

SPOTTED DOLPHIN (T)

Stenella attenuata (Gray, 1846)



Other Common Names

Spotter, spotted porpoise; delfin machado, delfin pintado or tonino pintado (Latin America); arari iruka (Japanese); kiko (Hawaiian); pyatnistyy del'fin (Russian).

Description

In overall body shape, this animal is very much like the common dolphin and striped dolphin. Adults range from 1.6 to 2.6 m long, and weigh up to 100 kg or more, depending on the geographic race involved (see section on Distribution below). Spotted dolphins are about 80 cm long at birth and are unspotted. Dark spots begin to appear ventrally when the animals reach about 1.5 m in length, followed by light spots appearing on the dark gray dorsal surface. In adults the ventral spots have fused and lightened, giving the animal a uniform gray appearance below. The light spots above persist and are on the average largest and most numerous in the relatively large-bodied, large-toothed, and robust "coastal" spotted dolphin. The "northern offshore" and "southern offshore" forms are relatively smaller, more lightly built, have smaller teeth, and on the average are less spotted. Spotted dolphins around Hawaii are still less spotted than the offshore forms in the eastern tropical Pacific, but are similar to them in size and shape.

The northern and southern offshore forms differ from each other in average values of some external and skull measurements, and specimens are assigned to the two stocks based on where they are captured or seen.

Natural History Notes

Most of what is known about spotted dolphins comes from studies of the offshore race, which is the cetacean most heavily involved in the eastern tropical Pacific tuna fishery. These dolphins are regularly found in an as-yet-unexplained association with yellowfin tuna. Fishermen spot, chase, and encircle large schools of spotted (and

other) dolphins with purse seines, then attempt to release the dolphins before hauling aboard the catch of tuna that remains beneath the mammals during the chase and capture operation. The release procedure is not always successful, and in the early 1970's 100,000 or more spotted dolphins died in tuna nets each year. Dolphin-release techniques have improved, and kills in recent years (e.g., 1980) have been in the tens of thousands. Release-technology research continues.



Spotted dolphins awaiting release from tuna seines. In addition to affording excellent views of body shape and proportions, these photos clearly show the structure of the cape pattern, details of the coloration of the head, including the light mouth and darker flipper stripe, and the pointed flippers. The bulging keel is usually most pronounced in adult males. (Photo by W. High, courtesy of NMFS.)

Spotted dolphins are extremely gregarious and are often found in offshore aggregations of more than 1,000 animals, frequently in mixed herds with spinner dolphins. The coastal form is usually encountered in herds of less than 100.

The life history of the northern offshore race has been studied intensively. Breeding takes place during prolonged spring and fall seasons; little of it occurs in winter, but there may be a third peak in summer. Gestation lasts for about 11.5 months, nursing for about 11.2 months. Since most females "rest" for a few months following lactation, the average calving interval is greater than 2 years.

Spotted dolphins are very active animals at the surface, and herds can be sighted at a great distance because of the froth caused by their porpoising and leaping. In some areas they still ride bow waves, but in the offshore eastern tropical Pacific, years of harassment by tuna boats appear to have discouraged this behavior, and they now usually flee from powered vessels. Although they do not adapt well to captivity, a few spotted dolphins have been maintained successfully in Hawaiian oceanaria.



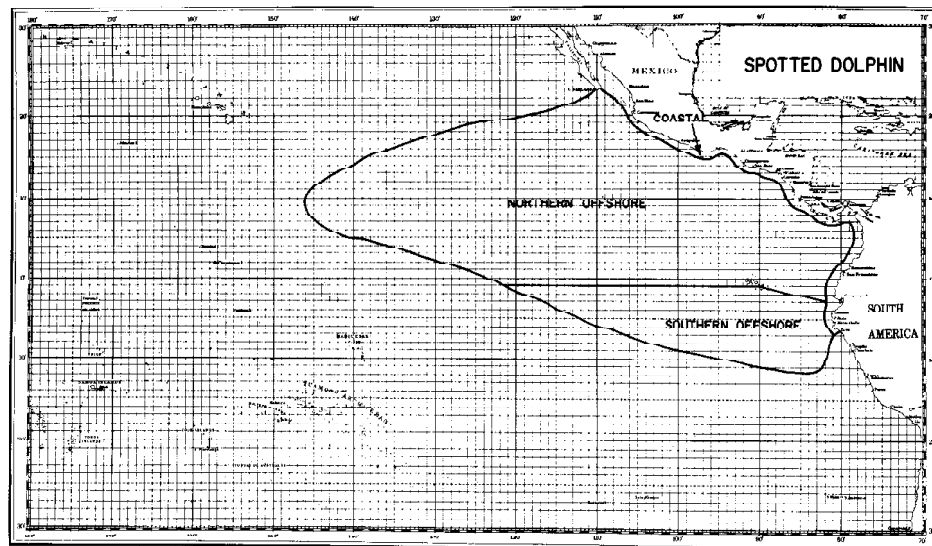
Seen from above, the distinctive pattern identifies the spotted dolphin.
(Photo by E. R.L. Pitman.)



Juvenile spotted dolphins are known for their frequent high leaps in the wild.
(Photos by E. Shallenberger.)

Mesopelagic and epipelagic fishes and squids form the diet of spotted dolphins. They are preyed on by large sharks, killer whales, false killer whales, and possibly other small whales.

Distribution



Spotted dolphins have not been recorded off the North American coast north of the United States-Mexican border and are clearly a tropical species. The coastal form ranges into the Gulf of California to about lat. 28°N. This coastal race is normally confined to waters within 50 km of the coast. It occurs continuously along the

Mexican, Central American, and South American coasts to well south of the equator. Frequently it is seen around the Tres Marias Islands and on the way in and out of Panama, Punta Arenas, and Costa Rica.

The offshore forms are found from south of Cabo San Lucas to below the equator and west to about long. 145 °W. They have been seen as far inshore as 20 km from the coast but are generally distributed farther offshore. Two populations were recently defined, north and south of lat. 1°S. The Hawaiian race inhabits the waters around the Hawaiian archipelago and may extend westward and southward from there. The populations of the offshore races have been estimated at more than 2 million animals in the aggregate.



Seen from the front, the distinctive pattern identifies the spotted dolphin.
(Photo by E. R.L. Pitman.)

Can Be Confused With

Young spotted dolphins are superficially almost indistinguishable from small bottlenose dolphins. However, they are usually seen in the company of spotted adults. Common dolphins and striped dolphins behave much like spotted dolphins around a boat, frequently jumping clear of the water and darting back and forth erratically when they ride the bow wave. Both, however, have white bellies that stand out sharply against their variously colored and patterned sides, while the spotted dolphin has a gray belly and spotting that is entirely absent in the other two species.

Because of their spotting, rough-toothed dolphins may also be confused with spotters. However, there is no crease to demarcate the beak from the forehead of the rough-toothed dolphin, and its spotting or mottling is generally not as extensive as that of the spotted dolphin.

Particularly since they occur in mixed herds, spotted and spinner dolphins can be confused. Spinners have a triangular or even slightly forward-curved dorsal fin.

Identification of Dead Specimens

The combination of spots, sharply demarcated rostrum, 34-48 teeth in each row, and no strongly marked pattern of stripes makes this animal easy to identify. Since the various geographical forms vary from each other only in average character state, individual specimens often cannot be identified to race on the basis of morphology alone.

Excerpted from NOAA Technical Report NMFS Circular 444:
"Whales, Dolphins, and Porpoises of the Eastern North Pacific and Adjacent Arctic Waters - A Guide to Their Identification" by Stephen Leatherwood, Randall R. Reeves, William F. Perrin, and William E. Evans with Appendix A on Tagging by Larry Hobbs. July 1982. U.S. Department of Commerce