Conservation of Biological Diversity in the Caribbeans

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Why amphibians?

• Amphibians comprises three orders, i.e., frogs, salamanders and caecilians
• On Caribbean islands, only frogs are found.
• Frogs are indicators of both land and water environments.
Lynx Edicion & IUCN
Countries with the most amphibians

- Brazil
- Colombia
- Ecuador
- Peru
- Mexico
- Indonesia
- China
- Venezuela
- United States
- Papua New Guinea
- India
- Madagascar
- Australia
- DRC
- Bolivia
- Malaysia
- Panama
- Cameroon
- Costa Rica
- Tanzania

Number of species
Percentage of endemic amphibian species

- Seychelles: 11/11
- Jamaica: 21/21
- Madagascar: 225/226
- Cuba: 57/59
- Australia: 200/214
- Sri Lanka: 67/83
- Japan: 45/56
- Philippines: 77/98
- Puerto Rico: 14/18
- USA: 182/261
- Chile: 38/55
- Mexico: 246/363
- PNG: 165/245
- Brazil: 489/751
- India: 151/236
- Venezuela: 155/298
- Haiti: 26/50
- China: 170/208
- Taiwan: 16/33
- Colombia: 337/697
Countries with the highest percentage of threatened amphibians

- Haiti: 46/50
- Dominican Republic: 31/36
- Jamaica: 17/21
- Cuba: 47/59
- Puerto Rico: 6/11
- Seychelles: 76/138
- Guatemala: 198/363
- Mexico: 48/98
- Philippines: 52/83
- Sri Lanka: 55/116
- Honduras: 20/55
- Chile: 163/447
- Ecuador: 20/56
- Japan: 61/179
- Costa Rica: 209/697
- Colombia: 9/32
- El Salvador: 55/195
- Panama: 9/33
- Trinida and Tobago: 9/33
- Taiwan: 9/33

percentage of species threatened
Relationship between area (km²) and # threatened amphibian species

Area
0 5 10 15 20 25 30 35 40 45 50

# threatened amphibians
0 50000 100000 150000 200000 250000

Cuba
Haiti
Dominican Republic
Jamaica
T&T
Belize
Guyana
Suriname
Relationship between area and # mammal species

- T&T
- Cuba
- Jamaica
- Dominican Republic
- Bahamas
- P. Rico
The number of mammal species extinct from the Caribbean islands:

- Haiti: 8 species
- Dominican Republic: 7 species
- Cuba: 5 species
- Puerto Rico: 3 species
- Virgin Island US: 2 species
- Jamaica: 2 species
- St Vincent and the Grenadines: 1 species
- Martinique: 1 species
Major threats to amphibians

- Habitat loss
- Invasive species
- Pollution
Case of Japan

Ogasawara Islands

Ryukyu Islands
Conclusions

• Though Japan is located in sub-tropical and temperate regions, many similarities found between Japan and the Caribbeans.
• Greater Antilles vs. JP four main islands.
• Lesser Antilles vs. Ryukyu and Ogasawara.
• From a conservation point of view, we are facing common problems.
• Opportunities expected for close collaboration between the Caribbeans and Japan.