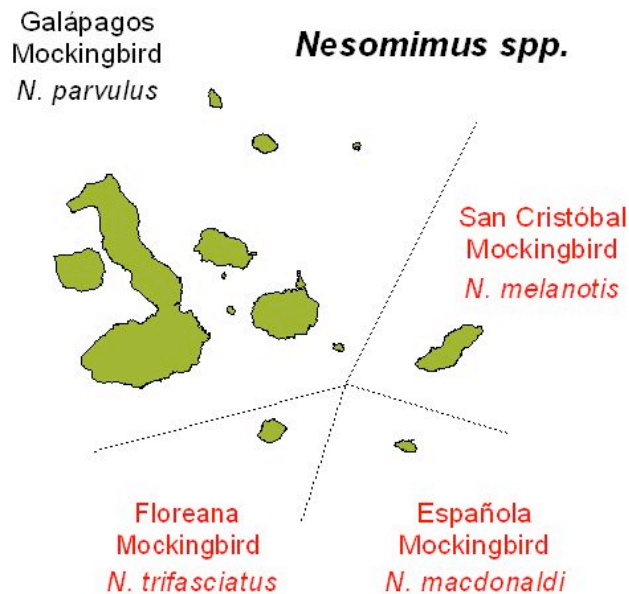


## Mockingbirds of the Galapagos Islands

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### Names and Geographic Range

There are four species of mockingbirds endemic to the Galapagos Islands. The Galapagos mockingbird (*Nesomimus parvulus*) is the most widespread. The other mockingbirds have both an English common name, and a Spanish common name. The Charles (or Floreana) mockingbird (*Nesomimus trifasciatus*) is only located on two small islands off Floreana, Gardner-by-Floreana, and Champion. The Hood (or Espanola) mockingbird (*Nesomimus macdonaldi*), is found only on Espanola and Gardner. The Chatham (or San Cristobal) mockingbird (*Nesomimus melanotis*) has the most limited range, being found only on San Cristobal Island (Fitter, Fitter and Hosking). The ranges of these different species do not overlap. The San Cristobal birds and the Charles mockingbirds are endangered, while the birds on Espanola are considered vulnerable (Dawin Research Station). The names of these birds in Spanish are: cucuve de Galápagos cucuve de Española, cucuve de San Cristóbal, and cucuve de Floreana.



Map from Galapagos Mockingbird website <http://oikos.villanova.edu/Nesomimus/map.html>  
Developed and maintained by Robert Curry

### Nearest Relatives

Like the mockingbirds commonly found in urban and suburban areas of the US, these birds are in Phylum Chordata, Class Aves, Order Passeriformes and Family Mimidae. Indeed mitochondrial DNA analysis shows the birds in North America, the Caribbean and northern areas of South America are the closest living relatives of the Galapagos birds, rather than those found in Ecuador. (Arbogast et al. 2006)

### Description

Because they are inquisitive, and sometimes aggressive birds, I am sure we will see these birds during our trip. They all have grey-brown plumage with downward curved beaks, and are about 11 (28 cm) inches long. (Fitter, Fitter and Hosking)

### Abundance and Density

These birds vary in abundance and density depending on the species and island where they are found. For example, the Espanola mockingbird, when not breeding, will congregate in groups of 40 or more individuals, while the total population of the Floreana mockingbird is estimated to be just 79 birds as of 2006. The preferred habitat for the mockingbirds is shrubland, however the

Charles mockingbirds feed primarily on *Opuntia* cacti, so can be found in dryer areas than the other birds. (Darwin Research Station)

### **Diet**

The mockingbirds are omnivores. Diet varies with the species but may include seeds, insects, eggs of birds and reptiles, marine and terrestrial arthropods, nestlings, young turtles, and even blood. Curry and Anderson (1987), observed mockingbirds drinking the blood from wounds on marine iguanas, sea lions, masked boobies, and even from cuts on the legs of researchers. Galapagos mockingbirds have also been observed picking at the teeth of sleeping sea lions to obtain scraps of food and drops of saliva (Trimble 1976).

### **Reproductive Ecology**

Mockingbirds have an interesting reproductive ecology in that some engage in cooperative breeding. In this type of reproductive strategy the parent birds are assisted in raising the young by helper birds, which are usually related to the parents. Like many of resident birds in the Galapagos egg laying is related to rain, and mockingbirds often raise two different broods. Some older siblings assist the parents in feeding the chicks in the second brood. (Grant and Grant 1979) While all helpers are not siblings of the nestlings, cooperation varies with relatedness, with more cooperation occurring when the chicks were closely related to the helper (Curry 1988).

### **Interdependence/ Symbiosis**

Galapagos mockingbirds have been observed picking ticks off of two species of land iguanas, *Conolophus pallidus* and *Conolophus subscristatus* (Christian 1980). This could be seen as a type of symbiosis called mutualism. In this type of symbiosis both parties benefit from the relationship. The iguana is cleaned of an ectoparasite, and the mockingbird gets a nice protein snack. However, Christian also reports a mocking bird ripping skin that was sloughing off the iguana, and in the process creating a bleeding wound. The bird then began to drink the blood. In that instance the symbiosis would be a type of parasitism with the mockingbird acting like an ectoparasite.

Curry (1986) reports an instance of a mockingbird stealing two different crickets from the jaws of the Galapagos centipede. Stealing of food from another individual is called kleptoparasitism. This type of opportunistic feeding by the mockingbirds is rare however as Curry reports no other instances of this behavior during his time on the islands.

### **Human Impact**

While the Floreana mockingbird was common when Darwin visited the island, it became extinct on Floreana about 125 years ago. The likely cause was the invasion of the island by goats that ate the birds favorite food, *Opuntia* cactus, and predation by black rats (Grant et al. 2000). Humans introduced both the rat and goat to the island. In April of this year meetings were held to discuss the best way to re-introduce the Floreana mockingbird back to its former home on Floreana (Darwin Research Station).

The smooth billed Ani is an introduced bird, which eats mockingbird nestlings, as do feral cats. Habitat destruction and degradation by humans also contributes to the decline of species such as the San Cristobal mocking bird. Introduced diseases such as avian pox affects mockingbirds along with other birds on the Galapagos (Darwin Research Station). As far as the bird impacting humans, there are reports of the Espanola birds becoming a nuisance to researchers due to its inquisitive nature and boldness (Rothman).

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