

Whaling in Alaskan Waters

Whaling may seem barbaric, but it has a long history in the North. It was a “boom and bust” industry. Within about 80 years, the whaling industry went from insignificant to world dominance and back to insignificant. There are 77 species of whales, but the most valuable have been baleen whales. Baleen whales are generally larger and slower than toothed whales, making them easier prey for traditional hunters. Sperm whales were also favored by hunters for their large quantities of spermaceti, used to produce oil for heating and light.

Native History of Whaling (500 BCE to 1800 CE)

The Inupiat are known to have hunted the bowhead for at least 2,500 years. Whale hunters went to sea in fragile walrus-hide umiaks or the smaller kayaks, with only toggle-head harpoons and seal-bladder floats as tools. The float served to both slow and tire the whale after it had been harpooned, and to mark the kill; a wounded whale could sometimes run for days, and it was a true test of endurance for the umiak crew to keep up. If the hunt was successful, these brave men were highly respected. With the arrival of Russians in Alaska in 1741, in pursuit of the then-abundant sea otters and fur seals, many natives were forced into market hunting, often in conditions that they knew were too dangerous. In 1800, 64 men in 2-man baidarkas were lost in one storm while whale-hunting for the Russians.

Commercial Whaling begins in 1835

Commercial whaling began in Alaska in 1835 when the New England Whaling Ship the *Ganges* hunted for whales in the Gulf of Alaska. Many whalers from New England followed this first ship around the southern part of South America to access Alaska. At this time in history, the U.S. dominated the whaling industry. In 1846, more than 525,000 barrels of whale and sperm oil were produced. Whaling crews employed 20,000 men across the country. The U.S. owned 640 whaling ships, more than the rest of the world put together *and tripled*. The industry contributed \$10 million (in 1880 dollars) to the economy. When the whaling products arrived back in New England, they were sold to agents or factories, who would then sell the product to oil factories, soap factories, or other agents. Exports in the 1850's averaged \$1.8 to \$3.6 million per year. More than \$2 million was spent annually in New England towns for voyages each year. By 1846, 29 American whaling ships sailed to SE and SW Alaska. Two years later, in 1848, Captain Thomas Roy's ship *Superior*, from New York, began bowhead whaling farther north in the Bering Sea. By 1850, more than 1,719 whales were killed with an additional 348 killed but not recovered (catch value = \$14 million for 1850). The *Superior* had such a successful season that in 1852 more than 200 whaling ships came to hunt bowhead whales in the Arctic. The year 1852 was the peak season, with 2,682 bowheads killed. Catches after that were extremely erratic, with none caught in 1855 or 1856; never again did the catch reach 600 animals in a season.

This time period was known as the "Golden Age of Whaling". During this period, the sperm whale was also very sought-after, because of the quantity of oil it contained, and because it floated when killed, whereas most species sink to the bottom. The crews were paid based on the number of barrels of oil they brought back to port. A voyage to get 2,000 barrels of oil

might take three to four years. The individuals profiting the most from whaling at this point in the industry's history were often East Coast investors who financed the voyages. Crews were paid a "share". Captains were paid 1/12 to 1/16 share, mates 1/20 share, and so on down to green hands who were paid 1/200th share. The entire crew was paid about 30% of the total proceeds. After expenses, the rest of the proceeds were profit for investors and ship owners.

Dangers aboard a Whaling Ship

In one of the more bizarre events in Alaska's whaling history, the U.S. government bought 40 whaling ships, filled them with stones, then deliberately sank them to block the harbors of Charleston, South Carolina, and Savannah, Georgia during the Civil War. Throughout the War, Confederate ships from the South often attacked whaling ships because they were from New England ports in the North. In one week in 1865, most of the fleet was destroyed. The Confederate Navy raider, *The Shenandoah*, brought the Civil War to the Arctic Ocean for 7 days from June 22 – 28, 1865, capturing 24 ships, burning 20 of them, and taking the crews prisoner. A more common way to die was when whaleboats were trapped and crushed by winter ice. While whaling could be extremely profitable, it was also very dangerous; in September 1871, 32 of the 41 ships whaling in the Bering Sea were trapped by early ice, forcing 1,200 people, including some women and children, to flee in small boats across up to 60 miles of ice-choked seas to reach safety. All but one of the ships, the *Minerva*, were crushed by the ice and lost the following spring. Salvage crews were, however, able to save 1,300 barrels of oil and \$10,000 worth of baleen from the wrecks; the local Eskimos salvaged a great deal of material from the wrecks, but some of them died after drinking from bottles they found in the ships' medicine chests. Five years later, another 12 whaleships were lost near Point Barrow; this time, 50 men died trying to escape.

Market Shifts from Oil to Baleen

The whalers took such risks because whaling was profitable. Although the price of whale oil dropped by half in the 1870s, the price of baleen rose. This came about because the best sources of baleen, bowhead whales, had dropped in number and because new uses for baleen developed. Between 1875 and 1900, baleen replaced oil as the most valued product of whale hunting. It was the chief plastic-like material of the period. Baleen began to be used in corsets and skirt hoops. It was also used for brushes, buggy whips, fishing rod joints, plumes on military hats and helmets, punch bowl ladles, and umbrella ribs.

Arrival of Steamships

The efficiency of commercial whaling increased dramatically in 1880 with the arrival of the *Mary and Helen*, the first whaler equipped with both sails and a steam engine to operate off the Alaskan coast. Not being reliant on vagaries of wind, this type of ship could follow the whales more closely, and stay on the hunting grounds longer. The ship had a very successful first voyage, arriving at San Francisco in the fall of 1880 with 2,350 barrels of whale oil and 45,000 pounds of baleen.

Whaling Stations

In 1884, the Pacific Steam Whaling Company of San Francisco established a whaling station at Point Barrow. The station was to take whales in spring as they moved nearer to shore to their summer feeding grounds. Whaling ships could not enter arctic waters until the ice broke in late June. Shore stations copied Native methods of catching whales at narrow leads in the ice. This first shore station in the arctic was so successful that within a few years 15 stations operated along the coast. They stretched from Cape Thompson to Point Barrow. Each station outfitted as many as 20 crews, composed mostly of Natives. Native whaling techniques were similar to those used by New England crews, with one exception: Natives attached their harpoons to sealskin floats, New Englanders attached their harpoons to their boats. A harpooned whale could take a New Englander's boat on a wild ride.

Commercial Whaling Moves North

Venturing east of Point Barrow was considered to be particularly hazardous, as the short ice-free season would force the ship to winter over in the ice. By 1888, however, whale populations had dropped to the point where new hunting grounds were needed. That summer, the Pacific Steam Whaling Company (PSWC) sent the first whalers into Canadian waters. They returned the following summer to report that bowhead whales were "thick as bees" near what would soon become the primary whaling base of the Beaufort Sea, Herschel Island.

In 1890, the PSWC sent the *Grampus* and the 90-foot *Mary D. Hume* to Herschel Island; they harvested 37 whales in the summers of 1891 and 1892. Two years later, the *Mary D. Hume* docked at San Francisco with a cargo of whale oil and baleen valued at \$400,000; it remains the most valuable U.S. whaling cargo ever.

The socio/economic structure aboard the "average" whaleship was a study in contrasts, and resulted in frequent serious conflicts. Many of the seamen were recruited from among the waterfront drifters in ports around the Pacific, and the violent lifestyle continued on board. The officers, though, were often well-educated and cultured; despite the brutal weather conditions, many of the captains brought along their wives, and sometimes children, on these multi-year voyages.

Impacts to other Wildlife

While they waited for annual whale migrations, the commercial whalers began to hunt walrus, another source of oil. Hunting walrus was easier than hunting whales. One person with a rifle could kill 100 animals stretched out on an ice floe. The rifle's noise would not disturb the walrus. Whalers took more than 100,000 walrus between 1868 and 1880. This slaughter severely decreased the Eskimos' food supply. Some ship captains realized that the Eskimos faced starvation because of this. They warned that continued walrus hunting could end with extermination not only of the walrus, but also of the Natives who depended on them for food.

Baleen Market Drops

Soon after the turn of the century in 1900, the signs became clear that the boom years of whaling were gone forever. By 1907, the price of baleen had dropped 75%, from a high of \$7

per pound, to 50 cents per pound; two years later, the market had virtually disappeared as spring steel and other metals replaced baleen. At the same time, improved petroleum distillation techniques were rapidly lowering demand for whale oil. Some recovery in the market for whale products was regained by using various parts of the whale for dog food, and grinding up the rest for fertilizer. From 1908 on, the few remaining arctic whaling ships were outfitted for fur trading voyages.

Although the Bering and Beaufort Seas had been two of the prime whaling grounds in the world, virtually all of the handful of remaining whalers gave up in 1912 due to the dwindling market and increasing costs of doing business in the Arctic. Operating costs, however, were much lower in Southeast Alaska, and dozens of shore-based whaling stations operated there well into the 1930s.

Whaling Continues in Other Regions across Alaska

The United States Whaling Company also operated in Southeast Alaska, at Port Armstrong near the southern tip of Baranof Island. The company killed 314 whales in 1912, its first season of operation. Modern harpoon guns were partly responsible for the high kill. These guns replaced traditional hand-thrown harpoons. They could throw a bomb-tipped harpoon 120 feet. After such a harpoon struck a whale, its bomb would explode inside the whale. Only one third as many whales were caught in 1913, however, and catches remained low in following years. In 1923, the company moved to New Zealand.

A group of Norwegians started a shore whaling station on Akutan Island in 1907. Incorporated as the Alaska Whaling Company, the operation changed its name to the North Pacific Whaling Company in 1915. The renamed company started a second station at Port Hobron, Sitkalidak Island, off Kodiak Island. Both stations operated into the 1930s, serving a growing market for dog food and fertilizer made from whale meat.

A different kind of whaling was attempted in Cook Inlet and at Nome between 1915 and 1920. Beluga whale hides could be made into soft gloves. Nets with large, deflated, rubber tubes on their upper edge were used. Whalers stretched the nets across rivers. When tides came in and the water rose, the nets sank to the bottom as the belugas entered the rivers. Then the tubes were inflated, the nets rose to the surface, and the belugas were trapped behind the nets. When low tide came, the small whales could be easily taken. The demand for whale skin gloves passed quickly, and all of the beluga whaling operations ended about 1920.

Factory Ships

In the 1920s, a new whaling era began. Large factory ships appeared. These ships could take entire whales aboard through large stern slipways. Complete processing aboard ship made whaling independent of shore bases. Japanese ships entered the Bering Sea in search of fin and right whales and soon were hunting in the Arctic Ocean. Japanese and Russian ships also hunted blue whales in the North Pacific Ocean off Alaska's coasts. New techniques and unrestricted whaling soon drastically reduced the world's population of whales, including those found in Alaskan waters.

Greatly improved equipment in the 1920s and 1930s, including the use of huge factory ships which could process the whales at sea, increased the slaughter to such a degree that world-wide attention focused on the possibility of hunting several species of whales to extinction.

The Decline of Commercial Whaling

The whaling industry was also affected by the pre-war discovery of petroleum in Pennsylvania, where the world's first oil well went into production. Petroleum oil gradually replaced whale oil in many uses such as lamp fuels and lubricants.

Beginning in 1931, international conferences discussed possible limits on whaling. In 1937, the first International Whaling Agreement was signed by several nations, including the United States. Although Alaskan Eskimos are allowed by the International Whaling Commission (IWC) to kill 50 bowhead whales each year, there is presently a great deal of controversy surrounding these decisions.

Whaling began again after World War II. Japan and Russia sent most of the commercial whalers that operated in the North Pacific. Although an International Whaling Commission was established after the war to set whaling quotas, overhunting in Antarctica soon caused the Japanese and Russians to increase their whaling efforts in the North Pacific. In 1966, Japan, Russia, the United States, and Canada met to set quotas for North Pacific whale catches.

Subsistence Whaling Continues

In the late 1970s, whales became the subject of a controversy that reached far beyond Alaska's borders. Beginning in 1977, the International Whaling Commission, whose members included the United States, temporarily banned all bowhead whale hunting.

Alaska's Eskimos thought this was unreasonable and set up an Alaskan Eskimo Whaling Commission to protect their interests. The whale hunt was important to Eskimo culture. Members of the Alaska Eskimo Whaling Commission explained, "To be a Native, one must hunt. To be an Eskimo, one must hunt the bowhead." The bowhead whale hunt gave Eskimos a sense of their heritage.

After negotiations that involved allowing the Japanese to take an additional 5,681 sperm whales, the Eskimos were allowed a subsistence quota of 12 bowheads. In subsequent years, the International Whaling Commission slowly raised the bowhead quotas for Eskimo subsistence use, but never to a level satisfactory to the Eskimos. This issue is still debated today.

Today, limited whaling is permitted for subsistence communities in the Arctic. Villages such as Barrow and Nuiqsut along Alaska's coastline can harvest a specific number of whales for the community to share. The landing of a whale is an important part of Native culture in the Western and the Far North regions of Alaska.

Sperm Whale (*Physeter macrocephalus*): * Grows to up to 60 feet long, weighs up to 63 tons; * Follows its food supply through the world's oceans – is generally found in colder seas in summer and in temperate and tropical waters in winter; * Feeds on small fish, squid, giant squid; * Dives to depths of at least 3,300 feet – deeper than any other marine mammal; * Holds its breath while submerged for up to 90 minutes; * Displays enormous teeth on its lower jaw; * Was the principal prey of the nineteenth-century American whale-fishery; * Haunted Captain Ahab in the classic American novel, *Moby-Dick*.

Baleen Whales (*suborder Mysticeti*)

Baleen whales do not have teeth. Instead, they are distinguished by baleen, which hangs in strips from the roofs of their mouths. Baleen is composed of keratin, a substance found in nails, claws, horns, and hoofs. It looks like hairy, vertical venetian blinds. The whale uses it to strain out krill (masses of small shrimp-like crustacea that float near the water's surface) from sea water..

Right Whale (Northern Right: *Eubalaena glacialis* and Southern Right: *Eubalaena australis*): * Grows to up to 60 feet, weighs up to 100 tons; * Migrates through temperate waters from Florida to southern Canada; *

Known as the “right” whale to hunt, (it was often close to the beach, visible to its land-based hunters and provided a large supply of blubber) it moves slowly and floats after being killed. It was pursued first by both Europeans and Americans. It is the most endangered of all whales, with a total population probably not exceeding 400.

Bowhead Whale (*Balaena mysticetus*): * Grows to about 60 feet in length and weighs 100 tons or more; * Prized by whalers for quantity and quality of its blubber and baleen; * Carries the thickest blubber of any whale (20-28 inches), an adaptation to the icy Arctic waters in which the species lives; * Possesses longest (10- to 14 feet) and largest number (600) of baleen plates.

Gray Whale (*Eschrichtius robustus*): * Grows to up to 48 feet long, weighs from 25-30 tons; * Migrates 12,000 miles roundtrip – longest migration of any whale species – from the frigid waters of the Bering and Chukchi Seas, where it summers, to the warm lagoons of Baja California, where it winters; * Considered ferocious by whalers, who called it “devil fish.” Present almost affectionate interaction between whale watching humans and gray whales