

Monodon monoceros Linnaeus, 1758

MONO Mono 1

NAR

FAO Names: En - Narwhal; Fr - Narval; Sp - Narval.

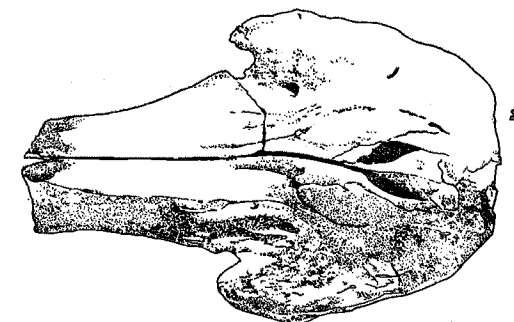


Fig. 205 *Monodon monoceros*

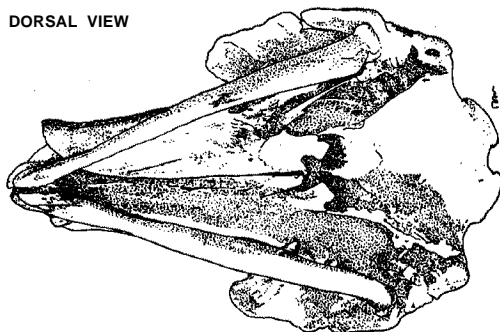
Distinctive Characteristics: Narwhals are characterized by a robust body, relatively small, bulbous head with little or no beak, short blunt flippers that turn up at the tips in adults, absence of a dorsal fin (however, a slight dorsal ridge is present), and oddly shaped flukes. The flukes of adults become straight to concave on the leading edge, and convex on the trailing edge. They are deeply notched and the tips tend to curl upwards, especially in older animals.

Young narwhals are uniformly grey to brownish grey. As the animals age, black mottling develops on the back and sides, and the belly becomes light grey to white (with some dark mottling). Older animals often appear nearly white, with some black still remaining on the appendages.

There are only 2 teeth, both in the upper jaw. In females, these almost always remain embedded in the upper jaw bones, but in males the left tooth normally grows out through the front of the head and becomes a tusk up to 3 m long. Occasionally, females with a tusk or males with 2 erupted tusks are seen.



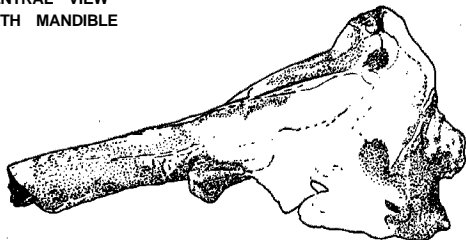
DORSAL VIEW



VENTRAL VIEW WITH MANDIBLE



TUSK



LATERAL VIEW



Fig. 206 Skull

Can be confused with: The narwhal is likely to be confused only with the white whale (p. 76). Young white whales, especially, can look like narwhals, because of their grey coloration. The absence of blotching on white whales is probably the best guide, and male narwhals can be easily distinguished by their tusks.

Size: Adult females can be up to 4.2 m and males up to 4.7 m long (exclusive of the tusk). Large narwhals can reach weights of up to 1 600 kg. Narwhals are about 1.6 m long at birth.

Geographical Distribution: This is an arctic species; it is found mostly above the Arctic Circle year-round. The principal distribution of the narwhal is from the central Canadian Arctic, eastward to Greenland and to the central Russian Arctic. They are rarely observed in the eastern Russian Arctic, Alaska, or the western Canadian Arctic. There are annual migrations, primarily to open water in autumn and back to inshore waters in spring. Three stocks are recognized on the basis of distribution and migration patterns.

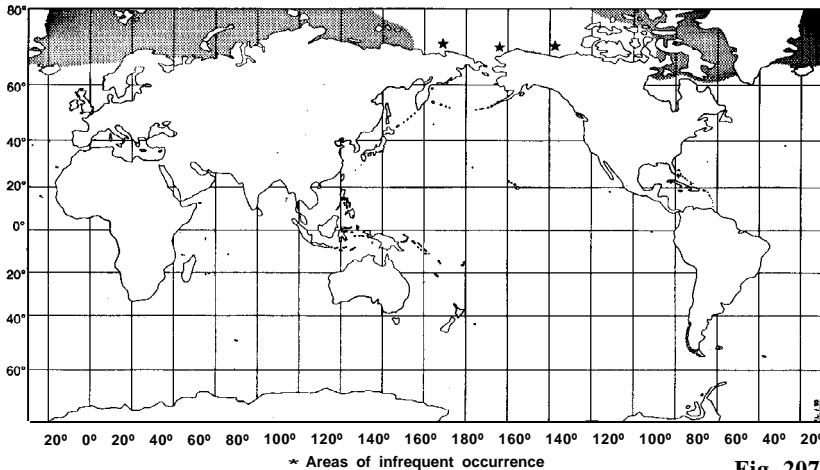


Fig. 207

Biology and Behaviour: Most pods of narwhals consist of 2 to 10 individuals, but there is some evidence that these groups are often parts of large dispersed herds of hundreds or even thousands of individuals. There is some age and sex segregation of narwhal groups, and all-male groups are common.

The tusk of male narwhals has long been a source of controversy. It now is generally agreed that the tusk is used in male-to-male, competition for females. It is used perhaps primarily as a display, although male narwhals have been seen "sparring" with their tusks held above water.

Young narwhals are born mainly in summer, from July through August.

Fish, squid, and shrimp make up most of the narwhal's diet. They feed, at times, in deep water and possibly at or near the bottom.

Exploitation: Narwhals have been hunted for many centuries, both by Eskimos and by Europeans. Often sold for a high price as the horn of a unicorn, the tusk was, and still is, a much sought-after prize. No strictly commercial hunting occurs today; however, narwhals are still hunted for "subsistence" by Canadian and Greenlandic natives. Throughout the 1980s, the annual kill was estimated to be less than 1 000 individuals. Oil and gas activities and pollution are other potential threats to narwhal populations.

IUCN Status: Insufficiently known.

Delphinapterus leucas (Pallas, 1776)

MONO Delph 1

BEL

FAO Names: En - White whale; Fr - Bélouga; Sp - Beluga.

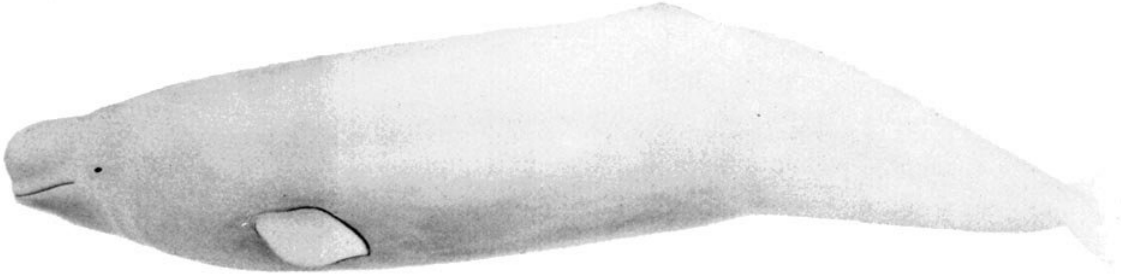
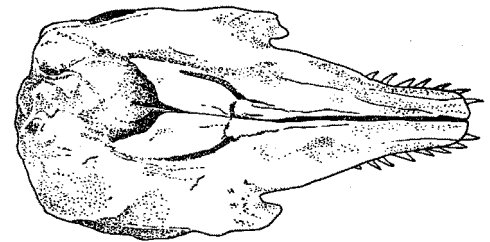


Fig. 208 *Delphinapterus leucas*

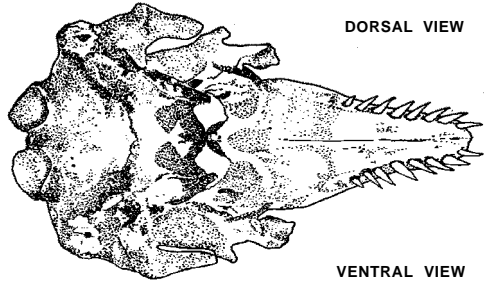
Distinctive Characteristics: The white whale, or beluga, is a robust animal. Its basic body shape is much like that of the narwhal; it has a small bulbous head with only a very short beak, no dorsal fin (instead, a shallow transversely nicked ridge runs along the midline of the back), small rounded flippers (with curled tips in adult males), and flukes that often have a convex trailing edge. White whales are "blubbery"; their bodies are supple and often wrinkled. There is often a visible neck. Because the cervical (neck) vertebrae are not fused, white whales can move their necks more than most other cetaceans.

At birth, white whales are dark grey to brownish grey. They whiten increasingly as they age, reaching the pure white stage between 5 and 12 years of age.

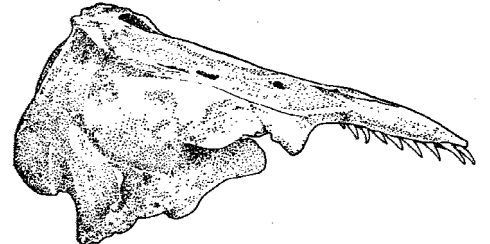
The mouth generally contains 9, often heavily worn, teeth in each row of the upper jaw, and 8 in each row of the lower jaw.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 209 Skull

Can be confused with: White whales can be confused with narwhals (p. 74), which overlap in much of their range. The blotchy grey colour of narwhals, and the tusks of males of this species, should permit proper identification in most situations.

Size: Most adult white whales are less than 5.5 m (males) or 4.1 m (females), and large animals may weigh up to 1 600 kg. Calves average about 1.6 m at birth.

Geographical Distribution: White whales are found only in high latitudes of the Northern Hemisphere. They are widely distributed throughout the arctic and subarctic regions, mostly in shallow coastal waters; however, they do move into deep, offshore waters at times. White whales enter estuaries, and even rivers; there are a few records of solitary individuals ranging thousands of kilometres up various rivers. At least 15 stocks of white whales have been recognized, based on morphological, genetic, and distribution differences.

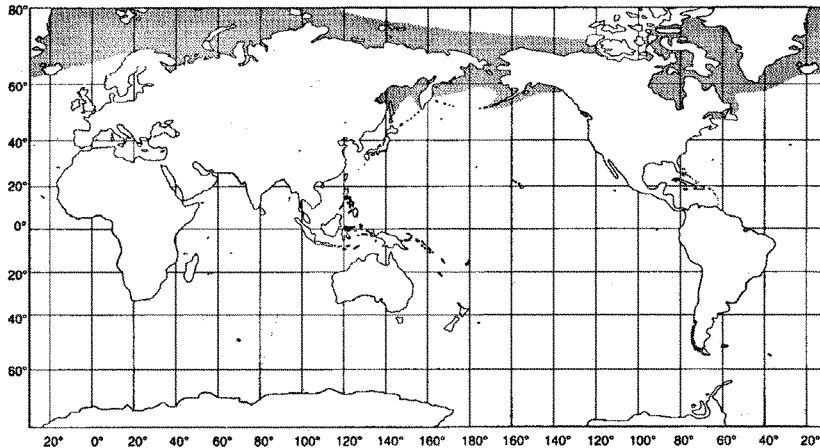


Fig. 210

Biology and Behaviour: The highly gregarious white whale is most often found in groups up to about 15 individuals, but it is sometimes seen in aggregations of thousands. Pods are often segregated by age and sex; all-male groups and mixed aggregations, including females and young, are known.

In general, white whales are not showy at the surface and they do not often leap. These animals generally swim slowly. During the summer, they aggregate in large numbers in shallow estuaries, and at these times are very active. Their extreme loquaciousness has earned them the name "sea canary."

Calves are born in spring to summer, between April and August, depending on the population.

Although various species of fish are considered to be the primary prey items, white whales also feed on a wide variety of mollusks and benthic invertebrates. Based on stomach contents, white whales are thought to feed mostly on or near the bottom.

Exploitation: There is a long history of direct hunting, both subsistence and commercial, of white whales by native peoples, Russians and Europeans. Commercial hunting is now uncommon, and most belugas are taken by natives for food. Recent catches by Alaskan, Canadian, Greenlandic, and Russian people combined, total several thousand per year. However, the population in most danger is no longer hunted. Beluga numbers in the St. Lawrence Estuary have declined, and the population is threatened primarily by the effects of chemical pollution. In other parts of their range, oil and gas activities have been a source of concern.

IUCN Status: Insufficiently known.

Berardius bairdii Stejneger, 1883

ZIPH Ber 2

BEW

FAO Names: En - Baird's beaked whale; Fr - Baleine a bec de Baird; Sp - Zifio de Baird.

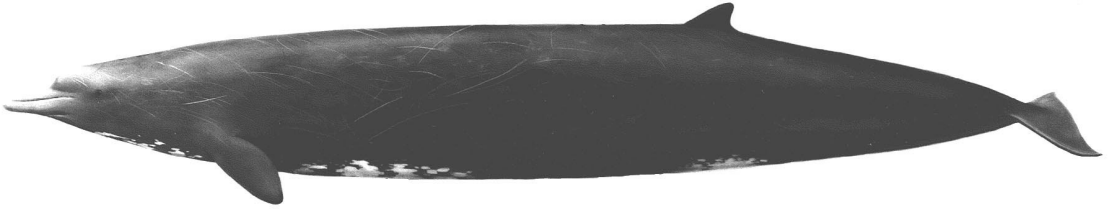


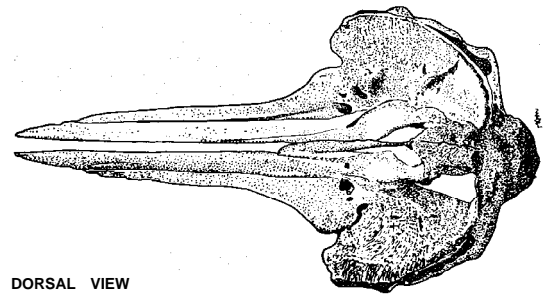
Fig. 211 *Berardius bairdii*

Distinctive Characteristics: Baird's beaked whales are the largest whales in the ziphiid family. They have a long, well-defined, tube-like beak and a rounded forehead (rising at a shallower angle than in bottlenose whales, *Hyperoodon* spp.). The body is relatively more slender than in bottlenose whales. The small, but prominent, triangular dorsal fin is about two-thirds of the way along the back and is rounded at the tip. There is the usual V-shaped pair of throat grooves characteristic of beaked whales. Though some animals have a median notch on the flukes, most have no notch (and some even have a bulge).

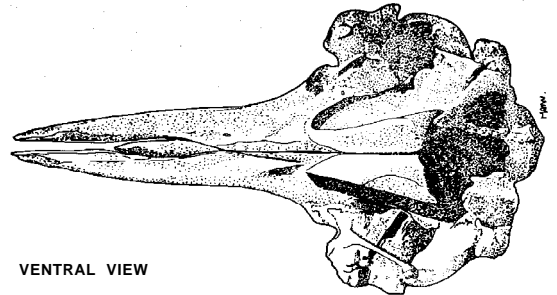
Baird's beaked whales are dark brownish grey, usually heavily scarred with light scratches or splotches on the back and, often, on the undersides.

There are 2 pairs of teeth near the tip of the lower jaw. The forward pair of teeth in adults is visible at the tip of the protruding lower jaw, even when the mouth is closed. On some individuals, these teeth are heavily infested with barnacles.

The conspicuous blow is low and rounded, and is often given in rapid succession.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW WITH MANDIBLE

Fig. 212 Skull

Can be confused with: Several of the other beaked whales (Cuvier's beaked whale [p. 82] and some species of *Mesoplodon* [starting on p. 90]) are found within the Baird's beaked whale's range, but the larger adult size and unique head and dorsal fin of the latter species should make them identifiable. Minke whales (p. 58) could, in some circumstances, be confused with Baird's beaked whales; when a good look is obtained, differences in dorsal-fin shape, head shape, and coloration make the 2 easily distinguishable.

Size: Baird's beaked whales reach lengths of 11.9 m (males) and 12.8 m (females), and weights of up to 12 000 kg. They are about 4.5 m long at birth.

Geographical Distribution: Baird's beaked whales are found in deep oceanic waters of the North Pacific Ocean and the Japan, Okhotsk, and Bering seas. Their range extends to the southern Gulf of California in the eastern Pacific, and to the island of Honshu, Japan, in the western Pacific. Though they may be seen close to shore where deep water approaches the coast, their primary habitats appear to be over or near the continental slope and oceanic seamounts.

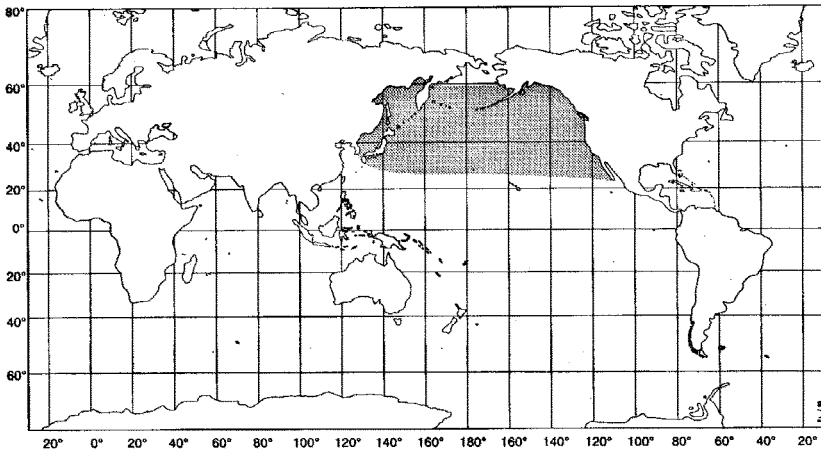


Fig. 213

Biology and Behaviour: Baird's beaked whales live in pods of 5 to 20 whales, although groups of up to 50 are occasionally seen. They often assemble in tight groups drifting along at the surface. At such times, snouts are often seen as animals slide over one another's backs. They are deep divers, capable of staying down for over an hour. From Japanese whaling data, it appears that males live longer than females and that females have no post-reproductive stage. There is a calving peak in March and April.

Baird's beaked whales feed mainly on deepwater and bottom-dwelling fish, cephalopods, and crustaceans.

Exploitation: Until the 1960s and 1970s Baird's beaked whales in the eastern North Pacific were taken only by United States and Canadian whalers (in relatively small numbers). In the western North Pacific, there has been heavier exploitation by the Soviets and Japanese. Japan's coastal whaling stations continue to take up to 40 Baird's beaked whales per year. Some Baird's beaked whales have been caught in Japanese salmon driftnets.

IUCN Status: Insufficiently known.

Berardius arnuxii Duvernoy, 1851

ZIPH Ber 1

BAW

FAO Names: **En** - Arnoux's beaked whale; **Fr** - Beradien d'Arnoux; **Sp** - Ballenato de Arnoux.



Fig. 214 *Berardius arnuxii*

Distinctive Characteristics: Similar in appearance to Baird's beaked whale, this species has a small head, with a long tube-like beak, moderately steep bulbous forehead, small rounded flippers, short slightly falcate dorsal fin, and (usually) un-notched flukes. A pair of V-shaped throat grooves is present.

Arnoux's beaked whales are slate grey to light brown; the head region is generally lighter than the rest of the body. The body is often heavily scarred and scratched, and the underside tends to be lighter, and covered with white blotches.

Two pairs of triangular teeth are present at the tip of the lower jaw; they erupt in both sexes and are visible outside the closed mouth. The pair nearest the tip of the jaw is larger.

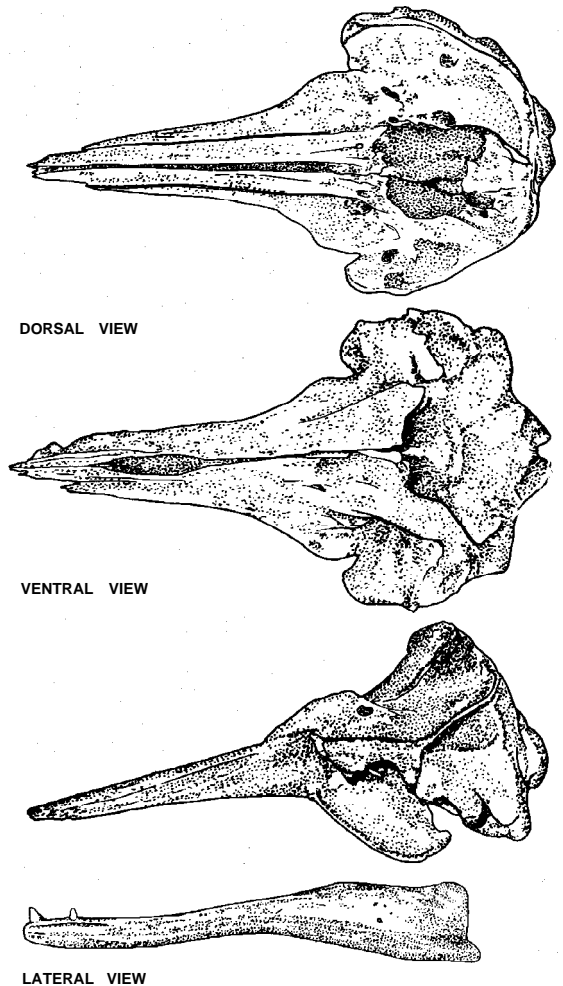


Fig. 215 Skull

Can be confused with: Arnoux's beaked whales can be easily confused with southern bottlenose whales (p. 86), which share much of their range. Differences in head shape, dorsal-fin shape, and tooth size and position should be sufficient to distinguish them, if clearly seen. Individuals of some species of *Mesoplodon* (starting on p. 90) could also be confused with this species, but they are generally much smaller.

Size: Arnoux's beaked whales reach a known maximum size of 9.75 m; females are probably larger than males, as is generally true in beaked whales. Length at birth is unknown, but is probably around 4 m.

Geographical Distribution: Although this species probably has a circumpolar distribution in deep cold temperate and subpolar waters of the Southern Hemisphere, most records are from the southeast coast of South America, near the Antarctic Peninsula, South Africa, and the Tasman Sea.

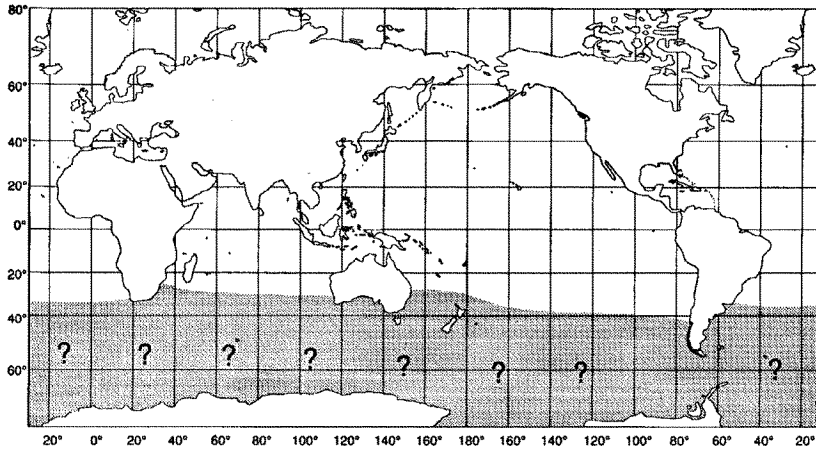


Fig. 216

Biology and Behaviour: Not much is known of the biology of this species. Most groups number between 6 and 10 individuals, but some as large as 80 whales have been seen. Arnoux's beaked whales are reportedly shy of boats and can dive for over an hour, making observation difficult.

This species' reproductive biology is poorly known.

The feeding habits of Arnoux's beaked whales are assumed to be similar to those of their Northern Hemisphere relatives, Baird's beaked whales, thus consisting of benthic and pelagic fishes and cephalopods.

Exploitation: There has not been any substantial commercial hunting for this species, but some have been taken for scientific study.

IUCN Status: Insufficiently known.