



## Desecheo Island Restoration Project, Puerto Rico



### WHY IS DESECHEO IMPORTANT?

- REFUGE FOR THREE ENDEMIC REPTILE SPECIES FOUND NOWHERE ELSE IN THE WORLD
- ONE OF ONLY THREE ISLANDS WHERE THE ENDANGERED HIGO CHUMBO CACTUS IS FOUND
- PREVIOUSLY THE LARGEST BROWN BOOBY COLONY IN THE WORLD

### OUR MISSION

To restore the island's forests necessary for the recovery of native plants and animals, particularly seabirds.

### OUR VISION

Desecheo Island is inhabited by thousands of nesting seabirds and its native plants and lizard species are thriving.

### THE PROBLEM

Invasive goats, feral macaques, and rats severely degraded Desecheo's native forest and eliminated virtually all nesting seabirds.

### THE SOLUTION

In 2012, Island Conservation and the U.S. Fish and Wildlife Service completed the removal of invasive species that endanger the survival of threatened and vulnerable native species on Desecheo Island.

### MEASURING IMPACT

The partners will monitor the anticipated recovery of endemic species and the return of more than six nesting seabird species to the island.



### Desecheo National Wildlife Refuge

Desecheo Island is a 358-acre dry forest island 13 miles off the west coast of Puerto Rico. Initially set aside as a preserve and seabird breeding ground by President Taft in 1912, the island is now managed by the U.S. Fish and Wildlife Service as a National Wildlife Refuge.



## DESECHEO ISLAND RESTORATION PROJECT

Despite continued degradation, Desecheo Island still supports important populations of plants as well as animals found nowhere else in the world, such as the Desecheo Anole, Desecheo Ameiva, and Desecheo Dwarf Gecko. Before the introduction of black rats, feral macaques, and goats, the island hosted large colonies of breeding seabirds, including the world's largest Brown Booby colony and a significant Red-footed Booby colony. But, due to the destruction of native vegetation and predation of eggs and chicks by these invaders, seabirds no longer nest on Desecheo and many native plants and animals have been wiped out from the island or are endangered.

In 2012, Island Conservation and the U.S. Fish and Wildlife Service completed removal of invasive species from Desecheo Island. With the island free of invasive species, native plants and animals are once again able to thrive in their natural habitat. Coral reefs in the Marine Reserve surrounding Desecheo (managed by the Department of Natural Resources and Environmental Resources) are also expected to benefit from the island's restoration—increased vegetation will reduce soil erosion into the sea.

### SAVING EXTRAORDINARY SPECIES

**1. WHAT NATIVE WILDLIFE ARE FOUND HERE?** For its tiny size, Desecheo has a significant number of island endemic species found nowhere else in the world. It is home to three endemic lizard species, the threatened Higo Chumbo cactus, two endemic spiders, and an endemic whip scorpion.



**2. WHAT IS THE GOAL OF THE RESTORATION?** This project will promote the recovery of thousands of nesting seabirds and native plant and lizard species. A dramatic return of native species is expected in the absence of invasive species. This project also offers a rare opportunity to inform restoration efforts on other islands in the Caribbean.



**3. HOW DO YOU MEASURE RESULTS?** The partners are implementing a monitoring and evaluation program called Conservation Measures. Conservation Measures staff design and implement research studies that measure changes in high priority plant and animal populations as a result of removing invasive species.



**4. ARE THERE ANY RARE PLANTS ON THE ISLAND?** The Endangered Higo Chumbo cactus was rediscovered on Desecheo in 2010 and is currently flourishing after the removal of the invasive feral macaques. Wild populations of the cactus only exist naturally on two other offshore islands; Mona and Monito.



**5. WHAT SEABIRD ROOKERIES WERE HERE BEFORE INVASIVE SPECIES?** In the early 1900s, Desecheo was a major nesting ground for thousands of seabirds. Approximately 15,000 Brown Boobies, 2,000 Red-footed Boobies, 2,000 Brown Noddies, 1,500 Bridled Terns and hundreds of Magnificent Frigatebirds, Laughing Gulls, and Sooty Terns nested here.

