

Phocarctos hookeri (Gray, 1844)

OTAR Phoc 1

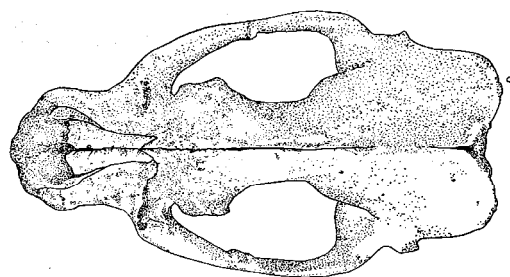
NSL

FAO Names: **En** - Hooker's sea lion; **Fr** - Lion de mer de Nouvelle-Zelande; **Sp** - León marino de Nuevo Zelandia.

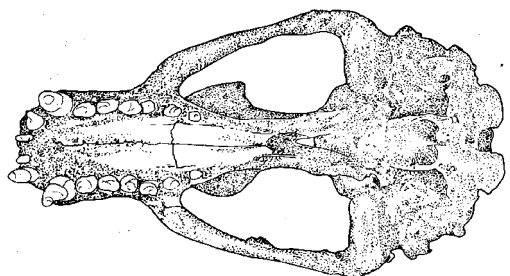
Fig. 487 *Phocarctos hookeri*

Distinctive Characteristics: Hooker's sea lions have a muzzle that is fairly broad; the top is either flat or slightly rounded. The ear pinnae are small and inconspicuous. The vibrissae are moderate in length, reaching as far back as the pinnae on some animals. In adult males, the neck and shoulders are greatly enlarged, and there is a mane of thicker and longer hair from the nape to the shoulders, and the chin to the chest. The head appears small. Adult females are much smaller and thinner than males through the neck, chest, and shoulders; the head and muzzle are narrower or less domed than in males.

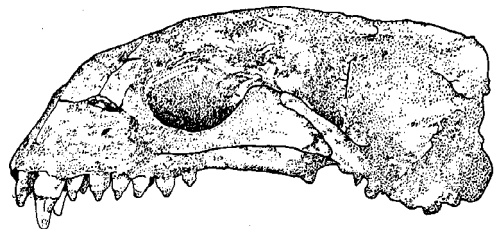
At birth, pups are dark brown with a lighter crown and nape; a pale stripe extends from the crown to the nose, including the mystacial area. Pups begin to moult their birth coat at 2 months. Adult females and subadults of both sexes are silvery grey to brownish grey above and tan to pale yellow below. The demarcation between light and dark is high on the neck and usually extends over the insertion of the flippers. The light coloration often extends above the ears (which can appear highlighted) to the eyes, and down the sides of the muzzle. There is considerable variation in the extent of dark and light areas, particularly on the head. The crown and the top of the muzzle are often darker, giving the appearance of a stripe of dark colour running to the nose, which can be more extensive, and include most of the muzzle. On some animals there may be little discernable contrast between coloration above and below. The foreflippers are often darker above, greyish to brown. Subadult males darken as they mature, and may pass through reddish orange or brown colour phases before attaining sexual maturity.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 488 Skull

Adult males have a dark brown to charcoal coat, which can have a hint of silver-grey, particularly on the sides and back.

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

Can be confused with: Three otariids (New Zealand [p. 248], Antarctic [p. 252], and subantarctic [p. 250] fur seals) are known to occur in or near the present range of the Hooker's sea lion. Hooker's sea lions can be differentiated from fur seals, based on coloration, fur characteristics, head and muzzle shape, size of the ear pinnae, and size and shape of the outer toes on the hindflippers.

Size: It is estimated that adult males reach 3.3 m and 400 kg or more. Adult females can be at least 2 m long and weigh 160 kg. Newborns are approximately 60 to 70 cm and weigh 6.5 to 8 kg.

Geographical Distribution: The primary habitat of this species is several subantarctic islands south of New Zealand, and their surrounding waters. The principal breeding colonies are in the Auckland islands, Campbell Island, and the Snares Islands. Historically, Hooker's sea lions had a more extensive range that may have included much of New Zealand.

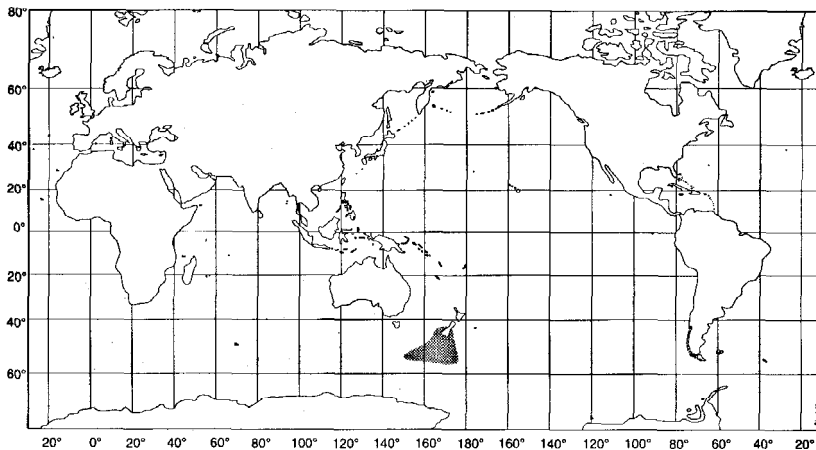


Fig. 489

Biology and Behaviour: The breeding season in this species is more defined than that of the similar Australian sea lion. Adult males establish small territories that have fluid boundaries. Pups are born from early December to early January.

Hooker's sea lions do not appear to be migratory although they disperse widely over their range during the non-breeding season. Some animals can be found at major rookeries and haul-outs year-round. Their activities at sea are little known.

There are no detailed accounts of feeding habits, but Hooker's sea lions take a wide variety of prey, including squid and such demersal species as flounder, octopus, and crustaceans. They are also known to take penguins, and even fur seal and elephant seal pups, on occasion. Some observations suggest they feed continuously while at sea.

Exploitation: Prehistoric use of this sea lion was made by the native Maori people of New Zealand. Commercial sealing began in the early 19th Century for hides and oil and continued until stocks were severely depleted by the middle of that century (in less than 50 years). Sporadic commercial sealing activity continued through the second world war, after which commercial sealing was banned in New Zealand. One unusual source of mortality comes from the activities of rabbits introduced by humans, which have excavated burrows near sea lion rookeries. Pups have been known to explore these burrows, become entrapped, and suffocate.

IUCN Status: Vulnerable.

Callorhinus ursinus (Linnaeus, 1758)

OTAR Call 1

SEN

FAO Names: En - Northern fur seal; Fr - Otarie des Pribilofs; Sp - Lobo fino del norte.

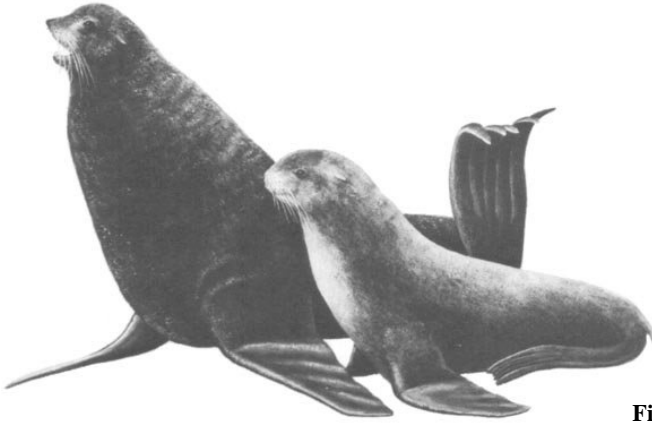
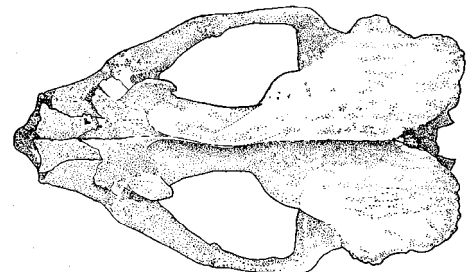


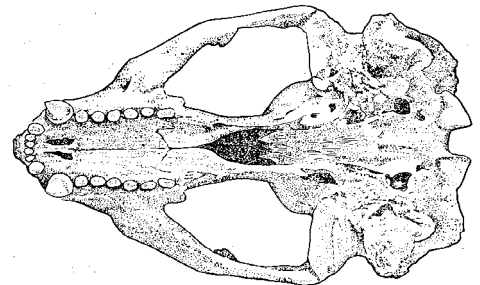
Fig. 490 *Callorhinus ursinus*

Distinctive Characteristics: Adult male northern fur seals have long coarse guard hairs, particularly on the neck, chest, and upper back; females and subadults have shorter, finer guard hairs. Adult females and subadults are moderate in build. It is difficult to distinguish the sexes until about age 5. The neck, chest, and shoulders of adult males are greatly enlarged over those of females and subadults (although those at the end of the breeding season may be thin to the point of emaciation). The head of northern fur seals looks deceptively small because of the very short down-curved muzzle and small nose. The nose extends slightly beyond the mouth in females and moderately in males. Fur is absent on the top of the foreflipper and there is an abrupt look of a "clean shaven line" across the wrist. The hindflippers are about one-fourth of the total body length, the longest in any otariid; they have extremely long, cartilaginous terminal flaps on all of the toes, beyond the position of the nails on the 3 central digits. The ear pinnae are long and conspicuous; in older animals they are naked at the tips. The vibrissae are long, and regularly extend to beyond the ears; they are white in adults. Newborns have black vibrissae that become white by way of "salt and pepper" stages in subadults.

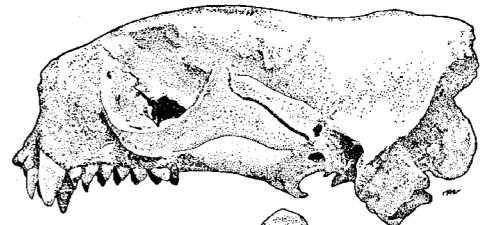
Adult females and subadults are medium to dark silver-grey above. The flanks, chest, sides, and underside of the neck (often forming a "V" pattern in this area) are cream to tan. There are variable cream to tan coloured areas on the sides and top of the muzzle, chin, and as a "brush stroke" running backwards under the eye. The fur of the ear pinnae near the naked tip and the insertion is often pale. Adult males are medium grey to black, or reddish to dark brown all over. The mane can have variable amounts of silver-grey or yellowish tinting on the guard hairs. Pups are blackish at birth, with variable oval areas of buff on the sides in the axillae, and on the chin and sides of the muzzle. After 3 to 4 months, pups moult to the colour of adult females and subadults. The dental formula is I 3/2, C 1/1, PC 6/5.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 491 Skull

Can be confused with: Northern fur seals can be confused with 3 other otariid species in their range: the Guadalupe fur seal (p. 240), and California (p. 230) and Steller (p. 228) sea lions. See the section on the Guadalupe fur seal for distinguishing these 2 fur seals. Northern fur seals can be separated from both sea lions, based on differences in size, pelage, flippers, head and muzzle shape, and relative size and prominence of the ear pinnae.

Size: Males can be as large as 2.1 m and 270 kg. Females can be up to 1.5 m and 50 kg or more. Newborns average 5.4 to 6 kg and 60 to 65 cm.

Geographical Distribution: Northern fur seals are widely distributed in the waters of the North Pacific Ocean and Bering and Okhotsk Seas. The vast majority of the population breeds on the Pribilof Islands, with smaller numbers on the Commander Islands as well. Rookeries are inhabited in summer and autumn. These oceanic pinnipeds spend most of the year at sea, rarely (if ever) returning to land until the beginning of the next breeding season. Many animals, especially juveniles, migrate south to southern California or the waters off Japan.

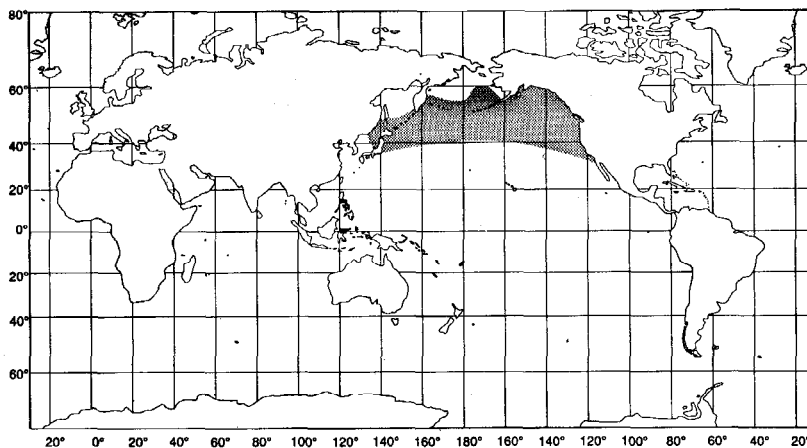


Fig. 492

Biology and Behaviour: This is a highly polygynous species. In general, males arrive at the rookeries before females; they fight and display to establish and maintain territories. Breeding on the Pribilof Islands occurs from mid-June through August, with a peak in early July (the median date in southern California is approximately 2 weeks earlier than at the Pribilofs).

At sea, northern fur seals are most likely to be encountered alone or in pairs, but at times in groups of 3 or more. Dive depth has been studied in lactating females and was found to average about 68 m and 2.6 minutes. Northern fur seals spend quite a bit of time rafting at the surface, either asleep or grooming. They employ a wide variety of resting postures, including raising 1 or more flippers into the air, and draping their flippers in a "jug handle" position.

The diet is varied and includes many varieties of epipelagic and vertically migrating mesopelagic schooling and non-schooling fish and squid. They seem to feed mainly at night.

Exploitation: Northern fur seals have been exploited by humans in both historic and prehistoric times. Their remains can be found in the middens of many peoples that have lived around the Pacific rim. First discovered by Europeans in 1786, sealing commenced and proceeded with highs and lows, but few periods of no commercial harvesting. All time population lows in the early 20th Century prompted a convention on conservation and led to international cooperation and management and an end to wasteful and destructive pelagic sealing. Commercial sealing ended on Saint Paul Island in the Pribilofs in 1984. A limited subsistence harvest by and for Native Americans continues to this day. The population of northern fur seals has also suffered from the depletion of commercial fish species that are important food resources for seals. They are also thought to be declining at least in part due to mortality from frequent entanglement in nets and debris of all types. All fur seals are susceptible to oil in the water so production and transport of petroleum products offshore creates an ongoing risk from accidents.

IUCN Status: Insufficiently known.

Arctocephalus townsendi (Merriam, 1897)

OTAR Arct 2

SGF

FAO Names: En - Guadalupe fur seal; Fr - Otarie de Guadalupe; Sp - Lobo fino de Guadalupe.

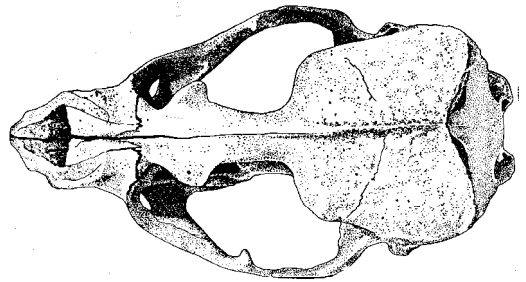


Fig. 493 *Arctocephalus townsendi*

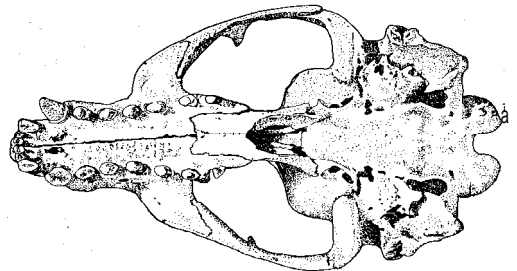
Distinctive Characteristics: Guadalupe fur seals have a thick pelage, with dense under-fur. The forehead is flattened to slightly convex. Adults have moderate length whitish cream vibrissae and long prominent ear pinnae. The foreflippers have pelage that covers the black leathery skin on the upper surface, well past the wrist. The hindflippers are moderately long. The toes of the hindflipper are all approximately the same length; the hallux is only slightly wider and thicker than the other digits. Adult males have a very long, flat-topped, pointed muzzle with a large bulbous nose with downward pointing nostrils (they can have a shark-like silhouette). Adult males develop a mane of long coarse guard hairs that cover the neck. This area is also thickened and more muscular in bulls.

Coloration of adult males is dark greyish brown to greyish black. The longer guard hairs of the mane may be light tipped, yielding a greyish grizzled appearance. Much of the head and back of the neck often appears tan to yellowish, whereas the throat and underparts of the neck are darker. Coloration of adult females is dark grey-brown to greyish black above, variably paler below (especially on the chest and underside of the neck, which can be creamy grey). There may be areas of lighter colour on the face.

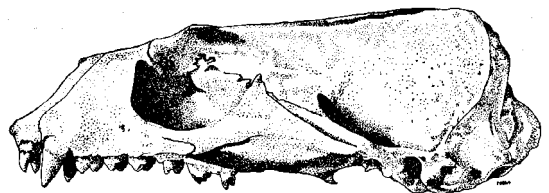
The dental formula is I 3/12, C 1/1, PC 6/5.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 494 Skull

Can be confused with: Three other otariids, the northern fur seal (p. 238) and California (p. 230) and Steller sea lions (p. 228) share the present range of the Guadalupe fur seal. The Guadalupe fur seal can be distinguished from them by head shape, ear size, hindflipper length, and coloration differences. Note the differences between the amount of fur on the foreflippers between Guadalupe and northern fur seals.

Size: Two adult males were about 1.8 and 1.9 m in length and the latter specimen was estimated to weigh 160 to 170 kg. Two adult females were about 1.2 and 1.4 m; the latter was estimated to weigh 45 to 55 kg.

Geographical Distribution: Guadalupe fur seals have a relatively small core range. At present, the only place they are known to breed is on Guadalupe Island off central Baja California, Mexico. Males are now regularly seen on San Miguel and San Nicolas Islands of southern California. They are also occasionally sighted at sea in the Southern California Bight, and on beaches in central and northern California. The pelagic distribution of this species is unknown. When ashore, Guadalupe fur seals prefer volcanic caves and grottos, or other rocky habitats. The former range of this species was apparently much more extensive.

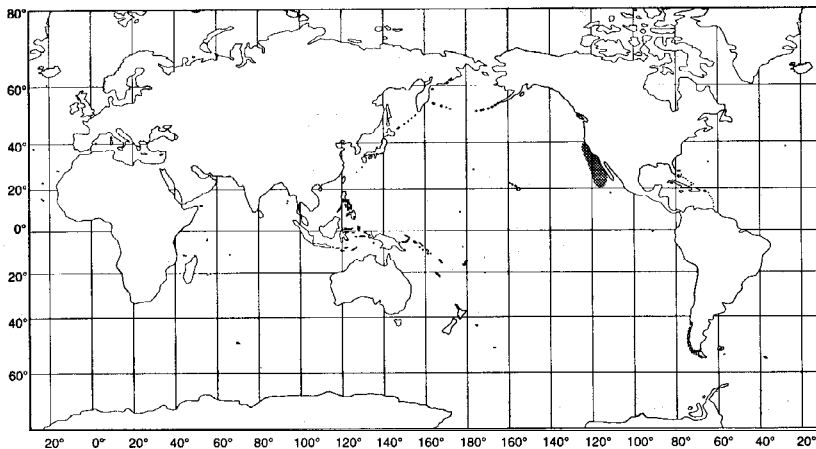


Fig. 495

Biology and Behaviour: Breeding and pupping in this species are from mid-June to August; most pups are born from the middle to the end of June. Females with pups and subadults may be seen on or around the island throughout the winter and into the spring.

Knowledge of activities and behaviour at sea, away from Guadalupe Island, are limited to a handful of records. At sea, they appear to be mostly solitary. Observations of animals in captivity suggest that they spend much of their waking time grooming. They raft at the surface to rest in the characteristic "southern fur seal" head-down posture. They also float with 1 or more flippers extended out of the water. When traveling rapidly, they have been observed to porpoise.

Feeding activities and food habits are nearly unknown.

Exploitation: Guadalupe fur seals were nearly exterminated by humans in the 19th Century, and by the turn of the century the species was considered extinct. Following the observation of several dozen fur seals on Guadalupe Island in 1926, and the collection of 2 animals for the San Diego Zoo in 1928, none were seen again until 1949 when a lone bull landed on San Nicolas Island. A 1954 search of Guadalupe Island found 14. A count from 1987, yielded 3 259 animals including 998 pups. Guadalupe Island has been a protected pinniped sanctuary since its designation by the Mexican government in 1975. These fur seals are fully protected under Mexican law.

IUCN Status: Vulnerable.

Arctocephalus philippii (Peters, 1866)

OTAR Arct 4

SJF

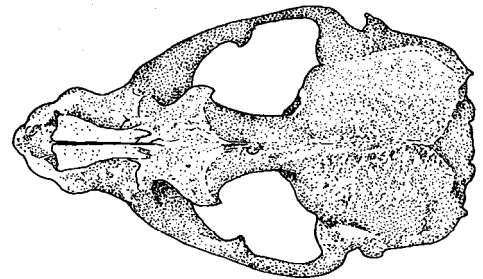
FAO Names: En - Juan Fernandez fur seal; Fr - Otarie de Juan Fernandez; Sp - Lobo fino de Juan Fernandez.

Fig. 496 *Arctocephalus philippii*

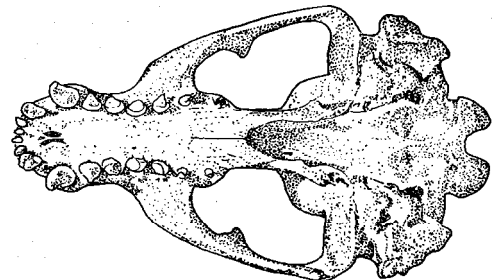
Distinctive Characteristics: Juan Fernandez fur seal adults have whitish cream vibrissae and prominent, long ear pinnae. Adult males have a very long, pointed, flat muzzle that may be slightly down-curved at the very end, and which terminates in a large, bulbous, fleshy nose, with downward pointing nostrils. The large size of the nose creates a shark-like silhouette in bulls. The forehead is flat to slightly convex. Adult males develop a mane of long, coarse guard hairs. This area is also thickened and more muscular in bulls. Nearly all adult males are scarred, some heavily. In adult females, the muzzle is long and pointed, and the nose extends beyond the mouth somewhat. The nose is large, but not as bulbous as in adult males. In most aspects, females seem to be typical of other species of the genus.

Adult males are dark blackish brown on the back and belly. The longer guard hairs of the mane are silver-tipped. The crown down to the ears, and nape to the shoulders sometimes appear silver-grey; the throat and neck are darker. Adult females are grey-brown to dark brown above, and variably paler below, especially on the chest and underside of the neck, which can be creamy grey. There may be areas of lighter colour on the face.

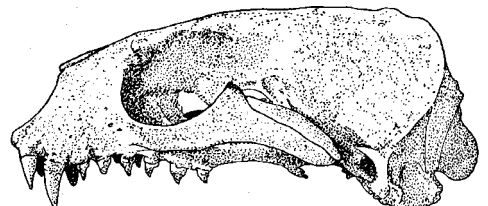
The dental formula is I 3/2, C 1/1, PC 6/5.



DORSAL VIEW



VENTRAL VIEW



LATERAL VIEW

Fig. 497 Skull

Can be confused with: Among other otariids, the South American (p. 246) Antarctic (p. 252), and subantarctic (p. 250) fur seals, and the South American sea lion (p. 232) have distributions that normally bring them near to that of Juan Fernandez fur seals, but there is no evidence that any of the former 3 species has regularly occurred at the Juan Fernandez Archipelago, nor is there a record for the Juan Fernandez fur seal on the mainland of South America.

Size: Adult males are estimated to be 1.5 to 2.1 m in length and weigh 140 to 159 kg. Adult females are estimated to be 1.4 to 1.5 m and 50 kg. Average lengths and weights for newborns are approximately 65 to 68 cm and 6.2 to 6.9 kg.

Geographical Distribution: The Juan Fernandez fur seal is restricted to the Juan Fernandez Archipelago in the eastern South Pacific Ocean off Chile and an incompletely known area of surrounding waters. When ashore, these fur seals prefer rocky and volcanic shorelines with boulders, grottos, overhangs, and caves.

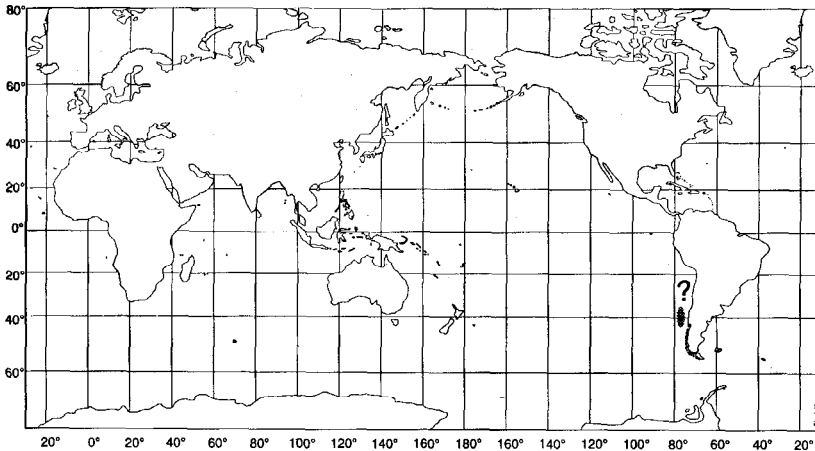


Fig. 498

Biology and Behaviour: Breeding in this species is from mid-November to the end of January; most pups are born from late November to early December.

There is no information on migration or diving. At sea, these fur seals can be quite animated at the surface, grooming and resting head down with hindflippers elevated and swaying in the air. They also raft at the surface with flippers tucked in a "jug-handle" position.

The diet of this species is poorly known. Cumulative evidence from stomachs has yielded the remains of 5 varieties of squid. Local fishermen claim that these fur seals also consume various fishes and lobsters.

Exploitation: Juan Fernandez fur seals have been severely exploited by humans. Records from sealers' logs, dating from the start of commercial sealing in 1687, account for approximately 4 million seals being taken from these islands. The species was thought to be extinct by 1900. In 1965 a relict population of approximately 200 fur seals were "rediscovered" on Mas Afuera Island.

IUCN Status: Vulnerable.