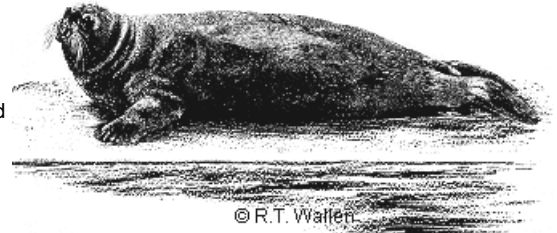




Bearded Seal

Bearded seals (*Erignathus barbatus*) are the largest seal in Alaskan waters and they are found in the Bering, Chukchi, and Beaufort Seas, typically in shallow water that is at least seasonally ice covered. *Erignathus* means deep jaw and *barbatus* refers to the long vibrissae or whiskers. Bearded seals have become the most important species of seal for coastal Alaska villages because they provide large quantities of meat, oil, and skins for umiaks (skin boats) and boots. Alaskan Eskimos refer to the bearded seal as ugruk in Inupiaq and maklak in Yup'ik. Skin boots are called maklaks and it is thought that long ago when someone asked for the Yup'ik name of the skin boots, the wearer thought he wanted to know what they were made of and answered bearded seal (maklak).



General description: Bearded seal belong to a group called pinnipeds, which includes other seals, sea lions, and walrus. Seals cannot walk on their hind legs and they do not have external ears. Bearded seals are one of four northern seal species that rely on ice for feeding, resting, and pupping; these four species are collectively called "ice seals." Bearded seals are the largest of the ice seals and adults can be nearly 8 feet (2.4 m) long from the nose to the tip of the tail, not including the hind flippers. They weigh up to 800 pounds (360 kg), in late winter and spring when they are heaviest. Pups are usually 4 feet (132 cm) long and weight about 74 pounds (33.6 kg). Coloration of adults range from silver-gray to dark brown and they have no distinctive markings. They have a small head in proportion to their body, long whiskers, square-shaped foreflippers, and four rather than two mammary teats as found in other ice seals. Bearded seals typically have 34 small teeth that they wear down quickly and seals older than 9 years rarely have teeth that extend above the gum line and so they appear toothless.

Food habits: Bearded seals primarily feed on the bottom, usually in water less than 650 feet (200 m). They eat a variety of benthic invertebrates (crab, shrimp, clams, and snails) and bottom fish (sculpins and flatfish).

Life history: Female bearded seals begin to reproduce at 5–6 years of age and males become sexually mature at 6–7. Females are capable of having one pup every year, but may pup less often depending upon food availability. Females usually give birth to a single pup on top of the ice in late April or early May. Pups weigh about 75 pounds (34 kg) at birth and are about 4 ft (1.3 m) long. Bearded seal pups are born with a soft grayish-brown natal coat called lanugo that is shed about one month after birth when the adult pelage is grown. Pups rapidly increase their weight to around 190 pounds (86 kg) in a nursing period that may last a month. Most of the weight gained is blubber.

Most bearded seals breed around late May or early June just after weaning their pups. Pupping, suckling, and mating occur on the seasonal sea ice within a period of a few months. The active gestation period for bearded seals is only 8.5 months. A 2.5 month delay in the implantation of the fertilized embryo corrects the timing so that the pups are born the next spring. The total gestation period, including the delay in implantation, is 11 months.

Seasonal movements: Bearded seals are thought to move south as the ice advances in winter and north as the receding ice edge from the Bering Sea into the Chukchi and Beaufort Seas. The northward migration occurs in late spring and summer when large numbers of bearded seals migrate through the Bering Strait. Juvenile bearded seals tend to be less associated with ice and are often found in ice free areas such as bays and estuaries. The Native village of Kotzebue, in cooperation with agencies, captured bearded seal pups and released them with satellite transmitters glued to their backs. Bearded seal pups tagged near Kotzebue in October ranged as far north as the village of Wainwright in October and as far south as the Pribilof Islands in December. A few went to Russia, as far south as the Kamchatka Peninsula.

Behavior: Bearded seals can create breathing holes with their claws but do not tend to maintain them in shorefast ice like ringed seals do. Bearded seals are usually solitary animals that can be very wary of their surroundings. They rest close to a hole or crack in the ice so that a quick escape is possible. Bearded seals are less wary of boats and humans in May and June when they "bask" on the ice to increase their skin temperature in order to facilitate the molt. Bearded seals have good vision and hearing, and at least a fair sense of smell. It is common for a bearded seal to surface in the vicinity of a boat, dive then resurface a safe distance away.

Male bearded seals vocalize during the spring breeding season using four types of calls: trills, ascents, sweeps, and moans. Each male has a unique call and males return to a specific breeding territory each year for mating. Scars on the males indicate that fighting may be involved in defending territories as well. Eskimo hunters follow the sound of singing bearded seals to hunt them.

Population size: There are no reliable population estimates available. Population estimates are extremely difficult to attain for ice seals due to the remoteness of their habitats and the amount of time they spend in the water where they cannot be seen to be counted. The population of the Bering and Chukchi Seas was estimated from aerial surveys in the 1970s at 250,000 to 300,000 bearded seals. Bearded seals are not currently listed as 'threatened' or 'endangered' under the Endangered Species Act, nor are they listed as 'depleted' under the Marine Mammal Protection Act.

Predators, hunting, and other mortality: Bearded seals are preyed upon by polar bears, killer whales, man, and possibly walrus. Polar bears attack bearded seals while they rest on the ice. The frequency of predation or importance of bearded seals to polar bears is unknown. Killer whales probably do not target bearded seals but prey on them opportunistically where their ranges overlap in the Bering and Chukchi Seas. Bearded seal skin has been found in walrus stomachs but it is unclear whether walrus kill bearded seals or if a dead seals are scavenged. Alaska coastal residents from Kuskokwim Bay to Kaktovik rely on bearded seals for food (meat and seal oil), skins for their umiaks (skin boats), clothing, and rope. There are no current estimates of the statewide subsistence harvest of bearded seals, but the Ice Seal Committee and the Alaska Department of Fish and Game are working toward collecting annual harvest information. The Ice Seal Committee (an Alaska Native Organization) and the National Marine Fisheries Service entered into a co-management agreement in 2006 to work together on management and research issues related to all ice seal species, including bearded seals.

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