

Walrus occur infrequently in the Beaufort Sea, and although individuals are occasionally seen in the Beaufort Sea, they do not occur in significant numbers to the east of Point Barrow. If walrus are observed, they are most likely to be seen in nearshore and offshore areas during the summer open-water season. They will not be encountered during the ice-covered season.

Walrus sightings in the Beaufort Sea have consisted solely of widely scattered individuals and small groups. For example, while walrus have been encountered and are present in the Beaufort Sea, there were only five sightings of walrus between 146° and 150°W during MMS sponsored aerial surveys conducted from 1979 to 1995.

Pacific walrus mainly feed on bivalve mollusks obtained from bottom sediments along the shallow continental shelf, typically at depths of 80 m (262 ft) or less. Walrus are also known to feed on a variety of benthic invertebrates such as worms, snails, and shrimp and some slow-moving fish; and some animals feed on seals and seabirds. Mating usually occurs between January and March. Implantation of a fertilized egg is delayed until June or July. Gestation lasts 11 months (a total of 15 months after mating) and birth occurs between April and June during the annual northward migration. Calves weigh about 63 kg (139 lb) at birth and are usually weaned by age two. Females give birth to one calf every two or more years. This reproductive rate is much lower than other pinnipeds; however, some walrus may live to age 35–40 and remain reproductively active until late in life.

#### *Polar Bear*

Polar bears (*Ursus maritimus*) occur in the circumpolar Arctic and live in close association with polar ice. In Alaska, their distribution extends from south of the Bering Strait to the U.S.-Canada border. Two stocks occur in Alaska: the Chukchi-Bering seas stock, whose minimum size is approximately 2,000; and the Southern Beaufort Sea stock, which was estimated in 2002 to have 2,273 bears.

Females without dependent cubs breed in the spring and enter maternity dens by late November. Females with cubs do not mate. Each pregnant female gives birth to one to three cubs, with two-cub litters being most common. Cubs are usually born in December. Family groups emerge from their dens in late March or early April. Only pregnant females den for an extended period during the winter; however, other polar bears may burrow in

depressions to escape harsh winter winds. The reproductive potential (intrinsic rate of increase) of polar bears is low. The average reproductive interval for a polar bear is 3–4 years. The maximum reported age of reproduction in Alaska is 18 years. Based on these data, a female polar bear may produce about 8–10 cubs in her lifetime.

Ringed seals (*Phoca hispida*) are the primary prey species of the polar bear, although polar bears occasionally hunt bearded seals (*Erignathus barbatus*) and walrus calves. Polar bears also scavenge on marine mammal carcasses washed up on shore and have been known to eat anthropogenic nonfood items such as Styrofoam, plastics, car batteries, antifreeze, and lubricating fluids.

Polar bears have no natural predators, and they do not appear to be prone to death by disease or parasites. The most significant source of mortality is humans. Since 1972, with the passage of the MMPA, only Alaska Natives are allowed to hunt polar bears in Alaska. Bears are used by Alaska Natives for subsistence purposes, such as consumption and the manufacture of handicraft and clothing items. The Native harvest occurs without restrictions on sex, age, number, or season, provided that takes are non-wasteful. From 1980 through 2002, the total annual harvest in Alaska averaged 107 bears. The majority of this harvest (69 percent) occurred in the Chukchi and Bering Seas area.

Polar bears in the near-shore Alaskan Beaufort Sea are widely distributed in low numbers, with an average density of about one bear per 30 to 50 square miles. Polar bears congregate on barrier islands in the fall and winter because of available food and favorable environmental conditions. Polar bears will occasionally feed on bowhead whale carcasses on barrier islands. In November 1996, biologists from the U.S. Geological Survey observed 28 polar bears near a bowhead whale carcass on Cross Island, and approximately 11 polar bears within a 2-mile radius of another bowhead whale carcass near the village of Kaktovik on Barter Island. From 2000 to 2003, biologists from the Service conducted systematic coastal aerial surveys for polar bears from Cape Halkett to Barter Island. During these surveys they observed as many as 5 polar bears at Cross Island and 51 polar bears on Barter Island within a 2-mile radius of bowhead whale carcasses. In a survey during October 2002, we observed 109 polar bears on barrier islands and the coastal mainland from Cape Halkett to Barter Island, a distance of approximately 350 kilometers.

#### **Effects of Oil and Gas Industry Activities on Subsistence Uses of Marine Mammals**

The subsistence harvest provides Alaska Natives with food, clothing, and materials that are used to produce arts and crafts. Walrus meat is often consumed, and the ivory is used to manufacture traditional arts and crafts. Polar bears are primarily hunted for their fur, which is used to manufacture cold weather gear; however, their meat is also consumed. Although walrus and polar bears are a part of the annual subsistence harvest of most rural communities on the North Slope of Alaska, these species are not as significant a food resource as bowhead whales, seals, caribou, and fish.

#### *Pacific Walrus*

The Pacific walrus has cultural and subsistence significance to Alaska Natives. Although it is not considered a primary food source for residents of the North Slope, walrus are still taken by a few Alaskan communities located in the southern Beaufort Sea along the northern coast of Alaska, including Barrow, Nuiqsut, and Kaktovik.

The primary range of Pacific walrus is west and south of the Beaufort Sea. Accordingly, few walrus inhabit, or are harvested in, the Beaufort Sea along the northern coast of Alaska. Therefore, the effect to Pacific walrus of Industry activities described in this rulemaking would most likely be minimal, as they would affect only those individuals inhabiting the Beaufort Sea. Walrus constitute only a small portion of the total marine mammal harvest for the village of Barrow. From 1994 to 2002, 182 walrus were taken by Barrow hunters as reported through the Service Marking, Tagging, and Reporting Program. Reports indicate that only up to 4 of the 182 animals were taken east of Point Barrow, within the geographic area of these incidental take regulations. Furthermore, hunters from Nuiqsut and Kaktovik do not normally hunt walrus east of Point Barrow and have taken only one walrus in that area in the last 13 years.

#### *Polar Bear*

Within the area covered by the regulations, polar bears are taken for subsistence use in Barrow, Nuiqsut, and Kaktovik where Alaska Natives utilize parts of the bears to make traditional handicrafts and clothing. Data from our Marine Mammal Management Office indicate that, from July 1, 1993, to June 30, 2002, a total of 194 polar bears was reported harvested by residents of Barrow; 26 by residents of the village of