Arctocephalus gazella (Peters, 1875)

OTAR Arct 1 **SEA**

FAO Names: En - Antarctic fur seal**; Fr -** Otarie antarctique**; Sp -** Lobo fino antartico.

Fig. 511 ***Arctocephalus gazella***

Distinctive Characteristics: The muzzle is s and moderately pointed. The nose does not extend much past the mouth, is not bulbous, and the nostrils point ahead. The ear pinnae are long, prominent, and naked at the tip. The creamy white vibrissae of adults are very long, particularly in bulls; some are the longest of any pinniped (up to 35 to 50 cm). The foreflippers are about one-third, and hindflippers slightly more than one-fourth, the total length. Adult males develop a mane on the chest, neck, and top of the head. There is an enlargement of this area with muscle and fat that occurs with maturity.

Adult females and subadults are medium grey, occasionally darker above, and paler below. There is usually a pale blaze on the flanks, extending towards the hindflippers. The chest and underside of the neck are palest; this pale colour extends onto the sides and back of the neck. T0he muzzle and face are also marked with lighter areas. Additional lighter areas often surround and highlight the ears, particularly in adult females and subadults. The tops of the flippers are generally darker than the back. At birth, pups are blackish, though they may be pale on the face and muzzle, and some animals are paler below. Adult males are dark greyish brown to charcoal, with frosting on the guard hairs of the back, mane, and flanks (these guard hairs often bunch up and reveal the fawn coloured underfur).

There is an unusual pale (yellowish off-white to honey) form of the Antarctic fur seal that occurs infrequently.

The dental formula is I 3/2, C 1/1, PC 6/5.

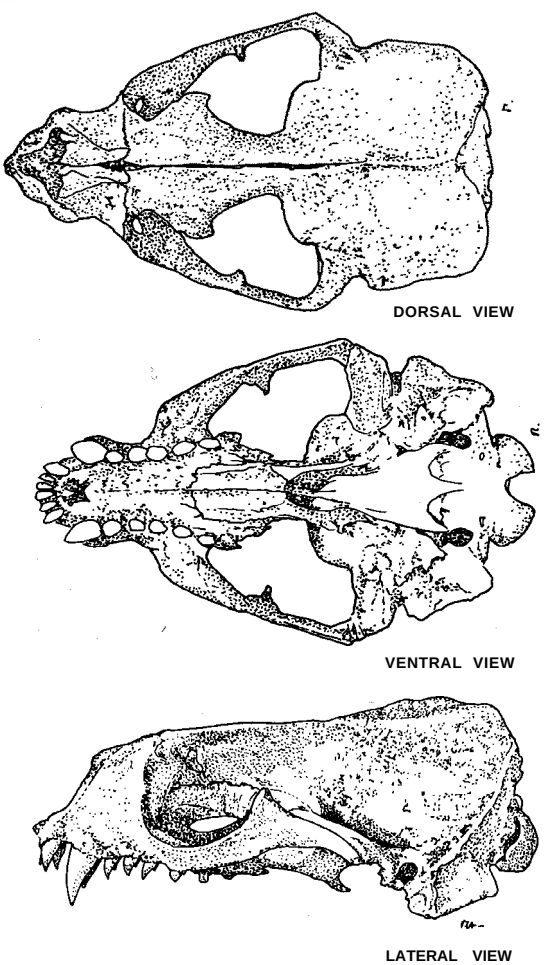

Fig. 512 Skull

Can be confused with: Antarctic fur seals might be confused with many southern otariids, most notably: subantarctic (p. 250), South American (p. 246), Juan Fernandez (p. 242), South African (p. 254), and New Zealand (p. 248) fur seals, and South American (p. 232) and Hooker's (p. 236) sea lions. To distinguish bulls of the different fur seals, note overall size, characteristics of the muzzle and nose, coloration, relative length of the flippers, and length of the vibrissae (keeping in mind that vibrissae may be broken off).In some cases, it may not be possible to separate adult female and subadult fur seals. Most useful are body shape, coloration, vibrissae, ear size, eye shape, and flipper size and shape.

Size: Adult males are up to 2 m long and weigh 110 to 230 kg, females up to 1.4 m and 22 to 51 kg. Newborns are about 63 to 67 cm and 6 to 7 kg.

Geographical Distribution: Antarctic fur seals are widely distributed in waters south, and in some areas slightly north, of the Antarctic Convergence. They breed and haul out on many islands in this region, from the Antarctic Peninsula west to Macquarie Island and South Georgia. Ashore, they prefer rocky habitats, but readily haul out on sandy beaches and move into such vegetation as tussock grass. They can be found far out to sea. In winter, males and subadults occur south to the edge of the consolidated pack ice, and can be found hauled-out on sea ice.

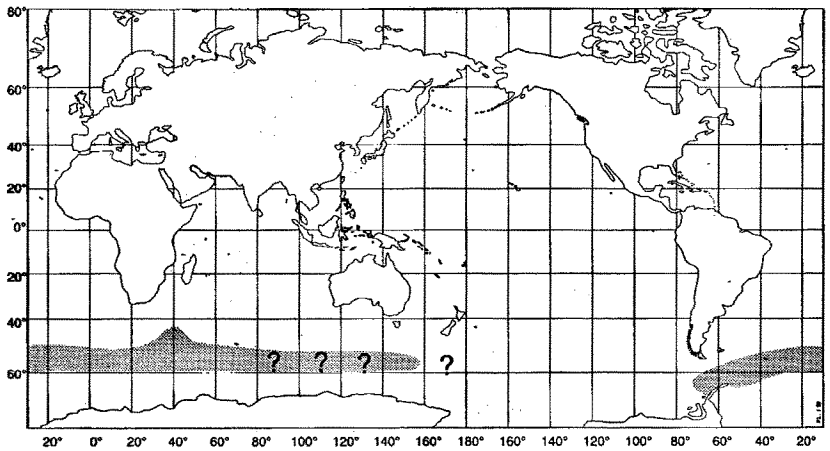

Fig. 513

Biology and Behaviour: Breeding is from late November to late December. After they mate and wean their pups, females disperse widely, possibly migrating north. Bulls also depart breeding areas, but subadults and adults can be seen around the rookeries at South Georgia all year. Like other fur seals, Antarctic fur seals porpoise when swimming rapidly. When rafting they often assume the typical fur seal resting posture. At other times, they can be found busily engaged in grooming.

Antarctic fur seals, especially adult females, feed heavily on krill, but also take fish in summer. Dietary patterns of females in summer indicate nocturnal feeding.

Exploitation: This species was nearly exterminated by sealers. Harvesting occurred with numerous highs and lows in activity from the late 18th until the early 20th Century. Estimates are that only a few hundred may have survived. Rapid population growth occurred from 1958 to 1972 and slower but continuous growth from that point until the present. Although the population of Antarctic fur seals is still growing, entanglement of these seals in debris at a rate of 0.1 to 1% at South Georgia may become a factor in the stability of this species.

IUCN Status: Insufficiently known.

Arctocephalus pusillus (Schreber, 1776)

OTAR Arct 8 **SEK**

FAO Names: ***A. p. pusillus:*** **En** - South African fur seal; **Fr** - Otarie du Cap**: Sp -** Lobo marino de dos pelos de Sudafrica. ***A. p. doriferus:*** **En** - Australian fur seal; **Fr -** Otarie d'Australie**; Sp -** Lobo fino de Australia.

Fig. 514 ***Arctocephalus pusillus***

Distinctive Characteristics: These are the largest fur seals. The head is large and wide, and the muzzle is robust (the most "sea lion-like" of any fur seal). The muzzle is pointed and flat to slightly upturned, most conspicuously in subadult males. It extends well past the mouth and ends in a bulbous fleshy nose (more heavily developed in males). The ear pinnae are long and prominent. The vibrissae are moderately long, regularly reaching past the ears.

Adults are greyish to brown; South African seals are generally darker than those from Australia. The guard hairs have a grizzled appearance. Males initially darken with age. Then as adults, the mane becomes light coloured. Females can also be lighter in the chest region, but less so than in males. The muzzle, lower jaw, and face are paler. The tops of the flippers are very dark. The ear pinnae and their insertions are frequently paler. Adult females and subadults are paler below, especially on the chest and underside of the neck. Pups are blackish, with variable hints of silver overall. They first moult at 4 to 5 months to an olive grey coat. As juveniles, they moult a year later into a silvery grey coat.

The dental formula is I 3/2, C 1/1, PC 6/5.

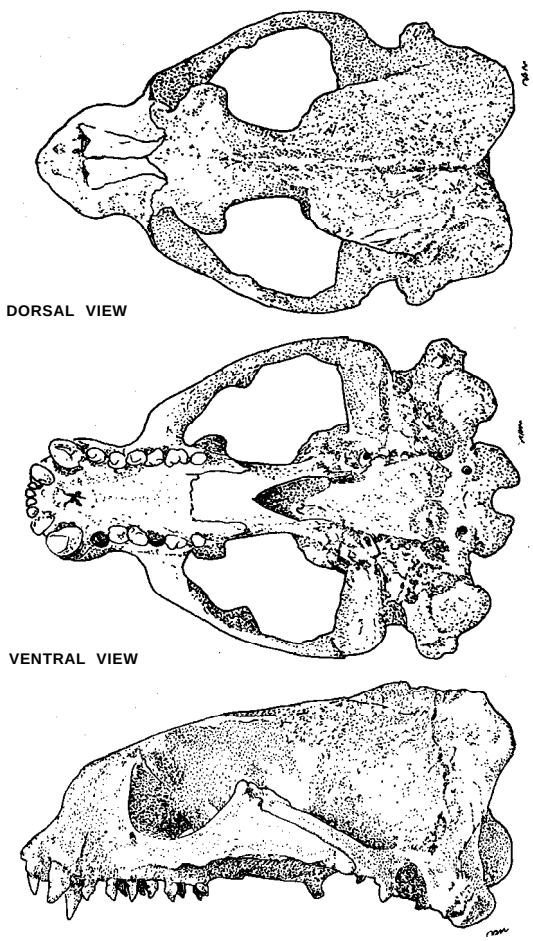

Fig. 515 Skull

Can be confused with: South African and Australian fur seals share their range with a number of vagrant or wandering otariid species. Of these, they may be confused with Antarctic (p. 252), subantarctic (p. 250), and New Zealand (p. 248) fur seals, and Australian sea lions (p. 234). The most important features are overall size, coloration, head and muzzle size and shape, proportional length of flippers, and size and prominence of ear pinnae. Differentiating subadult and female fur seals may be very difficult. The Australian race of this fur seal should be readily separable from the Australian sea lion.

Size: Adult males are up to 2.3 m long and weigh 200 to 360 kg, females to 1.8 m and 41 to 120 kg. Newborns are about 60 to 70 cm and 4.5 to 7 kg (South African) or 80 cm and 12.5 kg (Australian).

Geographical Distribution: South African fur seals ***(A. p. pusillus)*** are found along the south and south-western coasts of Africa from South Africa to Angola. Australian fur seals ***(A. p. doriferus)*** are found along the coast and continental shelf and slope waters from Victoria, along southern New South Wales, including Tasmania, and the islands of Bass Strait. They range up to 160 km offshore. On land, they have a decided preference for rocky habitat.

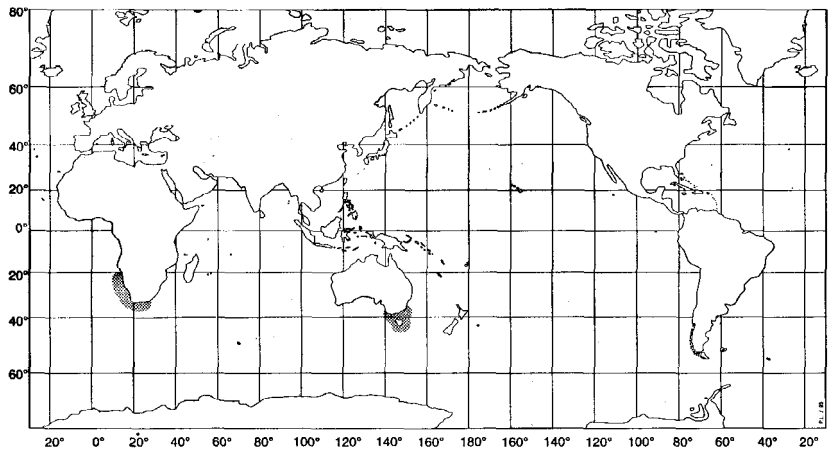

Fig. 516

Biology and Behaviour: Breeding is from late October to the beginning of January. The peak is in the first week of December, although there is some variation between colonies. At sea, these seals are found alone or in small groups of up to 15 animals, and often in huge rafts or herds adjacent to rookeries. They adopt a variety of postures while resting in the water, including the "jug-handle." These fur seals also purposely entangle themselves in rafts of kelp, possibly using the kelp as an anchor and for camouflage. When traveling rapidly, they sometimes porpoise. Neither of the populations is migratory; they move more locally within their restricted ranges.

These fur seals are opportunistic feeders that take a wide variety of prey, including pelagic, mid-water, and benthic animals, such as schooling and solitary fish, cephalopods, and crustaceans. They can dive to at least 200 m and are thought to feed most often during the day.

Exploitation: Commercial sealing began off southern Africa in the early 17th Century, and in the late 18th Century off Australia. By the late 19th Century both populations had been severely depleted. At about this time fur seals became partially protected in Australia, with hunting fully halted there in the 1970s. The government in South Africa took control and managed the sealing in the late 19th Century; however, it continues to this day.

IUCN Status: Insufficiently known.

Odobenus rosmarus (Linnaeus, 1758)

ODOB Odob 1 **WAL**

FAO Names: En - Walrus; **Fr -** Morse**; Sp -** Morsa.

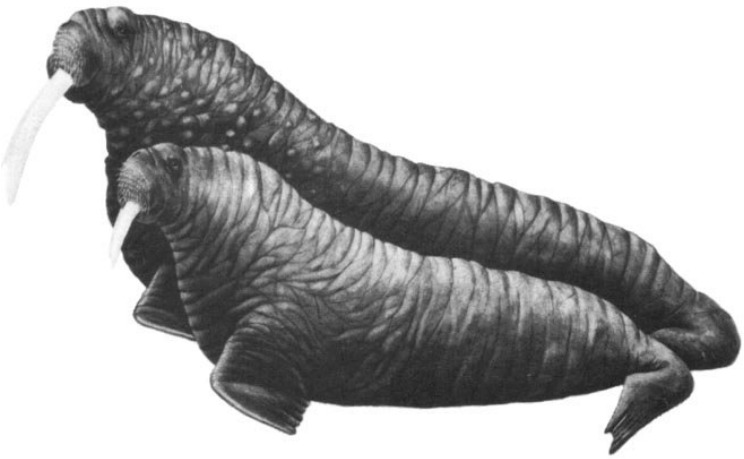

Fig. 517 ***Odobenus rosmarus***

Distinctive Characteristics: Walruses are very large and bulky animals. Males are longer and heavier than females. Adults have a short coarse pelage that grows sparser in older males than in females. The skin is thick, rough, and heavily marked with creases and folds. Older males often have lumps or nodules on the neck and chest, giving them a warty appearance. The neck, chest, and shoulders are massive, and the body tapers towards the tail. The head, and especially the muzzle, are short, but very wide. The "bloodshot" eyes are small, somewhat protruding, and set far apart. The end of the muzzle is flattened and has large, fleshy, forward-facing mystacia0l pads sprouting several hundred short, stiff, whitish vibrissae. The nostrils are located on top of the muzzle. Walruses have no ear pinnae. The foreflippers are relatively short and squarish; in some ways they resemble otariid foreflippers, with longer first digits and shorter subsequent digits, each with a very weakly developed claw. The hindflippers are phocid-like, with longer first and fifth digits, and strong expandable webbing between the digits, each with a small claw. The tail is enclosed in a web of skin.

Walrus coloration varies with age and activity. Most walruses are greyish cinnamon-brown. Males become paler as they age; some old bulls look albinistic. When walruses enter cold water they become paler still, as blood flow to the skin is reduced. Conversely, when these animals are warm, the skin becomes flushed with blood and they acquire a rosy red "sunburned" colour. Subadult animals tend to be darker, with almost black skin.

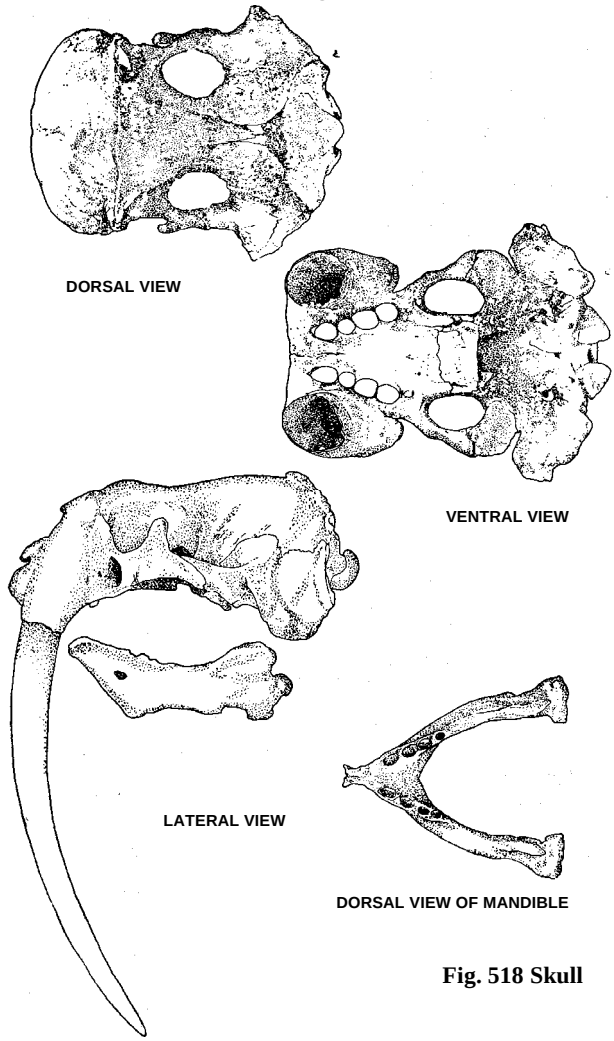

Fig. 518 Skull

The dental formula is I 1/0, C 1/1, PC 3/3. The upper canine teeth develop into tusks that grow throughout life; they are longer (up to 1 m total length) and thicker in males than in females (although they often are partially, or entirely, broken off in adults of both sexes). Tusks also tend to be less curved and more divergent at the tips in males. Walrus calves are born without tusks, but they erupt at an early age.

Can be confused with: Walruses are unmistakable, and should not be confused with any other animal.

Size: Males reach about 3.6 m and 1 900 kg, females about 3 m and 1 200 kg. Newborns are 1 to 1.2 m and weigh 45 to 75 kg.

Geographical Distribution: Walruses have a nearly circumpolar distribution in the Arctic. Three distinct subspecific populations are recognized: Atlantic, ***O. rosmarus rosmarus,*** from the eastern Canadian Arctic, and Greenland east to Novaya Zemlya; Pacific, ***O. r. divergens,*** in the Bering Sea and adjacent Arctic Ocean, and; ***O. r. laptevi,*** from the Laptev sea, north of Siberia (although this subspecies is not recognized by most taxonomists). Walruses are found in shallow water and coastal habitats, usually associated with pack ice. They regularly haul out on sandy beaches, rocky shores, and ice floes to rest and moult.

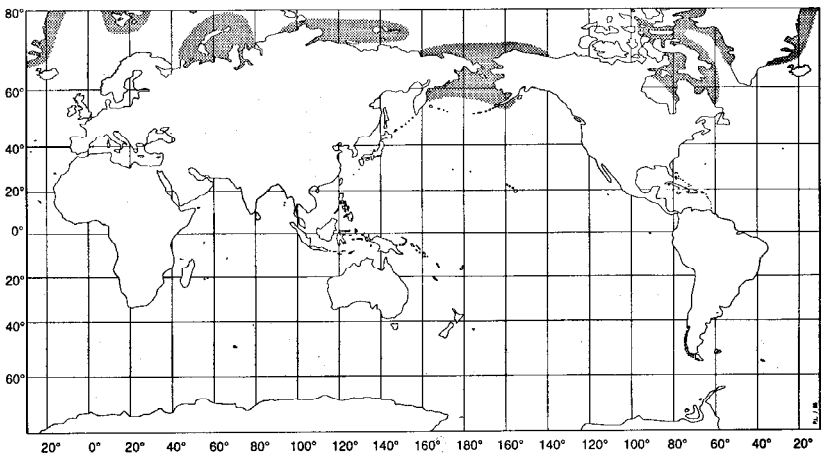

Fig. 519

Biology and Behavior: Calves are born from mid-April to mid-June on pack ice. Courtship and mating has been little studied, because walruses mate in the harsh winter environment of the Arctic. It is believed that walruses are polygynous and that males may form a type of lek; they seem to establish small aquatic territories adjacent to females hauled out on ice floes, where they vigorously vocalize and display.' There is also some intense male-male fighting at this time.

In most populations walruses generally follow the movements of the pack ice. However, some walruses summer far from the pack ice, such as on Round Island, Alaska. Walruses also haul out on shore, away from ice in years of reduced pack ice. Walruses are among the most gregarious of pinnipeds. Ashore they are regularly found in huddled masses; at sea they are often seen in groups of less than 10.

Tusks are used for hauling out, and in social interactions, not for digging up food, as previously thought. Walruses feed on a wide variety of prey, chiefly benthic invertebrates. Some of the favourite foods are clams, worms, snails, shrimp, and slow-moving fish. Some "rogues" regularly prey on seals and small whales.

Exploitation: Walruses have been severely exploited by humans. Like most Arctic pinnipeds, they have been hunted for millennia by native peoples who made wide use of the carcass for meat, skins for shelter and kayak coverings, and ivory for tools, weapons, and art. Europeans have taken vast numbers of these animals beginning with Viking traders in the 10th Century. Most populations were decimated in the 19th and early 20th Centuries. Although the Pacific population has recovered dramatically, the Atlantic and Laptev Sea populations are still at low levels. Subsistence catches are still important to northern cultures. These are managed by governments, but poaching continues to be a problem in most areas.

IUCN Status: Insufficiently known.

Phoca vitulina (Linnaeus, 1758)

PHOC Phoca 1 **SEC**

FAO Names: En - Harbour seal; **Fr -** Phoque veau marin; **Sp -** Foca común.

Fig. 521 *Phoca vitulina*

Distinctive Characteristics: The taxonomy of the harbour seal is controversial, but most workers refer to 4 or 5 subspecies (described below). The body is plump and the head is small and cat-like, with a slight forehead. The nostrils are small and terminal, forming a "V" that converges at the bottom. The eyes are relatively large and set close together. The external ear openings are relatively large and conspicuous, and are set slightly behind and below the eyes. Prominent, light-coloured, beaded vibrissae are characteristic of harbour seals. harbour seals are not obviously sexually dimorphic, and it is extremely difficult to tell the sexes apart. The flippers are relatively short, only about one-fifth to one-sixth of standard length; they have long, thin, hooked claws on all digits. The ends of the foreflippers are somewhat squared off.

The most conspicuous feature of the variably coloured coat is the presence of many fine spots, ring-like markings, and some blotches. The markings are usually scattered liberally over the body, but with fewer below than above. The most common base pattern is a light to dark grey or brown back, lightening to a paler belly (although some animals are uniformly coloured). In some localities, a few animals have a rust-coloured tinge, primarily on the head and upper body. Pups usually shed their silvery grey lanugo in the uterus (others may retain this lanugo for several weeks after birth).

The dental formula is I 3/2, C 1/1, PC 5/5.

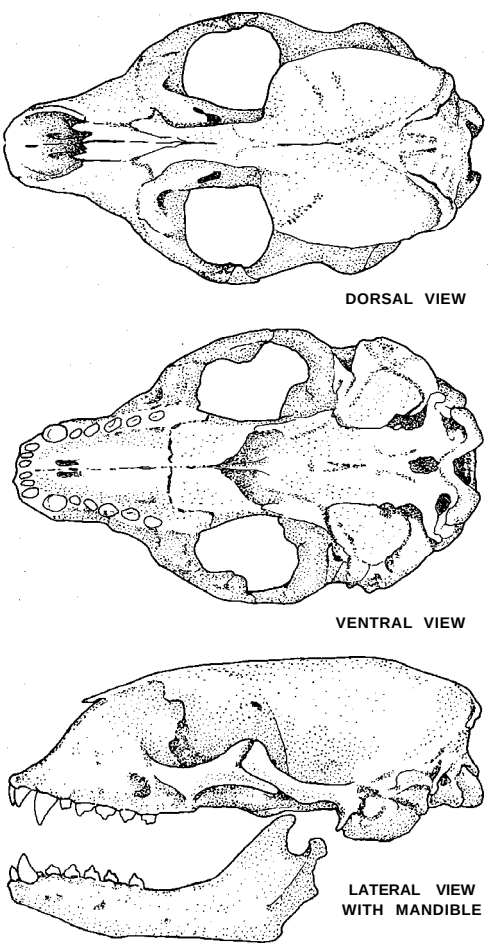

Fig. 520 Skull

Can be confused with: Eight other phocids share the range with 1 or more subspecies of harbour seal, presenting one of the most challenging identification problems among the pinnipeds. Features for distinguishing harbour seals from northern elephant (p. 284), grey (p. 272), and hooded (p. 276) seals are given in their respective species accounts. In the North Pacific, the Larga seal (p. 260) poses the most difficult identification problem. Details of the colour pattern provide the best clues for distinguishing them from the 2 Pacific subspecies of harbour seal. However, it should be noted that separating harbour and Larga seals may not always be possible.

Size: Adult males are up to 1.9 m long and weigh 70 to 150 kg, females 1.7 m and 60 to 110 kg. At birth, pups are 65 to 100 cm and 8 to 12 kg.

Geographical Distribution: Harbour seals are one of the most widespread of the pinnipeds. They are confinedto the Northern Hemisphere, from temperate to polar regions. At least 4 subspecies are recognized: ***P.vitulina vitulina*** in the eastern Atlantic from northern Portugal to the Arctic, including Iceland and Greenland; ***P. v. concolor*** in the western Atlantic from the mid-Atlantic United States to the Canadian Arctic: ***P. v. richardsi*** in the eastern Pacific from central Baja California, Mexico to the eastern Aleutian Islands, and; ***P. v. stejnegeri*** in the western Pacific from Japan to the Kamchatka Peninsula. At sea, these non-migratory seals are mainly found in coastal waters of the continental shelf and slope. They haul out and breed on beaches and low-lying rocks, terraces, and ice.

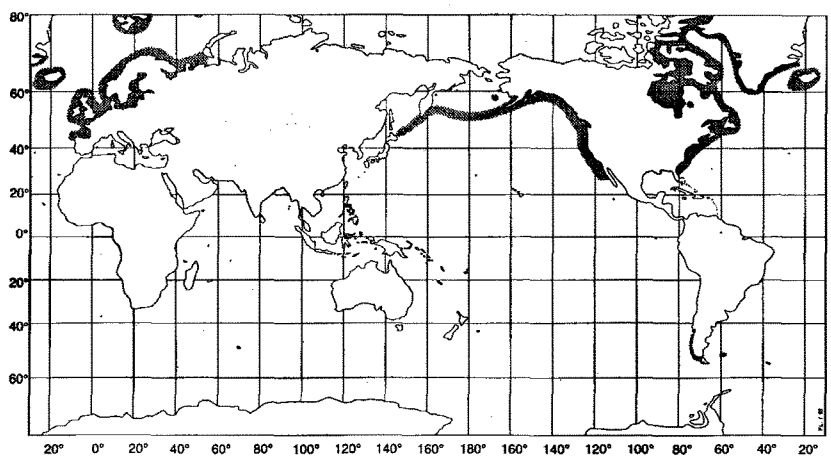

Fig. 522

Biology and Behaviour: On land, harbour seals are usually extremely wary and shy. It is almost impossible to approach them closely without frightening them into the water. They are gregarious at haul-out sites, where they frequently aggregate, especially at low tide. However, despite this aggregation behaviour, adults usually do'not lie in close contact with each other. At sea, they are most often seen alone or in small groups.

The mating system is promiscuous or weakly polygynous. Mating usually takes place in the water, during the February to October breeding season. Pupping peaks sometime between April and July. In some regions, pupping occurs earlier in more southerly areas.

Harbour seals feed on a wide variety of fish, cephalopods, and crustaceans of surface, mid-water, and benthic habitats.

Exploitation: Harbour seals have been hunted for food since prehistoric times. They have been taken for pelts in small local enterprises and large commercial operations, and under quota and bounty systems as threats to the fishing industry. Most recently, an outbreak of a distemper virus claimed an estimated 18 000 seals in the European population. Also, due to the proximity of these seals to centres of human industrial dumping and agricultural runoff, many carry high burdens of toxic pollutants, whose effects on seal health and reproduction is undetermined. Small-scale subsistence harvesting, poaching, and incidental catch in fishing gear, particularly in gillnets, account for an unknown level of annual mortality.

IUCN Status: Insufficiently known; vulnerable (***p. v. stejnegeri*** only).