Phocoena phocoena (Linnaeus, 1758)

PHOCO Phoc 1 **PHR**

FAO Names: En - Harbour porpoise**; Fr -** Marsouin commun**; Sp -** Marsopa común.

Fig. 373 ***Phocoena phocoena***

Distinctive Characteristics: The harbour porpoise is a chunky animal, with a blunt short-beaked head. Placed about midway along the back is a short, wide-based, triangular dorsal fin, with small bumps on the leading edge. The flippers are small and somewhat rounded at the tips. The flukes have a concave trailing edge, divided by a prominent median notch; the tips are rounded. The straight mouthline slopes upward towards the eye.

Countershading is apparent in the harbour porpoise's colour pattern; the animals are generally dark grey on the back and white on the belly. The sides are intermediate, with the border area often splotched with shades of grey. The flippers and lips are dark; there is a thin, dark grey gape-to-flipper stripe.

Nineteen to 28 small, spatulate, blunt teeth line each tooth row.

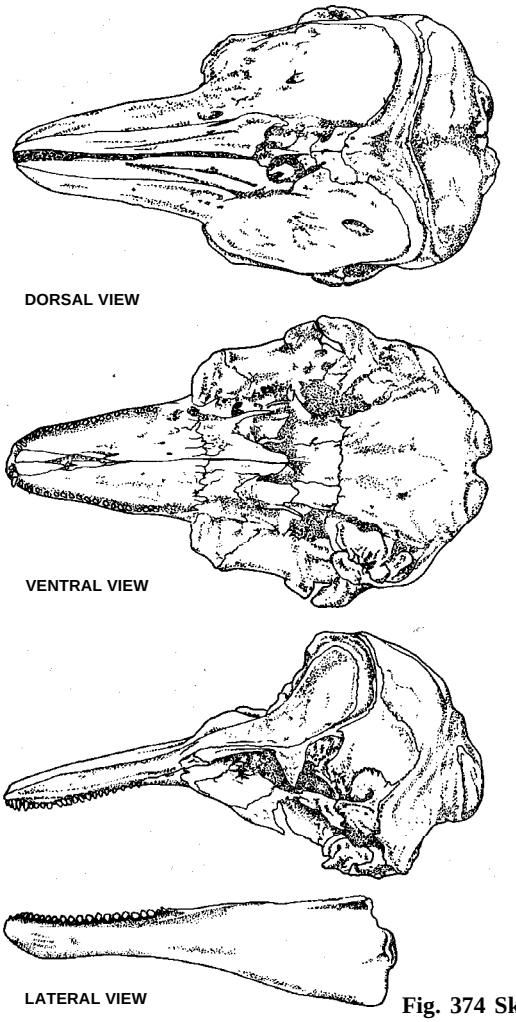

Fig. 374 Skull

Can be confused with: Harbour porpoises, if seen clearly, should not be confused with any of the various species of dolphins that share their range. The other porpoise that overlaps in the North Pacific, Dall's porpoise (p. 182), can be confused with this species when backlit fins are seen at a distance. However, the black and white colour pattern and slight difference in dorsal-fin shape of Dall's porpoise will be distinguishable, when seen well.

Size: Most adult harbour porpoises are less than 1.8 m long; maximum length is about 2 m. Females are slightly larger than males. Weights range from 45 to 70 kg for adults. Newborns are 70 to 90 cm long.

Geographical Distribution: Harbour porpoises are found in cool temperate and subpolar waters of the Northern Hemisphere. They are usually found in shallow water, most often nearshore, although they occasionally travel over deeper offshore waters. In the North Pacific, they range from southern California and northern Honshu, Japan, to the southern Beaufort and Chukchi seas. In the North Atlantic, they are found from the southeastern United States to southern Baffin Island (they apparently do not enter Hudson Bay) in the west and Senegal, West Africa, to Novaya Zemlya in the east. Major populations in the North Pacific and North Atlantic are isolated from each other, and many provisional stocks have been recognized.

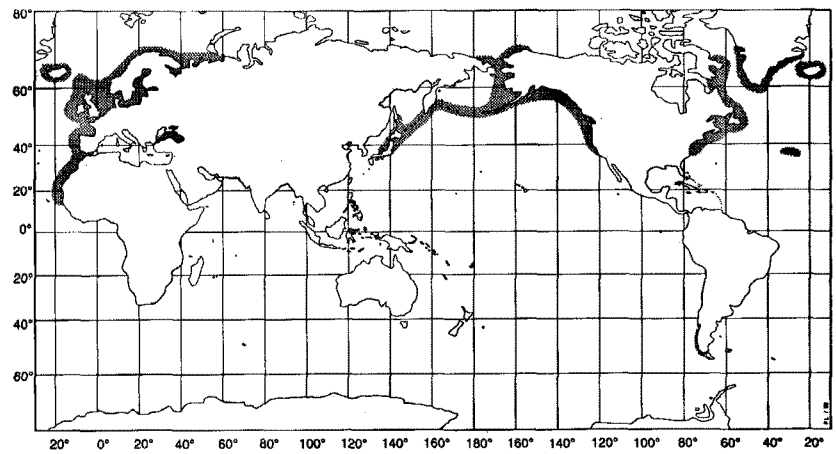

Fig. 375

Biology and Behaviour: Most harbour porpoise groups are small, consisting of less than 8 individuals. They do, at times, aggregate into large, loose groups of 50 to several hundred animals, mostly for feeding or migration. Behaviour tends to be inconspicuous, compared to most dolphins, and harbour porpoises rarely approach boats to ride bow waves. When moving fast, they surface in a behaviour often called pop-splashing. Breaches and other leaps are rarely seen. Harbour porpoises sometimes lie at the surface for brief periods between submergences, although we do not know why they do this.

Reproductive biology has been well-studied in some parts of the world. Most calves are born from spring through mid-summer.

Harbour porpoises eat a wide variety of fish and cephalopods, and the main prey items appear to vary regionally. Small, non-spiny schooling fish (such as herring and mackerel) are the most common prey in many areas, and many prey species are benthic or demersal.

Exploitation: A major human threat to harbour porpoises throughout their range is incidental capture in fisheries. Many thousands are taken each year in gillnets and in certain areas, incidental catches in herring weirs, cod and salmon traps, purse seines, trawl nets, and longlines also occur.

Directed fisheries have occurred in Puget Sound, the Bay of Fundy, Gulf of St. Lawrence, Labrador, Newfoundland, Greenland, Iceland, Black Sea, and the Baltic Sea. Many of these fisheries are now closed, but hunting of harbour porpoises still occurs in a few areas. Greenland and the Black Sea are the only areas where large direct catches have been reported recently.

Levels of pollutants in harbour porpoise tissues have been found to be high wherever studied, probably due to the species' coastal nature. Environmental contamination has been implicated, in part, for declines in harbour porpoise populations in Europe and some parts of North America.

IUCN Status: Insufficiently known.

Phocoena spinipinnis Burmeister, 1865

PHOCO Phoc 2 **BRP**

FAO Names: En - Burmeister's porpoise; **Fr** - Marsouin de Burmeister**; Sp -** Marsopa espinosa.

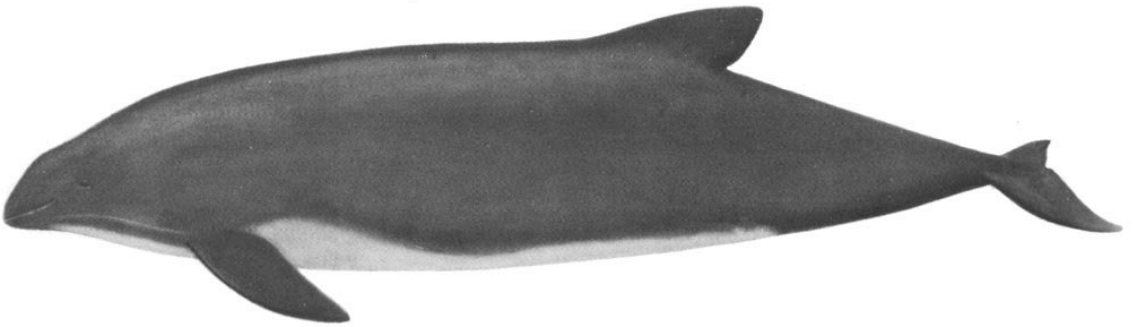

Fig. 376 ***Phocoena spinipinnis***

Distinctive Characteristics: The unique dorsal fin of Burmeister's porpoise rises at a very shallow angle from behind the midpoint of the back, and the trailing edge is straight to convex. Additionally, there are tubercles along the leading edge of the fin (this characteristic gave the species its scientific name). Other than this, the species has a rather typical phocoenid body form, with a blunt, nearly beakless head and broad-based flippers with rounded tips.

Coloration is dark charcoal to grey, with lighter grey streaks on the chin and belly. Burmeister's porpoises have dark eye patches, dark lips, and dark chin-to-flipper stripes (well-defined by lighter areas above and below). These flipper stripes are asymmetrical; they are more narrow and extend further forward on the right side.

Teeth number 10 to 23 in each upper tooth row and 14 to 23 in each lower row. As in other phocoenids, the teeth are spatulate.

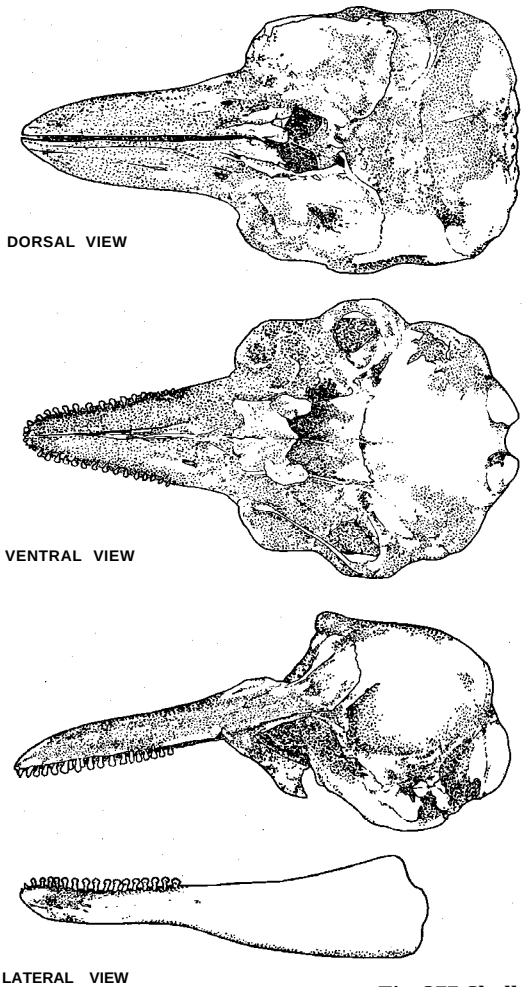

Fig. 377 Skull

Can be confused with: Burmeister's porpoises can be confused with South American fur seals (p. 246) and South American sea lions (p. 232) which often stick their flippers in the air (these can look like Burmeister's porpoise dorsal fins). Differences in coloration, dorsal-fin shape, and swimming style should allow Burmeister's porpoises to be distinguished easily from Commerson's dolphins (p. 174) and spectacled porpoises (p. 184), and head shape will be the best characteristic to allow distinction from franciscana (p. 202).

Size: Most adults are up to 1.85 m in length, although animals from Uruguay up to 2 m have been recorded. Maximum weight is about 85 kg. Newborns are 0.8 to 0.9 m.

Geographical Distribution: Burmeister's porpoises are distributed in coastal waters of South America, from southern Brazil, south to Tierra del Fuego, and north to northern Peru.

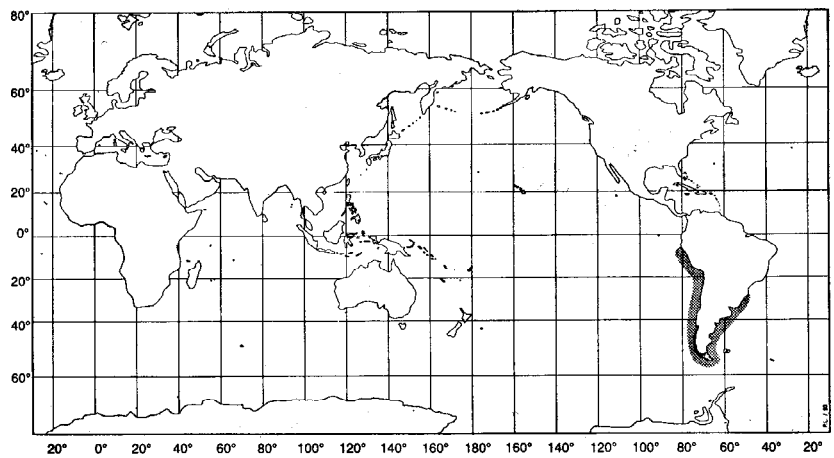

Fig. 378

Biology and Behaviour: Very little is known about the natural history of this species. Most sightings are of less than 6 individuals, but aggregations of up to 70 have been reported. Behaviour of this species is inconspicuous; they breath with little surface disturbance.

There appears to be a protracted summer birth peak; most births in Peru apparently occur in late summer to autumn.

Feeding is on fish, such as anchovies and hake, as well as squid.

Exploitation: Burmeister's porpoises are caught mostly in gillnets. They are taken, apparently in small numbers, in shark gillnets in Uruguay, fish (and until recently, king crab) gillnets around Tierra del Fuego, and gillnets for a variety of fish off Chile and Peru (by far, the largest kills). Additionally, they may be caught in direct fisheries for dolphins, using mostly gillnets, which have prospered in recent years in Peru, and to a lesser extent, Chile.

IUCN Status: Insufficiently known.

Phocoena sinus Norris and McFarland, 1958

PHOCO Phoc 3 **VAQ**

FAO Names: En - Vaquita**; Fr -** Marsouin du golfe de Californie**; Sp** - Vaquita.

Fig. 379 ***Phocoena sinus***

Distinctive Characteristics: The vaquita, or Gulf of California harbour porpoise, is among the smallest of all marine cetaceans. Compared to other phocoenids, it has a taller, more falcate dorsal fin and larger flippers. Like all porpoises, it is stocky, with a blunt beakless head.

Vaquitas have black to dark grey lip patches and eye rings; otherwise the body is light brownish grey fading to white on the belly. Calves tend to be somewhat darker than adults.

In the small number of specimens examined to date, there have been 16 to 22 pairs of teeth in the upper jaw and 17 to 20 pairs in the lower jaw.

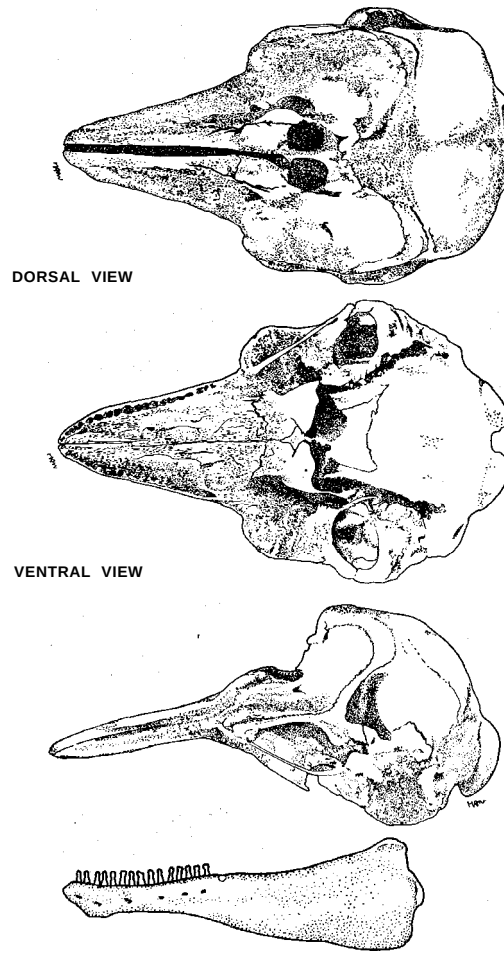

Fig. 380 Skull

Can be confused with: When seen at a distance, the tall dorsal fin of the vaquita must be distinguished from those of bottlenose (p. 154) and common (p. 166) dolphins, both of which are common in the vaquita's range. However, the small group size and unique body shape, as well as differences in behaviour, will generally allow the vaquita to be distinguished.

Size: Known maximum length is 1.5 m (females) and 1.45 m (males), but very few specimens have been examined.

Geographical Distribution: The habitat of the vaquita appears to be defined by relatively murky coastal waters in the northern quarter of the Gulf of California (although there are some suggestions that the range may extend further south in the Gulf as well). This is the most restricted range of any marine cetacean.

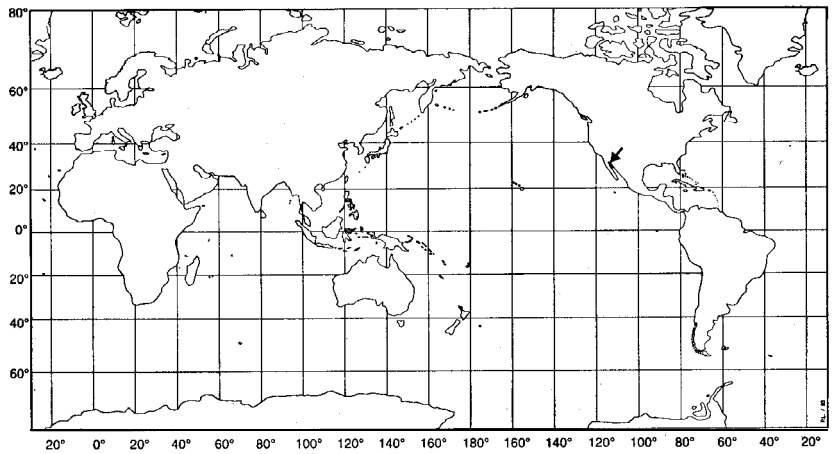

Fig. 381

Biology and Behaviour: Almost nothing is known of the biology of the vaquita. As is generally true for porpoises, they occur in small groups and are relatively inconspicuous in their behaviour.

Most calving apparently occurs in the spring.

Exploitation: The vaquita is in imminent danger of extinction, and is listed as an endangered species. The population may number only a few hundred individuals, and at least 30 to 40 are killed each year, mainly in large mesh gillnets set in the northern Gulf for totoaba, sea bass, rays, and sharks. Some are also taken in shrimp trawls. Recently, Mexico has taken some encouraging steps to try to save the vaquita.

IUCN Status: Endangered.