

Select Avians of 'The Enchanted Islands' by Pam Condos

As a birder with a strong interest in Central and South American avians, visiting the Galapagos Islands was an otherworldly trip of a lifetime. The Galapagos are a National Park and World Heritage Site, and are no ordinary islands. This is a place where you may meet a penguin and a flamingo on the same beach. This archipelago is part of Ecuador and is located 600 miles off its coast. The Galapagos is made up of 13 main islands, 6 smaller ones, and well over 100 islets and rocks scattered over approximately 26 miles of open space. Located at the confluence of three ocean currents, the Galápagos are a 'melting pot' of marine species. Ongoing seismic and volcanic activity reflects the processes that formed the islands. Galapagos is a harsh, remote land, and the species that arrived there did not survive by diversifying, but rather by evolving specific traits to suit a certain niche in the environment. There are roughly three broad categories of habitat, each with its own distinctive species; the coastal zone, arid zone, and humid highlands.

The origin and history of the Galapagos is fascinating and complex. Charles Darwin visited in 1835, and his observation of Galápagos' species later inspired his theory of evolution. This article highlights a few of the endemic and other prevalent avian species I encountered on the islands.

The mostly dull color of many of the birds, along with extreme tameness, makes them especially attractive to visitors. Entering and hiking the outer islands is strictly monitored. Visitors to any protected areas within the Galápagos National Park (GNP) must be accompanied by a naturalist guide authorized by the GNP Directorate. This is to ensure the protection of wildlife, which shows an uncanny lack of fear of humans.

The Galapagos Islands are home to some of the highest levels of endemism anywhere on the planet. Of the 56 native bird species of Galapagos, 45 are endemic and 11 are indigenous. In addition to the native birds, there are 29 migrant species (migratory and native) and 64 species that have been observed a few times. Galapagos birds can be separated into land birds, sea birds, and shore birds.



The **Galapagos Hawk** (*Buteo galapagoensis*) is one endemic land predator of the islands. These hawks feed mainly on insects such as locusts and giant centipedes, as well as small lava lizards, snakes, and rodents. It is not uncommon for hawks to take young marine and land iguanas. My avian guide shared that the hawks are thought to be extinct on up to five islands and interestingly, there are no hawks on one island because it is too young to produce land reptiles and lizards that the hawks like to feed on. Its conservation status is listed as Vulnerable.

The endemic group of 13 species known as **Darwin's finches** (with a 14th species found in the Cocos Islands some 650 km to the north), as a whole, are among the most abundant land birds. Each species has a distinctive beak size and shape, and their feeding behavior is specialized to their specific niche. Some eat seeds, others eat insects, some remove ticks from tortoises and land iguanas, some eat leaves or flowers, and several finch species use twigs or cactus spines to extract insect larvae from holes in dead tree branches.



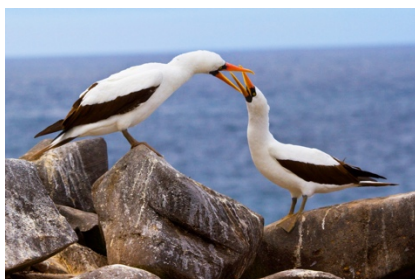
The four **Mockingbirds** (*Mimus parvulus*), constitute the second largest group of endemic land species. The species are distinguished in bill size and shape, body size and color, and their songs are species specific. Though omnivorous, they tend to be more predatory than their mainland relatives. They will eat young finches, lava lizards, insects, centipedes, carrion, and seabird eggs, among other things. They often form cooperative breeding groups consisting of a breeding pair plus their offspring from previous broods. This is a species of Least Concern.

There are six endemic species among the sea birds: the Galapagos Penguin, Flightless Cormorant, Waved Albatross, Galapagos Petrel, Lava Gull and Swallow-tailed Gull (*mostly endemic*). **Galapagos Penguins** (*Spheniscus mendiculus*), one of the smaller penguins of the world, are the only penguins that live at or just above the equator. A drop in sea temperature below 75 degrees stimulates the onset of breeding and if conditions are favorable, they may have up to three clutches a year. Long-term monitoring has shown that this species undergoes severe fluctuations, primarily related to El Niño events and their effects on the availability of fish. Galapagos Penguins are currently considered Endangered.



The **Waved Albatross** (*Phoebastria irrorata*) is the largest bird in the Galapagos with a wingspan of up to two and a half meters (8 1/4 feet). They get their name from the wave like pattern on the adults' wings. This species is classified as Critically Endangered because it has an extremely small breeding range, is essentially confined to one island, and evidence suggests that it has experienced a substantial recent population decline related primarily to fisheries, especially long-lining.

The **Swallow -tailed Gull** (*Creagrus furcatus*) is unique within the gulls for feeding exclusively at night. Its night-adapted eyes allow it to feed miles from shore on fish and squid it captures from the surface of the ocean. Virtually endemic to the Galapagos, this species breeds mainly on the islands and on one island off Colombia. In contrast to almost all other gulls which will return to their natal colony to breed, at the onset of their first breeding cycle Swallow-tailed Gulls will find a new breeding colony. It is a species of Least Concern at this time.



The largest of the three species of Galapagos boobies is the **Nazca Booby** (*Sula granti*). It was previously thought to be a subspecies of the Masked Booby, but is now considered a separate species. Nazca Boobies catch fish by plunge-diving into the waters from heights of up to 30 meters. These shore birds usually forage in the coastal waters surrounding the Islands. They consume small fish such as sardines, but also eat flying fish, squid and anchovies during periods of El Niño, when sardines are

less abundant in the marine environment. Its conservation status is Least Concern.

Although evolution has prepared the Galapagos Islands' creatures for a simpler and more innocent world, there has been a massive increase in human population and interference in the last several decades. There is still much work to be done to ensure their destiny as a place where humanity learns to live gently in stewardship with nature in these enchanted islands.

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