“The role of green zones as a refuge for wildlife in the urban environment: the case of the National Urban Park of Martissant, in Port-au-Prince, Haiti”

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Plan

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Introduction

- The principle of maintaining biodiversity was adopted in 1992, since the Rio Convention.

- Despite these services and the role of biodiversity is not yet integrated into the collective consciousness.

- This assertion is particularly relevant in the case of human populations living in urban areas.
Introduction

- Urban areas offering multiple habitats to many species of animals.

- The Martissant park, one of the few green zones of Port-au-Prince.

- It was declared a public utility on June 29, 2007 and on April 7, 2017 it was transformed into a National Urban Park.
Introduction

➢ The idea of creating this park was a proposal of FOKAL (Fondation Connaissance et Liberté).

➢ The purpose of this mainly wooded area is to conserve and develop the natural resources.

➢ Studies were carried out inside this park to know its specific diversity of the vertebrate fauna.
The Martissant park is located south of the town of Port-au-Prince, between Morne L'Hôpital and the sea on the road to Carrefour.
Materials and methods

- **Materials used**: GPS; Binoculars; Infrared and digital camera; Recorder Olympus LS 7; Bat detector; Song Meter

- **Herpetofauna Inventory**: Active search and sound recording were applied.

- **Mammals**: Indices of tracing and trapping were applied.
Methods

- **Birds**: Random walks and audio stimulations were made at key points.

- **Processing and analysis of data collected**: The collected sounds were analyzed using the "Audacity-win 2.0.3" software.

- The cariherb website "www.cariherp.org" and at the Natural History Museum at the Dominican Republic were used.
The fauna of Martissant park

- The wildlife of the Martissant park is home to 46 species of animals divided into:
  - 31 species of birds
  - 10 species of reptiles
  - 2 species of amphibians
  - 3 species of mammals

- Sixteen (16) of these species are endemic to Hispagnola, 7 species of birds, 7 species of reptiles and 2 species of amphibians.
Herpetofauna of Martissant park

- The island is home to 162 species of reptiles and 79 species of frogs.

- 118 species of reptiles and 56 species of frogs that are confined to the island.

- Martissant park has 10 species of reptiles and 2 species of amphibians. 7 species reptiles and the two species of amphibians are endemics.
Herpetofauna of Martissant park

Anolis cybotes

Anolis destichus

Anolis coelestinus

Ameiva chrysoloema

Trachemys decorata

Uromacer castebyi
Avifauna of Martissant park

- The Martissant park contains 31 species of birds they are subdivided into 24 exotic species and 7 endemic species.

- The exotic species are subdivided into several statutes, according to Stephen.
  - sedentary,
  - introduced,
  - migrant,
  - sedentary breeding / migrating
Sedentary species

- Haiti contains 120 sedentary species, the Martissant park contains 11 of these species.

*Nyctanassa violacea*

*Mellisuga minima*

*Zenaida macroura*

*Columbina passerina*
Endemic species

- Phaenicophilus palmarum
- Corvus leucognaphalus
- Coccyzus longirostris
- Dulus dominicus
- Icterus dominicensis
- Melanerpes striatus
Introduced species

*Sedentary and breeding*

*Passer domesticus*

*Ploceus cucullattus*

*Buteo jamaicensis*

*Egretta caerulea*

*Butorides virescens*
Haiti has 106 species of migratory birds, the Martissant park is home for 8 on these migratory species.

- **Dendroica caerulescens**
- **Mniotilta varia**
- **Setophaga ruticilla**
- **Seiurus noveboracensis**
Birds nesting

- During fieldwork, the presence of birds nesting were also observed, such as:
  - *Melanerpes striatus*
  - *Nyctanassa violacea*
  - *Dulus dominicus*
Wild mammals of Martissant park

- The park contains 3 species of exotic mammals:
  - The rat (*Ratus ratus*)
  - The mouse (*Mus musculus*)
  - A single species of Frugivorous Bat (*Artibeus jamaicensis*)
Conclusion

- The Martissant park is an area of revalorization and requalification of the district of Martissant.

- Some pragmatic measures should motivate the management and protection of this park.

- Pay special attention to endemic species classified vulnerable and near threatened on the IUCN Red Lis
To train and integrate field guards into certain research activities that take place inside the park;

Develop a teaching guide for environmental education.

Make a complete inventory of the animals of the park, tagging and follow-up.
Projects under development

- Projects under development in the Martissant Park: Two projects will be develop at the Martissant park

- Level: Master
- Funding: Caribaea Initiative
- Number of students involved: 2

- Name of the students: Jean-Marry Exantus and Pierre Michard Beaujour
Avifauna research: Importance of urban and rural green space for avian biodiversity in the western department, Haiti: comparison between Martissant park and the Wynne Farm reserve

- Wynn Farm Reserve at Kenscoff
- National urban park of Martissant
Master Project

➢ The methodology will consist in assessing and comparing species richness and relative abundance of avian species.

➢ The agricultural sites located in the immediate vicinity (> 1 km) of the green zone or further apart (> 5km).

➢ The present study will be of help to assess the importance of green zones and the avian assemblages in both urban and agricultural habitats.
THANK YOU!!!