118 Marine Mammals of the World

Orcaella brevirostris (Gray, 1866)

DELPH Orcae 1

IRD

FAO Names: En - Irrawaddy dolphin; Fr - Orcelle; Sp - Delfín del Irawaddy.

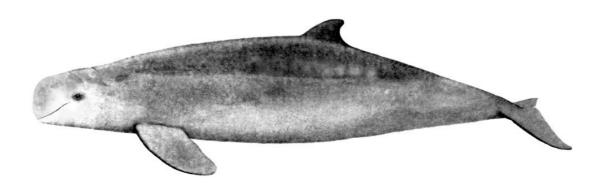
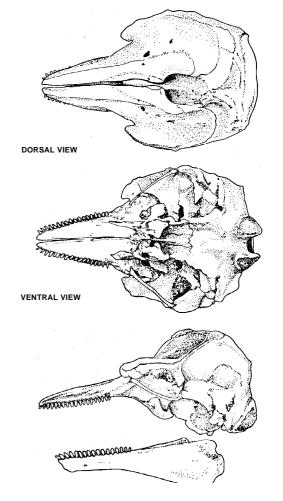


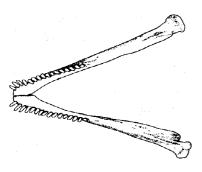
Fig. 270 Orcaella brevirostris

Distinctive Characteristics: The Irrawaddy dolphin resembles the finless porpoise, but unlike that species, it has dorsal fin. The fin is small and triangular, with a bluntly rounded tip, and is set just behind midback. The large flippers have curved leading edges and rounded tips. The head is blunt, with no beak; the mouthline is straight, and there may be a visible neck crease. The U-shaped blowhole is open toward the front, the reverse of the situation in most dolphin species.

The back and sides of Irrawaddy dolphins are grey to bluish grey; the belly is somewhat lighter.

Tooth counts are 17 to 20 (upper) and 15 to 18 (lower) in each row. The teeth have slightly expanded crowns.





DORSAL VIEW OF MANDIBLE

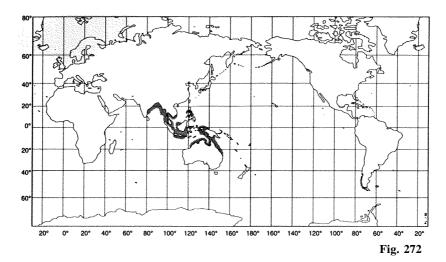
LATERAL VIEW

Fig. 271 Skull

Can be confused with: Irrawaddy dolphins can be confused with finless porpoises (p. 192) or dugongs (p. 212) in the parts of their range where these species overlap. When a clear view is obtained, Irrawaddy dolphins are distinguishable because neither of the other species has a dorsal fin.

Size: This is a relatively small dolphin: adults range from 2 to 2.75 m. Scant evidence indicates that the length at birth is about 1 m.

Geographical Distribution: Irrawaddy dolphins inhabit coastal, brackish, and fresh waters of the tropical and subtropical Indo-Pacific. They range from northern Australia and New Guinea to the Bay of Bengal, including at least the Irrawaddy, Mahakam, Mekong, Ganges, and Brahmaputra rivers. The range is poorly documented and is thought to be more extensive than shown.



Biology and Behaviour: Groups of fewer than 6 individuals are most common, but sometimes up to 15 dolphins are seen together. Irrawaddy dolphins have been seen in the same area as bottlenose and Indo-Pacific hump-backed dolphins. Irrawaddy dolphins are not particularly active, but do make low leaps on occasion. They are not known to bowride.

The calving season is not well known. Some calves appear to have been born from June to August, but 1 captive female gave birth in December.

Fishes, cephalopods, and crustaceans are taken as food. They sometimes spit water while feeding, apparently to herd fish.

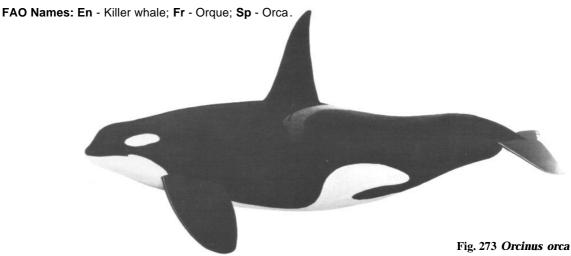
Exploitation: Shark gillnets in Australia and fish traps and other types of nets throughout the range are known to take some Irrawaddy dolphins. Some small-scale hunting by local people probably occurs in many areas of its range.

IUCN Status: Insufficiently known.

Orcinus orca (Linnaeus, 1758)

DELPH Orc 1

KIW



Distinctive Characteristics: Killer whales are among the most distinctive, and therefore easily identified, of all cetaceans. The tall erect dorsal fin is nearly as distinctive as the colour pattern. It may reach 0.9 m in females and 1.8 m in males. Adult males tend to have dorsal fins that are triangular or that may even cant forward to varying degrees. Killer whales have blunt snouts, with only very short and poorly defined beaks. The flippers are large and oval, and grow to lengths of up to 2 m in bulls.

The black-and-white colour pattern is unmistakable. The lower jaw, undersides of the flukes, and ventral surface from the tip of the lower jaw to the urogenital area is white. White lobes extend up the sides behind the dorsal fin, and there is a white oval patch above and behind each eye. The rest of the body is black, except for a light-grey "saddle patch" behind the dorsal fin. In some populations, the dorsal coloration includes a narrow black cape, below which the dark areas are more nearly charcoal grey.

There are 10 to 12 large, recurved teeth in each half of both jaws, which are oval in crosssection. In older animals, they are often worn and damaged by abscesses.

Can be confused with: Killer whales are easily recognizable to almost anyone who has spent time on the water or along the coast in areas they frequent. The great size of the dorsal fin (especially of adult males) and unique black and white colour pattern are diagnostic. At a distance, groups without adult males can be confused with Risso's dolphins (p. 152) and false killer whales (p. 126).

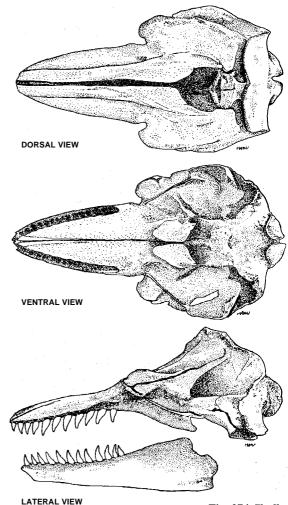


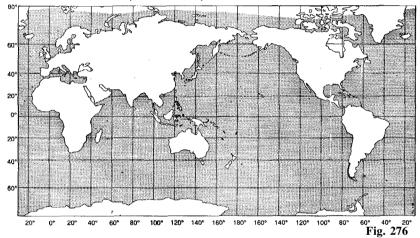
Fig. 274 Skull



Fig. 275 Surface - blow - dive profile

Size: Newborn killer whales are 2.1 ro 2.4 m in length and about 180 kg in weight. Adult females are up to 8.5 m and 7 500 kg; adult males up to 9.8 m and nearly 10 000 kg.

Geographical Distribution: This is probably the most cosmopolitan of all cetaceans. They can be seen in literally any marine region, and killer whales have even been known to ascend rivers. Killer whales are found in all oceans and seas, from the ice edges to the equator, in both hemispheres; however, they appear to be more common in nearshore, cold temperate to subpolar waters.



Biology and Behaviour: Studies in the eastern North Pacific, from Washington State to Alaska, have distinguished 2 types of killer whales, referred to as residents and transients. Although differentiated by ecological differences, there are also differences in coloration and external morphology. In Washington and British Columbia, at least, residents are primarily fish eaters and transients eat mostly marine mammals. Some studies in other parts of the world suggest that this pattern may be universal. Pods of resident killer whales in British Columbia and Washington represent one of the most stable societies known among non-human mammals; individuals stay in their natal pod throughout life. Differences in dialects among sympatric groups appear to help maintain pod discreteness. Most pods contain 1 up to 55 whales and resident pods tend to be larger than those of transients.

In the Pacific Northwest, calving occurs in non-summer months, from October to March. Similarly, in the northeast Atlantic, it occurs from late autumn to mid-winter.

Though best known for their habits of preying on warm-blooded animals (killer whales are known to have attacked marine mammals of all groups, from sea otters to blue whales, except river dolphins and manatees), killer whales often eat various species of fish and cephalopods. Killer whales also occasionally eat seabirds and marine turtles.

Exploitation: Pelagic whaling activities have rarely directed their attention towards killer whales, but whaling fleets have taken a few in most years. Very small numbers of killer whales were taken in the North Pacific by now-defunct shore whaling stations. Fishermen in many areas see killer whales as competitors, and shooting of whales is known to occur. This problem is especially serious in Alaska, where conflicts with longline fisheries occur. Small numbers are taken incidentally in fisheries in many areas. Live captures for public display have been banned in most areas of the eastern North Pacific. Subsequently, live capture activities shifted to Iceland, but in 1991, the Icelandic government announced that once current permits for live capture expire, no new ones will be issued.

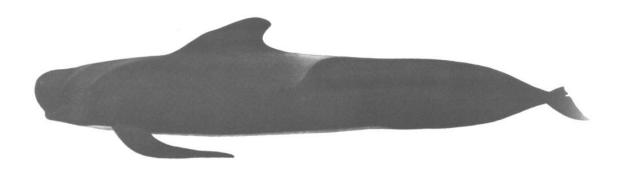
IUCN Status: Insufficiently known.

Globicephala melas (Traill, 1809)

DELPH Glob 1

PIW

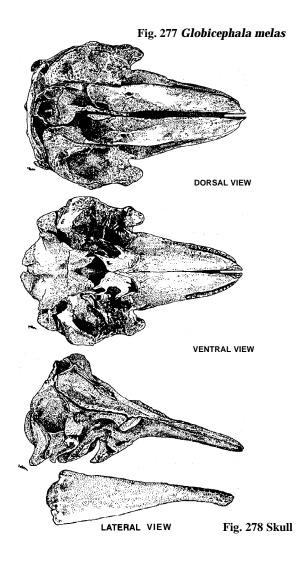
FAO Names: En - Long-finned pilot whale; Fr - Globicéphale commun; Sp - Calderón común Other scientific names still in use: *Globicephala melaena* (Traill, 1809).



Distinctive Characteristics: Externally, the long-finned pilot whale resembles its short-finned relative. The head is globose, with an upsloping mouthline. The flippers are extremely long (18 to 27% of the body length) and slender, with pointed tips and an angled leading edge that forms an "elbow." The dorsal fin is about one-third of the way back from the snout tip, and is low, widebased, and falcate. The tail stock is deepened (remains of more-or-less uniform he00ight from the saddle patch to just ahead of the flukes). Males have a larger, more bulbous head; larger, thicker dorsal fin; and deeper tail stock than do females.

Predominantly dark brownish grey to black, pilot whales have a white to light grey anchor-shaped patch on the chest, a light grey "saddle" behind the dorsal fin, and light grey "eyebrow" streaks.

Inside the mouth are 8 to 13 pairs of sharp, pointed teeth in the anterior part of each jaw.



Can be confused with: In some temperate waters, long-finned and short-finned (p. 124) pilot whales overlap in distribution. In these areas, the 2 species will be extremely difficult to distinguish at sea. Tooth counts and relative flipper lengths (both of which are generally not useful in at sea sightings) are helpful means of separating the 2. In the lower latitude areas of its range, the long-finned pilot whale can be confused with false killer (p. 126) and less likely, pygmy killer (p. 128) and melon-headed (p. 130) whales; however, the differences in head shape and dorsal-fin shape and position should permit correct identification.

Size: Newborns are 1.7 to 1.8 m long. Adults reach 6.7 m (males) and 5.7 m (females) in length. Bulls reach weights of 2 000 kg.

Geographical Distribution: Long-finned pilot whales occur in temperate and subpolar zones. They are found in oceanic waters and some coastal waters of the North Atlantic Ocean. They were previously found in the western North Pacific, but appear to be absent there today. The circum-antarctic population(s) in the Southern Hemisphere are isolated from those of the Northern Hemisphere.

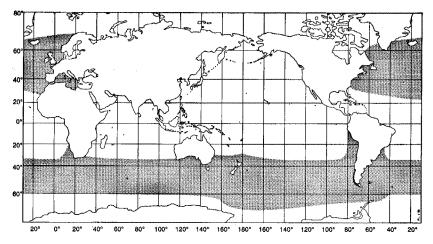


Fig. 279

Biology and Behaviour: Pilot whales are highly social; they are generally found in pods of about 20 to 100, but some groups contain more, to over 1 000. Based on photo-identification and genetic work, pilot whales appear to live in relatively stable pods like those of killer whales, and not in fluid groups characteristic of many smaller dolphins.

The mating system is hypothesized to be polygynous, which is consistent with the observed sexual dimorphism and adult sex ratio. Pilot whales are apparently deep divers. Groups often forage in broad ranks, sometimes with other species. Although they sometimes are aerially active, pilot whales are often seen rafting in groups at the surface, apparently resting.

This is one of the species most often involved in mass strandings. Strandings are fairly frequent, for instance, on Cape Cod (Massachusetts, USA) beaches from October to January. Their tight social structure also makes pilot whales vulnerable to herding, and this has been taken advantage of by whalers in drive fisheries off Newfoundland, the Faeroe Islands, and elsewhere.

Breeding can apparently occur at any time of the year, but peaks occur in summer in both hemispheres. Mating occurs primarily in spring to summer.

Primarily squid eaters, pilot whales will also take small medium-sized fish, when available.

Exploitation: The major exploitation of this species is probably the drive fisheries that were mentioned above. Today they are only taken in Greenland and the Faeroe Islands, but in the past, Newfoundland, Norway, Iceland, Shetland, Orkney, and the Hebrides were also sites of fisheries. Pilot whales are also known to be taken incidentally in trawl and gillnet fisheries in the western North Atlantic, and in swordfish driftnets in the Mediterranean.

IUCN Status: Insufficiently known.