

The St. George Seal Skin Plant, St. George Island, Alaska



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Archaeological Survey Cultural Resource Inventory Historic Property Evaluation Archival and Historic Research

The St. George Seal Skin Plant, St. George Island, Alaska

by

Charles M. Mobley

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Alaska Resources Library & Information Services Anchorage, Alaska

A report prepared by Charles M. Mobley & Associates, Anchorage, Alaska, under contract to Alpha Engineering Group, Inc., Bothell, Washington, for National Marine Fisheries, National Oceanic and Atmospheric Administration.

Abstract

Abstract

The St. George seal skin plant is a large concrete and wood industrial building in the village of St. George, on St. George Island, Alaska. It was built by the federal government in 1950-1951 to process the skins of the Northern Fur Seal, which annually migrate to the Pribilof Islands, in the Bering Sea, to bear and raise their young. Historic architectural and archaeological sites on St. George Island, together with those on St. Paul Island, are officially designated the Seal Islands National Historic Landmark. The building has been little-used since 1972, the last season of commercial sealing on St. George Island, but much of the skin-handling equipment remains intact. Structurally it is deteriorating, however, and rusting reinforcement rod and spalling concrete threaten the life of the structure. Because the building is owned by National Marine Fisheries, and is a centerpiece of the National Landmark, the agency has contracted for an architectural and engineering evaluation of its condition.

St. George Island, one of the two largest in the Pribilof group, was discovered in 1786 by Gerasim Pribilof as part of Russia's exploitation of Alaska's fur resources. St. Paul Island was sighted the following year. Aleut villagers were moved to the two uninhabited islands to kill fur seals and process their skins for export. A company town grew up on each of the two islands, first under the administration of the Russian American Company, then under the federal government after transfer to the United States in 1867. The Alaska Commercial Company, the North American Commercial Company, the U.S. Bureau of Fisheries, and the U.S. Fish & Wildlife Service each took a long turn at running the operation. Declining seal populations prompted the North Pacific Fur Seal Commission in 1973 to declare St. George Island a "control area" for biological research, halting commercial harvests after the 1972 season. Expiration of an international treaty forced closure of the St. Paul plant in 1985. The two communities have since diversified their economies.

National Marine Fisheries contracted Alpha Engineering Group, Inc., of Bothell, Washington, to conduct the architecture and engineering studies. Charles M. Mobley & Associates was subcontracted to Alpha Engineering to determine which equipment in the building is historically significant. During April 19 - 23, 1993, Charles M. Mobley worked on the building with an engineer from Alpha Engineering Group and an architect from Wisbeck & Fraser Architects. Accomplished were: measured drawings of the building, an assessment of the building's condition, and descriptions of the equipment inside the building.

The engineering and architectural survey revealed severe but repairable structural defects. The cultural resource evaluation determined that much of the machinery in the building is original and historically significant to the character of the National Historic Landmark. Remaining in good shape are redwood tanks for washing skins, bins for salting skins, carts for moving skins, stationary beams for removing the blubber from skins, one wood and one concrete paddle tank for soaking saltwater into the skins, and other items. This report documents the equipment and its historic significance, and assembles information that the State Historic Preservation Officer, National Park Service, and National Marine Fisheries can use to gauge the impact that building stabilization options may have on the equipment, as part of the Section 106 review under the National Historic Preservation Act of 106 (15) amended).

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So many people have helped me assemble this information. I've enjoyed it all. Much of the raw data was provided by local people who built or operated the skin plant. I thank them for contributing their anecdotes, their knowledge, to help breathe life into the St. George seal skin plant. Many other people helped, too.

In September of 1992, Dr. Roger L. Gentry, a Northern Fur Seal specialist with National Marine Fisheries, went through the building with me and narrated an explanation of the equipment, which I captured on videotape. He also read and critiqued a draft copy of this report.

At St. George, villagers who helped unravel the mysteries of the machinery for me included Andronik P. Kashevarof, Sr. (age 66), Victor Malavansky, Sr. (age 64), Terenty Merculief (age 67), and Greg McGlashan (age 40). Ed Philemonof, Executive Director of St. George Tanaq Corporation, explained details of the process and directed me to pertinent documents filed at their Anchorage office. Simeon Pletnikoff (age 74) and Feddie Krukoff (age 67), both of Nikolski, discussed the seal plant with me by telephone. Mrs. Anna Krukoff graciously answered my questions, also.

Bruce Merrill, of the Loussac Library in Anchorage, directed me to reference material. Among the useful items was a folder of articles, pamphlets, and other documents available through the foresight of C. Howard Baltzo of Lacy, Washington, who donated the material to the library.

Greg Goedeke and Sunil Saraya managed the project for Alpha Engineering Group, Inc. John Smith, of Alpha Engineering Group, and Wally Fraser, of Wisbeck & Fraser Architects, were good company and able partners in the joint structural, architectural, and historical field research at St. George.

I also appreciate the hospitality of St. George residents Chris and Beverly Mierzejek, whom I'd met in Sitka at Sheldon Jackson College, years ago.

The photography credits need special mention. Figure 8 is courtesy of the Anchorage Museum of History and Art (Steve McCutchen Collection #16869), thanks to Diane Brenner. Prints of Figures 9, 13, and 23 were provided by St. George Tanaq Corporation, with the assistance of Darci Richards and Ed Philemonof. The other historical photographs were originally published as U.S. Fish & Wildlife photographs (mostly taken by Victor B. Scheffer), but the prints for only some (Figures 10, 12, 21, and 27) were on file with the agency in Anchorage. I computer-scanned the remainder (Figures 22, 24, 25, 26, and 28) from the original publications (with the permission of the agency), hence their variable quality. Both groups of photographs should be considered courtesy of U.S. Fish and Wildlife Service, as should Figures 2,6,11,29,31,32,38,49,57,58, and 59, which I shot in September of 1992 while working for the agency. The remainder I shot in 1993 under contract to Alpha Engineering Group.

Thank you, everyone, for helping to assemble this report. Because of your efforts, state and federal agencies will be better-informed when making decisions about the fate of the St. George seal skin plant. I'm pleased to have had a part in it.

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Introduction

For uncounted centuries. Northern Fur Seals, Callorhinus ursinus, have raised their young on the shores of St. George and St. Paul Islands. On these two largest islands in the Pribilof group, in the Bering Sea 250 miles from the nearest land (Figure 1), hundreds of thousands of fur seals (Figure 2) congregated unmolested until 1786. Early in the summer of that year Captain Gerassim Pribilof charted the position of St. George Island and claimed it for Russia. The following summer he did the same for St. Paul Island. The Aleut had a traditional awareness of the seal islands (termed "Amig" in the Aleut language), but, until Pribilof's discovery, the Northern Fur Seal rookeries had eluded the Russian explorers bent on finding them. The Russians transplanted Aleuts to the two remote islands to kill seals and process their skins. Primitive facilities changed to match the growing commercial fur seal industry, and company towns were built on St. Paul and St. George Islands (Figure 3.4) to hold imported Aleut families and the equipment necessary to process seal hides for export.

When administration of Alaska passed to the United States in 1867, the fur seal industry was a recognized asset. The commercial venture was continued as a franchise handled by the federal government. It is said that the proceeds from the Pribilof fur seal industry paid off the cost of Alaska in ten years (Thomas 1990:9).

Under American rule St. George and St. Paul were maintained as company towns, by the Alaska Commercial Company from 1870 to 1890, the American Commercial Company from 1890 to 1910, and directly by agencies of the federal government after that (Thompson 1954b, 1956, 1957, 1960). Skins were handled by London furriers until just before World War I, and thereafter by the Fouke Fur Company of St. Louis, Missouri. The last commercial seal harvest at St. George was in 1972, and the industry is considered moribund by the expiration of the Northern Fur Seal Convention in 1985. While the Native people at St. George diversified their local economy and acquired most of the company buildings as private property in the last two decades (Figure 5), National Marine Fisheries keptownership of the large seal processing building and developed a program of seal biology experiments.

Because of their unique place in Alaska history and economy (Veltre and Veltre 1987), and because of their integrity as relatively intact company towns, St. George and St. Paul together have been entered on the National Register of Historic Places as the Seal Islands National Historic Landmark. In addition to the seal plant building, National Marine Fisheries owns Cottage C — the former company hospital and physician's quarters (Figure 6). The National Park Service is involved because of the property's National Landmark status, and the State Historic Preservation Officer has an interest because of its National Register status. Together these state and federal agencies determine the attention devoted to the historically significant seal plant building at St. George, and its contents. The seal plant contains a modern renovated bunkhouse upstairs in the east wing (above the brine house), and some wire mesh seal pens in the wash house and courtyard. Otherwise it is largely the way it was during operation, with most of its skin processing equipment intact.

But the seal processing building is in poor structural shape, due in part to the constant drench-

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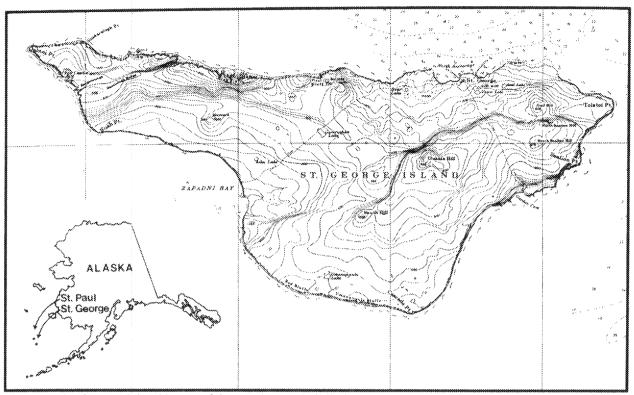


Figure 1. St. George Island is one of the two largest Pribilof Islands, located in the Bering Sea over 200 miles from the nearest land mass. It encompasses about 36 square miles (compared to St. Paul's 44 square miles).

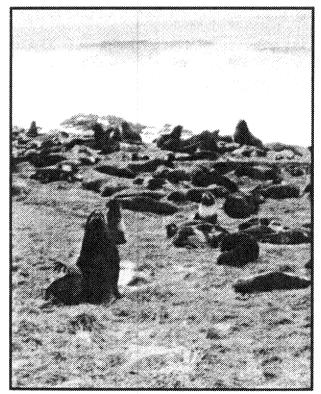


Figure 2. The cast rookery has many seals and is easily reached by an unimproved road.

ing with saltwater it has received from the spray of the nearby ocean and from the skin handling methods during the years of plant operation. Especially in the northwest corner, where only slender concrete pillars hold up the building, rusting reinforcement rod is expanding and spalling off large portions of concrete (exposing more rod and accelerating the process). If it's not fixed, the building will eventually collapse, probably beginning with the northwest corner.

Consequently, National Marine Fisheries has contracted Alpha Engineering Group, of Bothell, Washington, to conduct a survey of the building. The goal of the engineering and architectural survey was to assess the structural character of the building, make recommendations for stabilization, and complete a set of as-built drawings. I was to conduct a cultural resource assessment to inventory the machinery in the building and determine which is significant to the historic character of the building, and which is not. Some of the equipment was generally acknowledged to be significant when the National Register documentation was being prepared in 1986 (National Park Service 1986), but more detail was needed by the State Historic Preservation Officer (SHPO) to complete the Section 106 process.



Figure 3. St. George wakes up to a fresh snowfall on April 22, 1993, looking north from the cemetery. The steeple of the church shows up at the right, and the seal plant is down the hill behind it, not visible.

The Section 106 process is a provision in the National Historic Preservation Act of 1966 (as amended) which provides the SHPO the opportunity to comment on any federal undertaking which could adversely effect a cultural property eligible to the National Register of Historic Places. A federal undertaking is a project involving federal land, federal money, or a federal permit. My job was to collect information to help the SHPO and others make decisions and recommendations within the Section 106 process if the seal plant is to be modified.

I had been to St. George in September of 1992 for U.S. Fish & Wildlife Service, to assess modifications done to the building that year by agency carpenters. But in 1993 I went to St. George specifically to study the building and especially the equipment inside. This time I spent more time photographing the machinery and talking with local people. Russell Sackett, an historic architect with the SHPO's office, said that the study needed to produce two things: asbuilt drawings of the building, and a description of the skin-handling process tied to the equipment that remains in the building. John Smith of Alpha Engineering Group, Wally Fraser of Wisbeck and Fraser Architects, and I spent four days at St. George in mid-April of 1993. Smith and Fraser assembled field measurements for the as-built drawings and conducted the structural evaluation, while I conducted the cultural resource assessment.

This report summarizes the results of my cultural resource study of the St. George skin plant. Because it is tied to the Section 106 process for proposed structural rehabilitation, the report necessarily focuses on the building and especially the equipment inside. There are many analytical directions I've not pursued, and you won't find a lengthy history of the fur seal industry in this volume. Instead, you will find a brief

The story of the Alaska Fur Seal is compounded on mystery, romance, adventure and history such as surround few other forms of wildlife....Fouke Fur Company of St. Louis had the good fortune to play an important part in it. For it is at Fouke Fur Company in St. Louis that the skins of the Alaska Seal go through the long and intricate procedure of processing which turns them into one of the world's most desired furs. Fouke Fur Company (1958:1-3)



Figure 4. St. George the Great Martyr Russian Orthodox Church (here looking northeast) was built in 1936, but it contains many older church relics.

historical sketch of the St. George operation, followed by an architectural summary of the seal plant. Following that background, I discuss in some detail the workings of the fur seal plant, relying in part on the accounts by local men who participated during the commercial era. Then the report moves to a chapter which describes the equipment and its condition. The content of those two chapters is entwined in the chapter summarizing the engineering significance. Conclusions and a bibliography complete the report.

I wrote this report primarily as a legal compliance document designed to assist state and federal agencies in making thoughtful decisions about maintaining the fur seal plant. However, because the research done for Section 106 purposes often collects interesting and valuable information about local heritage (Mobley 1993a, 1993b), I've prepared this report with a broad audience in mind. The information that I needed

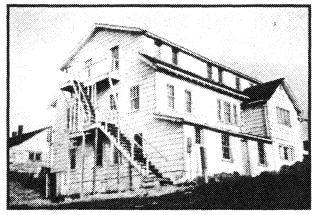


Figure 5. The hotel was operated by the Bureau of Commercial Fisheries as the St. George Rooming House, and is now owned by Tanaq Corporation.

to collect documents a central element in the lives of St. George villagers — the fur seal plant. Every building in the Landmark, every structure in the old company town, was built with one purpose — to support the activity that went on in the fur seal plant (Figure 7). As the economic mainspring of the community, the seal plant had tremendous cultural significance to the people of St. George. As a unique aspect of Alaska's commercialized natural resources, the Pribilof fur seal industry is significant at the state-wide level. The National Register documentation states the Landmark to "possess outstanding historical significance to the themes of industry, conservation, and ethnic heritage," during a period of significance of 1786 to 1959. Consequently, this report also organizes historical information that might be appreciated by anyone with an interest in Alaska's heritage.

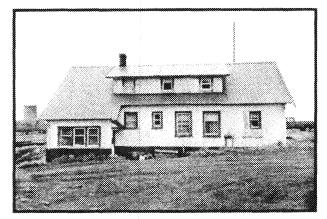


Figure 6. Cottage C was once the hospital and doctor's quarters; it is now owned by National Marine Fisheries and used to board federal personnel.



Figure 7. Looking north at the seal plant building one can see, from left to right, the wash house, blubber house, brine house, and barreling room.

Logistics and Methods

The first arrangements for my study at St. George were discussed in late January of 1993. Gregg Goedeke, of Alpha Engineering Group in Bothell, Washington, contacted me about the work, and the planning proceeded. Alpha Engineering Group was responding to a scope of work issued by National Marine Fisheries, requesting an engineering and architectural evaluation of the St. George sealing plant, which the agency owns. Because the building is a contributing structure to a National Historic Landmark, and was known to contain significant machinery, a cultural resource evaluation was also needed to proceed with the Section 106 review process under the National Historic Preservation Act.

On April 19 at the Anchorage International Airport I met John Smith, of Alpha Engineering Group, and Wally Fraser, of Wisbeck and Fraser Architects, and we proceeded to St. George (Figure 8). There we were met by resident Greg McGlashan, an agent for National Marine Fisheries, who turned over a truck for our use and led us to Cottage C, where we bunked. Cottage C — the former company hospital and doctor's quarters —is also administered by National Marine Fisheries and maintained as a residence for guests.

We stayed at St. George for four days, spending most of the daylight hours working on the building. Smith and Fraser worked jointly to assemble as-built sketches of the structure and identify areas where the building is deteriorating. I worked independently, noting building features and measurements, setting up lights to photograph the equipment, and talking with local people about the building and its operation.

The wash house, blubber house, and basement area of the seal plant have not been used for years, and are dirty and cluttered. Sources of grime include air-borne dust and sand, seal pens formerly used to house live seals, kenches or salt

bins full of old seal pelts, feces left in the building by wild foxes that sometimes get in, and rotting carcasses left by foxes that couldn't get back out. Extension cords had to be connected together to power electric lights, so that we could see the building's interior and photograph the machinery. I used two metal reflectors, each with one 150 watt bulb, and you can see them in a few photographs. The basement below the blubber house was boarded up by U.S. Fish and Wildlife Service carpenters in September of 1992, so we removed one plywood panel to enter, and dragged our extension cords in behind us to light up the dungeon-like space. Smith and Fraser had to climb on the roof and in the rafters to make observations and measurements, but I didn't.

Conversations with several knowledgable local people provided critical information about building dates and processing techniques, and their oral testimony is woven into this report. Two individuals — Andronik Kashevarof, Sr. (Figure 9), and Terenty Merculief --- agreed to be tape-recorded as we walked through the building, discussing the equipment. Both individuals signed a Gift and Release Agreement authorizing the original casette tape to be filed for public use at the archives of the University of Alaska-Fairbanks' Rasmuson Library. We recorded with lapel microphones using metal tape and a Marantz PMD-430 casette tape recorder. I took notes when interviewing Victor Malavansky, Sr., as we walked through the building. Greg McGlashan, who worked in the plant as a young man, also provided information. Later, I talked by telephone with Feddie Krukoff, who had been an assistant foreman at the plant, and with Simeon Pletnikoff, who was also familiar with the operation.

I began writing the report upon returning to Anchorage. The fourteen rolls of black-andwhite film I shot were developed and printed as

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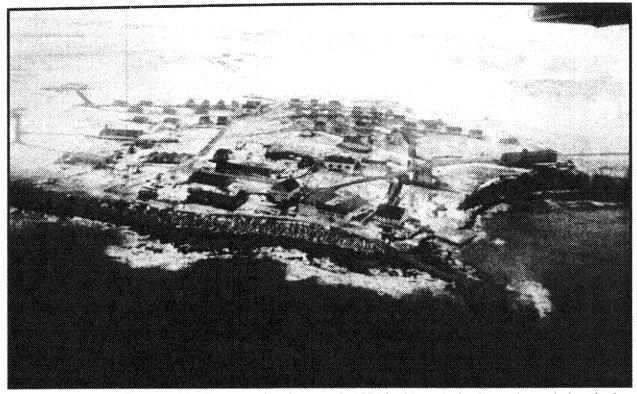


Figure 8. This aerial view of St. George, taken January 9, 1971 looking south, shows the seal plant in the foreground.



Figure 9. Andronik Kashevarof, Sr., at left, holds a skin with the blubber removed. His cousin, William Merculief, compares an unblubbered skin.

contact sheets. I also had access to negatives from six rolls of black-and-white film I shot of the facility for the U.S. Fish and Wildlife Service in September of 1992. Two rolls of color slides fill in the black-and-white coverage. Surreal Studios of Anchorage made duplicate copies of the oral history audiotapes. Meanwhile, John Smith and Wally Fraser were preparing as-built drawings and the report of their building survey.

It took several weeks to assemble a draft of this report, using my notes, photographs, oral history tapes, and published and archival material. The archival material is a deep but scattered trove of information, and --- because my historic evaluation is specifically to protect important equipment from damage during renovation - I have researched archival sources only a little. For example, Ed Philemonof, Executive Director of St. George Tanaq Corporation, mentioned that "we have the foreman's logs on the island," but I didn't have a chance to read them. Focusing on the information needed for legal compliance helped me meet the sixty-day deadline for submitting the draft report. Following a review period, this final report was released and submitted to the State Historic Preservation Officer for legal compliance.

A History of Sealing at St. George Island

Furs lured early Russian explorers to Alaska in the 18th century, where they found Aleut Natives living in villages of semi-subterranean sod-roofed huts called "barabaras." Competition among rival Russian fur companies fueled a succession of vovages over four decades. in which the waters of the Aleutian Islands were extensively exploited. Searching for rumored islands seasonally hosting huge numbers of seals. Gerassim Pribilof of the Lebedev-Lastochkin Fur Company arrived at St. George Island on June 25 of 1786, naming the first-encountered island "St. George" after his ship (Torrey 1978:44; Born 1952:3368-3369). St. Paul Island was colonized the following year. Aleuts from Unalaska and Atka were imported to build barabaras and storage buildings, and to kill seals and salt and barrel their skins. Rival fur companies established competing hunting communities around the shores of St. George and St. Paul Islands, until an exclusive twenty-year charter was granted to the Russian American Company in 1799. At St. George, the population was soon consolidated at the present site and a company town sprang up (Elliot 1898:27-29).

The Russian American Company controlled the fur seal enterprise through three successive charters, ending with the transfer of Alaska to the United States in 1867. In that time, St. Paul and St. George developed a community structure around the commercial seal harvest, subsistence hunting and gathering, and the Russian Orthodox church. Most of the furs were sold in the Orient, marketed along with fur-seal hides from the Falkland Islands, the South Shetland Islands, and the Antipodes Archipelago, numbering millions of pelts (Baker 1957:6). The Pribilof Islands were said to have produced 2.5 million pelts under the administration of the Russian American Company (Bower 1945:1-2).

Independent sealing companies took 300,000 skins from the Pribilof Islands in an uncontrolled frenzy during the first season under United States rule. The federal government took over the fur seal management, prohibiting sealing in 1868, declaring the islands a special seal reservation in 1869, authorizing a lease system in 1870, and establishing catch quotas, seasons, and other regulations (Baker 1957:6). From 1870 to 1890 the Alaska Commercial Company held the lease (U.S. House of Representatives 1876), and produced almost two million seal skins. But during the following two decades the new leasee — the North American Commercial Company — marketed only 342,651 pelts (Baker 1957:7). In 1910 the federal government took over the franchise directly, managing it first through the Bureau of Fisheries under the Secretary of Commerce, then through the U.S. Fish and Wildlife Service under the Secretary of the Interior.

Meanwhile, commercial methods were developed to hunt seals while they were at sea (Murray 1988, Williams 1984), much like whaling. This pelagic, or water-borne, sealing industry was unable to selectively take males and adults. The resulting seal population decline (down to 134,000 animals in the Pribilof herd) prompted the United States, Great Britain, Japan, and Russia to sign a North Pacific fur seal convention in 1911 which prohibited pelagic sealing (except by Natives using traditional methods) and set up a pelt-sharing arrangement among countries. Canada and Japan each received 15 percent of the skins taken annually from the

As long as Alaska was Russian property, most of the Pribilof sealskins were sold to China, particularly to the northern proyinces where warm clothes and furs were much appreciated....Originally the Russians sold their furs at Peking; but when China was closed to them they built a little town, Hyakhta, on the Russian side of the frontier opposite the Chinese town of Maimachen, famous for its tea. From Okhotsk the pressed sealskins were sent on packhorses to this distant trading post (nearly a thousand miles from Peking and more than 2500 miles from Moscow) and exchanged for the Chinese Highland tea so greatly valued by the Russians. W. Born, writing about "Alaska Sealskins" in 1952.



Figure 10. U.S. Fish & Wildlife Service biologist Victor B. Scheffer's northern fur seal research included this attempt to photograph the Polovina fur seal rookery at St. Paul Island, using a camera suspended from meteorological balloons. Pictures are, from left to right: Raul Vaz-Ferreira, an Uruguayan observer, and agency biologists Karl W. Kenyon, William H. Sholes, Jr., and Robert Zanes Brown.

I am 60 years of age....I have been in Alaskan waters every year but two since I was 14 years of age. I first went to Bering Sea in 1845, on a whaling voyage....and for the last thirteen years have been the [North American Commercial) company's local agent on St. George Island....Twenty-four years of my life have been devoted to the sealing industry....I have seen the herds grow and multiply under careful management until their numbers were millions, as was the case in 1880. From 1884 to 1891 I saw their numbers decline, under the same careful management, until in the latter year there was not more than onefourth of their numbers coming to the islands. In my judgement there is but one cause...and that is the shotgun and the rifle of the pelagic hunter... Daniel Webster, in a deposition for the 1898 federal report on fur seals by David S. Jordan.

Pribilof Islands (Baker et al. 1963:3).

The agreement remained in effect for 30 years, until it was terminated by Japan in 1941. In 1942, the Natives of St. George and St. Paul were evacuated to camps on Admiralty Island, in southeast Alaska, to protect them from possible Japanese occupation during World War II. Only 150 skins were taken that year, but a work crew brought back seasonally in 1943 took 117,184 skins — the allotment for 1943 and the previous year (Riley 1961:7-9). A temporary agreement between the United States and Canada was in force from 1942 and 1957, under which Canada received 20 percent of the Pribilof skins (Bower 1945:3). A new international convention was signed in 1957, by Canada, Japan, the USSR, and the United States, in which Canada and Japan each received 15 percent of the Pribilof skins.

In 1914 the Fouke Fur Company of St. Louis, Missouri obtained the first of a series of exclusive contracts to process the Pribilof fur seal skins (Born 1952:3384-3386). They were known for their quality furs, particularly fur seal, and "by 1960 Fouke was processing 90 per cent of the world's seal harvest, only 50 per cent of which was American; the rest came from South America and South Africa" (Busch 1985:231). The only country they didn't represent in the industry was the Soviet Union (Born 1952:3390).

Between 1962 and 1964 a competing firm obtained the contract, but their product proved inferior, and the General Accounting Office canceled the contract. A new contract was signed with Fouke Fur Company, now relocated in Greenville, South Carolina (Busch 1985:232). "Supara" was the name of the short-lived company, a partnership between the National Superior Fur Dressing and Dying Company of Chicago and the Superior Fur Dying Company of New York. The name can be seen stenciled on the walls of the coopering room in the St. George seal plant.

The Fouke Fur Company supervised fur operations at St. George and St. Paul, assuring quality control all the way to tanned and dyed,



Figure 11. National Marine Fisheries biologist Roger Gentry, in a study in the doctor's quarters of Cottage C in 1992, prepares a computerized instrument package for a ten-day ride on a female seal.

ready-for-auction pelts in St. Louis (Fouke 1958). A long coat took eight or nine skins. In 1930 you could buy a coat for \$600 to \$1000 (Born 1952:3389). To keep their edge in a competitive industry, the company conducted processing experiments and comparisons on the raw hides, mostly at the St. Paul plant.

The U.S. Fish & Wildlife Service followed suit (Figure 10), and the history of the Northern Fur Seal industry includes a federal research component that lasts to this day (Gentry 1987). Victor B. Scheffer, a marine mammal biologist with U.S. Fish & Wildlife Service from 1937 to 1969, conducted a wide variety of observations on the species using mostly St. Paul data (Scheffer 1949, 1950a, 1950b, 1950c, 1961). Roger Gentry, a marine mammal biologist with Commercial harvesting on St. George Island will be halted for a sufficient period for the fur seals to resemble, as near as possible, a "natural" population. Probably 15 years will be required; but it would be unwise to establish a fixed period at this time. Federal Register 38(147):20600; August 1, 1973.

Boris .R. Merculief, Peter .R. Lekanof, Blake Malavansky, Packed Barrels & Hoops also borax-Acid for shipment to St. Paul, June 20, 1973. Today's weather: Raining, S.E. Wind. Time 11:00 am. There will be a Cake Walk Dance - Tonight after movie. Grifitto on the wall of the cooper room, upstairs above the south end of the brine house.

National Marine Fisheries, has focused on behavioral and feeding studies using the St. George fur seal population (Figure 11).

In 1956 herd management policy was changed to kill more four-year-old females, and over 300,000 were killed between 1956 and 1968 (Thomas 1990:9-10). The Pribilof fur seal population dropped steadily thereafter. That prompted the North Pacific Fur Seal Commission to set aside St. George Island as a special biological reserve where an unharvested herd could be studied, requiring that commercial sealing be stopped in 1972. The St. George plant sent its remaining supplies to St. Paul the following year. The St. Paul operation was shut down in 1984. Now only a subsistence harvest of a few hundred seals takes place each year. The St. George building was opened a few years ago so that the

Previous to 1914, the great majority of seal-skins were dressed and dyed in London, the world's trade-centre for fur seal and sea-otter...pelts ever since Captain Cook's...voyages....In 1915, the U.S. Government, for the first time, put up for auction in St. Louis, through the Fouke Fur Company, sealskins dressed and dyed in the United States. It was high time, for the lack of shipping space during the first World War rendered the transport of furs impossible and the sealskins from Alaska might have piled up untreated. W. Born, writing about "Alaska Sealskins" in 1952.

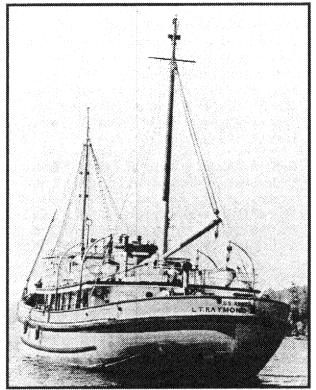


Figure 12. Within one week of each other in June of 1950, the St. George seal plant and the U.S. Fish & Wildlife Service supply tender *Penguin* caught fire, the latter to be hurriedly replaced by the surplus military vessel *Lt. Raymond Zussman*.

blubbering beams could be used on the subsistence catch, and those skins remain imbedded in salt in three kenches — bins built for that purpose in the blubber house.

The history of the Pribilof fur seal industry on St. George Island is to be found in the many company buildings standing in the village, in the books and records and photographs of the U.S. Fish & Wildlife Service, the Fouke Fur Company, and other archives, and in the island's archaeological sites. The first recording of archaeological sites was by Bryan (n.d.:4-5), who briefly described three. Staraya Artil (also known as XPI-015, using the official state-wide inventory or Alaska Heritage Resource Survey (AHRS) number), an original Russian settlement, was said (Bryan n.d.:4) to have been excavated in 1965 by teacher Bill Browne, who left the following year for Arizona. Nothing more is known about those excavations or results. Depressions left by old semi-subterranean houses — barabaras - were found at Zapadni Bay (XPI-012) and Garden Cove (XPI-013). Veltre and Veltre (1986) described those three sites in more detail, and

also mentioned: (a) a local story about a camp for sentries watching the sea for Japanese fur seal poachers during the pelagic sealing period, (b) a stone reindeer corral built about 1911, (c) isolated finds of artifacts within St. George village, and (d) stone cairns marking various points on the island. Short archaeological surveys conducted on St. George Island by state and federal agencies for compliance purposes have noted surface and buried cultural features and materials, but no new AHRS numbers have been assigned (Reynolds 1985, Yarborough 1986). Unlike the Aleutian Islands, where Native groups had lived for thousands of years (Laughlin 1980:79-95; McCartney et al. 1991:19; Mobley 1993b:29-32), no evidence of prehistoric human activity has ever been found on St. George Island, or on St. Paul Island.

All recorded cultural remains on St. George Island date no older than 1786, and most standing structures were built since the 1930s (National Park Service 1986). In two separate fires in 1950 the skin plant and the U.S. Fish & Wildlife Service's supply tender *Penguin* burned (Thompson 1953:49). The agency immediately replaced the vessel with the 140' surplus military ship *Lt. Raymond Zussman*, renaming it *Penguin II* (Figure 12). It took more than two years to completely replace the skin plant, using a small cement mixer to hand pour the concrete building (Thompson 1954a:53-55). And that is where I will take up the story in the next chapter.

...wildlife-research biologists....leave their homes for months on end, endure seasickness, and work in cold, bloody, filthy surroundings. Each one takes his reward in pride of accomplishment. Each is content to watch the cairn of scientific truth rise a little higher each year. The pebble each man puts in place is his piece of immortality....though the life of a seal...will forever hold its final secrets and will forever challenge the zoologist. He will never be able to know the seal or truly to sympathize with it, even though at moments he may look upon a little seal as simply a small person wrapped in fur and endowed prematurely with mustaches. Victor B. Scheffer, biologist with U.S. Fish & Wildlife Service, in his 1970 preface to "The Year of the Seal."

Architectural Summary

The St. George seal plant burned to the ground in June of 1950 (Figure 13), and planning and construction of the present building began soon thereafter (Figure 14). A supply ship, the Andromeda, brought a truck crane to St. George within two months (Thompson 1953:54); the following year the Union arrived with a fire truck (Thompson 1954:56). The new building was begun almost immediately, using a cement mixer, buckets, and wheelbarrows, to pour the foundations, floors, and walls of what was called a "fireproof" building. By 1951 the wash house and blubber house were "ready for use," if not completed (Terenty Merculief remembers a tarp set up to protect the blubber stations from rain). According to Thompson (1954:53, 55), the wash house was temporarily used to house four brine tanks until the brine house was completed, the whole building being finished in 1951. Local people remember the construction taking perhaps two or more years to complete. Lumber and other materials were brought in from the west coast on supply vessels. Gravel for the concrete came from the beach. Except for a modern bunkhouse in the attic of the brine house (Figure 15), architecturally the structure is largely as it was designed.

The resulting "U" - shaped building has a courtyard open to the south, flanked by the wash house on the west, the blubber house on the north (Figure 16), and the brine house on the east (Figure 17). The blubber house has a basement beneath it (Figure 18). A small poured concrete room at the southeast corner of the brine house, called the barreling room, has three walls set at a slight angle to the axis of the brine house. In the attic above the brine house a space once used for coopering and barrel and lumber storage now has been partly remodeled into a modern bunkhouse (in 1985, according to Roger Gentry).

The foundation, floors, and walls of the building are all of reinforced concrete. Many pouring seams are apparent as a result of the methods and equipment used — a small cement mixer, wheelbarrows, and buckets. Openings for doors and windows were poured as the walls went up. A retaining wall was poured on the west grade, and an existing one on the east was incorporated into the design. I could see from the concrete surfaces that much of the forming was done with shiplap siding.

The gable ends of the building are all framed with rough-cut lumber and sheathed with horizontal beveled wood siding. Windows are twelve-paned and mostly fixed. The roofs of the wash house, blubber house, and brine house are at a 7:12 pitch -- a 34 degree angle (Figures 19, 20. The east half of the roof over the brine house

Early on the morning of June 1 a fire on St. George Island resulted in the destruction of the machine shop and garage, as well as all of the buildings and most of the equipment and supplies used on that island in the curing and barreling of skins. This fire resulted from defective wiring and caused damage estimated at \$60,000.... Seton H. Thompson (1953:49), in his 1950 federal report.

I was assistant foreman for, oh, 19 years. I was getting broke-in to take over the job when the fire broke out. About 12:00 midnight was a knock, "There's a fire in the wash house!" We just watched it burn. No hydrant. No nothing....The wooden wash tanks we saved, I guess, because they were filled with water....That afternoon Benson had sent down a couple truck-loads of crates. The electricity had no conduit -- no insulation -- up in the wood room above the brine house, where they put those boxes.

Feddie Krukoff

...everybody was standing outside to look at the fire because we couldn't get no water. So everybody -- and all the women -- started hauling saltwater from the old dock down there...by hand. Because the fire was out of control. We couldn't do nothing. We didn't have firetrucks. And we tried a portable water pump.

Terenty Merculief

I lost a 16-gauge shotgun in the fire. It wasn't mine. It was my dad's. It burned a month before the season was to start... The building was rebuilt little by little, as they got government money. The government people here did it, but they didn't have good equipment. It took several years. Victor Malavansky, Sr.

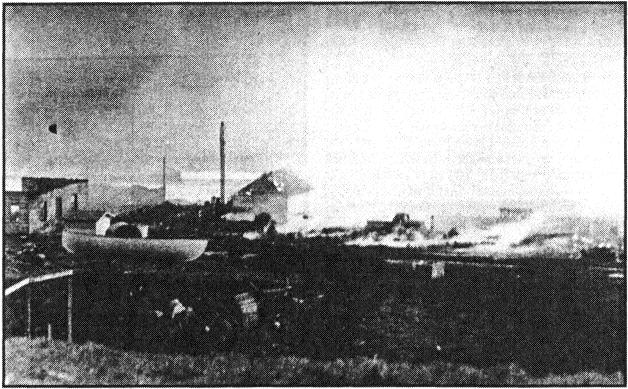


Figure 13. The machine shop still burns early on the morning of June 1, 1950. The seal plant was mostly of wood, and apparently the only portion left standing was the three concrete walls at far left, later incorporated into the new seal plant as the barreling room.

is covered with wood shingles, while the remainder of the three houses is covered with cement asbestos roofing. Over the barreling room is a shed roof, covered with rolled roofing.

The basement beneath the blubber house has poured reinforced concrete pillars, spaced apart and once framed-in and sided, with doors and windows. Now it (along with many of the

New fire-proof buildings for the washing and blubbering of sealskins were ready for use in 1951, and 4 new brine tanks for the curing of skins were installed and operated in the washhouse until the new brining building could be completed.... permanent improvements in 1951 included a new brining building of reinforced concrete with aluminum roofing for the curing of sealskins. A large attic provides space for coopering and storing sealskin barrels. Seton H. Thompson (1954:53-55), in his 1951 report to the federal government.

This was poured in by hand only....using three-gallon buckets....It didn't take very

building's windows) has been framed-in and boarded-up with treated timbers and plywood by U.S. Fish & Wildlife Service carpenters. Other recent modifications to the exterior include five skylights cut into the west roof in the brine house attic, a metal garage door installed in the east wall of the brine house, a wooden fence across the south end of the courtyard, and a suite of live seal

long, because we...build our own little elevator on the outside....And we used to have a wheelbarrow....Andronik's dad, he used to be operating that cement mixer. I was young then....It take a little longer [than one year], because I remember they used to have a tarp to protect these blubbering crews. Terenty Merculief

Wheelbarrows! They never used the crane or anything....I was in that job, too, and I'm telling you, it was really a tough one. They had about ten wheelbarrows going and one concrete mixer.

Andronik P. Kashevarof, Sr.

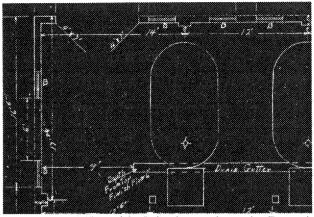
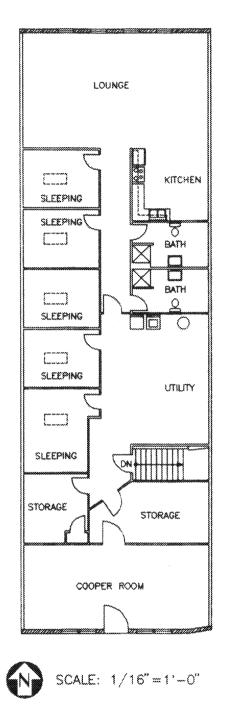


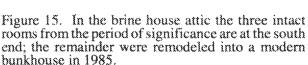
Figure 14. A plan of the brine house drawn by Samuel E. Shaw, probably in 1951, shows spaces for four redwood brine tanks with their salt boxes on the east.

pens (built in 1974, according to Roger Gentry) in the west side of the courtyard (Figure 16).

The interior of the wash house is laid out with some geometry. Along the east wall, spaced equidistantly with walkways between, are five redwood wash tanks for treating skins. Two others are arranged in the southwest corner of the building. A large rectangular trench poured in the concrete, with metal grates over it to act as a drain, runs down the center of the room from south to north. Against the west wall, north of the two wash tanks, are two redwood bins for salting skins, called "kenches." These two kenches, and the adjacent wash tank to the south (which was apparently used as a kench sometimes), are fitted with sideboards so the height of the bin can be raised. The east and west walls each have five windows, spaced equidistantly so that skins thrown through them would land in the wash tanks or kenches. The northwest corner of the wash house was apparently kept free for a work area. Entry from the south was through a large raising door hung with a counterweight, while the north exit leads directly to the blubber house.

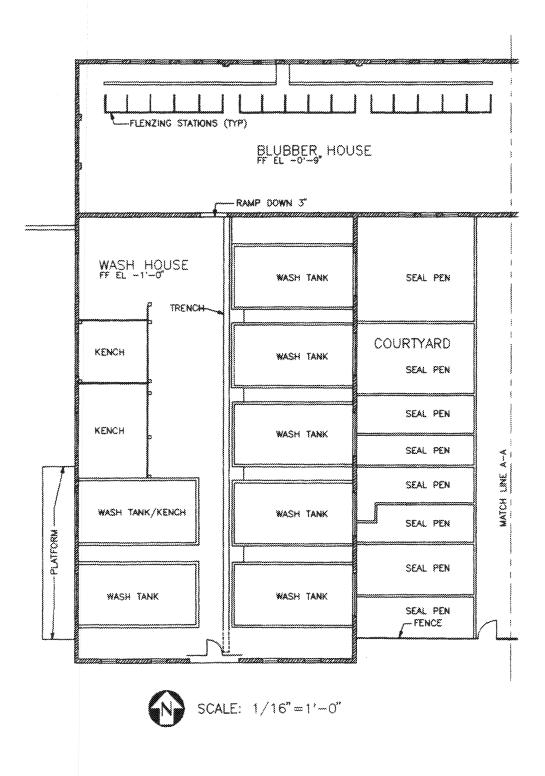
The blubber house (Figure 16) is a long narrow room oriented east-west, dominated by a row of fifteen windows on the north wall that illuminate fifteen blubbering stations strung the length of the room. The west wall has three windows. A large double door opens through the east wall into the brine house. An overhead track for skin carts runs the length of the wash house into the blubber house, where there is a switch overhead to direct it to the left or right. To the right the track continues east into the brine house, where it turns south so it could service the redwood brine tanks. Other than the fifteen blubber stations, which are described in the Equipment

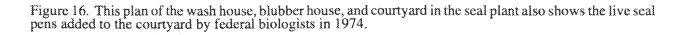


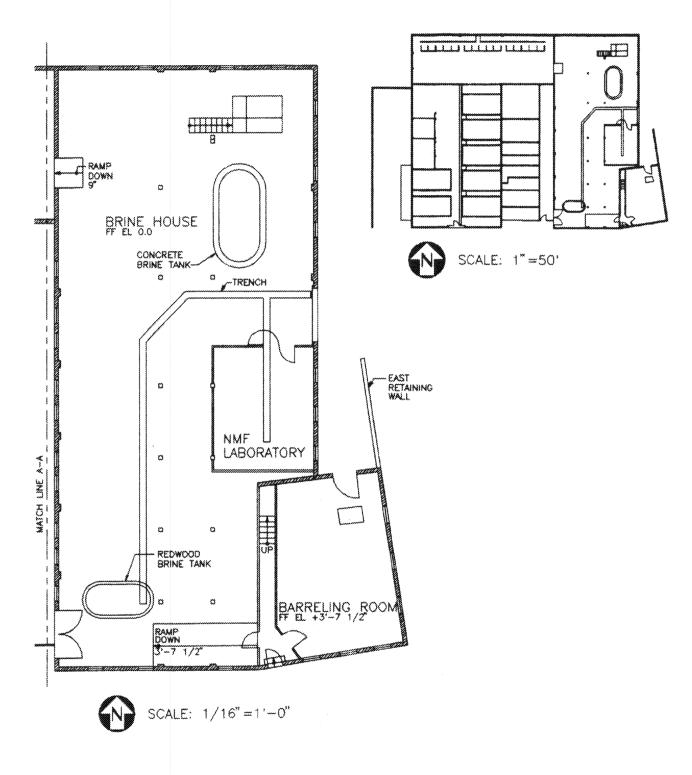


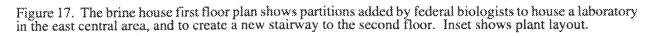
Inventory, the blubber house's only fixed feature is a concrete curb poured into the floor, on the north side, to guide blubber and water into a chute and out the building to the north.

The brine house (Figure 17) is oriented north-south, and has a used attic space. All four walls are well-penetrated with windows —









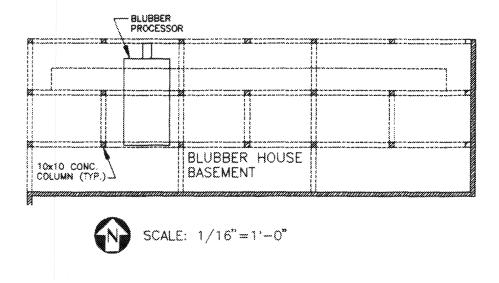


Figure 18. The basement under the blubber house, housing the large cylindrical blubber apparatus and considerable debris, is supported by slender poured concrete pillers.

twelve-pane windows on the south, west, and part of the east, and six-pane windows on the north and part of the east. In the northwest corner is the door connecting the blubber house to the brine house, through which people and the overhead track passed. A large double door, now unused, opens west in the southwest corner of the wing. A simple system of poured drains with metal grated covers services most of the room. In the northeast corner is a poured concrete brine tank, which is essentially stationary. A redwood brine tank in the southwest corner is movable. Two sets of wood columns run north-south to support the second story floor.

Upstairs above the brine house there was once a cooperage — at the south end — and a couple of small storage rooms. Roger Gentry told me that the west room was used to store heavy plumbing parts for the saltwater system, tools to maintain the brine tanks, and – during the winter season — the blubber knives. But the majority of the attic space, extending to the north gable end, was for finished lumber and barrel storage. Now the cooper room and the two small

They didn't have good electric system in here while I was blubbering, but lately after they started getting more power they put these flourescent lights in here.... They used to be waterproof, just like the ones they use aboard ship, you know. They screw in, so water can't get in.

Andronik P. Kashevarof, Sr.

storage rooms remain, showing their un-insulated roof and walls. The interior walls are of rough framing and planed butted boards used as horizontal paneling. The remainder of the attic has been remodeled into a bunkhouse, with a series of five bedrooms on the west side, and a utility room, two bathrooms, and a kitchen on the east side (Figure 15). A lounge area takes up the north end of the attic.

The basement beneath the blubber house has a poured concrete floor, walls, interior columns, and ceiling. The one major feature is a large metal apparatus installed in the west side to separate blubber from the saltwater discharge.

The barreling room is a concrete floored and walled room at the southeast corner of the brine house. It is distinguished from the brine house by having a floor over three and one-half feet higher than the brine house, and by having three walls oriented at an angle to the brine house (Figure 17). It has a shed roof. The east and south walls each have three twelve-pane windows. A door leads into the building at the southwest corner of the barrel room, and another leads out at the northeast corner.

When the architect and engineer first pointed out the different axis and elevation of the barreling room to me, we were puzzled about why it was so constructed. I asked Terenty Merculief, Andronik Kashevarof, and Victor Malavansky, but they didn't know why, either. John Smith, the engineer for Alpha Engineering Group, surmised that it was angled to keep a uniform distance from the west retaining wall of

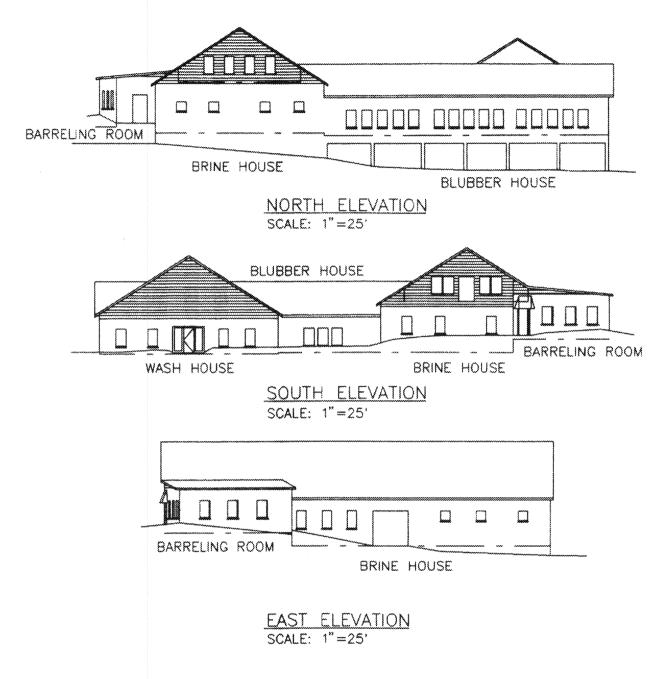


Figure 19. These three elevations show the building as it was originally built, except for the four north upstairs windows in the attic above the brine house, and the garage door penetrating the east wall of the brine house.

the machine shop to the east, so that trucks could more easily pass between the two buildings. However, when I saw the photograph of the 1950 fire (Figure 13), the reason was apparent, for there, standing among the smoldering ruins of the older seal plant and machine shop, are the three walls of the barreling room (compare the window configuration of Figure 13 with figure 17). The concrete walls of the present barreling room are all that's left of the earlier building that burned in 1950.

This perhaps explains some discrepancies between accounts of the earlier building's construction; some said it was wood only (including the foundation), while some said an earlier concrete foundation remained upon which the new 1950s building was constructed (National Park Service 1986; Habitat North

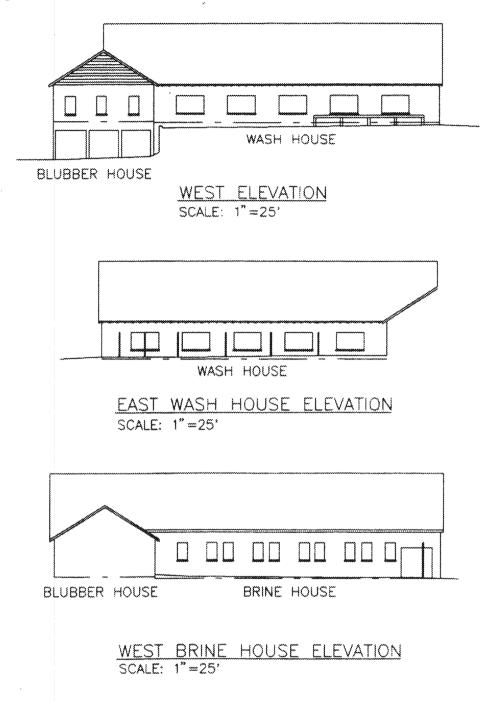


Figure 20. These three elevations show the building as it was originally built, except for the alignments of the seal pens, shown on the west elevation as five vertical bars.

1982:Bldg, L). When the new wash house and blubber house were built they were oriented slightly off from the axis of the three standing concrete walls. The following year (1951/52), when the brine house was completed, it was designed to incorporate those standing walls as part of the new structure.

The more I looked at the skin plant, the more clearly I could see how it was built with

forethought to handle the several phases of pelt processing. Raw skins came in to the wash house, went to the blubber house, the brine house, the barreling room, and out the door and into the baidar and out to the ship. The mostly-wood skin plant that burned was replaced with a reinforced concrete version that wouldn't. The designers intended the building to last; little did they know that it would out-last the industry.

Working in the Skin Plant

The fur seal plant was the economic heart of St. George. For almost two centuries the fur seal industry set the pulse of St. George; if it were not for sealing, the community would not have existed. Working in the seal plant was the main source of cash in the economy, and, indeed, even that was a recent innovation. Prior to 1950, the workmen were paid largely in foodstuffs and other goods (Thompson 1953:54). It is not surprising that the seal plant is remembered as a central element in the lives of St. George residents, even though skin plant work was strictly a male affair (that was not the case at St. Paul, according to Anna Krukoff, but the reason for the two different policies is unclear). I walked through the building with four men who worked in the plant during its commercial operation: Andronik Kashevarof, Sr., Victor Malavansky, Sr., Terenty Merculief, and Greg McGlashan. In September of 1992 I shot a videotape of Roger Gentry explaining the equipment. These sources, plus written documents and conversations with Feddie Krukoff and others, paint a picture of the seal plant in operation.

The various tasks in the seal plant were determined by the flow of saltwater, skins, blubber, salt, borax, and barrels through the building. A rigorous accounting system was used to keep track of the skins, and one or two men would be assigned the task. A government agent kept a separate tally. Totals had to match at all steps along the way. A bulletin board on the south wall of the blubber house was used to help keep track of skin counts. With annual St. George production in the latter decades commonly exceeding 10,000 skins (St. Paul, always the larger producer, commonly exceeded 50,000 skins), matching the numbers was no mean feat.

I was a skinboy. I started at age 16, in 1969, and I did it until 1972. My job was to be out in the field and help with roundup, and count the skins. We'd put them in groups of ten, blubber-side down, with one up for each 50 skins, and on the tenth row it was two blubbers up. Then, once we got the skins out, we did a final count. I reported to my boss, then we matched it up with the federal agent's kill count, and if they matched they go get the skins on the truck, go back to town. Then they were counted again as they were thrown through the window into the tanks. Then the next day I'd be a blubber boy. I'd go in at 7:30, a half hour early, and wade into the tanks with hip boots and put the skins in the carts. The first two years I did it were overhead carts, and the last two years were rolling ones.

Greg McGlashan

No, women never worked in the plant, St. Paul used to hire women (and I worked at St. Paul), but the St. George women didn't mind not getting hired. Anna Krukoff

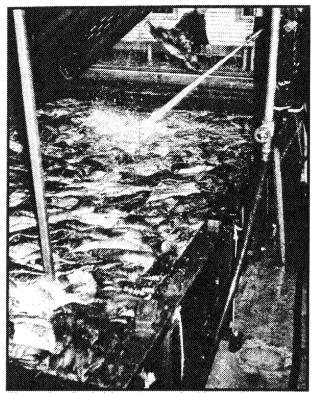


Figure 21. Seal skins were soaked in wash tanks, like these shown at the St. Paul plant, and blasted with high pressure hoses to remove dirt and grass.

Seals were killed every other day, with the intervening day devoted to processing. This worked out well because of the capacity of the plant's machinery, and because the labor force in the killing field doubled as the force in the plant. The season ran from about mid-June to the end of July, according to Ed Philemonof.

The skins were brought to the building on trucks, and the building was designed so that the trucks could pull right up to windows on either side of the wash house. Skins were thrown through the windows, one at a time (so they could be counted again), into the wash tanks. Each tank held a maximum of 250 skins. Skins that were to be kenched (salted) instead of washed and blubbered could be thrown directly through certain windows (in the northwest part of the wash house) directly into kenches. The company had options for handling the skins; in 1950, handicapped by the fire and loss of the seal plant and other buildings, they produced skins that were handled five different ways (Thompson 1953:50).

While the skins entered the wash house through the windows, workmen entered from the south through a wide counter-weighted door that slid up. Once inside the building, they were faced



Figure 22. From the wash tanks the skins went to a blubbering beam like this one shown at St. Paul, and the blubber was removed with double-handled knives.

with a long aisle running north-south down the length of the building. On either side were rows of wash tanks; five against the east wall, separated by walkways, and two against the west wall in the southwest corner. Kenches, or large salt-bins, for salting skins and blubber, were assembled when necessary against the west wall just north of the two wash houses.

The wash tanks were designed to flood continuously with salt water, which cleaned and cooled the skins (Figure 21). If not cooled quickly, the pelts would "slip," or loose their fur. Saltwater was pumped into the tank via large pipes, and left to overflow into a central drain running the length of the north-south aisle. Andronik Kashevarof, Sr. pointed out to me how the rims of the wash tanks slope towards the central drain; the angle is so slight that otherwise I might not have noticed. Each tank had a wooden floodgate at one corner to let the water out quickly. The wash house, like the whole building, was constantly drenched in saltwater and salt. Raw salt was sometimes thrown on the blubber house floor just for traction.

The skins soaked in the wash tanks for thirty hours. To keep them from cleaning unevenly and floating to the surface, large redwood

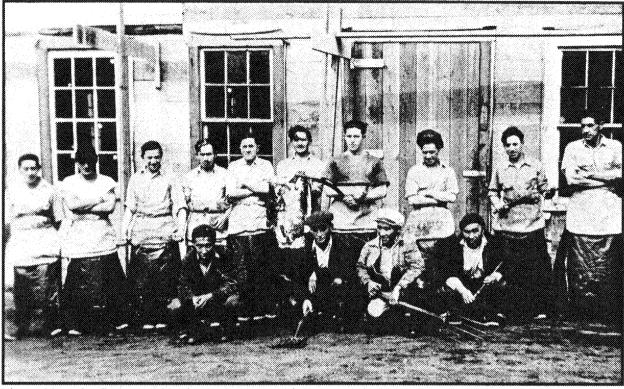


Figure 23. A St. George blubbering crew poses with their tools in front of the old seal plant, sometime before 1950 (back row, left to right, Innokenty Lestenkof, Ermogen Lekanof, Andrian Merculief, Afanasia Prokopiof, Eoff Philemonof, Alexay Prokopiof, Isiah Merculief, Moses Galanin, Laurence Galanin, and Isaac Philemonof; front row [from Aleutian Islands], George Kudrin, ____ Kudrin, ___ Kudrin, and Maroon ___.



Figure 24. In earlier decades all pelts were "kenched," or rolled in salt, as they are doing here at St. Paul.

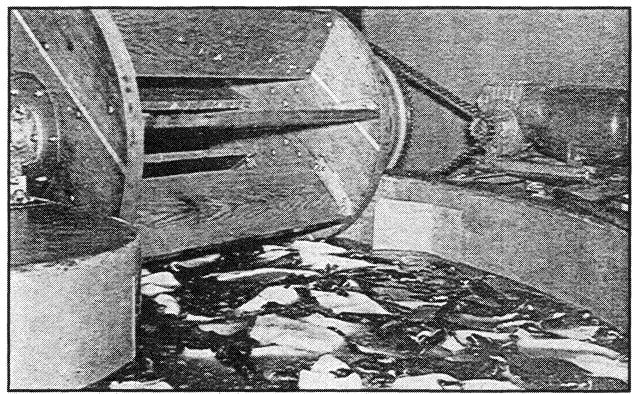


Figure 25. Replacing the kench method was the brine method, in which a tank with paddles -- like this one at St. Paul -- agitated the skins and soaked them in a 100% salt solution.

lath racks were used to press the skins down into the saltwater. Each tank had two large racks on hinges, each of which had a small rope leading to a pulley above the tank, and a counterweight. When the racks were raised, a pole was used to keep them from falling back down (Figure 21). When they were closed, blocks of wood fixed to the tank rim opposite the hinge acted as toggle fasteners. With the furs inside, a third, smaller rack was placed loose in the center of the tank, and the two hinged racks were brought down on either side to pin it in place, immobilizing all the furs. High pressure hoses attached to pumps, one at the southeast corner and one at the southwest, were used to spray the skins and remove grass and dirt. When the skins were done soaking, workers in hip boots waded into the tanks and threw them into the overhead or rolling carts, to be taken to the blubber house.

The wash tank was a relatively new process for the Pribilofs when the seven tanks were installed in the new St. George seal plant in 1950/ 51. Before that, skins, whether they were to be blubbered or not, were kenched. A kench is a large bin of salt in which the seal skins were rolled, to thoroughly encrust them with salt. The act of doing that was called kenching. Even after the wash tanks were in use, kenches were maintained as an optional processing method. They had sideboards, so their height could be changed as needed. The kenches could be dismantled as necessary, and the north wash tank of the two on the west wall was adaptable to either washing or with the addition of sideboards — kenching. Kenching was a back-breaking process that had changed little since the earliest days of the Russian industry began (Figure 24). It was useful when the blubberers, or the seven wash tanks ---with their 250 skin capacity --- couldn't handle all the sealskins. When well-kenched, seal skins can be blubbered three or four years later without hurting the quality of the skin, according to Terenty Merculief.

An overhead track system ran throughout the building, from the wash house, to the blubber house, to the brine house. Hanging from the track were wooden carts — as many as three or four used to move skins around the building. The carts were painted green. The overhead track entered the blubber house from the wash house to the south, immediately to a switching station. Using a simple mechanical device attached to a hanging rope, the cart operator could direct the cart east or west onto the track servicing the

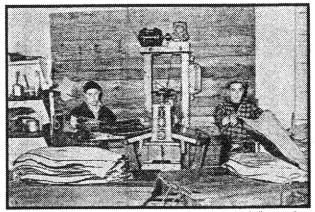


Figure 26. After the skins were removed from the brine tanks, they were put through a wringer like this one at St. Paul, to remove water.

blubber house. The carts were suspended from a roller assembly, and the operator had to push the cart by hand. In the last two years of operation — 1971 and 1972 — the overhead system was replaced with three sturdy rolling carts of slightly larger capacity.

The major fixture in the blubber house was a row of fifteen blubber stations, set in three banks of five stations each, lined up in an eastwest axis along the north side of the building. Each station consists of a blubber beam, a horizontal rail to hang skins on, and a compartmented box for knives. The north wall of the blubber house has fifteen windows, ganged in three sets of five corresponding to the blubber stations, to provide maximum natural light for the operation.

Behind each gang of stations, immediately to the south, was a long wooden table three in all. Unblubbered skins were tossed on top of the table, or draped over the horizontal rail beside each station. The blubberer took a fresh skin, arranged it over the blubber beam, and used a blubber knife to scrape the blubber off the pelt. He removed the ears with a second, smaller tool called a "tucker knife," so that they wouldn't snag the blubber knife and tear the skin.

The blubber beam was a smooth metalsheathed wooden board set at an angle pointing down to the north (Figure 22). To understand how the blubbering routine went, you should imagine leaning a small ironing-board against your midsection. The seal skin was draped over the blubber beam, held at the top with pressure from the blubberer's midsection, and then peeled of blubber one strip at a time using a long even stroke downward with the two-handled blubber knive. The work was done standing, leaning over

the beam. The blubber beam had a tension rod to adjust its height and angle to accomodate the height of each blubberer. Even so, the work was demanding, and it was common for blubberers to develop large blisters from rubbing against the beam.

The knife box at each blubber station contained three compartments, holding the two different kinds of knives. The blubber knife was a two-handled affair, like a draw-knife. The "tucker knife" was like a kitchen paring knife. The blubberers (Figure 23) were not responsible for sharpening their own blubber knives; one or two people were responsible for that, and they put the sharpened knives in one of two racks mounted at each end of the south wall.

When the skin was clean of blubber, the blubberer tossed it behind him to a large shelf built underneath each of the three large tables. An inspector looked over each skin, and sometimes returned them to the blubberer for a more thorough scraping. There are conflicting accounts as to whether blubberers were paid a straight rate per skin, but it is clear that some incentive existed to work quickly and efficiently. Each skin was counted again after it was blubbered.

The blubber that fell to the floor was scooped up with pitchforks and handled in various ways. A cement curb set back a few feet from the north wall helped channel the blubber against the wall, where it could be pushed to the center of the wall and out a small hole into a truck waiting outside beneath the north wall of the blubber house. From there it could be trucked to the dump. Or, it could be kenched. The Fouke Fur Company learned that blubber could be of value in the tanning process, and shipped many barrels

...one [wash] tank used to hold from 200-250 skins, and that was a full load for one tank. And we used to have about five tanks, altogether....they soak them in the tank for thirty hours....what my average was for blubbering used to be about 25 skins an hour, that was my average. And I used to blubber about 100 skins in about six hours, and that used to be a lot of work... I started blubbering when it was eleven cents a skin, and...25 cents was the highest I ever got....I was just about in my early twenties.

Andronik P. Kashevarof, Sr.

I used to love it, far as I know. I been at it for more than twenty years....my brother used to blubber here, too. Victor — Victor used to blubber down here, him and me....We all think it used to be fun.

Terenty Merculief

I worked 18 years on the blubber beam....I didn't like blubbering. The government didn't force you. But I had a wife, children...the faster you work, the more money. We'd argue when we got only large skins....I worked Station#12....We'd get blisters on our belly from rubbing on the beam, two and one-half hours, sweating. Nobody talked, you'd just hear "whooch, whooch, whooch, whooch" from the knives. The sound of hides slapping down on the rails was like waves crashing the beach.

Victor Malavansky, Sr.

The last season, when I blubbered, my beam was the last one over there. Each man had their own beam, because...some of them were short, you know, and here I'm tall... Andronik P. Kashevarof, Sr.

of it packed in salt back to St. Louis and Greenville. There was also an attempt to process the blubber with a large machine to make it more uniform and easier to handle. It consisted of a large (seven foot in diameter and fourteen feet long) set of concentric cylinders, brought off the supply ship in a baidar and installed in the basement under the blubber house in the late 1960s. Judging from my brief observations, it would seem that blubber was to be pushed — perhaps using centrifugal force — through successively smaller mesh in each of the metal cylinders. When it was forced through the outermost cylinder, with holes smaller than the shaft of a pin, water was sprayed from pipes to wash the fine material off and out a chute. When I talked with local people about it, they were all of the opinion that the apparatus never worked.

Workers skilled in blubbering were welcomed back each year, and many blubberers kept the same particular station year after year. People I talked to with blubber house experience remembered the distinctive noise of fifteen men

They're always two or three guys working with that trolley here.... Hand you the skins on the floor here, maybe five, six, seven, or Then the blubbering crew picks it ten. up...and start blubbering. ...there's a couple of guys, check every skin on this table, and make sure they're clean. If there's a little fat on it, they bring it back to you....After that...all those blubbered skins...went back into the brining tank. They brine those skins overnight. Let them turn. They used to have someone come down here and check those skins. Then from the brining tank, it goes to the wringer. Then go back to the...barreling department....And they make sure they roll them good....like the bread dough. Put them in the barrel. The barrel used to take about maybe 80, 80 to 90 skins. It depends on size of the skins. The barrel weighs about maybe 500 pounds....they put them on the scale, weigh them, take it outside, mark those barrels. And nobody were allowed to go by those barrels. From there, they wait for the supply ship to come up and pick it up. Navy supply ship. They go in the big transport, take it down to Seattle. I think from there they go to St. Louis, Missouri. They used to do a good job. **Terenty Merculief**

scraping blubber off skins. Terenty Merculief told me he remembered every once in awhile someone would yell "More skins" when the stock of fresh skins to be blubbered got low. Likely the wheels of the carts rolling along the overhead tracks would squeak as one or two men pushed it by. Victor Malavansky, Sr. remembers the punctuated "slap" of fresh skins draped over the horizontal rails beside each station. And Feddie Krukoff commented on the drone of the brine tank motors and the sloshing of the paddles. With its distinctive sounds and concentration of workers, the skin plant was a focus of activity in the community.

From the blubber house, skins were transported by cart to the brine house, using the double doors connecting the two areas. For a long time the final step was to salt the skins in a kench either blubbered or unblubbered — and barrel them, but in 1951 redwood brine tranks were installed to saturate the skins in a saline solution before barreling. According to local people, the first redwood brine tank – the one remaining



Figure 27. When the skins were dry, they were bundled in salt or borax and packed in barrels -- note man packing with his feet at right.

in the southwest corner of the brine house — was a used one brought over directly from St. Paul in two baidars lashed together. According to Thompson (1954:53-55) four new brine tanks were installed that year. The brine house plan by Samuel E. Shaw, drawn probably in 1951 prior to building construction, has spaces for four redwood brine tanks along the west wall.

The brine tank was favored because "it requires less time, is more satisfactory, and conserves labor" (Thompson 1955:74). Skins were placed in the tank, flooded with saline solution, and agitated by two constantly turning paddles that moved the skins in a clockwise direction (Figure 25). The two paddles each had six blades and a stainless steel two-inch diameter axle, and were connected by a gear box mounted on a redwood island in the center of the tank. A two-horsepower electric motor was mounted on one side (the north side in the case of the single remaining tank), to power the paddles. I was told that the high energy requirements of the redwood brine tank motors were one reason they were replaced with a concrete brine tank. The paddle assembly had a large sprocket, 35" in diameter, connected to the motor by a chain.

The salt box was an integral part of each

brine tank. The large redwood box was mounted on a platform, high enough so that it could drain into the top of the redwood brine tank. The platform was the operator's station. Bags of salt, both 50 and 100 pound size, were heaved up to the platform. The operator lifted the sack to a sturdy shelf on the side of the box, cut the sack, and poured in the salt. Saltwater was piped into the box at the same time, and the resulting mixture was piped into the brine tank when it reached a 100% salt solution.

A second person stood by the tank to flip the pelts down in the water and make sure none of them folded or caught in the paddle. If they did, they wouldn't saturate with salt properly and could spoil.

When they're wet they're very good to blubber....Once it get a bit soaked out of all the water, you know, it gets kind of dry, and it's a hard push.

Andronik P. Kashevarof, Sr.

Your upper weight do all the cutting, with the blubber knife. You run the knife. Don't let the knife run you! [laughs] Feddie Krukoff

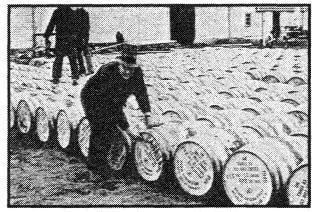


Figure 28. Packed barrels were stenciled on the lid and rolled outside to await the supply tender, as shown here at St. Paul.

When the concrete brine tank came on line, which appears to have been about 1967, the same basic tasks were largely continued. The paddles were configured differently, and each was run by its own motor, but someone still had to stand next to the tank to catch folded skins. A large auger system was installed to hoist salt up to the salt box, and the salt box was bigger, but the operator still mounted an elevated platform in the center of the apparatus to direct its workings.

When the skins had soaked in the brine tank for 24 hours, they were taken out and put through a large wringer to remove excess water. The wringer was a large free-standing machine with two horizontal rubber rollers powered by an overhead electric motor (Figure 26). One man operated the machine with a foot treadle, or "dead man's switch," which automatically disengaged the roller when foot pressure was removed. Locals differed as to where the wringer was located when in use, but it was probably in the east side of the building where the National Marine Fisheries laboratory is now.

Wrung skins were then stacked on redwood racks to dry for as much as a week. The drying racks were like long pallets, except the

Wringer machine....It works from the electric. The person who works on it have to really watch himself, not to get hurt, because it usually breaks down, too, once in a while. Just have to keep your eyes on the skin as they go through the wringer. If not they'll come out from the bottom or tear up the skins. There's two guys working on it. Terenty Merculief upper surface had a slight peak running down its length, with slats slanting down from that to help drain the skins. They were placed on the floor near the wringer, in the northeast corner where the concrete brine tank is now, and anywhere else they would fit.

Meanwhile, barrels in which to pack the skins had been accumulating upstairs in the attic above the brine house. Assembled barrels were shipped to St. George on the supply ship, and lightered to shore using baidars. Each assembled barrel contained the numbered staves to three more barrels, which were then put together in the cooper room in the south end of the attic. Each barrel of staves had a coarse burlap liner, perhaps to keep the staves damp and swollen. Barrel hoops and ends were also shipped with the staves, and all the parts were hoisted into the cooper room using the loading door cut into the south wall of the attic. After the barrels were assembled, usually well before the season started, they were stored in the center of the attic (finished lumber was stored in the north end). When they were needed downstairs, they were rolled to the stairs (which at that time had no turn as it does now, but instead led straight down into the barreling room). A flip-up ramp on hinges was lowered over the north half of the stairs to roll the barrels downstairs into the barreling room in the southeast corner of the complex.

The skins were ready for barreling as soon as they were dry. They were rolled in salt (and later borax), rolled tightly, counted, and crammed into barrels (Figure 27). The barrels would hold up to 90 skins, and could weigh as much as 500 pounds. This took place in the barreling room. The lid was put on, and the barrel was rolled onto a scale set into the concrete floor. The weight was recorded and entered on the barrel end. The barrel end was stenciled at some point to indicate its content, sponsor, destination, weight, and source ("G" within a diamond for St. George, "P" within a diamond for St. Paul). From the scale it was only a few feet out the door of the barreling room to areas outside the building (Figure 28) where the barrels were lined up pending arrival of the supply ship. When the supply ship had arrived and unloaded its cargos for St. George and St. Paul, baidars were used to haul the barrels of skins out for transport to the Fouke Fur Company in St. Louis. Everyone at St. George breathed a sigh of relief as soon as the cargo was on the ship, because from that point on it was insured.

Equipment Inventory

The equipment used to process seal hides at St. George ranged from portable hand tools to large stationary machines and built-in facilities. Most of the equipment remains in the building, but some smaller items like knives do not. The building contains at least two pieces of killingfield gear. In this chapter I list and describe the contents of the building in roughly the order that they were used. I will discuss the condition of the buildings, artifacts, and features, and point out those that seem to be missing.

Loading Dock

The loading dock attached to the west end of the wash house, where raw skins were passed through the windows into the wash tanks and kenches on the west wall, is still intact, as is the retaining wall beneath it (Figures 29, 30). The five concrete supports are in servicable condition, but the planks used for decking are rotten. On the east side of the building (where the seal pens are now), the unloading area was apparently unimproved, and trucks simply backed into the courtyard to off-load skins.

Killing Field Gear

Two of the tools used in the killing fields — the traditionally-used areas adjacent to rookeries where seals were culled and killed — are clubs, and skinning forks. The clubs used for commercial harvest were American hardwood bats manufactured for the purpose and shipped north from the west coast. One of these clubs was found in the building by contracted engineer John Smith, who described the artifact as slightly longer than a basefall bat, with much the same taper, but lacking a knob at the base of the handle. The bat is intact, tucked up on a platform in the far northeast corner of the wash house.

Skinning forks look like an odd potato fork. They're about four feet long, with a stirruphandle, and two tines at the fork end. A metal foot

I took these measurements from a whole seal club I...found near the blubber processor in 1975. The club is of ash, it is 5'2" long and 2 1/2" in diameter at the widest point. I 1/4" at the handle, and weighs 5 lbs. Like a baseball bat, it has a knob at the handle end. Like most others I have seen, this club is curved. According to Greg McGlashan, the clubs were soaked in water, then leaned in a corner to warp them as they dried. He said the clubbers preferred that shape over the straight shape that the manufacturer (which was said to be Louisville Slugger) provided. Clubs were plentiful in the 1970s. But in about the early or mid 1980s the company refused to make them any longer and they all but disappeared.

Roger L. Gentry



Figure 29. The skin plant, here looking southeast, is very near the shore and thus subject to ocean spray.

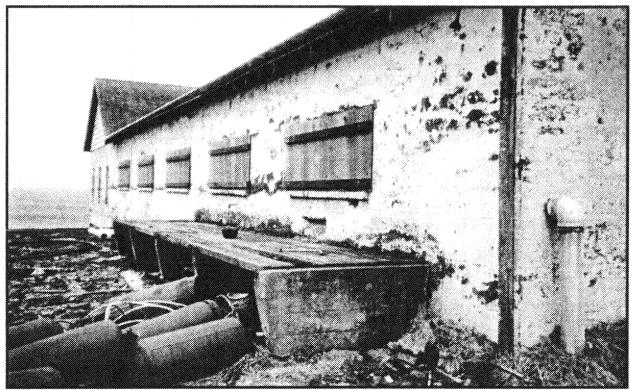


Figure 30. Skins were hauled up on trucks to this loading dock on the west side of the wash house, or to the east side, and thrown directly through the windows into wash tanks or kenches..

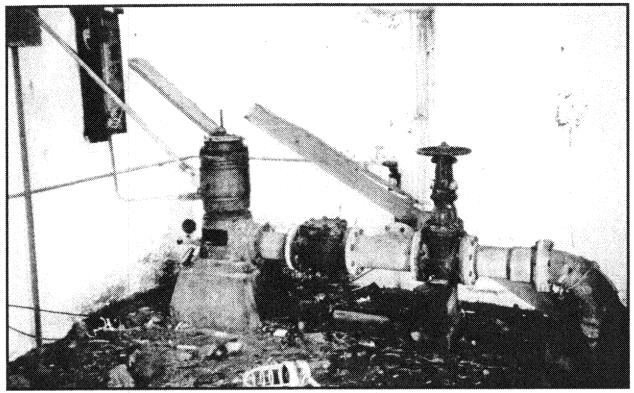


Figure 31. Saltwater was pumped from a pipe run into the sea, then later from this saltwater well drilled just west of the skin plant.

bar sticks out at a right angle to the wooden handle. The two tines are straight metal rods which are placed to straddle the dead seal's neck, so that a firm thrust down with the foot on the foot-bar effectively pins the carcass to the ground. Immobilizing the dead seal makes it easier to skin. Beginning with cuts around the head, the hide can be pulled from the body in one piece.

One of these forks, with the top of the handle missing, lies on the floor of the wash house. As with almost all items in the building, its metal parts are encrusted with rust. Two other forks, in better condition, are stored in the basement of Cottage C.

Electrical System

Electricity is still delivered to the seal plant building, but — aside from the renovated upstairs bunkhouse — primary outlets are live in only two locations: a large panel of circuit breakers at the south end of the washhouse, and in the newer partitioned laboratory and shop spaces in the southeast corner of the brine room. The large electrical panel in the wash house, wall-mounted and housed in a large plywood cabinet, was installed relatively recently during the period of operation, as Andronik Kashevarof, Sr. remembers when it wasn't there. Overhead flourescent light fixtures, most damaged beyond repair, are connected by partial runs of conduit through much of the building. Fixtures and partial runs of wire for an earlier overhead system can be seen here and there. Plans drawn in 1966 indicate that the motors for the redwood brine tanks in the brine house operated on 440 V power.

Water System

Salt water from the sea was piped in and used throughout the building. Originally, seawater was pumped through a pipe with its intake offshore, but later a well was drilled into the fractured rock on shore, and saltwater was pumped from the well to the building. A concrete pump house built around the well is intact (Figure 31), and is a contributing structure to the National Landmark. From a four-inch line into the building the system was stepped down to two-inch and smaller high-pressure outlets, and used in the washing and brining stages of hide-processing, as well as to wash down floors and other equip-

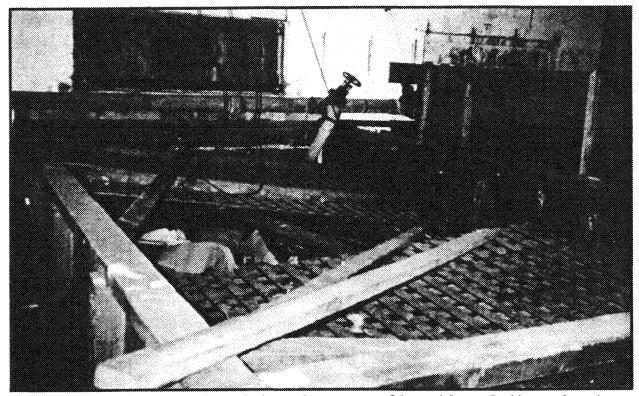
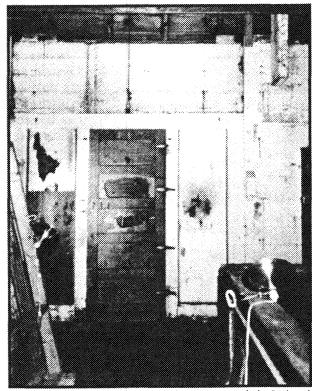


Figure 32. Each wash tank, like this one in the southwest corner of the wash house (looking northwest), was designed to hold 250 skins in salt water; note wash tank at right with sideboards.



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Figure 33. The counterweight at upper right helped lift and close the south door to the wash house, here shown looking south.

ment. Added to that was the overflow from the wash tanks (Figure 32) and the brine tanks, so that the floor of the building was awash with saltwater. The wash house and brine house each had a central drain, which is intact. Removable metal grates fit across the 13-inch wide trenches. Most if not all of the grates remain (Figure 34), and the brine house drain is still used.

Blubber House Entrance

The south and only external entrance to the wash house for people and gear was a large sliding door (Figure 33). The door slid vertically in framed slots with the aid of a counterweight. The counterweight is a rectangular concrete slab, probably poured in place with a rectangular form to achieve the proper weight. The whole apparatus is intact. However, it is nailed shut, so that a regular hinged, wood-paneled door must now be used. The present swinging door is painted brown, rather than white like its surroundings, and does not appear original. The sliding door was built to accomodate a hinged swinging door.

Wash House

The wash house is dominated by large redwood bins (Figure 32) on either side of a central walk-way. These are wash tanks, where hides were first soaked in saltwater before the blubber was removed. Their standard measurements are eleven feet by twenty feet, by about three feet high. The boards are of 2" milled redwood stock. The east side of the wash house has five tanks, spaced evenly with aisles on each side. Beginning on the south end of the west side are two more of the same dimensions. Each uses horizontal 2" x 6" redwood stock for the top-rail. Wooden floodgates, located at one corner of each tank to empty it, still have their wooden wedge keeping the gate in place (Figure 34).

The northern-most tank of the two on the west side is built to accomodate sideboards, to increase the volume of the tank. Two smaller bins further north on the west wall of the wash house are constructed differently from the others, but are also built to accomodate sideboards. One man said that the three tanks with sideboards were used only to kench blubber. The Fouke Fur Company, according to Thompson (1955, 1956, 1957, 1960), experimented with different techniques, and it took years for them to convert from the kenching (dry-salt) process to the brining process for curing skins. It is probable that the wash tank with sideboards was available to wash skins or kench them. Other kenches may have been built temporarily where the two 1976 examples are now located.

The condition of the wash tanks is good. The water system delivering saltwater to the wash house is in place but is likely inoperable. Seven wash tanks for hides and two kenches for blubber are in place, and local men say that's all there ever was. The "empty" floor space in the northwest corner of the wash house was said to be kept free as a staging area for various materials and tasks. The three bins with sideboards contain seal pelts acquired in subsistence harvests a decade ago (Figure 35). The pelts are imbedded in salt and retain some integrity, but foxes have gotten into the bins and damaged many. Local opinion is that the pelts's poor condition makes them useless.

When I photographed the wash house equipment, I grabbed a long pole out of a wash tank and used it to prop open the heavy hinged plywood lid over the breaker boxes. After looking at archival photographs (Figure 21), I believe Subsistence harvesting began on St. George in 1976. In 1974 and 1975 the government forced the St. George Natives to take fur seal meat from St. Paul so the St. George herd could remain fully untouched by humans. There were no kenches on St. George during those years....[and] no salt or skins...when I came in 1974. I assume from that that kenching was not a regular part of the skin processing that ended in 1972. The present kenches were assembled in 1976 to preserve skins of seals killed in the subsistence kill. Roger L. Gentry

that that pole and perhaps others were originally used to prop up the lath racks above the wash tanks.

In 1974 Dr. Roger Gentry and other National Marine Fisheries biologists, as part of a long-term research project, modified the five wash tanks on the east side of the wash house to serve as live seal pens. Using the existing redwood top-rails and 2" x 4" framing, a wire mesh partition was built to the ceiling to make five

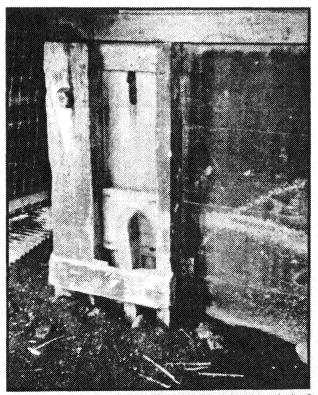


Figure 34. When the wash tank was to be emptied of water, a gate such as this one at the southwest corner of the southeast tank was opened by removing the wedge and the wooden panel behind it.

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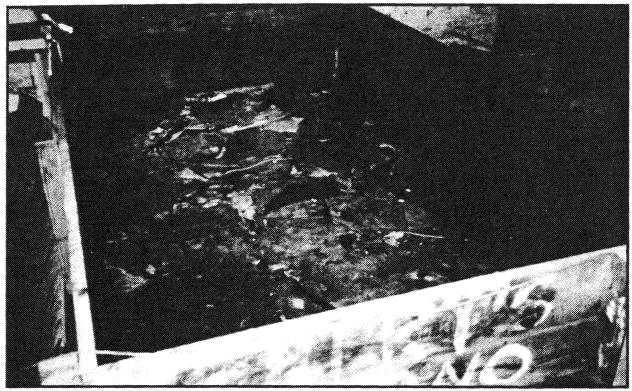


Figure 35. Hundreds of skins from seals taken for subsistence remain in the two kenches and the dual wash tank/kench.

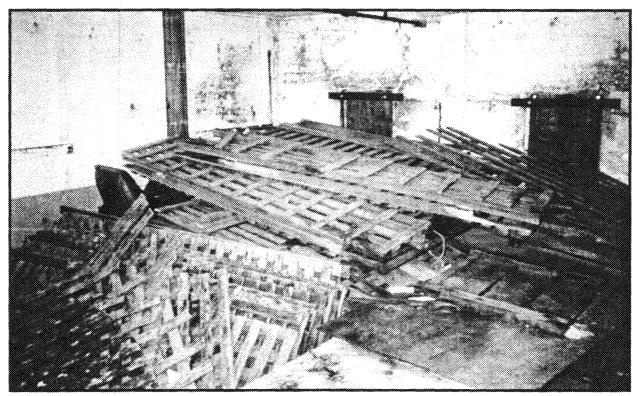


Figure 36. The redwood lath racks used to hold the skins down in the wash tanks are stacked in the southwest corner of the blubber house.

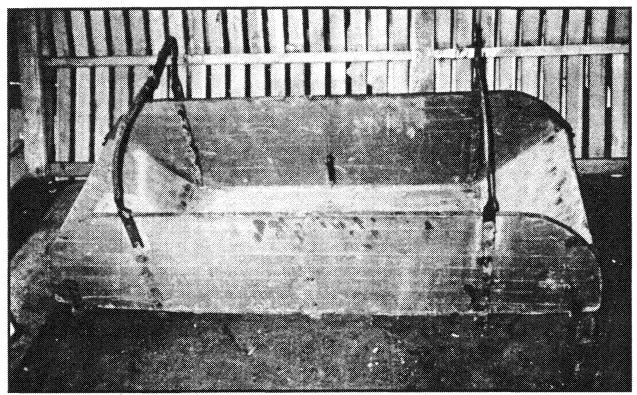


Figure 37. This cart moved on an overhead track, carrying skins from the wash house, to the blubber house, to the brine house.

pens. The five corresponding windows, through which seal hides used to be tossed from the incoming trucks, were made to serve as doors to the courtyard outside where the wire mesh partitions were extended to make outdoor runs for the animals. These modifications do not contribute to the historical significance of the building, but they are removable.

When the wash tanks were in use, large flat spacers of redwood lath were placed at intervals to press the hides down flat and evenly. The topmost rack was hinged to one side of the tank, and had a cable and pulley arrangement in the roof trusses to lift it. These stationary racks have been removed from the tanks, except for the one in the southwest corner, which is in place but has twisted hinges. Most of the racks are stacked in the southwest corner of the blubber house, where I counted over thirty sections (Figure 36). Several -- having a curved edge forming part of their perimeter -- were actually built for the concrete brine tank, I believe.

Overhead Carts

Skins were thrown from the wash tanks into wooden carts suspended on a metal track. A

central track runs north-south through the wash house to the blubber house, where a hanging rope (still there) operated a simple switch to send the cart east or west behind the men at the blubber stations. The east branch carried on to exit the blubber house and enter the brine house. One overhead cart remains in the building, on the floor in the blubber house. It is in fair shape, painted green, with metal hardware. The box is 28" wide, 20" tall, and 75" long (Figure 37). Three roller assemblies which connected the carts with the track are on the floor in the blubber house, near the overhead cart. Small mounds of loose rust surround the artifacts. It is not clear how many overhead carts were used during the operation, but the track layout, the trio of roller assemblies, and the number of operations the system served would suggest that at least three were in use. Plans prepared in 1966 for the concrete brine tank instructed the contractor to "relocate overhead trolley as required to serve new brine tank; use existing equipment."

Rolling Carts

Large rectangular carts on wheels were also used to move skins. There are three left in

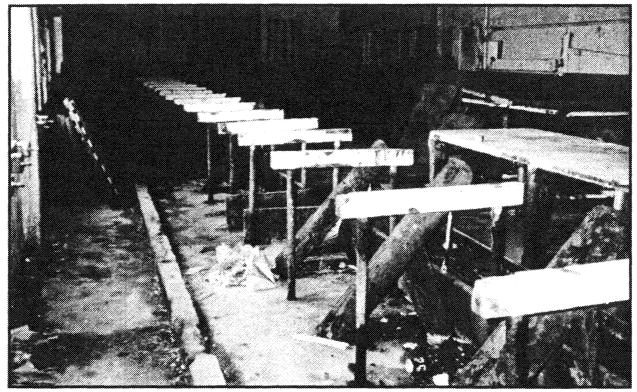


Figure 38. The blubber house still has its row of fifteen blubber stations, each with an angled blubber beam and a rail to put skins on, here seen looking southeast.

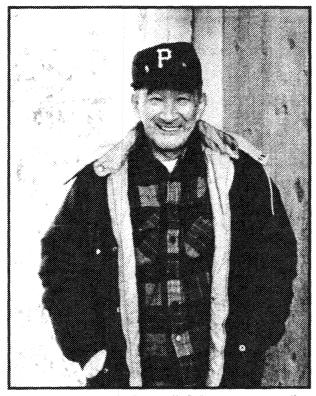


Figure 39. Terenty Merculief, here seen standing before the brine house, worked in the blubber house and provided information for this study.

the building — one each in the wash house, blubber house, and brine house (Figure 40). Each cart is of plywood and galvanized angle iron, on four heavy rubber-coated metal castors. The box is three feet wide, six feet long, and 21" tall. Although all three carts are somewhat corroded and battered, each appears servicable.

Blubbering Stations

Although other equipment is stored in the blubber room, its dominant feature is the row of 15 blubber stations along the north wall (Figure 38). The stations are ganged in three sets of five, with an aisle between each set. Each station consists of a blubber beam and a rail over which skins were hung. The blubber beam is of wood covered by sheet-metal, and angles down to the north. The angle and height of the beam was customized for each worker, using a turn-buckle beneath the beam. The horizontal wood rails are painted white, while the wood understructure is painted green. Two of the blubber beams are removed and laying nearby, and the overhead cart contains two more (extras). Otherwise, all the blubber beams are intact and in place. Each of the fifteen stations has a small three-compart-

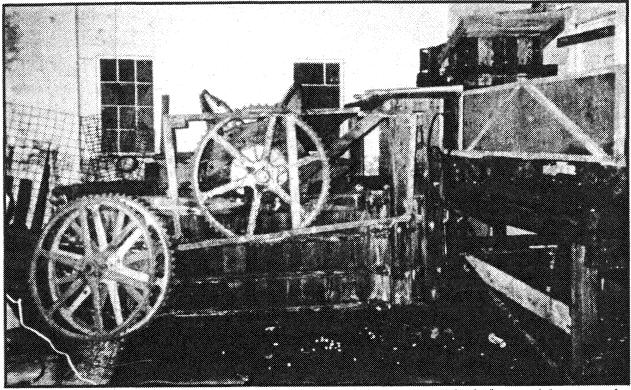


Figure 40. The redwood brine tank, here shown looking south, has an operator's platform at right, next to the saltbox; a wheeled cart is stored on the operator's platform.

ment box mounted near the rail, to hold knives.

Workers -- such as Terenty Merculief (Figure 39) -- stood up at the blubber stations, so no chairs or benches of any kind are present. Three long tables were positioned behind the blubber stations, to the south, with aisles in between corresponding to the aisles between the blubber stations. They measure three feet by twenty feet, and are very heavy. The top surfaces are painted white, with the understructure painted green. All three remain in good shape in the blubber house.

The knives used in the blubber house are no longer to be found there, but the racks in which they were placed do (see Figure 43). In addition to the knife holders found at each blubber station, there are two knife racks mounted on the south wall of the blubber house, painted white. Each has eight slots to hold eight knives horizontally.

Redwood Brine Tanks

There is one redwood brine tank left out of the four that once stood in a row along the west wall of the brine house (Figures 40, 41). The tub is of redwood staves 2 3/4" thick, in variable widths up to 5 1/2". Four tension rods surround the

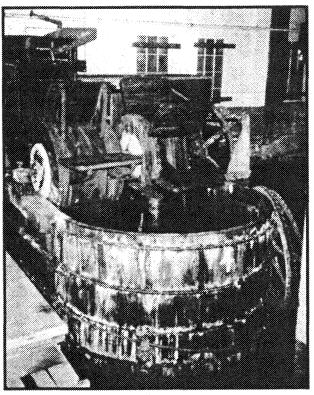


Figure 41. According to local people, the redwood brining tank, here shown looking northwest, was brought from St. Paul Island in two lashed baidars.

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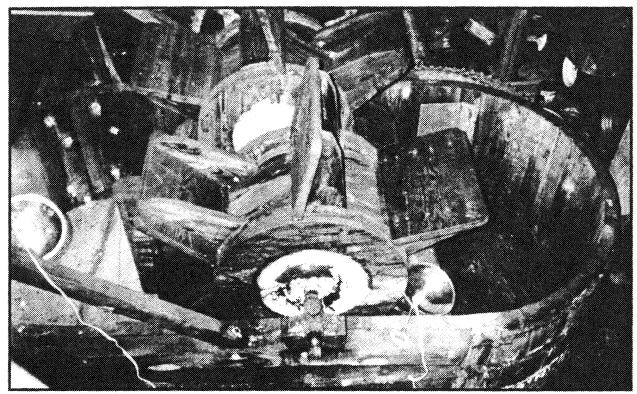


Figure 42. The two paddles in the redwood brine tank are geared to move skins around clockwise.

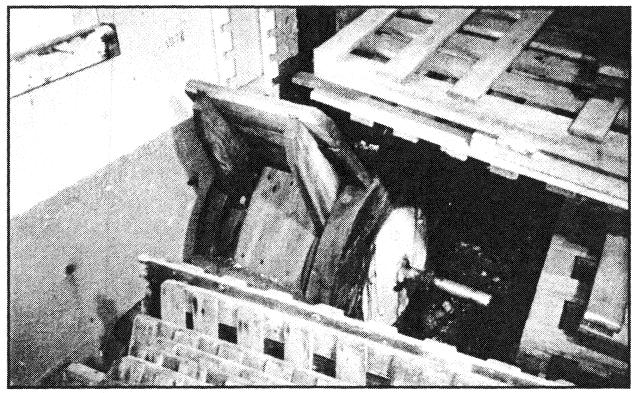


Figure 43. Two extra paddles for a redwood brine tank – probably salvaged from one of the discarded tanks – are stored beneath the stack of wash tank racks in the blubber house. Note blubber knife rack on the wall, and the stenciled "1972" – the last year the plant was in commercial operation.

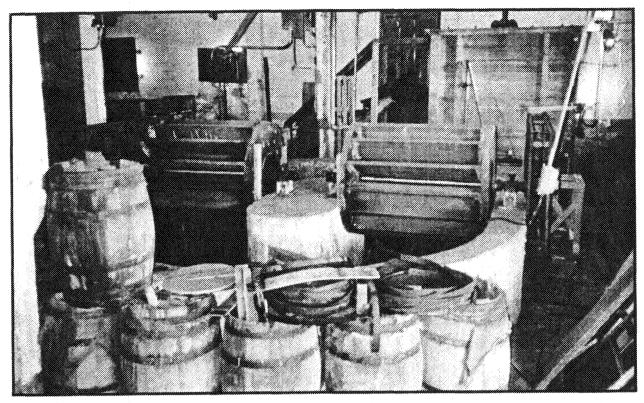


Figure 44. The concrete brine tank, here looking north, held up to 1000 skins.

staves to hold it in an oval shape, using long semicurved shims under the rods on the long axis of the oval to keep the pressure more uniform. The outside dimensions of the tub are 144" x 73", and its inside depth is 36". The tub's wood appears intact, but the second tension rod from the bottom has parted and fallen, leaving it only a matter of time before the staves loosen and collapse.

The paddles on the redwood brine tank are a pair of six-bladed drums, with paddles measuring 23" wide and 16" deep (Figure 42). I was told that a two-horsepower electric motor was mounted to run the paddles using large toothed sprockets and a drive chain. In addition to the sprocket remaining in place on the machine, three others are resting loose against the tank. On a redwood pedestal in the center of the tank a gear box connected the axles of the two paddles, so that their rotation was dependent. When I pushed against one of the paddles in April of 1993, the stainless steel axles still turned easily, one turning the other. Other metal equipment on the brine tanks is rusted; some are growing large white salt crystals. In the blubber house, in the southwest corner against the wall and half hidden by redwood lath, are two extra paddle assemblies (Figure 43).

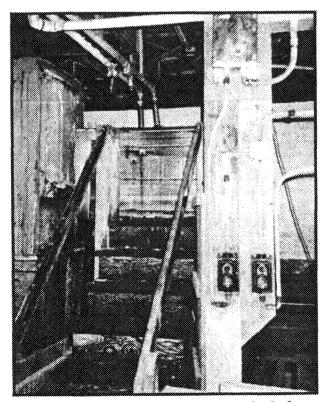


Figure 45. A stair leads up to the operator's platform, where he could watch the salt auger at left, the salt box at center and the concrete brine tank at right.

The St. George Seal Skin Plant, St. George, Alaska

The operator reached his station beside the saltbox, overlooking the brine tank, using a set of stairs up to a 42" high wooden platform. The platform has a floor of 2" X 12" planks, giving a surface area of 4' X 12'. Sacks of salt were stacked by hand on the platform, and the operator emptied them into the saltbox. The platform is still intact beside the redwood brine tank, although it is turned perpendicular to the tank in a way that would not be possible if a bank of four tanks remained in the brine house. The saltbox is also intact, and measures 52" deep. An extra saltbox for a redwood brine tank is stored in the blubber house. The saltboxes are made of 2" X 6" tongue-and-groove redwood.

The plans drawn for the brine house in 1951 show the four tanks with their salt boxes on the east. The as-built plan of the brine house drawn in 1966 (to install the concrete brine tank) also shows the salt boxes on the east. Now, however, the one remaining tank (labeled #1 on the plans) has its salt box on the west, against the wall. The 1966 plans requested that workmen take "existing brine tank No. 4" and "remove as directed." When #4 was removed, #3 went with it, according to Feddie Krukoff, who oversaw the operation.

Attachments for the redwood brine tank are more or less intact. Inside the redwood tank on the east side are two stainless steel flanges, one on each side, to help guide hides as they moved around the tub (clockwise). On the west side are a set of two redwood flanges, to help guide skins. A flimsey wood frame with a canvas cover is stapled to flip down and rest on the north paddle blade as it turns, probably to keep spray off the operator standing by the salt box. The light-weight lath and wire mesh chain guard for the drive train is broken.

Concrete Brine Tank

I recorded the concrete brine tank as I did the other equipment, with photography and notes written in my notebook. The people I interviewed didn't have much to say about the apparatus, except that it was installed relatively late in the period of operation -- sometime in the 1960s. My description of it in the draft report consisted of three short paragraphs. Weeks later I was sitting in the Anchorage offices of St. George Tanaq Corporation when Ed Philemonof, Executive Director, said "I think we have plans for that brine tank." He disappeared and returned with a We had a big problem with the wood paddle tanks. Every time we put in 150 skins, they'd roll up pretty bad, and we'd have to have one guy at the tank to unroll them, all night long. I had four tanks, that's all....I pulled them out of there myself, by the west door. I pulled two, and left two inside. Feddie Krukoff

rolled sheaf of six plans -- the complete set of government specifications drawn up to build and install the concrete brine tank. They were assembled in 1965 and 1966 by Roy Ellerman, for the U.S. Fish and Wildlife Service, and they allow me to discuss the equipment in more detail.

The large concrete brine tank takes up most of the northeast corner of the brine house (Figure 44). Its volume was not computed, but if it is identical to the "concrete paddle tank" built on St. Paul Island in 1952, it holds 5,000 gallons (Thompson 1954:53). All the walls are 12" thick, of poured concrete over reinforced steel, with the tank's bottom set about 20" below the existing floor slab elevation. The inside of the tank is four feet deep. The dimensions of the oval's interior are 13' (east/west) by 17'4" (north/south). A 6" drain pipe is installed flush with the bottom of the tank on its east side. In the basement, beneath the blubber house, are what may be the forms used to pour the tank.

The walls of the concrete tank appear relatively sound, and the two paddle drums are in place. I didn't try to rotate them. The 14 paddle blades are each constructed of two 2" X 8" planks to make a blade 13 1/2" deep. The blades are attached at each end to a round wood wafer or disk -- like a spool -- and are in good condition. The disk is four feet in diameter, of 3" X 12" Douglas fir planks, assembled with 3 1/2" stainless steel carraige bolts. The length of the axle, or shaft, on which each paddle turns is about 7'6" long, although one is slightly shorter than the other, according to the plans. The two paddle assemblies were not interchangable.

The two motors – one for each paddle – have been removed from their mounts. A photograph of the St. Paul example in early operation (Figure 25) shows the motor mounted perpendicular to a transfer box, which uses a chain to drive the large sprocket on the paddle (Thompson 1955:74). The plans call for a "Synchrogear electric motor, parallel shaft, double reduction, 5 HP, 30 RPM, 440 V. 60 cycle A-C, totally enclosed, AGMA Class II, equal to U.S.

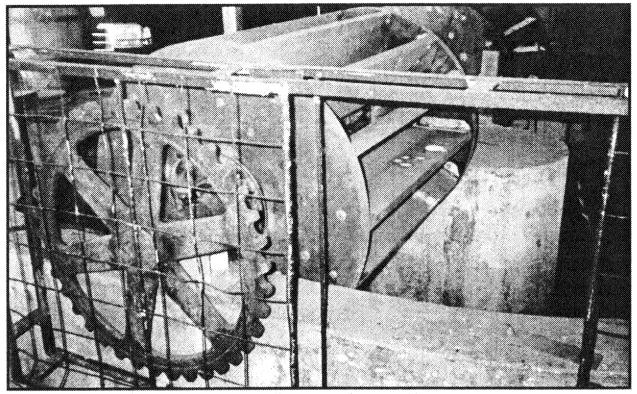


Figure 46. The concrete brine tank's two paddles were each powered by a separate motor.

Synchrogear Motor No. 254U-41." The metal chain guards remain but are rusted and loose in several places, while the chain is gone (Figure 46). The plans called for a chain "equal to Moline capper bearing Promal No. H-82, working load 3540 pounds." The motor and gear assembly also ran a circulating pump for the salt water. A 440 V magnetic starter was used for the motors, operated remotely by the operator at his station. The concrete tank was wired with industrial wire and heavy-duty circuit boxes and breakers, which are still in place, although not functioning.

The stairs, operator's station, and saltbox (termed a "lixator" in the plans) are also in good condition except for their metal brackets and parts (Figure 45). The housing for the salt conveyor is a rust-encrusted tower which may suggest the condition of the conveyor assembly within, but I didn't look inside. The distance between the two axles is over 12', for a total height of 16'. In the plans, the contractor was asked to "furnish elevator similar and equal to Linkbelt type 242, complete with adjustable head shaft, 8 x 5 buckets @ 16" spacing on 9" 4-ply rubber belt @ 225' per minute, low alloy steel case...1 HP Gearmotor totally enclosed, 440 V, 3 phase, 60 cycle, A-C current..." The plans called for lath racks to hold the skins down inside the tank, and I think they were made and are now stacked in the southwest corner of the blubber house along with the racks for the wash tanks. They are described as "wood batton 3/4" x 2 1/2" hold-down racks, battons @ 5" ctrs E. way, by government," and would be distinctive for their curved edges. However, the people I talked to at St. George said they didn't remember any such feature, claiming that -- if installed -- they would simply encourage the skins to hang-up and tear, and would prevent easy access to the tanks and skins. The racks may never have been used.

Wringer

A single wringer, used to squeeze water from the skins, is stored on its side on a pallet in the blubber house (Figure 47). Originally it was used in the brine house. I was told by Roger Gentry that there were two wringers left when he began research at St. George in 1974. The motor is missing from the remaining specimen, and no rollers are in place, but otherwise the assembly appears intact and in usable condition. Nearby on the floor are three long wooden shipping

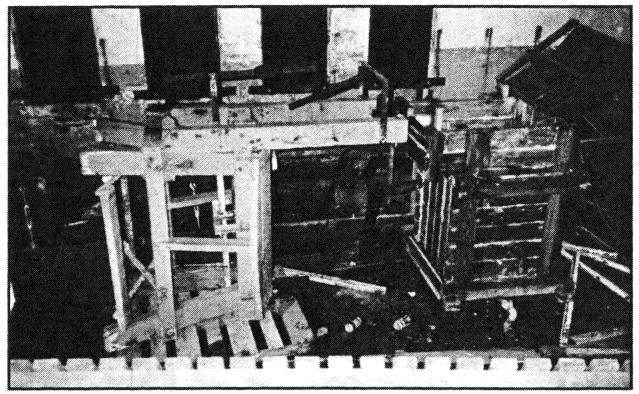


Figure 47. The wringer now lies on its side in the blubber house next to an extra salt box for a redwood brine tank; the workings of the machine are better visualized if the reader turns the page sideways.

boxes containing sets of rollers (Figure 48). Two boxes have two rollers each, and the third box has only one roller. One box displays a shipping tag from "Mechanical Rubber Division, American Wringer Co., Inc., Woonsocket, R.I."

Drying Racks

The drying racks, where skins went directly from the wringer, are now in the blubber house rather than their original location in the brine house (Figure 48). They are of 1" x 2.5" redwood stock, all four feet wide, and in variable lengths up to twelve feet long. They are built somewhat like pallets, except that the upper surface is not flat but rather has a slight pitch or angle to drain water to either side. I counted at least fourteen examples, mostly in the southeast corner of the blubber house, but there may be one or two more in the southwest corner among the stack of wash tank racks.

Barrels and Coopering Gear

Coopering, or barrel-making, took place upstairs on the second floor above the brine house, in a small room at the far south end.

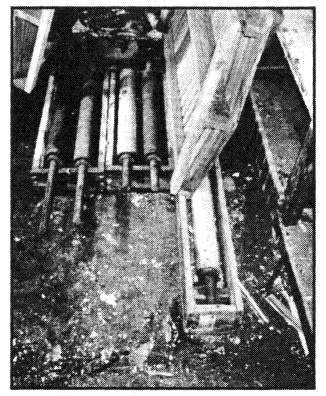


Figure 48. Extra rollers for the wringer lie near the wringer in the blubber house, with skin drying racks stacked on them.

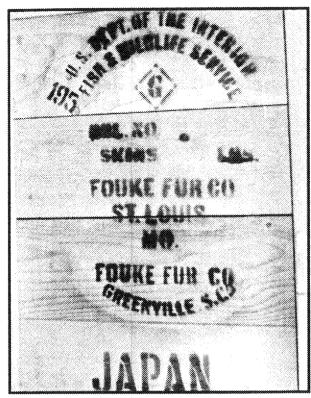


Figure 49. Each barrel end was stenciled like this imprint shown on the wall of the cooper room.

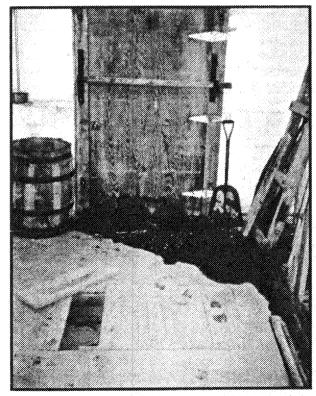


Figure 50. Removable boards cover the scale pit in the barreling room, here shown looking north, with the barrel exit shown at back.

Immediately adjacent to the north are two small storage rooms. A few miscellaneous plumbing parts -- left over from the period of operation -remain in the west room. All three rooms are largely as they were during the commercial period, although recent equipment and personal effects are now stored there. The remainder of the upstairs, where lumber and barrels were once stored, is now remodeled into a modern bunkhouse with full utilities. The fold-down ramp for rolling barrels down the stairs is no longer evident.

No coopering tools — hammers, etc. were observed in the building. Only two clues would suggest the room to be a cooperage. One is a bench nailed to the north wall of the cooperage, which has an arc cut from it to hold the edge of a barrel. Victor Malavansky, Sr., said that the cut-out helped to hold barrels when they were being assembled, while Terenty Merculief said that the table used to be located downstairs, where the cut-out held the edge of the barrel while skins were being packed in it (Figure 27).

The second clue consists of many barrel labels stenciled on the walls and ceiling (Figure 49). The label identified the agency - either U.S. Fish & Wildlife Service or Bureau of Commercial Fisheries, and the fur company. The Fouke Fur Company is stenciled using both its St. Louis, Missouri, and its Greenville, South Carolina, addresses. The Supara company is labeled on the walls, also, with a St. Louis address. The words "BLUBBER", "CANADA," and "JA-PAN" are also on the walls. A set of three years - 1956, 1954, and 1955 - is stenciled on one surface. It would appear that much of the equipment was packed and shipped to St. Paul in 1973, immediately after St. George's last commercial harvest in 1972, judging from one set of grafitti. In the 1970s there was a brass stencil in the building, according to Roger Gentry, but it has disappeared. According to Dr. Gentry, the stencil said "Fouke Fur Company, Greenville S.C.," but the word "Fur" had been carefully taped over so there was less indication of the barrel's contents.

Barrels are no longer stored in the attic. There are over a dozen in the brine house (Figure 44), most of which contain the numbered staves to construct three more barrels. They are intact, but their hoops are loosening, and some are already falling apart.

Some barrels contain unused hoops which have not yet been joined to make a circle. There

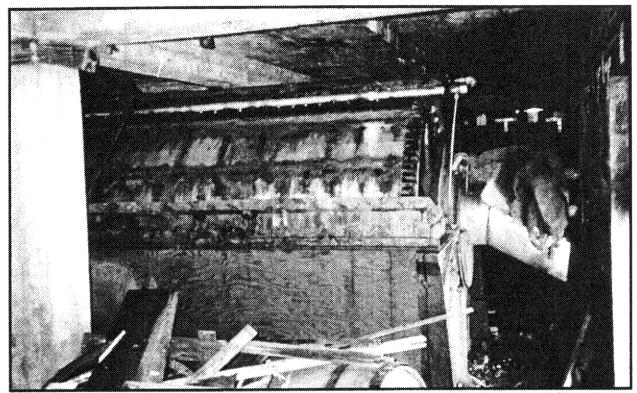


Figure 51. The blubber processor in the basement below the blubber house was installed in the 1960s and never worked very well, according to local people.

are several barrels in the barrel room, also. Under the blubber house, where the blubber processor is boarded up, are hundreds of unused hoops and perhaps that many staves. Some of the debris in the basement consists of barrels and barrels full of staves which have fallen apart in place. I found one barrel top down there on which was stenciled "ST. GEORGE ISLAND AAA."

Scales

The scales that once stood in the southeast corner of the building, in the barreling room, is no longer there. It was described as a commercial beam balance which used both sliding and detachable weights. Its whereabouts are unknown. The pit in which it once stood — a rectangular cut-out in the concrete floor — is still there, covered with short planks to form a smooth, safe walking surface (Figure 50). The wooden planks, of 2" stock, fit down into the hold and rest on a concrete shelf, and it is possible that they are original boards that were placed there after each season when the scales were cleaned and stored away under the hotel (Figure 5).

Blubber Machine

Downstairs below the blubber house is a large cylindrical machine intended to process blubber. When I talked with people at St. George. no one really knew how it worked, and in fact they were of the opinion that it never did work. The machine is seven feet high and seven feet wide, and twelve feet long. It looks like several large stainless steel cylinders were nested inside each other, each with progressively smaller mesh formed by holes in the metal. The outermost cylinder was perforated with at least 20 holes per linear inch. A pipe was stationed above the outermost cylinder, with nozzles pointing down at it, apparently to wash the fine blubber particles off and into a central conduit and out a chute pointing out the building towards the shore (Figure 51). Large gears protrude from the contraption, and it looks as if a motor was once attached to rotate the nested cylinders. Apparently, by rotating the drums fast enough, centrifugal force was expected to force the blubber through successively smaller mesh to pulverize it and make it easier to handle. Other than obvious rust, the

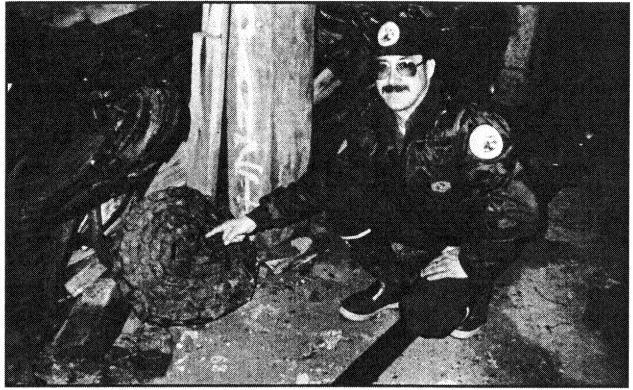


Figure 52. St. George harbormaster and resident Greg McGlashan, in the basement of the blubber house, points to a chain that may have driven either the blubber machine or one of the redwood brine tanks.

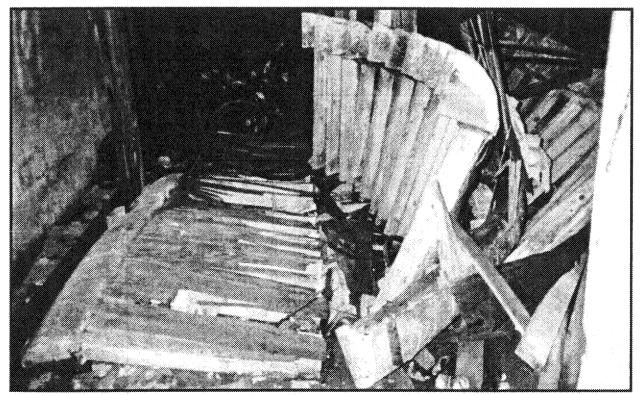


Figure 53. Also in the basement below the blubber house are these assemblies, which may be the forms used to pour the concrete brine tank.

condition of the machine is difficult to assess. If, as locals suggest, it was a prototypical machine that never worked, the blubber apparatus may be the only one in existance.

Equipment Summary

In the time since the period of significance, which for this building is 1950 to 1959, the federal government has altered the seal plant in several ways. The modern bunkhouse in the attic above the brine house is the most intrusive and irreversible of the changes. What was --- during the period of significance — a storage area for finished lumber and barrels called the lumber house, is now a fully-furnished living space with five bedrooms, a utility room, two bathrooms, kitchen, and lounge. The stairs, which formerly went down to the ground floor from west to east in one straight run, now turn halfway down and lead directly south to the exit door. There are now four windows in the north gable end, facing the sea, where there used to be two, according to Victor Malavansky, Sr. The three rooms at the far south end of the attic, where coopering and some storage took place, have not been remodeled. They do contain, however, building materials and personal effects stored by National Marine Fisheries personnel.

Downstairs in the brine house most of the floor has been cleared of skin-processing items, except for the two brine tanks (the redwood one in the southwest corner, and the concrete one in the northeast corner), and quite a few barrels. That space is now used to store federal equipment, and is packed with a skiff, inflatable rafts, four-wheelers, outboard motors, rope, plastic pipe, packing boxes, lumber, pickup trucks, and other gear. The barreling room in the southeast corner of the brine house is used as a shop, and contains power equipment and flourescent lights, enclosed by a relatively new (non-contributing) partition that also defines the remodeled stairwell. A set of three recent (non-contributing) partitions in the east-central portion of the building defines a laboratory space full of metal laboratory cabinets, lockers, and veterinary supplies. Right beside it in the exterior wall the concrete has been cut to contain a metal garage door, facing east. That door was in place by 1974, according to Roger Gentry, and was replaced in 1992. These alterations significantly detract from the brine house appearance during the period of significance, yet all but the attic bunkhouse and garage door are easily reversible.

The wood and wire caging over the five wash tanks in the east side of the wash house, built by federal biologists in 1974 to make live seal pens, does not date to the period of significance. Most of it is easily removable, however, and appears to have damaged the wash tanks very little. Similarly, the wood and wire mesh pens in the courtyard are non-contributing features, and are easily removable.

The treated plywood and timber battens over the windows, basement doorways, and some doors are recent additions made by U.S. Fish & Wildlife carpenters in 1992, but they, too, are easily reversible. The basement doorways at one time had frame partitions to wall off the interior, but they were not at all like the present plywood. Some of the debris entombed in the basement is non-contributing commercial fishing trash, but much of it appears to be associated with the seal skin activity (Figures 52, 53).

The majority of the original equipment remains in the building. Major pieces missing include the other three redwood brine tanks, which were reportedly removed during the 1960s when the concrete paddle tank came on line; the one remaining redwood tank was relegated to processing female seal skins. The condition of the equipment is variable; generally, the redwood items remain in good shape, while metal items are horribly rusted and corroded by the constant exposure to salt. The exceptions are some stainless steel items, such as the paddle axles for the brine tanks, and heavily painted parts such as those on the wringer.

Just as the seal plant building is a single structure contributing to the whole National Historic Landmark, the equipment in the seal plant is only a part -- although the largest part -of the equipment needed to pursue the fur seal industry. For example, the remains of the trucks used to haul skins from the killing field to the plant are likely discarded on the island somewhere. Similarly, baidars -- used to haul supplies from the ship and barrels of skins to the ship, and also to haul the redwood brine tank from St. Paul and the blubber machine from the supply ship -are also discarded on the island (Figures 54, 55). Two are in the city machine yard in town, and one is at the harbor at Zapadni. While the undertaking focused upon the seal plant will not affect these objects, it is useful to view the seal plant equipment in a broad context.

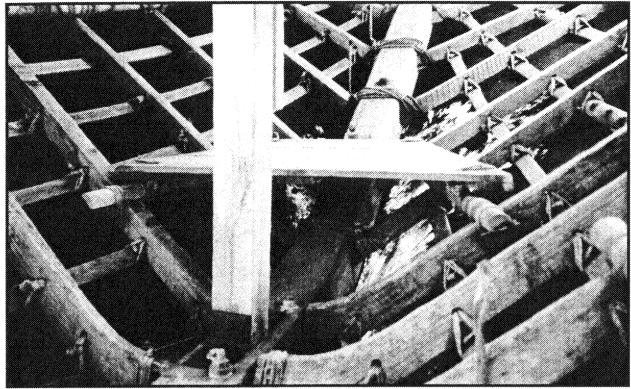


Figure 54. Lashing details can be seen in this interior view of a baidar's bow at St. George, here figured upside down for the reader (the boat is stored upside down).

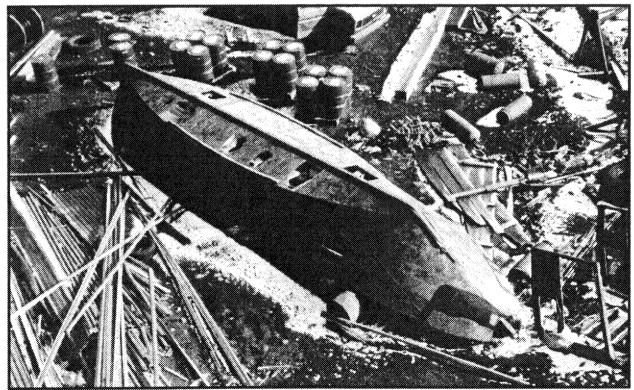


Figure 55. The size (40 feet long and seven feet wide) of one of the two baidars in the St. George city equipment lot is apparent when compared to the 55 gallon drums and truck next to it.

The St. George Seal Skin Plant, St. George, Alaska

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Historic Engineering Significance

Historic Engineering Significance

The seal plant is a structure contributing to the Seal Islands National Historic Landmark (NHL), but its significance is not the main focus of this study. Instead, the emphasis is on the significance of the equipment inside the building. My job was to help the SHPO, National Park Service, National Marine Fisheries, and others understand how stabilization of the building might affect historically significant equipment. Knowing the date a piece of equipment was placed in service is important, because if it does not date to the period of significance as defined in the original NHL documents, then it may be of less concern in the Section 106 process.

The period of significance for the Seal Islands NHL is 1786 to 1959, according to the documents prepared by the National Park Service. Pribilof's discovery of the island in 1786 is taken as the beginning of the period of significance, but the terminal date of 1959 (Alaska statehood) is less clearly justified. For the St. George seal plant, all of the machinery was placed in use after June of 1950, since that is when the prior building burned (I got conflicting accounts as to whether the wash tanks were salvaged from the older building). The only portion of the older building remaining is the barreling room, whose three standing walls were incorporated into the southeast corner of the brine house.

The historical significance of the Seal Islands NHL lies in the themes of industry, conservation, and ethnic heritage, according to the nomination documents. The building contributes to the Landmark and thus contributes to

The Seal Islands possess outstanding historical significance to the themes of industry, conservation, and ethnic heritage. 1786-1959, the period of significance, encompasses a consistent pattern of development, administration...and industry from discovery to Alaska statehood. National Park Service (1986), in the National Register nomination for the Seal Islands National Historic Landmark

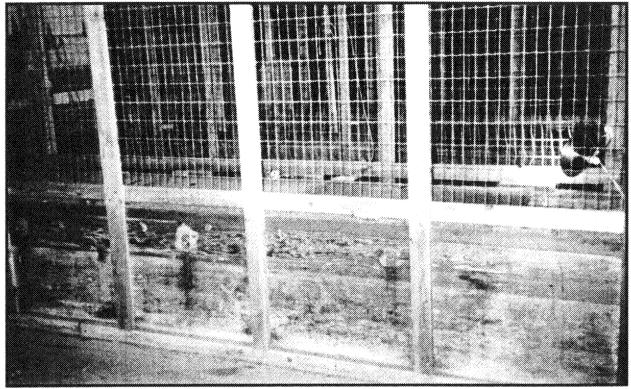


Figure 56. The five wash tanks along the east wall of the wash house have been made into live seal pens by the addition of lumber frames and wire.

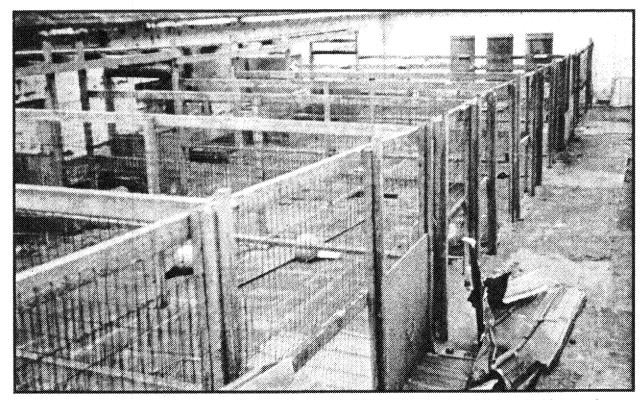


Figure 57. The seal pens continue outside in the courtyard of the building, here shown looking northwest.

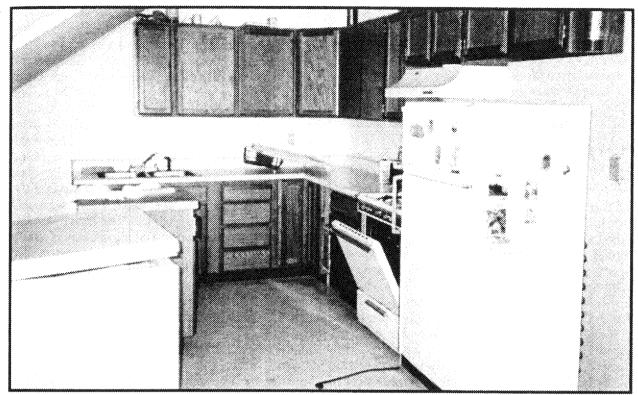


Figure 58. The kitchen in the modern bunkhouse has modern appliances.

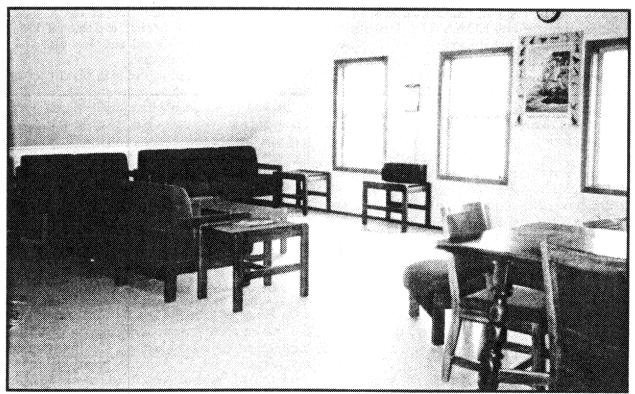


Figure 59. The living room in the modern bunkhouse above the brine house, here shown looking northwest, is in the far north end of the building.

The main original function of the building that was obliterated by our (actually my) changes was turning the former barreling room into a shop. Originally the room held a long wooden bench with a huge ventilator fan going through the shed roof. Under the fan, skins were rolled in borax. This bench and the ventilator were removed so we could put in the wall that separates the hallway from the shop. Roger L. Gentry

all three themes, as does the machinery, but the machinery especially relates to the theme of Alaska industry. Without the machinery, there would have been no seal skins processed.

The St. George equipment compares well with that left at the St. Paul plant, I'm told. I've not inspected the St. Paul facility, but NPS's Sandra Faulkner told me that much more of the historically significant machinery has been removed there. This is consistent with the nomination document, which describes equipment in the St. George plant and makes no mention of equipment in the St. Paul plant (National Park Service 1986). Besides, technology had advanced in the time between the 1972 St. George closing and the 1984 St. Paul shut-down: a photograph published by NOAA (U.S. Department of Commerce 1976:26) shows a bank of power equipment at St. Paul, above a caption that states "In years past, the fat (blubber) was removed manually from the sealskins. Machines are now used for this phase of the operation."

It's likely that the St. George plant is a uniquely intact representative of the entire global fur seal industry. Fur seal populations in New Zealand, South Africa, Soviet Union, Tierra del Fuego, Falkland Islands, Australia, and elsewhere have been commercially exploited, but none received the management necessary for sustained commercial yields as in the Alaska population (Born 1952:3383-3390). I have not, as part of this study, looked into whether processing plants similar to the Pribilof examples were built elsewhere or whether they still exist. Roger Gentry thinks not, saying "at the height of fur sealing, the Pribilof facilities were the most sophisticated in the world. By contrast, all the other sealing nations, Russia, South Africa, Uruguay, had primitive buildings where the processing

was carried out mostly by hand with little equipment."

It would appear that most of the skin processing equipment in the plant dates to the period of significance. The seven wash tanks were probably put into service in 1951. The redwood lath racks for the wash tanks are significant. The two kenches were built in 1976, after the period of significance, in an area of the wash house where kenches were commonly assembled (during the period of significance). Since kenches were made to break down, it is possible that the two kenches now in the wash room were assembled from an original kit. The overhead cart system is from the period of significance, while the rolling carts are not. The blubber stations are as they were originally designed and installed, so they are significant. The redwood brine tank dates to 1951. None exist at St. Paul, so this example may be the only one in the world. The concrete brine tank was designed in 1965-1966, and was probably installed for use in the 1967 season. Even though it misses the significant interval by a few years, the apparatus has high interpretive value (and it would be difficult to remove). The wringer and rollers are significant, as are the drying racks. The blubber processer in the basement beneath the blubber house postdates the period of significance, and never worked anyway, according to local people. But it is associated with the industry.

Facilities built in the skin plant by National Marine Fisheries personnel during the 1970s and 1980s are not historically significant. The wood and wire cages built over the five wash tanks in the east side of the wash house, to make live seal pens (Figure 56), are not historically significant, nor are the ones in the courtyard (Figure 57). The NPS, in preparing the nomination documents, stated that the seal pens were consistent with the building's historic use, but it's debatable whether biological experiments with live seals can be functionally equated with the commercial handling of seal skins. The document goes on to note that the pens are removable. But the modern bunk house in the attic above the brine house is less so. While the cooper room and the two adjacent storage rooms retain their historic integrity, the bunk house is startlingly out of place (Figures 58, 59), and does not contribute to the building's historic significance.

Conclusion

Thanks to the help and information provided by the people of St. George and elsewhere, I was able to accomplish my goal. The intent was not to determine whether the building was historically significant, because it is already listed as a contributing structure to the National Historic Landmark. Instead, my goal was to describe the skin-handling process and link it with the equipment in the building, to determine which machinery is historically significant and which is not. The oral testimony provided a crucial part of the puzzle. In addition, I recorded accounts of the building's destruction by fire in 1950, and its rebuilding. This was useful to John Smith and Wally Fraser in assessing structural flaws and restoration options.

Their report (Alpha Engineering Group 1993) recommends both architectural and structural rehabilitation. Architectural tasks include removing the live seal pens in the courtyard, painting the building's exterior, and replacing an exterior steel door. The barreling room would be re-roofed, and moss would be removed from the wood shingles roofing the east side of the brine house. Options for window repair are to either reinstall the plywood and Plexiglass where it is in place now, or install new windows and repair existing ones.

Recommended structural rehabilitation includes a concrete-testing program, a limited foundation investigation, repair of spalling concrete walls, and replacement and repair of columns and beams in the basement below the blubber house. Special finishing and forming techniques are proposed to retain the historic character of the building.

This cultural resource report, and the technical report by Alpha Engineering Group, will be compared by the SHPO, NPS, and other interested parties to help resolve any possible conflicts between the necessary rehabilitation and the historic integrity of the building and its contents. For example, the deterioration of the basement columns (Figure 60) demands atten-

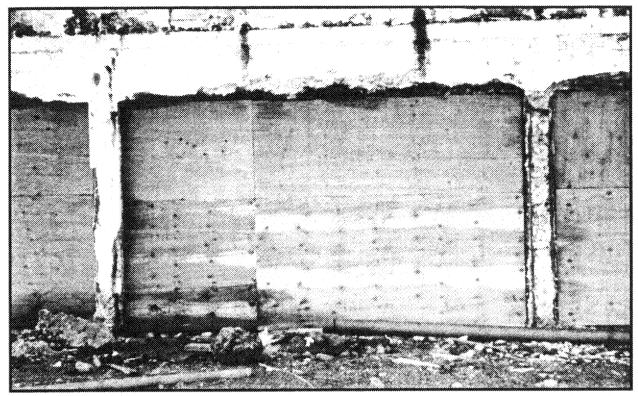


Figure 60. Spalled concrete and rusting reinforcement rod show at the northwest corner of the building (here looking south), beneath the blubber house. The openings were boarded up with plywood in 1992.

tion, but it would be difficult and dangerous to pour concrete under there without first removing the accumulation of barrel hoops, staves, wire, shingles, pipes, nail-studded boards, concrete spalls, and other detritus (Figure 61). Yet some -- perhaps most -- of those items relate to the skin plant and its operation.

Similarly, the blubber processor is a large machine which was installed with less than 2" of clearance between it and the concrete beams above. There is probably no handy way to pour new beams or repair the old ones without remov-

The wash house and blubber house alone contain about 95% of the total concrete damage and the brine house and barreling room contain the other 5%. The most serious deterioration occurs in the blubber house basement where concrete columns and beams will have to be removed and replaced....We feel that the concrete repair work can be accomplished under the following conditions: 1) All contents of the basement, including the blubber processor, will need to be removed. All other (moveing the apparatus. It apparently post-dates the period of significance, but it is in keeping with the theme of the National Historic Landmark. Elsewhere, like in the blubber house, Alpha Engineering Group believes repairs can proceed if the building's movable equipment is gently shifted and protected.

In 1992 U.S. Fish & Wildlife Service carpenters used treated plywood battens to board up the basement beneath the blubber house (Mobley 1992). The battens must be removed to repair structural defects in the concrete, but they

able) equipment can be moved slightly and protected to allow repair of the walls....Repair of the concrete will require that large areas of walls, slabs, and columns be replaced....To simulate the contours, tolerances, and textures of the shiplapformed, cast-in-place concrete walls, special finishing techniques will be developed that will preserve the character of the structure, restore structural integrity and protect areas of sound concrete.

John Smith, Alpha Engineering Group

Conclusion

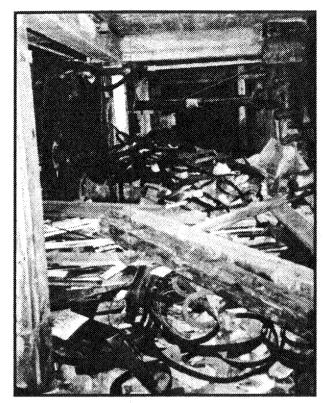


Figure 61. The floor of the basement beneath the blubber house is littered with debris, much of which is associated with the skin processing. Note the south end of the blubber processor at left (looking east).

can be replaced. During the period of significance, all the large openings were framed and sided with horizontal boards. Photographs show doors and windows (Thomas 1990:96). Chunks of the original exterior wall remain amid the debris piled in the basement, so that architectural details could be reconstructed, if desired.

The people of St. George Island have an intimate relationship with the sealskin plant, and I thank them very much for sharing their experiences in this report. The property is unique, in our global history as well as our local history. To the Fouke Fur Company, St. George, along with St. Paul, was the cornerstone of their interna-

Figure 62. The official logo of the Fouke Fur Company featured a fur-coated woman amid two hemispheres. Note the words "Alaska Fur Seal."

tional position in the world fur seal market (Figure 62). To the federal government, the industry was an interesting, and lucrative, management responsibility. And from the people of St. George, I got the impression that the comings and goings of the supply tenders, with their incoming cargos of goods and empty barrels and their outgoing cargos of skins, seemed as natural and welcome as the arrival of the seals each year. The fur seal industry was the foundation of their life on the island. It is fitting that the St. George skin plant be recognized as a cornerstone of the Seal Islands National Historic Landmark. The St. George Seal Skin Plant, St. George, Alaska

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