

Charles Darwin Research Station Fact Sheet

Galapagos sea lions (*Zalophus wollebaeki*)

The Galapagos sea lion captures the attention of visitors to Galapagos. They are inquisitive and playful, characteristics that are both endearing and can get them into trouble. They are vulnerable to a number of human activities including illegal fishing practices. Charles Darwin Foundation (CDF) scientists are keeping a close watch on this species to make sure that problems affecting their populations are dealt with as quickly as possible.

Unique to Galapagos

The Galapagos Sea Lion (*Zalophus wollebaeki*) is an endemic species. It is smaller than its closest relative, the Californian sea lion. The Galapagos species can be found out to sea hunting for fish and squid as well as on most islands. They prefer sandy beaches and gentle rocky shores.

A male sea lion can weigh up to 250 kilograms. Males are less sleek than females, and have a distinctive bump on their heads. When wet, both sexes are dark brown; when dry their fur is often lighter in color.

Mating season is generally from July to December. A dominant male will reign over a territory. It will fight with other males for control of the territory and the breeding colony located there. There are multiple reproductive groups present in each breeding colony. These include males, females, juveniles and pups. Females are known to move between territories if they find the dominant male unsuitable for breeding.

There are many males without breeding groups. These often congregate quite peacefully in 'bachelor' groups. Territorial males do not have time to feed while defending a territory. Eventually they become weak and tired, and retire to the bachelor group to recuperate. Another dominant male will take over the territory.

Females give birth to one pup each year, suckling them on rich milk for one to three years, and at five months pups start fishing for themselves. It is common to see a female with two pups of different ages suckling together. However, the older pup competes with the newborn pup, which may not survive.

While females are fishing, pups are left in 'nurseries' often watched over by a single adult. Pups are not allowed to swim beyond shallow pools; the dominant male shepherds the young sea lions to within a safe distance of the beach and warn the group if sharks are around.

Vulnerability and CDRS research activities

The Galapagos sea lion is listed as Vulnerable on the IUCN Red List. Scientists working for the CDF are monitoring the Galapagos sea lion to determine its current status, abundance and distribution.

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Key Facts

Species: *Zalophus wollebaeki*

Common name:
Galapagos sea lion

Size: Males weigh up to 250kg

Habitat: sandy beaches and rocky shores; fishing out to sea

Diet: Fish and squid

Range: Throughout Galapagos

Status: Vulnerable

Threatened by: El Nino events, by-catch resulting from illegal fishing practices, viral disease

Sea lion populations can be severely affected by an El Niño event. In 1979, approximately 50,000 sea lions lived in Galapagos. 25 years of El Niño cycles have taken their toll. During El Niño 1997-1998, sea lions in the principal colonies in central and southern Galapagos declined in number by an average of 48%. Many adult sea lions moved away but there was also high mortality. 90% of those born in 1997 and 67% of the dominant males died as a result of starvation. In 2001, the total population was estimated to be 14,000-16,000 individuals.

Recent monitoring indicates that recuperation of the marine conditions and food supply has allowed the population to increase to 16,000-18,000 animals. The recovery of the population was explained by the return of adult animals to colonies, as well as by an increase in the average number of pups per colony.

Studies carried out in collaboration with the Galapagos National Park Service (GNPS) and with tour operators looked at the interaction of sea lions with waste material and human activities. According to these reports, damage to sea lions has increased. Among the causes of injuries and mortality are entanglement in nets, fish hooks in the snout, and cuts from outboard motor propellers. Juvenile sea lions are the most affected because of their inquisitive and playful natures. Sea lions are often the victims of by-catch resulting from illegal fishing with longlines or nets.

Some sea lion pups and juveniles are also affected by a parasite, *Philophthalmus zalophi*, which infects their eyes. This and other health issues within sea lion populations are currently under investigation by CDF scientists. The spread of new illnesses to sea lions could be devastating in combination with future El Niño events.