Arctocephalus galapagoensis (Heller, 1904)

OTAR Arct 3 SGA

FAO Names: En - Galapagos fur seal**; Fr -** Otarie des Galapagos**; Sp -** Lobo fino de Galapagos.

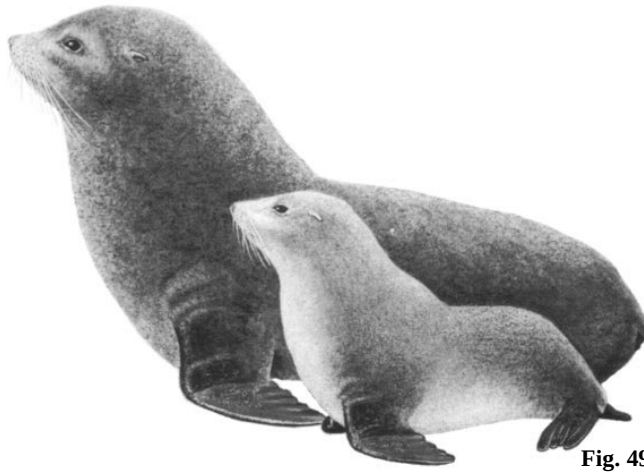

Fig. 499 ***Arctocephalus galapagoensis***

Distinctive Characteristics: The Galapagos fur seal is short and compact; with less sexual dimorphism than in other otariids. The flippers are typical for the genus, as are the long, prominent ear pinnae. However, the muzzle is short and pointed, with a small button-like nose, contributing to the flattened look of the end of the muzzle. The eyes appear large. The vibrissae in adults are cream coloured and fairly long. Adult males are much thicker in the neck and shoulders than females, but are not as dramatically different from females as are bulls of other species. A mane of only slightly longer guard hair covers the bull from the shoulders to the top of the head.

Galapagos fur seals are dark brown above, rarely with gold-brown or silver-grey hues. In both sexes, most of the muzzle is pale tan and in adult males, this colour can extend onto the face and forehead over the eyes. In adult females and subadults, the chest is pale greyish tan, sometimes continuing to the back of the neck, and the belly is rusty tan. A variable amount of grizzled lightening can regularly be found on the dark mane of bulls. In both sexes the long ear pinnae and the area of their insertions can be tan. Pups are blackish brown, sometimes with greyish to whitish margins around the mouth and nose. The pups moult this natal coat for one that resembles that of the adult female.

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

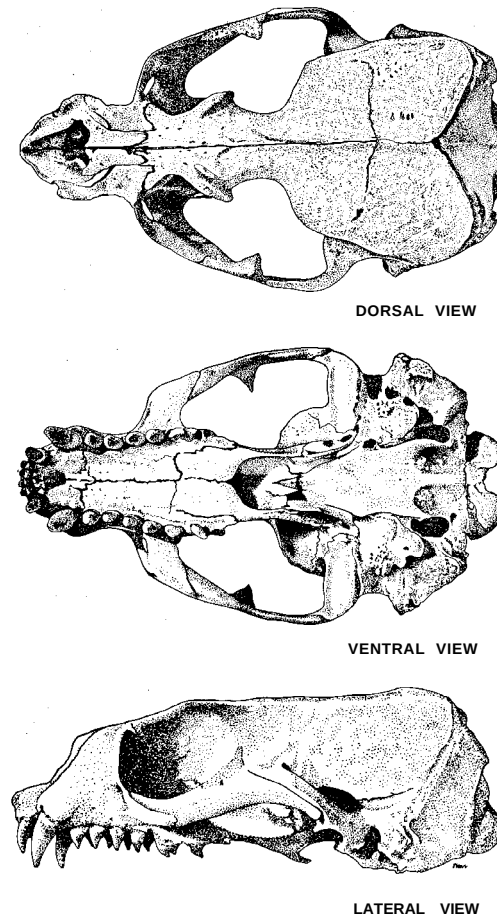

Fig. 500 Skull

Can be confused with: Galapagos fur seals normally share their restricted range in the Galapagos Archipelago only with the Galapagos sea lion (p. 230). The fur seal can be readily distinguished from the sea lion by the former's more pointed muzzle; lighter colour; and toe, ear pinnae, and fur characteristics, as well as the lack of a prominent sagittal crest in males. The South American sea lion (p. 232) has also been recorded as a vagrant in the Galapagos Islands; all of the features described above, plus its much greater size and robust features at nearly all ages, should be useful in distinguishing this species from the Galapagos fur seal.

Size: Adult males so far measured have averaged 1.6 m, with weights of 60 to 68 kg. Adult females have shown a range of lengths of 1.1 to 1.3 m and weights of 21.5 to 33 kg.Pups are approximately 4 kg at birth.

Geographical Distribution: This species is confined to the vicinity of the Galapagos Archipelago. Most of their rookeries and hauling grounds are found on the western and northern islands, nearest to the areas of oceanic upwelling. The preferred habitat ashore is rocky shores with boulders and lava, under ledges, and in spaces between boulders, where they seek shelter from the sun.

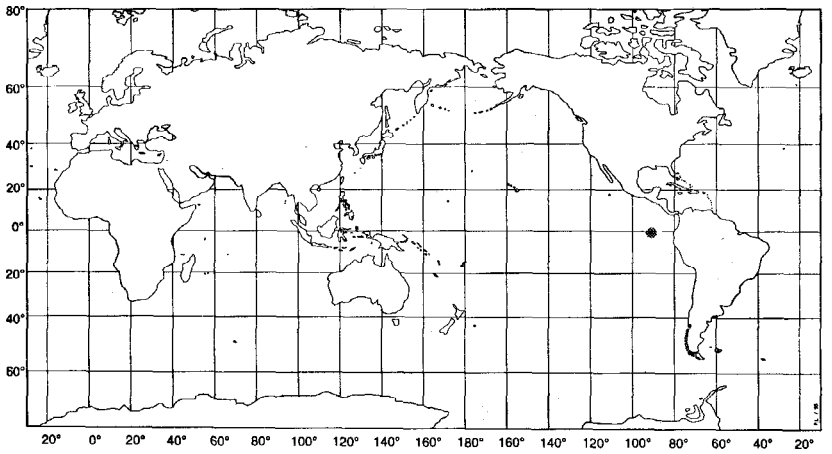

Fig. 501

Biology and Behaviour: The behaviour of the Galapagos fur seal has been extensively studied. It has a fairly long pupping and breeding season, lasting from mid-August to mid-November. The peak of pupping shifts from year to year, but usually occurs sometime from the last week of September through the first week of October.

In the water, particularly near haul-outs, Galapagos fur seals raft in postures typical of many of the southern fur seal species. There is no evidence for migration, and they do not seem to spend prolonged periods of time at sea.

Food habits are poorly known. Galapagos fur seals consume a variety of small squid species and several species of schooling fishes. They seem to feed mostly at night, possibly exploiting deep scattering layer organisms when they rise to the surface. They perform short, shallow dives, with an average depth of less than 30 m.

Exploitation: There is a legacy of destruction at the hands of humans, as with all fur seals. Whalers and sealers visiting the Galapagos Islands for water and fresh provisions and skins took no fewer than 22 500 during the period 1816 to 1933. The population reached unknown, but presumably low levels, from which it has rebounded since 1940. Today they are fully protected by Ecuadorian law, and benefit from the outstanding management of the islands as a national park and marine reserve.

IUCN Status: Insufficiently known.

Arctocephalus australis (Zimmerman, 1783) **OTAR Arct 5** **SEF**

FAO Names: En - South American fur seal**; Fr -** Otarie d'Amérique du Sud**; Sp** - Lobo fino austral.

Fig. 502 ***Arctocephalus australis***

Distinctive Characteristics: South American fur seals are stocky, as fur seals go. They have a moderately long, flat-topped, pointed muzzle, with a medium-sized nose. The nostrils are oriented straight ahead, and the nose extends past the mouth. There is a noticeable forehead and rounded crown. The ear pinnae are long and prominent, and the vibrissae of adults are creamy white, and short to moderate in length. Adult males are larger than females, with a proportionately thicker neck and more massive shoulders. Males also develop a mane of longer guard hairs on the head and shoulders.

Adult females and subadults are dark brown to greyish black above and paler, often mixed rusty brown, tan, and greyish, below. A band of light colour wraps around the lower neck, but darkens toward the top. The head is dark, but the muzzle is sometimes partly greyish tan. Lighter areas often surround and highlight the greyish tan ears, particularly in adult females and older subadults. The fur on the top of the flippers is generally quite dark. As they age, males darken and become more uniformly coloured, generally dark brown, with grey to yellowish tan grizzled frosting. Some bulls are paler. At birth, pups are dark, but there may be some paler markings on the face and muzzle, and some animals are paler below.

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

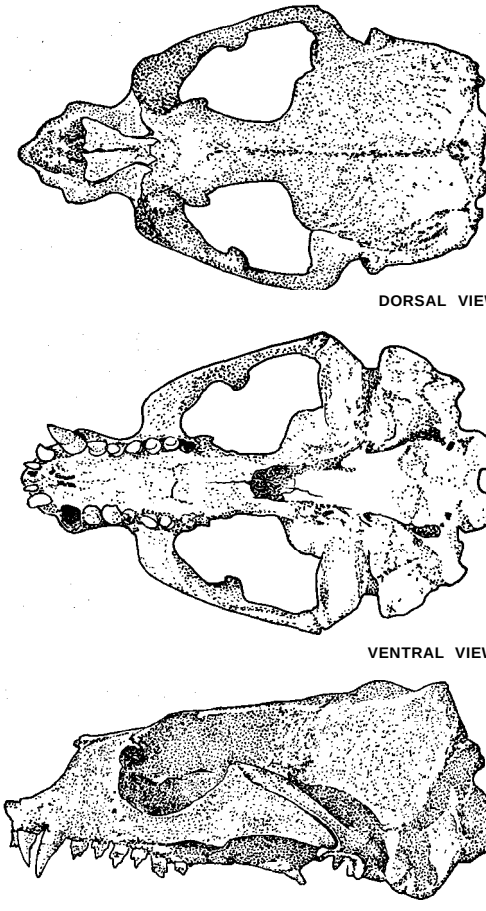

Fig. 503 Skull

Can be confused with: At least 6 other otariids can be found within the range of the South American fur seal: Juan Fernandez (p. 242), Antarctic (p. 252), subantarctic (p. 250), and Galapagos (p. 244) fur seals, and South American (p. 232) and Galapagos (p. 230) sea lions. See the section on the Juan Fernandez fur seal for distinguishing that species from South American fur seals. Subantarctic fur seals are comparable to South American fur seals in length and weight, but have a unique colour pattern on the chest and head, and (in males) a tuft of longer prominent guard hairs on the crown. Antarctic fur seals are smaller and lighter overall as adults, with a shorter muzzle, and often longer and more conspicuous creamy white vibrissae and a more grizzled coat. Galapagos fur seals are much smaller, with a muzzle that, in comparison to that of South American fur seal, is very short and blunt.

Size: Adult males reach 1.9 m and 120 to 200 kg, females are about 1.4 m and 40 to 50 kg. Newborns are 60 to 65 cm and 3.5 to 5.5 kg.

Geographical Distribution: South American fur seals are widely distributed from central Peru, around the southern tip of the continent, and up to southern Brazil. They also occur around the Falkland Islands. Distribution at sea is poorly known. These seals are thought to use primarily coastal, continental shelf and slope waters; however, there are records from more than 600 km offshore.

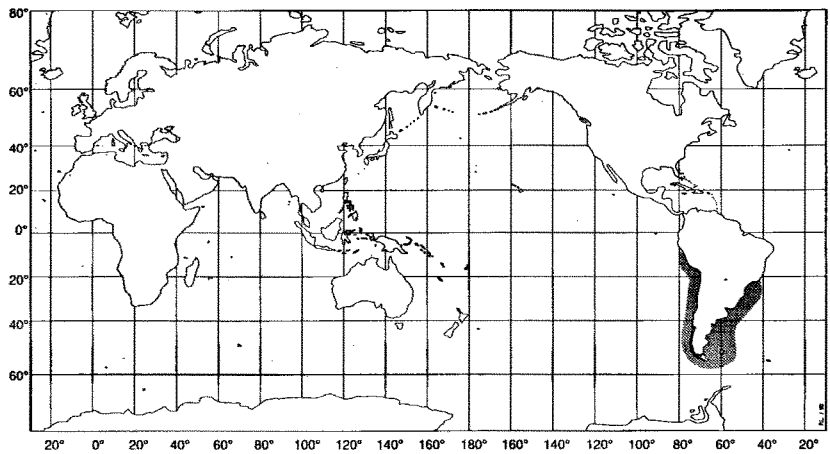

Fig. 504

Biology and Behaviour: Breeding take place from mid-October through mid-December. Males are territorial, and fighting can result in dramatic wounds and scars.

No migration is known and colonies on islands off Uruguay are occupied by portions of the population year-round. At sea, these fur seals may be seen rafting at the surface, with head down and flippers waving in the air. They frequently groom while at the surface. Groups of 15 to 20 animals have been seen traveling together offshore.

The diet is poorly documented, but includes a variety of small schooling fishes and invertebrates, such as cephalopods, crustaceans, and gastropods.

Exploitation: There is a long history of human exploitation of South American fur seals. Native peoples, particularly those of the Tierra del Fuego region depended heavily on pinnipeds for food and skins. Exploitation by Europeans goes back to the 16th Century and sealing for skins and oil was heavily pursued in the late 18th and early 19th Centuries in many parts of the species' range. Although commercial sealing has been discontinued elsewhere for these animals, it continues to this day in Uruguay and is the longest running sealing operation in the world. Fur seals are taken incidentally in fishing operations and by poaching throughout their range, particularly in Peru. Some are taken in Chile for use as bait in crab traps. Overfishing of prey species probably acts to limit population growth in some areas.

IUCN Status: Insufficiently known.

Arctocephalus forsteri (Lesson, 1828)

OTAR Arct 6 **SNZ**

FAO Names:En - New Zealand fur seal**; Fr -** Otarie de Nouvelle-Zélande**; Sp** - Lobo fino de Nueva Zelandia.

Fig. 505 ***Arctocephalus forsteri***

Distinctive Characteristics: New Zealand fur seals have rather generic southern fur seal features. The muzzle is moderately long, flat, and pointed, with a fleshy, somewhat bulbous nose that extends past the mouth and ends in nostrils that point ahead with a slight down angle. In adults, the vibrissae are cream to white and of medium length, reaching to about the ear. The flippers are of medium length, with the characteristic hindflipper toe configuration. The ears are long and prominent. The head of pups is rounded in profile. Adult males develop a mane of elongated, coarse guard hairs, which cover a thickened neck, chest, and shoulders. The nose is larger and more bulbous in adult males than in females.

Adult males are dark brownish grey above and paler below. In paler animals, the tops of the flippers are usually a contrasting darker brown. There is a grizzling of white, which creates a silvery sheen on dry animals. The muzzle is paler, grey to rusty tan. So, too, are the ear pinnae and the area around their insertions. Adult females are generally paler on the underside of the neck and chest. Pups are blackish, except for a whitish muzzle. They moult to adult pelage at 2 to 3 months.

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

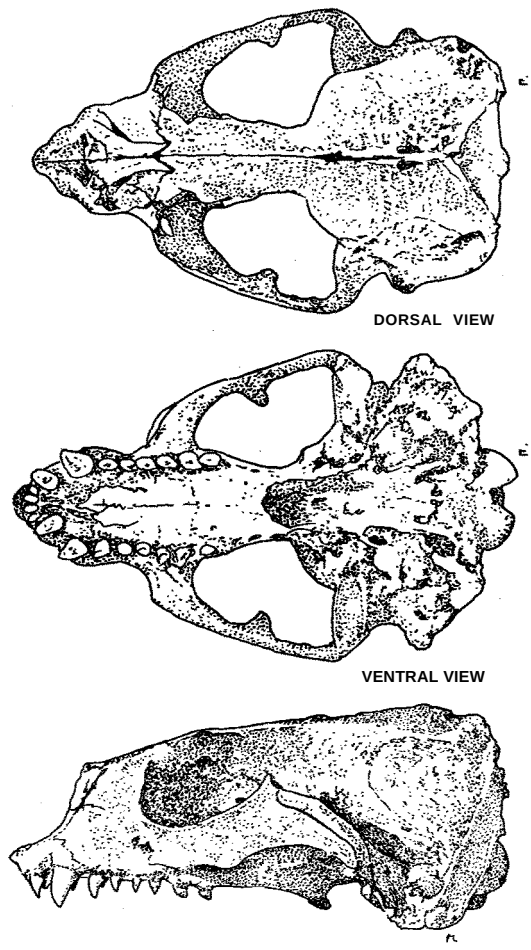

Fig. 506 Skull

Can be confused with: New Zealand fur seals share their range with a number of other otariids, including Antarctic (p. 252), subantarctic (p. 250), and Australian (p. 254) fur seals, and Hooker's (p. 236) and Australian (p. 234) sea lions. Shape of the head and muzzle, presence of a dense underfur, coloration, size and prominence of ear pinnae, and length of the toes on the hindflipper readily distinguish New Zealand fur seals from both sea lions. Separating the fur seal species is more difficult and may be problematic for subadults and females. Generally, note the length of the muzzle and size of the nose, coloration (especially of the front of the body), prominence and coloration of the ear pinnae, and relative lengths of the flippers.

Size: Adult males are up to 2 m and 120 to 200 kg, females 1.5 m and 30 to 50 kg. Pups average 3.3 to 3.9 kg and 40 to 55 cm at birth.

Geographical Distribution: New Zealand fur seals are distributed in 2 geographically isolated populations. In New Zealand, they occur around both the North and South Islands, with rookeries south and west to all of New Zealand's subantarctic islands. They are present, but do not breed, on Macquarie Island. Aseparate population also occurs on offshore islands in southern and western Australia. New Zealand fur seals prefer rocky habitat with shelter, particularly on locations more exposed to wind and weather; they readily enter vegetation. Little is known of distribution at sea, although they apparently prefer waters of the continental shelf and slope.

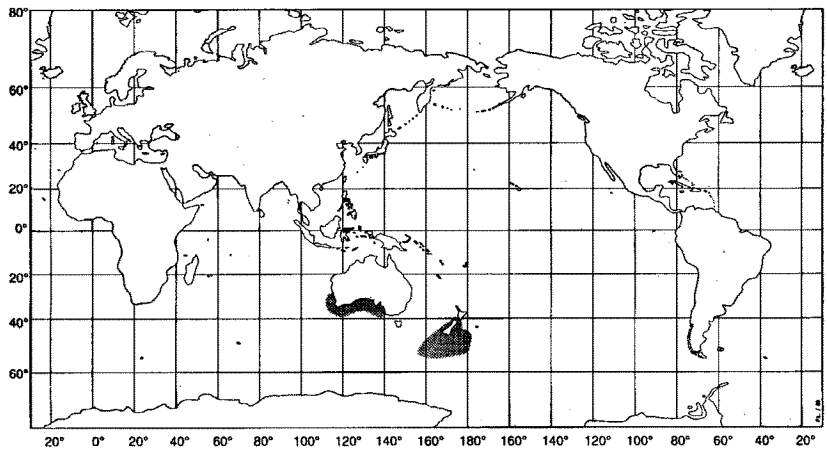

Fig. 507

Biology and Behaviour: Breeding occur from mid-November to January. Most pups are born from late November to mid-December. The number of animals ashore at rookeries declines rapidly in January. New Zealand fur seals are considered non-migratory. At sea they actively groom and raft in a variety of postures.

New Zealand fur seals appear to feed mainly at night. Diet includes a wide variety of pelagic near-surface fishes and squids, and benthic prey, particularly octopuses. They occasionally feed on penguins and other marine birds.

Exploitation: Prehistoric huntingwas pursued by native peoples of Australia and New Zealand. Commercial sealing by Europeans was carried out in earnest in the early 19th Century and the population of these fur seals in New Zealand, Australia and the subantarctic was drastically reduced and whole colonies were wiped out. There have been sporadic culls as numbers rebounded in the 20th Century. At present, New Zealand fur seals are protected throughout their range by New Zealand and Australian laws. Threats today include entanglement in fishing gear and debris and the potential depletion of their food resource base due to intensive commercial harvesting of fish and squid.

IUCN Status: Insufficiently known.

Arctocephalus tropicalis (Gray, 1872) **OTAR Arct 7** **SSF**

FAO Names: En - Subantarctic fur seal**; Fr -** Otarie sub-antarctique**; Sp -** Lobo fino de subantarctico.

Fig. 508 ***Arctocephalus tropicalis***

Distinctive Characteristics: In both sexes, the muzzle is moderate to short, flat, and somewhat pointed, with a non-bulbous nose and forward pointing nostrils. The vibrissae are very long, often reaching past the ears and well down the chest. The long ear pinnae, with naked tips, lie close to the head and are not particularly prominent. The flippers are proportionately short and broad. Adult males are heavily built; their enlarged chest and shoulders make the neck appear short. They develop a prominent tuft, or crest, of long guard hairs on top of the head, and a thick mane. In adult females, the mane and crest are absent, but the fur is generally longest on the chest and neck. Adult females have a blunt, broad muzzle.

Subantarctic fur seals are strikingly marked. In adult males, the back colour varies from greyish or orangish brown to charcoal (males become increasingly grizzled with age). There is often a dark band between the flippers, but the rest of the belly is a lighter brown. Adult females are usually lighter grey on the back than are bulls. In both sexes, the colour of the chest, muzzle, and face (to the ears and above the eyes) is cream to burnt orange. The tops of the flippers and the area around their insertions are brown, usually darker than the rest of the back (although, sometimes paler in bulls). The dark colour on the head sometimes comes to a forward-facing point on the muzzle. The naked ear tips are usually dark.

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

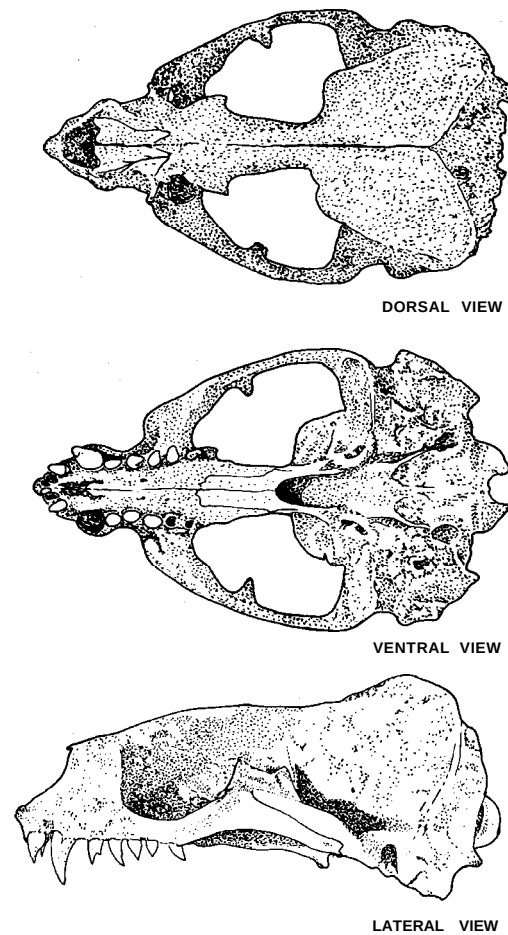

Fig. 509 Skull

Can be confused with: Subantarctic fur seals co-occur with Antarctic (p. 252), South American (p. 246), South African-Australian (p. 254), New Zealand (p. 248), and Juan Fernandez (p. 242) fur seals, and South American sea lions (p. 232). Distinguishing fur seals may be problematic, except for adult males, but note size, coloration; muzzle length, size of nose, relative flipper size, and vibrissae colour and length.

Size: Adult males are up to 1.8 m long and weigh 70 to 165 kg, females 1.4 m and 25 to 55 kg. Newborns are about 60 cm and 4 to 4.4 kg.

Geographical Distribution: Subantarctic fur seals are widely distributed in the Southern Hemisphere. They breed on many subantarctic islands north of the Antarctic Convergence. The northern limit of their range is not well known, but vagrants have appeared in South Africa, Argentina, Brazil, Australia, and the Juan Fernandez Islands. Subantarctic fur seals have also been recorded south of the convergence at South Georgia. When ashore; these seals prefer rough, rocky terrain.

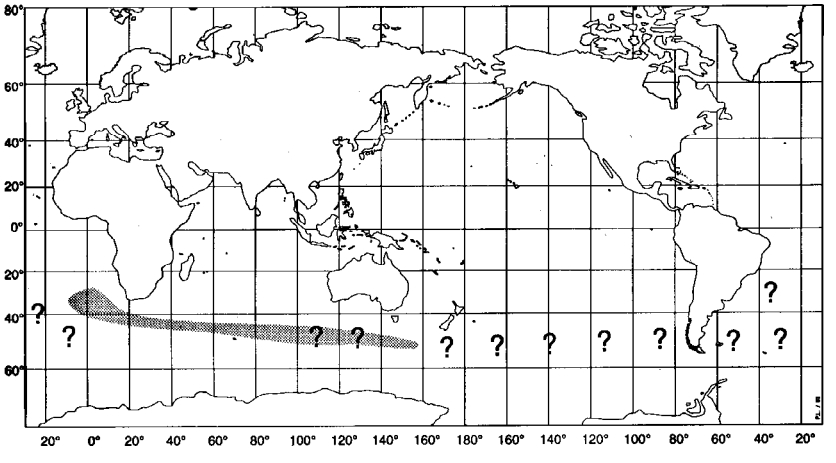

Fig. 510

Biology and Behaviour: Subantarctic fur seals pup and breed from late October to early January, with a peak in mid-December. Seals also are ashore for the annual moult between February and April, with a peak in March and April.

Little is known of their behaviour while at sea. Except for cows with pups, most of the population spends much of the winter and spring (June-September) at sea.

Diet varies by location and season, with fish, squid, penguins, and krill predominating.

Exploitation: Subantarctic fur seals were heavily hunted in the late 18th and 19th Centuries. Breeding groups on most islands were hunted out and the seals disappeared from a number of localities.Most colonies are experiencing rapid growth at present.

IUCN Status: Insufficiently known.