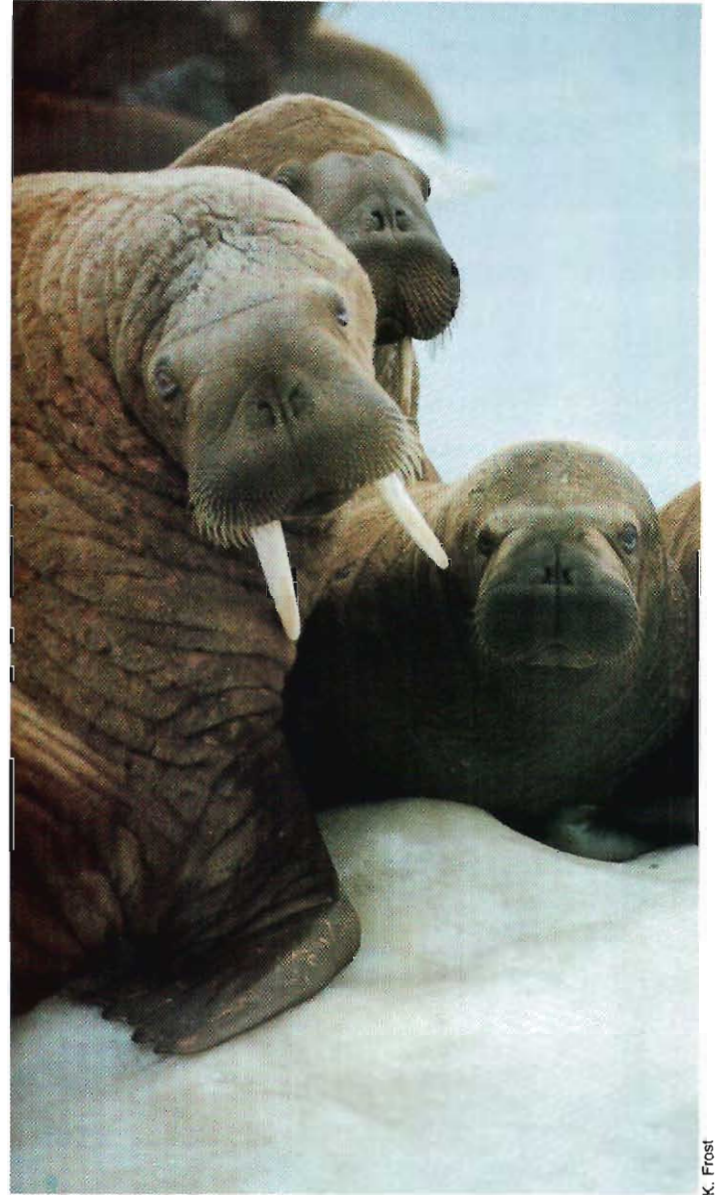


FACTS ABOUT WALRUS

by John Burns



K. Frost

Walruses are members of a widely distributed group of marine animals known as pinnipeds, a group that includes the seals and sea lions. Walruses are the largest pinnipeds in arctic and subarctic seas. They are most commonly found in relatively shallow water close to ice or land. Their geographical range encircles the polar seas.

Two forms are presently recognized: Pacific walrus (*Odobenus rosmarus divergens*) and the Atlantic walrus (*Odobenus rosmarus rosmarus*). The principal differences between the two are in the longer tusks and larger size of the Pacific walrus, but there are several other, less noticeable differences. The groups may be regarded as closely related but geographically separated subspecies.

Today, Pacific walrus far outnumber their Atlantic cousins. The population of the Pacific subspecies was estimated at about 250,000 animals in 1980. They are the mainstay of several Eskimo villages. Their flesh is used for food, their skins as boat coverings, and their intestines for making rain gear. In the American sector of the Bering and Chukchi Seas, walrus occur seasonally from Bristol Bay to Point Barrow. Most of the animals undertake a northward spring migration, and retrace their route south during the fall. These movements are directly related to the seasonal advance and retreat of the sea ice. About 15,000 bulls remain in Bristol Bay throughout the summer, and it is thought that they do not rejoin the main herds until the latter move south to their wintering areas, usually in later December or January.

The generic name of the walrus—*Odobenus* (meaning tooth-walker), refers to one of their most prominent characteristics—tusks. These tusks, which are elongated upper canine teeth, are present on both males and females.

Their body form is basically seal-like, and they have flexible hind flippers (they can be rotated forward), a thick, heavy neck and a broad muzzle containing many short, heavy bristles. They are huge animals. Adult bulls often approach two tons in weight and the females may exceed one ton. Adult bulls can be recognized by their larger size, broader muzzle, heavier tusks and the presence of numerous large tubercles (bumps) on the neck and shoulders.

Walrus calves are most commonly born in late April or May during the spring migration. They weigh 100 to 160 lbs. at birth and are dependent on their mothers for at least 18 months and occasionally for as long as two-and-a-half years. Most females do not begin to breed until six or seven years of age. Mating occurs from January through March, but growth of the fetus does not begin until about mid-June. This delay in fetal growth occurs, as far as is known, in all the pinnipeds. The total gestation period from conception to birth is 15 to 16 months. However, the actual period of fetal growth is about 11 months. Most cows do not breed again until the year following the birth of their last calf. Thus, calves are produced in alternate years by females in their prime. Calves are produced less frequently by the older females.

By two years of age, the young weigh about 750 lbs. Males continue growing until they are about 15 years old. Females stop growing at about 12 years, when they weigh about 2,000 lbs., their maximum weight.

The age of an individual walrus (except for very old animals) can be determined by the number of rings or “annual layers” observed in cross-sections of the teeth. In the older animals, some of the rings laid down during the first few years of life are worn away. However, examination of teeth has shown that walrus can live to 35 years. Due to rather constant, significant, and selective hunting pressure, as well as other factors, it is doubtful that very many walrus die of old age.

Walrus feed mainly on bottom-dwelling invertebrates found on the relatively shallow and rich Bering-Chukchi sea floor. The major food items are clams and whelks (snails), and several different kinds are utilized. Only the protruding extremity is

eaten, the “foot” of some types of clams, and the siphons of others. It is believed that these parts are torn away from the rest of the clam by a strong suction—a method of feeding for which the mouth of the walrus seems ideally designed. The mouth is narrow, with an unusually high roof, strong thick lips and a thick, piston-like tongue. Other food items include crabs, shrimps, worms, and occasionally seals. Walrus find food by brushing the sea bottom with their broad, flat muzzles.

The tusks are used for fighting, for climbing on land and ice, and for emergencies of various kinds. I have watched a female walrus literally demolish a heavy piece of ice to free her calf, which had fallen into a crevasse. The tusks were as effective as a pick-axe. The presence of a dozen men within 30 feet did not distract her from her task. Our attempts to assist her in her efforts were met by furious charges and a threatening noise made by rapidly opening and closing her mouth. This noise sounded much like a man banging a pipe with a hammer. We returned to our own tasks and in due time she freed her calf and swam off, carrying it on her back.

Cows will not abandon their calves, and vice versa. The cows make every effort to rescue their offspring and often carry their dead calves away from hunters. Walrus, especially young males, will push dead and badly wounded animals (often larger than themselves) off an ice floe, and out of the reach of hunters. They will frequently return to an ice floe as long as wounded animals continue to bellow, sometimes placing both men and boats in jeopardy. This return is not a reprisal action, but an attempt to lead the wounded animals to safety. A man imitating the sounds of a walrus can frequently get them to return.

Walrus (with the exception of some young bulls) are usually not malicious, but their inquisitiveness, size, and great strength demand caution of those who approach them.

Tusks are used a great deal in mutual display, the strongest animals (usually with the largest tusks) being dominant over the others. When animals on an ice flow are disturbed—and this is very often their usual state—they will raise their heads high, prominently showing their tusks. Animals with smaller tusks will usually move away or become respectfully quiet. The only serious battles (and these are quite brutal) are between animals with the same body and tusk size.

Walrus hunting is conducted from all of the Eskimo villages near which the animals occur. However, the bulk of the Alaskan harvest (usually 1,500 to 3,000 walrus annually) is taken from the villages of Gambell, Savoonga, King Island, and Little Diomed Island. Hunting loss is high, perhaps 40 percent of the animals struck. Walrus are also taken by Siberian Eskimos and by commercial hunting vessels of the U.S.S.R.

The most favorable period for hunting walrus is during the spring and summer when the animals are passing the villages on their way north. Hunting is good on St. Lawrence Island during May, and progressively later at the more northerly locations. Walrus reach the vicinity of Wainwright and Barrow during late July or early August. ■

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Alaska Fish & Game

July-August 1985

\$1.50

