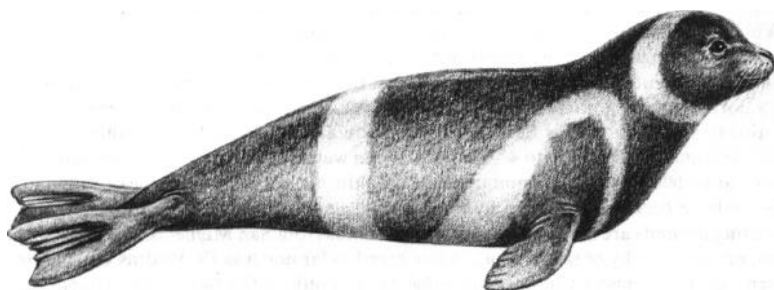


## RIBBON SEAL

*Phoca fasciata*

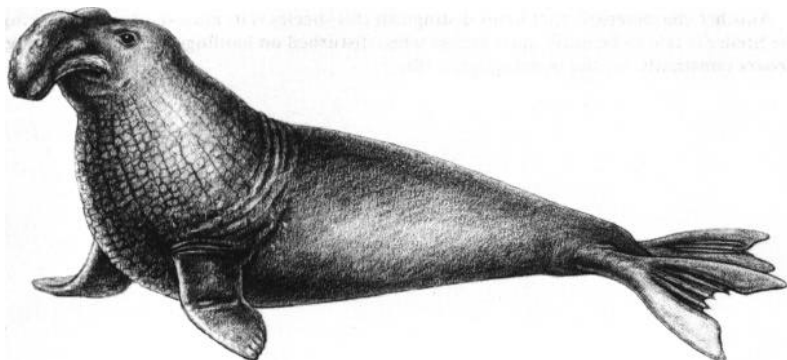


The normal range of this seal is from Pt. Barrow south to probably near the tip of the Alaskan Peninsula (55°N), and along the Asiatic coast in the western Pacific. However, in November 1962, a diseased and weakened male weighing about 200 pounds was found stranded on a beach just south of Morro Bay. This is the only California record. The animal was taken to the Morro Bay Aquarium, but it died a month later.

When in full pelage, this is a strikingly marked animal. It is dark-brown, grayish-brown, or grayish-yellow, with encircling yellowish bands, stronger in the male than in the female. One ring encircles the neck, one the flipper and shoulder region on each side, and one the rump.

## NORTHERN ELEPHANT SEAL

*Mirounga angustirostris*



This is the largest of all the seals, the males reaching lengths of 15-16 feet (an unverified report gives 22 feet) and weights of about 4,000 to 5,000 pounds, and females 11 feet and about 1,700 pounds. The color is brownish in old pelage, silver-gray in new. It is not a handsome animal: there are often patches of skin peeling off; and the male develops a bulbous enlargement of the snout, from which, along with its size, it gets its common name.

Those who have been fortunate enough to see elephant seals on their rookeries or hauling-out grounds have found them quite fascinating. They can be approached closely, usually neither fleeing nor attacking unless unduly disturbed.

The range of the species is from Alaska (Prince of Wales Island) to Baja California, Mexico (Cape San Lazaro). Elephant seals were formerly abundant as far north as Point Reyes, above San Francisco, but were hunted so extensively for their fine quality oil that they were nearly exterminated. Their last refuge was Guadalupe Island, off northern Baja California. In 1892 scientists found only nine on the island, and took seven of these for specimens. Fortunately, there must have been others which they did not see. In 1911 the Mexican government prohibited killing them, and the herd began building up until by 1930 there were about 500 on Guadalupe, and there were believed to be over 1,500 altogether. In 1938, 13 were counted on San Miguel, one of the southern California Channel Islands. In 1950 there were estimated to be 4,500-5,000 on Guadalupe Island and smaller colonies on other Mexican islands and on the Channel Islands; a count was made in that year of 168 on San Nicolas Island. By 1978 there were breeding colonies on San Nicolas, San Miguel, Santa Barbara, Ano Nuevo, and Southeast Farallon Islands, and a small breeding colony had started up on the mainland at Ano Nuevo Point. Individual animals have been seen as far north as Alaska on several occasions. A Department of Fish and Game census in 1978 revealed 5,600 elephant seals on San Miguel Island alone; however, this is at odds with National Marine Fisheries Service estimates of 10,000 for this island. In any event, the species has reoccupied all of its historic rookeries and hauling-out grounds, and recent estimates place the total population of northern elephant seals at 50,000 animals.



Elephant seals on Guadalupe Island. *Photo by John E. Fitch.*

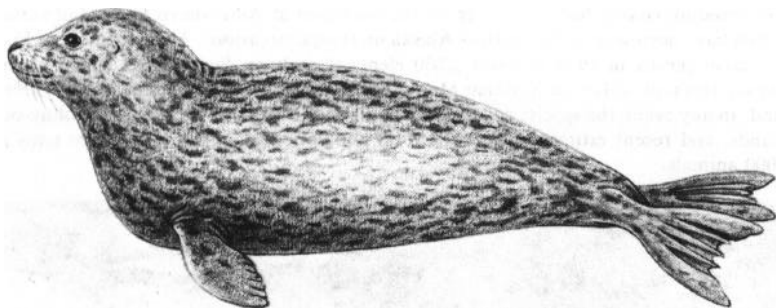
Elephant seals congregate on rookeries during the breeding season, which is from December through March. The harems consist of one male to 8 to 40 females. The gestation period is about 11-1/2 months. The principal breeding rookeries are Guadalupe and San Benito Islands, in Mexico.

These animals do a good deal of feeding at night, and probably in deep water. Small sharks, rays, ratfish, rockfish, and squid have been found in their stomachs.

A large seal, seen floating upright in the water with head and shoulders projecting, then sinking vertically out of sight, is probably of this species. On foggy days such happenings have been mistaken for mermaid sightings by wide-eyed fishermen.

## HARBOR SEAL

*Phoca vitulina*



The smaller size, chunky shape, lack of external ears, small front flippers, backward-pointing hind flippers which are used in swimming, and spotted coat make it easy to distinguish harbor seals from sea lions. Also, the squarer muzzle with more dorsally placed nostrils, and the large eyes, are characteristic of this species.

A male may be 5 or 6 feet long and weigh 250 to 300 pounds. Females are slightly smaller. These are rather chunky-built seals throughout, and lack the enlargement in the shoulder region of the male eared seals. The coat is mottled and spotted. There have been two subspecies described: *P.v. richardi*, which ranges from Herschel Island in the Arctic, and the Bering Sea, south to Monterey Co.; and *P.v. geronimensis*, which ranges from Santa Barbara south to San Geronimo Island, Baja California. The northern subspecies is typically a beautiful silvery-gray with black spots; the southern one is black (or brown) with silvery or white or yellowish spots. However, there is considerable variation, and the validity of these subspecies has been questioned. Their markings have caused them to be sometimes given the name "leopard" seal.

They are not as numerous nor as often seen as sea lions. The entire population of the two subspecies has been estimated at 50 to 200 thousand, with only about 2,000 individuals in California. They most often occur in bays and harbors or at the mouths of rivers, or may even go up rivers. San Francisco Bay is one of the places where they are most apt to be seen, or were at least in the days of the ferries. In 1944 a group of 10 to 70 hauled out on a sand bar 200 yards north of the east approach to the Bay Bridge, where they were observed and counted day after day by a biologist. In 1964 a group of about 30 hauled out regularly on some rocks directly below the east end of the Richmond-San Rafael Bridge. They frequently haul out on sand bars, as well as on rocky places. Surprisingly, they may go well-offshore at times: they have been seen on San Nicolas Island, the outermost of the southern California Channel Islands.



Harbor seal under water. *Photo from Marineland of the Pacific.*

Harbor seals were not included in the Department of Fish and Game census until recent years. The 1970 count was 1,675 which was a drop from the preceding year, but higher than in 1965.

The harbor seal has been described as polygamous or promiscuous, but does not form organized harems for breeding purposes. The pups are born mainly from the end of May through July. They are usually born on land, but may be born in the water. Of several pups born at Steinhart Aquarium, in San Francisco (up to 1928), all were born in the water and were able to swim at once. The pups nurse for 4 to 6 weeks.

The food of the harbor seal consists of fish, squid, and octopus, also some shell-fish.

It shares with the elephant seal the trait of floating in the water with just the head projecting, then sinking straight down out of sight. The sea lion dives forward.