Waved Albatross
*Phoebastria irrorata*

Kingdom Animalia
Phylum Chordata
Class Aves
Order Procellariiformes
Family Diomedeidae

Common Name
Waved or Galapagos Albatross, Albatros de las Galapágos

Nearest Relatives
There are four families and 93 species of albatrosses, storm-petrels, petrels and shearwaters in the order Procellariiformes, which means tubenose. All birds in this order have long, hooked, grooved bills with internal “tubes” that aid in expulsion of salt and also contribute to an unusually acute sense of smell. These birds are all highly pelagic, spending most of their time hunting at sea. They are agile fliers and are awkward or unable to walk on land. Procellariiformes are closely related to penguins (Sphenisciformes).

The waved albatross is the only albatross species found in the Galapagos though there are several species of petrel, storm-petrel and shearwater as well as the Galapagos penguin. They are most closely related to three other species in the genus *Phoebastria*, the northern pacific albatrosses.

Physical Description
This is the largest bird in the Galapagos with a wingspan of up to 2.5 meters and weighs up to 4 kg. The back, wings and tail are light to dark brown becoming lighter grey with wavy barring on the breast, hence the name. The head and neck are mostly white with some buffy yellow/orange on the nape. It has a large, yellow, hooked bill. These birds are easily recognizable by their size and may often be seen floating in large groups offshore.

Geographic range
Many consider the waved albatross to be endemic to the Galapagos; it is found only on Española (Hood) Island. There is, however, a very small population (approximately 5 breeding pairs) established on Isla de la Plata off the coast of Ecuador. Albatrosses can be found nesting at Punta Suárez and Punta Cevallos on Española from April through December and they spend the remainder of the year at sea fishing off the coast of Ecuador and Peru.

Habitat Description
This is the only species of albatross that breeds in the tropical, equatorial zone. Most other species of albatross are found farther south in colder oceans. High-density breeding colonies are found along southern Española where the coastline is steep (cliffs up to 100 m high) and exposed to strong southeasterly winds. Some lower density colonies are found on inland hillsides as well. No colonies are found on the north shores as the winds are not strong enough. The winds are important as these large birds are awkward on land and need the wind to help them become airborne. The vegetation cover at breeding sites is generally sparse consists of grasses and a low-lying forb, *Sesuvium edmonstonei*. The inland sites have more woody shrubs. Since the eradication of feral goats, breeding grounds of the albatross have declined because of shrub encroachment. Goats were heavy browsers of shrubs and actually increased the availability of suitable breeding spots for the albatross at many inland sites.
Abundance and Density
A 1971 census (Harris 1973) counted 12,000 breeding pairs. In 1994, 15,000 to 18,000 breeding pairs were counted (Douglas 1998) and in 2001 the population was estimated to be 34,000 individual animals (Anderson et al. 2002). While a more recent census has yet to be done, many have suggested declining numbers of waved albatross due to bycatch by longlining fisheries and hunting for human consumption.

Diet
The waved albatross mainly feeds at the ocean surface on fish, squid and crustaceans. They will also scavenge on and steal prey of other birds and consume garbage. While chicks are being raised, adults will forage at sea for one to two weeks. When they return, they can feed a single chick up to 2 kg of partially digested fish oil in one feeding!

Reproductive Ecology
As with all other species of albatross, the waved albatross is generally a monogamous species though there is some evidence of extra-pair copulations (Huyvaert 2000 and 2006). Courtship usually takes place at the end of the breeding season and the display consists of an incredibly elaborate dance where the males and females repeatedly snap their beaks shut loudly, cross beaks as fencers in a duel, and point their heads to the sky (for an eloquent narrative of the waved albatross mating dance, see Jackson 1993). The pair is then separated until the beginning of the next breeding season in late March/early April. The males arrive back at Española first and the females arrive shortly afterward. One large egg is laid per pair on bare ground (no nest is made) and the entire colony lays at the same time. Both males and females incubate the egg for approximately 60 days and they have been known to roll their egg around the ground with their beaks. An albatross chick is really something only a mother could love – ugly, fluffy, brown, oversized chicks! Chicks will fledge at about 170 days and will spend the next 5-6 years at sea before returning to breed for the first time. They live up to 30-40 years.

Human impacts
The waved albatross has been uplisted to critically endangered on the 2007 IUCN Red List. They are very well protected within the Galapagos Marine Reserve and tourism on Española is highly regulated to minimize disturbance to breeding colonies. However, having a very limited breeding range, coupled with increasing incidences of death from longlining fisheries and hunting for human consumption, is posing significant threats to the population of waved albatross.

References


