 4 a post office was established, and two newspapers, the Nome News and Nome Weekly Gold Digger were in press.¹¹

10. (Cont.) Rush: "The Poor Man's Paradise," Ph.d. diss., University of Washington, 1983). See also, Jafet Lindberg to Frank Hess, n.d., in Brooks, "Development of Mining,"; U.S., Department of the Interior, U.S. Geological Survey, A Reconnaissance of the Cape Nome and Adjacent Gold Fields of Seward Peninsula, Alaska in 1900, by Alfred H. Brooks, et. al., USGS Special Publication (Washington, D.C.: Government Printing Office, 1901), pp. 25-26.

11. Carlson, "The Discovery of Gold at Nome, Alaska," pp. 271-78; Carlson, "The First Mining Season at Nome, Alaska-1899," Pacific Historical Review, 16 (May 1947), pp. 163-65; Brooks, "Development of Mining," pp. 19-20; Webb, "Seward Peninsula-Kotzebue Sound," pp. 97-99. Word reached St. Michael, according to a story repeated by Carlson, in the very best of the Wild West tradition:

At St. Michael there was a large circus tent that served as Tex Richard's saloon. One evening about the end of November the men were sitting around, playing cards, betting, and arguing. Suddenly the saloon became quiet. A young man, possibly twenty-four years old, swarthy and slender, walked up to the bar and carelessly threw a poke of gold on the disk. Asked who he was and where he came from, he gave his name as Jafet Lindeberg and said: "I come from Nome, and there you will find more of the same stuff."

The madcap rush of would-be millionaires, many of them disappointed and discouraged by their experiences in the Yukon and Kobuk, to the bleak and barren landscape of Cape Nome brought health and sanitation problems endemic to mining boom towns. Those problems were likely of little moment to all except those who were stricken by typhoid that summer, however. Of far greater significance to men who had risked so much to find their fortunes was the fact that when they arrived they found the land already staked "'sea-beach to skyline.'" Because so many of those claims had been made by power-of-attorney, moreover, less than fifty mines were being worked, the rest lying idle. It was an explosive situation, made worse when the new-comers demanded that all claims be restaked.¹²

Violence was averted only by the presence of the military and one of the most improbable discoveries of gold in history. John Hummel seemed an unlikely man to bring peace to a mining camp on the verge of civil war, but he did just that. An old Idaho prospector who was too sick to leave the beach for the claim, he discovered gold in the beach sands where men were living.¹³

It seemed too good to be true. Although some were reluctant to believe their good fortune, within a week it became widely known that

12. Carlson, "Discovery of Gold at Nome, Alaska," p. 278; Carlson, "The First Mining Season at Nome, Alaska," pp. 163-170; Brooks, "Development of Mining", pp. 19-22. For example, Jafet Lindberg located eight claims for himself and eleven for others and Eric Lindblom thirty claims for himself and thirty more by power of attorney. L.B. Shephard, United States commissioner at St. Michael was said to have obtained sixty claims and Captain E.S. Walker, who had command of the troops at Fort St. Michael reputedly had obtained forty. The Alaska Commercial and North American Transportation and Trading companies owned five hundred claims that extended fifty miles in every direction except toward the sea. It was said that they paid Lapps to stake claims at the rate of two dollars a claim.

13. Carlson, "The First Mining Season at Nome, Alaska," p. 170. Apparently soldiers who were digging a well on the beach found gold at the same time. Hummel was not prospecting on the beach, but resting in the sun when he found gold.

a person could earn from \$20 to \$80 a day on the beach using only the simplest of equipment.¹⁴ By August 1 some 400 men were mining the sands, and by the end of the month, with men having deserted the inland claims, 2,000 men were busy working the "golden sands of Nome."¹⁵ The sands were rich. Single pans sometimes yielded from \$10 to \$20. Miners often made as much as \$4,000-\$6,000 in six weeks' time, and one hole measuring twelve feet square by four feet deep yielded \$9,000 worth of gold.¹⁶

The riches of the "golden sands of Nome" captured the imagination of people around the world. Far more productive, in the long run, would be the creeks and gulches all over the Seward Peninsula. In the summer of 1899, however, the beaches gave up gold valued, by

14. All it took was a shovel and rocker, a device resembling a cradle that rocked the sand and water over the riffles or strips of board or cloth that caught the gold. A few enterprising inventors did a lively business selling devices, all guaranteed to increase the yield--a gold pan that hung on a pivot and turned by a crank to "complex aggregates of wheels, pumps, sieves, and belts, which required a 100-horsepower engine for their operation" were only two of the unusable pieces of equipment that soon littered the beaches. Brooks, "Development of Mining," p. 24.

15. The next summer the whole affair took on the aspects of a fairy tale when miners discovered that the streets of Nome as well as the beaches were quite literally paved with gold. "Nome's Streets Paved with Gold," Nome Daily News, July 18, 1900.

16. Carlson, "The first Mining Season at Nome, Alaska," pp. 171-73; Brooks, "Development of Mining," pp. 24-25. Lynn Smith, a prospector from Indiana wrote, somewhat unhappily, of the strike on the Nome beaches: "I must not forget to say that when I got to walking around town, I passed the military barracks and found my friend who had robbed me and caused me to go to Alaska. He was working on the woodpile until spring. Then in a boat with two weeks grub he left with instructions to keep moving, get out of the country. He did--just in time to get to Nome when the beach was struck and he made \$4000 in six weeks rocking on the beach. He was run out of the country right into money. Luck? Well, it is all luck if you get it without any effort on your part, but no matter how hard one tries you usually can't get it. It took me ten years to find this out." Herbert S. Heller, ed., Sourdough Sagas: The Journals, Memoirs, Tales, and Recollections of the Earliest Alaskan Gold Miners, 1833-1923 (Cleveland: World Publishing Co., 1967), p. 143.

best estimates, at \$1,023,000. Another \$1,500,000 came from the creeks, with Anvil Creek yielding \$940,000, another \$440,000 from Snow Gulch, and \$50-100,000 came from Ophir Creek.¹⁷

Return of the steamers to the south in the fall 1899 carrying the gold taken from the beaches and creeks around Nome and stories of the easy wealth to be had created a gold rush comparable to that of the Klondike even before the ice broke up in the spring. By July 1, 1900, some fifty vessels had discharged as many as 20,000 people and their freight on the beaches near Nome. The mining camp, which was still less than two years old, was now a booming metropolis of tents that stretched nearly five miles. It was a place where men from the U.S. Geological Survey reported they feared to walk unarmed. Unlike the Klondike, where the Chilkoot Pass tested the mettle of miners, anyone who could pay the cost of transportation could reach Nome. As a result, a good many people came who were unable to cope with the rigorous conditions of the region.¹⁸

B. Mining Outside Nome

Few of the twenty thousand or more people who descended on Cape Nome in 1900 could possibly work the beaches or claims along the

17. Carlson, "The First Mining Season at Nome, Alaska," p. 175; Brooks, "Development of Mining," p. 24; U.S. Department of the Interior, U.S. Geological Survey, Report on the Progress of Investigations of Mineral Resources of Alaska in 1909, by Alfred H. Brooks, et. al., USGS Bulletin 314 (Washington, D.C.: GPO, 1907), p. 353. Total output is difficult to estimate. Miners were reluctant to disclose how much they made, and official records were not kept. Editors of the local newspapers estimated the value of the beaches as high as \$2,000,000, while others placed it much lower at \$750,000. Nevertheless, it is believed in 1899 that the total amount of all gold taken in the Seward Peninsula amounted to between \$2,500,000 and \$3,000,000.

18. Brooks, Blazing Alaska's Trails, pp. 390-92, 397; Brooks, "Development of Mining," p. 28. Brooks reported that as many as three-fourths of the people who came to Nome in 1900 left by fall. Inexperience, nonetheless, took its toll over the years. In July 1902, for example, George Dean, who had been prospecting in the Goodhope country, started to Nome by way of the Agipuk River. He and his companions did not take enough food along. Dean starved to death and his companions quite literally had him for dinner.

creeks and gulches in the immediate vicinity. Men, sometimes with their wives and children, soon raced around the peninsula in search of that elusive strike that drives gold prospectors and sets them apart. They scoured virtually every valley and creek in a place that had been crossed first by non-Natives less than a half-century earlier, and towns sprang up in the area that had been described as "unexplored" when the "three lucky Swedes" started out on their trip to the Snake River in 1898.¹⁹

Many of the towns or camps that grew up in those first years of the twentieth century just as quickly disappeared and are mostly forgotten today. Checkers, a small settlement located at the mouth of the Kougarok River, was a point of distribution of supplies brought by boat from the lower end of Grantley Harbor. Spooner was never anything more than a fourteen- by thirty-foot willow pole hotel and store at the mouth of the Noxapaga River and Record City was a collection of no more than a handful of tents and a sod house at the mouth of the Pinnell River in September 1903.²⁰

Others were more substantial and exist today, although by no means resembling the bustling centers they were in the early years of the century. Council, located south of border of present-day Bering Land Bridge National Preserve, was the trading and shipping headquarters for the mines at Ophir and Melsing Creek, and Dickson, situated at the mouth of the Solomon River, served the Solomon River mines. Candle boomed in 1901 and soon had a population of between 200 and 300 people living in dugouts, frame buildings, tents, and log cabins. That camp, which was the location of the recording office for Fairhaven district, and one of the chief distributing points for miners on the northern side of the

19. See, for example, Illustrations 4 and 11 and Brooks, "Development of Mining," p. 10.

20. Brooks, *et. al.*, Nome and Reconnaissance of Cape Nome and Adjacent Gold Fields, p. 126; Ducker, Alaska's Northwest Region, p. 36; "Record City" Mouth Punnell [*sic*], Inmachuck River, Sept. 23, 1903, Nowell Photographic Collection, Northwest Collection, Suzzallo Library, University of Washington.

Illustration 10.

Nome, 1900. Lomen Family Collection, Archives, Alaska and Polar Regions Department, University of Alaska - Fairbanks.



Illustration 11.

"Record City" - Mouth Punnell [sic], Inmachuk River, Sept. 23, 1903. Nowell Photographic Collection, Northwest Collection, Suzzallo Library, University of Washington, Seattle, Washington.



"Beard City" - Mouth Pinnell, Innochuk River - Spices 03

July 130.

Illustration 12.

Candle City looking up Keewalik [sic] River. September 30, 1903. Nowell Photographic Collection, Northwest Collection, Suzzallo Library, University of Washington, Seattle, Washington.

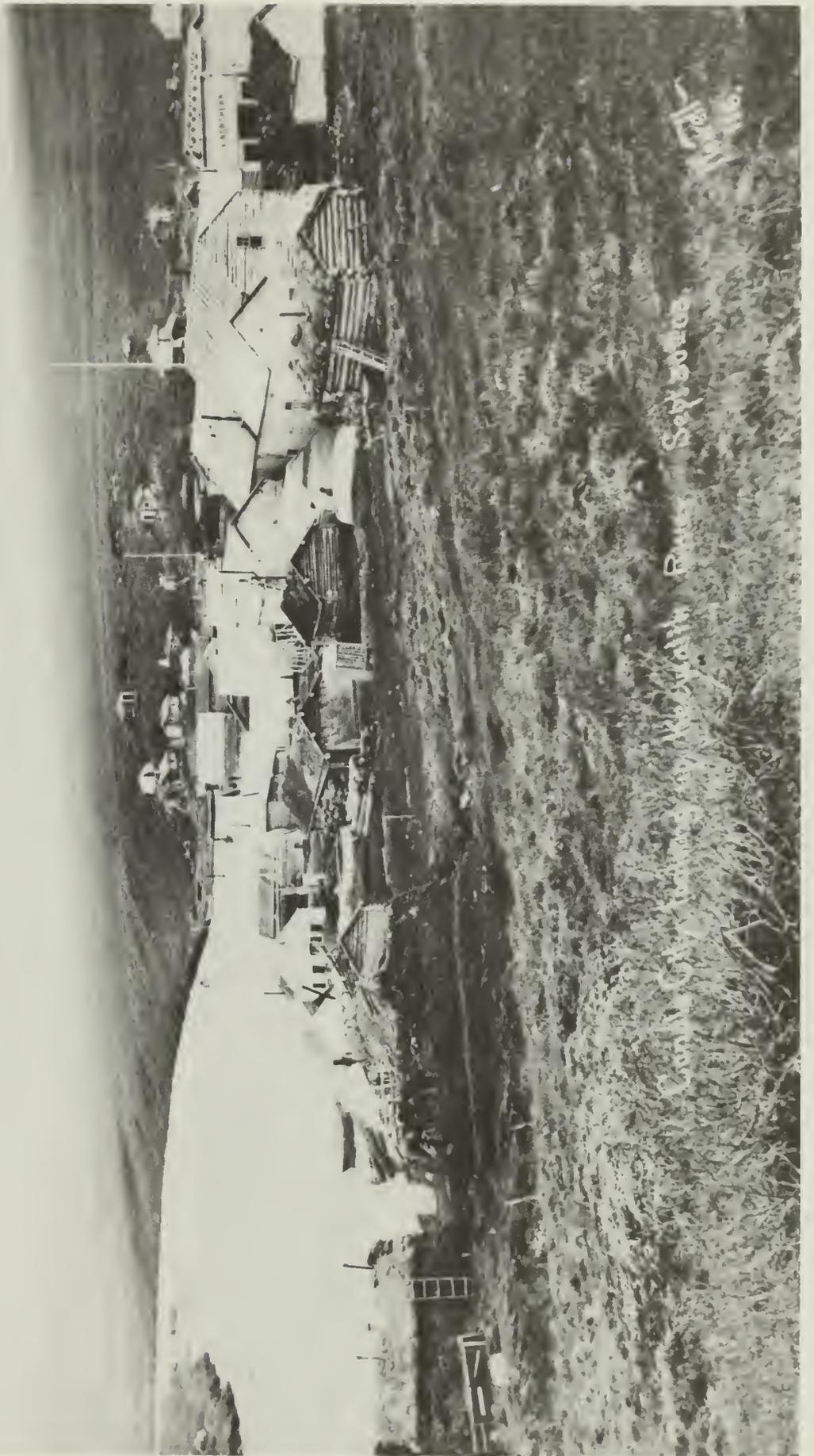
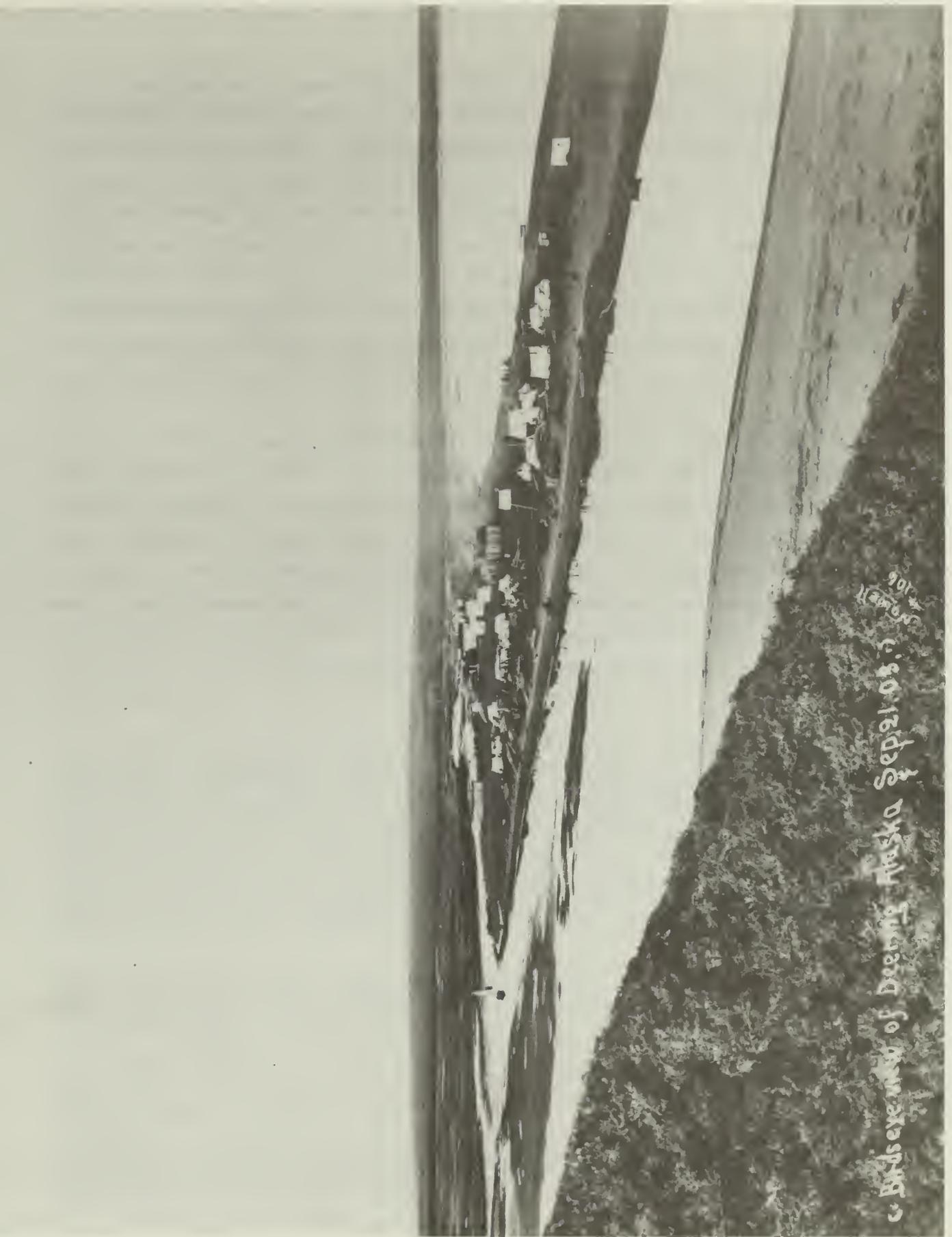


Illustration 13.

Birds-eye view of Deering Alaska, September 21, 1903. Nowell Photographic Collection, Suzzallo Library, University of Washington, Seattle, Washington.



C. B. B.'s eye view of Deering Alaska Sept. 10, 1901

peninsula, had a population of 250 in 1908 that supported two hotels, three banks, a dentist, telephone office, three general merchandise stores, a butcher shop, and four saloons. Farther west along the southern shore of Kotzebue Sound, some fifteen miles from the border of present-day Bering Land Bridge National Preserve, was Deering, founded in 1901 and thought to have been named after the schooner Abbie Deering. Also a distribution point for inland mining camps, the village had a population of 200 in 1908, and could boast of a Friend's Mission, government reindeer station, N.R. Dearborn's roadhouse, telegraph and telephone office, and Arthur Gurry's saloon.²¹

Miners took more than \$4,726,500 out of Seward Peninsula gold fields during the 1900 mining season. Two hundred thousand dollars came from the mouth of Daniels Creek, fifty miles east of Nome. Reports of rich finds on Tuttle Creek, a small stream flowing into the Kugrupaga River, would stimulate a small, but unrewarding stampede there. Reports indicated that men were working at Coffee Dome, and two separate rushes in March and July brought prospectors into the Kougarok region where they staked first Harris, Quartz, and Garfield creeks.²²

21. Nome Nugget, September 6, 30, December 4, 7, 1901 and June May 9, 1902; R.L. Polk, Polk's Alaska-Yukon Gazetteer and Business Directory, 1907-08 (Seattle: R.L. Polk & Co., 1908), pp. 137-39, 185. The population of Candle in the 1960s was 43 and Deering numbered 150 in 1980. Series 67, Box 3, Department of Public Works, Record Group 21, Alaska State Archives, Juneau; U.S., Department of the Interior, National Park Service, Bering Land Bridge National Preserve, General Management Plan/Environment Assessment, Land Protection Plan, Wilderness Suitability Review (Denver: National Park Service, draft, 1985), p. 15.

22. Brooks, et. al., Reconnaissance of Cape Nome and Adjacent Gold Fields, p. 69; U.S. Department of the Interior, U.S. Geological Survey, A Reconnaissance of the Northwestern Portion of the Seward Peninsula, by Arthur J. Collier, USGS Professional Paper 2 (Washington, D.C.: Government Printing Office, 1902); Fred H. Moffit, "Notes on Northeastern Seward Peninsula," USGS Field Notebook 44, 1903, Alaska Field Notebook Collection, USGS, Menlo Park, California; Nome Nugget, August 2, 1902; U.S. Department of the Interior, U.S. Geological Survey, Water-Supply Investigations in Alaska, 1906-07, Nome and Kougarok Regions, Seward Peninsula; Fairbanks District, Yukon-Tanana Region, by Fred F. Henshaw and C.C. Covert, USGS Water-Supply Paper 218 (Washington, D.C.: Government Printing Office, 1907), p. 94.

The search for gold soon brought men into what is now Bering Land Bridge National Preserve. In 1900 William T. ("Missouri Bill") Fee, who spent the summer prospecting all creeks east of Asses Ears, discovered Gold on Old Glory Creek, a stream that flows into the Inmachuk River.²³ Low rations forced Fee to leave his discovery without staking, but William H. Davis and Jessie Pinnell did so on September 21. Three days later, Z.E. Foster and Fred Sandstrum staked a discovery on Hannum Creek, another tributary of the Inmachuk, and during the winter of 1900-1901, M.V. Perry, who crossed the country by dog sled, staked the creek that bears his name.²⁴

The Nome Nugget sparked a minor stampede to the area when it announced on July 23, 1901, that Old Glory Creek "bids fair to outdo either Anvil Creek or the famous El Dorado on the Klondike."²⁵ Ignoring John Hummell's warning that "it is a hard country, though," 400 men were soon working claims along the tributaries of the Inmachuk, the beaches of Goodhope Bay, and several areas that are located within the boundaries of present-day Bering Land Bridge National Preserve--the gravel bars along the Goodhope River, and along Placer, Little Daisy, and Humboldt creeks.²⁶

23. Moffit, "Notes on Northeast Seward Peninsula," p. 46; U.S. Department of the Interior, U.S. Geological Survey, The Fairhaven Gold Placers, Seward Peninsula, Alaska, by Fred H. Moffit, USGS Bulletin 247 (Washington D.C.: Government Printing Office, 1905), p. 49. The Inmachuk River and its tributaries are located, for the most part, outside the boundaries of Bering Land Bridge National Preserve. It is assumed, however, that Fee prospected inside the boundaries of present-day preserve during the summer.

24. Moffit, "Northeastern Seward Peninsula," pp. 35, 46, 49.

25. Nome Nugget, July 23, 1901.

26. Nome Nugget, July 19, 30, and August 9, 27, 1901; Nome Gold Digger, July 31, 1901; Moffit, Fairhaven Gold Placers, pp. 53-60. The descriptions of above are not site specific. Two sites, a remains of a mining camp located on an alluvial terrace at the confluence of a small tributary of the Goodhope River (Historical Base Map no. 28) and a one-room sod house on the floodplain of the Goodhope River (Historical Base Map no. 26) may have been used during this early period. These (Continued)

The gold placers of the northern part of the Seward Peninsula--those in the Inmachuk and Candle Creek basins, primarily--did not prove to be as rich as those across the peninsula.²⁷ By 1908, however, as much as \$500,000 had been taken from the Inmachuk River basin, and \$2,245,400 from Candle Creek and its tributaries.²⁸ It was more than enough to keep men going, and looking.

In winter 1907-08 a party of "Laplanders" discovered gold at the mouth of Esperanza Creek, a tributary of the Goodhope River. The values were reported to be good, causing what was at least a minor stampede from all parts of the Fairhaven district. As late as June 24, 1909, six claims were being worked there, with ditches dug for sluicing and diversion dams put in. At the same time shafts were reportedly dug during the winter along Placer Creek, and unsuccessful prospecting occurred on Humboldt Creek.²⁹

26. (Cont.) sites are discussed in greater detail on pp. 195-198. A 1903 map of "Arctic Gold Fields of Alaska" (Illustration 16), moreover, shows a roadhouse located at the mouth of Placer Creek. The structure, according to F.J. Monroe, stood along a trail that ran from the tributaries of the Inmachuk River to the Goodhope, up Placer Creek to Eldorado Creek, down the Noxapaga and Kuzitrin rivers, and ending, eventually, in Nome. There is no evidence in the records to corroborate the map, and a NPS archeological survey team found no physical evidence of a structure in the area in 1985.

27. The Candle Creek stampede also occurred in 1901. Billed as one of the richest discoveries in Alaska, the strike at Candle Creek drained men away from the Inmachuk. Nome Nugget, September 6, 30, December 4, 7, 1901, June May 9, 1902; Brooks, et. al., Mineral Resources of Alaska, 1905, Fred Moffit, "Notes on the Northeastern Seward Peninsula," USGS Field Notebook 44, 1903, p. 82. "Reconnaissance Map of Portion of Seward Peninsula Alaska" shows claims in Inmachuk basin before 1907. Papers of William T. Perkins, Suzzallo Library, University of Washington, Seattle.

28. Henshaw, "Mining in Fairhaven Precinct," pp. 357, 364.

29. Henshaw, "Mining in Fairhaven Precinct," p. 369; Brooks et. al., Mineral Resources of Alaska, 1909, pp. 366-67. Two sites, one of historic and recent mining activity at the mouth of Esperanza Creek (Historical Base Map no. 27), the other a two-room sod house located on (Continued)

Southwest across the peninsula, meanwhile, prospectors had begun to explore and stake rivers draining into Shishmaref Inlet. In May 1900 Charles McLennan and Eskimo assistants traveled by dog team to Spring Creek, a tributary of Serpentine River.³⁰ McLennan became, apparently, the first non-Native to reach the hot springs there, known today as Serpentine Hot Springs and to the Natives of the peninsula as Iyat, or "Cooking pot" (Historical Base Map No. 24).³¹ That same summer John Sirene, who would spend the next eleven months in the Goodhope country, established headquarters at the hot springs.³²

In September 1901, when USGS geologist Arthur Collier visited the area, he reported finding a "small settlement," but no trace of McLennan's claim stakes. He noted that "a small garden had been made on some of the ground near the springs, and vegetables, consisting of

29. (Cont.) a ridge bordering Esperanza Creek, (Historical Base Map No. 29) may relate to mining activity in 1907-09. The sites are discussed in some detail on pp. 195-198.

30. Collier, Reconnaissance of Northwestern Portion of Seward Peninsula, p. 54.

31. Ibid., pp. 55; Koutsky, The Serpentine Area, pp. 29, 47; "Serpentine Hot Springs, Bering Land Bridge National Preserve: A Cultural Resource Evaluation," n.d. [1983], Division of Cultural Resources, Alaska Regional Office, National Park Service, Anchorage; National Register of Historic Places Inventory, Nomination Form, Iyat/Serpentine Hot Springs, March 12, 1980, by T.M. Sczawinski, Ibid. Differences of opinion regarding earliest Native use of the hot springs exist. Koutsky indicates that "since aboriginal times, people have made the long overland trek to reach the soothing, warm mineral waters of the springs to relieve many aches and pains." "The hot springs," moreover, "served as a place of power in Tapqaq cosmology and are associated with the training of shamans." Sczawinski, on the other hand, indicated "that it was from these miners and prospectors in the area that the local Eskimo residents learned of the medicinal qualities of the springs." A 1985 NPS archeological survey team located a pre-historic site on the landing field. See companion volume for details.

32. Nome Nugget, September 13, 1901.

Illustration 14.

Detail of sod in south wall of sod house on the floodplain of Goodhope River (Historical Base Map No. 26), 1985. NPS photo by Bering Land Bridge Archeological Survey Team.

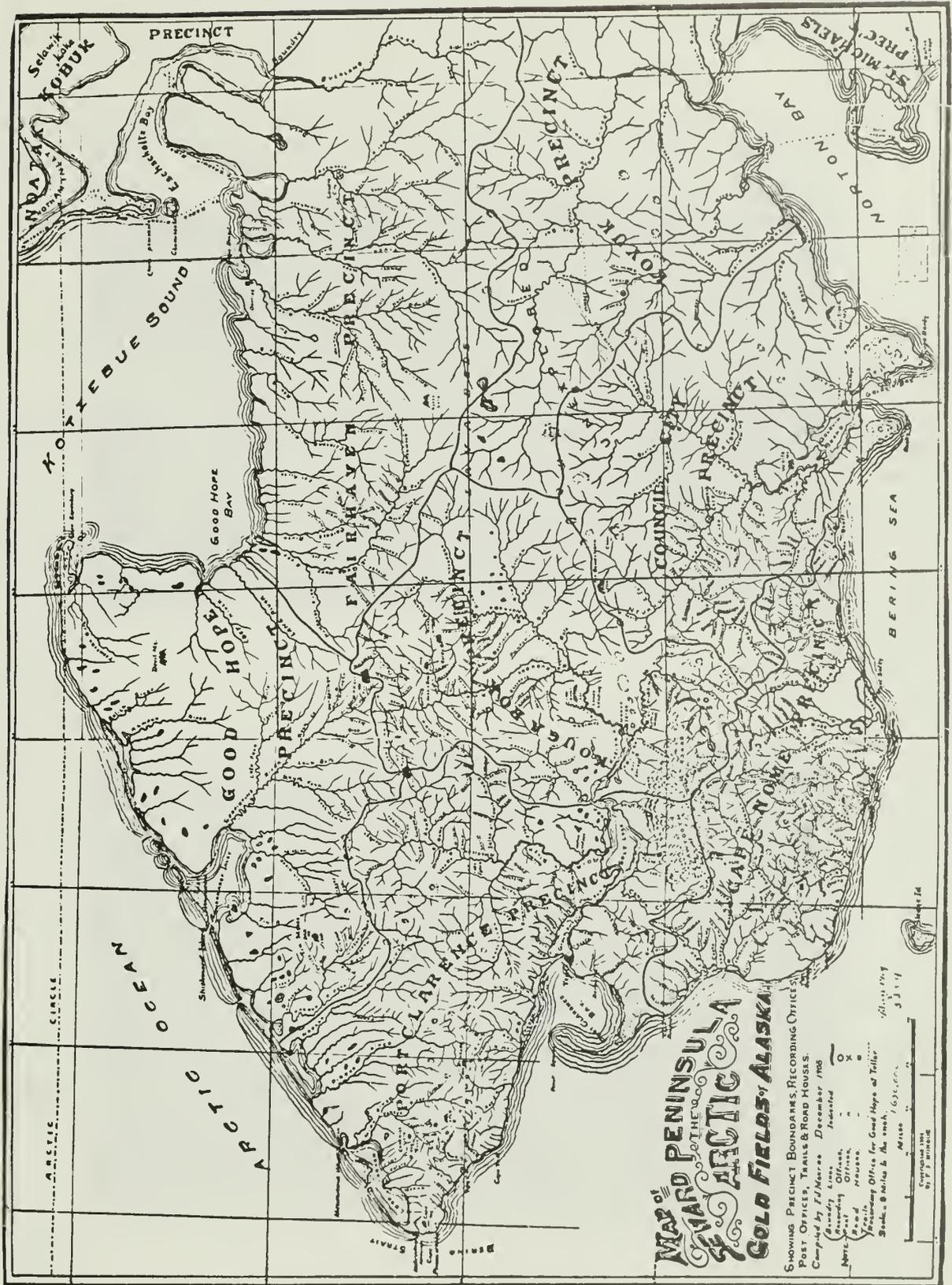
Illustration 15.

Mining camp near mouth of tributary of Goodhope River (Historical Base Map No. 28), 1985. NPS photo by Bering Land Bridge Archeological Survey Team.



Illustration 16.

"Map of Seward Peninsula the Arctic Gold Fields of Alaska." Compiled by F. J. Monroe, December 1903. Library of Congress.



MAP OF SEWARD PENINSULA OF THE ARCTIC GOLD FIELDS OF ALASKA

SHOWING PRECINCT BOUNDARIES, RECORDING OFFICES, POST OFFICES, TRAILS & ROAD HOUSES.
 Compiled by Ed Moore December 1908
 Boundary Lines Indicated
 Recording Office - O
 Post Office - P
 Road House - H
 Precinct Office for Good Hope at Teller
 Scale, 8 miles to the inch.
 16111 1197
 33-11



Copyright 1908
 by P. J. WILCOX

Illustration 17.

View of mining area near mouth of Esperanza Creek (Historical Base Map No. 27), 1985. NPS photo by Bering Land Bridge Archeological Survey Team.

Illustration 18.

Sod House near Esperanza Creek (Historical Base Map No. 29), 1985. NPS photo by Bering Land Bridge Archeological Survey Team.



lettuce and radishes, had been grown without difficulty."³³ By 1903, some forty men and at least one woman were within a fifteen-mile radius of the hot springs.³⁴

Between 1901 and 1907, and probably before 1904, someone--the sources indicate "prospectors"--built a cabin near the upper springs, a ten- by twelve-foot bathing pool, and named the "resort" "Arctic Hot Springs."³⁵ The records do not give an exact location of the structures, but physical evidence suggests that they were at the "old" springs, located .7 kilometers northwest of the present-day bathhouse and quarters.³⁶

33. Collier, Reconnaissance of Northwestern Portion of Seward Peninsula, p. 55. Collier left the first description of Serpentine Hot Springs: Two of these, the upper and lower ones, were visited by the writer. The upper spring is on the banks of the creek, probably above any except the highest floods. The spring is in the center of a broad mound, 10 feet in diameter and perhaps 2 feet high, built up from material precipitated from the spring water. The temperature of the water is about 212°. The lower springs are below the high-water mark of the creek. The amount of water is not over 1 miners' inch. For some distance around the spring the ground is warm, making it an ideal place for wintering in that climate.

34. Nome Gold Digger, January 28, 1903. Information on the number of people in the area came from Charles Watz and Hans Peterson, who had gone to the hot springs "to remove Mrs. Geo. Hammer." They reported that she refused to leave her mining interests there.

35. U.S. Department of the Interior, U.S. Geological Survey, Mineral Springs of Alaska, by Gerald A. Waring, USGS Water Supply Paper 418 (Washington, D.C.: Government Printing Office, 1917), pp. 75-76; Walter Shields, Report on Shishmaref, 1913, Reel 22, School Files, RG 75, Alaska State Library, Juneau;" "Topographic Map of the Northern Portion of Seward Peninsula, Alaska," 1907, in Collier, Reconnaissance of Northwestern Portion of Seward Peninsula; "Map of Seward Peninsula The Arctic Gold Fields of Alaska," 1903, (Illustration 16); "Reconnaissance Map of Northwestern Part of Seward Peninsula," 1907, in Brooks, et. al., Mineral Resources of Alaska, 1908. All three maps show structures on Hot Springs Creek. "Map of Seward Peninsula, The Arctic Gold Fields of Alaska," shows a "roadhouse" there.

36. Trip Report, June 14-18, T. Stell Newman, BELA Keyman Files, Box 26, Alaska Task Force Files, Records of the National Park Service, RG 79, FARC, Seattle; Telephone Discussion with Jeanne Shaaf, March 1986. Newman found the remains of an old cabin, remnants of the old (Continued)

Arctic Hot Springs did not achieve the popularity of the resort at the hot springs on the Pilgrim River, some sixty miles to the south.³⁷ Nevertheless, it was, said Walter Shields, " a fine place to reach and doubly appreciated after going over the mountains around it."³⁸ The Alaska Road Commission maintained a trail from Taylor to the "resort."³⁹ Today, Serpentine Hot Springs is a popular site, visited year-round by people from all over the peninsula.

Even as prospectors began to move away from the coast and into the interior in search of their fortunes, geologists, cartographers, and hydrologists from the United States Geological Survey made their way to the peninsula to conduct surveys of the gold fields. Congress had authorized the Survey to prepare a map of Alaska showing all known topographical and geological features and had appropriated \$20,000 for that purpose on January 28, 1898.⁴⁰ Responding to the demand for

36. (Cont.) bath, "one excavated pit that looked similar [sic] to coastal native house pits," but "no artifacts or other indicators of a date earlier than the 1920s."

37. See, for example, Annual Report on the Introduction of Domestic Reindeer into Alaska, 1905, p. 53; Waring, Mineral Springs of Alaska, p. 73; State of Alaska, Department of Natural Resources, Cultural Resource Survey, 1981, ed. by Richard O. Stern (Anchorage, 1982); Nome Nugget, March 11, 1905; Nome Gold Digger, August 28, 1905.

38. Walter Shields, Report on Shishmaref - 1913, Reel 22, Alaska School Files, RG 75, Alaska State Library, Juneau.

39. Board of Road Commissioners for Alaska, Report upon the Construction and Maintenance of Military and Post Roads, Bridges and Trails; and other Roads, Tramways, Ferries, Bridges, Trails, and Related Works in the Territory of Alaska (Washington, D.C.: Government Printing Office, 1919), p. 38. Additionally, maps shown in 1912 and 1916 reports show a pack trail going from Candle to the Goodhope River, to the hot springs and on to Taylor. A short history of the structures of Serpentine Hot Springs is included as Appendix 2.

40. U.S. Department of the Interior, U.S. Geological Survey, Mineals, Lands, and Geology for the Common Defense and General Welfare. Vol. II, 1879-90. A History of Geology in Relation to the Development of Public Lands, Federal-Science, and Mapping Policies and the Development of Mineral Resources in the United States During the First 25 Years of the U.S. Geological Survey, by Mary C. Rabbit (Washington, D.C.: (Continued)

Illustration 19.

"Old Hot Springs," 1985. NPS photo by Bering Land Bridge Archeological Survey Team.

Illustration 20.

"Old Hot Springs," showing foundation in creek, 1985. NPS photo by Bering Land Bridge Archeological Survey Team.



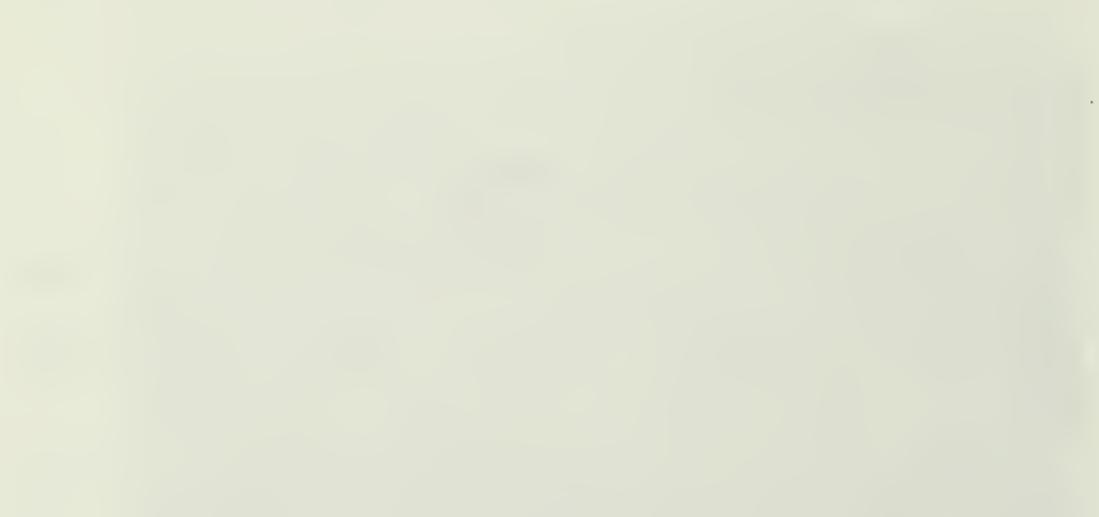


Illustration 21.

"Old Hot Springs," showing six by nine foot foundation, 1985. NPS photo by Bering Land Bridge Archeological Survey Team.



accurate maps of the mining districts, Survey geologists and their colleagues made annual trips to various parts of the peninsula. Frank C. Schrader, Alfred H. Brooks and D.C. Witherspoon initiated the work of the survey of the peninsula when they spent a short time in fall of 1899 visiting placers and mapping the southern portion of the peninsula west of Cape Darby. The following year Brooks led a party that surveyed the Fish, Tubutulik, Niukluk, Casadepaga, Pilgrim, Kuzitrin, and Kougarok drainages, while Walter C. Mendenhall and another party canoed up the Fish, Tubutulik, and Koyuk rivers. That same summer, E.C. Barnard led a small party that mapped the southwestern part of the peninsula, and in 1901, Arthur J. Collier devoted the field season to the northwestern part of the Peninsula. In 1903 Fred H. Moffit visited and mapped the northeastern part of the peninsula and in 1909 Philip S. Smith and Henry Eakin led a party that traveled from Nulato to Council.⁴¹

More detailed topographic mapping, geological studies, as well as water supply studies would follow. With the expedition of Philip Smith and Henry Eakin, however, the initial survey and mapping of the 20,000 square miles of the Seward Peninsula were complete. The work of those men provided valuable information for experienced prospectors and novices alike. They made an invaluable contribution to knowledge of the Seward Peninsula, and their published works, field notebooks, and maps contain a wealth of information regarding the whole of the Seward Peninsula gold rush. By 1910, as a result of their work, it was possible to say that "surveys and investigations of the Seward Peninsula are more nearly complete than those of any other part of Alaska."⁴²

40. (Cont.) Government Printing Office, 1980), pp. 280-8. George H. Eldridge, Josiah H. Spurr, and Alfred H. Brooks went along as project geologists, with E.C. Barnard, W.J. Peters, W.S. Post, and Robert Muldrow as cartographers.

41. Ibid., p. 305; Brooks, et. al., Reconnaissance of Cape Nome and Adjacent Gold Fields, pp. 174-75; Collier, et. al., Gold Placers of Seward Peninsula, p. 7, Decker, Alaska's Northwest Region, p. 35.

42. "Geological Survey Work in Alaska," Alaska-Yukon Magazine, 10 (June 1910), p. 55.

When Alfred H. Brooks and Frank Schrader made the initial USGS "reconnaissance" of the Cape Nome gold fields in 1899, they indicated that although "there were few definite or well-marked trails" in the area, the country was so open and flat that "one can without much difficulty proceed in any direction."⁴³ As early as 1901, the traveler from Nome to the placers at Candle Creek would face only three days, from El Dorado Creek to the north, without the relative comfort of a road house at night.⁴⁴

Nevertheless, transportation across the Seward Peninsula would remain a hinderance and major cost of mining there.⁴⁵ Miners sought to overcome the problems in the first years of the century by building their own roads, paying tolls on those built by others--the toll road east of Nome is an example--or, as in the case of Charles D. Lane, constructing a railroad.⁴⁶ When Fred Moffit of the USGS traveled to the Fairhaven gold placers on the northeastern side of the peninsula in 1903, however, he observed that the 300-mile-long boat trip around the peninsula

43. Quoted in Ducker, Alaska's Northwest Region, 36.

44. Nome Nugget, November 29, 1901. The route went north by way of the Nome River to Stone House (24 miles), Nugget Road House (24 miles), Joseph Sliscovitch's on the Pilgrim River (35 miles), Cottonwood Road House (22 miles), Preston's (28 miles), Carpenter's (30 miles), Nash's (20 miles), and El Dorado (25 miles).

45. See, for example, Nome-Seward Peninsula Chamber of Commerce to Alaska Road Commission, March 21, 1916, Kougrouk District, Box 65637, Records of the Alaska Road Commission, FARC, Seattle; A.H. Brooks, "Cost of Placer Mining," in U.S. Department of the Interior, U.S. Geological Survey, Surface Water Supply of Seward Peninsula, Alaska, by Fred F. Henshaw and G.L. Parker, USGS Water Supply Paper 314 (Washington, D.C.: Government Printing Office, 1913); Brooks, et. al., Mineral Resources of Alaska, p. 303.

46. Ducker, Alaska's Northwest Region, pp. 36-37; Alice Osborne, "The Council City and Solomon River Railroad," Alaska Journal 5 (Winter 1975), pp. 49-54; Brooks, et. al., Mineral Resources of Alaska, 1908, p. 25. Lane constructed his 5-mile-long Wild Goose Railroad to connect the claims on Anvil Creek to the rapidly growing mining camp of Nome. By 1908, four different railroads ran on 124 miles of rail in the southern part of the peninsula.

Illustration 22. Serpentine Hot Springs, 1984. NPS Photo.



Illustration 23.

Along Dahl Creek-Candle Trail, n.d. Alaska Road Commission Collection.
Alaska State University Library, Juneau.

Illustration 24.

Trail marker 1985. NPS photo by Frank Williss.

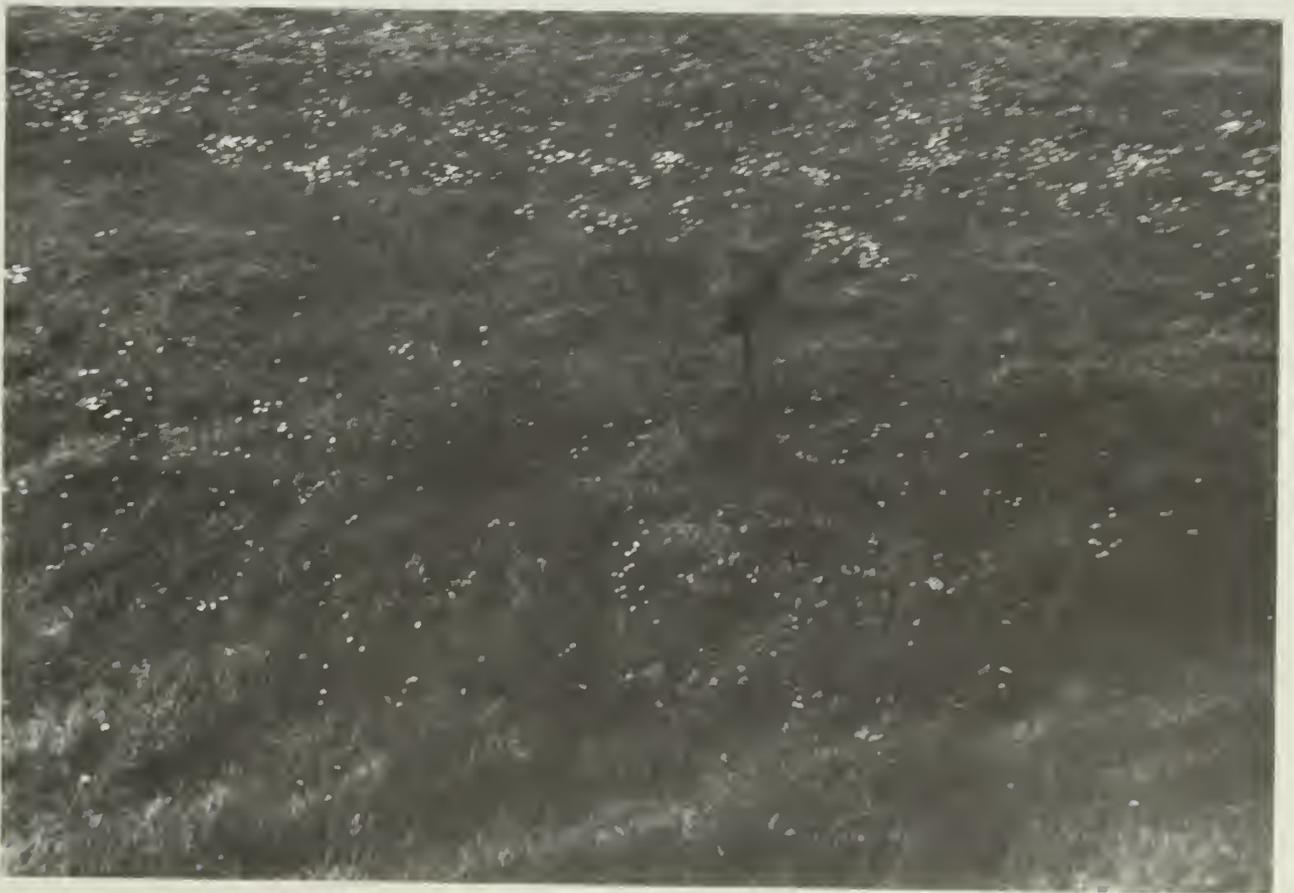


Illustration 25.

Cottonwood ARC shelter cabin Dahl Creek - Candle Trail, May 1926.
Alaska Road Commission collection, Alaska State Library, Juneau.

Illustration 26.

Cottonwood Shelter Cabin, 1985. NPS photo by Frank Williss.



Cottonwood ARC shelter cabin Dahl Cr. - Candle Trail July 1926

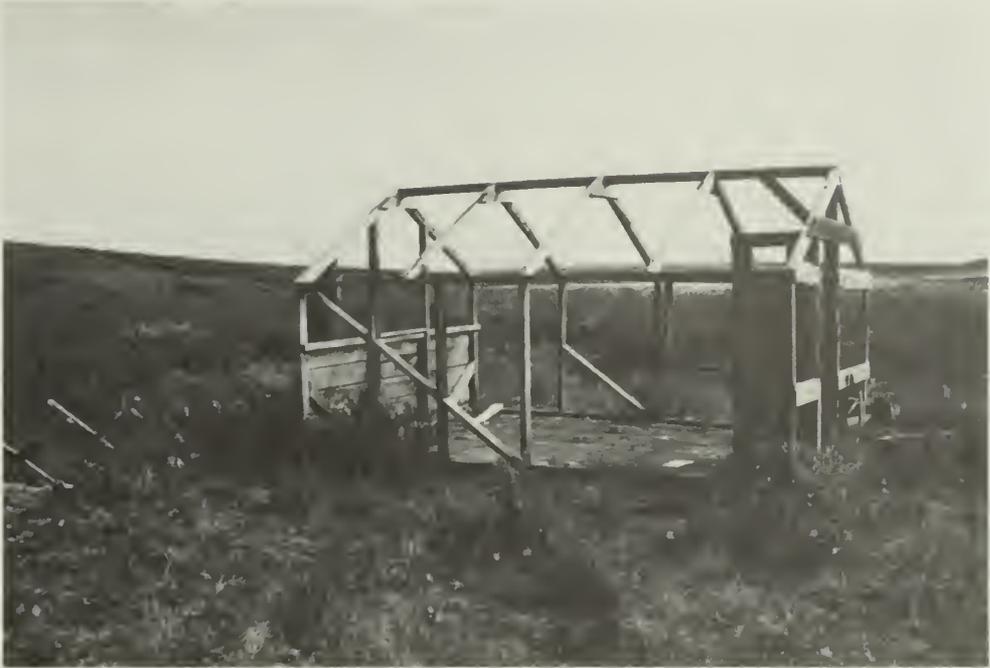


Illustration 27.

Frame of Berry Creek Shelter Cabin. 1985 NPS photo by Frank Williss.

Illustration 28.

Ruin of Aurora Shelter Cabin, 1985. NPS photo by Frank Williss.



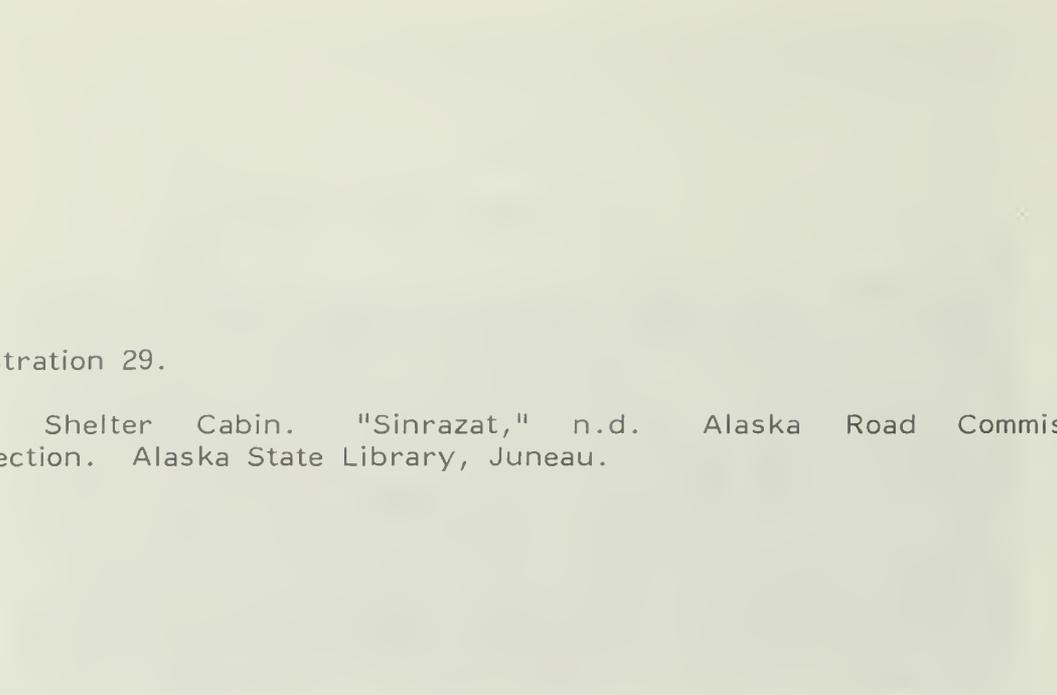


Illustration 29.

ARC Shelter Cabin. "Sinrazat," n.d. Alaska Road Commission Collection. Alaska State Library, Juneau.



Illustration 30.

Sinrazat shelter cabin, 1986. NPS photo by Bering Land Bridge Archeological Survey.



F.R.C. Shelter Cabin. "Sintazet". R 67A. Mile 119. After the Storm.



required less time and was considerably less difficult than a cross-country trip.

Miners followed two main trails to the placers at Candle, although neither were much used in the summer. One went east of present-day Bering Land Bridge National Preserve, running from Council to Candle. The second would become Alaska Road Commission Route 28 (Dahl Creek-Candle Trail), running northeast across the eastern side of the Preserve:

The second route reaches Lanes Landing by way of Nome River and Salmon Lake trail from Nome or by way of Teller and Marys Igloo. A wagon road leads from Lanes Landing to Quartz Creek. From Quartz Creek one travels northeast around the lowlands of Kuzitrin and Noxapaga rivers to Turner Creek, and thence along a low rounded ridge to Aurora and Eldorado creeks. At Eldorado Creek the trail turns eastward, crosses the head of Placer and Esperanza creeks to Goodhope River, and then follows the Cottonwood to Trail Creek, which heads against the Inmachuk.⁴⁷

In 1905, the Congressionally-created Alaska Road commission assumed responsibility for survey, construction, and maintenance of public wagon roads, trails, and bridges in the territory.⁴⁸ In 1915 the commission outlined its highest priorities on the Seward Peninsula: a system of local roads serving the placers in the vicinity of Nome, the

47. Moffit, Fairhaven Gold Placers, pp. 68-69.

48. Henry P. McLain to Chief of Engineers, February 20, 1905, File 974616, Records of the Office of the Adjutant General, Record Group 94, N.A.; Letter of Transmittal in Board of Road Commissioners for Alaska, Report upon the Construction and Maintenance of Military and Post Roads, Bridges and Trails; and other Roads, Tramways, Ferries, Bridges, Trails, and Related Works in the Territory of Alaska, 1915 (Washington, D.C.: Government Printing Office, 1916); Building Alaska with the U.S. Army, p. 52. The Board went into existence in on May 15, 1905, but because of lack of funds did not do any work until 1906. As seems to be so often the case with records in Alaska, a fire that destroyed a portion of the town of Valdez on July 15, 1915, destroyed practically all of the records of the commission.

Nome-Shelton tram, and the connecting permanently-marked winter trail that extended on through Dahl Creek to Deering and Candle.⁴⁹

Work on the Dahl Creek-Candle Trail consisted primarily of flagging, or repairing and replacing markers--in 1909, for example, the commission placed 150 permanent iron stakes every 500 feet along 85 miles of the 110-mile-long trail (Illustration 23).⁵⁰ In 1923, in response to petitions, the commission spent \$1,500 for the construction of shelter cabins in the district.⁵¹ Included in this amount was \$70.35 for construction of a shelter cabin at Aurora Creek and \$65.35 for another at Cottonwood Creek. A search of the records suggests that these cabins were the twelve-by-fourteen-foot corrugated metal structure which stand at Cottonwood today (Illustrations 25 and 26) as well as the remains at Aurora (Illustration 28). There is no evidence to indicate the date of construction of the shelter at Berry Creek, the frame of which remains today (Illustration 27).⁵²

49. Annual Report of the Alaska Road Commission, 1915, p. 84; 1924, p. 137; 1931, p. 56. The commission maintained two types of winter trails on the peninsula. Permanent trails such as the Dahl Creek-Candle Trail followed a definite location and were permanently marked. The second were temporary flagged trails which cut across water or were short cuts. Another trail listed in the 1924 report ran from Aurora to Taylor.

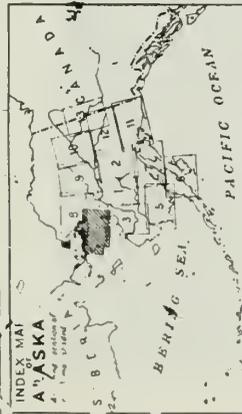
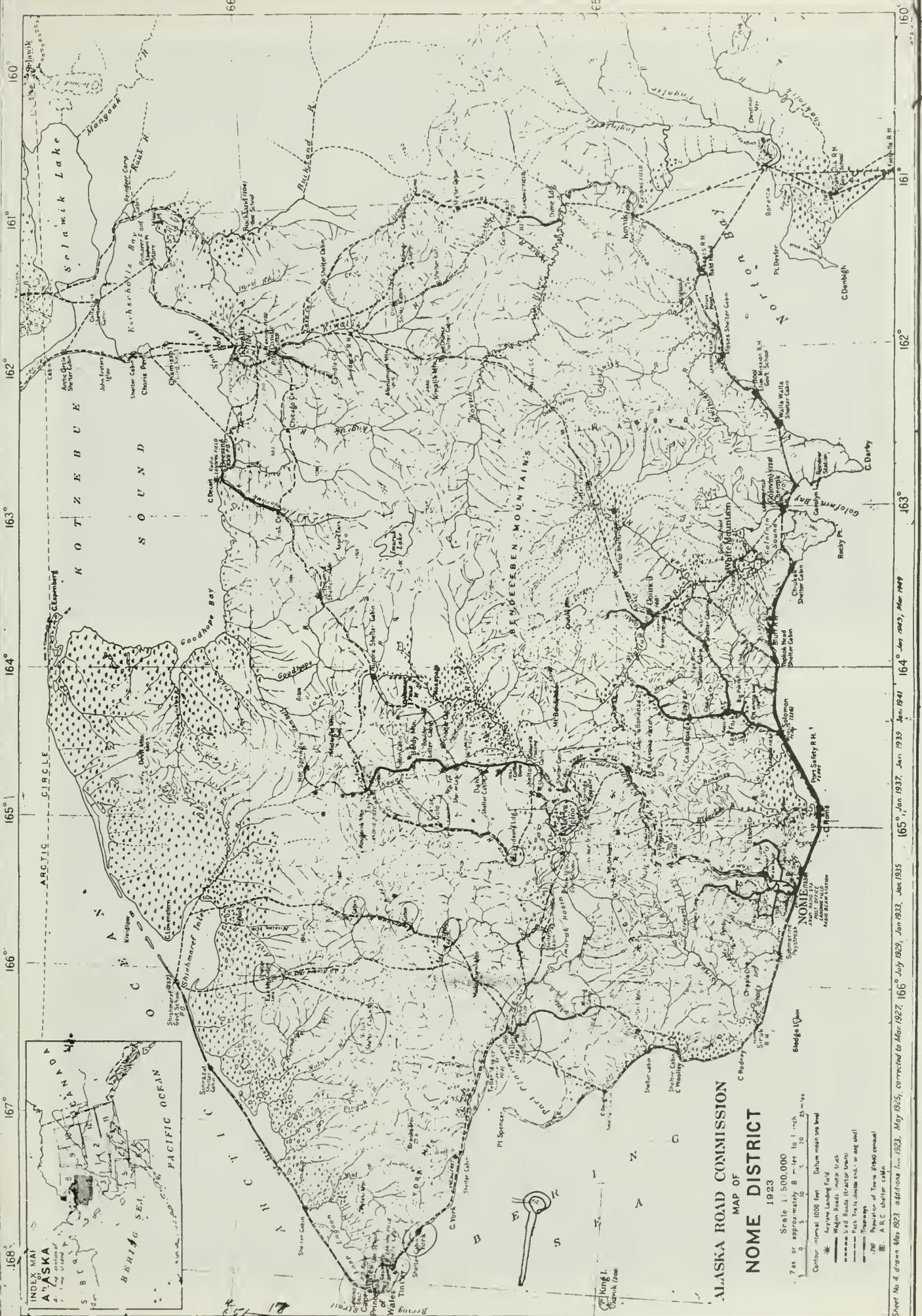
50. Annual Report of the Alaska Road Commission, 1909, p. 25. The remainder of the trail, the commission, noted, was marked by telephone poles of the line that ran to Deering and Candle. As seen in Illustration 24, some of the marker posts remain today.

51. John A. Wilson to Thomas Riggs, August 24, 1918, Records of the Office of the Territorial Governor, Record Group 101, Alaska State Archives, Juneau; Barney Gibney to A. Riggs, Transportation and Communication, Roads, Trails, Bridges and Docks, File 6205, Box 174, Ibid.; Riggs to James G. Steese, November 18, 1921, Box 199, Ibid.; Steese to Mike Sullivan, October 12, 1922, Ibid.; Ned Nusunginya to Mr. Witzler, December 14, 1922, File 22 Transportation and Communication, Shelter Cabins, File 223-5, Box 223. Ibid.; Annual Report Alaska Road Commission, 1923, p. 113; 1931, p. 56. Shelter cabins, aviation fields, and telephone lines were the responsibility of the territorial government.

52. Apparently another ARC shelter within the preserve--Sinzarat--was constructed at an earlier date (Illustration 29). The date of construction is not available, but it was standing in 1921. Annual report of Alaska Road Commission, 1921.

Illustration 31.

Alaska Road Commission Map of Nome District, 1923. Map Collection, Center for Cartographic and Architectural Archives, Washington, D.C.



ALASKA ROAD COMMISSION
MAP OF
NOME DISTRICT
 1923

Scale 1:500,000
 7.5 or approximately 8 miles to 1 inch
 Contour interval 1000 feet Datum mean sea level
 * Airplane Landing Field
 --- Wagon Roads, motor track
 --- Road (with tractor track)
 --- Path, trail, skid trail, or dog sled
 --- Railway
 --- Appearance of Town (1920 census)
 --- A.C. Shelter cabin

Illustration 32.

Route from Deering to Taylor Highway, 1985. NPS photo by Frank Williss.

Illustration 33.

Route from Deering to Taylor Highway, at Cottonwood Creek, 1985. NPS photo by Frank Williss.



The Dahl Creek - Candle Trail was never meant for heavy freighting, but rather, for mail, light freight, pack horses, and foot travelers. It was used primarily, as were most of the interior roads of the peninsula in the winter, when the snow cover made for easier traveling. The trail was in use into the 1930s and 1940s and was apparently used in a drive from Nome to Deering in the summer of 1975. The trail is open today to customary use during periods of snow cover. The trail is, generally, little more than a pair of tire-tracks across the tundra, although in wet areas, a number of tracks are visible.⁵³ It has not been used since 1980.

C. Ditches

Transportation was only one of a variety of problems facing prospectors on the Seward Peninsula. The "golden sands of Nome" had yielded up their riches even as thousands of miners swarmed into the new mining camp in 1900. Though small, independent miners would continue to successfully work their placers across the peninsula for years to come, prospectors, using gold pans, rockers, and sluice boxes had begun to exhaust the easiest-worked creek and bench bonanza placers within a short time as well.⁵⁴

Water supply on the semi-arid Seward Peninsula--where annual precipitation rarely exceeds ten inches a year, few natural reservoirs exist to capture what water there is, and too-gentle slopes and low grades of creek valleys prevent high pressure from developing--would not

53. See for example, various reports of the Alaska Road Commission during those years; Anthony J. Dimond to C.C. Gill, June 19, 1933, May-October, 1933, Official Correspondence - Alaska, Box 8, Records of the Federal Emergency Relief Administration, Record Group 69, N.A.; Trip Report, June 14-18, 1978, T. Stell Newman, History and Archeology, BELA Keyman Files, Box 26, Files of the Alaska Task Force, Records of the National Park Service, RG 79, FARC, Seattle; Draft General Management Plan, Bering Land Bridge National Preserve, p. 56.

54. The sluice box is a long box through which water from a diverted stream washes over gravel, depositing the heavier gold particles in riffles, and carrying away the lighter gravel.

support improved methods or large scale operations necessary for extracting deeper or low grade deposits. Men with valuable lands and sufficient capital turned to ditches designed to supply the water necessary.⁵⁵

In 1901 W.L. LeLand and J.M. Davidson designed and began construction on the Miocene Ditch, which would, when completed in 1903, carry water thirty-one miles from Glacier Creek, upper Snake River, Nome River and tributaries, and Grand Central River for use at the claims along lower Glacier and Anvil creeks.⁵⁶

Encouraged by the success of the Miocene Ditch, others followed. In 1902 the Topkok Ditch Company began construction of a ditch that would eventually bring water twenty-one miles from the Klokerblok River to placer mines near the mouth of Daniels Creek. In 1903 work was underway on ditches that would bring badly-needed water to mines along the tributaries of the Kougorok River and Bluestone and Solomon drainages. During the next several years men worked on ditches in the

55. Fred Henshaw, "Mining in the Fairhaven Precinct," in U.S. Department of the Interior, U.S. Geological Survey, Report on Progress of Investigations of Mineral Resources of Alaska in 1905, by Alfred H. Brooks, et. al.; Mineral Resources of Alaska: Report on Progress of Investigations in 1908, by Alfred H. Brooks, et. al., U.S. Geological Survey Bulletin 379 (Washington, D.C.: Government Printing Office, 1909), pp. 370-71; Webb, "Seward Peninsula - Kotzebue Sound," pp. 102-04. Although conditions on the peninsula prevented its full exploitation, large-scale mining required a process first used in California. Hydraulic mining, as it was called, involved a process that channeled water under high pressure into pipes and out in great velocity against the face of a gravel bank. The gravel was then carried into a sluice.

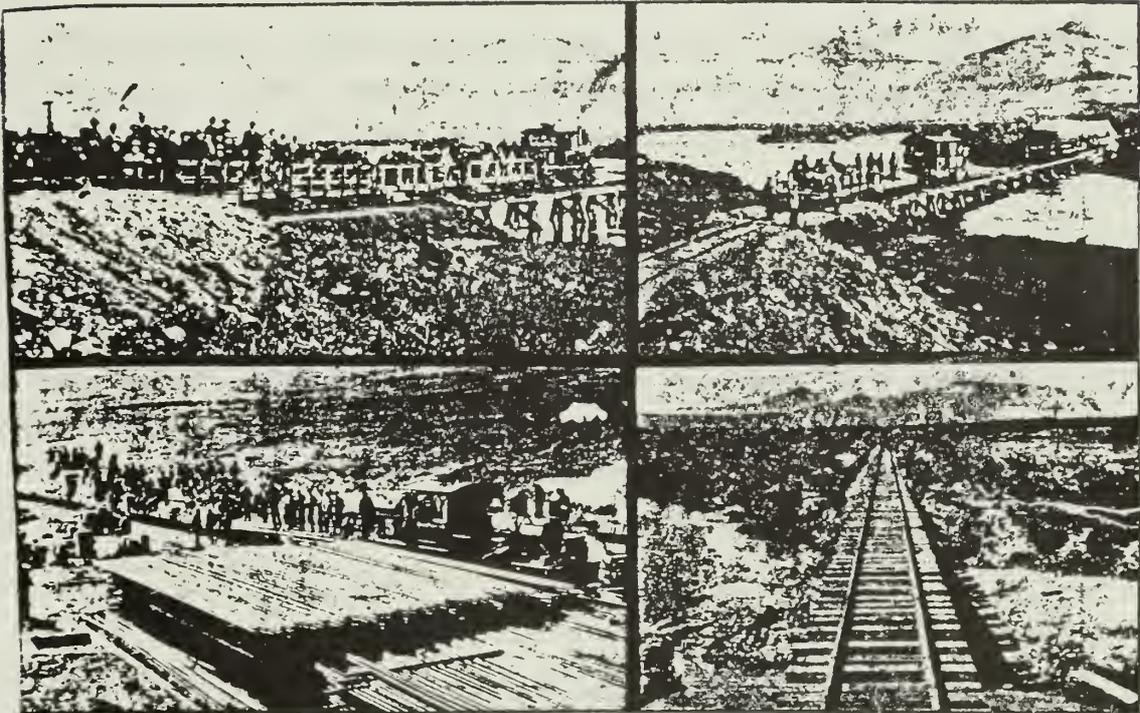
56. Henshaw and Covert, Water-Supply Investigations in Alaska, 1906-07, pp. 24-26; U.S. Department of the Interior, U.S. Geological Survey, Water-Supply of Nome Region, Seward Peninsula, 1906, by John C. Hoyt and Fred F. Henshaw, U.S. Geological Survey Water Supply Paper 196 (Washington, D.C.: Government Printing Office, 1907), p. 94; Chester W. Purrington, "Methods & Costs of Placer Mining in Alaska," Book 3, 1904, USGS Field Notebook, Alaska Field Notebook Collections, USGS, Meno Park, California.

Illustration 34.

Advertisement for C.L. Morris, contractor for Fairhaven Ditch.
Alaska-Yukon Magazine, March 4, 1906.

C. L. MORRIS CONTRACTOR

*Largest and Best Equipment for
Ditch and Railroad Construction
In Alaska*



73 miles of Seward Peninsula R. R. Constructed by C. L. Morris in 100 days, season of 1906.

**Contracts Aggregating ONE MILLION TWO HUNDRED THOUSAND DOLLARS
during Season of 1906**

Contractor for Cedric Ditch Co. Ditch, Seward Ditch Co. Ditch, Northland Mining Co. Ditch, Midnight Sun Mining & Ditch Co. Ditch, Seward Co-Operative Telephone Co. Line, Flambeau Hastings Mining & Ditch Co. Ditch, Solomon River Hydraulic Mining Co. Ditch, Hot Air Mining Co. Ditch, Center Creek Ditch, Bonanza Ditch, Seward Peninsula R. R., Northwestern Development Co. Ditch, Fairhaven Water Co. Ditch, Peninsula Mining Co. Ditch.

Winter Address, 614 First Ave., Seattle, Wash.

C. L. MORRIS, Nome, Alaska

Cripple River basin, American, Casadepaga, Inmachuk, Iron Creek, Kiwalkik, Noxapaga, Penny, Serpentine, Sunset Creek, and West Fork Buckland drainages. By 1909 forty-two ditches carried more than 52,000 inches of water a total of 569 miles, something that led E.S. Harrison to exclaim: "If death will covenant with me that I may 'die in the last ditch' constructed in Northwestern Alaska I will measure my life by centuries."⁵⁷

Representative of the early twentieth century ditches on the Seward Peninsula is Fairhaven Ditch, which runs north from Imuruk Lake across the eastern corner of Bering Land Bridge National Preserve and on to the drainages of the Inmachuk River. Surveyed in 1905 and constructed in 1906 and 1907 by C.L. Morris for the Fairhaven Water Company, the Fairhaven Ditch brought water to the mines along the Inmachuk River drainage.⁵⁸

Digging a thirty-eight mile-long ditch without mechanized equipment would be no enviable task anywhere. Those built on the Seward Peninsula during the first years of the twentieth century were engineering and logistical marvels. Even before the contractor went north for the season's work he faced the formidable task of preparing for the summer's work. He had to be absolutely certain that he was fully

57. Ducker, Alaska's Northwest Region, p. 34; James A. Kelly, "Ditch Construction on the Seward Peninsula," Proceedings of the Pacific Northwest Society of Engineers, 6 (September 1907), pp. 20-34; "Seward Peninsula Ditches," Alaska-Yukon Magazine, 7 (March 1909), p. 553; E.S. Harrison, "Nome Ditches," Alaska Magazine, 2 (January 1905), p. 30.

58. Nome Gold Digger, September 5, 1905; "Arthur Rush, "Canal Morris Leads a Strenuous Life," Alaska Magazine, 2 (1905), pp. 30-31. Morris contracted for the construction of a number of Seward Peninsula ditches--Cedric, Seward, Flambeau, Hot Air Mining Company, Bonanza ditches for example; built the seventy-two mile-long Nome-Arctic to Kougarok Railroad and the two-hundred-mile-long telephone line from Nome to Candle Creek-Deering; and operated regular freight lines between Nome and Council, Council and Golovin, Nome and Teller, the Kougarok, Gold Run, and surrounding districts. His activities made him one of the largest employers in Northwest Alaska (see illustration 34).

prepared. If he misjudged the amount of pipe needed, or the amount of food required by men and animals, the result could be disastrous--there was little opportunity to acquire more anywhere on the Seward Peninsula. Besides horses, he had to purchase and arrange for transportation for tons of food for men and animals, miles of iron pipe, miles of burlap, plows, scrapers, graders, lumber, wagons, tons of coal, tents to house as many as 100 men and animals, and a mountain of small tools.⁵⁹

The ditches were extremely expensive, moreover. Beyond the costs of equipment and food for men and animals, horses had to be purchased and transported to the Seward Peninsula. Insurance for the horses, along with food between shipping point and destination amounted to hundreds of dollars each. Ten percent never lived to work, but died on the voyage or failed to acclimate to Alaska, neither of which, strangely, was apparently covered by the insurance. It is difficult to estimate shipping costs to Deering, the point of debarkation. A rough estimate can be made, however, by examining the costs of transportation from Seattle to Nome in 1910:

Freight and passenger tariffs, Seattle to Nome, 1910.

Coal	\$10 to \$12.50 per ton.
Merchandise	12 to 15 per ton.
Lumber	14 to 27 per thousand.
Machinery	15 to 55 per ton.
Hay	17 to 22 per ton.
Grain	14 to 17 per ton.
Horses	60 to 75 per head.
Passengers, first-class	100 each.
Passengers, second class	65 each.

59. "Ditch Construction at Nome," Alaska-Yukon Magazine, 4 (December 1907), pp. 282-87; Kelly, "Ditch Construction on the Seward Peninsula," p. 22; Alicia Godfrey, "The Seward Peninsula Gold Rush," April 30, 1975, typescript, History and Archeology, Box 27, BELA Keyman Files, Alaska Task Force Files, Records of the National Park Service, FARC, Seattle; Theodore Chaplin, "Fairbanks and Seward Peninsula," USGS Field notebook 332, 1913, Alaska Field Notebook Collection, Menlo Park, California. There is some discrepancy regarding the number of men employed for the construction of Fairhaven Ditch. Godfrey indicated the (Continued)

If goods went first to Nome and then on to Deering, an additional charge of as much as six cents a pound was levied, and once at Deering, lighterage fees were \$4.00 a ton. Transportation inland during the summer cost, according to Alfred H. Brooks in 1909, as much as \$80 to \$200 a ton if hauled no more than ten miles, and considerably more after that. Laborers earned five dollars a day and board (an average of two dollars a day) and foremen and superintendents received from \$6.00 to \$10.00. It was little wonder that Morris estimated that the final cost of construction of ditches on the Seward Peninsula averaged about \$4,500 a mile.⁶⁰

There is no information regarding actual construction of Fairhaven Ditch, although methods used would have likely been similar to those of Taylor Creek Ditch Company in 1905:

The working season being a short three months, dirt was flying before the first six hundred feet of stakes were set. The stakes being set, tundra was immediately plowed up between the lower slope stakes and up to a point directly over the bottom of the ditch on the up-hill side. This sod or tundra was dragged off by laborers with hooks made from miners' driving picks with the ends bent over, and if the sod was of any value at all as bank it was placed as such, otherwise tundra and light material was dragged down the slope to clear the bank. The ground thus exposed was allowed to thaw. In the glacial ground it thawed and sunk readily to a point below the subgrade, then the burlap mentioned was placed in the bottom of the ditch to

59. (Cont.) number was 1000 in 1906 and 600 in 1907. Those numbers seem to represent more likely the total number of men Morris employed for all projects on the Seward Peninsula. The number given here--100--comes from the report submitted by USGS geologist Theodore Chaplin in 1913. People in Deering told Godfrey that 500 Russians were brought over to work for \$1.00 a day on the ditch. Neither she, nor research for this report, confirmed this story.

60. "Ditch Construction at Nome," p. 285; Alfred H. Brooks, "Costs of Placer Mining," in Henshaw and Parker, Surface Water Supply of Seward Peninsula, Alaska, p. 273; Gold Placer Hydraulic Proposition Fairhaven District, Seward Peninsula, Alaska: Statement compiled for Col. Wm. T. Perkins, Seattle by Mr. C.M. Garfield, Locator [1912], Perkins Papers, Suzzalo Library, University of Washington; Ducker, Alaska's Northwest Region, p. 34. Ducker gives the cost of ditches at \$1,000 to \$2,500 a mile while Garfield estimated it at \$8,000.

prevent erosion and thawing, and covered with silt up to grade, the sod left on the upper side gradually dropping as the ground sloughed out from under, forming a protection for the upper bank against further thawing. In cases where the ground thawed unevenly an ordinary device similar to an old-fashioned snow plow, "V" shaped, steel shod and well loaded with sand bags, was held against the upper bank and dragged along with horses, this pushing the mud against the lower bank and evening up the bottom of the ditch. For ordinary dirt excavation, long-handled shovels and a type of horse scrapers generally known as "slushers" were used, six teams with scrapers comprising an outfit, with one driver, two loaders and two dumpers working in a circle crosswise of the ditch and dumping on the bank.⁶¹

Work commenced in 1906. During that summer, Morris' men built a 500-foot-long by 5-foot-high dam across the outlet of Imuruk Lake to conserve run-off,⁶² the seventeen-mile-long upper section that ran through a lava formation from Imuruk Lake to the head of a divide between Wade Creek and the Pinnell River, and more than half of the lower section that extended from the intake on the Pinnell River along the right side of the valley to a point a few hundred feet below Logan Gulch, a small tributary of the Inmachuck River. It is likely, too, that five cabins associated with the ditch (Historical Base Map nos. 25A-D and Illustrations 42-44) were built in 1906 as well. Completion came the following July with construction of the remaining half of the lower section, the half-mile-long middle section, installation of 10,600 feet of pressure pipe leading from the penstock below Logan Gulch to the mines, and a diversion dam and waste ditch at the mines.⁶³

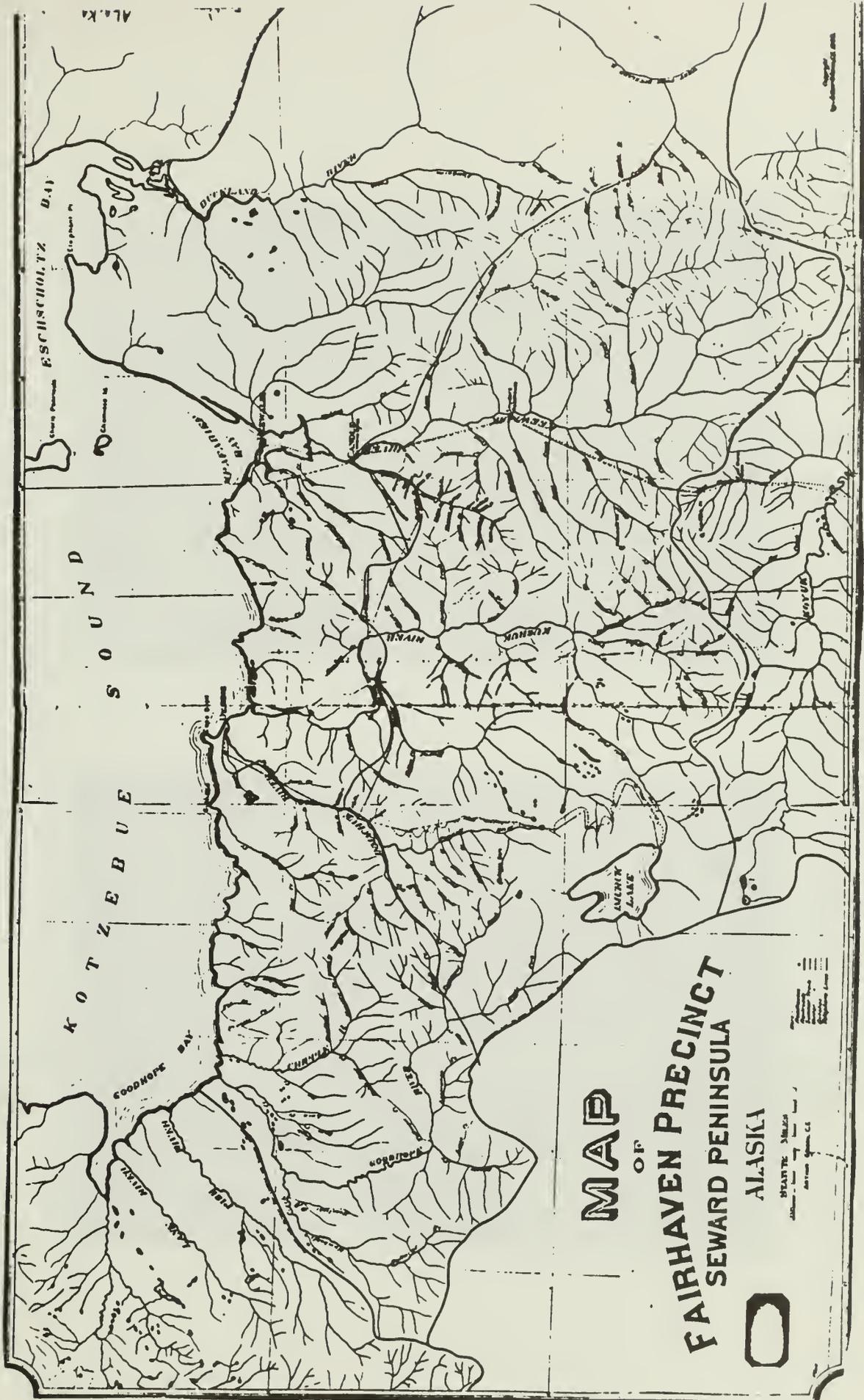
61. Kelly, "Ditch Construction on the Seward Peninsula," p. 26.

62. The dam was designed to hold the total inflow at the lake for two years if necessary. It was closed from August 1906 until August 1907. During that time, the surface of the thirty-square mile lake rose twenty-six inches. Henshaw and Covert, Water-supply Investigations in Alaska, 1907, p. 99.

63. "Mining in Fairhaven Precinct," pp. 358-360; Henshaw and Parker, Surface Water Supply of Seward Peninsula, p. 235. Illustration 34 is a 1908 map of Fairhaven Precinct showing Fairhaven Ditch. At the end of the seventeen-mile-long upper section, the water dropped into a channel emptying into a sinkhole in the lava that was connected by an underground passage to Wade Creek. The middle half of the ditch (Continued)

Illustration 35.

Map of Fairhaven Precinct Seward Peninsula Alaska, showing Fairhaven Ditch, 1908.



MAP
 OF
FAIRHAVEN PRECINCT
SEWARD PENINSULA
ALASKA



STATE MAPS
 DIVISION OF GEOGRAPHY
 ALASKA

Illustration 36.

Fairhaven Ditch at outlet of Kugruk River from Imuruk Lake, 1985. NPS photo by BELA Archeological Survey Team.

Illustration 37.

Pipe, Fairhaven Ditch, approximately 1 mile from outlet at Imuruk Lake, 1985. NPS photo by Frank Williss.



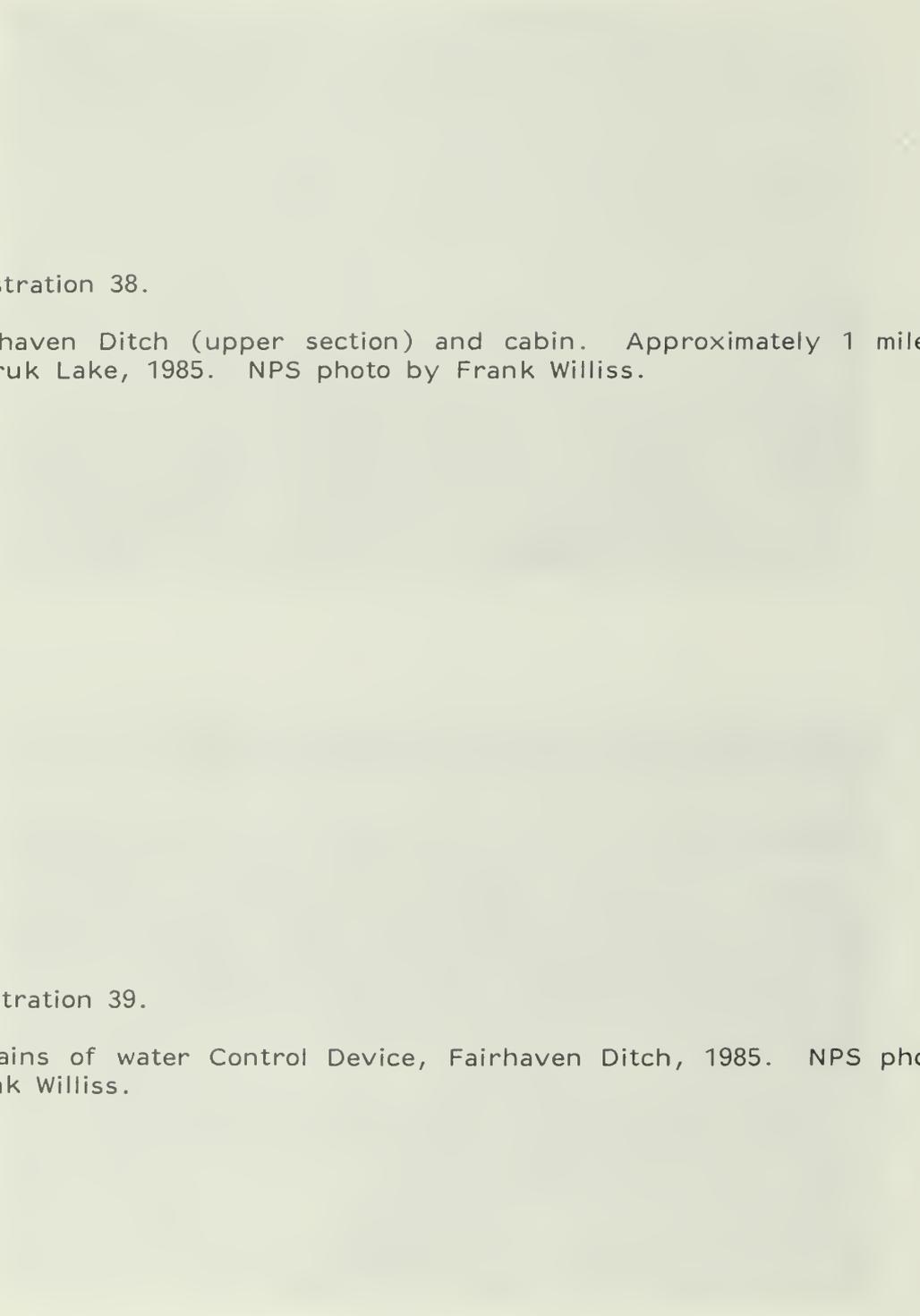


Illustration 38.

Fairhaven Ditch (upper section) and cabin. Approximately 1 mile from Imuruk Lake, 1985. NPS photo by Frank Williss.

Illustration 39.

Remains of water Control Device, Fairhaven Ditch, 1985. NPS photo by Frank Williss.



Illustration 40.

Fairhaven Ditch (upper section) and cabins, View to north, 1985. NPS photo by Frank Williss.

Illustration 41.

Fairhaven Ditch (upper section), View to north, 1985. NPS photo by Frank Williss.



Illustration 42.

Cabin at mile 1 from outlet at Imuruk Lake, 1985. NPS photo by Frank Williss.

Illustration 43.

Cabin at mile 35/8 from outlet at Imuruk Lake, 1985. NPS photo by Frank Williss.



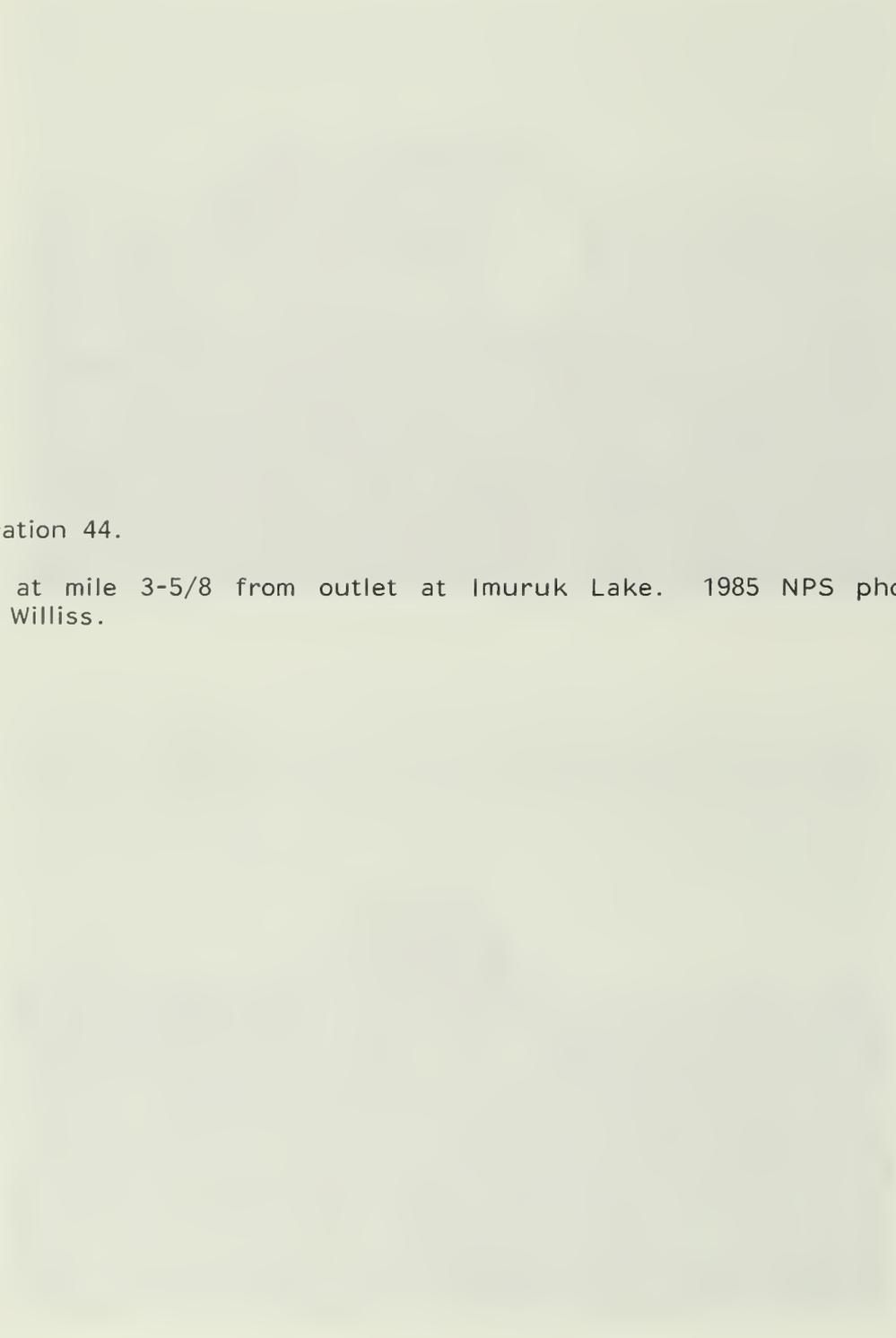


Illustration 44.

Cabin at mile 3-5/8 from outlet at Imuruk Lake. 1985 NPS photo by Frank Williss.



Construction of Fairhaven Ditch was a remarkable accomplishment. Men worked in a climate that can be hot one moment, cold and rainy the next. All the time, they would have worked amid almost unimaginable swarms of mosquitos. The ditch, which was one of the longest on the peninsula, was as much as eleven feet wide at the bottom and ran seemingly endlessly through lava formations and permafrost across the barren landscape. Practically all of the upper ditch and at least three-fourths of the lower ditch run through permafrost. When the top layer of earth was removed and water run through the ditch the ice melted and the bottom settled at least two feet in most places and the banks widened as much as fifteen to twenty feet. Fine material carried along by water was redeposited along the sides and bottom, forming a tight lining. Measurements showed that nearly all the water turned into the intake was delivered to the mines, nearly forty miles away. In fact, when the ditch was opened in September 1907, it was necessary to add a second penstock to reduce the head at Utica group of claims about two miles from the mouth of the Pinnell River from 530 to 330 feet.⁶⁴

The editors of the Alaska-Yukon Magazine predicted, in 1907, that completion of the Fairhaven Ditch would make the Fairhaven Water Company the largest "shippers of gold from this section for a number of years." Whether this prediction was fulfilled is impossible to say as the company refused to release the amount taken. There seems to be little question that the ditch allowed for full exploitation of the company's

63. (Cont.) diverted water from Wade Creek to the Pinnell River. The water flowed in the Pinnel about four miles to the lower section. The total distance from the upper section to the lower section of the ditch was about six and a half miles. Illustration 39 is a photo of the remains of what was apparently a water control device on the upper section. No information regarding this structure was uncovered. More detailed information regarding the buildings follows on pages 197-197.

64. Henshaw and Parker, Surface Water Supply of Seward Peninsula, pp. 235-36; Henshaw, "Mining in Fairhaven Precinct," pp. 359-60; Godfrey, "Seward Peninsula Gold Rush," p. 11. Illustrations 36-41 are photos of Fairhaven Ditch.

claims on the Inmachuk, however. Those were, according to C.M. Garfield, located on one of the best placer streams in Alaska, and they reputedly took out \$90,000 in one cut. As late as 1918 USGS geologists reported that the company operated a dredge on the Inmachuk, but two years later reported that their claims had played out. Although the ditch was not in use at that time, it was still in sound condition. The company sold the small pipe to people at Candle, but left the large pipe (24-30 inches) on the ground.⁶⁵

D. Decline

Individual miners continued to work their placer mines around the peninsula for years. Minor booms, such as that on Esperanza Creek in 1907-1908, rekindled little of the excitement of the first years of the Seward Peninsula Gold Rush. Later, in 1935, USGS geologists reported that small hydraulic operators working their placer mines along Humboldt Creek had a successful season. The reports gave neither names nor locations. It is quite likely, however, that they were referring to a miner named Walsh who apparently worked along the headwaters of the creek in the 1930s. Local sources indicate, moreover that tailings along the creek and an abandoned gable-roofed frame cabin (Historical Base Map No. 30 and Illustration No. 45) on claim No. 1. Above Discovery of the present-day Tweet claims, remain from Walsh's activity in the area.⁶⁶

65. "Ditch Construction at Nome," p. 287; "Gold Placer Hydraulic Proposition, Fairhaven Hydraulic Proposition, Fairhaven District," [1912], Perkins Papers, Suzzalo Library, University of Washington; Cathcart, USGS Field Notebook 445, 1918, Alaska Field notebook collection, USGS Field Notebook 444, 1920, Ibid; U.S. Department of the Interior, U.S. Geological Survey, Past Placer-Gold Production From Alaska, by Smith, USGS Bulletin 857-B (Washington, D.C.: Government Printing Office, 1933), p. 96. By 1930 total production from the Fairhaven District was \$5,727,100.

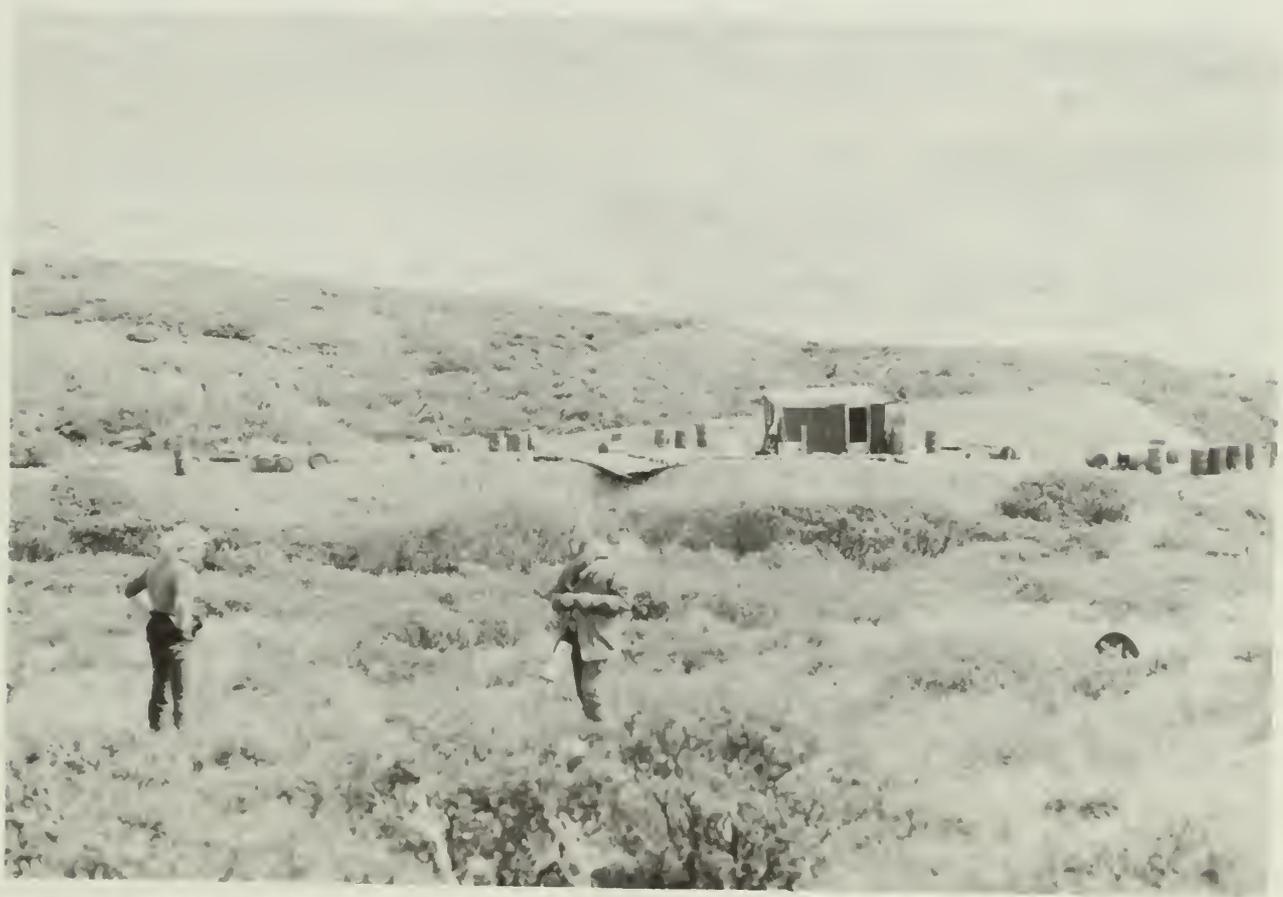
66. U.S. Department of the Interior, U.S. Geological Survey, Mineral Resources of Alaska: Report on Progress of Investigations in 1935, by Philip Smith, et. al., USGS Bulletin 880 (Washington, D.C.: Government Printing Office, 1938), p. 54; Moxham and West, Radioactivity Investigations in the Serpentine-Kougarok Area, p. 6; U.S. Department of the Interior, National Park Service, "Mineral Report: Validity Examination of the Humboldt Creek Placer Mining Claims involving N.B. (Continued)

Illustration 45.

[Walsh] cabin on Humboldt Creek (Historical Base Map no. 30), 1985.
NPS photo by Bering Land Bridge Archeological Survey Team.

Illustration 46.

Cabin on Humboldt Creek, 1985. NPS photo by Bill Nagle.



Clearly, however, concentration on the individual miners would overlook a more significant development that began with the construction of ditches--the gradual displacement of the individual prospector with his pan and rocker by large-scale operators. The arrival of dredges on the peninsula proved further evidence of this process.

The first dredge actually had been used in the Snake River as early as the summer of 1900, but apparently had little success.⁶⁷ Despite early problems, dredges could be found working placers along the Solomon and Niukluk drainages in two years later, and within five years had returned to the Nome and Snake River drainages.⁶⁸ By 1917, twenty-one dredges worked the Snake, Nome, Solomon, Niukluk, and Casadepaga drainages and two years later they were in use across the peninsula on Candle Creek, and the Kugruk and Inmachuk rivers.⁶⁹ Five years later twenty-two dredges produced 42.1% of the output of gold on the peninsula, an amount that would increase to 83% by 1931 and 78% in 1939.⁷⁰

66. (Cont.) Tweet & Sons, "Bering Land Bridge National Preserve," by Sidney L. Covington, Jr. (draft, December 20, 1985). Another abandoned gable-roofed frame structure (Historical Base Map. No. 31 and Illustration No. 46) stands nearby. No evidence regarding this structure was uncovered.

67. Webb, "Seward Peninsula - Kotzebue Sound," p. 104; Ducker, Alaska's Northwest Region, p. 34. An early description of dredges and the problems of dredging on the Seward Peninsula is T.A. Rickard, "Dredging on the Seward Peninsula," Mining and Scientific Press, 97 (November 1908), pp. 734-740.

68. Ducker, Alaska's Northwest Region, p. 34.

69. Ibid.

70. S.H. Cathcart, "Mining on Seward Peninsula." Field Notebook 446, 1918, Alaska Field Notebook Collection, USGS, Menlo Park, California; U.S. Department of the Interior, U.S. Geological Survey, Mineral Resources of Alaska: Report on Progress of Investigations in 1931, by Philip S. Smith, et. al., USGS Bulletin 844 (Washington, D.C.: Government Printing Office, 1934), p. 45; U.S. Department of the Interior, U.S. Geological Survey, Mineral Resources of Alaska: Progress of Investigations in 1940, by Philip Smith, et. al. USGS Bulletin 933 (Washington, D.C.: Government Printing Office, 1944), p. 55. The (Continued)

The introduction of improved technology never fully solved the myriad of problems facing miners on the Seward Peninsula--short working season, lack of usable water, high cost of transportation, high cost of labor, just to name a few.⁷¹ From 1897 to 1908, placer mines on the Seward Peninsula produced \$37,247,000 worth of gold.⁷² In 1906, 352,812.50 fine ounces of gold produced were worth \$7,500,000. That year was the high point of the production of gold on the peninsula.⁷³ Thereafter the value of gold produced on the peninsula declined. In 1909, an extreme drought that lasted from early July until freeze-up brought on a general state of depression and value of gold declined to \$4,260,000.⁷⁴ By 1914 the value of gold produced was less than half of what it had been in 1907, and by 1922 less than one fourth.⁷⁵

After 1932 the value of gold rose from \$20.67 to \$35.00 an ounce. The higher prices stimulated yet another boom, and by the end of the decade the value of gold produced on the peninsula reached

70. (Cont.) number of dredges had declined to fourteen in 1931, but rose again to twenty-three in 1939. A dredge operates at Taylor, just south of Bering Land Bridge National Preserve, today.

71. For discussion of the cost of labor see Cathcart, "Mining on Seward Peninsula," and U.S. Department of the Interior, U.S. Geological Survey, The Alaska Mining Industry in 1918, by G.D. Martin, et al., USGS Bulletin 712 (Washington, D.C.: Government Printing Office, 1920), p. 185. James Foster, in his "AFL, IWW and Nome: 1905-1908," Alaska Journal, 5 (Winter 1975), pp. 66-73, also mentions wages paid miners.

72. Collier, et. al., Gold Placers of the Seward Peninsula, 1908, p. 11. During the same period, \$118,725,000 came from the Klondike.

73. U.S. Department of the Interior, U.S. Geological Survey, Mineral Resources of Alaska: Report of Progress of Investigations, 1922 by Alfred H. Brooks, et al. USGS Bulletin (Washington, D.C.: Government Printing Office, 1924), p. 49. Brooks placed the value of silver production on the peninsula at \$29,600 that year.

74. Brooks, et. al. Mineral Resources of Alaska, 1909, p. 353; Brooks, et. al., Mineral Resources of Alaska, 1922, p. 49.

75. Brooks, et al. Mineral Resources of Alaska, 1922, p. 49.

\$3,590,000.⁷⁶ That proved to be short-lived, however, when an October 8, 1942 order of the War Production Board closed all non-essential mines "to promote the national defense."⁷⁷ Although the order did exempt smaller mines, USGS geologists reported that mining came to a standstill on the peninsula and that after the revocation of the order on June 30, 1945, it only slowly started up again.⁷⁸ In 1946, they indicated that while John Kanari was working six miles north of Taylor, Sam Godfrey at Henry Creek, and George Bodis near the mouth of Budd Creek, mining had not resumed at Walsh camp on Humboldt Creek.⁷⁹

Gold mining never regained its pre-war importance, although NPS planners reported an up-surge in 1973. In 1971 employment in mining on the peninsula varied from a low of seven to a high of fifty-six.⁸⁰ Some mining did continue in what is now Bering Land Bridge National Preserve--chiefly in the Serpentine Hot Springs, Tin Mountain, Humboldt area, and farther east along Esperanza Creek. Presently, there are seventy-nine unpatented and inactive mining claims within Bering

76. Webb, "Seward Peninsula-Kotzebue Sound," p. 121; U.S. Department of the Interior, U.S. Geological Survey, Mineral Resources of Alaska: Report on Progress of Investigations in 1940, by Philip S. Smith, et. al., USGS Bulletin 933 (Washington, D.C.: Government Printing Office, 1944), p. 55. In 1930, twelve dredges worked the placers on the Peninsula. By 1940 that number had risen to twenty-three.

77. Federal Register, 7 (October 9, 1942), p. 992.

78. Moyhan and West, Radioactivity Investigations in the Serpentine - Kougorok Area, p. 4; Federal Register, vol. 10 (July 3, 1945), p. 8110. Covington, Mineral Report. Covington indicates that the Tweet family, who own claims along Humboldt Creek today, began mining there in the 1940s.

79. Moxham and West, Radioactivity Investigations in the Serpentine - Kougarok Area, pp. 4-6.

80. U.S. Department of the Interior, Alaska Planning Group, Final Environmental Statement, Proposed Chukchi-Imuruk National Reserve, Alaska (Washington, D.C.: Government Printing Office, 1975), p. 160.

Land Bridge National Preserve--along Humboldt Creek and south of Serpentine Hot Springs valley.⁸¹

By 1930 areas adjacent to present-day Bering Land Bridge National Preserve--Fairhaven, Kougarak, and Port Clarence districts--had produced \$8,506,800 worth of gold. The Seward Peninsula has produced, since 1897, \$150,000,000 worth of gold, making it one of the major gold-producing areas in the United States.⁸² The story of mining there is much more than bonanza claims, stampedes, and boom town, however exciting that may be. The Seward Peninsula gold rush left no aspect of life untouched--politics, social milieu, transportation, Native - non-Native relations, and communities. The changes brought to the land and the people who lived there are still being felt today.

E. Sites Related to Mining

1. Serpentine Hot Springs (Historical Base Map 24)

Located on the Hot Springs Creek, a tributary of the Serpentine River, the site consists of a twenty-by fifty-six foot modular

81. Preliminary Cost Estimates for Proposed Chukchi-Imuruk National Preserve, Alaska, January 2, 1978, Keyman Files, Bering Land Bridge National Preserve, Alaska Task Force Files, Records of the National Park Service, RG 79, FARC, Seattle; U.S. Department of the Interior, Bureau of Land Management, Mining Activity Report, August 25, 1884, xerox copy in Mineral Resources Branch, Division of Energy, Mining and Minerals, Denver Service Center; Draft General Management Plan, Bering Land Bridge National Preserve, p. 127. Mining did occur on Esperanza Creek as late as 1980. The claims of Jack Hoogendorn, however, were declared abandoned and voided in 1981.

82. Smith, Past Placer-Gold Production From Alaska, p. 96; Webb "Seward Peninsula - Kotzebue Sound," p. 121; U.S. Department of the Interior, U.S. Geological Survey, Placer Deposits of Alaska: An Inventory of the Placer Mines and Prospects of Alaska, Their History and Geologic Setting, by Edward H. Cobb, USGS Bulletin (Washington, D.C.: GPO, 1973), p. 61; U.S. Department of the Interior, U.S. Geological Survey, Alaska's Mineral Resources and Production, 1923, by Alfred H. Brooks, et. al., 773 (Washington, D.C.: Government Printing Office, 1925), p. 49. In 1903 Brooks estimated that the total value of gold that could be taken from the Seward Peninsula would be between \$265,000,000 and \$325,000,000.

World War II "knock-down" structure, a deteriorating fifteen foot square plywood bathhouse, and 1,100-foot airstrip. The remains of what is believed to be the original bathhouse may be seen 7 km. to the northwest. Natives of the area used the hot springs at an early date, and miners first visited in 1901.⁸³

2. Fairhaven Ditch (Historical Base Map 25)

Constructed in 1906 and 1907, Fairhaven Ditch carried water thirty-eight miles from Imuruk Lake to claims on the Inmachuk River. The ditch has not been used since the second decade of this century. Pipes are still visible in some locations. Although the banks have deteriorated in some areas, in others they remain solid.⁸⁴

3. Cabins

a. Historical Base Map 25a

This cabin is located approximately 1 mile from the Imuruk Lake outlet. It is a fifteen by twenty-one foot plank, gable-roofed structure with a six- by nine-foot shed entryway. One by three-inch battens held canvas and tar paper covering. One wooden bed frame remains inside the cabin, and some cracks are covered with newspapers, dated January 1962. Debris outside includes a number of reindeer skulls and bones, c-ration cans, and an isopropyl alcohol can marked "U.S. Army Corps of Engineers, 1963."

There is no documentary evidence regarding date of construction or use of the cabin. It is likely, however, that it related to construction and monitoring of the ditch. Debris indicates continued use, with reindeer herders among the users.⁸⁵

83. See pp. 139-147, 241-243 for documentation.

84. See pp. 168-189 for documentation and photos.

85. Field notes, Frank Williss, July 1985.

b. Historical Base Map 25b

This site consists of two cabins. One is a fifteen by eighteen foot gable-roofed plank structure, with battens used for attaching tar paper. Inside are nine bed frames attached to the wall, remains of a stove, and bear-proof food box. The second cabin is of similar construction and measures fifteen by eighteen feet. Three wooden bed frames remain inside, as does a stove with the name "Langs Alaska, 1923." Boards are marked "F. Mining Co. Deering" and a paper on a window is dated August 23, 1910. Attached to the outside are telephone insulators and what appears to be a wood antenna frame. Debris in the yard includes the remains of a stove and sledge.

There is no evidence regarding date of construction or use. The number of bunks inside, however, suggests that the cabins related to construction of ditch, and evidence of later use suggest a relation to maintenance.⁸⁶

c. Historical Base Map 25c and Historical Base Map 25d

Both cabins have collapsed.⁸⁷

3. Sod House (Historical Base Map No. 26)

Located on the floodplain of the Goodhope River, this structure is an irregular rectangle measuring 5.6 x 6.6 x 5.2 x 5.7 meters, Artifacts near and inside the house include enamel buckets and bowls, a "J.C. Bill's Best Cut Blue" tobacco tin, tin cans, and a wooden paddle wheels probably used to bring water to a sluice box. NPS archeologists found a sluice box two kilometers downstream. No documentation regarding this site exists, but it may be dated to 1901, the earliest recorded date of mining activity in the area.⁸⁸

86. Ibid.

87. Ibid.

88. Bering Land Bridge Archeological Survey 1985, Ben-091. See pp. 137-138 here for discussion of early mining activity in the area.

4. Mining Site (Historical Base Map 27)

Located at the mouth of the Esperanza River, this site consists of an artificial holding pond, nearby sluice box, Krogh Co. pump, caterpillar radiator, doors, cots, tanks for propane or acetylene, fifty-five gallon drums, and railroad ties.

Active mining continued at this site until 1981. However, it may have also been mined as early as 1907-08 when USGS geologists reported that "Laplanders" had found gold at the mouth of Esperanza Creek.⁸⁹

5. Sod House (Historical Base Map No. 29)

This two-room sod house is located near Esperanza Creek. The house measures 11.5 by 6 meters with each room measuring 4 x 4.5 meters each.

No documentation exists regarding this site. It may well date, however, to mining activity in the area in 1907-1909.⁹⁰

6. Mining Camp Site (Historical Base Map No. 28)

Located at the mouth of a small tributary to the Goodhope River, this site is the remains of a historic to recent mining camp consisting of, among other things, wood, pickaxes, cots, and buckets made from five gallon containers.

No documentary evidence regarding this site exists. It may date to earliest activity in the area (1901) and used, as well, until fairly recent times.⁹¹

89. Ibid., Ben-093 and p. 138 here.

90. Ibid., Ben-097 and pp. 137-138 here.

91. Ibid., Ben-095 and pp. 137-138 here.

7. [Walsh] Cabin (Historical Base Map No. 30)

Located near Tweet Claim No. 1. Above Discovery on Humboldt Creek, this deteriorating wood-frame gable-roofed cabin dates, according to local sources, to the 1930s. Considerable debris relating to mining is found in the area as well as remains of another, possibly older cabin.⁹²

8. Cabin (Historical Base Map No. 31)

Located near site 30 on Humboldt Creek. This flat-pitched gable-roof structure and numerous oil drums is of unknown origin. It has been used recently as a cabin.⁹³

9. Trails and Shelter Cabins

A number of trails primarily associated with mining activity crossed the present-day preserve.

a. Route from Deering to the Taylor Highway (Historical Base Map No. 32)

Described as one of two major trails to mines on the northeastern side of the peninsula, the trail became the permanently marked Alaska Road Commission Route 28 (Dahl Creek - Candle Trail). The trail was used, primarily in winter, for transporting mail and light freight, animals, and people. It apparently has not been used since 1980.⁹⁴

(1) Cottonwood Shelter (Historical Base Map 32a)

Built in 1923 by the Alaska Road Commission, this shelter cabin is a twelve by eighteen-foot gable-roofed, corrugated metal structure. Remaining in the interior are two bunks, stove, lantern, and table.⁹⁵

92. Covington, Mineral Report.

93. See Illustration 46.

94. See pp. 153-168 for documentation and photos.

95. Ibid.; field notes, Frank Williss, July 1985.

(2) Berry Creek Shelter Cabin (Historical Base Map 32b)

No documentary evidence regarding construction of this shelter exists. All that remains of the nine-by-twelve-foot structure is the 2 x 4 wood framing, some planks, door, and debris that includes stove, beds, etc.⁹⁶

(3) Aurora Shelter Cabin (Historical Base Map 32c)

Constructed in 1923 by the Alaska Road Commission, nothing remains but the roof, lying some distance from the original site.⁹⁷

10. Trail Taylor-Serpentine/Arctic Hot Springs (Historical Base Map 33)

This trail, constructed by the Alaska Road Commission, was part of the Nome-Serpentine Trail. It is shown variously as a pack trail, and in 1924, as a wagon road.⁹⁸

11. Shishmaref Inlet to Serpentine/Arctic Hot Springs Trail (Historical Base Map 34)

This trail is shown on maps as early as 1903.⁹⁹

12. Aurora-Taylor Trail (Historical Base Map 35)

Shown on various maps as a trail from Aurora to the mining camp of Taylor.¹⁰⁰

96. Ibid.

97. Ibid.

98. Annual Report of the Alaska Road Commission, 1921; Alaska Road Commission, "Map of Nome District," 1923, [corrected to March 1939].

99. F.J. Monroe, "Map of Seward Peninsula the Arctic Gold Fields of Alaska, December, 1903," Map Division, Library of Congress.

100. See for example Annual Report of the Alaska Road Commission, 1921.

13. Candle-Serpentine Hot Springs/Arctic Hot Springs Taylor Trail (Historical Base Map 36)

Various maps as a pack trail from Candle to Taylor via Serpentine/Arctic Hot Springs.¹⁰¹

14. Sinrazat Shelter Cabin (Historical Base Map 37)

Located on the barrier island between Arctic Lagoon and the Chukchi Sea midway between Ikpek and Shishmaref, Sinrazat Shelter is a two-room shed roof cabin measuring fourteen by twenty-eight feet. The east room was used as a dog barn. Stalls are located against the North and South walls.¹⁰²

F. Recommendations

The people who came to the Seward Peninsula in search of gold had a significant impact on the land now within the boundaries of Bering Land Bridge National Preserve. Their story is one which must be told in any park publications.

1. Sites

1. Serpentine Hot Springs

Has been nominated to the National Register of Historic Places.

2. Fairhaven Ditch and Associated Structures

Because of its association with the Seward Peninsula Gold Rush and as a representative example of ditches that were a significant part of that era, Fairhaven Ditch will be nominated to the National Register of Historic Places. A nomination form accompanies this report.

101. Annual Report of the Alaska Road Commission, 1912; 1916.

102. Field Form, Bering Land Bridge Archeological Survey, 1986.

3. Other Sites

It is not believed that other sites described in section E here meet criteria for nomination to the National Register. No special management activity is warranted. No documentation for most sites exists. Should a decision to clean up debris described above, however, it should be preceded by a detailed archeological survey to determine significance of artifacts.

EPILOGUE

For a brief period of time at the beginning of this century, the eyes of a fascinated world focused on the Seward Peninsula. As the excitement of bonanza placers, boom towns, and "golden sands" wore off, however, they quickly turned away. By 1975, more than 200 years after the first outsiders had reached the peninsula, Dorothy Jean Ray could write of the land:

In the twentieth century the feeling from the cape is not so much isolation as loneliness, not so much desolation as desertion, for people have come and gone, forming an unbroken chain of human occupancy as rediscovery followed upon discovery in a great wilderness. From the top of the cape, Norton Sound is a plate of blue that fuses with a soaring sky along its outer edge, a spatial immensity that technology of the 1970s cannot seem to dent. This famous cape, only ten miles from Nome, has never been more lonely. Sometimes not a ship is in the sea, or an airplane in the sky; of course, no umiaks or kayaks--the Eskimo's own boats--now break the surface of the ocean. From certain positions high on the cape, the town of Nome is lost from view; the cabins built on the site of Ayasayuk on the lower slopes are obscured by thick copses of alders and willows; and the road is swallowed beneath its own embankment. There is not a sign to show that man has ever been there before.

Now in the 1970s the greater part of the Bering Strait region has this same look of forever. Before the gold rush of 1898-1900 foreign visitors left few mementos--a building or two here and there, some telegraph poles, or a derelict ship--all quickly appropriated by the Eskimos or the elements. After the gold rush, tons and tons of indestructible metal from castaway machinery at every mining site up and down the coast and back in the valleys swiftly acquired the timeless look of the tundra as they slowly rusted into commemorative monuments to the twentieth century. Except for villages of European-styled houses, a few miles of roads, and the tailing piles left by dredges that chewed the gravel for gold, the land is not much different from the time of its first discovery.

1. Ray, Eskimos of Bering Strait, pp. 4-5.

The ever-increasing number of outsiders who came to the Seward Peninsula from 1732 impacted the lives of the people who lived there. Certainly in the twentieth century even those who lived in the remotest village faced a broader array of choices than ever before. Yet, even today the overwhelming preponderance of Native people on the Seward Peninsula depend upon the land for their livelihoods in a manner similar, in respects, to that of their ancestors. Subsistence activity not only provides economic support, but is an important unifying force in Native culture.

Subsistence activity occurs across Bering Land Bridge National Preserve. It is concentrated, however, along the coast, lagoons, and Serpentine River on the western side of the preserve. There, most often on allotment application lands, are found a number of cabins or campsites related to subsistence activity.² Herbert Nayokpuk, for example, applied for land along the Chukchi Sea that he had used nearly every year since he was a child. Here, he indicated, he obtained most of his family's yearly supply of meat (seal, walrus, whitefish, trout, and salmon). Esau

2. The Alaska Native Allotment Act (34 Stat 197, May 17, 1906) as amended on August 2, 1956 allows the head of family to obtain an allotment of 160 nonmineral acres of land upon proof of substantial and continuous use and occupancy. Such lands need not be contiguous, but may be in as many as four parcels. They are inalienable and are not subject to taxation. Natives have filed 104 allotment applications totalling 12,249.5 acres in Bering Land Bridge National Preserve. No allotments have been conveyed thus far. The Bureau of Land Management is presently adjudicating applications. Federal Field Committee for Development Planning in Alaska, Alaska Natives and the Land (Washington, D.C.: Government Printing Office, 1968), p. 451; Draft General Management Plan for Bering Land Bridge National Preserve, pp. 127-29. Statement of Herbert Nayokpuk, April 13, 1983, File F 18775, Native Allotment Files, Bering Land Management, Fairbanks; Field Report, Esau Weylouanna, 5/8/77, File 18775, Ibid; Statement of Witness, Gideon Barr, File 49(B), Ibid. Time and funds did not allow for a exhaustive examination of Native allotment files. Additionally, because adjudication is on-going some files were not available for inspection. Sites relating to subsistence, as a result, are not shown on the historical base map. Location of Native allotment applications are shown on the Land Status map in Draft General Management Plan, Bering Land Bridge National Preserve.

Weyiouanna used forty acres on the north bank of the Serpentine River (one of four parcels) for picking blueberries, hunting moose in the fall, and ice fishing in the winter. A cabin located on the northwestern side of North Killeak Lake was constructed in 1932 and still serves as an emergency shelter.

Two hundred years of history had established an inter-dependence with the outside world, however. Not even the remotest village on the Seward Peninsula could escape that burden. Time and again came reminders that there would be no return to the isolation of an earlier day. In winter 1918-19, for example, the influenza that had already brought millions of deaths world-wide reached the peninsula, killing as many as 500 Natives.³

For a short time in 1942 when reports of the presence of a Japanese fleet in the Bering Sea spurred fears of an invasion, Nome and the Seward Peninsula, again captured the nation's attention. In less than twenty-four hours in June, Army pilots made 179 trips to Nome, bringing 2272 men, twenty anti-aircraft guns, and tons of equipment to the near-deserted mining camp. By early July, when it became clear that no invasion would take place, the first mass airlift in American military history (dubbed "Operation Bingo") had brought nearly 900,000 pounds of men and supplies to Nome.⁴

3. See, for example, "Nome - City of Golden Beaches," p. 136; Lomen, Fifty Years in Alaska, pp. 124-25; William Ramsey, "A Brief History of the Spanish Influenza is so far as the undersigned was concerned in the defense of those places mentioned in preventing contamination, and the relief of places of infection," June 7, 1919, Reel 34 Alaska School Files, Reel, Alaska State Library, Juneau; William A. Oquillak, People of Kauwerak: Legends of the Northern Eskimo (Anchorage: AMU/Press, 1973), pp. 205-208. The S.S. Victoria apparently brought the disease to Nome. Carried into the interior by mail carriers, influenza struck with devastating swiftness. Shishmaref escaped the ravages of epidemic. Villagers there received warning of the spread of the disease. They posted armed guards along trails leading to the village, allowing no one to enter or leave.

4. Brian Garfield, The Thousand Mile War: World War II in Alaska and the Aleutians (Reprint ed.; New York: Bantam Books, 1982), (Continued)

Nome continued to be a focal point of World War II activity on the Seward Peninsula, serving as a stopping point for planes transferred to the Soviet Union under the lend-lease program. Remains of a weather station located a Lava Lake in present-day Bering Land Bridge National Preserve (Historical Base Map No. 38) was one of several constructed to provide information for Russian pilots involved in transferring planes from the United States to the Soviet Union. Although little information exists on this or other such sites--they were apparently constructed and abandoned without any paperwork involved--the few records as well as site evidence suggests that it was abandoned shortly after the war ended.⁵

Local legends hold that the burned-out hulk of an airplane found on Lane Mountain (Historic Base Map No. 39 and Illustration No. 47) is related to World War II (or sometime after) activity on the Seward Peninsula. Official records provide no information on the wreck,

4. (Cont.) pp. 110-14; John Haile Cloe, Top Cover for America: The Air Force in Alaska, 1920-1983 (Missoula, Mont.: Anchorage Chapter - Air Force History Association and Pictorial Histories Publishing Company, 1984), p. 84; Stan Cohen, The Forgotten War: A Pictorial History of World War II in Alaska and Northwestern Canada (Missoula: Pictorial Histories Publishing Company, 1981), pp. 97-98.

5. U.S. Army Corps of Engineers, Alaska District, "Site Inventory Report Defense Environmental Restoration Program, Lava Lake Weather Station, Alaska," 1985; Trip Report, Lake Access Project, July 25-30, 1976, BELA Keyman Files, Box 24, Alaska Task Force Files, Records of the National Park Service, RG 79, FARC, Seattle. There are actually two parts to the site, one located on the east edge of the lake, the second about ½ mile to the east. At the first are found empty barrels, lumber from weather instrument boxes, an oil heater, six coal burning stoves, tools, and a bed spring. At the second site (apparently the actual meteorological station itself) are remains of two portable quonset huts, one assembled and the other stacked in a pile; two small wood-frame buildings on skids; and numerous empty barrels. A cast-iron coal-burning stove and cast-iron transmission case are found in the standing frame and the remains of a two-story building nearby is almost overgrown.

however. Identification from photos is impossible, and even may be so with on-site inspection.⁶

When Europeans first laid claim to the land that would become known as Alaska, they conveniently ignored the people who lived on the land. The treaty providing for the sale of Alaska to the United States ignored the land claims of the Native people as well. Although the issue would be raised from time to time over subsequent years, legislators nimbly side-stepped the issue. Even when Congress granted statehood to Alaska, it did not address the question, but merely reaffirmed its own right to settle the Native land claims:

As a compact with the United States, said State and its people do agree and declare that they forever disclaim all right and title to any lands or other property not granted or confirmed to the state or the political subdivisions by or under the authority of this Act, the right or title to which is held by the United States or is subject to disposition by the United States, and to any lands or other property (including fishing rights), the right or title to which may be held by Indians, Eskimos, or Aleuts . . . or is held by the United States in trust for said Natives, shall be and remain under the absolute jurisdiction and control of the United States until disposed of under its authority, except to such extent as the Congress had prescribed or may hereafter prescribe, and except when held by individual Natives in fee without restrictions or alienation.⁷

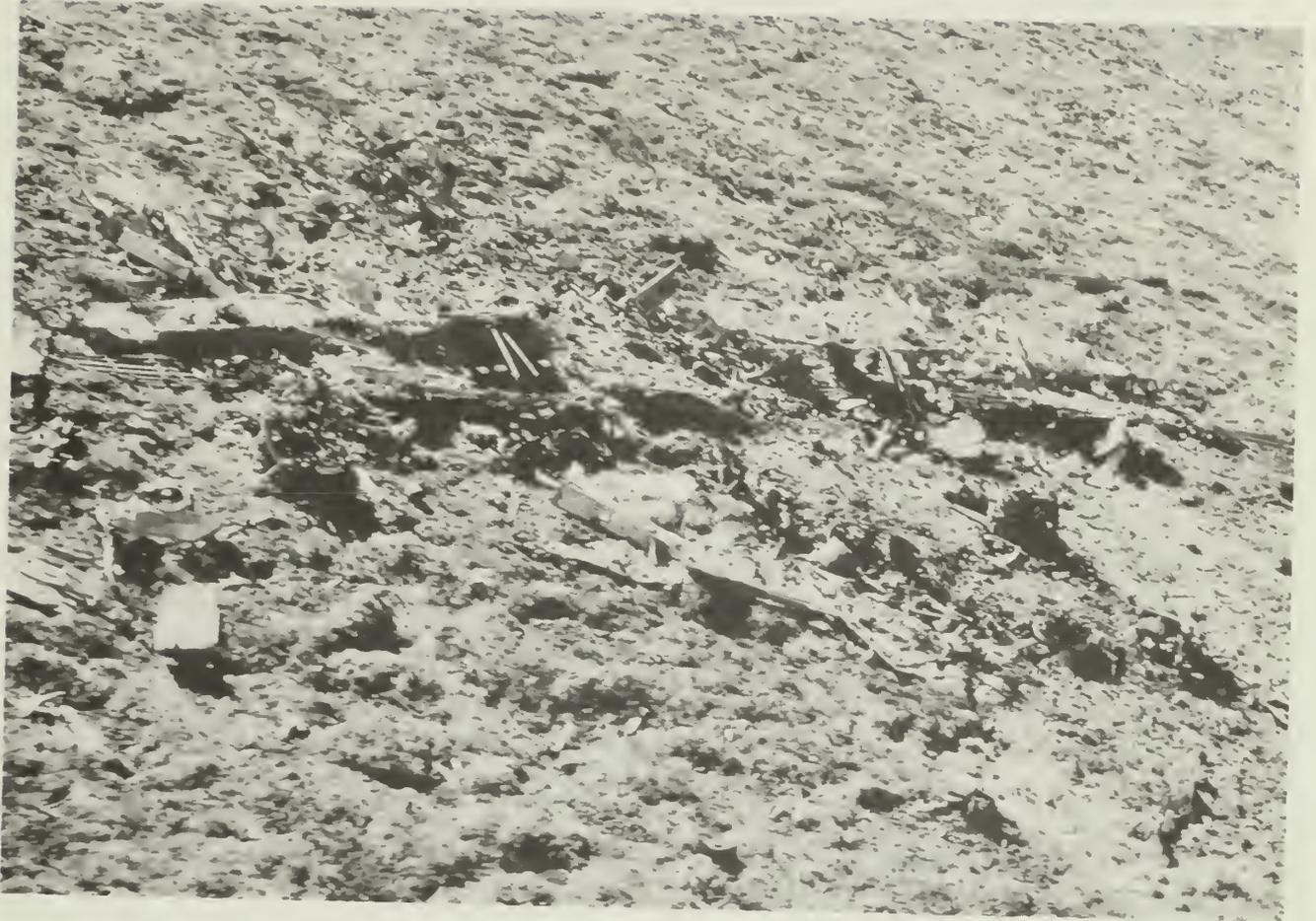
State land selections--the statehood act provided the new state with more than 104,000,000 acres of public land--quickly brought state officials

6. Telephone discussion with Harold Tweet, May 1986; John H. Cloe to Frank Williss, April 20 and May 14, 1986; telephone discussion with Jeanne Shaaf, May 28, 1986.

7. P.L. 85-805. This discussion of land claims is based upon Williss, Do Things Right the First Time. Alaska received the right to select 102,550,000 acres from the public domain, 400,000 acres from National forest land in southeast and 400,000 acres from the public domain for community expansion, and 200,000 acres of university and school lands to be held in trust by the state. congress also confirmed earlier federal grants to the territory amounting to 1,000,000 acres. State selections that are tentatively approved run along the southern and eastern/southeastern borders of Bering Land Bridge National Preserve. There are no state-selected lands within the preserve, however.

Illustration 47.

Plane wreck, Lane Mountain, 1985. NPS photo by Bering Land Bridge Archeological Survey Team.



into conflict with Natives who needed many of the same lands to maintain their lifeways. Near continual clashes resulted, in 1967, in a virtual freeze on transfer of all public lands in Alaska. More important than Native rights, it is now clear, the conflict threatened construction of a pipeline needed to carry newly-discovered North Slope oil to the designated shipping point of Valdez. In 1972, at long last, Congress addressed the Alaska Natives' rights in the land when it passed the Alaska Native Claims Settlement Act of 1972.⁸

As Congress considered the disposition of Alaska's public lands in its deliberation regarding Native land claims there were those who believed that the question was not merely a two-sided one involving Natives and state. Conservationists and federal officials alike argued that any formula must include provisions for the national interest. As a result of their efforts the Alaska Native Claims Settlement Act also contained provisions (D-1 and D-2) which authorized the National Park Service and other federal agencies to study and recommend National Interest Lands for Congressional consideration as additions to the National Park, National Forest, National Wildlife Refuge, and Wild and Scenic Rivers systems. Congress finally passed the Alaska National Interest Lands Conservation Act, nearly a decade later. Among the 43,600,000 acres of land preserved in the National Park System was the 2,457,000-acre Bering Land Bridge National Preserve.

8. Generally considered the most generous settlement ever made between the United States government and a group of Native Americans ANCSA granted Alaska Natives \$925,000,000 and 42,000,000 acres of land (2,000,000 of which would be reserved as historic and cemetery sites) to be divided between village corporations and twelve (with the option of thirteen) regional corporations created by the act. Bering Land Bridge falls within the boundaries of two regional corporation--Bering Straits Native Corporation and NANA Regional Corporation. Regional and village corporations have selected some 175,402 acres (including overlapping selections made by both) within the preserve. Only one small tract--1,280 acres northwest of the Killek Lakes--has been interimly conveyed to Kikiktagruk Inupiat Corporation. Draft General Management Plan, Bering Land Bridge National Preserve, pp. 127-130.

RECOMMENDATIONS

1. A number of sites and structures (primarily in the west portion of the preserve) relate to subsistence. Because these are on Native allotment application lands, no treatment is recommended.
2. Lava Lake weather station. Little documentary evidence regarding this site exists, and it apparently maintains little integrity. It is impossible, therefore, to make recommendations regarding treatment. Before any action is taken, that may affect the site, however, it is recommended that further research in the national archives be undertaken and a thorough on-site investigation be made.
3. Lane Mountain plane wreck. Information regarding this wreck is not, apparently, found in official documents. Because of lack of information and probable difficulty in identifying, no treatment is recommended. It is recommended, however, that further research and a thorough on-site investigation be conducted before any action is taken that may affect the site.
4. Bering Land National Preserve, and all of that area once constituting a broad land connection between Asia and North America has been the field of exciting scientific endeavor. Beringian science, as it is known, incorporates a number of disciplines--earth sciences, botany, zoology, paleoecology, and anthropology, for example--and it has been an important example of sharing and cooperation between American scientists and their Russian counterparts. These scientific and internationalist themes have been prominent as rationale for the Bering Land Bridge parkland from 1965 on.

Beringian science is a theme that, while too highly specialized to be developed here, nonetheless should be examined. It is recommended that David M. Hopkins, a pioneer in Beringian science, whose works The Bering Land Bridge (1967) and The Paleoecology of

Beringian (1985) stand as landmarks in the field, be persuaded to prepare an essay that develops this theme, highlights historic moments, and identifies for nomination to the National Register of Historic Places sites commemorating the history of Beringian science.

APPENDIXES

APPENDIX A

JOURNAL OF THE PROCEEDINGS OF MR. W.R. HOBSON (MATE) AND PARTY UNDER HIS CHARGE, WHILST TRAVELLING FROM PORT CLARENCE TO CHAMISSO ISLAND, AND RETURNING TO THE SHIP. Between February 9 and March 27, 1854 (inclusive).

Thursday, February 9, 1854.--Thermometer -33°. Started from the ship at 7.30 A.M., with two sledges, nine dogs, and provisions for 38 days, accompanied by Henry Toms (A.B.) and William Lee (A.B.)

On first starting we had no difficulty in getting on, but in crossing Grantley Harbour found the snow heavy and our strength insufficient. After trying every method I could devise, without success, we were obliged to quit one sledge and drag the other to the beach, returning for the second as soon as we landed; this caused a delay of not less than two hours. One of the sledge dogs here refused work; he had shown symptoms of illness before leaving the ship, I therefore had him cast off to return if he can. Found the travelling along the beach easier, but still had great trouble in getting both sledges along together. At sunset we were about two miles from Tup-cut-a-toui, and the dogs so fagged as to be unable to get on, we were therefore obliged to put all our strength on the heavy sledge, leaving the other; shortly after so, met Tudlig, who is to be our guide, and reached Tup-cut-a-toui, about 5.30, from which place I despatched a native and four fresh dogs to bring up the light sledge; it arrived in about an hour and a half. We put up here for the night. Time of travelling 10 hours; distance about 10 miles. Several deer were seen in the distance during the day. The number of natives at this place is about 30, present at all of whom are suffering from coughs.

February 10.--Thermometer -30°. Packed and started about 8 A.M., accompanied by Tudlig and his wife, having borrowed one dog. The morning was clear, with a keen N.E. wind, which we lost on entering the gorge; found the travelling very good. The ice had in many places fallen away from the beach, in such a manner as to appear that the water has fallen considerably since its first being frozen over; several hares were seen whilst passing through the gorge, where the cliffs are high and steep; it is the mouth of the river Cug-i-oe-to-uk.

At 11.30 reached Tocsuc, a village of three huts; I tried to purchase a dog there but without success; there were only three about the place. Foreseeing a night in the snow, I procured a set of benders, to make a hut with. Proceeded after remaining about half an hour in the village. Shortly afterwards a herd of 11 deer passed almost within gun-shot distance of the sledges. We were now crossing a large sheet of water, almost a lake, called by the natives I-mou-ruk, where the travelling was very heavy. At four o'clock, having reached the last point where we could obtain brushwood, pitched for the night, under the lee of a cliff. Our hut is made with seven light bent poles or benders, and the sledge skins, which are each six deer skins sewn together. The poles are fixed in the snow, bent over at the top, and lashed, forming a circular framework about four feet high in the centre, and covering just sufficient space to allow five persons to lie upon. The snow shoes are stuck into the snow between the poles to prevent the lower part of the skins from being pressed in. The sledge skins are then thrown over, and snow heaped round the sides to keep the wind out. When procurable, a little dry brushwood to lie upon. This is the native plan, to which we add our tent bottom, which is a great improvement. Time of travelling eight hours; distance about 11 miles. Going out of the hut a little before 12 o'clock, I observed the thermometer standing at -39° , with rather a _____ . On taking the glass inside it rose to $+05^{\circ}$.

February 11.--Thermometer -36° . Packed and started at 6.30 A.M., crossing the lake. On our right hand the Kig-li-wi-ak hills rise almost abruptly from the margin, whilst on the left the land is low, and composed of the low rounded hills which seem to be the main feature of the country about here. I observed a deep gorge leading to the eastward, through the Kig-li-wi-ak range. After travelling about two hours, found the second sledge considerably in the rear; stopped, and sent the dogs back; on its coming up shifted the weights, and gave them one of our dogs. Arrived at Cuv-vi-i-rook at 6.45, after $12\frac{1}{4}$ hours of heavy dragging, during which time we travelled about 18 miles. Put up for the night at a deserted hut; there are seven here, all large. The inhabitants are absent now, hunting.

February 12.--Thermometer -34° . Read prayers. Started at 8.30. In getting the sledges down a steep bank, the light one (No. 4) broke down, and was taken back to the hut, where I left it, and the sledge skin lent by Ki-mo-ki; packed everything on the remaining sledge and proceeded; it was nearly ten o'clock before we got away. Struck the banks of a river called by the natives Cug-i-oe-to-uk, almost immediately up which we travelled, at times striking across the land to avoid a bend of the stream. The travelling generally was very heavy, it being at times as much as we could do to start the overloaded sledge. At 3.30 arrived at two huts called Hung-i-ow-ret, where there are about 30 inhabitants, children forming the greater part of the number. The banks of the river are thickly clothed with brushwood (dwarf willow), amongst which a great number of ptarmigan were seen. As we are informed that the road to Kek-to-a-lek is very bad, I resolved on not pushing on. I am not altogether sorry that we have made such a short day's work, as it is Sunday, and our clothes want drying; the dogs will be none the worse for a little rest. The huts here are small and dirty, but the people seem tolerably well off; they have abundance of hares, ptarmigan, and fish, and a good many dogs. Read the evening service.

February 13.--Thermometer -40° . A clear calm morning. Started at seven, having bartered seven ptarmigan. Found the road overland so bad as to force us to keep the course of the river, which was pretty fair travelling, but increases the distance much. The banks are thickly lined with brushwood and literally teeming with ptarmigan. The sledge running tolerably lightly, I got out of harness and shot three; I could easily have killed many more, but they sat on the bushes in places where they would have fallen into thick snow and been lost; even shouting at them would not make them fly. At 1 P.M., passed Kek-to-a-lek, which is deserted; opposite this place we found clear running water, where the river had been dammed, seemingly for the purpose of fishing. 3.30 arrived at Noo-kei-row-e-lek, two inhabited huts; the people seem well off, but refuse to sell anything for dogs' food; I therefore fed them on ptarmigan, reserving the remains of what was brought from the ship as a stand by. Shortly after our arrival a man brought in four hares he had just snared. There are about 15 inhabitants here; they will by no means permit us to

out anything on their fire, although there is a large one in the hut; there seems to be some superstition against it. They have many dogs, but refuse to sell any. Time of travelling, nine hours; distance, 16 miles. The temperature has been so low to-day, that some brandy I had with me was frozen, no uncommon occurrence with the reduced num.

February 14.--Thermometer -22° . Started at 7 A.M., a fine clear morning, with a light northerly breeze. Found the travelling good, making considerable progress along the river. 8.30, struck across a piece of land where the road was better than any land travelling we have yet met with. On striking the course of the stream again we were obliged to take the dogs out and lower the sledge down a steep bank. Since starting this morning, we have been passing some strange peaks on our right; one on the top of a slightly rounded hill has much the appearance of a ruined fortification. The banks of the river are less thickly clothed than nearer the mouth. A few ptarmigan were seen. During the day we passed two inhabited huts, at the first of which we were unable to procure dog's food, but succeeded in getting some large fish at the second. It was about 3.30 P.M. when we passed this hut, and Tudig, who had become exceedingly lazy and useless, wanted to remain; I however determined on pushing on. He remained behind on pretence of getting his moccasins mended, saying he would follow. After travelling until dark, we saw two deserted huts and a boarder, which I supposed to be Korghu-rook, the place I wanted to reach, and prepared to remain there for the night. When the sledges were unpacked and the hut cleaned, Tudig, and his wife, who had also remained behind, came up and told us we were not at Korghu-rook; it was too late now, so we had to make the best of it. The hut we chose, although better than the other, is little short of ruinous. We found it excessively cold during the night (from which cause my watch stopped); this will prove a great inconvenience. Time of travelling, 11 hours; distance, 15 miles.

Wednesday, February 15.--Thermometer -22° . Packed and started about 8.30, having made a later start than usual, from misjudging the time. Passed Korghu-rook about 11.30, and pushed on without stopping, hoping to reach Obell to-night; the road, however, became so heavy, as to plainly show that we had but little chance of doing so. The river, as it

narrows, is less clear of snow, and the travelling consequently heavier. Took the land at 3.30, and pushed on until nearly dark, when, getting into heavy snow, and the dogs, from sheer fatigue, refusing further work, I found that it was useless to attempt proceeding, our strength being barely sufficient to start the sledges; we therefore pitched for the night, under the ice of a low hill. Our hut is made in the same way as when we first slept on the snow, except that we were forced to substitute the tent bottom for the sledge skin left at Cuv-vi-e-rook, and had nothing to lie upon but a buffalo skin. I am sorry to see a mist over the hills this evening, which I have observed to be a certain forerunner of wind. Time of travelling $9\frac{1}{2}$ hours; distance, 12 miles. There being no wood near, we were obliged to content ourselves with some frozen pork and tea boiled by the spirit lamp.

February 16.--Thermometer -23° . Started without breakfast at about 9, only intending to reach Obell to-day. Shortly after leaving our camping place a strong north-easterly wind sprung up, sweeping across the plain that extends for a great distance before us, with a cutting severity that I have not before experienced; we were passing along some rather high cliffs, which were almost hidden from us by the snow drift; we got on with great difficulty, the dogs almost refusing to face the snow drift. Reached Obell at about 3 P.M., having come six miles in as many hours, with exceedingly hard labour. One of our dogs died almost immediately we arrived; he gave up work, and seemed to be taken ill exactly in the same way that the other one we lost was. There is a man ill in the hut we put up at, apparently with cold and asthma, the women therefore refuse to sew anything for us, although our mocassins are much out of repair. I hear that a child has died here lately. We had much trouble in procuring wood and making a fire; the people will not suffer us to cook in the hut. As far as I can discover, this superstition is in some way connected with their catching deer; they do not seem at all willing to explain it. During the evening an old man performed a strange incantation for the recovery of the sick man. Seating himself before the fire, in a crouching position, he commenced shaking a skin between his hands, and rapidly uttering strange guttural sounds, seemingly only a few words, which he constantly repeated, being occasionally joined by

others of the party, but only in ejaculations. My knowledge of the language is insufficient to allow of my catching the sense of what he said. This lasted for more than an hour and a half, during which time the chief performer never for an instant ceased shaking the skin, or altered his position in the slightest. About 12 o'clock at night I was awakened by one of the natives lighting our candle, and, without speaking, turned round to watch proceedings. The sick man was groaning much, and seemingly in great pain; an old woman passed a skin band round his head, with a stick attached to it, which she used as a handle to lift and lower his head by; at times he permitted this to be done, but at others obstinately refused, on which she pronounced a few words (always the same), the only one of which I could catch was their name for the evil spirit (Ee-ri-goek). There are three huts at this place, and about 50 inhabitants, a large proportion of them children. They seem well off for venison, clothing, &c., but have few dogs, which they refuse to barter.

February 17.--Thermometer -17° . A light air from the northward. Started from Obell about 7.30, having had much difficulty in getting Tudlig out of the hut; he is exceedingly lazy and sulky, and evidently disinclined to proceed. Shortly after starting the sledge capsized in going down a steep bank. I rather suspect Tudlig, who was leading the dogs, did this for the purpose, as he made a sharp turn in a manner that no one so much acquainted with the management of a sledge as a native must be would be likely to do by accident. When we were righting and restowing the sledge, he laid down and refused to assist. On first starting, we followed the river for a short distance, then striking across a low hill, we got upon an extensive plain, where our progress was slow from the heaviness of the road. Several small rounded hills spring from the plain, having much the appearance of islands. A great number of deer were seen during the day; towards the evening, a herd coming rather near, I despatched Tudlig to try and shoot one; he fired a good many shots without success. About five we again struck a bend of the river; shortly afterwards the sledge, shooting rapidly down a steep bank, broke the ice, and remained fixed; we all got wet up to the knees. I was much afraid that frost bites would be the result; this was fortunately not the case. I think the low temperature caused the water to freeze on

our mocassins too quickly to penetrate much. We were forced to unload the sledge, and take it some distance round before we could get sound ice. I attribute the weakness of the ice in this place to rapid springs. It was nearly 8 o'clock before we reached the hut, all a good deal tired, having had 12 hours most laborious dragging, and made about 14 miles. The name of this place is Poe-loe-low-reuc. There is one large hut inhabited, and several more or less ruinous in the vicinity. There are about 25 people here, who seem well of, but have few dogs, which they will not part with.

February 18.--Thermometer -22° . On packing the sledge this morning I discovered that it had been so seriously damaged by its capsizing yesterday, and the descent through the ice, as to render it useless for us to proceed with it; one of the runners was snapped and all the arches broken; I therefore exchanged it with a bunch of small blue beads and eight hands of tobacco for another, the best I could get, but much inferior in quality to our own. Packed and started about 8.30, having bartered a double haunch of venison, two hares, and three ptarmigan. Morning fine and clear, with a light northerly wind; found the travelling heavy. Arrived at Show-e-yok (a village of four huts) shortly after 3 o'clock, having travelled about seven miles in six hours and a half. This being the last village met with for several days we remained here to get a supply of dogs' food. The huts here are two and two, considerably detached, so as almost to form two distinct villages. The inhabitants are well clothed and have a large supply of venison, which they seem ready to barter; of dogs they seem to have no more than they require for their own use, I have been unable to barter one. The natives here are less civil than we have found them elsewhere, and evince a strong disposition to steal anything they can lay hands upon.

February 19.--Thermometer -25° . The natives being troublesome I dispensed with reading prayers; packed and was ready to start about 8 o'clock, when I discovered that Tudlig had made up his mind to proceed no further, nor could I prevail upon any man in the village to become my guide, even for the reward of a gun. Truly, the native reports of the road are far from encouraging; they describe it as hilly and unfrequented, without brushwood, or any possibility of procuring

supplies. I can gain no information as to the probable number of days it will take to reach the coast. As a last resource, I started off for the hut I slept at last night, in rather a despairing mood, and repeated my offer of a double-barrelled gun, which to my great joy and surprise was accepted by an old man named Ow-wock; the only preparation he required to make was putting a supply of dry grass and tobacco into his bag, and he was ready to accompany me; resolved not to part with him again. We returned together to Show-e-yok, and start to-morrow morning.

I wrote a short account of our proceedings to Commander Trollope this evening, which I intend giving Tudlig to deliver.

February 20.--Thermometer -20°. The guide I engaged yesterday told me this morning that a man in the village would lend me a capital sledge. I quickly struck a bargain with him, giving 10 hands of tobacco and a shirt. Another man lent me a dog, for which I gave five hands of tobacco and a few blue beads. I considered it better to take both sledges with me. Whilst packing the sledges, I discovered that our axe, two large knives, and some tobacco had been stolen. I succeeded in recovering the axe and one knife, but could get no clue to the other things. Some small gear was also taken, amongst which were a spoon, some matches, &c. Started about 7.15; finding the road better than expected; there was a sharp N.E. wind which rendered travelling very unpleasant, especially as our road was across some hills. Lee got his nose and wrist frost-bitten, but not severely. Our progress was good, the snow being very hard frozen; several deer were seen whilst on the hills. About 2.30 struck the course of a stream called by the natives E-nu-lu-muk, which I think is a tributary to the Cug-i-oe-to-uk; before we got into the course of the river our guide stopped and made a small fire, for what purpose he would not tell me. The snow being blown off the river we made great progress along the smooth ice. There are a great number of large stones along the banks and but little brushwood. Shortly before stopping for the night a pack of at least 40 hares started from a small patch of brushwood; I tried to get a shot at them, but without success. Pitched for the night at 4 P.M. under the lee of a cliff close to a patch of dry brushwood. On opening the sledges we discovered that at least 30 lbs. of biscuit had been stolen from us at

Show-e-yok, which is a most serious loss. A great number of hares were seen along the banks of the river. Time of travelling 8-3/4 hours; distance about 14 miles.

February 21.--Thermometer -28° . Packed and started about 7.15, with a good road. For the two first hours we were able to keep the dogs at a smart trot. As we got further up the river found the snow lay heavier on the ice and the banks less stony. The land on both sides of us is still a succession of low rounded hills, composed of morass. The course of the stream is rather circuitous, but enables us to make good progress. One fox, a great number of ptarmigan, and the tracks of many deer and some wolves were seen during the day. The weather has been dark and gloomy. Towards the afternoon a stiff north-westerly wind sprung up, which, however, from the shelter afforded by the banks of the river, did not incommode us much. At about 3.30 we came to a bend where the stream winds back nearly in the direction from which we had been coming. Shortly after passing this, saw a small deserted hut, where, as it was now blowing very hard, with a considerable snow drift, I determined on passing the night. The hut is called E-tum-ner-it, and is the smallest that I have yet seen; it seems not to have been inhabited for a long time. Time of traveling, 8-3/4 hours; distance, 13 miles.

February 22nd.--Thermometer -15° . Blowing nearly a gale from N.N.W. with so heavy a snow drift as to render it impossible to travel. The hut had been bitterly cold during the night, but by raising a large fire we contrived to keep ourselves warm at the expense of being almost suffocated with the smoke. On going down to the sledges in the evening, for the purpose of feeding the dogs, I found that they had torn the tent bottom, which we use as a sledge skin, so much as to allow them to drag out a bread bag, in which some of their food is kept. Towards night the wind fell, and the weather assumed a better appearance.

February 23.--Thermometer $+4^{\circ}$. Shortly after waking this morning, received a call that soon put us upon the alert. Toms, who had gone down to the sledges, called out to me that they were both gone, and that he thought he could see them some way down the river. I could attribute this to no one but the natives, and remembered that our fire-arms had not been brought into the hut. Arming ourselves with heavy sticks, we

started in pursuit of the supposed marauders, but were glad to find the sledges safe at the bend of the river. After satisfying myself that the contents were untouched, we dragged them back to the place they had been left at. It turned out that our guide had removed them during the night, to be out of the way of the dogs and snow drift. Packed and started at about 8.30, having been some time delayed refitting our harness, &c, which the dogs had torn to pieces during the night. They gnawed the canvas and rope to pieces, besides utterly destroying two pairs of snow shoes that had been left within their reach. After following the course of a small stream, which falls into the river near where we slept, for about three hours, we commenced the ascent of a steep hill, up which we were obliged to take the sledges separately. It was two o'clock before they were both up. Shortly afterwards we struck a small mountain rill, the course of which we followed until about four, when we came to some old deer snares, and pitched near them. They supplied us with wood for cooking. There are the largest pair of deer's antlers near them that I have ever seen, save those of the moose, which they nearly approached in size. The hills we are crossing are excessively barren; nothing but a little withered grass and stunted brushwood (the latter very scarce) is to be seen. Time of travelling, 7½ hours; distance, 8 miles. Both of the men are complaining much of their eyes, from the effect of yesterday's smoke. The day has been dark and gloomy, with a light easterly wind.

February 24.--Thermometer -3°. Packed and started at 7.30. A most unpleasant morning, with a light easterly wind and snow-fall, which increased as the day advanced. For some miles we travelled over a succession of low rounded hills, composed (as indeed all the land about here is) of morass. At 11 A.M. struck the course of a stream, the same we followed yesterday afternoon, here much increased in size. It bears the appearance of the head waters of a small river, which must lead us to the coast soon. After travelling down it for three hours, brushwood again began to make its appearance, and a few ptarmigan were seen. A slight break in the weather showed us a rather high and sharply outlined peak, bearing nearly west from us. About 4 P.M., finding a convenient place, we made our hut by the left-hand bank of the stream, near a

patch of tall dry brushwood. Time of travelling, 8½ hours; distance, 15 miles.

February 25.--Thermometer -8°. Packed and started at 7. A considerable fall of snow had taken place during the night, which makes the travelling very heavy; the wind still continues to the eastward. Whilst following the course of the stream many ptarmigan were seen. At 1 P.M. struck across a hill to the eastward, up the steep part of which we had to drag the sledges separately; after getting them up, we continued ascending a gentle slope until about 3, when we commenced the descent, and camped at about 4.30 at the foot of the hill, near a small lagoon where there is brushwood. Time of travelling 9½ hours; distance 14 miles.

February 26.--Thermometer -3°. Read prayers, packed and started at 8; wind from the S.E. with a light fall of snow; travelling tolerably easy. There are two remarkable peaks visible to the westward of us, which I suppose to be either the Asses or False Ears. At 10 reached an extensive plain which stretches as far as we can see before us. We here met two natives, the first seen since leaving Show-e-yok. Shortly after 12 arrived at Kip-lik-tok, a village of four huts; the only people there are two women and some children, who are particularly dirty and ill clothes; the men are all out hunting. There seems to be a good supply of venison in the place. There are very few dogs about. I observed that before we entered the village the women lit a small fire in the track we were to pass over; they hailed the guide to stop until it was done; I was unable to discover the meaning of this, but conclude it is some superstition regarding the arrival of strangers. We purchased a hare, about 15 lbs. of venison, and some dogs' food, for a little tobacco and some needles. They would by no means permit us to chop the dogs' food with the edge of an axe, but had no objection to its being broken up with the back; I have noticed the same thing at other villages. As it was early in the day, I only remained about half an hour, and then pushed on until 3.30, when we pitched by the banks of the river which we had struck again at Kip-lik-tok, but did not follow as it is very winding. We saw a very large quantity of deer on the plain, and met one native who was hunting. One of our best dogs refused work this morning, but I

hope may recover, as he took his food greedily. Time of travelling 7 hours; distance 12 or 13 miles. Read the evening service.

February 27.--Thermometer -22° . Started at 7.30; travelling across the plain, at times crossing a bend of the river, which is called by the natives Pittock, and steering for a low point about 10 miles distant. About 12 passed a village, which we are told has been lately deserted, on account of three men having died there. 1.30 passed the last brushwood that is in sight; we therefore put sufficient on the sledges for cooking, and pushed on; reached the point seen in the morning about 3, and stopped at 4 under the lee of another about a mile-and a half further on. The ground we have been passing over for the last two hours is exceedingly rough, and in summer is, I should imagine, an extensive marsh; there is no land to the northward of us, and altogether the place has the appearance of a river's mouth. I expect to strike the coast to-morrow; the road has been very bad all day. Time of travelling $8\frac{1}{2}$ hours; distance 11 or 12 miles.

February 28.--Thermometer -3° . Packed and started at 8, with one sledge, and ten days' provisions, being convinced that we are close to the coast, and not many days' journey distant from Chamisso. I left the other in a conspicuous place near where we slept, and buried the remaining provisions and every thing else we could spare close to it. For two or three hours after starting we were travelling over a frozen marsh; about 11 we had emerged on to clear ice; I broke and tasted it, and found it perfectly salt. About 2, we were abreast of a low point, and after rounding it found the land trend to the southward considerably; I therefore conclude we are to the westward of Cape Deceit. Not a vestige of brushwood is to be seen; the hills, which are low and rounded, are bare of anything approaching vegetation; the ice in some places rough and slightly packed. In the afternoon the dog borrowed at Tup-cut-a-toui gave up work; as he was evidently dying, and in much pain, I shot him through the head. The dog that was taken ill yesterday gave us much trouble to get him on; I fear he will not last long. Pitched for the night at 4.15 close to the beach, where we found plenty of drift wood, most of which seems to have been thrown up some time. Whilst we were making our huts, &c. a number of deer passed near us, I

despatched the native to try and shoot one; he returned in about an hour and a half in great glee at having succeeded. This being his first attempt with the gun, I am very glad that he has got one, as I am thus supplied with a good stock of dogs' food. Time of travelling $8\frac{1}{4}$ hours; distance 15 or 16 miles.

March 1st.--Thermometer $+20^{\circ}$. Started with the empty sledge at about 6 A.M. to bring in the carcass of the deer shot yesterday, leaving one man to cook breakfast. On coming up to the place where it was buried, we found a wolf prowling about; he slunk off without giving us a shot at him. Cutting up the venison, and selecting what we wanted, occupied us until 8, when we started, having buried about one third of the whole in a secure place, which we marked by putting up a pole. The travelling was very good all day. We have been passing shallow bays, the headlands of which are high stony cliffs, which, from their ragged frozen surfaces and the masses of ice collected about them, present much the appearance of ice cliffs. The ice is rough and much packed, especially abreast of the points just referred to; by keeping well off those we had a smooth road. The day has been dark and gloomy, with a fresh south-westerly breeze. During the afternoon four high peaks were seen inland some miles distant. About 4 P.M., finding we could not reach the point of the next bay before dark, kept in for the beach, which we reached in half an hour, and pitched under the lee of a steep bank. There is plenty of drift wood here. A great number of deer were seen during the day. Several native graves have been passed, and here and there we crossed an old sledge track; a native fishing net and drinking cup were also seen, indicating the vicinity of natives. Time of travelling $8\frac{1}{2}$ hours; distance 13 or 14 miles.

Thursday, March 2.--Thermometer $+5^{\circ}$. Packed and started a little before seven; morning gloomy, with a strong south-easterly wind. Found the traveling better than we have yet had it. The land we are passing along is a succession of high cliffs of the same description as those seen yesterday, with shallow bays between, on the beaches of which there seems to be abundance of dried wood. The ice is much packed, especially inshore, but by keeping out a little we got smooth travelling. In many places immense blocks are thrown up under the cliffs. I should

think, from appearances, the ice must have been broken up by a heavy gale of wind, after obtaining considerable solidity. About 12 passed a point, off which there is a very remarkable rock, distant about 200 yards, and leaning slightly towards the cliff. Adjoining this there is a perfect wall of ice, formed of heavy pieces, and extending nearly to the shore. At this place we had much difficulty in threading our way through the rough ice. As soon as we opened the bay, a village on the heights was observed, which at first seemed to be uninhabited. A fox was prowling about within a few yards of a hut, and a couple of ravens were perched on the stage where skins, &c are kept. Concluding from this that there was no one there, I was on the point of sending a ball at the fox, when a woman appeared from the hut. The wind having freshened considerably, and the snow drift and fall being considerable, I decided on remaining here for the night, although it was yet early. I was glad to meet natives, for the sake of gaining certain information as to the distance we are from Chamisso. Time of travelling six hours; distance 10 miles. The name of this village is Kip-pel-lik. There are two huts in repair, and two ruinous; only one is inhabited. The people here are one man, three women, and three children; two of the latter are perfectly blind, and the third seems to have defective eyesight. The remainder of the people are absent seal hunting; they have left no dogs or sledges here, and the inhabitants seem to have but a scanty supply of food. We are informed that Chamisso Island may be reached in one day from here; but that we shall probably spend one night on the ice, as it is a very long day's journey.

March 3.--Thermometer -16° . Blew very hard from the south-east during the night, with a considerable fall and drift of snow. Towards the morning the wind fell, and the weather cleared, and by daybreak became very fine; the wind had shifted to the N.E. We saw Chamisso Island from the heights before starting. The people here have treated us with great civility, and promise to sell me a supply of blubber for the dogs on our return. Packed and started by seven. Found the travelling better than I expected, considering the quantity of snow that has fallen. As we drew out from the land, found the ice rough and packed, caused, I should think, by shoal water. After passing through six or seven miles

of this, we again got upon smooth ice, and continued travelling until 7.30. I intended to push on to Chamisso, but was obliged to pitch at that time short of our mark, as since sunset the weather has become thick and overcast, and we got amongst rough ice, lost sight of the land, and had nothing to guide us. Time of traveling 12½ hours; distance, 20 miles.

March 4.--Thermometer +20°. A dark gloomy morning, with a strong easterly wind and much snow-drift. Started at 6.45, and reached, as we thought, Chamisso Island about 9 o'clock, having travelled five miles. I immediately ascended to the highest point to bury the information, but on arriving there was disappointed to find that we were on Choris peninsula, instead of the island; a slight break in the weather showed the right place, and we could distinguish the pole on top of it; there is a large pile of stones here, I suppose one of the "Herald's" surveying marks, which in the gloom we mistook for the information post. As the weather has become very bad I resolved on not taking the sledge across, but tried to reach Chamisso Island myself; the snowdrift and fall, however, increased to such a degree that I was obliged to relinquish the attempt. The place that our tent is pitched is a sandy bay, extending to the northward of Cape Garnet, which has, I believe, received the name of Blubber Bay; there is a good deal of wood standing up along the beach, seemingly for the purpose of fire wood; the only drift-wood I saw was a fine straight young pine-tree, that would have made a mast for a large boat.

March 5.--Thermometer -26°. Blew very hard from the E.S.E. with a heavy fall and drift of snow. The morning was so bad as to prevent our starting, although I am most anxious to do so, as we have very little dogs' food with us, and not enough of our own provisions to give them a single feed from it. Read the morning service, and afterwards, there being a slight improvement in the weather, I attempted to cross to the island, accompanied by Toms, with the materials for burying the information-cylinder; but when midway between the land and Chamisso Island, the wind freshened again, raising so great a snowdrift as to prevent our seeing 20 yards. We were therefore obliged to retrace our footsteps, which we did with much difficulty, the snow-shoe tracks being

filled up: fortunately two of the dogs had followed us, and their feet having sunk deeper than ours, enabled us to find our way back. At about 3.30 the weather cleared sufficiently to allow of our striking the tent and pushing across to Chamisso, which we reached about 5.45 and pitched under the steep cliffs at the northern point. I intend, weather permitting, to make an early start to-morrow, so as to reach Kip-pel-lik, without sleeping on the ice. Read the evening service.

March 6.--Thermometer +25°. Started for the information-post at 5 o'clock, accompanied by Toms, leaving Lee to go on with the sledge as soon as he could get it packed, he got away about half an hour afterwards; I hoped by starting thus early to reach Kip-pel-lik to-day, but was doomed to disappointment. On reaching the summit of the island we immediately commenced to nail up the notice, and bury the cylinder in which is the following information:--

"Her Majesty's Sloop 'Plover,' Commander Rochfort Maguire is wintering at Point Barrow.

"Her Majesty's Sloop 'Rattlesnake' is wintering in Port Clarence with the view of affording assistance to Sir John Franklin's expedition, and the crews of the vessels under Captain Collinson, sent in search of him.

"HENRY TROLLOPE,

"Commander H.M.S. 'Rattlesnake.

"Port Clarence, February 9, 1854."

"Chamisso Island, Kotzebue Sound was visited by a party from H.M.S. 'Rattlesnake;' we left the 'Rattlesnake' in Port Clarence, on Thursday, February 9, 1854, passing through the following places, each place forming one day's journey, with the estimated distances annexed.

	Miles
"Tup-cut-a-tam	10
Snow near Tocsuc	11
Cuv-vi-e-rook	18
Shung-e-ow-ru	09
Noo-kui row-i lik	16
Hut near Ko-gru-pack	15
Snow near Obell	12

Obell	06	
Poc-loc-low-rel-ec	14	
Show-e-Yok	07	
Delayed for a guide		
Snow	14	
Deserted Hut	13	On River E-nu-lu-nuk
Delayed by weather		
Snow	18	
Snow	14 or 15	Crossing between rivers
Snow	14 or 15	E-nu-lu-nuk and Pit-tock.
Snow	12 or 13	
Snow	13 or 14	On River Pit-tock.
Snow	15 or 16	
Snow	13 or 14	On sea coast.
Kip-pel-lek	10	
On sea ice, near Chamisso	20	
Chamisso Island	05	

"We arrived at Chamisso Island on Saturday March 4, 1854, and placed this record of our proceedings 10 feet magnetic north from the 'Herald's' mark on the summit of the island, and propose returning to the 'Rattlesnake' on the same day.

"WILLIAM R. HOBSON,
"Mate, in charge of the party.

"As far as Show-e-yok, a better route would be made by sleeping at the following villages:--

	Miles		Miles
"Tocsuc	16	Ko-gru-puck	16 to 18
Cuv-vi-e-rook	24	Obell	10 to 11
Kek-to-a-lik	10 to 12	Show-e-yok	21"

The coast is struck just to the eastward of some high cliffs, near which there is a village on the heights called Kip-pel-lek; after three days' journey down the coast, a deep inlet will be seen which is the mouth of the river Pittock; two villages are here met with, at the last of which, Kip-lik-lok, a guide should be obtained for Show-e-yok. Between these places no natives are seen, and no supplies can be obtained. The date given here for our arrival at Chamisso, is that on which we reached Point Garnet; the weather prevented our starting on the same day, but

as this can be of little importance, I made no alteration on discovering my mistake. The "Plover's" bottle was not sighted, although our cylinder must be close to it. The earth has evidently been disturbed, although not very lately, and we found the remains of a small fire that had been lighted over the place. I conclude that the "Plover's" information must be buried under a large stone which we were unable to remove. Besides the "Herald's" mark there is a small slab here, put up by a Russian vessel several years before. While we were thus employed, a change took place in the appearance of the weather. The wind, which had been light from the E.N.E., had freshened considerably, and the morning and the sky became overcast and threatening. We now proceeded with all speed to the spot where the provisions are buried. I find that, to all appearance, nothing has been touched. We dug up some fragments of a large boat, apparently clinker-built. She must have been literally smashed to atoms. For some time I could discover no notice of the presence of provisions, but at length saw something painted on a large flat stone, high up on the cliff. Climbing up to this, I was able to make out the word "provisions" without difficulty, as also the year when they were placed there (1850), but nothing else was legible, except a few straggling letters. I spent some time in scraping and rubbing the face of the rock, in the hope of reading the notice, but without success. It might possibly be read when the frost is off the ground. It was 9 A.M. before we had finished, and there being now a considerable fall and drift of snow, we went round to our last night's sleeping place, and struck the sledge track at once. Following this, we passed between Puffin Rock and the island. In a very short time it became difficult to follow the track, so rapidly was it filling up. It also became apparent that the wind had shifted or the sledge swerved from its course. On catching the sledge, which we did after three and a-half hours' rapid walking, I consulted the compass, and found that both had been the case. Travelling being no longer practicable, we were obliged to pitch at about 1 P.M., having been under weigh about 7½ hours, and travelled about 14 miles, although, I fear, in a very circuitous direction. The dogs had the last food we had last night. If the weather permits us to reach the village to-morrow, this will not matter much, but the evening is most unpromising; the snow drift

and fall have increased, and it blows a perfect gale from the south-westward.

March 7.--Thermometer -2° . The morning even worse than last night. The south wind, snow-fall and drift, are almost blinding, but the falling temperature gives some hopes of a change. I begin to feel considerable uneasiness about the dogs, and judge it prudent to reduce our own allowance, as we have not much provisions with us. At 12 the weather cleared a little and we made a start, but there was still a snow drift and the most cutting wind I ever experienced blowing in our faces: these, however, decrease as the afternoon advanced. Pitched about 5.30, having travelled seven miles. We found that we had wandered considerably out of our course yesterday. Pock (the white dog) died yesterday; he has been evidently failing for the last week. I had him skinned, and tried if the other dogs would eat him, but nearly all of them refused.

March 8.--Thermometer -10° . Spent a most wretched sleepless night. I do not think that one of the party, natives included, slept half an hour during the whole time. The wind had shifted to the northward, and the drift-snow, finding its way through the torn tent bottom, which had now become the weather side of the hut, was so deep inside as to bury a large canteen. From the late high temperature, and snow-drift, our clothes and skins became wet and are now frozen as stiff as boards. In the morning there was still a considerable snow-drift, but the wind fell as the sun rose, and we started about half-past eight. Our spirits of wine were exhausted, so we were unable to cook anything. The men being cold and cramped, I served out half a gill of rum a man, off which, and a little raw pemmican, we breakfasted. About 10 we met a Spaf-a-rief native, who had been out sealing. He promised to bring some seal and blubber to Kep-pel-lik, for barter.

We reached the village about 1.30, right glad to do so, having travelled ten miles in five hours--thus passing over 31 miles for the 20, which is about the distance between Chamisso Island and this place. I remain here for the night as our clothes require mending and drying. The dogs worked better to-day than I should have deemed it possible to do after so long a fast as they have had. They were perfectly ravenous

when fed. I got some moccassins at this place, but had much difficulty in getting them to sell me sufficient blubber to last the dogs to Kip-lik-tok.

March 9.--Thermometer -18° . Started about 7, having got our clothes in a manner dried and mended, the weather was exceedingly fine, with a light north-easterly wind, travelling very good. We did not stop until after 6 P.M. when finding a convenient place for camping, we pitched for the night. Time of travelling 11 hours, distance 22 miles. Our last provisions were used to night be we pick up the venison we buried, early to-morrow, which will be more than sufficient to last until we reach the sledge we left behind. All our biscuit is out to-day, although it has been used with the greatest economy since our loss at Show-e-yok.

Friday, March 10.--Thermometer -2° . Blowing very hard from E.N.E. with a considerable fall and drift of snow, started shortly before 6, and reached the place where our venison was buried about 9: on approaching the place it became evident that we had been forestalled, as deers' bones was strewing the snow in all directions coming up to where it should have been we found that a wolf had been beforehand with us, and left nothing but the skin and one shin bone perfectly cleaned. There was now nothing to be done but to push on for the other sledge, which is within reach of a long day's work. After getting into the inlet at the mouth of the Pit-tock, being nearly before the wind, we made sail on the sledge, with a buffalo skin, which I think helped us a little. We were forced to stop short of our mark about 6 P.M. as the snow-drift was so thick as to hide everything from our view, and we feared getting embayed. I do not think we can be far from our sledge, as notwithstanding the travelling has been bad, and the weather worse, we have made a long day's work and considerable progress: my only fear is, that from being obliged to keep the left hand land on board, we have got into a bay we noticed here in passing the other way. Time of travelling, 12 hours; distance, 18 miles.

March 11.--Thermometer -5° . We were all awakened about 2 o'clock this morning by the sledge skin blowing off the top of our hut, the wind had shifted to the north-west, and blew very hard with a great snow drift; daylight brought no improvement, we tried to make a start but

could not face it, I have not seen such drift since we have been out. We have been compelled to remain here all day, our condition is far from enviable; the hut is full of snow, and we are cold, hungry, and without the power of helping ourselves; the native seems to feel it most: he is sitting with his head buried under his coat, knocking his feet together, and looking the picture of misery, he has not moved or spoken during the whole day although he is generally most loquacious.

March 12.--Thermometer -15° . The weather having cleared during the night, started at 6.30, and came up to our sledge in about an hour; we immediately set to work upon some raw pork and pemmican, the first food we had tasted for more than 60 hours. Packing both sledges we proceeded until about 12, when striking the course of the river Pittock in a place where there is brushwood, we stopped for an hour and a half, and cooked some dinner of which we were all much in need. Proceeded at 1.30, and shortly afterwards had to kill one of our dogs, which was taken with a fit, she tore the tent bottom a good deal with her teeth, and bit three of the other dogs severely. About 2.30 passed the village seen on the 27th of last month, it bears the appearance of having been very recently inhabited. The travelling was very heavy in many places: during the afternoon we had the assistance of a native we met returning from hunting, I gave him a hand of tobacco for his trouble. Camped about 5 by the bank of the river. Time of travelling nine hours, distance 11 or 12 miles. The wind has been very variable, and a good deal of snow fell in the afternoon. A great many deer were seen. Read the evening service.

March 13.--Thermometer $+3$. Started at 6.45, and reached Kip-lik-tok about 1 P.M., having had heavy and most disagreeable travelling, the wind is from the north-eastward, very fresh, and there is a great snow-drift. We remain here for the night, as I want a large supply of dogs' food and as much as I can get for ourselves. Time of travelling, six hours; distance, seven miles. There is only one of the huts inhabited; the people in it are four men, four women, and two children, they do not seem very anxious to sell venison, but I have nevertheless succeeded in obtaining a fair supply. I feel the want of knives much in bartering, I have used all my own, and all that the ship supplied, with the exception of one which I keep as a stand-by. I was

forced to borrow one from the guide to-day, he had sold me a pair of moccassins for it some time ago. The wind and snow-drift have increased greatly since our arrival.

March 14.--Thermometer -20° . Blowing very hard from E.N.E.; the wind exceedingly cutting, with a considerable snow-drift, which prevents our starting from here, the dogs work being over a hill, and much exposed. I care less than I otherwise should about the delay, as we have procured a considerable supply of venison and hares, and are still getting a little more. Our clothes and sleeping gear are in very bad order, and we shall get them mended and partially dried by remaining a day in the village. About 2 P.M. the weather cleared, and shortly afterwards we might have started, but it was too late in the day.

March 15.--Thermometer -18° . Started at 6.15, having obtained about 70 lbs. of venison, 6 hares, 3 ptarmigans, and sufficient offal to last the dogs two days. I also bartered one dog, which I had much difficulty in getting. The wind was fresh from W.S.W. (right in our faces), and increased until 11 o'clock, at which time it blew nearly a gale, raising a considerable snowdrift. I have noticed that about here these winds are far keener than the northerly ones, and to day we found it worse than anything we have yet experienced. At about 9 A.M. we commenced mounting a hill, over which we only got the sledges by exerting our utmost strength. The dogs would scarcely face the wind, and it was quite painful to us to do so; the native guide had his face much frost-bitten. If there had been any place near where we could have found the slightest shelter, I should certainly have pitched, but as there was not, we were forced to proceed. Shortly after noon the wind dropped, and we were able to get on a little better, but still had very heavy travelling. At about 6 P.M. we had got over the hill, and struck the course of the river at the foot of it; we were glad enough to pitch, which we did, by the banks near some dry brushwood. This has been the most fagging day's work of any we have had since leaving the ship. Time of travelling, 11-3/4 hours; distance, 15 miles. There is a very beautiful aurora this evening, the thermometer has fallen to -36° , and the which is now very light, shifted to the northward.

March 16.--Thermometer -33° . From the frozen state of our buffalo skins and sleeping bags, and the sudden fall in the temperature, we

spent a wretchedly cold night. Packed, and started at 6.30; a fine clear morning, with a light north-easterly wind. Following the course of the river, we found the travelling so heavy that we could make scarcely any progress, I therefore abandoned the small sledge, and packed everything on the other, which is not particularly heavy now. We soon got into a better road, and made good progress. At about 5 P.M. we came to the last brushwood that is seen on this river, and pitched close to it. Time of travelling, 10½ hours; distance, 17 miles. There is a very beautiful aurora again this evening.

March 17.--Thermometer -34°. Started about 6.30, having felt the cold again very much; our skins are in such a state that it is impossible to wrap them round us. The morning is beautiful, with a light north-east wind. About two hours after starting we commenced ascending the hill, up which we first had to drag our sledges separately. On this side it is a very gentle slope. We kept the water course, instead of the hill sides, and found the travelling excellent. The snow is so hard frozen that the runners do not sink in the least, and the gradual ascent is scarcely felt with our light sledge. Within less than a quarter of a mile of the top we lost the watercourse, and had a steep bit of hill, but soon got to the brow, where we again saw the Kig-li-qui-ak hills. They seem almost like old friends to us. The hill being steep here, the sledge descended very rapidly; we at times had to throw ourselves on the fore part of it to prevent its running over the dogs. It was about 4 o'clock when we again struck the course of the E-nu-lu-nuk, and in an hour and a half reached E-tum-ner-te, the small hut, where we were weatherbound on the 22d of last month. Time of travelling, 11 hours; distance, 25 miles. Many tracks of wolves were seen during the day.

March 18.--Thermometer -25°. Started about 6.30, keeping the course of the river, and made the same journey as our corresponding one in coming except that we travelled about six miles further down the river in hopes of reaching Poi-loc-low-ree-ec to-morrow. I wished to avoid sleeping at Show-e-yok if possible. A great number of ptarmigan were seen during the day. At about 4 P.M. we passed the patch of brushwood from which we started a large pack of hares when going up the river, and now saw a still larger one in the same place, certainly not less than

60 together. After this, every bend of the river that we opened, they started by dozens from amongst the stones. I should think that between two and three hundred must have been seen during the evening, we could not get within range of them; we also saw the tracks of several wolves and a few deer. The day has been very clear, with a light northerly breeze and considerable glare. Pitched about 6 P.M., having travelled $11\frac{1}{2}$ hours, and made about 19 miles. We used the last of our spirits to-day, and lost another dog.

March 19.--Thermometer -34° . Started about 5.30, hoping to reach Poi-loc-low-ree-ee, which is about 16 miles distant from our sleeping place. At the foot of the hill we should have crossed over to Show-e-yok. Met a native, who told me they were driving deer on the hill above, and that by going up we should turn them; I therefore consented to keep the river, which, he said, would not delay us much. At about 11, we reached a hunting hut, where I bought a double haunch and some small pieces of venison, five ptarmigan, and some dogs' food; they seemed to have a large stock of the former. Shortly after leaving this we struck across a hill, and found that the round we had taken, instead of delaying us a little, had led us several miles from our course. The guide not knowing the position of Show-e-yok, we should have been late in getting there had we not met a native about two o'clock, who pointed out a sledge track to us. We have, however, spoiled a day's work, as I fear that we cannot reach Obell to-morrow. Reached the village (Show-e-yok) about 4.15, having travelled $10\frac{3}{4}$ hours, and passed over at least 18 miles for the nine which we should have gone had we followed our former route. We had to cross a small stream near here, which is overflowed for some distance, I suppose from the presence of springs. A very great number of deer were seen to-day, and one wolf followed up a small herd. The snow is literally cut to pieces by deer's tracks. The wind has been from the north-eastward, and freshened a good deal towards evening. Show-e-yok, at present, is indeed the land of plenty, their stages are literally loaded with venison, and there is an immense quantity buried about the place. A man brought me a double haunch as a present directly we arrived. The hut that I am in at present is crowded with natives; they have an immense fire in it, and are eating venison as fast as

they can cook it, with appetites that seem insatiable. I have been obliged to commence writing in self-defence, as they are literally overwhelming me with pieces, and I prefer waiting for my own dinner; they are too busy to barter with us to-night. When we arrived, all the village came out to meet us; they dragged our sledge in, and seemed to think it rather strange than otherwise that we should have returned.

March 20.--Thermometer -15°. Turned out before daybreak, intending to start at once; breakfast at Poi-loc-low-ree-ec, and push on for Obell. In this, however, I was foiled; the sledge had yet to be bought, and this was not to be accomplished so easily as I had imagined. After considerable delay and difficulty, I thought I had satisfied the owner, and went outside the hut, where I presently bartered as much venison, and as many fish and ptarmigan as we could carry. We were just lashing up the sledge when the man to whom it belonged came out and wished to return what had been given to him for it. Anxious to start, I gave him some more beads, but he was still unsatisfied. Whilst he was hesitating about the price, the man who had lent me a dog (which died the day before yesterday) came up; I had already remunerated him, but he noisily made a further demand. A young native, who had been very troublesome on our former visit, commenced throwing things off our sledge; this was the signal for a sort of attack. The sledge would soon have been stripped had I not interfered to prevent it. The man who commenced pushed me back two or three times, but was not strong enough to prevent my interposing myself between the sledge and him: the men doing the same, they could touch nothing without attacking us, which I feared, from the growing excitement among them, that they were inclined to do. I immediately gave the owners of the dog and sledge a large bunch of beads, even making each man express himself satisfied before quitting my hold of them, lashed up and left the village as quickly as I could. Had weresented [sic], or not resisted their conduct, I think a skirmish would have been the consequence, in which, from their numbers, we should probably have been overpowered, although our firearms were at hand. It is worthy of note, that although the Obell and many river natives are congregated here, all but the Show-e-yok men stood aloof, and showed no disposition to interfere; as we were leaving the village, venison, ptarmigan, and fish were almost forced upon us; I

could have bought 1,500 lbs. of the former without the slightest difficulty. We had been so much delayed that it was nine o'clock before we were away, so I had to content myself with reaching Poi-loc-low-ree-ec, abreast of which place, we got into the river, wetting ourselves nearly to the knees; we reached the hut about 2 P.M. As it is now deserted we were able to raise a large fire in it to dry our clothes. A great number of ptarmigan and deer were seen during the day; a great number of the former, and two or three of the latter might have been shot without leaving the sledge. Time travelling, five hours; distance, seven miles. There has been a fresh north-easterly breeze all day, and the travelling has been heavy.

March 21.--Thermometer -8° . Started about 7 A.M.; travelling along the course of the river for a short distance, and then across the plain which divides the two villages. The snow on the plain was rather heavy, but the weather has been beautiful; there was a light north-easterly breeze all day, and the glare was so great we were glad to use the snow spectacles for the first time; we complained of heat today, and were glad to be without skin coats whilst actually dragging at the sledge, but felt the cold directly we stopped; at about three we reached two hunting huts near Obell, and remained there half an hour. The people gave us some boiled venison, in return for which I made them some small presents of tobacco; reached Obell at four, and found it, as we had been led to suppose, deserted in consequence of several people having died there lately. Time of travelling $8\frac{1}{2}$ hours, distance 15 miles. Awakened in the middle of the night, I observed our guide sitting up in a corner of the hut, and asked him why he could not sleep: he told me that it was hard to sleep in a hut where any one had died, and could not be persuaded to do so.

March 22.--Thermometer -8° . Whilst we were at breakfast this morning two women came to the hut with venison, &c. for sale, which I got from them for a mere trifle; started at seven, a beautiful morning with a light north-easterly breeze and considerable glare; found the travelling very heavy; arrived at Ko-gru-pack about 5; it is still deserted. Time of travelling 10 hours, distance 10 miles. Our best dog died shortly after reaching the village; we have only two left that are

worth anything, and those much fallen off. A good many ptarmigan were seen during the day.

March 23.--Thermometer -2° . Started about six; our progress during the early part of the day much impeded by the ice on the river being, in many places, overflowed; about nine we were brought to a full stop, the ice being weak all round us, and no passage out to be found; had to make a run for the shore, which we did with the ice cracking and water springing at every footstep: after reaching the land, dragged the sledge along a steep snow bank formed against the side of a cliff, with difficulty preventing a capsize; after this was passed we got upon smooth ice, and made good progress until one, when we came to a hut inhabited by two old men, who seem ill off have nothing to barter. The river now again became difficult to pass, and continued so for a mile and a half, when we got on to the wide part of the stream, and no more water was met with, but the snow was so heavy that we made but bad travelling with our weak team of dogs, and had to keep the stream which increased our distance much; stopped at about five at a deserted hut called oa-te-ue, having travelled 11 hours, and made about 15'. A great many ptarmigan seen during the day.

March 24.--Thermometer $+2^{\circ}$. Started at 6.30 and reached Noo-kui-row-e-lic in about two hours; being unable to barter anything there, we only remained a few minutes. Shortly after leaving we passed through a patch of brushwood, where there was a track barely wide enough to let the sledge pass. The snow here was exceedingly deep and soft, causing us much labour to get the sledge along; a considerable bend of the river is cut off, however, by crossing here. Shortly after getting on the river again we saw another sledge coming towards us, which was soon made out to be Mr. Bouchier and party, with eight days' provisions for us. Our ship's provisions all out, but we had sufficient venison and ptarmigan on the sledge to carry us to the ship, even if we failed to get anything more. We were exceedingly glad to meet the supply sent us, as our biscuit has been out since the 9th, and spirits since the 19th of this month; the tea and sugar lasted till the 21st, and I kept a small quantity of meat as a stand-by, until we obtained a supply at Show-e-yok. We met Mr. Bouchier about 10.30, three miles from Kik-to-a-lik, which we

reached about an and a half afterwards, and decided upon remaining there for the night. Time of travelling, 5½ hours; distance, 7 miles. We met some natives, who were passing on the river at a place where it is dammed close to the village.

March 25.--Thermometer +12°. Started at eight, having packed everything that we are not likely to use on Mr. Bouchier's sledge; and taken the eight days provisions for us. He lent me a dog to enable us to keep up with him. There was a strong north-easterly wind and slight snow-drift, but the travelling was very fair. Arrived at Shung-e-ow-ret about 11, at which place we remained for nearly an hour, and bought one hare, 15 ptarmigan, and two large fish, as well as some dogs' food. The water by the banks of the river is brackish here, which is not the case five miles further up the river. Shortly after leaving the village, I was obliged to shoot another dog; she was evidently dying in much pain. Reached Cuv-vi-e-rook about four. Time of travelling, seven hours; distance, 12 miles. A herd of deer were seen close to the huts.

March 26.--Thermometer +15°. Read the morning prayers' started about 5.30, having a long day's journey before us. A few deer were seen in the morning. The wind from E.N.E. during the day. We continued travelling until about seven, when we reached Toc-suc, and stopped there for the night. Time of travelling, 13½ hours; distance, 24 miles. The huts are very small, and full of natives; a number of them turned out of the hut we are in to make room for us, sleeping outside themselves.

March 27.--Thermometer +18°. Started about six, and stopped to cook breakfast at 7.30 in the gorge, where there is a little brushwood. After remaining two hours, we again started; sighted the ship about 11, and reached Tup-cut-a-taut at 12. After remaining there nearly an hour, we pushed on for the ship, which we reached at 6.30 P.M., having been absent 47 days, and travelled 560 miles. During the whole of the time we have been travelling, not an hour has been spent out of harness by any of the party, myself included. Our dogs, which were not very good when we left the ship, have all died, with the exception of two; we lost one to-day, making the ninth that has died. Time of travelling, 9½ hours; distance, 16 miles.

WILLIAM R. HOBSON, MATE.

APPENDIX B

SERPENTINE HOT SPRINGS

Residents of the Seward Peninsula continued to use Serpentine Hot Springs long after the excitement of the gold rush died. Although 1923 maps showed a landing strip at the hot springs (Illustration 31), in response to "strong public sentiment" the Alaska Road Commission discussed construction of a landing field at the site in 1940.¹ There is no record of actual construction of a field then, and a 1941 map showing locations of landing fields does not indicate that one existed at Serpentine Hot Springs.² It did by 1945, however, for in that year reports indicated that the field was in such poor condition that local pilots had threatened to discontinue using it. Cost of improving the field, John Hudert indicated, would be \$250.³ The records do not indicate whether the commission constructed any kind of a shelter at that time, either, although one was requested. We do know that it completed a building project there on January 14, 1948.⁴ It is believed that at least the present main structure--a modular "knock down" World War II Army structure probably acquired by the road commission as surplus was put into place at that time.⁵

1. Ike P. Taylor to R.J. Kinney, March 25, 1940, Serpentine Hot Springs, Records of the Alaska Road Commission, Record Group 30, FARC, Seattle; R.J. Kinney to Ike P. Taylor, April 18, 1940, Ibid.

2. "Map of Alaska," 1941, compiled by the U.S. Geological Survey for the Alaska Road Commission, Alaska G & T, Records of the Office of Territories, Record Group 126, Map Collection, Center for Cartographic and Architectural Archives, N.A.

3. John D. Hudert to Ike Taylor, August 25, 1945, Box 6542, Records of the Alaska Road Commission, RG 30, FARC, Seattle; Moxham and West, Radioactivity Investigations in the Serpentine-Kougarok Area, p. 2.

4. Route 90B--Sepenting [sic] Hot Springs Building Project, Nome Annual Report for 1947, Records of the Alaska Road Commission, RG 30, FARC, Seattle.

5. Nome Nugget, January 30, 1946; Annual Reports for 1940 - Nome District, Box 65430, Records of the Alaska Road Commission, RG 30, (Continued)

By the mid-1970s, the main structure needed a new stove and the bath house was in such a state of disrepair that it needed replacing.⁶ In 1976-1977 people of the village of Shishmaref, who use the hot springs for recreational, medicinal, and religious purposes, made the needed repairs, using a \$25,000 grant from the Alaska Department of Community and Regional Affairs, Division of Rural Development Assistance.⁷ Most of the official records of the project were destroyed in a fire, including those describing repairs. Best evidence indicates, however, that among the repairs made at that time were construction of an eight-by-ten-foot redwood plank tub, a plywood bathhouse plywood-covered walkway between the bathhouse and main structure.⁸

Today, Serpentine Hot Springs consists of a twenty- by fifty-six-foot modular "knock down" World War II Army structure, a deteriorating fifteen-foot-square plywood bathhouse, and 1,100-foot

5. (Cont.) FARC, Seattle; "Serpentine Hot Springs" A Cultural Resource Evaluation." Stenciling on an attic rafter bears out this assumption: "Res. Engr. U.S.E.O., Nome Bldg., W6889, 20 x 80 Bath and Latrine, 7 of 25, 5' modules." Local sources indicated, however, that the building was moved to the site in sections and reassembled.

6. Chuck Newberg to Larry Beal, September 16, 1958, xerox copy provided author by Mr. Beal; Frederick Tocktoo to James W. Matthews, February 24, 1976, *Ibid.*; Trip Report, June 14-18, T. Stell Newman and David Cohen, Alaska Task Force Files, Records of the National Park Service, RG 79, FARC, Seattle.

7. Rural Development Assistance Expense Report, Project 1, Serpentine Hot Springs Shelter, July 29, 1976 - January 11, 1978, xerox copy provided author by Larry Beal; Resolution Declaring the Shishmaref People's Right to Own, Manage, and Maintain Serpentine Hot Springs, May 26, 1984, Historic Sites, File F72005, Serpentine Hot Springs, Native Allotment Files, Bureau of Land Management, Anchorage.

8. Telephone Discussion with Larry Beal, March 20, 1986 (Mr. Beal's information is second-hand, gathered from discussions with a number of people involved); "Serpentine Hot Springs: A Cultural Resource Evaluation"; "Resolution Declaring the Shishmaref People's Right to Own, Manage, and Maintain Serpentine Hot Springs, May 26, 1984, Historic Site, File F72005, Serpentine Hot Springs, Native Allotment Files, Bureau of Land Management, Anchorage; Tocktoo to Mathews, February 24, 1976.

airstrip. The remains of what is believed to be the original bathhouse may still be seen at the "old" springs, .7 km to the northwest, but the cabin remains mentioned in 1976 NPS trip reports have long since disappeared. The hot springs are used by people from all over the peninsula, with highest use coming in the summer. Bering Straits Native Corporation selected Serpentine Hot Springs as a historical site under terms of the Alaska National Interest Lands Conservation Act of 1980. The Bureau of Indian Affairs certified the site as eligible for conveyance, but the Bureau of Land Management, which has responsibility for conveyance, rejected the application, indicating that it was not eligible because of prior withdrawal. The U.S. Department of the Interior Office of Hearings and Appeals upheld that decision on May 30, 1985.⁹

9. "Cultural Resource Evaluation: Serpentine Hot Springs"; Draft General Management Plan, Bering Land Bridge National Preserve pp. 64-66, 55; Decision, Section 14 (h)(1) Application, Serpentine Hot Springs, June 27, 1984, File 33827 - Regional Selection, Native Allotment Files, Bureau of Land Management, Anchorage; U.S., Department of the Interior, Office of the Hearings and Appeals, Decision regarding Serpentine Hot Springs, May 30, 1985, Ibid. Regulations regarding conveyance of historical or cemetery sites under Section 14(h)(1) state that no land included in Secretary of the Interior Roger's C.B. Morton's December 17, 1973 recommendations for additions to the National Park System are eligible for selection. Serpentine Hot Springs was included in those recommendations as part of the proposed Chuckchi-Imuruk National Reserve. Williss, Do It Right The First Time, pp. 143, 265.

BIBLIOGRAPHY

SOURCES CONSULTED

Manuscripts

Anchorage, Alaska. Bureau of Land Management.
Native Allotment Files

Fairbanks, Alaska. Bureau of Land Management.
Native Allotment Files

_____. University of Alaska. Rasmussen Library. Alaska and Polar
Regions Department.
Lomen Family Papers
Reindeer Stock Company Records
Collins Telegraph Co. Records
Clarence Andrews Papers
Cooperative Park Studies Papers
Alaska Historic Site Nominations
Reindeer Program Papers (microfilm)
Alaska Mining Material
Edward Conway Collection
Ezra Cornell Papers
Reindeer Stock Company Records
Ben B. Mozee Papers

Juneau, Alaska. Alaska State Archives and Records Center.
RG 101. Records of the Office of Territorial Governor
RG 21. Department of Community and Regional Affairs

_____. Alaska State Library.
Wickersham Papers
Photographic Collection
Alaska School Files

Menlo Park, California. U.S. Geological Survey. Technical Data Unit.
Alaska Field Notebook Collection.

Nome, Alaska. Bureau of Indian Affairs.
Native allotment files.

Seattle, Washington. Federal Archives and Records Center.
RG 75. Alaska Reindeer Service
RG 30. Records of Alaska Road Commission

_____. University of Washington, Suzzallo Library.
Northwest Collection (photographs)
Charles S. Hubbell Papers
William T. Perkins Papers
Charles Bulkley Papers (microfilm)

Spokane, Washington. Gonzaga University. Oregon Province Archives of the Society of Jesus Mission Collection (microfilm)

Washington, D.C. Library of Congress.

Map collection

Photographic Collection

_____. National Anthropological Archives.

Henry Bascom Collins Papers

C. Hart Merriam Papers

_____. National Archives.

RG 69. Records of the Works Progress Administration

RG 126. Records of the Office of Territories

RG 187. Records of the National Resources Planning Board

RG 35. Records of the Civilian Conservation Corps

RG 12. Records of the Bureau of Education

RG 28. Records of the Post Office Department

RG 94. Records of the Adjutant General's Office

RG 57. Records of the United States Geological Survey

RG 22. Records of the U.S. Fish and Wildlife Service

RG 90. Records of the Public Health Service

RG 102. Records of the children's Bureau

RG 48. Records of the Office of the Secretary of the Interior

RG 6. FERA Papers

RG 96. Records of the Public Health Service/Marine Hospital Service

Still Picture Division

_____. _____. Center for Cartographic and Architectural Archives

Map collection

Books

Arnold, Robert D., et al. Alaska Native Land Claims. Anchorage, Alaska: Alaska Native Foundation, 1976.

Ashley, Clifford W. The Yankee Whaler. 4th edition. Garden City, N.Y.: Haleson House, 1942.

Bancroft, Hubert Howe. History of Alaska, 1730-1885. Volume 33 in The Works of Hubert Howe Bancroft. San Francisco: A.L. Bancroft and Co., Publishers, 1886.

Beechey, Frederick William. Narrative of a Voyage to the Pacific and Beerings Strait, to Cooperate with the Polar Expeditions. Performed in His Majesty's Ship Blossum Under the Command of Captain F.W. Beechey, R.N. in the Years 1825, 26, 27, 28. 2 vols. Reprint. New York: Da Capo Press, 1868.

- Bockstoce, John R. Steam Whaling in the Western Arctic. New Bedford: Old Dartmouth for the New Bedford Whaling Museum.
- Bodfish, Hartson H. Chasing the Bowhead. Cambridge, Mass.: Harvard University Press, 1936.
- Brooks, Alfred H., Blazing Alaska's Trails. Fairbanks, University of Alaska and Arctic Institute of North America. 1953.
- Brown, William E. This Last Treasure: Alaska National Parklands. Anchorage: Alaska Natural History Association, 1982.
- Burch, Ernest S., Jr. Eskimo Kinsmen: Changing Family Relationships in Northwest Alaska. San Francisco: West Publishing Co., 1875.
- Chevigny, Hector. Russian America: The Great Alaskan Venture, 1741-1867. New York: Viking Press, 1965.
- Cloe, John Haile. Top Cover for America: The Air Force in Alaska, 1920-1983. Missoula, Montana: Anchorage Chapter-Air Force History and Pictorial Histories Publishing Company, 1984.
- Cohen, Stan. The Forgotten War: A Pictorial History of World War II in Alaska and Northwestern Canada. Missoula, Montana: Pictorial Histories Publishing Company, 1981.
- Cook, James. The Journals of Captain James Cook on His Voyages of Discovery. The Voyage of the Resolution and Discovery, 1776-1780. Edited by J.C. Beaglehole, Cambridge: Cambridge University Press for the Hakluyt Society, 1967.
- Cook, John A. Pursuing the Whale: A Quarter-Century of Whaling in the Arctic. Boston: Houghton-Mifflin Co., 1926.
- De Voto, Bernard. The Course of Empire. Boston: Houghton Mifflin Co., 1952.
- Falk, Marvin W. Alaska Maps a Cartobibliography of Alaska to 1900. New York: Garland Publishing Inc., 1983.
- Fedorva, Svetlana G. The Russian Population in Alaska and California, Late 18th Century-1867. Trans. by Richard A. Pierce and Alton S. Donnelly. Kingston, Ontario, Limestone Press, 1973.
- Fisher, Raymond H. Bering's Voyages: Whither and Why. Seattle: University of Washington Press, 1977.
- Garfield, Brian. The Thousand Mile War: World War II in Alaska and the Aleutians. Reprint ed. New York: Bantam Books, 1982.
- Golder, F.A. Bering's Voyages. An Account of the Efforts of the Russians to Determine the Relation of Asia and America. 2 vols. New York: American Geographical Society, 1922.

- Golder, Frank A. Russian Expansion on the Pacific, 1641-1850. An Account of the Earliest and Later Expeditions Made by the Russians Along the Pacific Coast of Asia and North America; Including Some Related Expeditions to the Arctic Regions. 1914; Reprint edition. Gloucester, Mass.: Peter Smith, 1960.
- Heller, Herbert L., ed. Sourdough Sagas: The Journals, Memoirs, Tales, and Recollections of the Earliest Alaskan Gold Miners, 1833-1923. Cleveland: World Publishing, Co., 1967.
- Hinckley, Ted C. The Americanization of Alaska, 1867-1897. Palo Alto: Pacific Books, Publishers, 1972.
- Hohman, Elmo P. The American Whalemens: A Study of Life and Labor in the Whaling Industry. 1928; Reprint. Clifton, New Jersey: August M. Kelley, 1972.
- Hunt, William R. Arctic Passage: The Turbulent History of the Land and People of the Bering Sea, 1687-1975. New York: Charles Scribner's Sons, 1975.
- Kippis, Andrew. A Narrative of the Voyages Round the World Performed by Captain James Cook with an Account of His Life During the Previous and Intervening Periods. 1788; Reprint. Philadelphia: Porter and Cortes, n.d.
- Kotzebue, Otto von. A Voyage of Discovery into the South Sea and Beering's Straits for the purpose of Exploring a North-East Passage, undertaken in the Years 1815-1818, . . . 3 volumes. 1821; Reprint. New York: Da Capo, 1967.
- Koutsky, Katherine. Early Days on Norton Sound and Bering Strait. 8 vols. Fairbanks: University of Alaska [Cooperative Park Studies Unit], 1981.
- Krauss, Michael E. Alaska Native Language: Past, Present, and Future. Fairbanks: University of Alaska [Alaska Native Language Center Research Paper No. 4], 1980.
- Lantzeff, George V. and Pierce, Richard A. Eastward to Empire: Exploration and Conquest on the Russian Open Frontier to 1750. Montreal: McGill-Queens University Press, 1973.
- Lazell, J. Arthur. Alaskan Apostle: The Life Story of Sheldon Jackson. New York: Harper and Brothers, 1960.
- Lomen, Carl J. Fifty Years in Alaska. New York: David McKay Co., 1954.
- Neatby, Leslie. The Search for Franklin. New York: Walker & Co., 1970.

- Olson, Dean Francis. Alaska Reindeer Herdsmen: A Study of Native Management in Transition. College, Alaska: University of Alaska [Institute of Social, Economic, and Government Research], 1969.
- Oquillak, William A. People of Kaurewak: Legends of the Northern Eskimo. Anchorage: AMU Press, 1973.
- Polk, R.L. Polk's Alaska-Yukon Gazatteer and Business Directory, 1901-08. Seattle: R.L. Polk & Co., 1908.
- Ray, Dorothy Jean. The Eskimos of Bering Strait, 1650-1898. Seattle: University of Washington Press, 1975.
- Samoilor, Viacheslav. Semen Dezhnev: ego vremen [Semen Dezhnev and his Times]. Moscow, 1945.
- Sarychev, Gavriila A. Account of a Voyage of Discovery to the North-east of Siberia the Frozen Ocean and the North-east Sea. 1806; Reprint. New York: Da Capa, 1969.
- Sherwood, Morgan B. Exploration of Alaska 1865-1900. New Haven: Yale University Press, 1965.
- Smith, Herbert R. John Muir. New Haven, Conn.: Twayne Co., 1965.
- Steffansson, Vilhjalmun. Unsolved Mysteries of the Arctic. New York: MacMillan Company, 1939.
- Stern, Richard O., et. al. Eskimos, Reindeer, and Land. Fairbanks: University of Alaska, 1980.
- Teal, Edwin Way. The Wilderness World of John Muir. Boston: Houghton-Mifflin Co., 1954.
- Ulibarri, George S. Documenting Alaskan History: Guide to Federal Archives Relating to Alaska. Fairbanks: University of Alaska Press, 1982.

Articles

- "Answers from an Icy Grave." Newsweek, October 8, 1984, p. 89.
- Brickley, James & Catherine. "Reindeer, Cattle of the Arctic." Alaska Journal, 5 (Winter 1975), pp. 16-24.
- Carlson, L.H. "The Discovery of Gold at Nome, Alaska." The Pacific Historical Review, 15 (September 1946), pp. 259-78.
- _____. "The First Mining Season at Nome, Alaska--1899." Pacific Historical Review, 16 (May 1947), pp. 163-75.

- "Ditch Construction at Nome." Alaska-Yukon Magazine, 4 (December 1907), pp. 282-287.
- Farrelly, Theodore S. "A Lost Colony of Novogorod in Alaska." Slavonic and East European Review, 22 (American Series, vol. 3) (1944), pp. 33-38.
- Fisher, Raymond H. "Semen Dezhnev and Professor Golder." Pacific Historical Review. 25 (August 1956), 281-92.
- Foster, James. "AFL, IWW, and Nome: 1905-1908." Alaska Journal, 5 (Winter 1975), pp. 66-73.
- "Geological Survey Work in Alaska." Alaska-Yukon Magazine, 10 (June 1910).
- Harrison, E.S. "Nome Ditches." Alaska Magazine, 2 (January 1905), p. 2
- Kelly, James A. "Ditch Construction on the Seward Peninsula." Proceedings of the Pacific Northwest Society of Engineers, 6 (September 1909), pp. 20-34.
- Mackinnon, C.S. "The Wintering-over of Royal Navy Ships in the Canadian-Arctic, 1819-1876." The Beaver, (Winter 1984/85), pp. 12-21.
- McCoy, Kathleen. "The Life of a Reindeer Herder: Winter Corraling at West Camp." We Alaskans (Anchorage Daily News Magazine), February 9, 1985.
- Montgomery, Maurice. "The Murder of Missionary Thornton." Pacific Northwest Quarterly, 54 (October 1963), pp. 167-73.
- "Nome--City of the Golden Beaches." Alaska Geographic, 11 (1984).
- Oglobin, N.N. "Semen Dezhnev (1638-1671)." Offprint of Article first published in December 1890.
- Osborne, Alice. "The Council City and Solomon River Railroad." Alaska Journal, 5 (Winter 1975), pp. 49-54.
- Ray, Dorothy Jean. "Early Maritime Trade with the Eskimos of Bering Strait and Introduction of Firearms." Arctic Anthropology, 12 (1975), pp. 1-10.
- _____. "Kauwerak Lost Village of Alaska." Beaver, 295 (Autumn 1964) pp. 4-13.
- _____. "Nineteenth Century Settlement and Subsistence Patterns in Bering Strait." Arctic Anthropology, 11 (1964), pp. 61-94.

- _____. "The Omilak Mine." The Alaska Journal, 4 (Summer 1974).
- _____. "Sheldon Jackson and the Reindeer Industry of Alaska." Journal of Presbyterian History 43 (June 1965), pp. 71-79.
- Rickard, T.A. "Dredging on the Seward Peninsula." Mining and Scientific Press, 97 (November 1908), pp. 734-740.
- Rush, Arthur. "Canal Morris Leads a Strenuous Life." Alaska Magazine, 2 (1905).
- Smith, Glenn. "Education for the Natives of Alaska." Journal of the West, 6 (July 1967), pp. 440-450.
- "Seward Peninsula Ditches." Alaska Yukon Magazine, 7 (March 1909), p. 553.
- Taggart, Harold F., ed., "Journal of George Russell Adams, Member, Exploring Expedition in Russian America, 1865-67." California Historical Society Quarterly, 35 (December 1956), 291-307.
- _____. "Journal of William H. Ennis, Member of Russian-American Exploring Expedition." California Historical Society Quarterly, 33 (1954) pp. 1-11; 33 (1954), pp. 147-68.
- Tompkins, Stuart A. "After Bering: Mapping the North Pacific." British Columbia Historical Quarterly, 19 (1955), 1-55.
- "Trapped in Time." Time, October 8, 1984, p. 69.

Government Documents

Board of Road Commissioners for Alaska. Report Upon the Construction and Maintenance of Military and Post Roads, Bridges and Trails; Other Roads, Tramways, Ferries, Bridges, Trails, and Related Works in the Territory of Alaska. Washington, D.C.: Government Printing Office, 1906.

Federal Register

- Great Britain. House of Commons. Sessional Papers.
- Hansen, Herbert C. "Importance and Development of the Native Reindeer Industry in Alaska." Typescript January 30, 1952.
- "Preliminary Inventory of the Records of the Alaska Reindeer Service (Record Group 75)," compiled by Frederick H. Klunder: Typescript in Federal Archives and Records Center, Seattle, 1979.

- State of Alaska. Alaska Division of Parks. Office of History and Archeology. Alaska Mining History: A Source Document, by Virginia Doyle Heiner. Anchorage, 1977.
- State of Alaska. Department of Natural Resources, Cultural Resource Survey, 1981. Edited by Richard O. Stern. Anchorage, 1982.
- U.S. Army, Alaska. The Army's Role in the Building of Alaska. USARAL Pamphlet 380-5, December 1965.
- _____. Congress. Senate. Letter from the Secretary of the Interior Transmitting Report Relative to the Condition of the Natives of Alaska. 51st Cong., 2d Sess., 1890.
- _____. _____ . _____ . Message from the President of the United States, Transmitting Pursuant to Senate Resolution No. 137, Copies of Reports of Special Agent Frank C. Churchill Regarding the Condition of Educational and School Service and the Management of Reindeer Service in Alaska, . . . 59th Cong., 1st sess., 1906.
- _____. _____ . _____ . U.S. Congress, Senate. Report on the Introduction of Domesticated Reindeer into Alaska, 52nd Cong., 2d Sess., 1893.
- _____. _____ . _____ . Report on the Introduction of Domestic Reindeer into Alaska, 1894, 53rd Cong., 2d sess., 1894.
- _____. _____ . _____ . Report on the Introduction of Domesticated Reindeer into Alaska, 1895. 54th Cong., 1st sess., 1896.
- _____. _____ . _____ . Report on the Introduction of Domestic Reindeer into Alaska, 1896, 54th Cong., 2d Sess., 1897.
- _____. _____ . _____ . Report on the Introduction of Domestic Reindeer into Alaska, 1897, 55th Cong., 2d. sess., 1898.
- _____. _____ . _____ . Report on the Introduction of Domestic Reindeer into Alaska, 1898, 55th Cong., 3rd Sess., 1898.
- _____. _____ . _____ . U.S. Congress. Senate. Report on the Introduction of Domestic Reindeer into Alaska, 1900, 56th Cong. 2d Sess., 1901.
- _____. _____ . _____ . Report on the Introduction of Domestic Reindeer into Alaska, 1902, 57th Cong., 2d. Sess., 1903.
- U.S. Department of the Interior. Alaska Planning Group. Final Environmental Statement Proposed Chukchi-Imuruk National Preserve, Alaska. Washington, D.C.: Government Printing Office, 1975.

- _____. _____. Bureau of Land Management. Alaska's Northwest Region: A History, by James H. Ducker. Anchorage: Bureau of Land Management, 1985.
- _____. _____. U.S. Geological Survey. The Alaskan Mining Industry in 1918, by G.C. Martin, et. al. USGS Bulletin 712. Washington, D.C.: Government Printing Office, 1920.
- _____. _____. Cassiterite in Gold Placers at Humboldt Creek Seward Peninsula, Alaska, by C.L. Sainsbury, et al. USGS Bulletin 565. Washington, D.C.: Government Printing Office, 1968.
- _____. _____. U.S. Department of the Interior. U.S. Geological Survey. Dictionary of Alaska Place Names, by Donald J. Orth. USGS Professional Paper 567. Washington, D.C.: Government Printing Office, 1967.
- _____. _____. Gold Placers of Parts of Seward Peninsula, Alaska, Including the Nome, Council, Kougarok, Port Clarence, and Good Hope Precincts by Arthur H. Collier, et. al. USGS Bulletin 328. Washington, D.C.: Government Printing Office, 1908.
- _____. _____. The Fairhaven Gold Placers, Seward Peninsula, Alaska, by Fred H. Moffit. USGS Bulletin 247. Washington, D.C.: Government Printing Office, 1905.
- _____. _____. Mineral Resources of Alaska: Report on Progress of Investigations in 1908, by Alfred H. Brooks, et. al. USGS Bulletin 379. Washington, D.C.: Government Printing Office, 1909.
- _____. _____. Mineral Resources of Alaska: Report on Progress of Investigations, 1922, by Alfred H. Brooks, et. al. USGS Bulletin 755. Washington, D.C.: Government Printing Office, 1924.
- _____. _____. Mineral Resources of Alaska: Report on Progress of Investigations in 1931, by Philip Smith, et. al. USGS Bulletin 844. Washington, D.C.: Government Printing Office, 1934.
- _____. _____. Mineral Resources of Alaska: Report on Progress of Investigations in 1935, by Phillip Smith, et. al. USGS Bulletin 880. Washington, D.C.: Government Printing Office, 1938.
- _____. _____. Mineral Resources of Alaska: Report on Progress of Investigations in 1940, by Philip S. Smith, et. al. USGS Bulletin 933. Washington D.C.: Government Printing Office, 1944.
- _____. _____. Mineral Springs of Alaska, by Gerald A. Waring, USGS Water Supply Paper 418. Washington, D.C.: Government Printing Office, 1917.

Minerals, Lands, and Geology for the Common Defence and General Welfare. Vol. II: 1879-1904. A History of Geology in Relation to the Development of Public Land, Federal-Science, and Mapping Policies and the Development of Mineral Resources in the United States During the First 25 Years of the U.S. Geological Survey, by Mary C. Rabbitt. Washington, D.C.: GPO, 1980.

U.S. Department of the Interior. U.S. Geological Survey. Placer Deposits of Alaska: An Inventory of the Placer Mines and Prospects of Alaska, their history and geologic setting, by Edward H. Cobb. USGS Bulletin 1874. Washington, D.C.: Government Printing Office, 1973.

Preliminary Report of the Cape Nome Gold Region Alaska, by Frank C. Shrader and Alfred H. Brooks. USGS Special Publication. Washington, D.C.: Government Printing Office, 1900.

Radioactivity Investigations in the Serpentine-Kougaruk Area, Seward Peninsula, Alaska, by Robert M. Moxham and Walter S. West. USGS Circular 265. Washington, D.C.: Government Printing Office, 1953.

A Reconnaissance of the Cape Nome and Adjacent Gold Fields of Seward Peninsula, Alaska in 1900, by Alfred H. Brooks, et. al. USGS Special Publication. Washington, D.C.: Government Printing Office, 1901.

A Reconnaissance of the Northwestern Part of the Seward Peninsula, by Arthur J. Collier. USGS Professional Paper 2. Washington, D.C.

Report on Progress of Investigations of Mineral Resources of Alaska in 1905, by Alfred H. Brooks, et. al. USGS Bulletin 284. Washington, D.C.: Government Printing Office, 1906.

Report on Progress of Investigations of Mineral Resources of Alaska in 1909, by Alfred H. Brooks, et. al. USGS Bulletin 314. Washington, D.C. Government Printing Office, 1909.

Water-Supply Investigations in Alaska, 1906-07, Nome and Kougarok Regions, Seward Peninsula; Fairbanks District, Yukon-Tunama Region, by Fred F. Henshaw and C.C. Covert. USGS Water-Supply Paper 218. Washington, D.C.: Government Printing Office, 1907.

Water Supply of Nome Region, Seward Peninsula, 1906, by John C. Hoyt and Fred F. Henshaw. USGS Water Supply Paper 196. Washington, D.C.: Government Printing Office, 1907.

- _____. _____. _____. Surface Water Supply of Seward Peninsula, Alaska, by Fred F. Henshaw and G. Parker. USGS Water Supply Paper 314. Washington, D.C.: Government Printing Office, 1913.
- _____. _____. _____. National Park Service. Draft General Management Plan/ Environmental Assessment, Land Protection Plan, Wilderness Suitability Review. Denver: National Park Service, 1985.
- _____. _____. _____. "A Historical Overview of the Seward Peninsula-Kotzebue Sound Area," by Melody Webb Grauman. Anchorage: National Park Service, 1977.
- _____. _____. _____. "Mineral Report: Validity Examination of the Humboldt Creek Placer Mining Claims involving N.B. Tweet & Sons, Bering Land Bridge National Preserve," by Sidney L. Covington, Junior (draft, December 20, 1985).
- _____. _____. _____. The National Park Service and the Alaska National Interest Lands Conservation Act of 1980, by G. Frank Williss. Denver: National Park Service, 1985.
- _____. Department of Treasury. Reserve Marine, Cruise of the Revenue Steamer Corwin in the N.W. Arctic Ocean in 1881, by C.L. Hooper. Washington, D.C.: Government Printing Office, 1883.
- _____. _____. _____. Report of the Cruise of the Revenue Marine Steamer Corwin in the Arctic Ocean in the Year 1884, by M.A. Healy. Washington, D.C.: Government Printing Office, 1889.
- _____. _____. _____. Report of the Cruise of the Revenue Steamer Corwin in the Arctic Ocean in the Year 1885, by M.A. Healy. Washington, D.C.: Government Printing Office, 1887.

Unpublished Works

- Foote, Don Charles. "Exploration and Resource Utilization in Northwestern Arctic Alaska Before 1855." Ph.D. dissertation, McGill University, 1965.
- Godfrey, Alicia. "The Seward Peninsula Rush." Typescript, 1975.
- Hinckley, Theodore C., Jr. "The Alaska Labors of Sheldon Jackson, 1887-1890." Ph.D. dissertation, Indiana University, 1961.
- Poole, Charles Pinckney. "Two Centuries of Education in Alaska." Ph.D. dissertation, University of Washington, 1948.
- Stein, Gary. "History of the Northwest Arctic Coast." Typescript draft in preparation for publication.

Newspapers

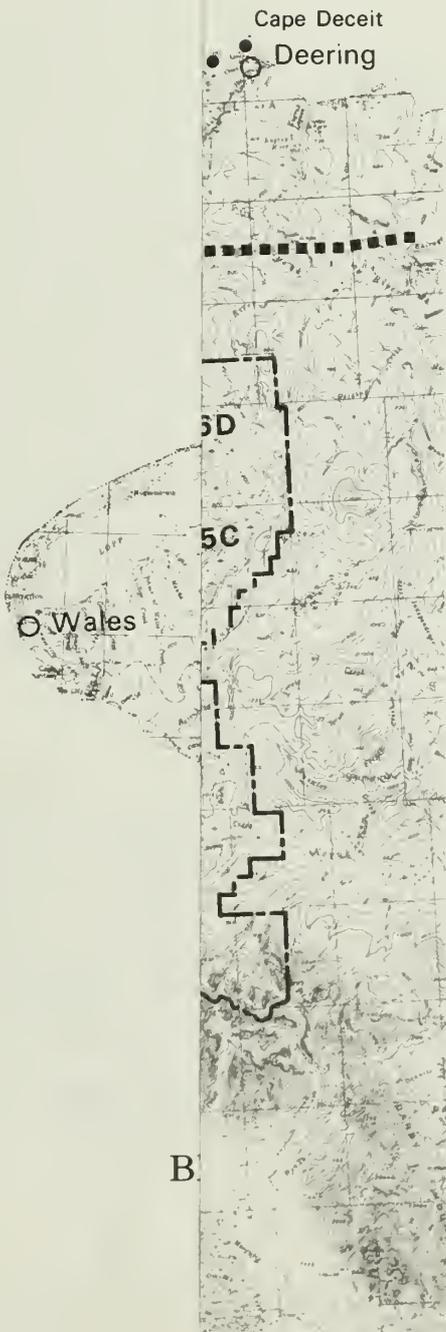
Nome Nugget

Nome Gold Digger

Nome News

Nome Daily Chronicle

The Esquimaux



I SITES ASSOCIATED WITH EXPLORATION

- 1 IKPEK (IKPIK)
- 2 ENNAGHRAUK
- 3 KIVIDLUK
- 4 UNGMALAUKPUK
- 5 LIKLIKNUKTUK
- 6 TUGMAGLUK
- 7 PITTAK (PITAKMUIT)
- 8 UYAUKS
- 9 SIKNAUGRURAK
- 10 PITTAKPUK
- ● ● ● 11 ROUTE OF W.R. HOBSON (SPECULATIVE)



II SITES ASSOCIATED WITH REINDEER HERDING

- 12 ULLUGSAUM
- 13 [REINDEER HERDER'S CAMP]
- 14 [REINDEER HERDER'S CAMP]
- 15 [REINDEER HERDER'S CAMP]
- 16 SOD HOUSE
- 17 [REINDEER HERDER'S CAMP]
- 18 GOODHOPE RIVER REINDEER CORRAL COMPLEX
- 19 CAPE ESPENBERG REINDEER CORRAL COMPLEX
- 20 CABIN - REINDEER HEADQUARTERS - GOODHOPE ALLOTMENT APPLICATION
- 21 REINDEER CORRAL AND FENCES - WEYIOUANNA ALLOTMENT APPLICATION
- 22 REINDEER HERDER'S CABIN - KOKEUK ALLOTMENT APPLICATION
- 23 WAREHOUSE AND CORRAL - FANNIE GOODHOPE ALLOTMENT APPLICATION



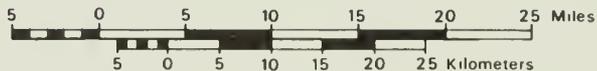
III SITES ASSOCIATED WITH MINING

- 24 SERPENTINE HOT SPRINGS
- 25 FAIRHAVEN DITCH
 - A. CABIN
 - B. CABINS (2)
 - C. CABIN (RUIN)
 - D. CABIN (RUIN)
- 26 SOD HOUSE
- 27 MINING SITE
- 28 MINING CAMP
- 29 SOD HOUSE
- 30 [WALSH] CABIN
- 31 CABIN
- 32 ROUTE FROM DEERING TO THE TAYLOR HIGHWAY (EXISTING)
 - A. COTTONWOOD SHELTER
 - B. BERRY CREEK SHELTER (RUIN)
 - C. AURORA SHELTER (RUIN)
- 33 TAYLOR-SERPENTINE / ARCTIC HOT SPRINGS TRAIL (EXISTING)
- 34 TRAIL - SHISHMAREF INLET - SERPENTINE / ARCTIC HOT SPRINGS
- 35 TRAIL AURORA - TAYLOR
- 36 TRAIL CANDLE - SERPENTINE / ARCTIC HOT SPRINGS
- 37 SINRAZAT SHELTER CABINS



IV SITES ASSOCIATED WITH WORLD WAR II

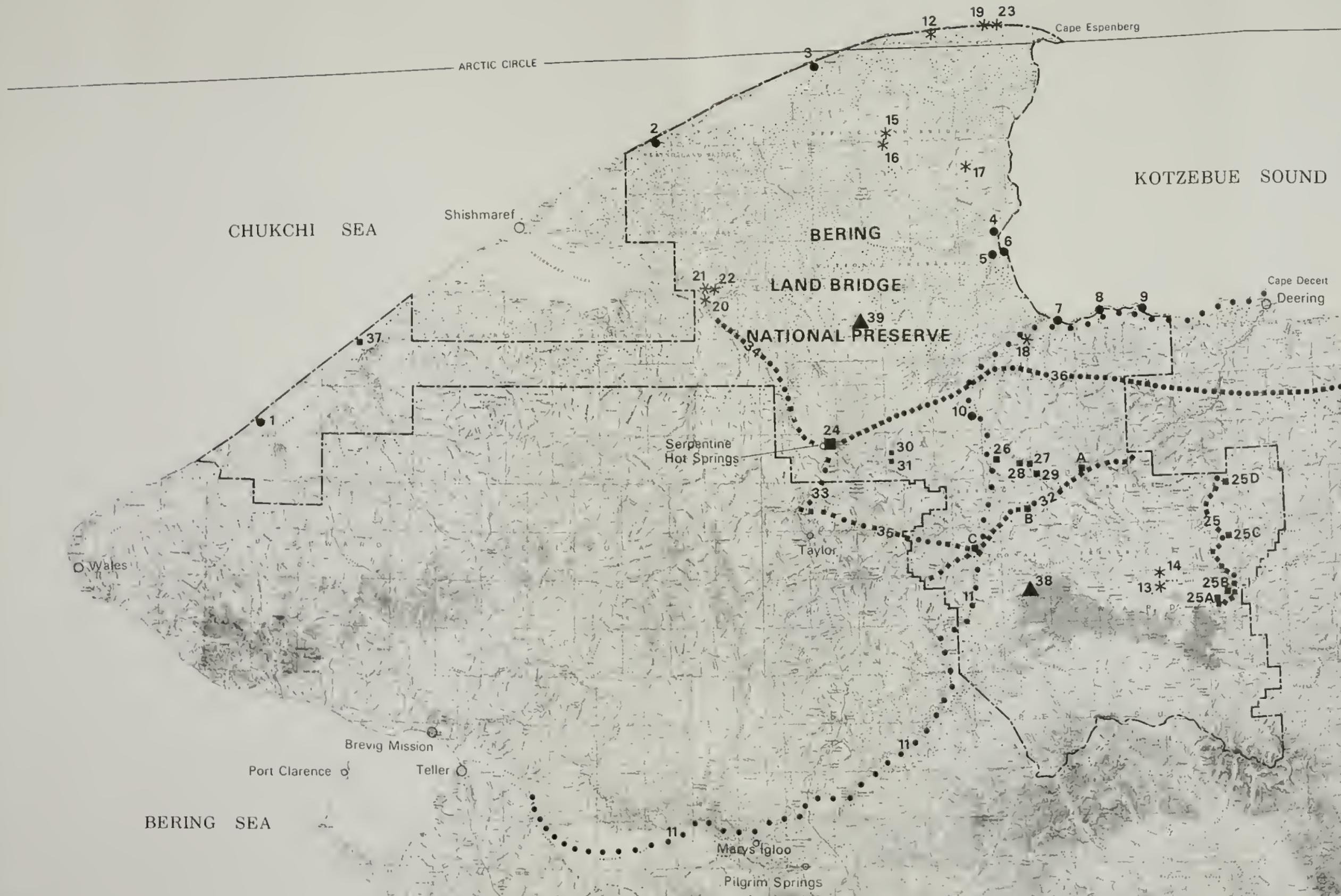
- 38 WEATHER STATION
- 39 PLANE WRECK - LANE MOUNTAIN



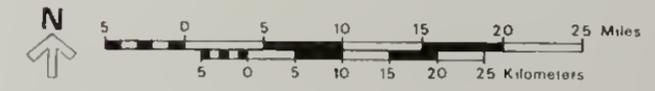
HISTORICAL BASE

BERING LAND BRIDGE NATIONAL PRESERVE

United States Department of the Interior/National Park Service
DSC / JUNE 1986 / 182 - 25000



- I SITES ASSOCIATED WITH EXPLORATION**
 - 1 IKPEK (IKPIKI)
 - 2 ENNAGHRAUK
 - 3 KIVIDLUK
 - 4 UNGMALAUKPUK
 - 6 LIKLIKNUKTUK
 - 6 TUGMAGLUK
 - 7 PITTAK (PITTAKMUIT)
 - 8 UYAUKS
 - 9 SIKNAUGRURAK
 - 10 PITTAKPUK
 - 11 ROUTE OF W.R. HOBSON (SPECULATIVE)
- * II SITES ASSOCIATED WITH REINDEER HERDING**
 - 12 ULLUGSAUM
 - 13 [REINDEER HERDER'S CAMP]
 - 14 [REINDEER HERDER'S CAMP]
 - 16 [REINDEER HERDER'S CAMP]
 - 16 SOD HOUSE
 - 17 [REINDEER HERDER'S CAMP]
 - 18 GOODHOPE RIVER REINDEER CORRAL COMPLEX
 - 19 CAPE ESPENBERG REINDEER CORRAL COMPLEX
 - 20 CABIN - REINDEER HEADQUARTERS - GOODHOPE ALLOTMENT APPLICATION
 - 21 REINDEER CORRAL AND FENCES - WEYIDUANNA ALLOTMENT APPLICATION
 - 22 REINDEER HERDER'S CABIN - KOKEUK ALLOTMENT APPLICATION
 - 23 WAREHOUSE AND CORRAL - FANNIE GOODHOPE ALLOTMENT APPLICATION
- III SITES ASSOCIATED WITH MINING**
 - 24 SERPENTINE HOT SPRINGS
 - 26 FAIRHAVEN DITCH
 - A. CABIN
 - B. CABINS (2)
 - C. CABIN (RUIN)
 - D. CABIN (RUIN)
 - 26 SOD HOUSE
 - 27 MINING SITE
 - 28 MINING CAMP
 - 29 SOD HOUSE
 - 30 [WALSH] CABIN
 - 31 CABIN
 - 32 ROUTE FROM DEERING TO THE TAYLOR HIGHWAY (EXISTING)
 - A. COTTONWOOD SHELTER
 - B. BERRY CREEK SHELTER (RUIN)
 - C. AURORA SHELTER (RUIN)
 - 33 TAYLOR-SERPENTINE / ARCTIC HOT SPRINGS TRAIL (EXISTING)
 - 34 TRAIL - SHISHMAREF INLET - SERPENTINE / ARCTIC HOT SPRINGS
 - 36 TRAIL AURORA - TAYLOR
 - 38 TRAIL CANDLE - SERPENTINE / ARCTIC HOT SPRINGS
 - 37 SINRAZAT SHELTER CABINS
- ▲ IV SITES ASSOCIATED WITH WORLD WAR II**
 - 38 WEATHER STATION
 - 39 PLANE WRECK - LANE MOUNTAIN



HISTORICAL BASE

BERING LAND BRIDGE NATIONAL PRESERVE
 United States Department of the Interior/National Park Service
 OSC / JUNE 1986 / 182 - 25000

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics staff of the Denver Service Center. NPS D-20 September 1986

