Preserving Biodiversity in Haiti

The State of Research
• Quick environmental facts about Haiti
• Brief history of research on biodiversity in Haiti
• Great obstacles to research in Haiti
• Main impacts of the lack of research
- Part of the neotropics
- Second largest island in the Caribbean *(includes 5 satellite islands that have their own endemicity)*
- In the center of the migration route of many species of migratory birds and insects
- Has both coral and volcanic origins
- Altitude ranging from 0 to 2,692 meters high *(2,659 m found on Google Earth)* giving various relief forms and micro-climates
- 9 classes of soils, facilitating the development of a high flora biodiversity

- Various ecosystem types:
  9 Holdridge lifezones, 5 ecoregions, 13 biogeographical regions, 10 agroecological zones)

- 5 climat types (Köppen classification)

- High endemicity rates (37% of vascular plants / 75% of vertebrates)
Brief history of research on Haitian biodiversity

1 - 17th-18th century: First inventories and collections by French colonists and missionaries (Charlevoix, Labat, Nicolson), botanists and naturalists (Plumier, Buffon, Descourtilz, etc.)

2 - End of 19th century to first half of 20th century: terrestrial aquatic and marine data collection, mainly oriented for full exploitation (few Haitian researchers under foreign control – US occupation) Eckman, Baker, L.G. Tippenhauer

Main motor of researches until last decades of 20th century:

discovering of new territory + ressource exploitation
3- **2nd half of 20th century**: considerable decrease of researches and departure of many researchers due to sociopolitical turmoil and dictatorship;

4- **End of 20th century**: shy recovery of researches in very few domains (birds and marine life) depending on needs, interests of the moment and available funding. Specialists training still scarce.

5- **21st century**:
- Slight increase of haitian academic researchers (*mostly young specialists trained outside that return home*)
- increase of research mainly conducted by foreigners on critical ecosystems, herpetology, ornithology
- many institutions and local authorities not informed,
- repatriation of reports and studies without sharing with locals
- poorly diverse research (focus on highly degraded ecosystems recognized to have a high level of biodiversity)
- Funding of training for national specialists still scarce
- Level of local diplomation still low and unaffordable for the majority.

**Main motor for doing researches:**

Most of 20th century:
**ressource exploitation**

End of 20th century until today:
**Drastic loss of biodiversity**.
Need to cope with the disastrous effects on locals.
Great obstacles to research in Haïti

- Lack of **INTEREST** from the authorities
- Lack of **FUNDING** for the establishment of laboratories fully equipped and well managed by good research unit staff
- Lack of **INVESTMENT IN THE CORRECT FIELDS** that lead to ecological problems solving
- Lack of **TRAINING** in these appropriate fields
- Lack of **OPPORTUNITIES** for young researchers to work in the field of their research.
• **TERRAIN DIFFICULTIES** due the nature of terrains themselves:
  ◦ climate, land property, area extension;
  ◦ rapid changes in the environment due to habitat loss, meteorological phenomenon, transformation of land occupation;
  ◦ difficulties with associated logistic
• **OTHER PRIORITIES** chosen by authorities due to social and political reality – emergency actions prioritized by national authorities and international organizations
• Researches **RARELY LEAD TO DECISION MAKING** nor conservation actions and rely in binders
• **DISCOURAGEMENT** from potential students and researchers
Main impacts of the lack of research what does it do?

- Biodiversity cannot be correctly observed, followed and preserved;
- Lack of knowledge about actual status of biodiversity;
- Impossibility to accurately measure the regular changes, the frequency of different changes in land occupation that may occur;
- Lack of understanding the reasons (or the probability) of rise or decline of certain species.
• Research is not seen as a valuable field to invest self into
• Actual researchers are not valorized
• Studying local sites seems to have no value despite the urge to solve environmental problems that underly social, economic and political problems
• Always same decisions are taken in regard of environment protection. It worsens the situation.

But…
Nevertheless... what’s actually going on locally?

- FoProBim (marine and coastal life)
- Société Audubon Haïti (avifauna, herpetofauna)
- Jardin Botanique des Cayes (flora restoration)
- Universities (agricultural science)
- Wynne farm ecological Reserve
- UNEP-UNDP
- UNESCO-MAB
- Reefcheck
- more
THANK YOU!

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