

## Floreana Island, Galápagos



### WHY IS FLOREANA ISLAND IMPORTANT?

- HOME TO 54 IUCN THREATENED SPECIES
- WORLD'S LARGEST GALÁPAGOS PETREL BREEDING COLONY, WITH OVER 60% OF THE GLOBAL POPULATION
- 11 SEABIRD SPECIES NEST ON THE ISLAND, INCLUDING 4 SPECIES FOUND ONLY IN THE GALÁPAGOS

### PROJECT MISSION

Restore Floreana Island's ecosystem by removing invasive species in order to protect the island's rare and endangered plants and animals and benefit the local community.

### PROJECT VISION

Livelihoods of Floreana residents are improved and native species are once again thriving on Floreana Island, providing pride, enjoyment and economic benefits to Galapagueños, Ecuadorians, and international visitors.

### THE PROBLEM

A suite of invasive species threaten native plants and animals through predation and competition for resources. The Critically Endangered Floreana Mockingbird can no longer breed on Floreana Island due to feral cats and invasive rats, and is currently restricted to two small, nearby islets, Champion and Gardner Islands.

### THE SOLUTION

With support from The Leona M. and Harry B. Helmsley Charitable Trust, Island Conservation is working with the island community, Floreana Parish Council, Galápagos National Park, Galápagos Biosecurity Agency, and Ministry of Agriculture to plan and implement our shared vision of reviving Floreana's natural island ecosystem by removing invasive feral cats, rats, and mice.



**Floreana Island, Galápagos** is the sixth largest island within the Galápagos archipelago and lies 1,000 km off the coast of Ecuador. In 1978, the Galápagos were designated as a UNESCO World Heritage Site. The Galápagos National Park manages over 98% of Floreana Island; an agricultural zone (230 ha) and the town of Puerto Valasco Ibarra (42 ha, 140 residents) fills the remaining 2%. Floreana Island is an Alliance for Zero Extinction site.



## FLOREANA ISLAND RESTORATION PROJECT

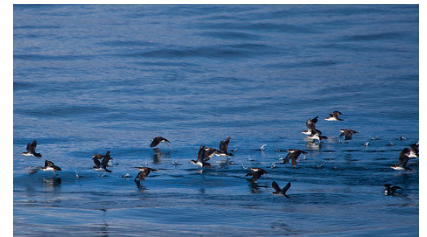
Floreana Island in the Galápagos archipelago is home to an incredible diversity of native species found nowhere else in the world, including Galápagos Penguins (*Spheniscus mendiculus*), Galápagos Petrels, Marine Iguanas (*Amblyrhynchus cristatus*), land snails and Darwin's finches. Unfortunately, the 54 IUCN threatened species that call this island home are threatened by the presence of feral cats and invasive rats and mice.

Floreana Island was first settled in 1832 and now has a small community of 140 people that rely on tourism, farming, and a small fishery to support them. Island Conservation (IC) is supporting the Floreana community and other partners (see front page) in achieving our shared vision of a restored Floreana free of invasive species. This will allow the island's unique fauna the opportunity to flourish and thrive and create the conditions for sustainable community tourism and farming on the island. IC conducted field studies on the island to identify options for invasive rodent and feral cat removal. With partners, we are working to develop and implement key strategies to achieve these shared goals.

## PROTECTING A GLOBAL TREASURE

### 1. GALÁPAGOS PETREL (*PTERODROMA PHAEOPYGIA*)

Over 60% of the world population of this Critically Endangered seabird breeds on Floreana. To avoid native predators, this species comes and goes from its breeding colony under the cover of darkness. But this is no protection against introduced cats and rats. One study found almost 50% of Galápagos Petrel nests on Floreana were predated despite efforts to locally reduce feral cat and invasive rat predation.



### 2. FLOREANA MOCKINGBIRD (*MIMUS TRIFASCIATUS*)

Of the four mockingbird species found only in the Galápagos, the Critically Endangered Floreana Mockingbird is the most at risk of extinction. In the absence of native rodents or feline predators, these birds evolved to spend much time on the ground. Feral cats and invasive rats introduced to the island are likely major factors in the mockingbird's extirpation from Floreana Island. Today, it is only found on two small predator-free offshore islets



**3. LAND SNAILS** Twenty species (and eight subspecies) of endemic land snails are known from Floreana Island. The IUCN Red List considers three of these species critically endangered, six as endangered, and four as vulnerable, while the other seven remain to be evaluated. Introduced rats and mice prey heavily on native snails and are the primary threat. On nearby Rabida Island, endemic snails were considered extinct, only to be rediscovered two years after rodent removal.



Photo: Christine Parent

### 4. FLOREANA GIANT TORTOISE (*CHELONOIDIS*

*ELEPHANTOPUS*) The endemic Floreana Giant Tortoise was considered extinct by 1850. However, the species was recently rediscovered through genetic analysis of wild tortoises historically translocated by whalers to Isabela Island. The presence of invasive species on Floreana prevents the possibility of tortoises breeding there. Weighing up to 320 kilograms and standing stretched more than 1.2 meters, the Floreana Giant Tortoise is a critical, natural part of the Floreana ecosystem performing important roles, such as seed scarification and dispersal, soil disturbance, and grazing.

