

Beaked Whales of the Genus *Mesoplodon*

The species of the genus *Mesoplodon* are very poorly known. Many of the species are known only, or primarily, from study of skeletal material or a few stranded carcasses. Because the external appearance and behaviour of individual species is poorly documented, it is nearly impossible, even for experts, to identify whales of the genus to species from sightings at sea. Even with a specimen in hand, museum preparation is often required for positive identification (except for adult males of some species). Useful field marks for adult males are beak length, shape of gape, location and size of teeth, and to a lesser extent, size and shape of the dorsal fin.

The distribution of most species is also poorly documented, and is mostly known from stranding records. More information is available from the eastern tropical Pacific than for any other area because of the extensive survey effort associated with the tuna fisheries there. Even for this area, however, the picture is very blurry. There are 14 species of *Mesoplodon* currently recognized. The newest of these was only described in 1991, and it is possible, even likely, that other undescribed species exist. Most species are similar in appearance, and only adult males are likely to be identifiable to species. Coloration is usually brownish grey to olive, often with extensive white spots and scarring, especially in adult males. The pattern of scarring (which is thought to be caused by intraspecific fighting among adult males) may be useful in narrowing identifications to one or several species. For example, sets of closely paired scratches suggest 2 teeth located near the tip of the beak (such as in True's or Hector's beaked whales), while single or more widely spaced parallel scratches may implicate species with more widely separated, protruding teeth set farther back in the jaws (Blainville's, strap-toothed, Stejneger's, Andrews', or Hubbs' beaked whales). Finally, Gervais', Sowerby's, Gray's, and ginkgo-toothed beaked whales have teeth that are removed from the tip of the jaw, but which do not project above the snout. Thus, these species would not be expected to have paired scars. All species of *Mesoplodon* have low, inconspicuous (usually invisible) blows and most have a small dorsal fin set about two-thirds of the way back from the snout tip.

In general, mesoplodonts are slow and sluggish. Most sightings are brief, as these whales do not spend much time on the surface. They are presumed to pursue mostly squid at great depths. Groups are usually small, most often 7 or less. Almost nothing is known of their behaviour and social organization.

Mesoplodon densirostris (de Blainville, 1817)

ZIPH Mes 1

BBW

FAO Names: **En** - Blainville's beaked whale; **Fr** - Baleine à bec de Blainville; **Sp** - Zifio de Blainville.

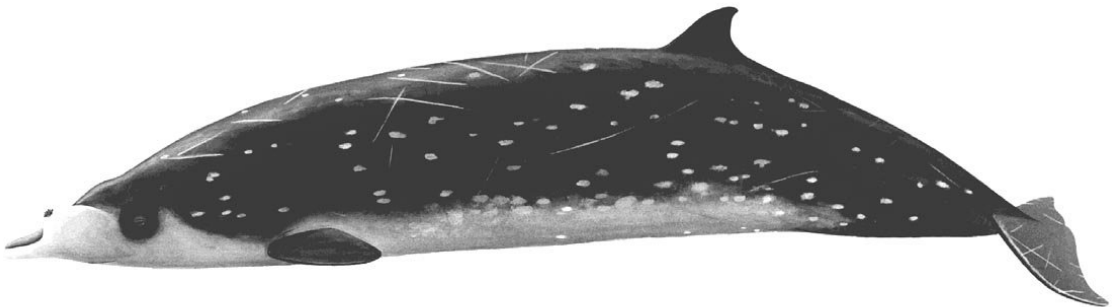


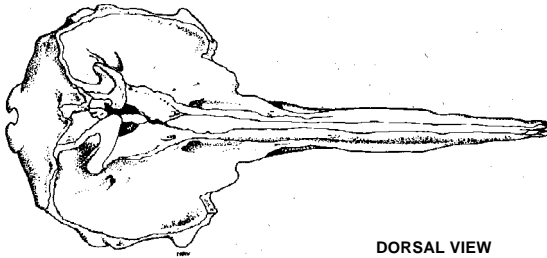
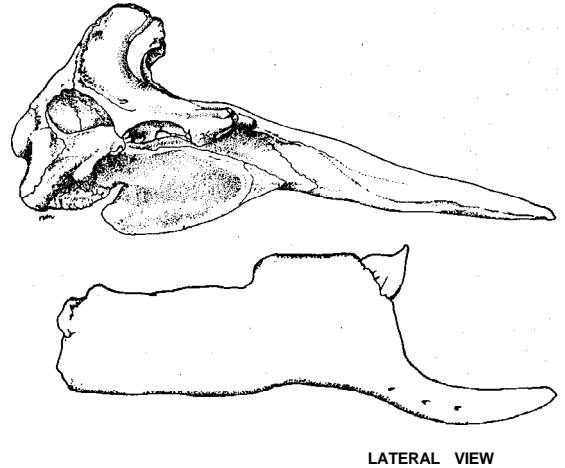
Fig. 229 *Mesoplodon densirostris*

Distinctive Characteristics: Adult Blainville's beaked whales are blue-grey above and white below; coloration of young has not been properly described. The dark areas tend to have round or oval white scars and scratches.

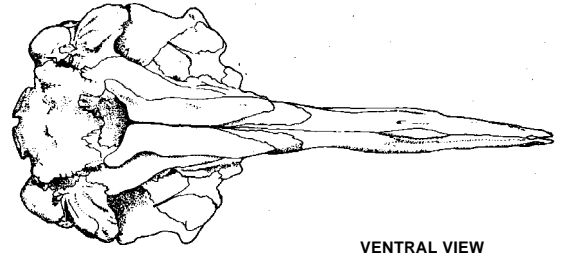
The lower jaw of this species is highly arched; a massive flattened tusk erupts from the top of this arch in adult males, and it extends above the top of the upper jaw. In some individuals the tusks are covered by a tassel of barnacles.

Can be confused with: Generally, only adult males of this species will be distinguishable from other species of *Mesoplodon* (starting on p. 90). The high arching mouthline and massive flattened tusks that extend above the upper jaw will allow identification of bulls,

Size: Maximum size for both sexes appears to be around 4.7 m. Weights of up to 1 033 kg have been recorded. Length at birth is presumed to be between 2 and 2.5 m.



DORSAL VIEW



VENTRAL VIEW

Fig. 230 Skull

Geographical Distribution: Blainville's beaked whales occur in temperate and tropical waters of all oceans. Like other beaked whales, they are found mostly offshore in deep waters.

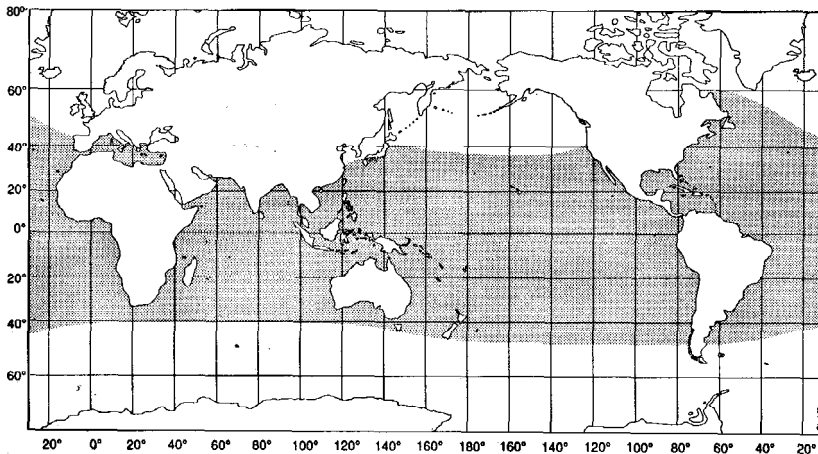


Fig. 231

Biology and Behaviour: Groups of 3 to 7 individuals have been recorded, although singles or pairs are most common. Dives of over 45 minutes have been recorded. Squid are probably the main food items, but some fish may be taken as well.

Exploitation: Some whales of this species have been taken in the North Pacific by Taiwanese whalers, and accidentally by Japanese tuna fishermen in the Indian Ocean.

IUCN Status: Insufficiently known.

Mesoplodon grayi von Haast, 1876

ZIPH Mes 2

BYW

FAO Names: **En** - Gray's beaked whale; **Fr** - Baleine à bec de Gray; **Sp** - Zifio de Gray.

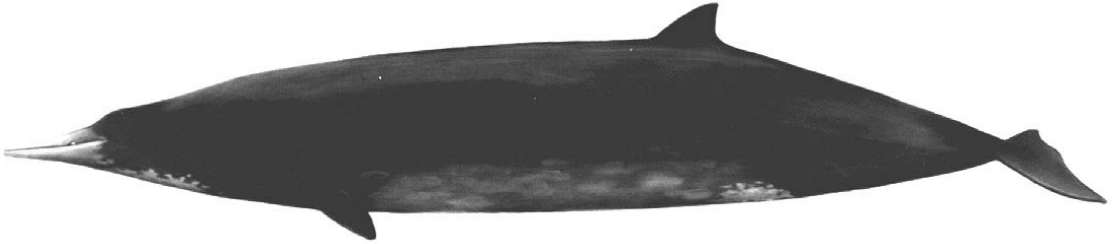
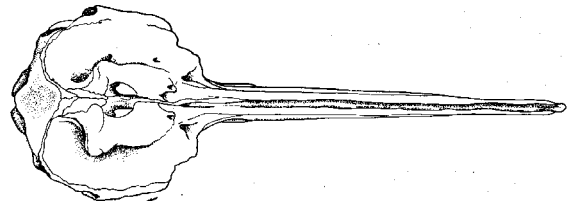


Fig. 232 *Mesoplodon grayi*

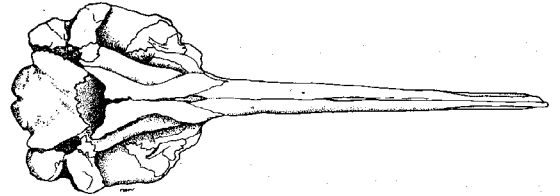
Distinctive Characteristics: Gray's beaked whales have small heads, with extremely long, narrow beaks.

Although mostly grey, white patches are found in the genital region and the beak becomes white in adults (Gray's beaked whales observed in the eastern tropical Pacific have had white lower jaws and dark upper jaws, separated by a straight mouthline).

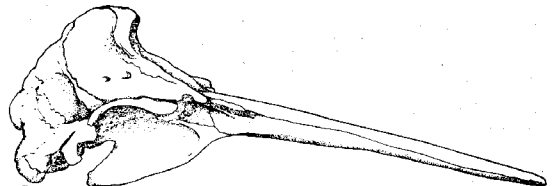
There are 2 small, triangular teeth set in the middle of the lower jaw, which erupt only in bulls, and 17 to 22 pairs of small teeth in the upper jaw.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW



Fig. 233 Skull

Can-be confused with: The long white beak (often stuck up out of the water as the animal surfaces) and straight mouthline may allow Gray's beaked whales to be distinguished from other species of *Mesoplodon* (starting on p. 90), if a good look is obtained.

Size: Maximum known sizes are 5.6 m for both sexes. These animals are known to reach weights of at least 1 100 kg. Length at birth is probably between 2 and 2.5 m.

Geographical Distribution: This is primarily a Southern Hemisphere cool temperate species, which is possibly circum-antarctic in occurrence. There are many records from New Zealand and Australia, and others from South Africa, Argentina, Chile, and Peru. This species apparently wanders into the Northern Hemisphere on occasion, as evidenced by a few sightings in the eastern tropical Pacific and a stranding in the Netherlands.

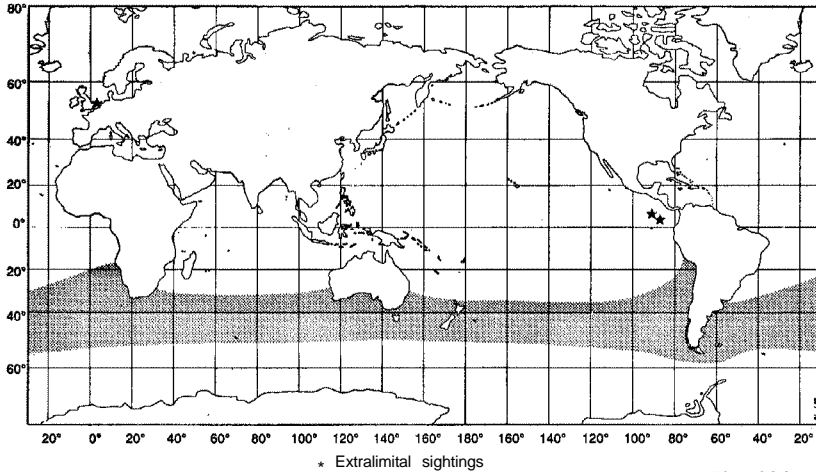


Fig. 234

Biology and Behaviour: Very little is known of the biology of this species. Gray's beaked whales are seen mostly as singles or pairs; however, there is one record of a mass stranding of 28 of these whales. Gray's beaked whales generally raise their long snouts out of the water when surfacing.

Exploitation: Unknown.

IUCN Status: Insufficiently known.

Mesoplodon ginkgodens Nishiwaki and Kamiya, 1958

ZIPH Mes 3

TGW

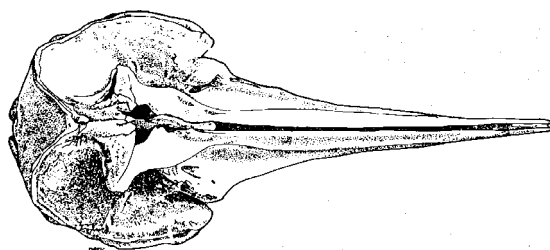
FAO Names: En - Ginkgo-toothed beaked whale; Fr - Baleine a bec de Nishiwaki; Sp - Zifio Japonés.



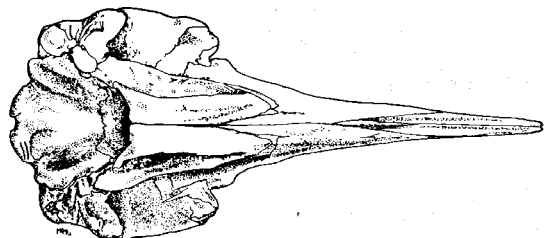
Fig. 235 *Mesoplodon ginkgodens*

Distinctive Characteristics: Adult male ginkgo-toothed beaked whales are dark grey, with light spots; females are apparently lighter. They do not appear to be as heavily scarred as most other mesoplodonts. The throat grooves, dorsal fin, and tail flukes are typical for *Mesoplodon* species.

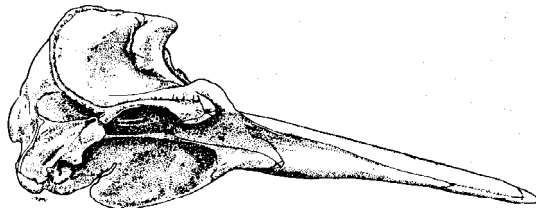
Bulls have flattened tusks that barely break the gumline, slightly behind the middle of the lower jaw; erupted teeth are absent in females.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 236 Skull

Can be confused with: The uniform dark pigmentation, small posteriorly placed teeth, and paucity of characteristic ziphiid scars may allow a tentative classification of adult male ginkgo-toothed beaked whales. Otherwise, this species will be virtually indistinguishable from other species of *Mesoplodon* (starting on p. 90).

Size: Maximum known sizes are 4.9 m (females) and 4.8 m (males). At birth, they are thought to be about 2 to 2.5 m.

Geographical Distribution: This species is known from widely scattered sightings, strandings, and collections (albeit sparse) in temperate and tropical waters of the Indo-Pacific Ocean.

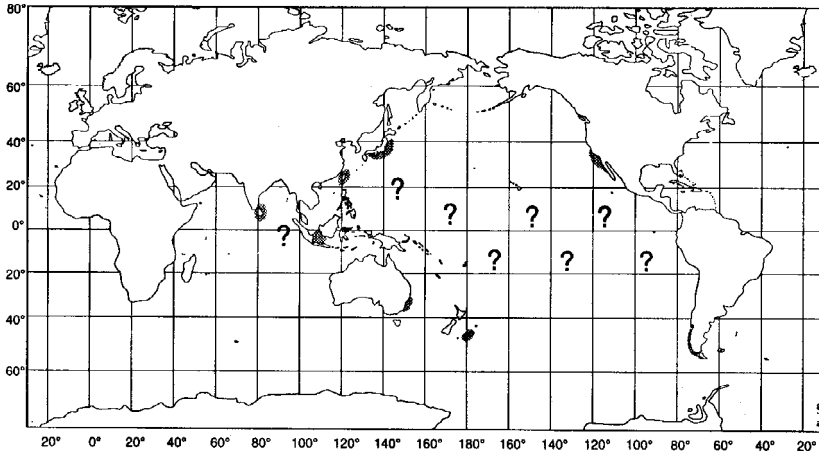


Fig. 237

Biology and Behaviour: Almost nothing is known of the biology of the ginkgo-toothed beaked whale.

Exploitation: A few animals have been taken in coastal fisheries off Japan.

IUCN Status: Insufficiently known.

Mesoplodon hectori (Gray, 1871)

ZIPH Mes 4

BHW

FAO Names: **En** - Hector's beaked whale; **Fr** - Baleine à bec d' Hector; **Sp** - Zifio de Hector.

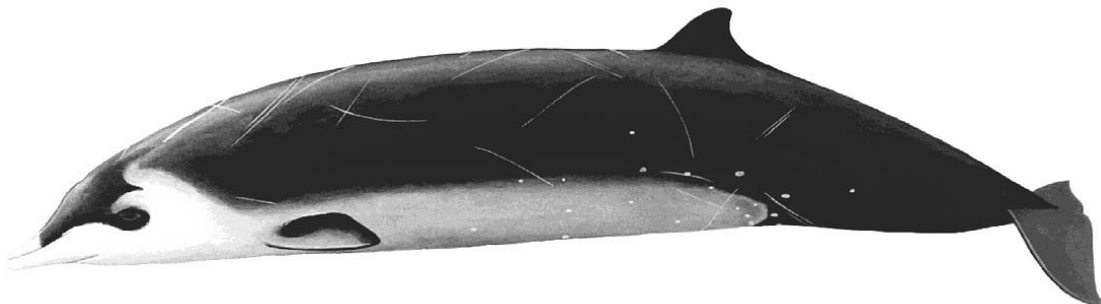
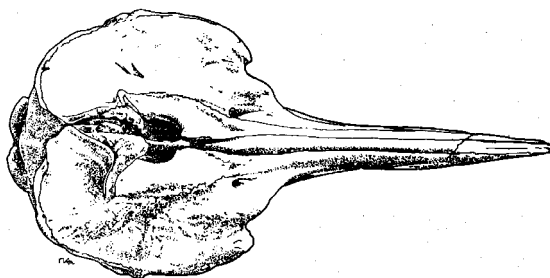


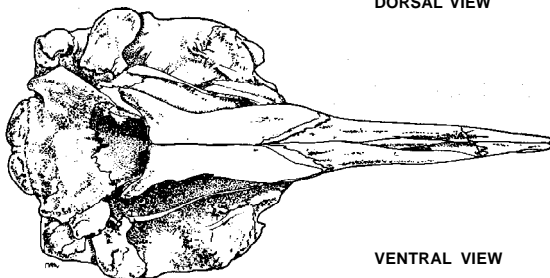
Fig. 238 *Mesoplodon hectori*

Distinctive Characteristics: Body colour of Hector's beaked whales appears to be dark grey-brown above and light grey below, with scratches often covering the body. Males have white on the undersides of the flukes.

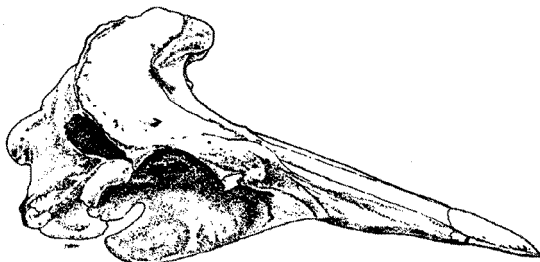
The single pair of flattened, triangular teeth is moderately small and is located near the tip of the lower jaw; they erupt only in bulls.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW



Fig. 239 Skull

Can be confused with: The placement of the flattened teeth of bulls at the tip of the lower jaw may allow them to be distinguished from other species of *Mesoplodon* (starting on p. 90) when the head is seen well.

Size: Females of up to 4.4 m and males of up to 4.3 m have been measured. Newborns presumably are about 2 to 2.5 m.

Geographical Distribution: Hector's beaked whale is primarily a Southern Hemisphere cool temperate species. The records are from southern South America, South Africa, Australia, and New Zealand. Recently, there have been several strandings and possible sightings off southern California, but it is unknown whether these represent extralimital strays or normal occurrences.

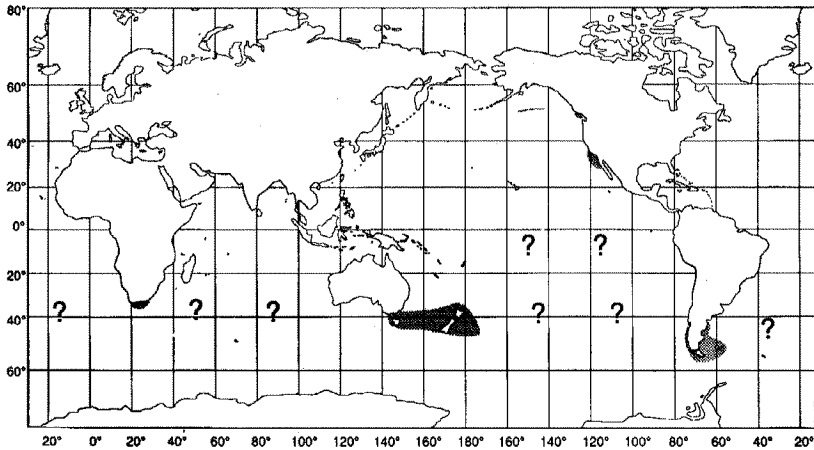


Fig. 240

Biology and Behaviour: Most of the few sightings have been of pairs of animals. Hector's beaked whales are known to feed on squid, and the remains of an unidentified invertebrate have been found in the stomach of an animal stranded in California.

Exploitation: This species is not known to have been commercially hunted; however, 1 individual was taken in the 1800s in New Zealand.

IUCN Status: Insufficiently known.