

***Stenella attenuata*** (Gray, 1846)

DELPH Sten 3

DPN

**FAO Names:** **En** - Pantropical spotted dolphin; **Fr** - Dauphin tacheté de pantropical; **Sp** - Estenela moteada.



Fig. 328 *Stenella attenuata*

**Distinctive Characteristics:** Pantropical spotted dolphins (sometimes called "spotters") are generally slender, streamlined animals. They have a long thin beak that is separated from the melon by a distinct crease. The dorsal fin is narrow, falcate, and usually pointed at the tip.

Although unspotted at birth, by adulthood Pantropical spotted dolphins have varying degrees of white mottling on the dark dorsal cape, which is narrow on the head and sweeps low on the flank in front of the dorsal fin. The spotting ranges from very slight (or even non-existent) in offshore animals to heavy enough to obliterate the cape in coastal dolphins. The lower sides and belly of adults are grey and the lips and beak tip tend to be brilliant white. A dark grey band encircles the eye, and continues forward to the apex of the melon; there also is a dark gape-to-flipper stripe.

In each tooth row are 34 to 48 slender, sharply pointed teeth.

In at least the eastern tropical Pacific, a separate coastal form exists. It is larger and stockier, with a thicker beak and more extensive spotting than the offshore form.

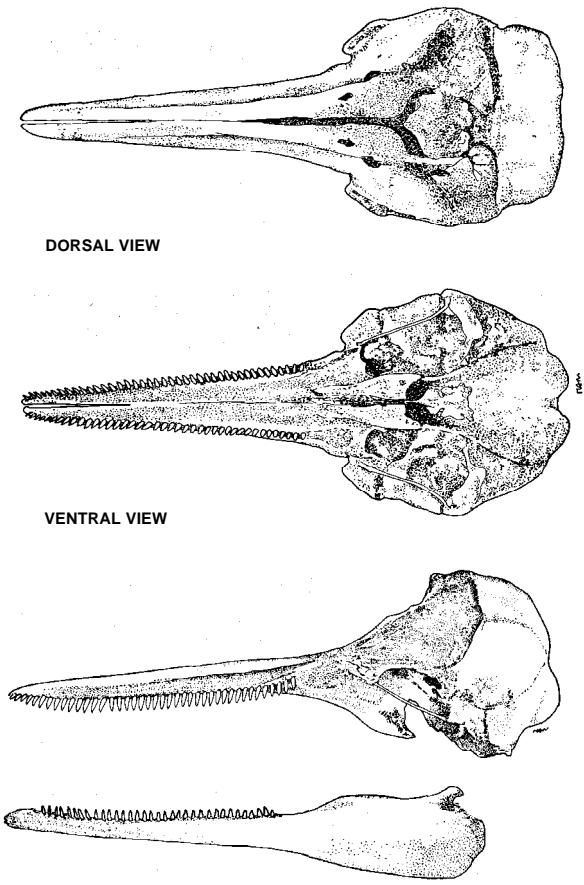


Fig. 329 Skull

**Can be confused with:** Pantropical spotted dolphins can be confused with several other long-beaked oceanic dolphins. Spinner dolphins (p. 160) can be distinguished by differences in dorsal-fin shape, beak length, and colour pattern. In addition to Atlantic spotted dolphins (p. 158) both bottlenose (p. 154) and hump-backed (starting on p. 134) dolphins can also be spotted (generally on the belly), but will often be distinguishable by differences in body shape and size.

**Size:** Adults are from 1.6 to 2.4 m (females) or 1.6 to 2.6 m (males). Animals from offshore populations can weigh up to at least 120 kg, but are smaller than those from coastal ones. At birth, pantropical spotted dolphins are about 85 cm long.

**Geographical Distribution:** Pantropical spotted dolphins are mostly creatures of oceanic tropical zones. As their name implies, these animals are found in all oceans, between about 40°N and 40°S, although they are much more abundant in the lower latitude portions of their range.

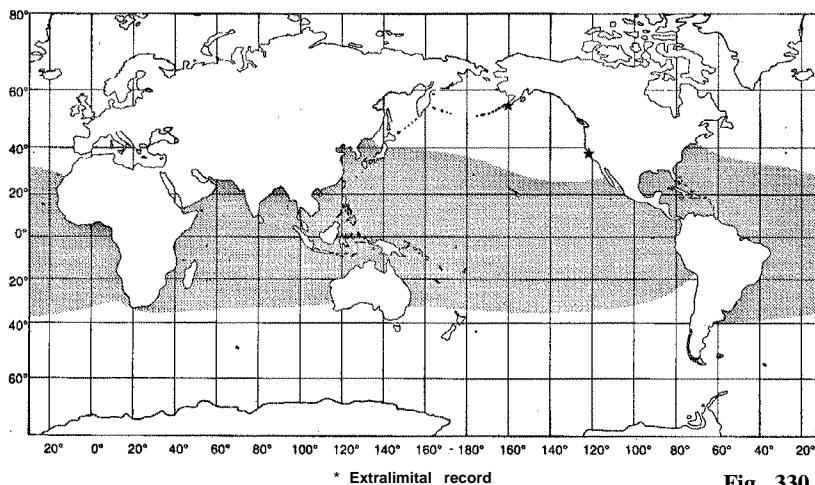


Fig. 330

**Biology and Behaviour:** These animals are among the most abundant dolphins in the eastern tropical Pacific and are the primary species involved in interactions with tuna there. Pantropical spotted dolphins associate with yellowfin tuna, spinner dolphins, and other pelagic predators; the fishermen take advantage of this association to help them locate and catch tuna more efficiently.

School sizes are generally less than 100 for the coastal form, but offshore herds may number in the thousands. In the eastern tropical Pacific, large herds are less common than they were before the tuna fishery began to exploit them. These gregarious animals are fast swimmers, often engaging in acrobatics, and frequently bowriding (except on the tuna fishing grounds of the eastern tropical Pacific, where they generally have learned to avoid boats).

There are 2 calving peaks in the eastern tropical Pacific, 1 in spring and 1 in autumn.

Pantropical spotted dolphins feed largely on epipelagic fish and squid, primarily during the day.

**Exploitation:** The tuna fishery in the eastern tropical Pacific targets the pantropical spotted dolphin to catch yellowfin and skipjack tuna that often swim below the herds. Annual mortality of spotted dolphins in the late 1980s was in the tens of thousands. Takes of hundreds of thousands per year in the 1960s and 1970s reduced the northern offshore stock of spotters to an unknown degree. Spotted dolphins are also taken in other fisheries, including drive fisheries in Japan and the Solomon Islands, and Sri Lankan gillnet and harpoon fisheries for human consumption, among others. Some have been reported taken in the Caribbean small cetacean fishery.

**IUCN Status:** Insufficiently known.

***Stenella frontalis* (Cuvier, 1829)****DELPH Sten 2****DST**

**FAO Names:** **En** - Atlantic spotted dolphin; **Fr** - Dauphin tacheté l'Atlantique; **Sp** - Delfín pintado.

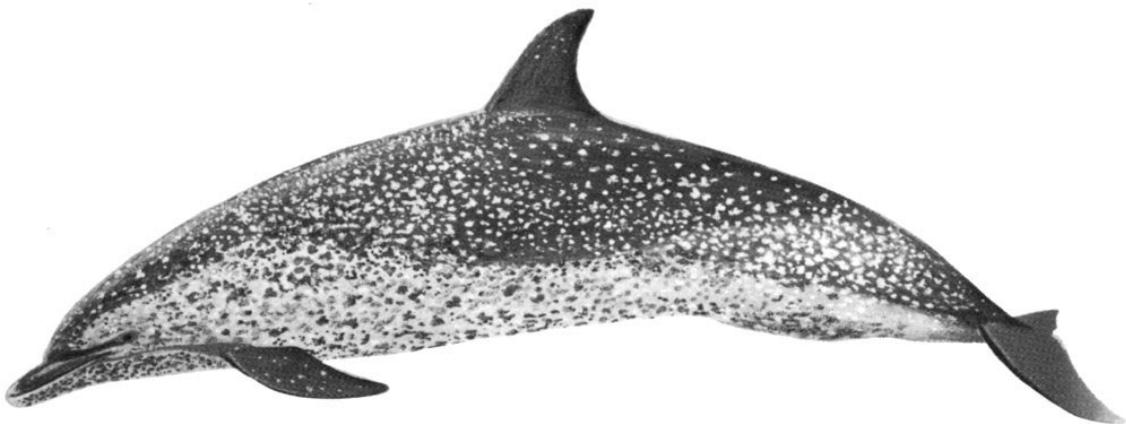


Fig. 331 *Stenella frontalis*

**Distinctive Characteristics:** The Atlantic spotted dolphin, in many ways, tends to resemble the bottlenose dolphin more than it does the pantropical spotted dolphin. In body shape, it is somewhat intermediate between the 2, with a moderately long, but rather chunky, beak. There is a distinct crease between the melon and beak.

There is much developmental variation in the colour pattern. Atlantic spotted dolphins begin life with unspotted background coloration. Young animals look much like slender bottlenose dolphins, with a dark cape, light grey sides and spinal blaze (variable in its development), and white belly. Large spotting on both dorsal and ventral surfaces progresses as the animal ages: some individuals become so heavily spotted that the cape margin and spinal blaze are obscured. However, in some populations, adults are essentially unspotted (these are generally in offshore areas).

There are 30 to 42 pointed teeth in each tooth row.

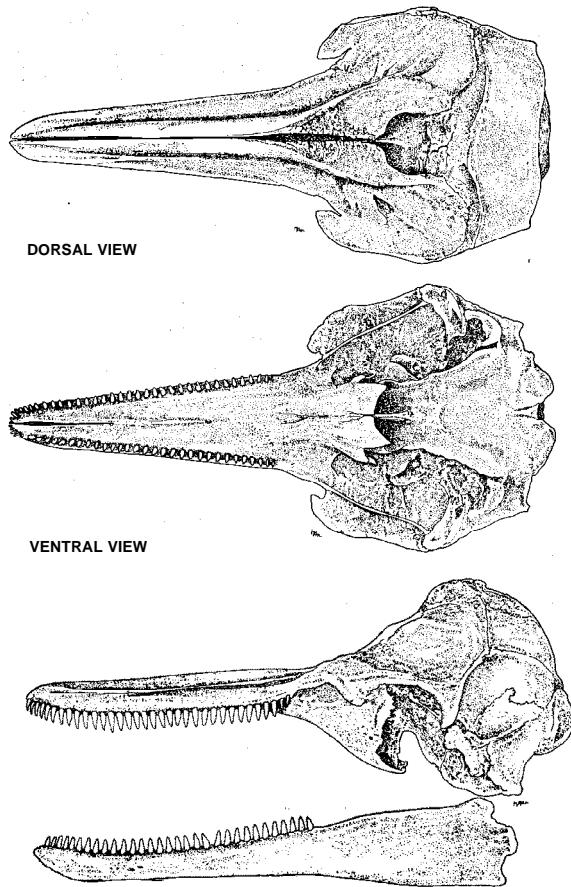


Fig. 332 Skull

**Can be confused with:** Atlantic spotted dolphins can be most easily confused with bottlenose dolphins (p. 154) and sometimes with pantropical spotted dolphins (p. 156). The differences in size and robustness are good clues, but may require a trained eye to distinguish in many sightings at sea. Heavy spotting is a good characteristic for Atlantic spotted dolphins; however, some may be nearly unspotted and some bottlenose dolphins may have spotting and blotches on the belly and sides. Pantropical spotted dolphins (p. 156) also may be difficult to distinguish, but attention to body robustness, snout shape, and colour pattern differences will allow them to be separated. Only the coastal form of the pantropical spotted dolphin is likely to appear very similar to the Atlantic spotted dolphin, but the former is only known from the eastern Pacific.

**Size:** Adults are up to 2.3 m long and 143 kg in weight. Newborn Atlantic spotted dolphins are 0.8 to 1.2 m long.

**Geographical Distribution:** This species is found only in the Atlantic Ocean, from southern Brazil to New England in the west, and to the coast of Africa in the east (the exact limits off West Africa are not well known).

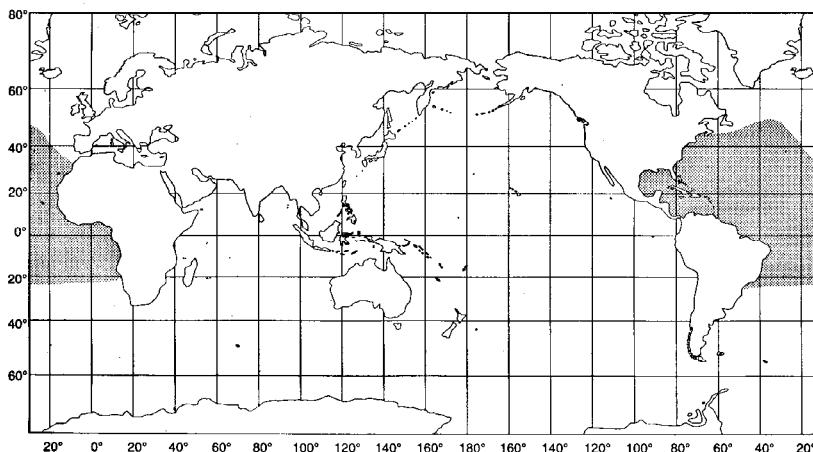


Fig. 333

Their tropical to warm temperate distribution is mostly over the offshore continental shelf, but Atlantic spotted dolphins also inhabit some deep oceanic waters.

**Biology and Behaviour:** Small to moderate groups, generally of less than 50 individuals, are characteristic of the Atlantic spotted dolphin. Coastal groups usually consist of 5 to 15 animals. These are acrobatic animals and they are known to be avid bowriders. Studies of Atlantic spotted dolphins off the Bahamas that allow people to swim with them show that these animals have a fluid group structure, like that of bottlenose and other small dolphins.

There is not much known of the species' life history, but tropical populations would be expected to have a protracted breeding season.

A wide variety of fishes and squids are taken by this species.

**Exploitation:** Atlantic spotted dolphins are taken in a direct fishery for small cetaceans in the Caribbean. Direct takes may also occur off the Azores and off West Africa. Some are probably also taken incidentally in tuna purse seines off the West African coast. However, there are not reliable estimates of the number of animals taken in any of these fisheries.

**IUCN Status:** Insufficiently known.

***Stenella longirostris* (Gray, 1828)**

DELPH Sten 4

DSI

**FAO Names:** En - Spinner dolphin; Fr - Dauphin longirostre; Sp - Estenela giradora.

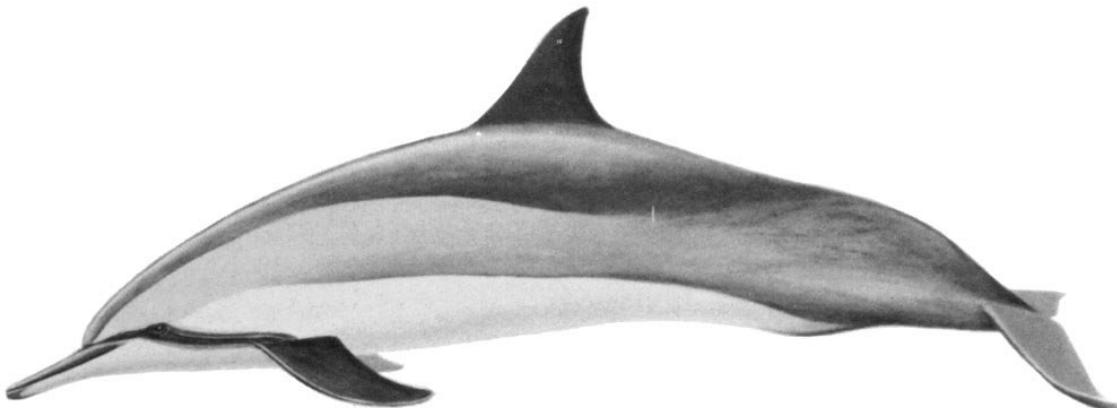
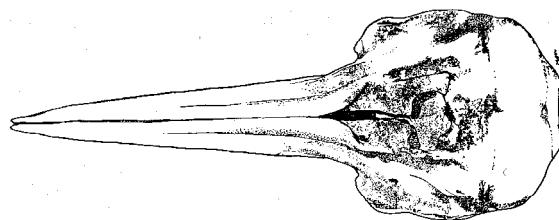


Fig. 334 *Stenella longirostris*

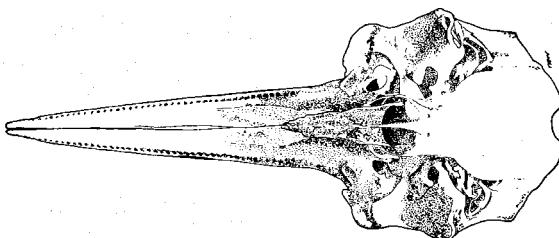
**Distinctive Characteristics:** The spinner dolphin is a slender dolphin, with an extremely long, thin beak. Also, the head is very slender at the apex of the melon. The dorsal fin ranges from slightly falcate to erect and triangular. In adult males of some stocks, the dorsal fin may become so canted forward that it looks as if it were stuck on backwards, and the tail stock may become very deepened, with an enlarged post-anal keel of connective tissue.

Spinner dolphins generally have dark eye-to-flipper stripes and dark lips and beak tips. There are 3 subspecies known. The individuals of most spinner dolphin stocks in the world have a three-part colour pattern (dark grey cape, light grey sides, and white belly) and only minor differences in appearance of males and females. These animals (illustrated above) are called Gray's spinner dolphins (*S. l. longirostris*).

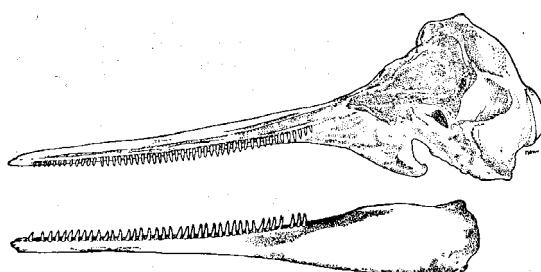
In the eastern tropical Pacific, there are 3 other forms. Eastern spinner dolphins (*S. l. orientalis*) have a monotone steel grey colour pattern, with white only as patches around the genitals and axillae. They have the most exaggerated sexual dimorphism. Central American spinner dolphins (*S. l. centroamericana*), previously called Costa Rican spinners, are poorly known, but appear to have a similar colour pattern, although it may lack the white ventral patches. A third type of spinner dolphin in the eastern tropical Pacific, often called the whitebelly spinner dolphin, appears to represent a hybrid between eastern spinner and Gray's spinner dolphins. Whitebelly spinners are more robust, with a two-part colour pattern and less exaggerated sexual dimorphism than the other stocks in the eastern tropical Pacific.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 335 Skull

Geographical forms of spinner dolphins have not been well described for most areas, with the exception of the eastern Pacific; although a dwarf form has been described from the Gulf of Thailand. Animals of the above described forms, or other undescribed stocks, may exist elsewhere as well.

In spinner dolphins, there are 45 to 62 pairs of very fine, pointed teeth in each jaw. This is more than in almost any other cetacean species.

**Can be confused with:** From a distance, other long-snouted oceanic dolphins can look like spinner dolphins. Spinner dolphins are most likely to be confused with clymene dolphins (p. 162) in the Atlantic, but careful attention to colour pattern differences and head and body shape differences will allow them to be distinguished.

**Size:** Newborn spinner dolphins are about 75 to 80 cm long; adults reach 2 m (females) and 2.4 m (males). They reach weights of at least 77 kg. Eastern spinner dolphins are the smaller and Central American spinner dolphins the larger of the subspecies in the eastern tropical Pacific.

**Geographical Distribution:** The range of the spinner dolphin is nearly identical to that of the pantropical spotted dolphin, encompassing oceanic tropical and subtropical zones in both hemispheres. Limits are near 40°N and 40°S.

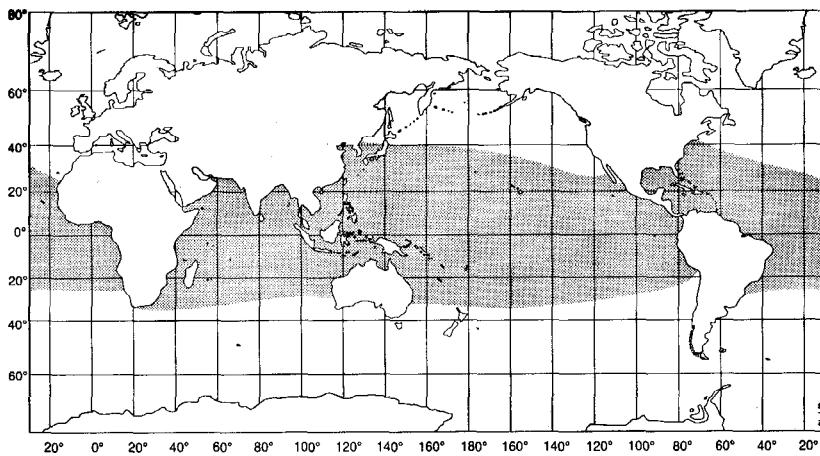


Fig. 336

**Biology and Behaviour:** The spinner dolphin is named for its habit of leaping from the water and spinning up to 7 times on its long axis, before falling back to the water. This is one of the most aerial of all dolphins. Herd sizes range from less than 50 up to several thousand. Associations with pantropical spotted dolphins are common in the eastern tropical Pacific.

Calving peaks in different populations range from late spring to autumn.

Spinner dolphins of most populations feed predominantly at night, on mid-water fish and squid, and rest during much of the day. Their association with pantropical spotted dolphins and yellowfin tuna results in their entanglement in tuna purse seines in the eastern tropical Pacific.

**Exploitation:** Both the whitebelly and eastern spinner forms have been heavily involved in the tropical Pacific tuna purse seine fishery. The numbers of eastern spinners have been reduced significantly in the last few decades by this fishing practice. Catches of spinner dolphins also occur in the Caribbean, Australia, Japan, Thailand, the Philippines, and Sri Lanka; in this last area up to 15 000 are killed each year in gillnets and by hand-harpooning. There are likely to be fisheries interactions off West Africa.

**IUCN Status:** Insufficiently known.