

# HOW TO PREVENT 80 ISLAND EXTINCTIONS

THERE ARE  
~ **465,000 ISLANDS**

IN THE WORLD [1]

YET THEY COMPRISE ONLY **5.3% OF THE EARTH'S TERRESTRIAL AREA** [2]

5.3%

## ISLANDS ARE EXTINCTION EPICENTERS

75% OF REPTILE, BIRD, AMPHIBIAN, AND MAMMAL EXTINCTIONS COMBINED HAVE OCCURRED ON ISLANDS [3]



## ISLANDS PROVIDE CRITICAL REFUGE



FOR TODAY'S HIGHLY THREATENED SPECIES, CURRENTLY SUPPORTING 36% OF BIRD, MAMMAL, AMPHIBIAN, AND REPTILE SPECIES THAT ARE CLASSIFIED AS CRITICALLY ENDANGERED ON THE IUCN RED LIST [4]

## INVASIVE SPECIES



ARE A KEY THREAT TO ISLAND PLANTS AND ANIMALS. INVASIVE MAMMALS SUCH AS PIGS, GOATS, CATS, AND RATS ARE AMONG THE MOST DAMAGING DUE TO PREDATION AND HABITAT DESTRUCTION [3, 4]

## ISLANDS OFFER HOPE

RESTORING ISLANDS BY ERADICATING INVASIVE MAMMALS HAS REPEATEDLY PROVEN TO BE A HIGH IMPACT CONSERVATION ACTION [5]



Pinzón Giant Tortoise hatchlings survive for the first time in 150 years after rat eradication [6]



Biologists document a 5,000% increase in native tree recruitment on Palmyra Atoll after rat eradication [7]



Scripps's Murrelets on Anacapa Island rebounded with a threefold increase in hatching success following the eradication of invasive rodents [8]

MORE THAN **1,200 INVASIVE MAMMAL ERADICATIONS** HAVE BEEN ATTEMPTED ON ISLANDS WORLDWIDE, WITH AN AVERAGE SUCCESS RATE OF **85%** [9]

## NEW RESEARCH



HIGHLIGHTS 107 GLOBALLY IMPORTANT ISLANDS TO INITIATE ERADICATIONS BY 2020, TO HELP PREVENT EXTINCTIONS OF 151 POPULATIONS OF 80 SPECIES

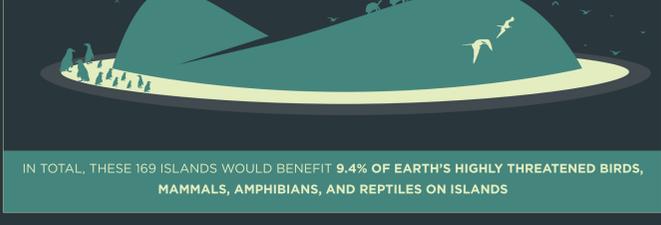
**151 POPULATIONS**



**80 SPECIES**

PLUS

RESTORATION OF AN ANOTHER 62 ISLANDS BY 2030 WILL BENEFIT AN ADDITIONAL 88 POPULATIONS OF 51 HIGHLY THREATENED SPECIES



IN TOTAL, THESE 169 ISLANDS WOULD BENEFIT **9.4% OF EARTH'S HIGHLY THREATENED BIRDS, MAMMALS, AMPHIBIANS, AND REPTILES ON ISLANDS**

## HIGHEST-RANKING EIGHT

OF THESE ISLANDS WOULD BENEFIT 24 POPULATIONS OF 23 HIGHLY THREATENED SPECIES



- SOCORRO MEXICO
- SAN JOSE MEXICO
- GOUGH UK TERRITORY
- PUERTO RICO
- MONA ECUADOR
- FLOREANA ECUADOR
- AMSTERDAM FRENCH TERRITORY
- ALEJANDRO SELKIRK CHILE
- NIAU FRENCH POLYNESIA

## THIS RESEARCH WAS DONE BY A GLOBAL COLLABORATION

**50 AUTHORS**

FROM 40 INSTITUTIONS IN ACADEMIA, NON-GOVERNMENTAL ORGANIZATIONS, AND GOVERNMENT, WITH MORE THAN 804 COMBINED YEARS IN CONSERVATION SCIENCE

TO IDENTIFY THESE GLOBALLY IMPORTANT ISLANDS THE AUTHORS INVESTIGATED:

- 1,279 islands
- 1,184 birds, mammals, amphibians, and reptiles listed as Critically Endangered or Endangered
- 3,990 harmful interactions with invasive mammals
- Technical feasibility of implementing eradications based on current methods
- Socio-political feasibility of initiating an eradication by 2020

## BUT WAIT THERE'S MORE OTHER KEY BENEFITS

OF ERADICATING INVASIVE MAMMALS FROM THESE GLOBALLY IMPORTANT ISLANDS

- INVERTEBRATES**  
Invertebrate-supported processes would benefit from the eradication of non-native predators [10]
- CORAL REEFS**  
Would benefit from the eradication of seabird-derived nutrients and the return of seabird-preferred nutrients [11]
- PLANTS**  
Would benefit from the eradication of non-native herbivores damaging habitat and rare species

INVASIVE-FREE ISLANDS MAKE WAY FOR OTHER IMPORTANT ISLAND RESTORATION PROJECTS SUCH AS TRANSLOCATION OF THREATENED SPECIES INCLUDING THE ENDANGERED FLOREANA MOCKINGBIRD [12]



FLOREANA MOCKINGBIRD  
*Mimus trifasciatus*

ERADICATING INVASIVE MAMMALS FROM THESE GLOBALLY IMPORTANT ISLANDS WOULD MAKE A MAJOR CONTRIBUTION TOWARDS MEETING

## GLOBAL BIODIVERSITY TARGETS

THESE INCLUDE THE CONSERVATION FOR BIOLOGICAL DIVERSITY 2020 AICHI TARGETS [12]

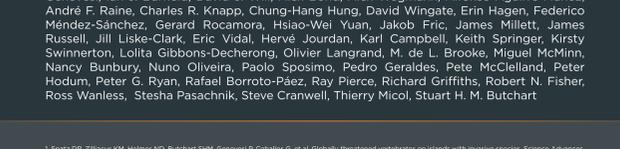


**TARGET 9:**  
Invasive alien species control or eradication



**TARGET 12:**  
Preventing threatened species extinctions

## THIS RESEARCH WAS LED BY



AUTHORSHIP

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