



Desecheo Island, 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 THREATENED* HIGO CHUMBO CACTUS IS NATURALLY FOUND
- HAS POTENTIAL TO ONCE AGAIN BE THE LARGEST BROWN BOOBY COLONY IN THE WORLD

PROJECT MISSION

To restore Desecheo Island's dry-forest ecosystem, protect species found nowhere else in the world (endemic), and recover seabird populations.

PROJECT VISION

Desecheo Island would be inhabited by thousands of nesting seabirds and its native plants and unique reptiles are thriving.

THE PROBLEM

Invasive rats severely degrade Desecheo Island's dry-forest ecosystem, and have virtually eliminated all nesting seabirds.

THE SOLUTION

The U.S. Fish and Wildlife Service and Island Conservation, with cooperation of the Puerto Rico Department of Natural and Environmental Resources, are removing invasive rats that endanger the long-term survival of the native and endemic species on Desecheo Island.

MEASURING IMPACT

We will monitor the recovery of lizards and plants, and the return of at least six nesting seabird species to the island.



Desecheo National Wildlife Refuge Desecheo Island is a 301-acre dry-forest offshore island 13 miles from the west coast of Puerto Rico. Historically, the island was one of the most important seabird colonies in the Caribbean and was aside as a seabird preserve by President Taft in 1912. The island is now managed by the U.S. Fish and Wildlife Service as a National Wildlife Refuge.

*USFWS designation is 'Threatened'. It is also the only species on Desecheo that is legally protected.



DESECHEO ISLAND RESTORATION PROJECT

Desecheo Island 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 invasive rats, the island hosted large colonies of breeding seabirds, including the world's largest Brown Booby colony and an important Red-footed Booby colony. But, due to the destruction of native vegetation and predation on eggs and chicks by these invasive rats, seabirds no longer nest on Desecheo and many plants and animals are threatened.

Island Conservation and the U.S. Fish and Wildlife Service are working together to remove invasive rats from Desecheo Island. With the island free of invasive species, native plants and animals will once again be able to thrive in their natural habitat. Coral reefs in the Marine Reserve surrounding Desecheo (managed by the Department of Natural and Environmental Resources) are also expected to benefit from the island's restoration; increased vegetation will reduce soil erosion into the sea, and the seabirds will provide valuable nutrients to the adjacent marine ecosystems.

SAVING EXTRAORDINARY SPECIES

1. RARE WILDLIFE For its tiny size, Desecheo Island has a significant number of endemic species found nowhere else in the world. It is home to the native, threatened Higo Chumbo cactus, three endemic lizards, two endemic spiders, and an endemic whip scorpion.



2. PROJECT GOALS This project intends to re-establish the island as a globally important seabird reserve, safeguard the future of the native and endemic reptiles, plants, and invertebrates, and restore the dry-forest plant communities and ecosystem functioning. A dramatic return of seabirds and land birds is expected in the absence of invasive rats. This project also offers a rare opportunity to inform restoration efforts on other islands in the Caribbean.



3. SUCCESS WORLDWIDE Conservationists have protected thousands of island-dependent species worldwide by removing more than 1,100 populations of invasive species from more than 700 islands. Rats and other rodents have been successfully removed from more than 300 islands worldwide, frequently resulting in rapid recovery of the native bird and reptile populations.



4. HIGO CHUMBO CACTUS During surveys in 2010 and 2013, the number of individual threatened Higo Chumbo cactus' on Desecheo increased, due to decreased numbers of invasive browsing animals. Today, the cactus is flourishing. Wild populations of the cactus only exist naturally on two other offshore islands; Mona and Monito.



5. RESTORING SEABIRD COLONIES Prior to invasive species, 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.



Photo: Andrew Wright