

## 4.2 OTHER MARINE CARNIVORES - Sea otters, Marine otters, and Polar bears

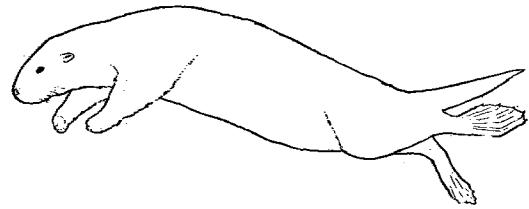
By far, most carnivores are terrestrial mammals. Besides pinnipeds, the Order Carnivora contains 7 families of largely meat-eating mammals, including cats, dogs, bears, raccoons, weasels, otters, civets, and hyenas. Of these, only 2 families contain marine mammal representatives, the Mustelidae (otters and weasels) and the Ursidae (bears). As only 3 of these 231 non-pinniped species of carnivores are marine mammals, we will not present the detailed characteristics of members of this order.

### 4.2.1 Guide to Families

#### MUSTELIDAE

The mustelids are the otters, weasels, and their kin. Other mustelids include the minks, polecats, martens, wolverines, Skunks, and badgers. Only 2 of the 67 species in this family are truly marine, the sea otter and the marine otter. It is clear that "fresh-water" otters in certain areas enter marine waters; however, we restrict our treatment to species usually considered among marine mammals. Otters are often classified in their own subfamily, the Lutrinae (containing 12 species).

**Otters** (2 marine species in 2 genera) p. 298

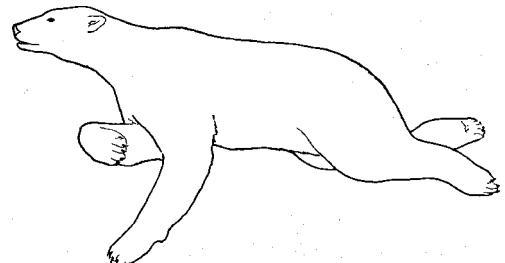


**Fig. 577 Mustelidae**

#### URSIDAE

There are 7 species of bears in the world and 6 are wholly terrestrial. Bears are very familiar animals to many people. In particular, the grizzly, brown, and black bears of the Northern Hemisphere are often exhibited in zoos and are well-known. The single marine species, the polar bear, qualifies as the least aquatic of all marine mammals.

**Bears** (1 marine species in 1 genus) p. 302



**Fig. 578 Ursidae**

## 4.2.2 FAO Species Identification Sheets

***Enhydra lutris*** (Linneaus, 1758)

MUST Enhy 1

OTS

FAO Names: **En** - Sea otter; **Fr** - Loutre de mer d'Amérique du Nord; **Sp** - Nutria marina.

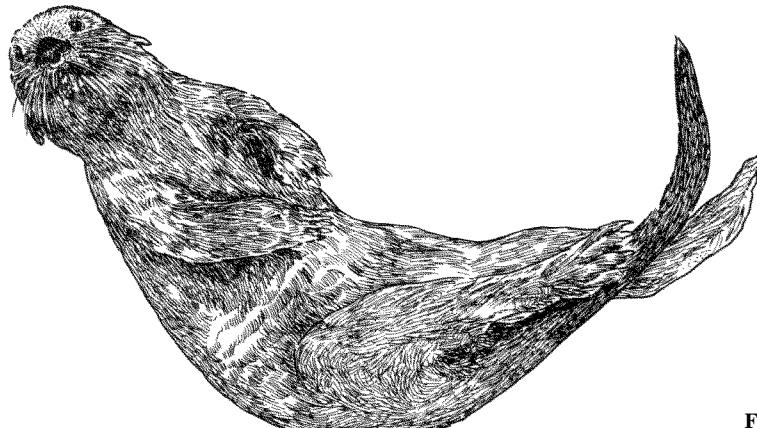
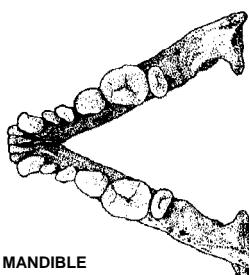


Fig. 579 *Enhydra lutris*

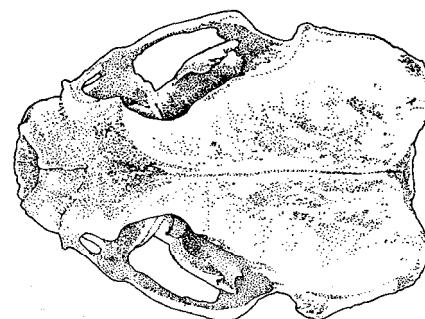
**Distinctive Characteristics:** The sea otter is the most derived of the otters. The muzzle has a set of thick vibrissae. The large head has a blunt snout, and is connected to the body by a short, stocky neck. The forelimbs are short and similar to those of other otters, with a loose flap of skin under each that is used to store food. The hind-limbs are large and flattened like flippers; they are oriented backwards. Although the short tail is not noticeably tapered, it is flattened top to bottom into a paddle-like structure. Three subspecies are currently recognized (described below).

The pelage of sea otters is the densest of any mammal (more than 100 000 hairs/cm<sup>2</sup>). A layer of sparse guard hairs overlays the dense underfur. Sea otters are completely covered with fur, except for the nose pad, inside of the ear flaps, and the pads on the bottom of the feet. The colour of the fur is dark brown to reddish brown. Older individuals become grizzled, with the fur around the head, neck, and shoulders becoming almost white.

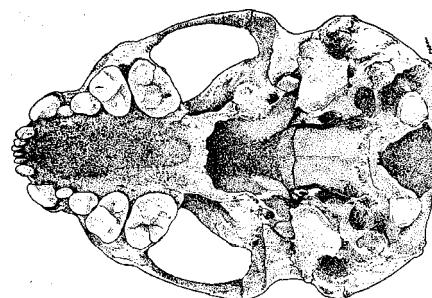
The dental formula is I 3/2, C 1/1, PM 3/3, M 1/2.



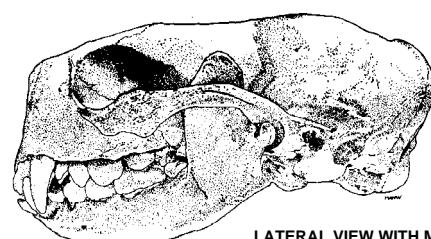
DORSAL VIEW OF MANDIBLE



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW WITH MANDIBLE

Fig. 580 Skull

**Can be confused with:** The sea otter is the only truly marine otter in its range, although North American river otters (*Lutra canadensis*) are often found in marine waters along the northwest coast of North America. River otters are smaller and more slender than sea otters, with longer tails. Also, river otters generally swim belly down even at the surface, while sea otters usually move along the surface on their backs.

**Size:** Male sea otters reach lengths of 148 cm and weights of 45 kg. Females can be up to 140 cm and 32.5 kg. Newborns weigh about 1.0 to 1.9 kg.

**Geographical Distribution:** Sea otters are found in shallow, nearshore waters of the North Pacific Rim, from the southern Kurile Islands, north along the Aleutian Islands, and thence south to southern California. Originally, their distribution was nearly continuous from Hokkaido, Japan, to central Baja California, Mexico. However, there are now 4 disjunct remnants: Kurile Islands to southeast Kamchatka Peninsula (classified as *E. l. gracilis*); Commander Islands; Aleutian Islands to Prince William Sound, Alaska (these 2 groups are classified as *E. l. lutris*); and central California (classified as *E. l. nereis*). In addition, there have been several reintroduction attempts (some successful, others not) along the west coast of North America.

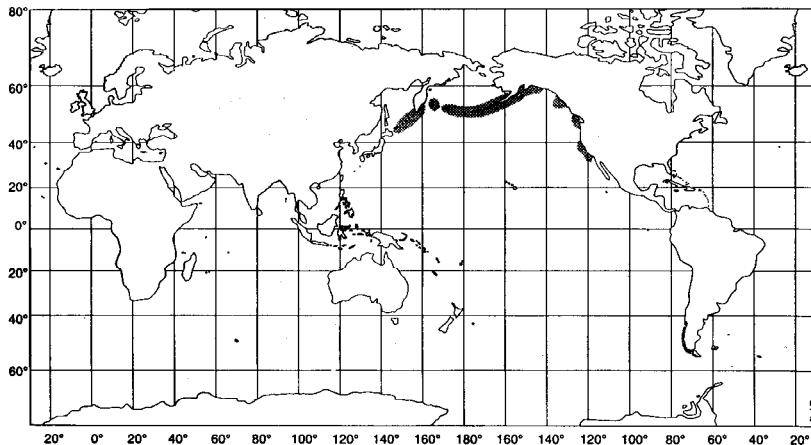


Fig. 581

**Biology and Behaviour:** Sea otters can be seen singly or in groups (most often resting groups called rafts). Rafts in California rarely exceed 50 individuals, but those in Alaska can contain up to 2 000 otters.

Sea otters are polygynous: males tend to defend large territories that encompass the ranges of several females. Pupping occurs throughout the year, but peaks in May to June in Alaska, and in December to February in California. During mating, the male bites the nose of the female to position himself; thus, females often have nose scars (these are useful to researchers in identification of individuals).

Sea otters feed on or near the bottom in shallow waters (often in kelp beds). Major prey items are benthic invertebrates such as abalones, sea urchins, and rock crabs. However, sea otters also eat other shellfishes, cephalopods, and sluggish near-bottom fishes.

**Exploitation:** Sea otters have been commercially hunted since the 1700s, mostly for their pelts. All 3 subspecies were significantly reduced. Protection was finally afforded in some areas near the turn of this century. Oil spills and catches in net are the major remaining threats.

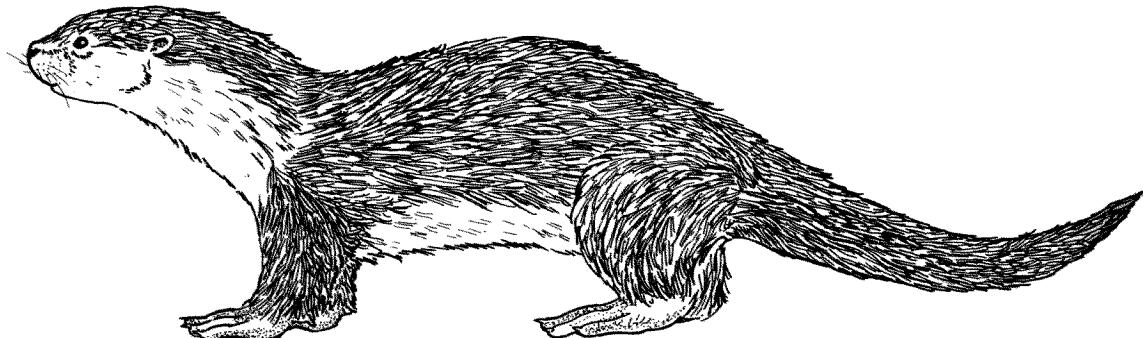
**IUCN Status:** Not listed.

***Lutra felina*** (Molina, 1782)

**MUST Lutra 1**

**OTM**

**FAO Names:** **En** - Marine otter; **Fr** - Loutre de mer; **Sp** - Nutria de mar.

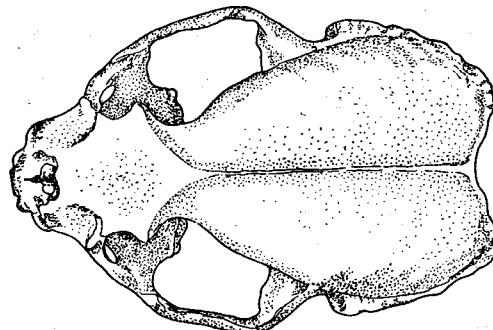


**Fig. 582 *Lutra felina***

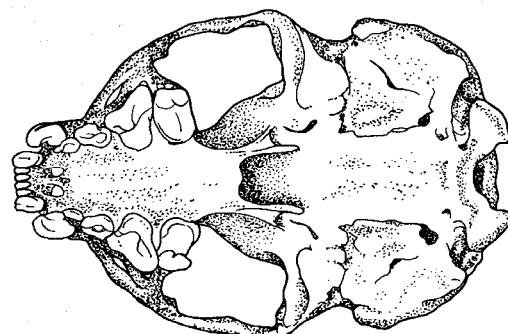
**Distinctive Characteristics:** Marine otters are very similar in appearance to freshwater otters. The snout is blunt at the tip and the nose pad is naked and relatively flat. The tail tapers to a point, typical of freshwater otters. The well-webbed feet are of moderate size, with strong claws. The coarse pelage looks rough; it has a dense underfur and a set of long guard hairs (up to 20 mm long).

Marine otters are dark brown above, a lighter fawn colour below. The muzzle, throat, and lips are not spotted, as in some other otter species. The nose pad is black, and variations in its structure may be useful in indicating stocks of marine otters (nose pad variations are used to distinguish different species within the otter subfamily).

The dental formula is I 3/3, C 1/1, PM 3-4/3, M 1/2.



**DORSAL VIEW**



**VENTRAL VIEW**

**Fig. 583 Skull**

**Can be confused with:** This is the only truly marine otter along the west and southwest coasts of South America, although there are southern river otters (*Lutra provocax*) along some parts of the coast and marine otters enter rivers. The river otters can be distinguished by their larger size, darker colour, finer fur, and peaked nose pads.

**Size:** Marine otters attain total lengths (including the tail) of slightly over 1 m, and weights up to 4.5 kg.

**Geographical Distribution:** These coastal otters are found on exposed rocky shores from the southern tip of Chile to southern Peru. They have been extirpated from Argentina.

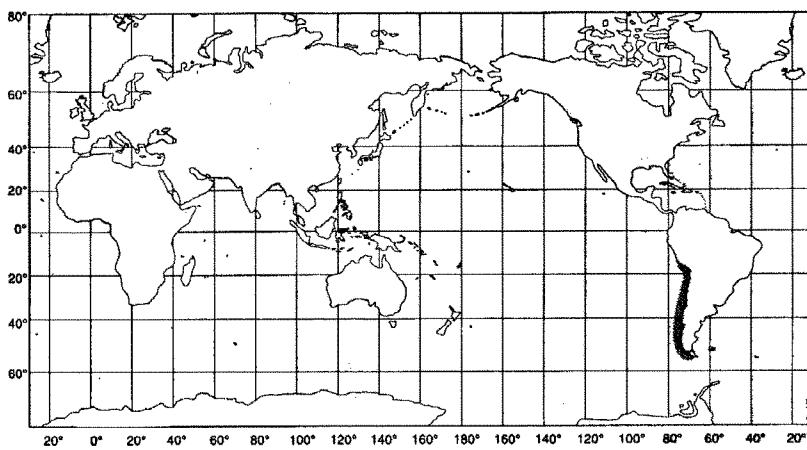


Fig. 584

**Biology and Behaviour:** Very little is known of the biology of the marine otter. They are found mostly singly or in pairs, but groups of 3 or more are sometimes seen.

The reproductive season is not well-known, but much of the breeding may occur in December and January. The usual litter of 2 pups is born after a gestation period of 60 to 70 days.

Marine otters feed on crabs, shrimps, mollusks, and fish. They sometimes enter rivers to feed on freshwater prawns.

**Exploitation:** This species has been hunted in Chile for fur and because of perceived competition with shellfish fisheries. Although legally protected, there is still some poaching.

**IUCN Status:** Vulnerable.

***Ursus maritimus*** Phipps, 1774

URSI Ursu 1

BPL

**FAO Names:** **En** - Polar bear; **Fr** - Ours blanc; **Sp** - Oso polar.

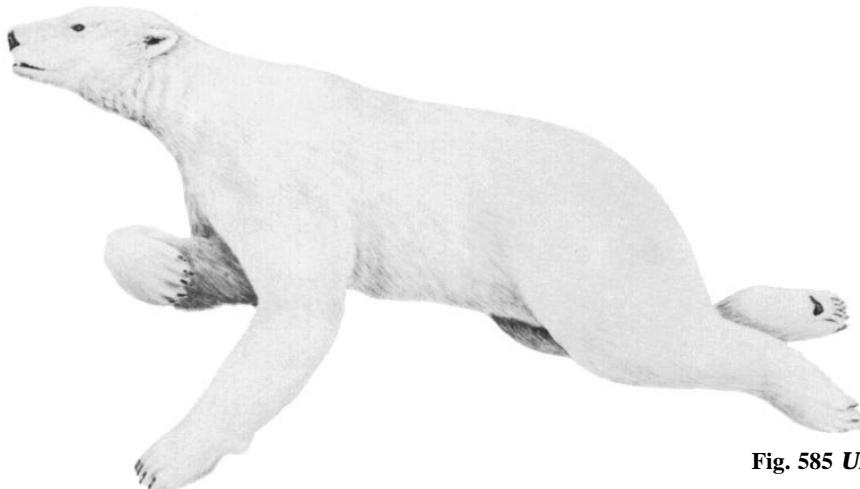
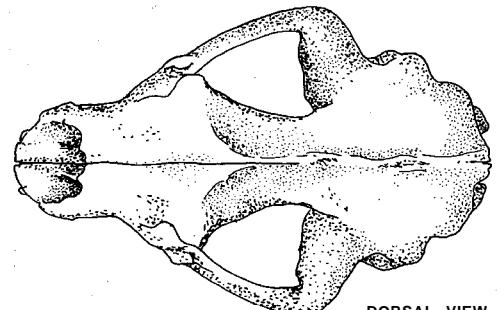


Fig. 585 *Ursus maritimus*

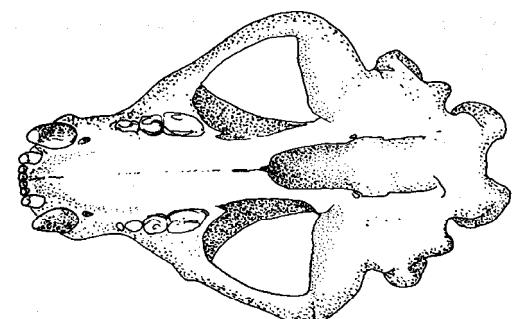
**Distinctive Characteristics:** The polar bear is not substantially different from other bears in body form. It is similar in size to brown and grizzly bears (*Ursus arctos*), but is more slender, and has a long neck and elongated head. The ears are small, an adaptation to the cold. Large partially webbed paws on the front limbs are used for swimming. There are 5 digits on each foot, each with a non-retractable claw. Polar bears are covered with fur on all but the nose and the pads on the bottoms of the feet. The guard hairs overlaying the underfur are up to 15 cm long.

Generally, the pelage of polar bears is white, but (depending on lighting and condition) it can appear yellow, light brown, or light grey. The nose and skin are black.

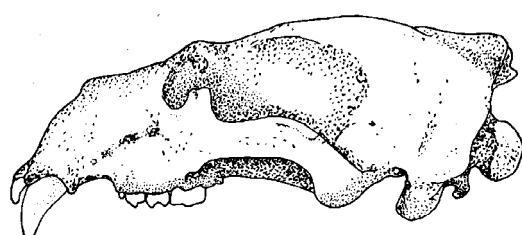
The dental formula is I 3/3, C 1/1, PM 2-4/2-4, M 2/3.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 586 Skull

**Can be confused with:** There should be no problem recognizing polar bears. In the few areas where grizzly, brown, or American black (*Ursus americanus*) bears are found within the polar bear's range, the much lighter colour of the polar bear's fur will make it unmistakable. It should be noted that grizzly, brown, and black bears can be seen swimming, with only their heads up. Careful attention to coloration and head shape should eliminate any confusion. Also note, at a distance a bear's head could be confused with that of a pinniped, especially if conditions are sub-optimal for viewing.

**Size:** Males may be up to 250 cm long and weigh 800 kg. Females reach lengths and weights of 200 cm and 300 kg, respectively. At birth, the tiny cubs weigh only about 0.6 kg.

**Geographical Distribution:** Polar bears have a circumpoalr distribution in the Northern Hemisphere. Their southern limits fluctuate with the ice cover (they have been recorded as far south as the Pribilof Islands in the Pacific and Newfoundland in the Atlantic). The northernmost record is from around 88°N. Polar bears are generally associated with sea ice, but they have been seen swimming at sea many kilometres away from the nearest land.

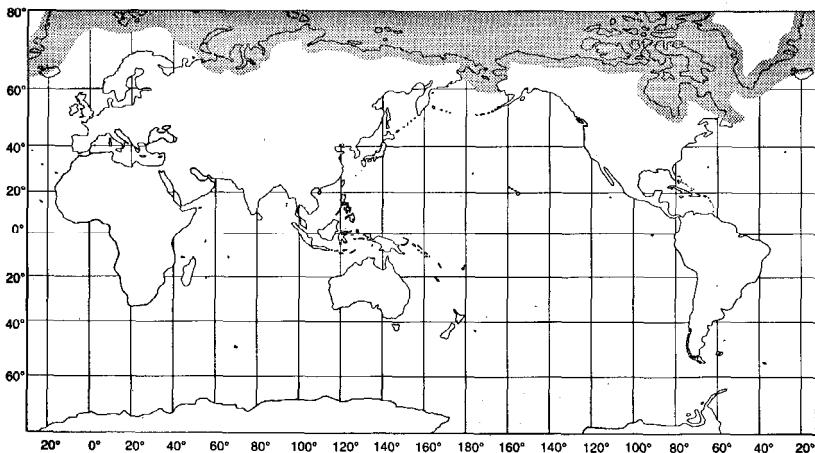


Fig. 587

**Biology and Behaviour:** Polar bears tend to be solitary, but breeding pairs and females with up to 3 cubs may be seen together. They also aggregate in areas of great food concentrations. These bears can swim rather well, using their large webbed paws. They sometimes spend significant periods of time on land.

Mating occurs from April to June. Each male may mate with 1 or several females. In November to December, the pregnant female excavates a den, where the 1 to 3 cubs are born in December and January.

The primary diet of polar bears consists of ringed seals, but they also take bearded, harp, and hooded seals, and rarely walruses and white whales. These bears sometimes eat arctic cod and other forms of animal and vegetable matter.

**Exploitation:** There is a long history of hunting, both commercial and subsistence, of the polar bear, mostly for meat and hides. There is active management in several areas, and most stocks are stable or increasing.

**IUCN Status:** Vulnerable.