

## Charles Darwin Research Station Fact Sheet

# Waved Albatross (*Phoebastria irrorata*)

The waved albatross is the largest bird in the Galapagos Islands and the only albatross species found entirely within the tropics. Restricted breeding areas and human activities increase the vulnerability of this bird. The Charles Darwin Foundation (CDF) advises that policy and research-based actions are required to ensure the survival of this species in Galapagos.

### *Unique to Galapagos*

The waved albatross is regarded as endemic to Galapagos. It weighs 3-4 kilograms, is approximately 90 centimeters in length, and has a wingspan 2.35 meters. Its wings, back and tail are brown, and paler underneath with grey wavy barring. The neck is white and cream and the bill is yellow.

Once airborne, waved albatrosses are efficient flyers, however becoming airborne is difficult. At sea, they use their webbed feet, the wind and waves to achieve flight. On land, they launch from a cliff into the wind.

Breeding is limited to Española Island, although a few pairs are thought to breed on Isla de la Plata (Ecuador). The elaborate courtship ritual of the waved albatross is extraordinary to see. This involves a precise series of sequences including:

- rapid bill circling and bowing
- beak clacking
- an upraised bill to make a “whoo-ooo” sound

Eggs are laid on bare ground between April and June, and incubated for two months. Chicks start out small, brown and downy, and two weeks after hatching, are left in ‘nursery’ groups while the parents are fishing. Parents return to feed the chick large amounts of predigested oily fish liquid. A chick may receive as much as 2kg of oil, and the chick grows rapidly and looks quite ungainly. The young reach adult-size by December, and leave the colony by January. They then spend the next six years at sea off Ecuador and Peru, fishing and scavenging for fish and squid. After this time, they return to Española to seek a mate for life and to breed.

### *Vulnerability*

The waved albatross’ small breeding range means that it is listed as Vulnerable on the IUCN red list. It is recommended that it be listed as Endangered if populations continue to decrease.

Waved albatrosses have in the past been affected by water pollution such as oil slicks. Other threats include:

- Accidental mortality related to fishing activities
- Harvesting for human consumption

### CDF FOCUS: RESTORATION



#### Key Facts

**Species:** *Phoebastria irrorata*

**Common name:** Waved albatross

**Class:** Endemic

**Size:** 3-4 kilograms in weight, length of 90 centimeters, wingspan 2.35 meters; largest bird in Galapagos

**Life span:** Up to 40 years

**Habitat:** Open sea for fishing; cliffs, rocky shores and shrubland for breeding

**Diet:** Squid, fish, and crustaceans

**Range:** Breed on Española, seen at sea throughout region

**Status:** Vulnerable

**Threatened by:** Natural predation, El Niño events, fisheries-related mortality, water pollution

- Contaminant ingestion

The Española mockingbird (*Nesomimus macdonaldi*) preys on albatross eggs. Its impact on albatrosses should be monitored. El Niño events can cause reproduction in the colony to fail completely due to a lack of food.

### *CDRS research activities*

The CDF acts as scientific advisor to the Government of Ecuador on matters of Galapagos conservation. It has formally expressed its concerns about the waved albatross to the Ecuadorian Ministry of Environment, stressing that policy-based actions are needed to prevent a population crash.

Collaborating scientists have visited Galapagos frequently since 1999 to work with CDF scientists and the Galapagos National Park Service to survey and band adult waved albatrosses twice every year. However, studies began as early as 1962, studying the state of the population and reproductive success. Recent studies have shown that adult survival of the waved albatross is lower than historical estimates, contributing to a reduced breeding population. Preliminary results indicate a decline in albatross populations between 1994 and 2001, then remaining stable from 2001 to 2006.

In 2003, the CDF's collaborating scientists also gathered survey information from major fishing communities in Peru, the principal foraging site of this species. The albatross is being affected by incidental death caused by fishing by-catch or intentional harvesting for human consumption.

Ongoing monitoring of population trends will improve our understanding of the risks affecting waved albatrosses. Activities to manage and protect their habitat will help to preserve the populations, as will the establishment of bi-lateral policies between the Ecuadorian and Peruvian governments.