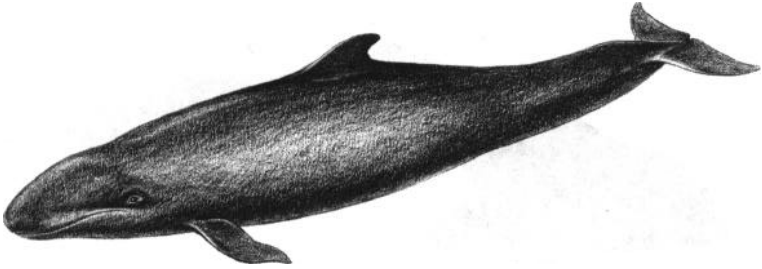


FALSE KILLER WHALE

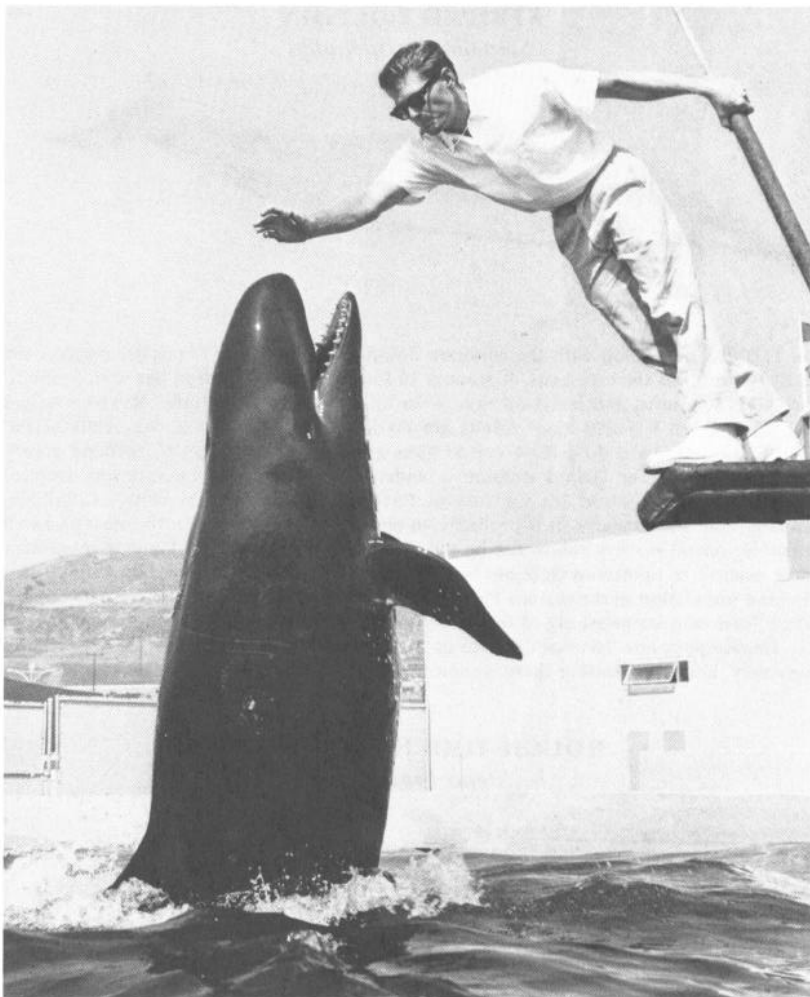
Pseudorca crassidens



This is a large dolphin, with males attaining 20 feet in length and females 16. Newborn calves are about 6 feet long. It is entirely black, except that it may have a ventral medium-gray blaze mark on the anterior belly. The snout is rounded, with no beak. It differs greatly from the true killer whale: the body is more slender; the dorsal fin smaller; the flippers are narrow and pointed, rather than broad and rounded; it lacks the conspicuous white markings of the latter.

The false killer is found in both the Atlantic and Pacific Oceans. In the Pacific, it is known to range from Puget Sound, Washington, to Acapulco, Mexico. It travels in large schools of perhaps 100 or more. In October 1963, a school of 200-300 was seen about 4 miles off the Palos Verdes Peninsula, and an 11-foot female was captured from this school by collectors for Marineland of the Pacific. This animal, the first of its kind to be kept in captivity, proved very docile and fearless, feeding the next day after it was captured and soon learning to jump for its fish. Its formidable teeth are apparently used for seizing large surface fish. Off Hawaii, it has been seen eating *mahi-mahi* (dolphinfish). It is probably more common than once believed; its apparent rarity may be due to the fact that it is mainly a creature of the open seas, seldom coming near shore. When it does, it sometimes gets stranded in large numbers on shallow flats.

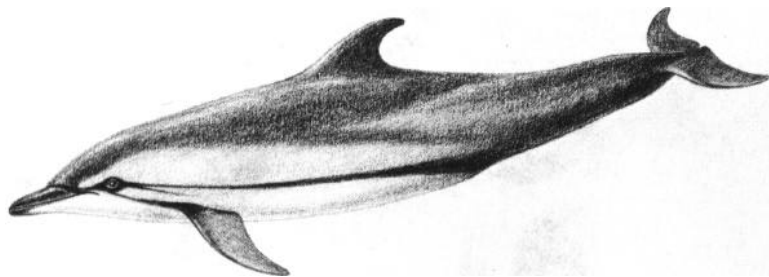
These animals feed on squid and some fish.



False killer whale. *Photo from Marineland of the Pacific.*

STRIPED DOLPHIN

Stenella coeruleoalba

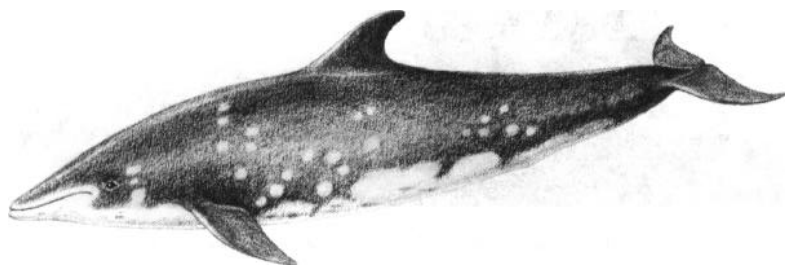


This dolphin, along with the common dolphins (*Delphinus*), I consider perhaps the most beautiful of the cetaceans. It reaches 10 feet in length. Gestation has been found to last 11-1/2 months, and lactation occurs for an additional 11 months. Newborn calves are about 2 feet 9 inches long. Adults are black or dark brownish above, white below, with black lines extending from eye to anus and from eye to flipper, forming a very striking pattern. The striped dolphin is widely distributed in temperate and tropical waters around the world. In the eastern Pacific it is known from British Columbia, Canada, south to Ecuador. It is probably an open sea form, staying for the most part well offshore. Aerial surveys conducted by the U.S. Navy and Bureau of Land Management have resulted in numerous sightings of this species off California. The size of the striped dolphin population in the eastern Pacific has been recently estimated at 248,000 animals. Their food consists primarily of fish (mostly mesopelagic species) and cephalopods.

This dolphin also has been known as *Stenella euphrosyne* and as *S. styx*. Markings may vary, and some believe there is more than one species.

ROUGH-TOOTHED DOLPHIN

Steno bredanensis



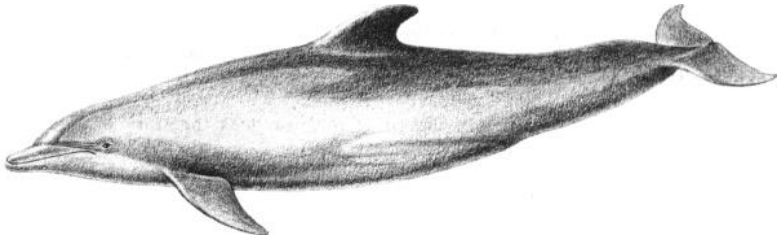
This is a slim dolphin, with a pointed beak, not sharply demarcated from the forehead. It reaches 8 feet in length. The external shape and color pattern generally are similar to the Pacific bottlenose dolphin, but in this species the rostrum is not sharply set off from the head. "Yellowish-white spots" ascribed in previous accounts as part of its color pattern now are known to be scars from bites of what has been called the "cookie-cutter shark," *Isistius brasiliensis*. The rough-toothed dolphin is found in both the Atlantic and Pacific oceans, but it does not seem to be common anyplace, and little is known about it. Its most distinctive feature is its teeth, which are roughened or furrowed on the crown with fine vertical ridges, instead of being smooth as in other dolphins.

The name *Steno rostratus* has also been applied to this species.

The few stomachs that have been examined have contained fish almost exclusively.

PACIFIC BOTTLENOSE DOLPHIN

Tursiops truncatus



The bottlenose dolphin is fairly large and stout-bodied, reaching a length of 10-12 feet, though 8 feet is more usual, and a weight of 500 (or even as much as 800) pounds. Gestation lasts about one year, and calves nurse 1-1/2 to 2 years, although they begin to take solid food at 6 months. Newborn calves are 3-1/3 feet long. Estimated life span is about 25 years. As its name suggests, it has a prominent beak. Its mouthline curves to give it an appearance of smiling. In color, it is almost uniform gray, lighter on the ventral surface.

There appear to be two distinct population of *Tursiops* in southern California waters: an offshore form which is found throughout the Channel Islands (frequently in the company of Pacific pilot whales), and an inshore form that rarely strays this far north, but has been seen in and just outside the surf zone off San Diego and Orange Counties on numerous occasions. There is evidence that in the past this inshore form strayed as far north as Monterey and San Francisco Bay. Although numerous specific and subspecific names have been applied to bottlenose dolphins, most current researchers believe it would be premature to assign subspecific names at this time.

The bottlenose is one of the best known dolphins in the world. It shares with the common dolphin in being probably one of the two most familiar kinds to the early Greeks and Romans, who had a great affection for dolphins and told many stories about them. One story, which may be just legend but may equally well be true, tells of a dolphin (I would guess a bottlenose) which nearly 2,000 years ago frequented the waters near Hippo, in the Mediterranean, and became friendly with the people there. It let people handle it, and let one boy ride on its back. In 1955 and 1956, a bottlenose remained near the beach at Opononi, in New Zealand, where it was very friendly with the bathers, especially children, let herself be handled, and played with balls and other objects. Like the dolphin of the earlier story, one particular child was her favorite.

In recent years, marine aquaria in Florida and California have exhibited bottlenose dolphins, both Atlantic and Pacific forms. Their ready adaptation to life in a confined space, their intelligence and quickness in learning tricks, their inventive playfulness (abetted by a greater flexibility of the neck than in most other dolphins, which makes it easier for them to catch and throw objects), have made them very successful exhibition animals. There have been a number of live births at Marine Studios, Florida.

The Atlantic bottlenose has also gained notoriety from its recent use as an experimental animal. Development of electronic and other apparatus, plus military interest in underwater sounds on the part of the U.S. Navy, led first to the discovery that cetaceans, like many other marine animals, are noisy creatures. This led to a series of experiments by one investigator which proved that some of the dolphin sounds served the purpose of a very efficient echo-ranging or sonar system, by means of which the animals could avoid obstacles, locate fish, etc., without any visual help.

Another investigator, a medical researcher who was impressed by the very large and very convoluted brain of the cetaceans, conducted a series of experiments on *Tursiops*, as result of which he was convinced that dolphins are among the most intelligent of

animals, perhaps exceeded only by man. He found that they make a variety of sounds for purposes of communicating with one another (in addition to those used for echo-ranging) and conceived the idea that communication between them and man might one day be possible. One of his dolphins is said to have an imitative vocabulary of at least 60 words. He visualizes them hunting submarines for us, finding and herding fish, making oceanographic observations, and performing many other useful services! (A writer of fiction has expanded on this idea, and written a story in which dolphins direct human research projects.)

An interesting children's book, *Children of the Sea*, tells the story of a fictional bottlenose dolphin and its friendship with a little boy.

Tursiops feed largely on fish. In captivity, an 8-foot one may eat 15 pounds of mackerel per day. In nature, a bottlenose was found to have eaten over 62 fish of at least 8 kinds. It may also feed on shrimp.



Mother bottlenose dolphin and young. *Photo from Marineland of the Pacific.*