

The unique reptiles of Mauritius Offshore islands – the last refuge

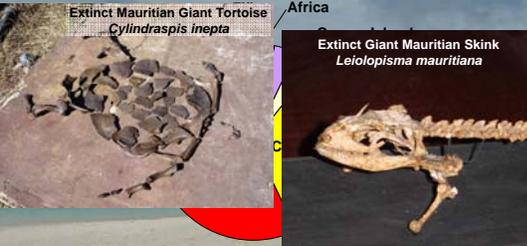


Island Biodiversity & Reptile Extinction

- 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 17th Century 75% of all animal extinctions have occurred on islands

Island Biodiversity & Reptile Extinction

- **Phreodactylus** the first reptile to be introduced as **Mauritius** by **Colonial** authorities is 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

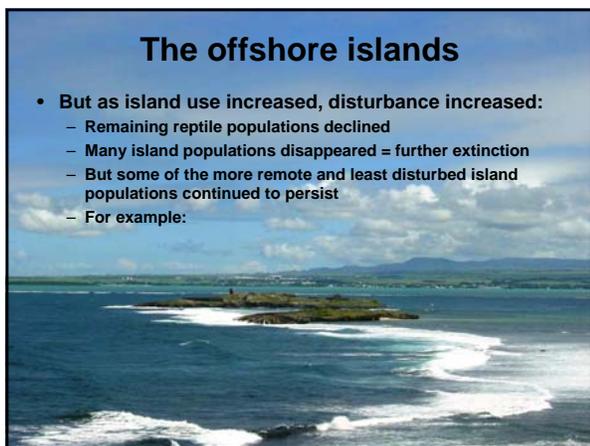
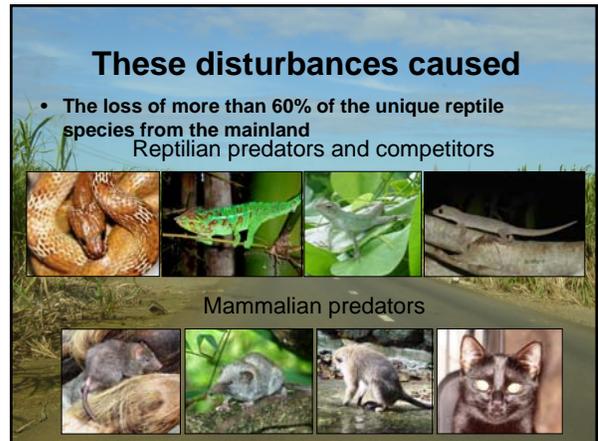
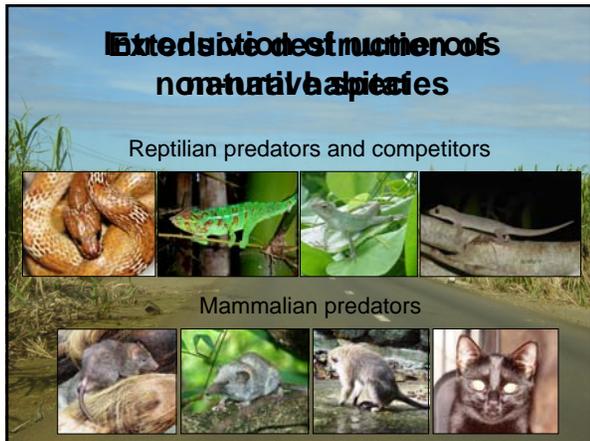
- **These reptiles are the only reptiles in the world that are dependent on a single species of plant for their survival**



the formation of an ecosystem with:

- REPTILIAN BEEBEE EATERS & POLLINATORS





Round Island

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

Keel scaled boia, *Crotaphytus wislizenii*

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*

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Ilot Vacoas

Other endemics now restricted to islands

- The Bojer's skink, *Gongylomorphus bojerii*

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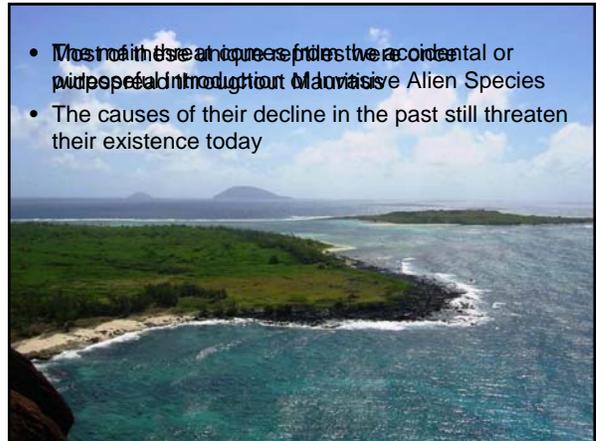
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Other Mauritian reptiles on islands

- 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



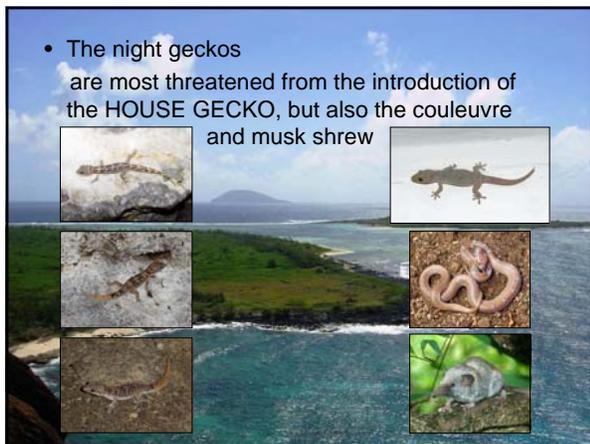
- The larger reptiles are most threatened from the introduction of RATS, CATS, DOGS + other large mammals



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



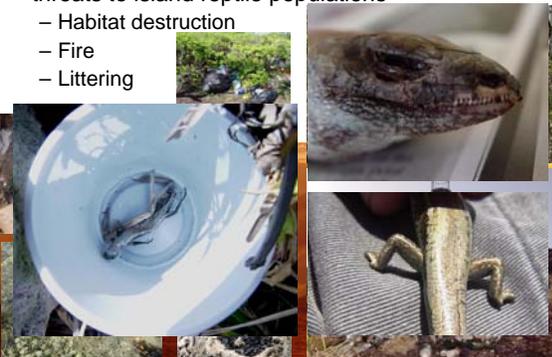
- The night geckos are most threatened from the introduction of the HOUSE GECKO, but also the couleuvre and musk shrew



The introduction of **PREVENTION** or exotic reptile poses a **great threat** to the **unique** reptiles of **Achieve** **World** **simple** **disastrous** **diversity** **procedures**



- 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 ***Basiliscus*** have a 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
 - Culriers 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



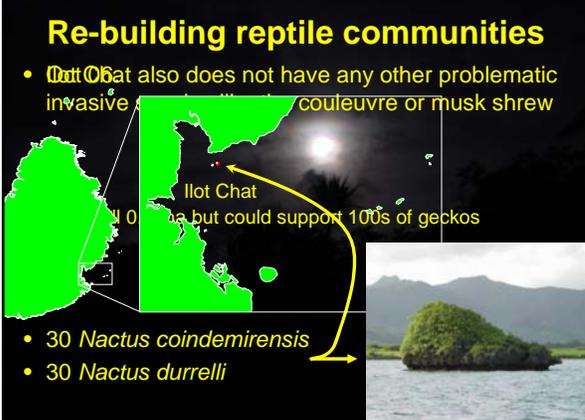
Re-building reptile communities

- **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 **coucouveur** or musk shrew
 - Ilot Chat 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!

