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United States Department of the Interior National Park Service

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NAT	REGISTER OF HISTORIC PLACES NATIONAL PARK SERVICE

OMB No. 1024-0018

# NATIONAL REGISTER OF HISTORIC PLACES MULTIPLE PROPERTY DOCUMENTATION FORM

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in How to Complete the Multiple Property Documentation Form (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

X \_\_\_\_ New Submission \_\_\_\_\_ Amended Submission

A. Name of Multiple Property Listing

Entrepreneurship and Exploitation along the Fairweather Coast and the Glacier Bay Vicinity

# B. Associated Historic Contexts

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

- 1. Placer/hardrock gold mining and other mineral extraction in the Glacier Bay region 1880-1945
- 2. The Commercial Salmon Industry, Canneries, and Associated Support Facilities in the Glacier Bay Region, 1883-1945
- 3. Commercial Fox Farming and Fur Harvesting Operations at Glacier Bay, Dundas Bay, and Lituya Bay, 1925-1940
- 4. The Timber Industry and Sawmills in the Glacier Bay Region, 1914-1945.

C. Form Prepared by

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### D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.

2000en Signature and title of certifying official

12/23/96

National Park Service

State or Federal agency and bureau

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

fa Signature Date per

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in How to Complete the Multiple Property Documentation Form (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

**E. Statement of Historic Contexts** (If more than one historic context is documented, present them in sequential order.)

1. Placer/hardrock gold mining and other mineral extraction in the Glacier Bay region 1880-1945

Context One shall provide an overview of historic placer and hardrock mineral extraction efforts in the Glacier Bay region. The context begins with the discovery of gold along the outer Fairweather Coast from the 1880s through the 1930s. Special emphasis is given to placer operations at Lituya Bay. The context next examines mineral extraction within the confines of Glacier and Dundas Bays from the 1920s until the mid-1940s. Context One also provides descriptions concerning the geography, climate, transportation, and development challenges associated with entrepreneurship and exploitation activities discussed in Contexts Two, Three, and Four.

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The history of mining at Glacier Bay National Park is linked to the larger history of westward expansion and development. The California gold strike of 1848 set up a progression which would sweep up the west coast enveloping British Columbia and eventually, Southeast Alaska. The presence of gold in Southeast Alaska was known to the Russians. Russian records from the mid-19th century note the appearance of gold in several localities. The Russians, however, showed little interest in pursuing the yellow metal. They were content to continue exploitation of the "soft gold" sea otter trade.

The former Russian capital of Sitka was the scene of the first American era gold strike in 1872 with the development of the Stewart Mine. In 1880 Joseph Juneau and his partner Richard Harris were prospecting at Windham Bay, 50 miles south of present day Juneau. Dissatisfied with their findings, the two men proceeded up the coast. On a small unnamed creek, the men discovered gold. The richness of the strike set off a stampede which assured the future life of the City of Juneau.<sup>1</sup>

With the exception of Juneau, most Southeast mining operations were small-scale. The two principal methods of extraction--placer and hardrock mining--likewise relied upon low-

<sup>1</sup>James C. Hildebrandt, *History of Placer Mining in Alaska* (Anchorage: Privately printed, undated), 13-14; DOI, USGS, *Juneau Gold Belt*, by Arthur C. Spencer, Bulletin 287 (Washington: GPO, 1906), 4.

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technology methods. Hand shovels, sluice boxes, and lots of water were the basic tools of the trade in placer mining. The gold bearing material, gravel or sand, was first hand excavated with a shovel. The material was then shoveled into a sluice box. Sluice boxes were constructed from boards or other convenient material. Riffles were cut into the bottom of the box, or chute which the sluice more closely resembled. The riffles would capture the heavier gold, separating it from the lighter waste material. Mercury was often placed in the riffles because of its ability to amalgamate with gold. Water was secured from a nearby stream and diverted through a ditch or flume to the head of the sluice box. The water was the driving force used to propel the gold bearing ore through the sluice. The final step in the process was cleanup. The heavy gold laden amalgam was usually saved until the end of the season for retorting. Retorting involved placing the amalgam in the retort, a pressure cooker like container, fitted with a tight lid from which a metal pipe emerged. Upon heating the mercury would vaporize, thus separating itself from the gold. The mercury would flow through the pipe and condense, to be captured at the other end of the pipe for eventual reuse.<sup>2</sup>

Hardrock or lode mining as it is often called, requires different methods than placer mining. Hardrock gold is found wedged in fissures, often in the presence of quartz veins. The typical hardrock operation relied upon a tunnel--or when practical, a surface trench--to access and extract the gold. The tunnel had to be dug in a manner that best followed the gold laden vein. This was often a matter of trial and error. Methods for ventilating the tunnel, bracing the tunnel to ensure the miners' safety, and hoisting the ore to the surface needed to be developed. Once the ore was extracted, the gold needed to be separated from the gangue (waste material). Milling, the physical crushing of the ore to help separate gold from waste, could generally be done on-site. Smelting, the actual application of heat to separate minerals from the ore, required sending the refined ore to a facility on the west coast.<sup>3</sup>

The Juneau strike assured that additional prospecting along the Southeast coast would occur. The Glacier Bay region, which lay to the northwest of the lucrative Juneau gold belt, seemed a logical place to search for gold. In 1880 initial prospecting efforts began along the Alsek River. Some worthwhile quantities were apparently discovered, although no available records substantiate this. During the same year, James Hollywood and three partners headed out of Sitka to prospect the Fairweather Coast. The party ran into trouble while attempting to land at Lituya Bay--the site of misfortune for France's 1786 La Perouse expedition. One of the prospectors drowned while negotiating the heavy surf. This scenario was to be played out repeatedly in years to come. Two other members of the group were later murdered during an altercation with some Natives from Yakutat. The Hollywood disaster discouraged others from prospecting the Fairweather Coast for several years.<sup>4</sup>

One of several early entrepreneurs who led prospecting efforts in the Glacier Bay region--once they began in earnest during the late 1880s--was John Healy. Described as a "tough little Irishman," Healy arrived in Juneau in 1886. Healy was already a renown frontiersman having established his reputation in Montana Territory as an Indian fighter, fur trader, and frontier

<sup>2</sup>C. Perry McBeth, "Gold at Lituya Bay," *The Alaska* Sportsman, February 1949, 7; Richard V. Francaviglia, *Hard Places* (Iowa City: University of Iowa, 1991), 127; DOI, NPS, *CRMIM* Overview, by Becky Saleeby, Draft (Anchorage: In progress), 34.

<sup>3</sup>Francaviglia, 86.

<sup>4</sup>Francis E. Caldwell, Land of the Ocean Mists: The Wild Ocean Coast West of Glacier Bay (Edmonds, Wash.: Alaska Northwest Publishing Company, 1986), 112, 116; William R. Hunt, Golden Places: The History of Alaska-Yukon Mining (Anchorage: NPS, 1991), 319.

sheriff. Healy established a trading post at Dyea. He then purchased a schooner and began a business transporting prospectors throughout Southeast Alaska, including Glacier Bay. In 1890 Samuel Wheelock hired Healy to transport a party of seven to Lituya Bay. A Juneau City Mining Record from 1890 described the coast between Cape Spencer and Yakutat as the gold coast of Alaska. Wheelock and his partners planned to stake claims in the potential gold bearing beach sands just outside the bay. Their prospecting efforts succeeded in locating some worthwhile samples. Each member of the group staked 20 acres. They then organized the Fairweather Mining District and pooled their claims into a single entity known as the Lituya Company. During their first season of operation, in 1891, the company netted \$13,000 worth of gold.<sup>5</sup>

The ruby sands of Lituya Bay, so named because of their red ruby color, proved to be a decisive challenge for the many miners who worked the area during the next 40 years. The gold bearing sands, both red and black, lay wedged between thick layers of grey silt containing no gold. The gold was of a fine flour consistency, making it difficult to extract. The method of recovering this gold was placer mining. As with most Alaska placer operations, the method employed at Lituya had to be modified to suit local conditions. A scarcity of water was a chronic problem. Long flumes had to be constructed to transport water from local streams to the various diggings along the beach. Large quantities of gray silt needed to be shoveled away to reach the layers of gold laden ruby sands. This was a labor intensive process involving crews working around-the-clock during the short summer season.

Miners had to also contend with the vagaries of nature. Crafts of all types foundered in the treacherous tides and breakers of Lituya Bay. In the lucky cases, miners escaped with their lives and were able to salvage some of their supplies. Less fortunate were those individuals who lost their lives or found themselves stranded on the beach wet, cold, and without provisions. The year 1892 was especially disastrous. The schooner *Salmo*, carrying members of the Jeff Talbot party, crashed upon the rocks. The party barely escaped with their lives. On August 13 the schooner *Albatross* ran aground leaving two crew members and three miners, already on-site, stranded with only a few days' provisions. The survivors reached Yakutat, some 50 miles to the northwest, after an arduous 18 day overland trek.

Mining at the Lituya Bay ruby sand diggings peaked in 1896. The number of miners ran from a low of 75 to upwards of 200 men. W.M. Brook, owner of the Ruby Sand Mining Company, had the largest operation. In 1895 Brook had purchased claims from Wheelock and O.M. Cole, along with seven on-site cabins. Brook hired 14 men to commence round the clock operations. The crew constructed 2,000 feet of flume with a string of five sluice boxes. Over the course of the 135 day season the company recovered gold worth in excess of \$12,000. Workers earned an average of \$270 dollars each, or two dollars a day, for their effort. Production slowed in 1897 because of a shortage of workers bound for the Klondike strike. However, in 1898 with the Klondike rush largely over, Brook redoubled his efforts bringing in a crew of 21 men.<sup>6</sup>

From the general laborer's perspective, working the ruby sand digs was a good deal. Perry McBeth, a laborer at the Marion Shook operation in 1896 and 1897, noted that he received \$2 a day plus room and board. This was twice the wage he had been earning in California. When coupled with the potential for adventure, Lituya Bay seemed like the ideal setting for a young man. McBeth noted how in one attempted landing their small dory was upended. He, along with several chickens and a pig, wound up in the heavy surf. The streams around Lituya Bay abounded with trout and silver salmon. The miners made nets out of burlap and two pronged gig spears to capture the tasty fish. The bay's large brown bears and an occasional black bear offered plenty of hunting opportunities.<sup>7</sup>

> <sup>5</sup>Ibid., 90; Ibid., 145-147. <sup>6</sup>Caldwell., 149; Hunt., 320. <sup>7</sup>McBeth, 29-31.

Some of the more bizarre misadventures which occurred at the ruby sand digs centered around the Lituya Bay Gold Placer Mining Company. The company began operations in 1898, offering 100,000 shares of stock at \$100 each. The stock offering had all the trappings of a confidence game, although no charges were ever filed. The company did actually hire a crew and began working its claims in 1899, producing about \$16,000 worth of gold. Some infrastructure was also associated with the company. A high tide wharf was constructed at Big Rock Anchorage on the north side of Lituya Bay. Wooden piles were hand driven to support the wharf. A boom and chain extended over the wharf to facilitate the unloading of cargo. At the end of the wharf, a lean-to shed was built for storing freight. A series of mishaps shut the company down in 1900. First, came the great fall earthquake of 1899. The quake created a series of slides which covered up or washed away much of the gold laden ruby sands. Following this was a murder in which the winter crew took upon themselves the job of administering miner's justice. It was said that the crew foreman's wife assumed the role of executioner during the subsequent hanging. The story found its way into major newspapers and later became the centerpiece of a Jack London story entitled *The Unexpected*.

Mining activities persisted in the Lituya Bay area until the mid-1930s. Placer claims staked along the beach some four to nine miles southeast of the bay yielded minor quantities of gold and platinum. A mining camp was constructed 16 miles north of Lituya Bay, just south of Cape Fairweather. The site consisted of 16 log cabins, horse sheds, and several equipment sheds. The camp was abandoned after harsh winter storms of 1918-19 reshaped the gold laden beach and associated creek mouths making further mining impractical.<sup>8</sup> The U.S. entry into the First World War, for all practical purposes, sealed the region's fate. Men went off to war or abandoned the coast for more lucrative war-related civilian jobs. During the 1930s some halfhearted prospecting took place in the region, with negative results. Of interesting note was the Mallory party which arrived at Lituya Bay in June 1933, after reading a story in the Los Angeles Times about a ghost town at the bay. The group brought along a Model T Ford truck and constructed a road from Anchorage Cove to a creek west of the bay. The prospectors' efforts never panned out. They sold the truck to some trappers and headed home. The trappers in turn abandoned the truck which several other individuals then utilized.<sup>9</sup>

Most of the other mining which took place within the present park unit boundaries was confined to Glacier Bay. Like Lituya Bay, mining efforts at Glacier Bay focused predominately on gold. Glacier Bay mining operations, however, were generally hardrock. Furthermore, because the Glacier Bay operations were often conducted high on the mountainside above the beach, some means of transporting the ore to the waterfront, for later shipment, had to be devised. The miners also had to comply with an increasing number of federal regulations. At Glacier Bay this was because most mining operations came after monument designation in 1925.

One of the early miners to stake a claim at Glacier Bay was Joseph Ibach. Depending upon your perspective, Ibach could either be regarded as a true "Alaskan sourdough" or a troublemaker bent upon exploiting pristine public lands for his personal gain. The novelist Rex Beach, who first met Ibach in 1905, described him as the "nearest to a free soul of anybody I ever knew and anything less than complete independence irked him like a shirt of nettles."<sup>10</sup> In the summer of 1924 Ibach and his wife Muz left their home, at Lemesurier Island in Icy Strait, to prospect for gold in Reid Inlet. The Ibachs discovered what appeared to be two promising gold bearing veins. They registered their claims--Monarch and Incas--with the General Land Office. The land office personnel, however, failed to tell the Ibachs that President Coolidge had issued an executive order temporarily withdrawing Glacier Bay from mineral entry on April 1,

<sup>8</sup>Caldwell, 152-153.

<sup>9</sup>Ibid., 165.

<sup>10</sup>Hunt, 324.

1924.<sup>11</sup> This incident turned out to be the catalyst for a larger mining controversy which would reach to the highest levels of Washington, D.C. officialdom.

In 1936, Ibach succeeded in gaining access to his 1924 claims. Ibach managed this with the help of Rex Beach. Beach likewise succeeded in getting Glacier Bay opened to new claim filings. Beach accomplished this feat in part through the publication of an article which appeared in *Cosmopolitan* Magazine. The article portrayed Glacier Bay as an untapped mining bonanza, capable of putting thousands of able bodied young men to work. Beach also initiated a letter writing campaign which succeeded in popularizing the issue with President Franklin Roosevelt.<sup>12</sup> When the area opened to mining, Ibach, acting on behalf of himself and Beach, immediately set about staking claims. In total, he recorded 45 claims, with the most promising claims encompassing veins in the Highland Chief group. Other sites included the Rainbow, Sentinel, and Galena claims. Ibach collected a total of five tons of gold bearing ore in 1936, which he hauled back for milling at his Lemesurier Island homestead.<sup>13</sup>

The majority of Glacier Bay mining claims staked during the late 1930s and early 1940s were in the area lying between Reid Inlet and Lamplugh Glacier. Among these were the Rambler, Whirlaway, Hopalong, Sunrise, Lincoln, and LeRoy claims. In 1937 the Newmont Mining Company leased Ibach's Highland Chief and Rambler claims. The company spent several months sampling the veins. The veins turned out to be too small and inaccessible to be profitable. This seemed to be the situation with most of the Reid Inlet claims. Subsequent U.S. Geological Survey sampling found the gold bearing rock content to be too low to warrant profitable mining. Despite this, local miners running low budget operations could realize some measure of success. Ibach, along with partner Tom Smith, a charter boat operator from Juneau, continued to work the claims. Smith even constructed a blacksmith shop at the Inca claim which the Ibachs converted into living quarters. A 1954 USGS survey at the Inca claim noted the remains of a blacksmith shop and cabin foundation, as well as signs of surface testing. The partners extracted seven tons of ore from Rainbow in 1938 and 30 tons from Galena in 1939. The Galena ore was supposed to have garnered about \$1,800, although Smith later said their net profit amounted to \$13 each for the two year period.<sup>14</sup>

In 1940 Ibach undertook infrastructure improvements to facilitate his Reid Inlet operations. Principal among these improvements was the need for a better transportation network. The exposed slopes surrounding Reid Inlet, where Ibach had his claims, were covered in a mantle of glacial debris to a height of 1,000 feet. The area could be easily traversed on foot but was virtually inaccessible to wheeled vehicles. Heavy snows, remaining well into late spring, compounded these difficulties. Ibach's first step in solving his dilemma was the construction of an access road. During the spring Ibach brought in a Caterpillar tractor via the Ptarmigan Creek drainage. He then bulldozed a road through the unconsolidated material to his Inca claim. Ibach next constructed a nearly one mile long cable tram running from the beach to Inca and on to his Rainbow site, which lay about 2,500 feet northeast from the mouth of Reid Inlet.

<sup>12</sup>Rex Beach letter to Mervin McIntrye of 14 January 1936, National Archives, NPS Central Classified File, RG 79, Box 2226, GLBA File 201; Rex Beach letter to Franklin Roosevelt of 14 January 1936, National Archives, NPS Central Classified File, RG 79, Box, 2226, GLBA File 201; Rex Beach letter to Arno Cammerer of 14 January 1936, National Archives, NPS Central Classified File, RG 79, Box 2226, GLBA File 201.

<sup>13</sup>Bulletin 1058-B, 37-38; Bulletin 963-A, 31.

<sup>14</sup>Bulletin 1058-B, 33; Bulletin 963-A, 31; Frank T. Been, field notes, 30 July and 3 August 1940, ARO; Bohn, 89.

<sup>&</sup>lt;sup>11</sup>Dave Bohn, Glacier Bay: The Land and the Silence (San Francisco: Sierra Club, 1967), 87; DOI, USGS, Some Mineral Investigations in Southeastern Alaska, by W.S. Twenhofel and others, Bulletin 963-A (Washington: GPO, 1949), 31; DOI, USGS, Geology and Ore Deposits in the Reid Inlet Area Glacier Bay, Alaska, by Darwin Rossman, Bulletin 1058-B (Washington: GPO, 1959), 37-38.

At some point another tram was extended from the cat trail to the Monarch 1 site, where a 250 foot tunnel accessed a promising vein. The trams were used to haul supplies up to the claims and ore down to the beach.<sup>15</sup> Ibach's other 1940 project involved the construction of a cabin and two outbuildings--a shed and what has been referred to as a salmon cabin--at the mouth of Reid Inlet. The Ibachs remained at the cabin on a seasonal basis until the mid-1950s. Muz landscaped the ground surrounding the cabin, using rocks to create terraces. Dirt was hauled in from Lemesurier Island for planting a vegetable garden, which included strawberries and flowers. Strawberry and rhubarb plants were still present at the sight during a 1994 field examination. Three small spruce trees were also brought in to add some greenery to the treeless landscape. Today these trees are 10-12 inches in diameter and have resulted in several small seedlings.

The other noteworthy operation in the vicinity of Reid Inlet belonged to the Abraham Parker family from Gustavus. Parker was one of the original founders of Gustavus. A jack of all trades, Parker tried his hand at cattle ranching, farming, lumbering, and construction to make ends meet at the family homestead. Over the winter of 1937-38 Parker, by then an old man, designed and built a two stamp mill. The mill was dismantled, placed on a raft, and towed up Glacier Bay to Reid Inlet in anticipation of a significant find. About a mile east of Lamplugh Glacier, above Ptarmigan Creek, Parker and his son Leslie located what appeared to be a significant vein at 950 feet above sea level. A favorable assay convinced the Parkers and their partners, the White family also of Gustavus, to make a major investment in their LeRoy mining claim during the summer of 1939. The partners barged in a bulldozer and constructed a 2,400 foot long road from the beach at the mouth of the creek to their claim. They then hauled over 3,000 feet of cable in to construct an aerial tramway extending 2,300 feet. The stamp mill was brought over from Reid Inlet and reassembled. A small cabin was constructed at the LeRoy claim. Later, a new mill was constructed below the mine at 500 feet above sea level. An aerial tram connected this mill to the mine. Some 3,300 pounds of ore was shipped from the mine to a smelter in Tacoma, Washington at the end of the 1939 season.<sup>16</sup>

Parker and his partners continued to work the claim until the end of 1940. The mine was then leased out to some Fairbanks investors who worked the site for a couple of years. The site reverted back to the Parker family in 1945. Records show that 1941 was the greatest year of production at the LeRoy mine. Over 250 tons of ore was mined from which some \$45,000 worth of gold was recovered. In total, over 4,570 ounces of gold and 1,628 ounces of silver were extracted from the LeRoy Mine. Little in the way of physical evidence remains to mark the former mine. The processes of repeated snow avalanches and land slides have either erased or destroyed much of the historic landscape. In 1994 the NPS completed the process of sealing up the mine shaft which had become a safety hazard.

There were other mining operations--some of which predated the monument--scattered around Glacier Bay. These were located at Willoughby and Francis Islands, at Blue Mouse and Sandy Cove, and elsewhere. No evidence exists to suggest that these produced any measurable amounts of gold or other precious metals. At Dundas Bay, Doc Silvers (William Horseman) and his wife, operating out of their two room cabin, staked some 50 claims, extending over to Taylor Bay. The Silvers invested thousands of dollars in the operation but apparently never realized a profit from their efforts.<sup>17</sup> This was also the case with Ed Brekhus's attempts to extract wealth from his claim near Lake 285 about four miles from the north arm of Dundas Bay. Brekhus and a partner spent the winter of 1933-34 camped in a cave near the lake. Brekhus would hike to the Dundas Bay cannery to pick up mail and supplies. Brekhus worked his placer claim with a small sluice box during the spring of 1934, then again in 1937 and 1938. During the 1938

<sup>15</sup>Bulletin 1058-B, 50-52.

<sup>16</sup>Bulletin 1058-B, 39; Bulletin 963-A, 32-33; James Mackovjak, Hope and Hard Work: The Early Settlers at Gustavus, Alaska (Gustavus: Goose Cove Press, 1988), 46-47.

<sup>17</sup>Bruce W. Black, A History of Glacier Bay National Monument Alaska (Gustavus: Privately printed, 1957), 88-89.

operation he blasted a 40 foot channel at a stream on the northeast side of the lake, hoping to create an artificial riffle box in the stream bed. Brekhus also constructed a 10 by 12 foot log cabin with a canvas tent roof as living quarters. His operation was flooded out when a fall storm dropped 22 inches of rain over a 36 hour period. Brekhus realized little more than a few pans of promising color for his efforts.<sup>18</sup>

2. The Commercial Salmon Industry, Canneries, and Associated Support Facilities in the Glacier Bay Region, 1883-1945.

Context Two shall provide an overview of the commercial salmon harvesting and processing operations in the Glacier Bay Region between 1883 and 1945. The context begins with a discussing of the evolution of commercial salmon fishing in Southeast Alaska. The context next provides a description of salmon processing facilities, in the Glacier Bay region, beginning with Bartlett Cove in 1883 and culminating with the revitalization of a facility at Excursion Inlet after the Second World War.

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The role of salmon in the Southeast Alaska economy predated the coming of European explorers. Salmon constituted a major portion of the Tlingit diet because of its benefits over other available food sources. First, the effort needed to capture salmon was quite low. The seasonal migrations of the five major species of Pacific salmon--kings, reds, silvers, pinks, and chum--were generally predictable. Their concentration was such that a single individual utilizing simple gear--gaffs, dipnets, hooks, and various traps--could easily secure a year's supply. Secondly, salmon could be readily preserved and transported. The common method of preservation was to either sun dry or smoke the fish. In this form it could be easily stored for winter use and transported with minimal risk of spoilage. Finally, salmon had the advantage of providing high nutritional value, particularly as a source of protein.<sup>19</sup>

During the Russian-American period, 1741 to 1867, there were few changes within the salmon economy. Salmon played a minor role in the Russian's economic endeavors in Alaska. The Russians dried and salted salmon for their own personal use. Some limited amounts were sold to passing schooners, and salted salmon found its way to the American west coast or was shipped back to St. Petersburg for consumption as a local delicacy. This situation remained largely the same for the first several years after the U.S. purchase of Alaska. Sufficient quantities of salmon for commercial purposes were more readily available off the coasts of Oregon and Washington.<sup>20</sup>

As over-fishing and higher demand began to take its toll on Pacific Northwest stocks of salmon, the sheer abundance of Alaska's salmon could no longer be ignored. In 1878 two small salmon canneries were constructed in Southeast Alaska. The combined take for the season of the two canneries was just over 425,000 pounds of salmon. By 1923 the output of Alaskan salmon canneries exceeded 232 million pounds annually. This figure jumped to 322 million pounds in 1926.<sup>21</sup>

The early commercial salmon industry was at first a boon to the Tlingit who populated Southeast Alaska. Local Native and non-Native fishermen provided most of the catch needed for canning.

<sup>19</sup>Richard A. Cooley, Politics and Conservation (New York: Harper & Row, 1963), 15.

<sup>20</sup>Ibid., 23-24; Ted C. Hinckley, *The Americanization of Alaska, 1867-1897* (Palo Alto, Calif.: Pacific Books, 1972), 122-123.

<sup>21</sup>Hinckley, 125; Treasury Department, Commerce and Customs, Annual Reports: Alaska 1923-1940 (Juneau: Office of the Collector, 1941).

<sup>&</sup>lt;sup>18</sup>Ed Brekhus, Interview by Donald D. Chase and Paul J. Ewers, 23 August 1980, transcript, Alaska Regional Office.

Natives, primarily women, likewise supplied much of the labor force at the canneries. These circumstances began to change with rapid expansion in the industry. The number of local fishermen were insufficient to meet industry demand. This resulted in the importation of fishermen, recruited from major west coast ports. These company fishermen--with their cannery supplied gear--directly competed with and in some cases displaced local operators. The labor force at the canneries underwent a similar transition as outside labor, primarily Chinese, replaced local labor on the cannery floor.<sup>22</sup>

The focus of Southeast Alaska salmon harvesting was primarily directed towards pink and silver salmon. Red salmon--the preferred cannery fish because of its appealing red color--were less abundant in Southeast Alaska This was likewise the case at Glacier Bay. Multiple methods were implemented to harvest the region's salmon. Traditional Tlingit equipment consisting of gaffs, spears, and various small traps quickly gave way to commercial devices. Principal among these were nets and traps. Netting was generally implemented in one of two ways. The first was gill netting. Gill netting was the oldest and least utilized means of capturing salmon in Southeast Alaska. The method involved setting nets across stretches of a river to capture spawning fish. In some cases fishermen would tie the gill nets off to their boats and drift, capturing fish as they swam into streams during slack tides. Purse seining, however, was the favored means of netting salmon in the narrow fjords and inlets of the waters which typified Southeast Alaska, including the Glacier Bay region. Fish bunched up in the narrow headlands at a stream's mouth were easy to spot. Fishermen simply had to drag their nets through these schools and entrap the salmon in the purse shaped net. Purse seining had the added advantage of being inexpensive. Local fisherman possesing little capital could generally afford the basic equipment needed to begin operation.<sup>23</sup>

From the perspective of cannery owners, seiners--many of whom were locals--presented undesirable impediments. Both Native and non-Native locals were viewed as too unpredictable, often choosing to fish only when they were in immediate need of money. Independent locals pushed up the contract price paid for salmon. This was offset in part through the introduction of contract fishermen from outside. Still, the addition of outside fishermen was not enough to free cannery owners from local influence. This only came about after the introduction of the commercial fish trap.

The commercial fish trap had been utilized extensively on the U.S. west coast and in British Columbia before coming to Alaska. Its use proved so effective that fish traps were soon outlawed in these areas. Not so, in Alaska. Fish traps played a dominant role in Southeast Alaska's salmon industry until they were outlawed in the late 1950s. The general persistence of fish traps was a testimony to their effectiveness, as well as the lobbying skills and political clout of commercial canners from outside Alaska. The early fish traps were a stationary apparatus consisting of webbing and wire mesh which was held in place with a series of piles driven into the underlying mud. Later models held the traps in place with cables and anchors rather than driven piles. These floating traps were easier to place and less expensive to construct. The outside frame of the trap was constructed of stringers (logs 20 to 26 inches in diameter). The webbing and wire mesh was nailed to the stringers with the entire affair fashioned into a "v-shape" funnel, referred to as a heart. At the end of lay a large wire box or pot. Here the salmon would remain until needed when they could be scooped up and hauled out of the water into a waiting scow.<sup>24</sup>

<sup>24</sup>Cobb, 1911 Report, 27; H.C. Scudder, The Alaska Salmon Trap: Its Evolution, Conflicts, and Consequences (Juneau: Alaska State Library, 1970), 3, 8.

<sup>&</sup>lt;sup>22</sup>Hinckley, 126-127; Cooley, 30; Jefferson F. Moser "The Salmon and Salmon fisheries of Alaska." In the *Bulletin of the U.S. Fish Commission* vol. 18 for 1898 (Washington: GPO, 1899), 43.

<sup>&</sup>lt;sup>23</sup>Cooley, 45; Department of Commerce and Labor, Bureau of Fisheries, The Salmon Fisheries of the Pacific Coast, by John N. Cobb (Washington: GPO, 1911), 23-24, 26.

The initial capital outlay for a fish trap was beyond the means of most local Alaskan fishermen. Only the large cannery owners could afford such an initial investment. However, once the trap was running maintenance costs were quite low. The trap required minimal labor, just a watchman and occasional visits from the cannery scow. At the end of the season, traps were pulled onshore for utilization the following season.

Trap placement was critical to a successful operation. Traps had to be placed where the salmon had a natural tendency to swim, which was generally near the mouth of a stream. In some cases professional scouts were hired to seek out the best sites. Fish trap ownership provided cannery operators with a virtual monopoly on the industry, accounting for nearly one-half of the annual salmon harvest. The all time high for Southeast Alaska peaked at 575 traps in 1927.<sup>25</sup> Single haulouts amounted to several tons. This allowed cannery owners the luxury of controlling the market price for salmon, much to the chagrin of local fishermen.

The general expansion and success of improved salmon capture methods resulted in an expansion in the number of canneries in the Glacier Bay region and other parts of Southeast Alaska. This early canning industry was a rather haphazard affair. Many of the early facilities were actually salteries. Salteries consisted of small-scale operations in which salmon were salted and packed in large barrels for shipment to market. Early cannery equipment was often cumbersome and labor intensive requiring a steady reliable work force to maintain productivity. Industry owners did not generally perceive Tlingit labor as sufficiently reliable. The Natives were found to be good workers but could not be counted on to work the entire season. In other cases, canneries were located far from a local labor source. This resulted in the importation of Chinese workers from larger west coast cities as the primary source of cannery labor. The Chinese were found to be reliable and skilled workers, willing to labor long hours during the peak runs.<sup>26</sup>

By the early 20th century, improved mechanization further advanced the cannery process. The seam sealed sanitary can replaced the older solder type can. This made for a more reliable seal. The labor intensive job of cleaning fish was soon replaced with the 1904 introduction of Smith Cannery Machine Company's "iron chink." The device automatically butchered, cleaned, and trimmed 3,000 salmon an hour. This eliminated the need for upwards of 40 laborers. These and related labor saving devices turned the cannery line into a truly mechanized operation allowing both small and large operators greater economies of scale.

In her 1883 visit to Glacier Bay's Bartlett Cove, the travel writer Eliza Scidmore reported that a salmon cannery had just been completed in the vicinity of a Hoonah Tlingit salmon camp and Dick Willoughby's trading post. Whether this was an actual cannery or merely a saltery is uncertain. In her account Scidmore noted that supplies off-loaded from the steamer *Idaho* included nets, salt, barrel staves, and hoops, leading one to speculate that the operation was a saltery.<sup>27</sup> The first indepth report of packing operations at Bartlett Cove appeared in an 1899 report written for the U.S. Fish Commission. The report's author, Jefferson F. Moser, visited canneries throughout Southeast Alaska in 1898 and again in 1900 and 1901.

In 1888 the Bartlett Bay Packing Company began operating a cannery facility at Bartlett Cove. According to Moser, the 1888 operation was a saltery and it was not until 1889 that cans and cookers were brought in to produce a hand pack of 4,300 cases of red salmon. The salmon for this initial pack came from the Bartlett River which Moser described as a nine mile long red fish stream. Moser's 1902 report further noted evidence of a "v-shaped" runway in the stream in which traps were formerly used. There was no evidence of recent use of these devices at the site. During the following year, 1890, William, Brown & Company of San Francisco, constructed

<sup>27</sup>Black, 23; Eliza R. Scidmore, *Journeys in Alaska* (Boston: D. Lothrop and Company, 1885), 125.

<sup>&</sup>lt;sup>25</sup>Jones, 9; Cooley, 34; Scudder, 6, 9.

<sup>&</sup>lt;sup>26</sup>Cobb Report 1911, 35; Cooley, 27.

an on-site cannery. Packs were made in both 1890 and 1891 of 12,000 and 7,600 cases respectively. However, in 1892 the cannery became part of the Alaska Packing Association, which formally incorporated as the Alaska Packers' Association in 1893. The cannery was dismantled in 1894 and its equipment shipped to a facility at Pyramid Harbor.<sup>28</sup>

In 1898 packing operations were renewed at Bartlett Cove. Peter Buschmann, founder of Petersburg, Alaska, had purchased the former cannery site the previous year for \$1,200. Buschmann owned the Icy Strait, Quadra, and Chatham packing companies. All that remained of the original cannery at the time of purchase were a few cabins on Lester Island. Buschmann established a red salmon saltery at the site and enlisted his son, August, to run the operation.<sup>29</sup> Upon his arrival in 1899, the young Buschmann described the saltery as:

a string of small buildings and cabins strung along the beach above high water mark on the north side of the cove. There was not very much room between high water mark and where the steep incline up to the sand dunes started. There was no dock out to deep water from the saltery so our pack had to be loaded by hand on scows and hoisted on board our cannery tender from Petersburg...<sup>30</sup>

About 300 to 400 feet behind the saltery was a Hoonah Tlingit cemetery located on the sand dunes about 40 feet above the high tide line.<sup>31</sup>

The young Buschmann's crew consisted of some 40 to 50 Hoonah men and women. The men served as the fishermen, using beach seines to capture the spawning red salmon. The women and some men worked in the saltery. This employment of a nearly total Native work force was an exception to the trend towards the hiring of Chinese laborers. The actual salting of the salmon was a fairly simple operation. First, the salmon were cleaned. In some cases only the fillets or belly portion of the fish was preserved. The fish was next laid in a wooden barrel and liberally sprinkled with rock salt, thus forming a brine. When a barrel was full, about 45 red salmon to the barrel, it would be sealed up and ready for shipment. The facility salted 200 barrels of red salmon during 1899.<sup>32</sup>

The Buschmanns' establishment of a saltery at Bartlett Cove appears to have been a precursor to construction of a cannery. During 1900 salting operations continued at Bartlett Cove. Some 530 barrels of red salmon and another 120 barrels of silver salmon, most likely taken from Berg Bay, were prepared for market.<sup>33</sup> During the same period construction began on a cannery building on an adjacent spit with plans made for the installation of cannery equipment in 1901. Piling timbers were cut from the forest within the cove. The actual structure was described as "a simple cannery building, 150 feet long, projecting on piles over the water."<sup>34</sup>

<sup>28</sup>Moser 1899, 125; Jefferson F. Moser, "Alaska Salmon Investigation in 1900," In the Bulletin of the U.S. Fish Commission vol. 21 for 1901 (Washington: GPO, 1902), 312, 374.

<sup>29</sup>August Buschmann letter to David Hamlin of 20 June 1960, GLBA.

<sup>30</sup>August Buschmann letter to Francis H. Jacot of 28 June 1960, GLBA.

<sup>31</sup>Buschmann letter, 6-20-60.

<sup>32</sup>August Buschmann letter to David Hamlin of 15 June 1960, GLBA; Moser Report 1902, 262-263; Alex Widerstrom, Interview by David Hull and Robert Nash, 13 September 1974, Alaska Packers Vertical File Manuscript D, Alaska Historical Library.

<sup>33</sup>Moser Report 1902, 262-263.

<sup>34</sup>Ibid., 376.

During the winter of 1900-1901 the Bartlett Cove operations were sold to the Pacific Packing and Navigation Company. The new owners did not operate the saltery in 1901. Instead they took locally caught salmon to their new cannery at Sitkoh Bay for processing. The Bartlett cannery remained dormant, with whatever plans which may have existed for its operation aborted when Pacific Packing went bankrupt in 1903.

The demise of Bartlett Cove operations did not signal the end of commercial canning in the Glacier Bay area. In the spring of 1900 Western Fisheries Company of Portland Oregon constructed a cannery at Dundas Bay. A tribute paid to the local Hoonah Tlingit, for use of the land and fishing rights in the Dundas River, was reportedly a part of the transaction. The initial facility was a small hand operation capable of producing upwards of 300 cases per day. A listing of employees from 1900 shows a diversity more typical of Southeast Alaska cannery operations. Fishermen included nine Whites and 26 Native men (probably all Hoonah Tlingit). In the cannery there were 5 Whites, as supervisors and maintenance support, and 20 Native men, 6 Native women, and 30 Chinese men all employed as cannery line workers. The White fishermen, most of whom owned their own gear, were paid between \$40 and \$60 a month plus board and a transportation stipend. The Native fishermen, who in general utilized company owned gear, were paid ten cents each for kings, six cents for silvers, five cents for reds, two cents for dogs, and one cent for pinks. Basic gear consisted of purse seines, with gill nets utilized in the murky water of the Dundas River. Key fishing spots included Dundas and Taylor Bays, Cape Spencer, Glacier Bay, the Alsek River Delta, and Excursion Inlet.<sup>35</sup>

Cannery line workers, at Dundas Bay, were paid based upon the Chinese contract which was listed at 38 cents per case for one pound tall cans, 40 cents for half-pound flats, and 42 cents for one pound flats with "the usual conditions."<sup>36</sup> The usual conditions referred to the stipulations of the contract system which dictated the terms of employment for seasonal labor. The system, as alluded to earlier, stemmed from the need for a larger and as some perceived, more dependable cannery work force. What the industry wanted was an inexpensive work force, capable of mobilizing on short notice, who were willing to work long hours without complaint. Few Whites or Natives were willing to work an entire season under these conditions. Chinese laborers, who made up the bulk of the early cannery work force, were therefore recruited through west coast labor firms. Chinese labor contractors owned most of these firms. The typical worker was a young single man, generally unskilled and often a recent immigrant. Labor contractors would negotiate with the canneries to provide a specific number of workers to pack a given amount of salmon for the season. If the number of cases packed exceeded the contract, the labor contractor would be paid an agreed-upon bonus per case. Labor contractors were likewise assessed a per case penalty for shortages.<sup>37</sup>

Chinese laborers were paid through the labor agency. Workers signed an agreement which stipulated pay scale, hours of work, lodging, transportation, and penalties for failure to fulfill the contract. More often than not, the worker wound up on the short end of the stick. Workers put in an 11 hour day. An overtime rate of 15 cents an hour was paid for anything over 11 hours. Salary for a season's labor, six to seven months, averaged about \$175. Labor agencies often extended credit for the purchase of special clothes workers would need, charging exorbitant interest rates on the purchase. Any penalties which the canneries assessed upon a contractor were automatically passed onto workers regardless of blame. Living quarters were often described as primitive or squalid, and food was usually given short shrift to reduce

<sup>35</sup>GLBA, "Proceedings of the Second Glacier Bay Science Symposium," edited by A.M. Milner and J.D. Wood Jr. (GLBA: NPS, 19-22 September, 1988), 104. Moser Report 1902, 253; Steve Langdon, A Brief History of Salmon Fishing in Cross Sound and Icy Strait (The Icy Strait Fishery Federation: 5 January 1980), 4.

<sup>36</sup>Ibid.

<sup>37</sup>Cobb Report 1911, 35; Sue E. Liljeblad, "Ethnic Evolution of the China Crew," (Anchorage: The Sea in Alaska's Past, A Maritime History Conference, 7-8 September 1979), 3, 8.

overhead.<sup>38</sup> Such conditions did not begin to change until the late teens and early 1920s when the government began to demand better sanitation. The advent of labor unions in the 1930s further improved conditions. To what degree these conditions existed at the Dundas Bay cannery is unknown. However, it would be difficult to assume that this operation was markedly different from the norm.

The first year of production at Dundas Bay was successful. The cannery processed 60 cases of kings, 6,100 cases of reds, 977 cases of silvers, 1,800 cases of pinks, and 4,700 cases of chum salmon. In 1901 the facility was sold to Pacific Packing and Navigation Company. A single mechanized processing line was installed with an estimated capacity of 500 cases per day.<sup>39</sup> This was a considerably smaller operation than the large four and five line operations capable of processing some 2,000 cases per day. Still, the basic procedure was the same. Fish were loaded from boats to hand carts, and wheeled up an inclined ramp to the processing house on the seaward end of the cannery. Once in the cutting room, the salmon were cleaned and dressed. Dressing gangs chopped off the heads, tails, fins, and gutted the salmon. (In future years, an iron chink would perform this task.) The waste was tossed in a chute landing in the water below the cannery where it was washed out with the tide. After rinsing the salmon were processed through a cutting machine where a series of gang knives cut fish into suitable size chunks. The salmon pieces next passed into a plunger, which deposited a fixed amount of salmon into cans passing along a conveyor below, each prefilled with one-quarter of an ounce of salt. Each can was then sealed shut and cooked for an hour in a giant pressure cooker known as a retort. The cans were labelled and boxed in case lots for shipment to market.<sup>40</sup> Steam powered freighters made regular stops at Dundas Bay to pick up the final product.

In 1905 the Northwestern Fisheries Company assumed ownership of the Dundas Bay facility. Northwestern maintained continuous operations at the cannery through 1931. Pacific American Fisheries purchased the facility in 1932 but failed to reopen the plant. Historic photos and site investigations portray a self-contained community complete with cannery, about 40 houses-referred to as "squawtown"--with an adjacent boardwalk, docking facilities, and an on-site water storage system.<sup>41</sup> In addition, the Dundas owners invested heavily in the construction of fish traps. According to Bureau of Fisheries records, the Dundas Bay cannery operated three floating traps between 1925 and 1931. Such a large investment would not have been made had there been doubt over the short-term viability of such an expenditure. The impact of these and other traps upon local fishermen was so severe that trap robbing became rampant. Fishermen would sell the stolen salmon back to the canneries. In response the canneries hired armed guards to protect traps against theft.<sup>42</sup> The remains of several of these traps have been documented in recent years at Dundas Bay.

At some point, during the late 1930s, arrangements were made with Horace Ibach to dismantle the facility and its associated structures. Ibach remained on the property until the mid-1940s, dismantling all structures except for the one that he and his wife were occupying.<sup>43</sup> Despite his efforts, a substantial amount of the infrastructure was left behind. Boilers, retorts, an

<sup>38</sup>Liljeblad, 9-10; Jones, 30; Orosa, 38-39.

<sup>39</sup>Moser Report 1902, 253, 377.

<sup>40</sup>Ibid., 253; Cobb Report 1911, 51-53, 55, 58-59; Alex Widerstrom Interview, 9-13-74.

<sup>41</sup>Millard C. Marsh and John N. Cobb, "The Fisheries of Alaska in 1908," Report of the Commissioner of Fisheries for the Fiscal Year 1908 and Special Papers (Washington: GPO, 1910), 13-14; Buschmann letter, 6-15-60; Commerce and Customs, 1941; MacDonald, 31.

<sup>42</sup>Langdon, 5-6.

<sup>43</sup>DOI, NPS, Glacier Bay Expedition 1939, by Earl A. Trager (Mt. McKinley NP: NPS, 1939), 75; Horace Ibach letter to Frank Been of 8 December 1939, GLBA; Frank Been memo to Superintendent Tomlinson of 6 December 1940, GLBA.

immense water storage tank, processing equipment, dock pilings, and house posts as well as the Ibach's residence still remain. These remnants provide a glimpse into the vibrant operation which once thrived at Dundas Bay.

Other cannery operations, which lie just outside park boundaries, warrant mention because of their impact on adjacent park land. The first of these lay to the northwest of Dundas Bay at Dry Bay. In 1910, the construction of a cannery began on a 10 acre site on the northwest side of Dry Bay near Cannery Creek. The cannery infrastructure included a large plant facility and a narrow gauge railway running from the cannery to the creek. The cannery work force consisted of Native women, Chinese men, and Japanese men. The utilization of Japanese and other recent immigrants as cannery help was a response to federal exclusionary legislation which curtailed the further immigration of Chinese nationals. The men and women shared common mess facilities and freely socialized, but were housed in separate dormitories. The cannery was closed in 1913 after the owners went bankrupt. Shortly after the end of the First World War, Charlie Johnson was given the job of dismantling the cannery's infrastructure. It was a common practice to remove cannery processing equipment for reuse at a new operation. An NPS survey in 1977 noted that the principal structures had collapsed and all that remained at the site was a railroad engine.<sup>44</sup>

The final commercial fishing operations of note occurred at Excursion Inlet at the park's southern most boundary. In 1908 Pacific American dismantled its Chilkat Inlet plant and moved its operation to a new site at Excursion Inlet. That same year, the Astoria Puget Sound Canning Company also constructed a facility at Excursion Inlet. Pacific American ceased operations in 1935 after an agreement was reached with Astoria to process Pacific's catch. Figures taken from the annual Customs and Commerce reports, during the early to mid-1920s indicate that cannery operations at Excursion Inlet were quite active with the annual value of supplies brought in to support cannery operations ranging between \$170,000 and \$250,000. Likewise the abundance of fish trap remnants at the inlet's Sawmill Bay--six according to some estimates--suggest a successful operation. Bureau of Fisheries records from the period 1925 through 1955 indicate that the Excursion Inlet plants operated an average of five traps annually. The number of traps peaked in 1939 at 13 traps. The two facilities utilized both floating and pile driven traps. To this day a processing plant--adapted from a Second World War facility, after a 1948 fire destroyed the Astoria plant--still remains in operation on the east side of Excursion Inlet.<sup>45</sup>

3. Commercial Fox Farming and Fur Harvesting Operations at Glacier Bay, Dundas Bay, and Lituya Bay, 1925-1940

Context Three provides an overview of commercial fox farming and fur harvesting operations in the vicinities of Glacier Bay, Dundas Bay, and Lituya Bay between 1925 and 1940. The context begins with a general discussion of the fox farming industry. Following this is an examination of fox farming and other fur harvesting operations in the region. In addition, Context Three provides linkages to the entrepreneurial development and exploitation discussed in Contexts One and Two.

Like the sea otter industry before it, fashion drove the burgeoning fox farming industry which engulfed Southeast Alaska and found its way to Glacier Bay. Fox furs were the rage among flappers--the fashionably dressed young women of Europe and America who flouted conventional behavior--during the 1920s. More was considered better. Most flappers sported full length fox

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<sup>44</sup>Trefzger, 117-118; Congress, House, Glacier Bay National Monument Additions: HR 39, revised 11 July 1977.

<sup>45</sup>MacDonald, 32; Trager, 89; Robert E. Ackerman, Archeological Survey Glacier Bay National Monument, Southeastern Alaska Part II (Pullman, WA: Washington State University Laboratory of Anthropology Report of Investigations No. 36, 1965), 5-6.

apparel. Among Europe's fashion setters the blue fox, said to go well with any outfit, was the fur of choice. In the United States the preference was for silver fox. Those who could not afford the more expensive blue or silver furs draped themselves in red, white, and cross fox attire.<sup>46</sup>

The process of Alaska fox farming had its origins in Russian America. The Russians took breeding pairs from indigenous populations of blue and arctic fox, transplanting them throughout the Aleutian Islands as a source of future revenue. However, the fox farming methods which emerged during the early 20th century owed their success to the pioneering efforts of Alaskan James Judge, an assistant treasury agent. Judge established the process of constructing feeding stations to supplement a colonized island's natural food supply. The stations were nothing more than a series of wooden feeder boxes, roughly two foot square, placed at ground level. Common food included salmon and seal often times mixed with various grain mashes.<sup>47</sup> More elaborate than the feeding stations were house traps. House traps provided a method for island fox farmers to easily harvest the free-ranging foxes. The typical house trap was a multi-roomed structure equipped with feeding tables. In this room entrances and egresses could be quickly blocked and foxes easily contained. During the winter the foxes were captured and sorted with the best specimens released for breeding. Foxes marked for harvesting were relegated to a special processing room.

By the turn of the century, two distinct methods of fox farming had emerged. In Southwest Alaska and on smaller Southeast islands, free range island ranching predominated. Islands were typically leased from the U.S. Forest Service for a period of five years. In Interior Alaska and Southeast areas, where island ranching was not possible, the corral or pen rearing method was most prevalent. Corral farming involved a larger capital outlay than island ranching. A typical corral consisted of a small doghouse-like structure to which was attached a run, generally 30 to 40 feet long, constructed of wire mesh. At one end a "man door" was placed to allow easy access for feeding and harvesting purposes. Each run contained a single pair of "breeders". A supply of fresh drinking water and sandy soil offering good drainage were likewise needed to help assure success.<sup>48</sup>

The aspiring fox farmer had to spend a significant amount of money purchasing breeding pairs. A pair of blue or silver fox averaged about \$300. Most successful operators suggested purchasing at least six breeding pairs to assure an adequate return on an investment. A farmer could expect to annually harvest about five offspring from a single breeding pair. Despite initial outlays, sometimes running several thousand dollars, successful farmers could reap significant profits. During the 1920s silver and blue fox pelts fetched \$75. It was this potential for profit which caused cash strapped entrepreneurs to establish operations in the Glacier Bay region.<sup>49</sup>

One of the earliest fox farming operations in the region belonged to Joe and Muz Ibach. In 1911 Ibach established a farm on Middleton Island in Prince William Sound. By 1920 Ibach had turned the venture into a successful operation selling nearly \$17,000 worth of furs (one season's take) to a Cordova buyer. With the profits from his Middleton farm, Ibach established another farm on Lemesurier Island, just outside the entrance to Glacier Bay. It was from this base that Ibach launched his many mineral prospecting expeditions to Reid Inlet. Other farming

<sup>46</sup>Lone Jansen, Those Alaska Blues: A Fox Tale (Anchorage: Alaska Historical Commission Studies in History No. 168 Microfiche, 1985), 2:1.

<sup>47</sup>Ibid., 2-5:1; Jones, 116.

<sup>48</sup>Jones, 120-121.

<sup>49</sup>Trefzger, 89.

operations soon followed. During the 1920s Carl Swanson established farms on Beardslee and Strawberry Islands, and John Johnson had a farm on Willoughby Island.<sup>50</sup>

Between 1925 and 1935 permits for farming operations in the Beardslee Islands passed through several hands. Records from 1935 listed George Johnson and O.J. Anderson as the permit holders on nearly six acres of land for which they paid an annual \$50 fee. The partners ran operations on eight small islands where they had constructed 18 trap houses. The structures were located near the beach to make feeding and harvesting easier. A 1939 NPS report described the trap houses as four to six feet long on each side and about seven feet high. Inside each structure was a pit about four feet deep, occupying most of the floor area. A small door at either end provided access. Seven of the trap houses were still being utilized in 1939 to feed between 100 and 150 foxes. During the summer the foxes were fed every two days. In the winter, when feed kept longer, they were fed weekly. The foxes' principal food consisted of salmon heads obtained for free from local canneries. Salmon was mixed with various grains and cod liver oil, and cooked up in large vats near the partners' headquarters on Beardslee Island. The headquarters consisted of a small cabin and dock, and nearby warehouse which burned in 1938. By 1940 dwindling market prices--attributed to changing fashions and the Great Depression--had resulted in the collapse of the Beardslee operation.

A 1994 site survey noted the location of several historic structures and artifacts associated with the Beardslee Islands enterprise. Among these were the intact remains of a cabin, feeding stations, and a shed utilized for rendering seal fat. Beside the shed were large metal barrels (60 gallons capacity) and concrete cookers used in preparing fox food. Other remnants included a wooden rowboat, barrel stove, dock pilings, and numerous small miscellaneous items associated with the farm.<sup>51</sup>

In contrast to the Beardslee Islands, Carl Swanson's nearby Strawberry Island fox farm was a corral operation. Originally headquartered at Beardslee Island, Swanson's operation relocated to Strawberry Island in 1929. Here he constructed a facility consisting of several fox runs about 35 feet long. The runs contained a man door at one end and a small fox house at the opposite end. Several feeding stations were located near the beach suggesting that some of the foxes ranged freely about the island. The discovery of feeder boxes on the island's north side supports this assumption. Swanson also constructed a warehouse and a storage shed, the latter which of which was used for preparing fox food. For himself, Swanson constructed a small log cabin. A later two story house built next door to the cabin was never finished. The park service razed the house, in the 1970s, which was on the verge of collapse. Swanson ceased operations at his Strawberry Island farm in 1938. Low fur prices made commercial fishing a more profitable venture.

The other noteworthy fox farm site within Glacier Bay was at Willoughby Island. In 1927 John A. Johnson and four partners--Sam Felton, Gunnar Bloomgreen, Alfred Singer, and Ernest Robinson--obtained a permit to begin fox farming at a place named Three Hill Island. The partnership failed and the partners' permit was canceled. Johnson spent several months capturing four remaining breeding pairs of blue fox. He transported them to a new permit site he had secured at Willoughby Island. Johnson constructed a cabin and a warehouse at the site. He likewise established several feeding sites and constructed 12 trap houses to support his island enterprise.<sup>52</sup> By 1938 Johnson, like his Glacier Bay counterparts, realized the futility of fox farming. Johnson received a two year permit from the National Park Service; which allowed him to trap his remaining foxes and shut down his operation. He then took up mineral prospecting, hoping to find the financial means to continue living at Willoughby Island.<sup>53</sup>

<sup>50</sup>Jansen, 1, 3-4, 1-6:9.

<sup>51</sup>DOI, NPS, "1994 Site Field Survey," by Rick S. Kurtz, 16 August 1994, ARO.

<sup>52</sup>Trager, 72-74.

<sup>53</sup>Ibid., 73-75; Been, 28-29.

Outside Glacier Bay, Stanley "Buck" Harbeson, joined Doc Silvers and his wife at Dundas Bay in the early 1930s. Harbeson spent his first season working Silvers' gold claims. The two men, however, had a falling out and Harbeson then constructed a cabin near the Dundas Bay Cannery. The cabin burned down two years later. Harbeson then built a new squatter's cabin on the north end of the bay. The new cabin was a one story, four room structure. It was made of a combination of vertical log poles and 2 by 4 inch studs with an exterior of wood shingles. About 30 feet behind the cabin, Harbeson constructed a woodshed. A wooden boardwalk connected the two buildings.<sup>54</sup> Harbeson also constructed a small one room cabin a couple miles upstream from the mouth of the Dundas River. The cabin served as his headquarters during winter trapping operations along the river. During the 1930s Harbeson ran joint trapping operations with Horace Ibach, who was in the process of tearing down the former Dundas Bay salmon cannery. The two men constructed a total of five small lean-to cabins along the east side of the Dundas River to facilitate their venture.<sup>55</sup> A large vegetable garden and hunting supplemented Harbeson's meager trapping income. Harbeson also toyed with marten ranching-one of many fur farming fads which sprung up during the 1920s and 1930s. Aside from a female marten which he kept as a pet, Harbeson's ranch never amounted to anything. Even so, Harbeson remained at Dundas Bay until his death in 1964.<sup>56</sup>

To the northwest of Dundas Bay, at Lituya Bay, lived Jim Huscroft. Huscroft was known as a gregarious fellow who welcomed the occasional prospector and mountaineering party which came to the bay. Huscroft arrived at Lituya Bay about 1917, along with several other prospectors. When his partners left, Huscroft decided to remain behind. He constructed a cabin on the north side of Cenotaph Island. Later, during the 1920s, he constructed a new cabin on the west side of the island. Rather than continue with prospecting, Huscroft turned his attention to fox farming. Huscroft and his partner, a Norwegian fisherman named Ernie Rognan, tried their hand at it for several years. They finally gave up their efforts as a lost cause in the early 1930s. In 1930 Huscroft and Rognan constructed a 26 by 16 foot bunkhouse next door to the cabin. The bunkhouse was constructed of square logs with a large window facing the entrance to the bay. An open sided shed roof connected the bunkhouse to the cabin. Visitors referred to the bunkhouse as "Huscroft Hotel." Nearby was a large garden plot and a root cellar where Huscroft kept his garden produce and canned goods. An abundant supply of wild berries and salmon supplemented these stores. In addition, Huscroft had a trapping cabin about seven miles west of Lituya Bay on a small lake near Echo Creek.<sup>57</sup>

Little today remains of Huscroft's homesite. The demise began in 1936 when a severe fall storm created a giant breaker wave which hit Lituya Bay. Huscroft, and a visiting friend, escaped to higher ground as the wave swept over Cenotaph Island. The wave destroyed some of Huscroft's outbuildings and his garden. Shortly thereafter Huscroft's health began to fail. He was never able to complete repairs. In 1939 Huscroft died. A subsequent 1958 earthquake-generated wave, of even greater magnitude, wiped-out most remaining physical evidence of the homesite.<sup>58</sup> Recent surveys turned up a few scattered remains of fox pens and little else.

4. The Timber Industry and Sawmills in the Glacier Bay Region, 1914-1945.

Context Four provides an overview of the timber industry and sawmills in the Glacier Bay region. The context begins in the late 19th century with a discussion of the development of a regional timber industry. The context next describes specific sawmills and associated operations culminating during the 1940s at Excursion Inlet. Context Four likewise describes

<sup>54</sup>Bohn, 78; DOI, NPS, "Historical Survey of GLBA," by Ray Miller (GLBA: NPS, 1982).

<sup>55</sup>Trager, 78.

<sup>56</sup>Ibid., 78-80; Bohn, 78.

<sup>57</sup>Caldwell, 156-158; Bohn, 33.

<sup>58</sup>Bohn.; Caldwell, 174, 191-192.

the linkages of the industry to entrepreneurial and exploitation efforts occurring within the region under Contexts One and Two.

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Sawmill operations played a rather minor but distinct role in the economy of the Glacier Bay region and Southeast Alaska. With its general proximity to the Tongass National Forest, timbering and sawmill operations would have seemed a flourishing regional industry. Such, however, was not the case. Late 19th century federal law dictated that timber could only be cut on mineral claims, and then only for personal use. Sawmill operators could not purchase timber for commercial use from public land. This was altered with the 1898 Alaska "homestead act" which provided legal provisions for cutting timber from unoccupied and unreserved public land.<sup>59</sup> Still, the industry did not grow beyond a local market. Inhospitable terrain and seasonal variances made cutting and hauling timber to local mills expensive. In addition, passage of the 1920 Jones Act, which required the use of American flagged ships on all shipments between Alaska and the lower 48 states, further raised costs.<sup>60</sup> Alaskan timber simply could not compete in markets when more accessible timber was available in the Pacific Northwest.

Despite these impediments, several local sawmills managed to successfully operate in the Glacier Bay region. Most of these mills served a local clientele, selling timber to local cannery operators for fish trap construction, and bridge and dock facilities. Later, during the 1930s, local lumber was used for Civilian Conservation Corps projects. Local operations included a Gustavus sawmill constructed on the banks of the Salmon River in 1921. The mill, lying outside the present park boundaries, was a small family run operation belonging to Abraham Parker. Parker sold lumber to the local canneries for fish traps and related construction. Remains of the mill are still visible today.

Another local sawmill was the Kane sawmill constructed near the head of Sawmill Bay, within the Excursion Inlet drainage. The Kane brothers arrived in Southeast Alaska from the lower 48 during the early 1890s. Frank Kane established a store at the village of Hoonah in 1893. A prospector at heart, he was not a very good business man and soon gave up the store. He later perished in 1898 while on a prospecting trip near Whitehorse, Yukon Territory. Frank's widow Louise, a Tlingit of mixed blood ancestry, then married Frank's brother, Stephen. The Kane<sup>G</sup>s resettled in Hoonah, constructing a new store which also housed the local post office. The Kane family branched out into other entrepreneurial ventures. They took up small scale farming, commercial halibut processing, and establishment of a sawmill.<sup>61</sup>

The exact year in which the sawmill was constructed is not clear. Records, however, show that the 24.75 acre trade and manufacturing site was patented to Louise Kane on October 27, 1914. The mill ceased operations during the mid-1930s. Timber was supplied from the surrounding mountainsides, then under U.S. Forest Service management. At the height of operation, the mill annually produced between 15 million and 50 million board feet of lumber. Much of this lumber was sold to the two canneries operating at Excursion Inlet.<sup>62</sup> The mill consisted of a main building where the logs were sawn and several outbuildings. One of the outbuildings appears to have contained an edger--a double bladed machine used to cut boards to standard widths. A dock, boardwalk, and a small water wheel were likewise on-site. The water wheel was used to

<sup>60</sup>Ibid., 246.

<sup>61</sup>Alaska History Class, Hoonah History (Hoonah, Alaska: Hoonah Public School, 1973), 23.

<sup>62</sup>Trager, 89; DOI, NPS, "Settlers, Indian Claims, Residences, Fox Farm Leases, Etc.," 18 February 1935, GLBA; Ackerman, 6.

<sup>&</sup>lt;sup>59</sup>Dept. of Agriculture, U.S. Forest Service, A *Cultural Resource Overview of the Tongass* National Forest Alaska, Part 1:0, by Katherine L. Arndt and others (Fairbanks: GDM, Inc., 1987), 254.

power the operation. A six inch diameter steel pipe gravity fed water from a lake above the mill. $^{63}$ 

By the time Excursion Inlet became a part of the monument in 1939, the mill had fallen into a state of disrepair. The buildings were collapsing and much of the machinery had been removed or was rusted beyond repair. When the Kane family inquired about the possibility of reopening the sawmill, the park service suggested that they start a new operation outside the monument. The mill was never reopened and the site passed into park service hands. The NPS planned to demolish the buildings and conduct a general site cleanup.<sup>64</sup> This was never implemented. Today, there still remains a substantial number of remnants marking the former sawmill operation.

During the Second World War, the military, in cooperation with civilian contractors, constructed a sawmill at the head of Excursion Inlet. The sawmill and its associated activities impacted land under park service management and neighboring forest service property. The mill supported construction of a military operating base at Excursion Inlet.<sup>65</sup> In August 1942 the U.S. Army embarked upon a massive but highly secret construction project on the east shore of Excursion Inlet, outside the park unit boundary. Military planners estimated the project would require the cutting of some 20,000 to 30,00 log pilings from Excursion Inlet. A sawmill and equipment shed were constructed at the head of the inlet to facilitate this effort. Tractors hauled the timber down to the shore for milling. From there the rough cut lumber and pilings were shipped down the bay to the construction-site. Before it was over the facility, known as the Alaska Barge Terminal, employed 3,000 workers and cost nearly \$18 million.<sup>66</sup> When completed, the terminal was supposed to serve as the principal supply depot for American troops attempting to retake the Aleutian Islands of Kiska and Attu from the Japanese. It was further assumed that the facility would play a major role in any attempt to conquer the Japanese homeland via a northern invasion route.<sup>67</sup> Remnants of the sawmill operation were noted during a site survey conducted in the 1960s.

# **F. Associated Property Types** (Provide description, significance, and registration requirements.)

1. Placer/hardrock gold mining and other mineral extraction in the Glacier Bay Region 1880-1945

Name of Property Type: Mining remnants and other Physical Manifestations Associated with Mineral Extraction

**Description:** The mining remnants and other physical manifestations associated with mineral extraction, primarily gold, in the Glacier Bay region can be grouped into four categories. First are the actual alterations of the physical landscape which were associated with placer and hardrock mining operations. Principal among these are tailings piles, ground sluices, tunnels, trenches, ventilation shafts, and stumps from tree cuttings. Second is the infrastructure created to extract and process the mineral bearing ore. At placer sites this

<sup>63</sup>Kurtz, "Field Survey".

<sup>64</sup>Trager, 89.

<sup>65</sup>Ibid.; Mackovjak, 37, 45; Ackerman, 3.

<sup>66</sup>Lyman Woodman, "German Prisoners: The POW Camp at Excursion Inlet," *The Alaska Journal*, 14:4, 1984, 16-17.

<sup>67</sup>Lyman Woodman, 700 German Prisoners of War in Alaska (GLBA: NPS), 2; Ackerman, 3; Theodore Catton, Land Reborn: A History of Administration and Visitor Use in GLBA (Seattle: University of Washington, 1995), 92-93.

includes the remains of sluice boxes, flumes, pipes, retorts, shovels, and a variety of hand tools. Hardrock operations will likely contain remnants of hand tools as well as winches, hoists, and small scale stamp mills. Tool or equipment shed remains may likewise be present. A third class of remnants are the transportation networks associated with mineral extraction in the region. These will be of two types: land based and water based. Land based remnants may include road cuts, vehicles, animal sheds, and tramway remains. Manifestations of water based transport systems include docks and piers, rafts, boats, barges, and possible shipwrecks. Fourth, are the remains of mining crew messing and berthing facilities. These will include cabins, bunk houses, cook shacks, and related structures. Complementary manifestations tied to mess and berthing may include bed frames, cots, stoves, utensils, dishes, pots, buckets, and personal items.

**Significance:** The mining remnants and related physical manifestations of mineral extraction in the Glacier Bay region are significant under Criterion A in the areas of industry, commerce, and economics. The nominated resources have local and state significance.

The late 19th and early 20th century gold mining efforts at Lituya Bay were part of a larger trend in Alaska and neighboring Canadian provinces. During this period mining was the predominant industry of the Alaskan economy, providing necessary stimulus to support a growing service sector and the development of local communities. Wage and production figures provided in the narrative for Context A provide evidence of Lituya Bay's contribution to these developments. Lituya Bay's recognition as a contributing component to the mining industry and as an economic stimulator is further evidenced through latent mining attempts during the Great Depression of the 1930s.

Much of the same argument applies to mining efforts at Glacier and Dundas Bays during the 1920s, 1930s, and 1940s. Local entrepreneurs perceived mining as one of the few locally available means of securing a living from the land. These attempts took on greater importance during the 1930s when President Roosevelt, at the instigation of the novelist Rex Beach, opened Glacier Bay National Monument to mining. This was done with the belief that Glacier Bay would provide jobs for thousands of able-bodied men and in turn feed gold into the larger cash-strapped national economy.

**Registration Requirements:** The mining remnants and other physical manifestations associated with mineral extraction in the Glacier Bay region are historically significant. These properties may have experienced degradation through the forces of decay, weathering, and revegetation. These properties should still be considered significant if it can be shown that the properties contribute to the 1880 - 1945 placer/hardrock gold mining and other mineral extraction historic context.

To be considered eligible, all properties must maintain integrity of location and setting. Physical manifestations associated with mineral extraction efforts must remain on-site. The general physical setting must likewise maintain the character of place which was evident during the period when the mining efforts occurred. This applies to both naturally occurring features as well as human made physical alterations to the immediate landscape. Structures and apparatus manufactured on-site to support mineral extraction must maintain integrity of materials and workmanship indicative of the historic period. Finally, in maintaining the before mentioned integrity traits the historic property is assured of preserving aspects of feeling and association.

Historic Properties: These sites should be considered in the future for nomination under Context One.

a. Mining Claims Lituya Bay - Ruby Sands Placer Digs Highland Chief Claims Rainbow Claim Sentinel Claim Galena Claim Rambler Claim Whirlaway Claim Hopalong Claim Sunrise Claim Lincoln Claim LeRoy Claim Monarch Claims Incas Claims

- b. Other Mining Sites Doc Silvers (William Horseman) Claims Willoughby Island Francis Island Blue Mouse Cove Sandy Cove Ed Brekhus Digs
- c. Structures Ibach Cabin Site - Reid Inlet Doc Silvers Cabin Site Big Rock Anchorage Ed Brekhus Cabin Site Mining Camp East of Cape Fairweather
- 2. The Commercial Salmon Industry, Canneries, and Associated Support Facilities in the Glacier Region 1883-1945

Name of Property Type: Salmon Processing Facilities, Fish Traps, and Associated Physical Manifestations

Description: The processing facilities, fish traps, and associated physical manifestations of the commercial salmon industry can be classified under three categories. First are the processing facilities of which there were two types, salteries and canneries. The first saltery was established at Bartlett Cove possibly as early as 1883 but no later than 1888. The first cannery in the region was likewise established at Bartlett Cove in 1889. The establishment of these facilities and subsequent processing operations in the region reflected the overall expansion of the salmon industry in Alaska in the late 19th and early 20th centuries. Remnants associated with processing facilities include piers, docks, pilings, retorts, boilers, barrels, and portions of the cannery buildings. Category two encompasses the commercial salmon capture devices. The principal capture device of the period still present in the area are the remains of commercial fish traps. The traps consist of 20 inch and larger logs fastened together with cables and spikes. Wire mesh and rough cut lumber are also common to these devices. Portions of both the "v" shaped hearts and pots are likely to be found. The third property type includes remains of the various support facilities associated with the commercial salmon industry. These may include the docks, wharves, boat ramps, and narrow gauge railways used to facilitate the transport of fish and other goods. The remains of employee houses, bunk houses, and mess halls are also common near processing facilities. Other features may include company stores, or nearby trading posts servicing company workers.

**Significance:** The salmon processing facilities, fish traps and associated physical manifestations in the Glacier Bay area are significant under Criterion A in the areas of industry, commerce, and economics. The nominated resources have significance at both the local and the state level.

The development and expansion of the commercial salmon industry was reflective of a trend occurring throughout coastal Alaska during the late 19th and early 20th centuries. When the demand for salmon depleted stock in the Pacific Northwest, processors began turning to Alaska to meet the demand. The expansion affected the economies of both Alaska and the west coast. The industry supported local jobs for fishermen, wage earners, and merchants. The industry further support a seasonal influx of laborers, mostly Chinese or other recent immigrants, who competed with Alaskans for jobs. At the same time, the industry brought significant profits to the numerous processing plant owners who generally resided in west coast cities.

The ultimate manifestations of the development and expansion of the salmon industry in Alaska are apparent in the numerous processing facilities and capture devices which remain at locations in the Glacier Bay area and elsewhere. These manifestations link the state to an industry which dominated the Alaska economy for several decades.

**Registration Requirements:** Salmon processing facilities, fish traps and their associated physical manifestations are historically significant. These properties may have experienced degradation through the physical processes of weathering and decay. Further degradation may have occurred as a result of dismantling of portions of facilities, a common occurrence within the processing industry. As historically significant properties, these manifestations may sustain some alteration and still be eligible for the National Register if it can be shown that the properties contributed to the development and were representative of Alaska's commercial salmon industry.

To be considered eligible, the properties must maintain integrity of location and setting. All remaining physical manifestations associated with the commercial salmon industry are significant so long as they remain at their original locations. Salmon processing and capture devices were strategically located to take the utmost advantage of proximity to the target species. Relocation of remnants would destroy this association. The maintenance of the general physical environment reflecting the rustic character of the predominantly wilderness setting where these properties were located must be maintained. This will help to convey the property's expression of feeling and association linked to salmon industry operations. Augmenting this is the integrity of materials, workmanship, and design reflected in these historic properties. Processing facilities, fish traps, and other industry manifestations were all developed for the sole purpose of efficiently capturing and processing salmon. Historic properties help to convey the message of industry adaptation in pursuit of these goals.

#### Historic Properties: These sites should be considered in the future for nomination under Context Two.

- a. Canneries Dundas Bay Cannery Bartlett Cove Saltery Bartlett Cove Cannery
- b. Fish Traps Dundas Bay Sawmill Bay
- c. Other
  Dick Willoughby's Trading Post
  "Squawtown" (Dundas Bay)
- 3. Commercial Fox Farming and Fur Harvesting Operations at Glacier Bay, Dundas Bay, and Lituya Bay, 1925-1940

## Name of Property Type: Fox Farm and Fur Harvesting Properties

**Description:** Fox farming and fur harvesting properties within the Glacier Bay region are associated with the increased demand for foxes, and to a lesser degree other furs, during the 1920s and 1930s. Two types of operations--free range island ranching, and corral or pen rearing--characterized fox farms in the Glacier Bay area. Small roughly two foot square wooden feeder box placed at ground level are common at former free range operations. Also found at such sites are the more elaborate house traps. Standing tall enough for a person to enter they featured a feeding table, along with an entrance and egress for foxes, which could be blocked off for capturing the animals. Thirty to forty foot long wire mesh runs typify corral operations. The corrals typically have a "man door" at one end and a small doghouse-like wooden fox shelter at the far end.

The remains of cabins, sheds, docks, and related evidence of human habitation are evident at these former sites. Such structures are of wood, log, and other locally available materials.

Structures of this type are also going to be the primary physical manifestation associated with trapping operations in the region. Smaller less elaborate trail cabins may be located along former trap lines.

**Significance:** Fox farm and fur harvesting properties are significant under Criterion A in the areas of industry, commerce, and economics. The nominated properties are significant at the local and state levels.

Fox farming was one of the leading industries in Alaska during the early 20th century. The high prices paid for individual furs, ranging upwards of \$75, sparked the establishment of several hundred fox farming and associated fur harvesting endeavors throughout the territory. Fox farming and fur harvesting enterprises in the Glacier Bay vicinity formed an integral part of this greater effort to meet American and European demands for fashionable furs. It was only with the onset of decreased demand--because of changing fashions, the Great Depression, and the Second World War--that local fox farmers gave up their operations.

**Registration Requirements:** Fox farm and fur harvesting properties are historically significant. Many of these properties suffer the effects of physical weathering and revegetation. As historically significant properties, these manifestations may sustain some alteration and still be eligible for the National Register if it can be shown that the properties contributed to the development, and were representative of Alaska's fox farming and fur harvesting industry.

To be considered eligible, the properties must maintain integrity of location and setting. All physical manifestations associated with fox farming and fur harvesting are considered significant so long as they remain in their original locations. The general setting of the properties should remain essentially intact. This will help to convey the property's feeling and association to the rustic outdoor setting typical of the historic period. Augmenting this is the integrity of materials, workmanship, and design reflected in these historic properties. The predominant use of locally available materials and functional aspects of design lent a common familiarity to structures associated with fox farming and fur harvesting. So too does the quality of workmanship which was generally the product of jack-of-all-trades entrepreneurs, rather than highly skilled craftsmen.

#### Historic Properties: These sites should be considered in the future for nomination under Context Three.

a. Fox Farms
 George Johnson and O.J Anderson - Beardslee Islands
 Carl Swanson - Strawberry Island
 John A. Johnson - Willoughby Island
 Jim Huscroft - Cenotaph Island

- b. Fur Harvesting Operations Stanley "Buck" Harbeson - Dundas Bay Jim Huscroft - Lituya Bay Kidney Island Camp
- 4. The Timber Industry and Sawmills in the Glacier Bay Region, from the late 19th Century through 1945.

#### Name of Property Type: Sawmill Properties

**Description:** Sawmill properties in the Glacier Bay region were primarily served the needs of a local market from the early 1900s through the Second World War. The properties include both the primary milling facility as well as an associated support network. The mill buildings consisted of a partially enclosed warehouse or shed type design of wood construction. The primary structure housed the mill. The mill consisted of the carriage, trackway, and saw. A loading scaffold and other platforms for transferring logs and lumber were likewise part of the primary operation. Associated site features include the remains of tool and equipment sheds, winches and similar off-loading apparatus, piers and docks, and power plants. The remains of

slab piles, lumber, and timber are generally present at former mill sites. Short haul roads and mill yards (where timber and lumber were stored) are a common feature of historic sawmill properties.

**Significance:** Sawmill properties in the Glacier Bay region are significant under Criterion A in the areas of industry, commerce, economy, and the military. The nominated properties are locally significant.

Sawmill operations in the Glacier Bay area played an important role in the local economy. Most mills served a local clientele, selling timber to cannery operators for fish trap construction; or for bridge and dock erection. During the 1930s, the mills also provided lumber for Civilian Conservation Corps projects. As such, the industry supplied jobs and was a source of cash income for owners and wage earners.

During the Second World War, sawmill properties assumed a new role when the U.S. Army, in cooperation with civilian contractors, established a sawmill at the head of Excursion Inlet. This facility provided milled timber and lumber utilized in the construction of the U.S. Army's marine barge terminal on the east side of Excursion Inlet.

**Registration Requirements:** The sawmill properties in the Glacier Bay region are historically significant. Some degradation through weathering, decay, and salvaging have altered the properties. However, they may still be eligible for the National Register if it can be shown that the properties contributed either to local development or U.S. military efforts in the region during the Second World War.

To be considered eligible, under this nomination, the properties must remain in their original location. Likewise, the properties must be located within the present park unit boundaries. The immediate setting must retain the rustic landscape qualities apparent when the mills were operating. The properties integrity of design, materials, and workmanship is reflected in the use of local materials--primarily wood--and workmanship reflecting a design focusing on utility rather than aesthetics. Feeling and association integrity is present if the integrity of location, setting, design, materials, and workmanship exist.

#### Historic Properties: These sites should be considered in the future for nomination under Context Four.

Kane's Sawmill

#### G. Geographical Data

This multiple property nomination encompasses the area which lies within the current boundaries of Glacier Bay National Park and Preserve.

H. Summary of Identification and Evaluation Methods (Discuss the methods used in developing the multiple property listing.)

The multiple property listing for Entrepreneurship and Exploitation along the Fairweather Coast and the Glacier Bay Vicinity is based upon a 1994 National Park Service field investigation of Glacier Bay National Park and Preserve. This investigation consisted of the following team members: Rick S. Kurtz, Historian; Timothy Cochrane and Dottie Theodoratus, Cultural Anthropologists; Mary Beth Moss, Resources Manager; Hank Lenfter, Biological Technician; and Jennifer Sepez, Intern. The investigation required the team to utilize both air and water transport to gain access to various survey sites. Historic properties were marked on USGS topographical maps for future reference. Properties were recorded through the use of field notes, drawings, and extensive photographs. Research in support of the field investigation included the investigation of park service records; oral histories, and local, regional, and national archives and libraries.

A subsequent result of these investigations is the development of a historic resources study. The study addresses significant historic themes and developments within the park unit from the time of European contact through the Second World War. The historic contexts for this multiple properties nomination is based upon one of the various themes resulting from the historic resources study. The 1994 field investigation has likewise contributed to the development of an ethnographic history of the region which will result in multiple property nominations for Native American sites. The significant property types identified in this nomination were derived from the historic contexts related to entrepreneurship and exploitation along the Fairweather Coast and in the Glacier Bay vicinity between 1880 and 1945. The requirements for integrity of properties under this nomination were based upon predictions derived from historic trends in the region, the accounts of persons associated with Glacier Bay, analysis of previous field examinations, and development of the historic resources study.

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Primary locations where additional documentation is stored:

University of Alaska Anchorage Consortium Library

University of Alaska Fairbanks Elmer Rasmusson Library

Alaska Resources Library, Anchorage Federal Building

Z.J. Loussac Municipal Library, Anchorage

National Park Service, Alaska Regional Office, Division of Cultural Resources Records

Glacier Bay National Park and Preserve Library

Library of Congress, Washington, D.C.

National Archives of the United States, Washington, D.C. NPS Central Classified File, RG 79

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