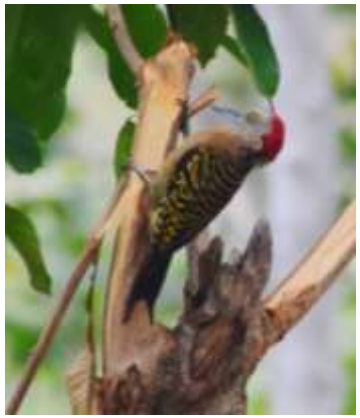
Preserving Biodiversity in Haiti

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

Haïti : Quick environmental facts

- 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 missionnaries (*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

Lack of laboratories, insitutes ou research centers

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- 21th century :

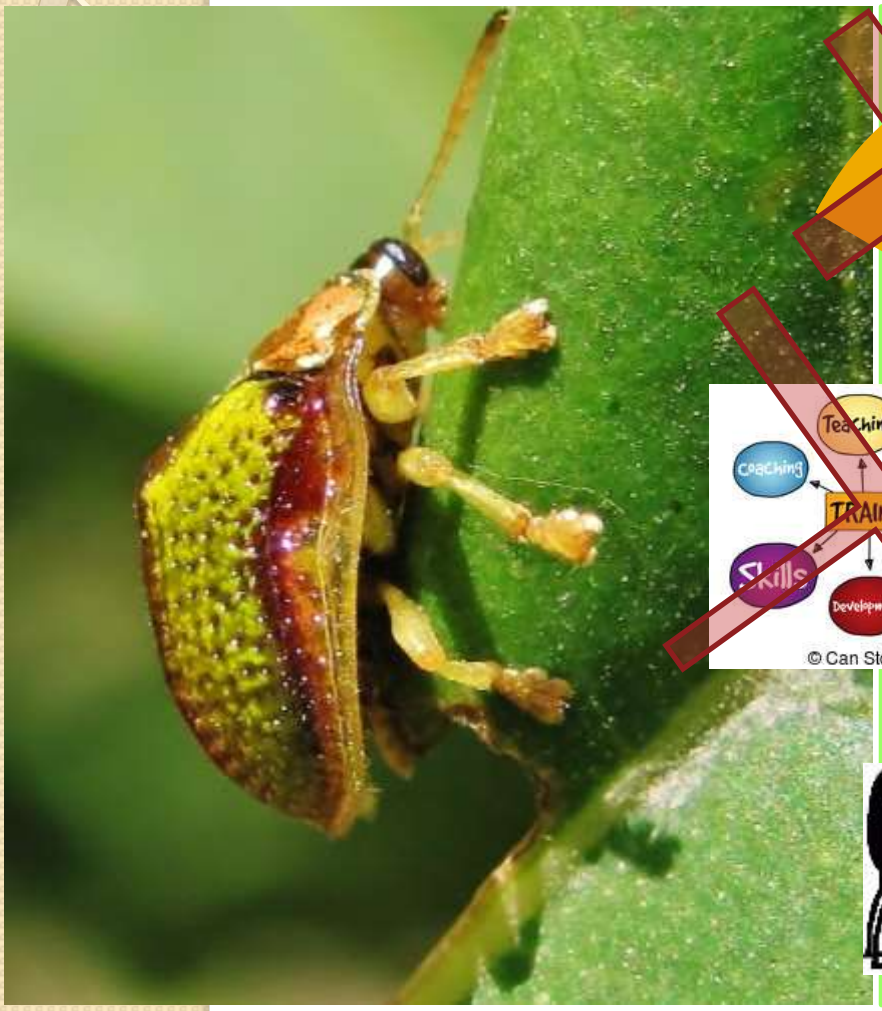
- Slight increase of haitian academic researchers *(mostly young specialists trained outside that return home)*
- increase of research mainly conducted by foreigners on critical ecosystems, herpetology, ornithology
- many institutions and local authorities not informed,
- repatriation of reports and studies without sharing with locals
- poorly diverse research (focus on highly degradated 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



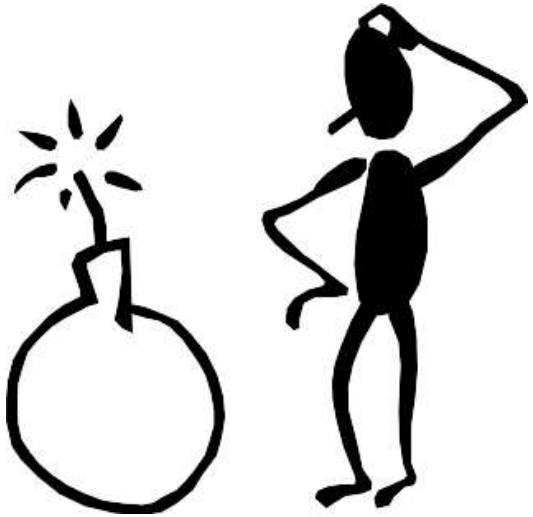
- Lack of *INTEREST* from the authorities
- Lack of *FUNDING* for the establishment of laboratories fully equipped and well managed by good research unit staff
- Lack of *INVESTMENT IN THE CORRECT FIELDS* that lead to ecological problems solving
- Lack of *TRAINING* in these appropriate fields
- Lack 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 priorized 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 !