

SEA & SHORE BIRDS

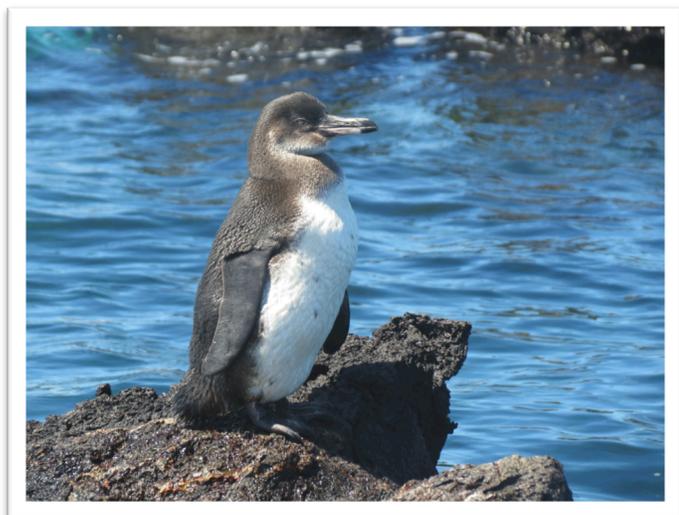
Island birds are one of the groups most subject to extinction worldwide following the arrival of humans. Galapagos is the exception, mainly because humans arrived so much later than on other islands. There are extinct bird populations on certain islands, but the islands as a whole retain all of their native bird species.

SEA BIRDS

The Galapagos Islands are a haven for tropical seabirds, including Blue-footed, Red-footed, and Nazca Boobies, Flightless Cormorants, Great and Magnificent Frigatebirds, Red-billed Tropicbirds, Waved Albatross, Swallow-tailed Gulls, Lava Gulls, Galapagos Penguins, and many more. Large breeding colonies of seabirds provide some of the best wildlife watching opportunities on the islands.

Only six species of sea birds are endemic to the islands, these are the Galapagos Penguin, Flightless Cormorant, Waved Albatross, Galapagos Petrel, Lava Gull and Swallow-tailed Gull. Each species of gull has evolved its specific behaviors related to breeding, feeding, etc.

Galapagos Penguins are the only penguins that live at or just above the equator. A population of about 2000 individuals is found in the colder, nutrient-rich waters in the western islands – Fernandina and Isabela (about 95% of the population). However, some small isolated populations are also found at satellite islands off the coast of Santiago and along sections of the northern coast of Floreana. They breed year-round and nest in caves at sea



level. They forage relatively close to shore and at relatively shallow depths. Although the current population is relatively stable, the species is listed as Endangered by the IUCN due to its small population size, restricted range, and its vulnerability to El Niños. There is a danger that with climate change and the increased frequency of El Nino events, this population will be further endangered.

Flightless Cormorants are ranked as one of the worlds rarest birds. They are endemic to Fernandina and Isabela Islands and have a population of around 6000 individuals. As with the penguins, their range centers on the cold, nutrient-rich waters of the western islands. As the name suggests, the Galapagos Cormorant has lost its ability to fly. They only have vestigial wings, but very strong legs, making them excellent swimmers. They feed on eels, octopuses, and fish. The cormorants nest in small groups in June - October, when marine productivity is high and the risk of heat stress is reduced. They are also negatively affected by El Niño events. However, in the past 20 years, the population has grown more rapidly than ever With population stabilization their status as been downgraded to "vulnerable" by the IUCN.

Waved Albatross breed only on Española Island in the Galapagos, and perhaps on Isla de la Plata off Manabí province, Ecuador. The Española



population was estimated at around 34,700 adults in 2001. On Isla de la Plata, there are probably fewer than 10-20 pairs. Waved Albatross breed annually, arriving in Espanola around late March and laying eggs from mid-April to late June. Pairs mate for life and perform elaborate and unique mating

dances to ensure they have the right partner. They feed on squid, fish, and crustaceans. This species is classified as Critically Endangered because of its extremely small breeding range, being essentially confined to one

island. Evidence suggests that recent population decline is related to long-line fishing.

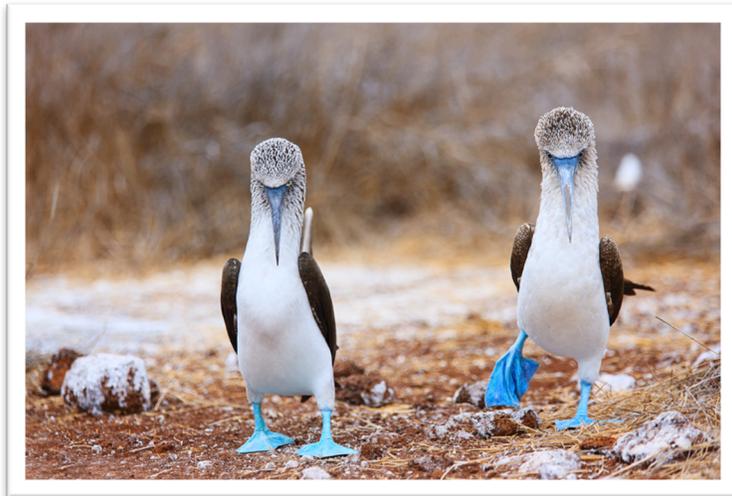
Galapagos Petrels are the only seabird in the islands that breed in the humid highlands of the larger islands – Santa Cruz, Floreana, Santiago, San Cristóbal, and Isabela. The petrels nest in burrows or natural cavities usually on sloped hillsides. This nesting behavior makes them extremely vulnerable to introduced predators, including cats, rats, and pigs. By the 1980s all of the populations had plummeted. Conservation efforts, aimed at controlling the introduced predators at the nesting grounds, have resulted in the recovery of the petrel numbers. The global population estimate is now 10,000-20,000 individuals. However, the IUCN continues to list them as Critically Endangered due to the continued presence of both rats and cats in the majority of their nesting areas, potential of nest destruction by goats, donkeys, cattle and horses, and impacts from agriculture and invasive plants on their habitat. Increased construction in the highlands and long-line fishing are also impacting these birds. In addition, El Niño events seem to have a detrimental impact on both nesting and productivity. Galapagos petrels feed mostly on squid, fish, and crustaceans.

Swallow-tailed Gulls breed mainly on the Galapagos Islands but also on Malpelo Island, Colombia. The population is estimated at 10,000–15,000 pairs and appears to be stable. When not breeding, these gulls can be found along the Pacific coast of South America from Ecuador to northern Chile. Swallow-tailed gulls, unlike all other gulls in the world, forage mostly at night, feeding on squid and some fish. They appear to suffer from periodic food shortages and are often observed feeding 500 km from the nearest land. Swallow-tailed Gulls breed throughout the year and asynchronously across the Galapagos, with individual sub-colonies being synchronized by social interactions. They nest on steep slopes or broken cliffs, on ledges, and also just above the wave line on gravelly beaches and under vegetation. Adults leave the colony after breeding and become highly pelagic, returning in 4-5 months often to their previous nest site. Their range is very large and does not approach the threshold for the Vulnerable category – and thus Swallow-tailed Gulls are listed as Least Concern.

Lava Gulls are one of the least known of the seabirds. Although widespread throughout the archipelago, Lava Gulls do not form large breeding colonies and are usually observed in single pairs. The population is estimated at 900-1200 individuals. The reason for the tiny population and the solitary nesting behavior is not fully understood but is thought to be related to its feeding behavior. Lava Gulls nest solitarily in scrapes on sandy beaches or low outcrops close to water. The female lays two eggs. A gull's territory is large and adults are extremely wary when nesting. They are scavengers but will also take seabird eggs, juvenile marine iguanas, small fish, and crustaceans. This poorly known species is considered Vulnerable because of its small population size. Although its numbers appear stable, there are numerous potential threats.

Three Species of Boobies are among the most popular and most frequently seen birds of the Galapagos Islands. They are large birds, very similar to gannets, with

large pointed wings. Like gannets, booby's feed by making spectacular dives into the ocean to catch fish. All three species live in groups, but range from widely distributed small colonies of Blue-footed Boobies to the larger, less frequent



colonies of the Nazca Boobies, to the few huge colonies of Red-footed Boobies. The number of eggs laid by each species is related to how far they venture to feed. Blue-footed boobies feed near the shore and lay 1-3 eggs. Nazca's feed further offshore and lay 2 eggs, while Red-footed boobies feed in the open ocean and only lay 1 egg. Although the smallest and least often seen, Red-footed Boobies are the most abundant of the three species. While the Blue-footed and Nazca Boobies nest on the ground, Red-foots nest in trees and shrubs. The Red-foots also have two color phases, the large majority (95%) with a brown body and the rest with a white-and-black body.

Their elaborate mating ritual, which includes a silly feet-stamping dance and a pose known as “skypointing,” is fascinating to watch.

Frigatebirds - two of the world’s five species of frigatebirds are found in Galapagos – the Magnificent Frigatebird and the Great Frigatebird. They are superior flyers, and feed by snatching fish, squid, and scraps from the surface of the ocean, and by stealing from other seabirds in flight. When feeding off the surface of the sea, only their beak will touch the water as



their feathers are not waterproofed like most seabirds. If they get too wet, they can become waterlogged and drown. Watching the Frigatebirds courtship ritual is mesmerizing. Males have a bright red gular pouch that can be inflated to attract the female. The males sit together or alone in trees at their

nests, waiting for the females to fly overhead. On seeing a female, they turn their head and wings upward, shake them vigorously, displaying their bright red pouches, and call loudly. If a female is attracted, she will descend to the nest and courtship continues. Females lay a single egg and both parents share incubation duties.

SHORE BIRDS

The most commonly seen shore and water birds include the Galapagos flamingo, heron species including Great Blue Herons, Yellow-crowned Night Herons, Lava Herons, Black-crowned Herons and Striated Herons, Oystercatchers, White-cheeked pintails, Gallinules, and Common Egrets.

Even though common the Galapagos Flamingo population is only around 320-350 individuals. This is the world’s smallest flamingo population and is listed as Endangered on the Red List for birds in Ecuador. While most flamingoes require large groups in order to breed, this small population has adapted it's breeding behavior and they are able

to breed with just a few pairs present. They live in the saltwater marshes, close to the sea and filter feed primarily on brine shrimp. Young flamingos hatch with grey plumage, developing the pink color as a result of their diet (beta carotene). Intense El Niños can affect their food supply and severely impact their habitat, making nesting impossible.



The Great Blue Heron, eats much larger prey than the other heron species. The Lava Heron catch fish right out of the water and also small crabs, while Yellow-crowned Night Heron, hunt at night, and feed almost exclusively on crabs.