

## The unique reptiles of Mauritius Offshore islands – the last refuge



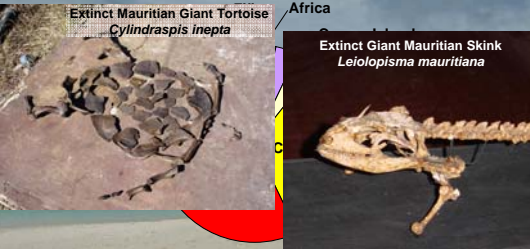
## Island Biodiversity & Reptile Extinction

- Islands maintain some of the richest biodiversity in the World
  - A greater number of unique animal and plant species per unit area – Mauritius in a major biodiversity hotspot
- Isolation and uniqueness of species on small islands makes them vulnerable to extinction
- Since the 17<sup>th</sup> Century 75% of all animal extinctions have occurred on islands



## Island Biodiversity & Reptile Extinction

- The red-footed booby and the Mauritius kestrel are listed as **critically endangered** species, therefore of great importance in maintaining global biodiversity



## Mauritian reptiles

- Although the Mascarenes have lost more species than anywhere else, Mauritius still maintains one of the richest reptile diversities in the World



## Mauritian reptiles

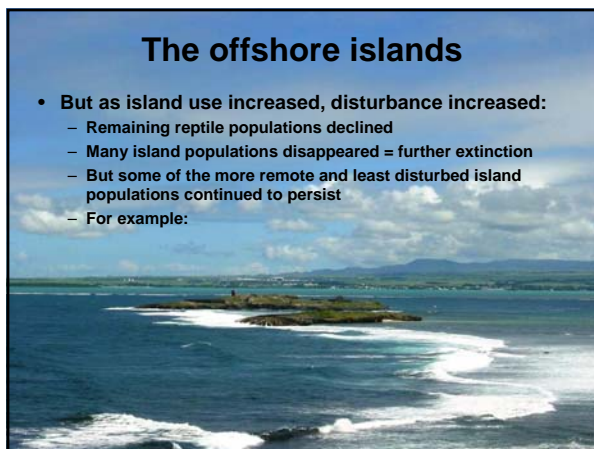
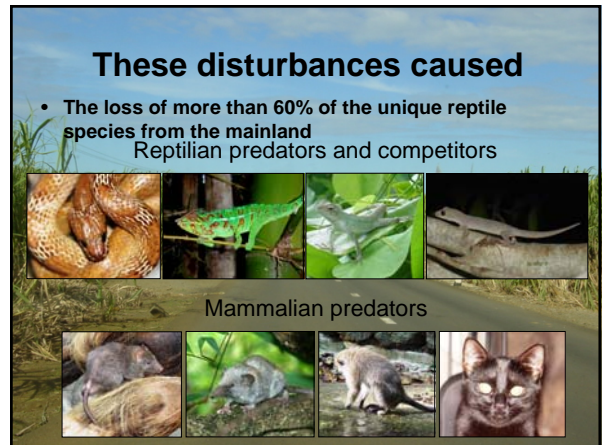
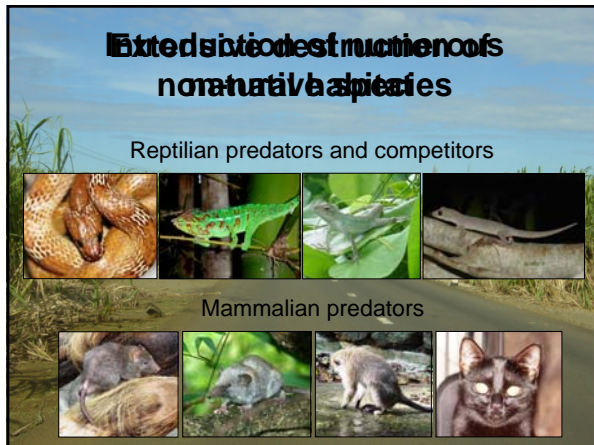
- The reptiles and amphibians, which are the most diverse in the world, are the most vulnerable to extinction



## the formation of an ecosystem with:

- REPTILIAN BEHAVIOURS & POLLINATORS





### Round Island

- Because the localization of Earth to find a boia, *Bolyria multicaudata* was seen in 1975

**Keel scaled boia, *C***

Bullock & North 1975

### Serpent Island

- The only place to find it and difficult to land upon

Serpent Island skink, *Gongylomorphus* sp.

Ser... ula

### Other islands that now have marooned species include:

**Flat Island**

- Although highly degraded is home to last population of: Orange-tail skink, *Gongylomorphus fontenayi* sp.

### Ilot Vacoas

- Maintains the last semi-intact reptile community in the south-east of Mauritius, which includes a unique form of Bojer's skink found nowhere else

Ilot Vacoas' skink, *Gongylomorphus bojerii* sp.

### Other endemics now restricted to islands

- The Lesser night gecko, *Nactus coindemirensis*

restr...

Ilot Vacoas

### Other endemics now restricted to islands

- The Bojer's skink, *Gongylomorphus bojerii*

re

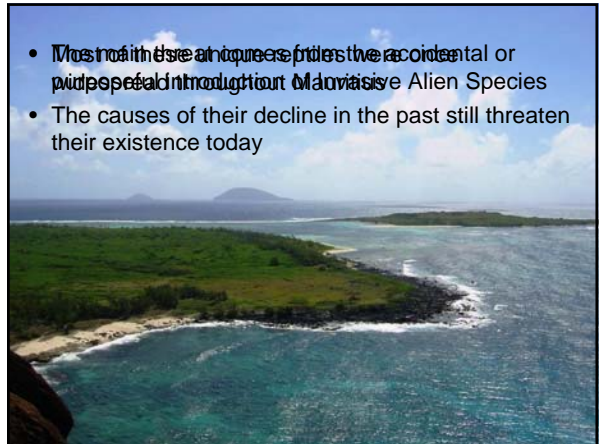
nd -  
I Island  
Quoin

### Other Mauritian reptiles on islands

- The Ornate day gecko, *Phelsuma ornata*
- The Bouton's skink, *Cryptoblepharus boutonii*
- These are still found in coastal areas of Mauritius, but are more abundant on the islands



- Most of these animals are either accidental or widespread throughout Malawi as Alien Species
- The causes of their decline in the past still threaten their existence today



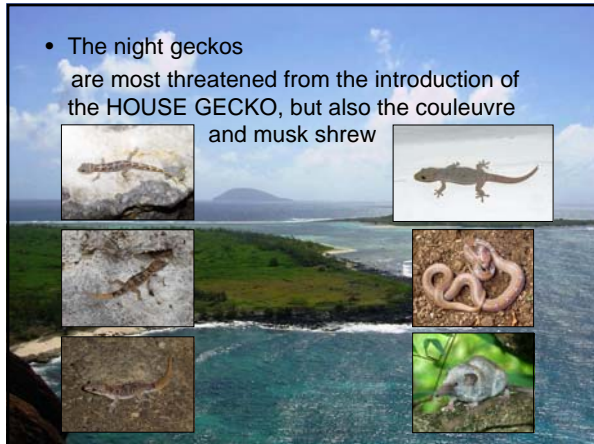
- The larger reptiles are most threatened from the introduction of RATS, CATS, DOGS + other large mammals



- The smaller skinks are most threatened from the introduction of the COULEUVRE and MUSK SHREW



- The night geckos are most threatened from the introduction of the HOUSE GECKO, but also the couleuvre and musk shrew



**PREVENTION**  
The introduction of exotic reptile poses a great threat to the native reptiles of Achimota University.

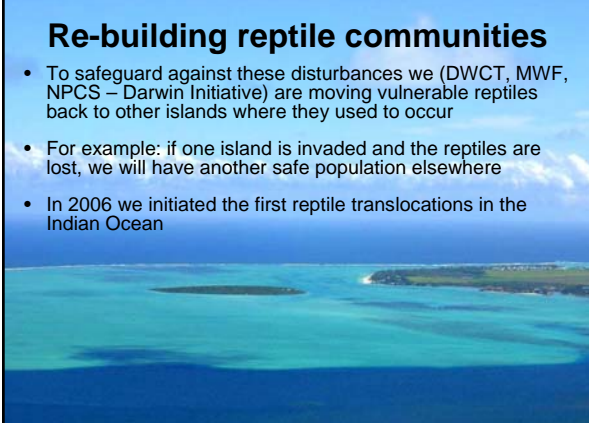


- There are also other current and highly related threats to island reptile populations
  - Habitat destruction
  - Fire
  - Littering



### Re-building reptile communities

- To safeguard against these disturbances we (DWCT, MWF, NPCS – Darwin Initiative) are moving vulnerable reptiles back to other islands where they used to occur
- For example: if one island is invaded and the reptiles are lost, we will have another safe population elsewhere
- In 2006 we initiated the first reptile translocations in the Indian Ocean




### Re-building reptile communities

- **Telfair's skink** and ***Gongylomorphus bojerii*** have huge potential for restoring complete reptile communities
  - Dec 06 to Feb 07
  - Rebuilt very severely
  - 260 skins to Ile aux Aigrettes
  - The IAS responsible for large reptile extinctions have been removed
  - Ile aux Aigrettes is under intensive restoration
  - Sullivans Quoin is one of the few locations that has no invasive mammals or reptiles



### Re-building reptile communities

- Ilot Vacoas' skink, *Gongylomorphus bojerii* sp.
  - Restricted to Ilot Vacoas, only 1ha!
  - 400 skins inhabit the island
  - Jan 07 we translocated 20 skins to Ile aux Fouquets
  - Then in Jan 08 we repeated the process



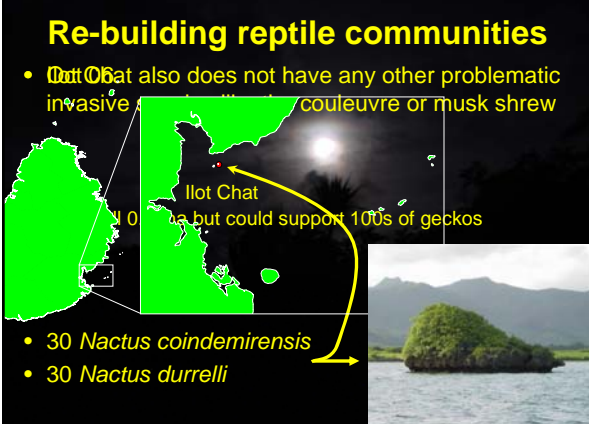
### Re-building reptile communities

- **NZ** in **SE**
  - Only islands populated by night geckos and two additional islands remain free of introduction of the house gecko, *Hemidactylus*
  - Ilot Chat



### Re-building reptile communities

- **Ilot Chat** also does not have any other problematic invasive
  - *Coutouivre* or musk shrew
  - Ilot Chat
  - but could support 100s of geckos
  - 30 *Nactus coindemirensis*
  - 30 *Nactus durrelli*



### Re-building reptile communities

- Every few months we check on the status of the reptiles and the islands



- So far all is going well, however....

### Re-building reptile communities

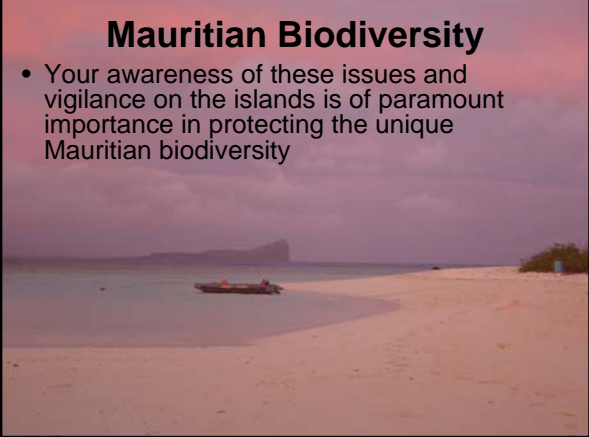
- Since we started we have had:
  - 4 introductions to Ilot Chat
    - Agamid lizard
    - Musk Shrew
    - Couleuvre
    - Rat



- These animals have killed all the geckos on Ilot Chat
- Demonstrates the current threat to other island populations posed by Invasive Alien Species in Mauritius

### Mauritian Biodiversity

- Your awareness of these issues and vigilance on the islands is of paramount importance in protecting the unique Mauritian biodiversity



### Mauritian Biodiversity

- Conservation and restoration of the Mauritian islands is a collaborative process therefore your help is much appreciated

Thank you!

