

Two species of seals reside and breed in the western half of Australia: the Australian sea lion, Neophoca cinerea, and the New Zealand fur seal, Arctocephalus forsteri. Both are eared seals — family Otariidae — of the order Carnivora. There are two other orders: Odobenidae, the Artic walrus; and Phocidae, the earless seals. A few stragglers of the latter group visit southern Australian coasts from Subantarctic islands and the Antarctic Continent, but none breed in Australian waters, i.e. not today; elephant seals did at the beginning of the nineteenth century.

Seals used to be classified in their own order Pinnipedia (= fin-footed) on account of the obvious modification of their limbs, particularly the hands and feet, into flippers for aquatic locomotion. Fur seals and sea lions can bend their hind flippers at right angles to the body enabling them to "walk" on all fours, with a kind of shambling gait. They are quite agile on land and fur seals can quickly out-distance a human on rocks over which they clamber with surprising ease towards their second home, the water. These forms may be referred to alternatively as "walking" seals, but their external ears are their most obvious distinguishing feature.

Members of the Phocidae lack external ear flaps: there is only a pair of small apertures in the skull behind the eyes. Seals of this group cannot bend their hind flippers at right angles to the body and progress on land by means of an ungainly hitching motion on their bellies, propelled by their rather small front flippers.

Earless seals swim by means of a sculling action of the hind flippers — and hence may be known as "swimming" or "true" seals — using their front flippers for braking and manoeuvring. The eared fur seals and sea lions use their large front flippers like paddles for swimming and steer by means of their hind flippers.

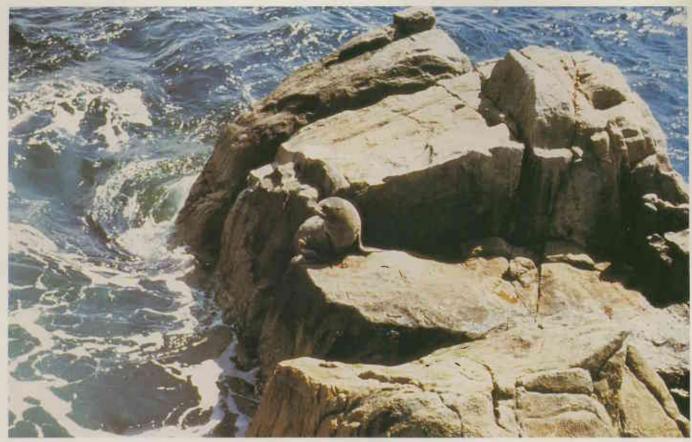
They also have denser fur and do not dive to such great depths as the more aquatically adapted earless seals.

The Australian sea lion numbers only about 4-5 000 individuals over

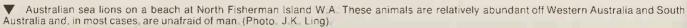
its entire range from Houtman Abrolhos, W.A. to The Pages east of Kangaroo Island, S.A., making it one of the world's rarer species. The New Zealand fur seal population in Australia is about the same size, but this species is much more numerous across the Tasman Sea. It occurs in Australia over much the same range as the sea lion, but does not extend as far north along the Western Australian coast.

Survivors of the Dutch East Indiaman Batavia wrecked on Half Moon Reef in the Abrolhos are said to have killed and eaten 147 seals most probably sea lions — during the six months they stayed in the archipelago awaiting rescue. Sea lion colonies around the Western Australian coast are small in number but breeding takes place and it seems unlikely that there is much if any intermixture between the sea lions of Western Australia and South Australia where much larger breeding colonies occur. There are probably only 750-1 000 sea lions in Western Australia altogether and 3-4 2000 in South Australia.

Houtman Abrolhos, North



A New Zealand fur seal, Arctocephalus forsteri, on a granite outcrop off the south coast of Western Australia, (Photo I, Abbott),





Fisherman Island, Carnac Island and the Recherche Archipelago are the main haunts of sea lions in Western Australia, whilst fur seals are most numerous on the islands of the Recherche Archipelago.

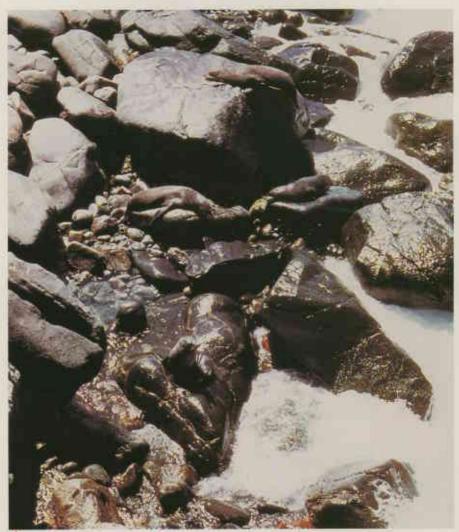
The main colonies in South Australia are on Nuyts Archipelago, Kangaroo Island, the Neptune Islands and the Sir Joseph Banks Group in Spencer Gulf, and The Pages. Fur seals are most common in the three first-named areas.

Fur seals breed during December and January each year on rocky islands and headlands; a single black-coated pup being produced and nursed for 6-8 months. They tend to be very timid and immediately take to the sea when disturbed. Hence it is very important that fur seal breeding sites are not visited during the pupping and nursing season in order to reduce any disruption of normal breeding behaviour.

Sea lions are enigmatic animals: very unafraid, almost friendly, on sandy beaches where they doze and pose for photographers. However, on rocks or boulder-strewn beaches where they breed, they too are rather wary or belligerent: tending to hold their ground rather than take flight. Nevertheless, it is important not to disturb breeding areas.

It has been found that sea lions at Kangaroo Island, S.A. have their pups at about 18-month intervals, but it appears on the basis of repeated observations by wildlife officers at various points around the coast that an annual breeding cycle is the rule elsewhere. Much more careful study, using marked or at least individually identifiable animals, is required to elucidate the reproductive behaviour of this rare species.

Fur seals and, to a lesser extent, sea lions were hunted for their pelts during the first few decades of the nineteenth century. Sealers worked the islands of the Recherche and many hundreds, if not thousands of skins went overseas. Seals do not appear to have regained their former numbers as judged by the size of some of the early cargoes, rather



Fur seals are particularly difficult to approach as they are wary and ready to plunge into the sea if disturbed. However, their breeding sites on rocky headlands and islands help to protect them from interference by making access difficult. (Photo I. Abbott.)

than reliable information about the colonies themselves. We cannot even be sure of the exact indentity of the fur seal species-taken. However, Matthew Flinders certainly distinguished between fur seals and sea lions ("hair seals").

I would be extremely interested in any information about sea lions and fur seals in particular and seals in general from around the Western Australian coast. Data relating to breeding biology: date of birth, number of breeding females and pups, number of breeding males in attendance, mating, suckling and mortality would be immensely valuable. I should be happy to exchange information or provide more details to any interested person, for example, census methods, age categories, identification or photographs.

FURTHER READING

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