Invasive Species in the Caribbean
Biodiversity Threats
But Opportunities

Boris Fabres
Our Case

Islands represent:

- Less than 5% of the Earth's land mass
- 40% of animals currently at risk of extinction*
- 80% of known extinctions since 1500
Target 9: “By 2020, IAS and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment”

Target 12: “By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained”
“Spread of invasive aliens is generally considered the greatest threat to the native biodiversity of Caribbean Islands especially to its endemic species”

“Most damaging invasive aliens on islands are typically terrestrial vertebrates such as goats, feral cats, pigs and rats”

Critical Ecosystem Partnership Fund (CEPF)  
Caribbean Islands Biodiversity Hotspot - Ecosystem Profile (2010)
The conservation status of the world’s reptiles

Island Conservation in the Caribbean

- 2004 Technical advice (Abaco, Bahamas) on feral cat eradication
- 2006 Scoping (Pine, Water, Little Water Cay: Turks & Caicos)
- 2006 Scoping (Anegada, British Virgin Islands)
- 2007 Scoping (Goat Islands, Jamaica)
- 2010 Ungulate control (Montserrat)
- 2010 Feasibility (Cabritos, Alto Velo, Dominican Republic)
- 2012 Eradication (Allen’s Cay, The Bahamas)
- 2013 Eradication (Cabritos, Dominican Republic)
- 2013 Eradication Planning (The Bahamas, Dominican Republic)
Threatened Island Biodiversity Database (TIB)
http://tib.islandconservation.org

Database of Island Invasive Species Eradications (DIISE)
http://eradicationsdb.fos.auckland.ac.nz/
The Global Effort (March-October 2011)

<table>
<thead>
<tr>
<th>Personnel</th>
<th>= 3490 person hours research</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>= 15 persons (65% volunteers/unpaid)</td>
</tr>
<tr>
<td>Experts</td>
<td>555 contacted (307 responded)</td>
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<tr>
<td>Literature Review</td>
<td>682 journal articles</td>
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<tr>
<td></td>
<td>548 dissertations &amp; reports</td>
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<td>146 books</td>
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<td>109 credible websites &amp; databases</td>
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Caribbean Results – So Far (2011)

241 IUCN Red Listed (CR, EN, VU) Caribbean vertebrates (mammal, bird, reptile, amphibian)

44 ‘At Risk Species’: un-assessed single island endemics

197 islands - threatened species and known invasive species overlap

150 (approx.) vertebrate invasive species

<table>
<thead>
<tr>
<th>Animal Type</th>
<th>IUCN</th>
<th>Single Island Endemics</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>CR</td>
<td>EN</td>
<td>VU</td>
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<tr>
<td>Amphibians</td>
<td>68</td>
<td>63</td>
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<td>Reptiles</td>
<td>27</td>
<td>23</td>
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<td>Land Birds</td>
<td>12</td>
<td>15</td>
<td>3</td>
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<tr>
<td>Mammals</td>
<td>13</td>
<td>8</td>
<td>1</td>
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<tr>
<td>Sea Birds</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>121</strong></td>
<td><strong>111</strong></td>
<td><strong>9</strong></td>
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Identified Information Gaps

**Geographic Coverage**
- Outer islands of larger Caribbean archipelagos
- Small ‘Offshore’ islands off the coast of large islands
- Continental islands

**Knowledge Base**
- ‘Local Information’ to complement peer-reviewed literature
- Threatened & Invasive Species/Ecosystem relationships
- Clear and Objective prioritization approach (restoration)
It Can be done
Breeding pairs of birds on Rabbit, Redhead and Lobster Islands
GEF 6 (2014)
Program 5
($50 - 100 M)

Avoiding Imminent Extinction in Island Ecosystems:
A Time-sensitive Agenda

“Support to the implementation of IAS management frameworks will focus primarily on island states and islands”
Total Number of persons in the IUCN Iguana Specialist Group | Number of Caribbean SIDS persons in the IUCN Iguana Specialist Group

84 | 4
Technical & Development Partner

1. Scientific and Technical advice
2. Joint implementation: Invasive Species eradications
3. Cooperate in project development, financing
4. Cooperate in developing National Strategies (NISS)

Global Campaign Partner

1. Partner with island nations (SIBD Campaign)
2. Engage key conservation institutions - solid science base
3. Cooperatively develop a financing portfolio: aid agencies, multi-laterals, foundations, countries
Invasive Species
Opportunities for Caribbean Countries

1. Prioritize to CBD, GEF 6 replenishment: IAS Program 5
2. Provide leadership: tropical island restoration
3. Develop marketable skills: removals, training
4. Pioneer local knowledge gathering
Thank You

Ideas

Comments

Questions

ISLAND CONSERVATION
Preventing Extinctions