

SAVING OUR WORLD'S MOST VULNERABLE SPECIES

200 species on 100 islands by 2020



ISLAND CONSERVATION

Preventing Extinctions

Dear Conservation-minded Friend,

You are reading a “prospectus” for one of the most ambitious conservation initiatives ever conceived. In the face of global mass extinction, Island Conservation and our partners administer a proven cure. Removing invasive species from islands protects our world’s most vulnerable species and leads to dramatic recovery of islands’ natural systems. In fact, this promising and cost-effective strategy to protect threatened species and biodiversity also improves the health and economies of island communities.

Island Conservation has worked to restore fifty-two islands over twenty years to protect hundreds of imperiled species. As global extinction rates accelerate, now is a critical time to double down on our efforts. Together, with your support of our Small Islands, Big Difference campaign, we can achieve our goal to protect 200 Threatened species on 100 islands by 2020. This prospectus and the actions identified within illustrate our hope for the future of our imperiled island species and communities. Partner with us now to turn today’s hope into tomorrow’s success stories!

Gratefully yours,



Bill Waldman

Chief Executive Officer
Island Conservation

David Hartwell

Board Chair
Island Conservation

Cover: When we returned to Rábida Island in the Galápagos in 2012 we confirmed the success of a 2011 rat-removal and our partnership made an unexpected discovery: a new gecko species never before recorded alive on the island.

Right: By eradicating rats from Anacapa Island, California, our partnership helped keep the Scripps’s Murrelet (*Synthliboramphus scrippsi*) from being added to the US Endangered Species List. Today, the island’s ecosystem is thriving; Murrelet nest numbers have quadrupled with a 50 percent increase in eggs hatched. Photo by Glen Tepke, pbase.com/gtepk



Join one of the
boldest
campaigns ever
to save our
world's most
vulnerable
species!



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A Prospectus of Hope

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Islands are at the epicenter of extinction and biodiversity; to prevent extinctions, we must focus on islands.

Islands represent:



Less than 5% of the Earth's land mass¹ 40% of animals currently at risk of extinction² * 80% of known extinctions since 1500³

Invasive species, introduced to islands intentionally or accidentally by humans, represent one of the greatest global threats to native island plants and animals, driving many of them to extinction. These invaders eat native species, destroy their habitat, threaten island ecosystems, and disrupt the natural balance that evolved over millennia.

Removing invasive species from islands has proven to be one of the most effective tools in preventing extinctions and protecting biodiversity, and is a cornerstone action for broader island restoration goals.

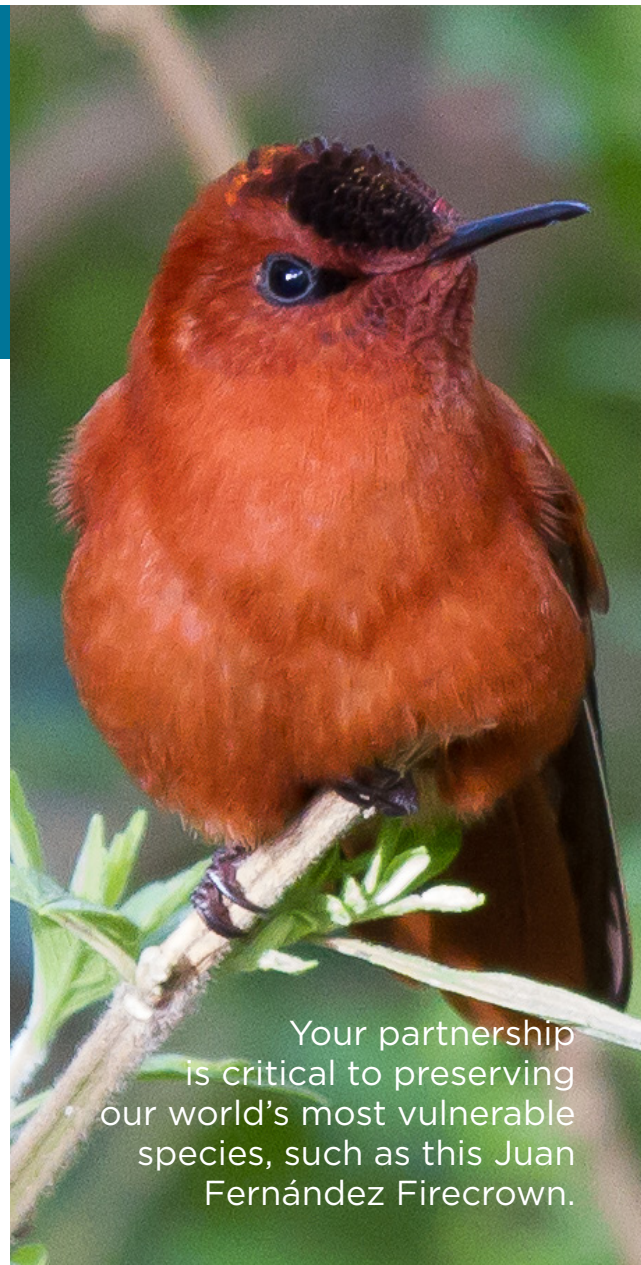
Since 1994, Island Conservation has deployed scientists to fifty-two islands worldwide to protect 994 populations of 389 native species. All told, conservationists have protected thousands of island-dependent species worldwide by removing more than 1,100 populations of invasive species from more than 700 islands.

However, in order to help stem the world's first mass extinction caused by human activities *we must all work together to secure the funds and the support to protect 200 species on 100 islands by 2020.*

¹ UNEP-WCMC. 2013. Global Islands Database. United Nation's Environmental Program, Cambridge, UK

² Ricketts, T.H., et al. 2005. Pinpointing and preventing imminent extinctions. Proceedings of the National Academy of Sciences 102:18497-18501

³ Threatened Island Biodiversity Database (see p. 7). The TIB is available online at <http://tib.islandconservation.org>.



Your partnership is critical to preserving our world's most vulnerable species, such as this Juan Fernández Firecrown.

Global island science and leadership

Scientific excellence and capacity are central to the success of invasive species removals from islands. **Island Conservation scientists advance the restoration of islands globally by:**

- **Identifying the most important islands to restore and species to save.** With global partnerships, we produced and now maintain the world's most comprehensive databases of islands with threatened animals, invasive species, and historic removal efforts (more on page 9). The Threatened Island Biodiversity database¹ (TIB) and the Database of Islands and Invasive Species Eradications² (DIISE) help conservation scientists prioritize where to focus their efforts to save species (TIB), and analyze and build on 1000s of previously successful eradication worldwide (DIISE).
- **Measuring the success of our efforts.** We monitor and map species and habitats, and collaborate with academic, government and NGO researchers. By scientifically documenting island species' and ecosystems' response to the removal of invasive species, we can adjust and improve island restoration strategies, tools, and outcomes.



2011 *Pisonia grandis*



2012 *Pisonia grandis*



2014 *Pisonia grandis*

Above: Island Conservation and UCSC scientist Coral Wolf stands among *Pisonia grandis* seedlings following the 2011 removal of rats from Palmyra Atoll, in the Line Islands, roughly 1,000 miles south of Hawai'i. With rats removed, *Pisonia grandis* seedlings are abundant, and three-year-old trees that sprouted in 2011 are now towering overhead.

¹ Threatened Island Biodiversity Partners, 2012. The Threatened Island Biodiversity Database: developed by Island Conservation, University of California Santa Cruz Coastal Conservation Action Lab, BirdLife International and IUCN Invasive Species Specialist Group. Version 2012.1. Available at <http://tib.islandconservation.org>.

² DIISE, 2014. The Database of Island Invasive Species Eradications, developed by Island Conservation, Coastal Conservation Action Laboratory UCSC, IUCN SSC Invasive Species Specialist Group, University of Auckland and Landcare Research New Zealand. <http://diise.islandconservation.org>.



SMALL ISLANDS BIG DIFFERENCE

A campaign to save our world's most vulnerable species

Small Islands, Big Difference—a global campaign to save our world's most vulnerable species—has been a central priority for Island Conservation since 2012. After completion of the first comprehensive assessment of globally threatened island species, Island Conservation and key partners agreed that we must dramatically increase our global advocacy and island eradication efforts to save threatened species and island communities. Island Conservation is concentrated on restoring 100 of the most important islands that host more than 200 globally threatened species in need of immediate conservation. Through our Small Islands, Big Difference campaign, with support from dozens of endorsers, we are leveraging public policies and millions in public funding to support these efforts on hundreds of islands worldwide.

In 2012, 194 Signatory Parties (countries) to the UN's Convention on Biological Diversity (CBD) formally recognized Small Islands, Big Difference and Island Conservation's approaches as key strategies to help Parties achieve CBD's conservation goals. In 2014, the primary financier of the CBD, the Global Environment Facility (GEF), announced a record US\$4.43 billion for its next four-year funding cycle. Of that, **at least \$50 million is anticipated to be dedicated to addressing the negative impacts of invasive alien species on biodiversity.** Island Conservation and partners are working hard to ensure these resources support the removal of invasive species from islands. While we applaud this historic investment in invasive species removals, it represents a fraction of the need. We therefore continue our perennial efforts to leverage additional public and private philanthropic support for this critical work.

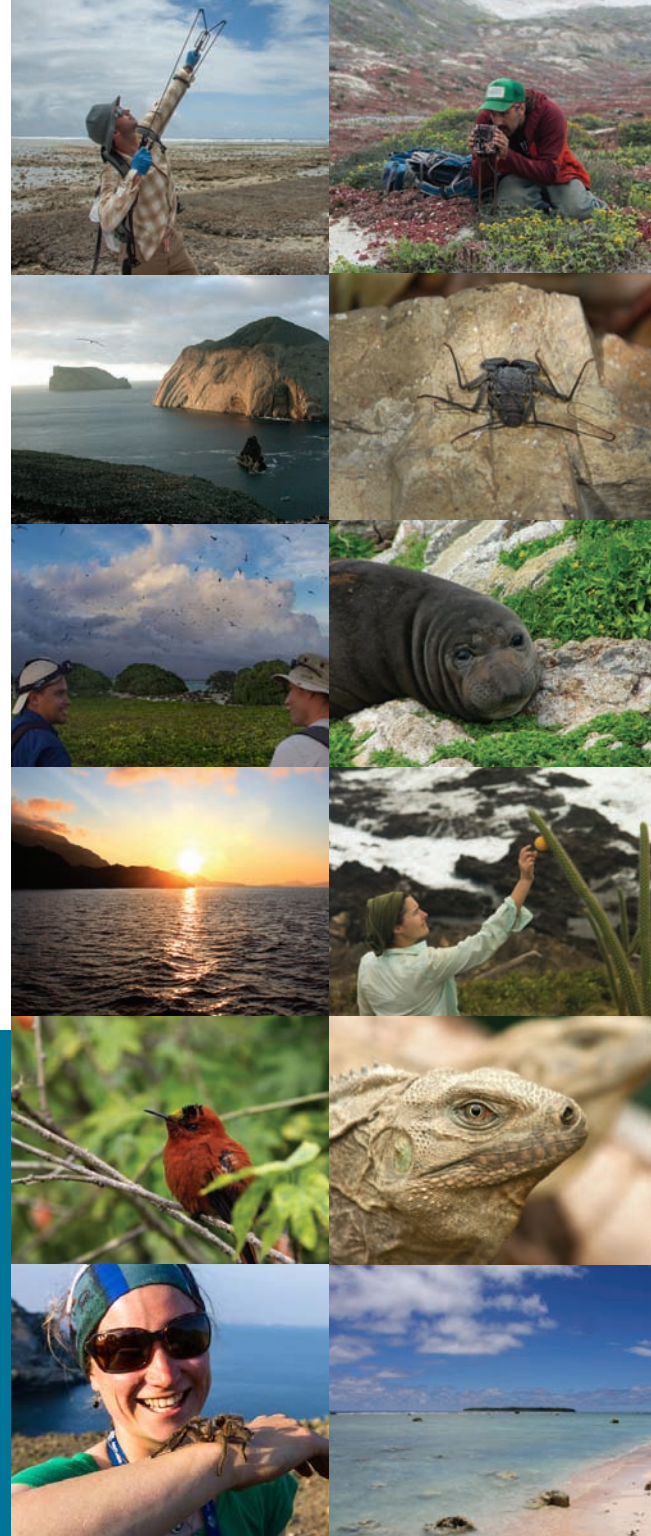
With your support, we can build on these successes and continue our global and regional Small Islands, Big Difference advocacy by:

- **Securing new policies, increasing public funding, and leveraging private dollars** to support island restoration work. We continue work to strengthen international policies and public funding for invasive species eradications.
- **Establishing shared island conservation priorities** with partners and governments while helping advance their efforts to protect the islands most in need of invasive species removal.
- **Developing and promoting tools** to help identify, plan, and implement island restoration projects. We support the creation, adoption, and promotion of internationally accepted best practices.
- **Ensuring experts are deployed where they are needed most** by making essential conservation experts and tools in multiple languages available for partners around the world.

*Join us to make
the Small Islands, Big Difference
campaign a success!*

“The Small Islands, Big Difference campaign is a very exciting way for individuals, organizations, governments, or funding institutions to engage in conserving some of the most threatened species globally and therefore directly contribute to achieving the 2020 global targets set forth by the Convention on Biological Diversity.”

Gustavo Fonseca
Head of Natural Resources, Global Environment Facility



200 species on 100 islands by 2020

Mapping the agenda

By 2020, Island Conservation will work with partners to protect the native plants and animals on these exceptional islands. This work will help prevent the extinction of more than 200 globally listed threatened species. Look to the right to find the ones closest to you!

Science-based conservation tools

Informing our island selection strategy is the Threatened Island Biodiversity database (TIB). This searchable, web based map interface is a portal to the world's most comprehensive inventory of virtually every island on the planet that has Critically Endangered or Endangered animals at risk from invasive vertebrates. Island Conservation, University of California at Santa Cruz Coastal Conservation Action Laboratory, BirdLife International, and the IUCN Invasive Species Specialist Group consulted 400 experts, and collated 1,800 scientific literature sources in order to inventory almost 2,000 islands and 1,182 threatened species for this database.



“Islands are the ultimate in biodiversity hotspots. The TIB database is *the essential tool* for prioritizing



Experience the TIB online at: tib.islandconservation.org

conservation investments aimed at preventing extinctions in these critically important parts of our planet.”

Russell A. Mittermeier
President, Conservation International



Photo: Julia Rendleman

Southwest Pacific: Preserving Paradise

Many of the methods used to remove invasive species were pioneered in the Southwest Pacific, and for good reason. Invasive species are considered to be the greatest threat to native island species in the Pacific. Nearly one third of the almost 4,000 native species assessed in the region are threatened with extinction; in French Polynesia, almost half are threatened with extinction. Invasive species are the leading threat to the threatened animals in the Polynesia-Micronesia biodiversity hotspot.

We are supporting local experts and the region's ongoing efforts by:

- **Partnering with communities, governments, and regional conservation groups** to identify, plan, fund, and implement priority projects.
- **Leveraging millions of dollars of new funding** dedicated to restoration projects through the Small Islands, Big Difference campaign.
- **Assessing the feasibility of removing invasive species** in eastern Melanesia. This area is a major center for species diversity, and this proof of concept is needed before island nations can develop a full-scale program.



Above: Invasive species in Palau are devastating plants and animals and are impacting the lives and livelihoods of islanders. Invasive species spread disease, devour crops before they can be harvested, and, in some cases, as a result force women out of their traditional and important cultural role as farmers.



Tasman Parakeet

Cyanoramphus cookii

Critically Endangered

Number surviving < 240

Norfolk Island, Australia, is home to the Tasman Parakeet, which was rescued from the brink of extinction in the late 1980s. Today, population estimates are still fewer than 250 individuals, and the population may be crashing yet again. This is one of fifty-six island species found solely on Norfolk Island that are threatened by invasive predators and competitors. We are working with the island community and Australian government to resume invasive species removals and other efforts to ensure the survival of the parakeets and other imperiled animals.



Lord Howe Stick Insect

Dryococelus australis

Critically Endangered

Number surviving unknown

Norfolk Island, Australia, is home to thirteen bird species, two reptile species, fifty-one plant species, and numerous invertebrates threatened by invasive species. Until these invaders are removed, the Critically Endangered Lord Howe Island Stick Insect cannot be re-established. Island Conservation was asked to serve on the project advisory committee and provide technical assistance and staff resources to support community outreach and ultimately a project to remove invasive rodents from the island. Photo: Jay Town



Tuamotu Sandpiper

Prosobonia cancellata

Endangered

Number surviving < 1,300

The Tuamotu Archipelago, French Polynesia, provides essential habitat for the Tuamotu Sandpiper, the only remaining tropical sandpiper species. It is threatened with extinction by invasive species. Island Conservation and partners are working to remove invasive rats from the archipelago and are seeking additional philanthropic support to save this species. This landmark project can serve as a model for other restoration work in French Polynesia.

“The agreement between BirdLife Pacific and Island Conservation is good news for the Pacific Island countries, for it strengthens our ability to address the threats that invasive species pose to native birds throughout the region, many of which are facing extinction.”

Don Stewart
Regional Director, BirdLife International



South America: Protecting iconic species and islands

Nearly 11,400 islands off the coast of South America are home to about one quarter of the world's endangered species. But many of the islands, including the famous Galápagos Archipelago, are overrun with invasive species. Island Conservation and regional partners, both governmental and NGO, are tackling increasingly difficult invasive species removals in the region. **In addition to key species protection projects, Island Conservation is:**

- **Establishing** government partnerships and contracts and securing multilateral funding in Ecuador.
- **Seeking approval** of new conservation tools in partnership with the island communities and the government of Chile.
- **Providing support to Chile** for the development of conservation action priorities, protected areas, and policies to prevent reintroduction of invasive species on islands.



Above: Floreana Island in the Galápagos is home to fifty-four globally threatened plant and animal species, including the Marine Iguana (*Amblyrhynchus cristatus*). We are working with the Floreana community and local government to protect native species such as the Marine Iguana by removing invasive species from the island.



Floreana Mockingbird

Mimus trifasciatus

Critically Endangered

Number surviving < 50

Floreana Island, Galápagos Islands, Ecuador, has iconic populations of rare tortoise, lizard, iguana, and birds. Half of these populations suffer from predation by invasive species and competition for food and habitat. The Floreana Mockingbird is currently found only on offshore islets and cannot return to its namesake island until these invaders are removed. We are supporting the Floreana Island Community and Galápagos National Park's goals to enhance nature tourism by protecting fifty-four globally threatened species by removing invasive predators from the island.



Juan Fernández Firecrown

Sephanoides fernandensis

Critically Endangered

Number surviving < 3,000

Robinson Crusoe and Alejandro Selkirk Islands, Juan Fernández Archipelago, Chile, are home to three globally threatened birds found only on these remote islands, including the Juan Fernández Firecrown. Seven invasive species are propelling these and other globally threatened animals to the brink of extinction. Restoring balance by removing invasive predators from these islands is the only way to permanently protect these species.



Humboldt Penguin

Spheniscus humboldti

Vulnerable

Number surviving < 10,000

Choros Island, Chile, supports breeding colonies of the Vulnerable Humboldt Penguin and the Peruvian Diving-petrel (*Pelecanoides garrnotii*), whose nesting is disrupted by invasive species. Removing these invaders from Choros will protect these species and demonstrate how similar efforts will benefit imperiled species on other Chilean islands.

“Island Conservation is the world’s most effective organization in terms of species saved from extinction per dollar spent.”

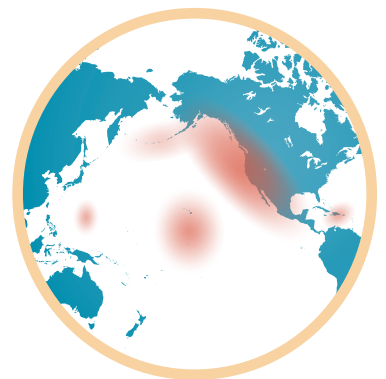
Michael Soulé
Cofounder, Society for Conservation Biology



North America*: Conserving our disappearing birds

North America is home to nearly sixty globally threatened species and leads the world in environmental compliance standards. By expanding partnerships, enhancing political support, and increasing funding, our partnerships are making invasive species removals higher priorities and more efficient efforts. **Our many longstanding and new emerging partnerships are:**

- **Helping to build and implement a tri-national collaboration** among Mexico, Canada, and the United States on invasive species removals to accelerate species protection and increase investment of resources and expertise.
- **Working with partners to identify programmatic opportunities** to reduce costs and streamline processes for invasive species removals.
- **Expanding government partnerships** with North American countries and territories.



*includes U.S. territories

Above: In 2008, Island Conservation and partners worked together to protect native species on an island that was formerly named Rat Island. Now, species like the Tufted Puffin (*Fratercula cirrhata*, pictured) are thriving on this predator-free island, which the indigenous Aleuts community successfully petitioned to be renamed to its original native moniker—*Hawadax*.



Newell's Shearwater

Puffinus newelli

Endangered

Number surviving < 84,000

Lehua Island, Hawai'i, is home to sixteen species of seabirds, including eight that breed on the island, among them the Endangered Newell's Shearwater, Black-footed Albatross (*Phoebastria nigripes*), and Laysan Albatross (*Phoebastria immutabilis*). Invasive species on Lehua have caused overwhelming ecological damage over many years. Island Conservation is working with regional partners to remove invasive rats and restore the island's natural equilibrium.



Laysan Duck

Anas laysanensis

Critically Endangered

Number surviving < 600

Kaho`olawe Island, Hawai'i, used to have abundant native plant and animal populations, but they have been devastated by invasive species. Island Conservation and partners are developing implementation plans and securing funds to remove invasive species and restore native habitat. This work will make possible the return or establishment of at least twelve federally listed endangered species, including the Laysan Duck. Photo: Jimmy Breeden/USGS



Yellow-shouldered Blackbird

Agelaius xanthomus

Endangered

Number surviving < 1,250

Mona Island, Puerto Rico, U.S. Territory, provides essential habitat for many plant and animal species native only to the region, including three Endangered species: Yellow-shouldered Blackbird, Mona Ground Iguana (*Cyclura stejnegeri*), and Mona Boa (*Epicrates monensis*). These unique species need habitat that is free of invasive predators—the main threat causing these species' populations to plummet. Photo: Alcides Morales

“Island Conservation should be a model for the interaction of conservation biologists and managers who have to deal with damaging exotics. It is refreshing to see some conservation victories on the ground.”

Dan Simberloff

Director, University of Tennessee's Institute for Biological Invasions



The Caribbean: Saving our biological treasures

The Caribbean is home to nearly 8,000 plants and animals found nowhere else in the world—the principal reason that this region is recognized as one of the world’s top five biodiversity hotspots.¹ Invasive species are the leading threat to the Caribbean’s native plants and animals, and they are implicated in the 90 percent decline of the region’s seabird populations. Even more troubling is the fact that most of the native mammals are now extinct, and the remaining species are threatened by extinction. **We are working to save these species by:**

- **Partnering with Caribbean governments and nongovernmental organizations** to expand capability to save vulnerable species.
- **Increasing capacity through trainings and knowledge transfer** for partners’ invasive species removal capabilities.
- **Supporting global practitioners** by ensuring they can access and utilize Spanish translations of vital island conservation tools.

¹ Myers, N., R. A. Mittermeier, C. G. Mittermeier, G. A. B. da Fonseca, J. Kent, 2000. Biodiversity hotspots for conservation priorities. *Nature* 403:853-8.



Above: Bahamas National Trust staff celebrate the restoration of Allen’s Cay, Bahamas. In 2012, our partnership successfully removed invasive mice from the cay to protect the globally declining Audubon’s Shearwater (*Puffinus lherminieri*) and Endangered Allen’s Cay Rock Iguana (*Cyclura cyclura inornata*).



Noble's Anole

Anolis altavelensis

Single-island Endemic

Number surviving unknown

Alto Velo Island, Dominican Republic, provides critical habitat for three species of endemic lizards, including the Noble's Anole, perhaps the rarest anole in the world. The island is also home to the largest, yet declining, breeding colony of Sooty Tern (*Onychoprion fuscatus*) in the Caribbean. Invasive species consume reptiles, birds, and bird eggs and destroy native vegetation. We must work to restore thriving, healthy populations of Alto Velo's native species.



Ricord's Iguana

Cyclura ricordi

Critically Endangered

Number surviving < 4,000

Cabritos Island, Dominican Republic, is home to the Critically Endangered Ricord's Iguana. Invasive species eat their young, trample their burrows, and compete with them for food. Our efforts to protect the iguana will also demonstrate the effectiveness of invasive species removal in the Dominican Republic and beyond. Through this much needed conservation action, we will protect this species, strengthen government and NGO partnerships, and increase local support and understanding.



Bartsch's Iguana

Cyclura carinata

Critically Endangered

Number surviving < 30,000

Booby Cay, The Bahamas, is home to the Bartsch's Iguana, found nowhere else in the world. Invasive species eat juvenile iguanas, compete with them for limited resources, and destroy their habitat. Island Conservation and our partners are working to protect iguanas and seabirds on the island by designating the island as a national park—ensuring lasting protection.

“As we extinguish a large portion of the planet’s biodiversity, we lose also a large portion of our world’s beauty, complexity, intellectual interest, spiritual depth, and ecological health.”

David Quammen
Author and Journalist

Hundreds of critical island restoration projects worldwide

By working together, we can reach the most at-risk islands before time runs out for these imperiled species. Evolving partnerships are assessing the feasibility of key projects and considering the need for new regional staff investments.

Examples from around the world include:



Nosy Hara Dwarf Chameleon

Brookesia micra

Single-island Endemic

Number surviving unknown

Nosy Hara, Madagascar, is home to the smallest chameleon in the world, the Nosy Hara Dwarf Chameleon, discovered in 2012. Several other recently discovered reptile and amphibian species found here occur nowhere else in the world. Invasive species threaten these and thirty-one bird species recorded on this small island.

Photo: Frank Glaw & Jörn Köhler



Coiba Agouti

Dasyprocta coibae

Vulnerable

Number surviving unknown

Coiba Island, Panama, hosts many rare and endemic subspecies including the Vulnerable Coiba Agouti. This UNESCO World Heritage Site is being ravaged by many invasive ungulates like Water Buffalo, which trample Agouti habitat and cause major erosion that damages the marine environment. We are supporting the Panamanian government's efforts to protect this World Heritage Site, its marine environment, and its rare endemic species through the removal of invasive species. We are optimistic this work could help restore this ecological gem in Central America.

Photo: Fluid Adventures Panama



Innovation

Building a better mousetrap (literally)



Above: Conservation scientist Emma Bishop records bird sounds on Anacapa Island, California, helping build the foundation for a new brand of science-based conservation. Using cutting-edge technology like this automated recording unit, we are working with the University of California at Santa Cruz to determine exactly which bird species have returned to the island since the removal of invasive rats in 2003.

Efforts to save priority species by successfully restoring particular islands are currently blocked by several barriers, including the limitations of current technologies, the lack of engagement of island communities and decision-makers, and the costs associated with outreach and new technology development. **To overcome these barriers, we are working to:**

- **Innovate new technologies** to tackle more complex projects that are not viable with today's technology.
- **Forge structured and facilitated collaborations with local island communities** to build our collective capacity and establish common conservation objectives essential for thriving island ecosystems and livelihoods.
- **Streamline decision-making processes** to help some countries save time and money by creating more efficient decision-making processes to enable projects.



How can you make a big difference for small islands?

You can help save 200 species on 100 islands by 2020 by becoming a partner in our Small Islands, Big Difference campaign!

Donate to Island Conservation to support the campaign today!

Thank you for partnering with us in this campaign, as a new or loyal donor. You are a valued team member and essential to preventing extinctions on islands.

Share this prospectus with a friend who may be interested in helping save species.

Contact Bill Waldman or visit our website www.islandconservation.org for more ways to support Island Conservation and our Small Islands, Big Difference campaign.

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All threatened species' status established in the IUCN Red List of Threatened Species.

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Thank You!

Contact

Bill Waldman
Chief Executive Officer
Island Conservation
2161 Delaware Ave. Suite A
Santa Cruz, CA 95060
1.831.359.4787 X 111 (office)
1.831.595.8770 (mobile)
Bill.Waldman@IslandConservation.org



ISLAND CONSERVATION

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