

## Global Extinction-Reptiles

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Biology 330: Conservation Biology

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### **Reptiles Introduction**



11,690 species identified (November 2021)



2,198 subspecies identified (November 2021)

Currently there is 1,216 reptiles endangered



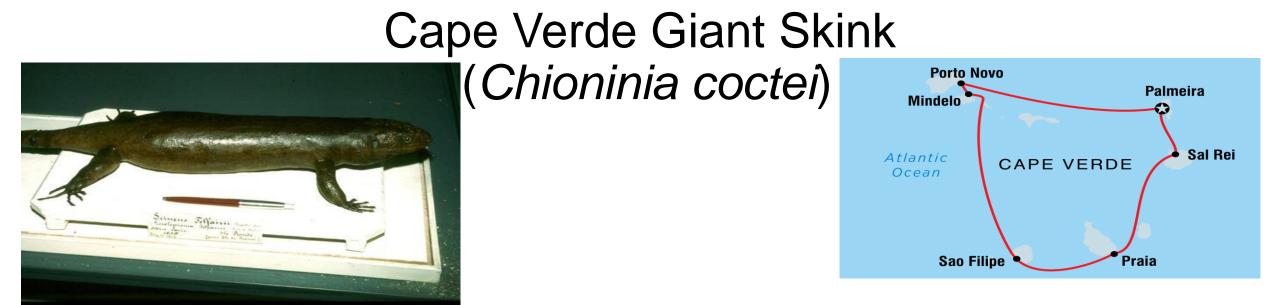
https://reptile-database.reptarium.cz/ , https://www.iucnredlist.org



#### Reunion Giant Skink (Leiolopisma ceciliae)



- Former Range: Reunion Island (French Department)
- Date of Extinction: 1670
- Cause(s) of Extinction: Believe that invasive non-native species were the cause of extinction.
- Natural History: It is believed that the molecular clock of this species dates back 180,000 to 200,000 years, which indicates that they survived a catastrophic volcano eruption.
- References: <a href="https://www.iucnredlist.org/species/17023550/17023949">https://www.iucnredlist.org/species/17023550/17023949</a>



- Former Range: Cape Verde islands preferred the rocky cliffs with seabird colonies
- Date of Extinction: 1940
- Cause(s) of Extinction: Introduction of cats, dogs, humans, and rats as predators; as well as competing for food, may have caused a decline in seabirds in which the skinks rely on.
- Natural History: Humans used the skinks not only for food but for medicine and skins.
- References: <u>https://www.iucnredlist.org/species/13152363/207442561</u> <u>https://uk.in</u> <u>aturalist.org/taxa/146009-Chioninia-coctei</u>

## Kawekaweau (Hoplodactylus delcourti)

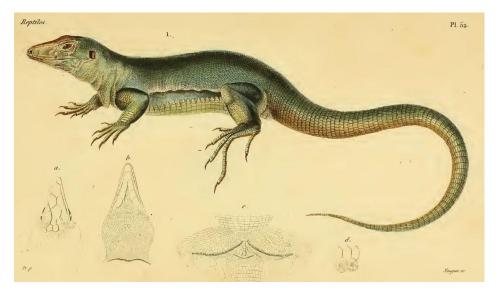


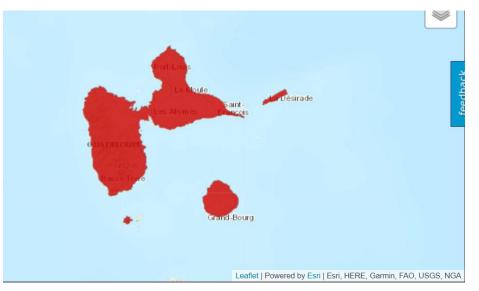
- Former Range: New Zealand
- Date of Extinction: 1870
- Causes of Extinction: Unknown



- Natural History: There was only one significant account of a human seeing one of these alive and was killed.
- **Source:** <u>https://www.iucnredlist.org/species/10254/120158840</u> , https://en.wikipedia.org/wiki/Hoplodactylus\_delcourti

#### Guadeloupe Ameiva (*Pholidoscelis cineraceus*)





Former Range: Eastern coast of Badde-Terre, Guadeloupe Date of Extinction: Around 1928 Causes of Extinction: Hurricane and invasive species Natural History: Ground-dwelling species that fed on carrion. Source: https://www.iucnredlist.org/species/1119/121639617#taxonomy

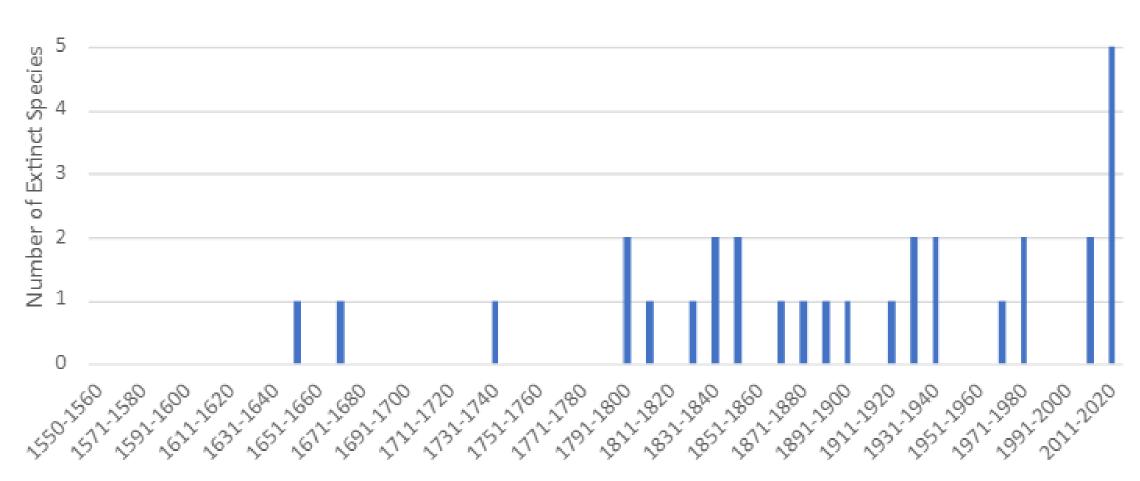
## Eastwood's Longtailed Seps (Tetradactylus eastwoodae)



- Former Range: Limpopo Province, South Africa
- Date of Extinction:1928
- Causes of Extinction: afforestation and fires
- Natural History: habitat was subtropical or tropical high-altitude grassland
- **Source:** <u>https://www.iucnredlist.org/species/21663/115653635#threats</u>
- https://en.wikipedia.org/wiki/Eastwood%27s\_long-tailed\_seps

#### **Temporal Patterns of Extinctions**

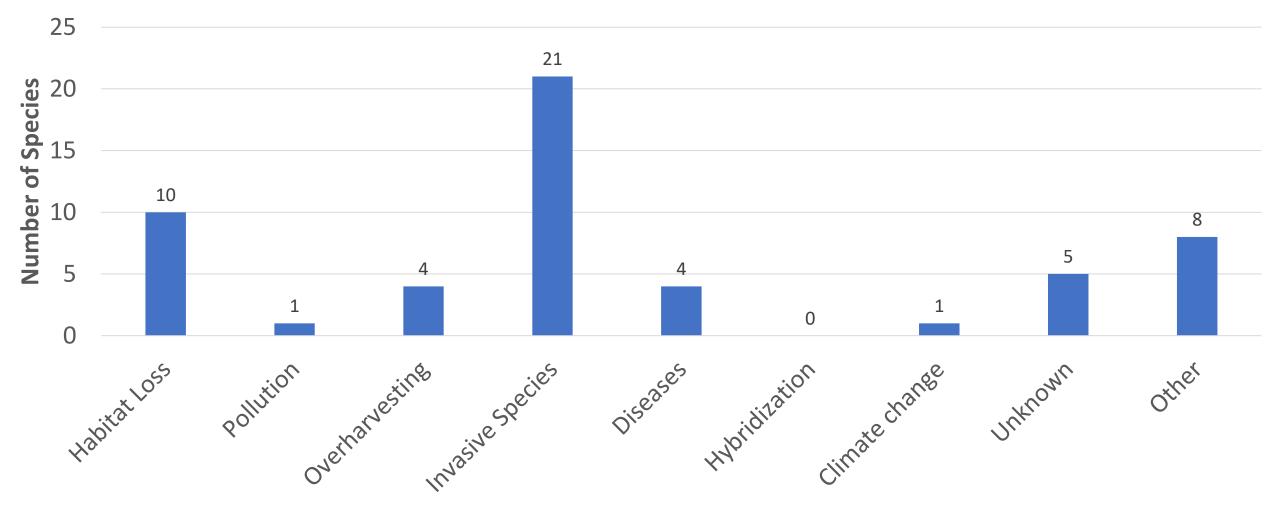
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Decade

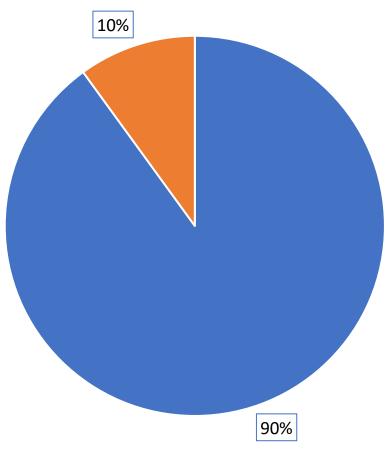
#### **Extinction Casual Factors**

**Causal for Extinction** 



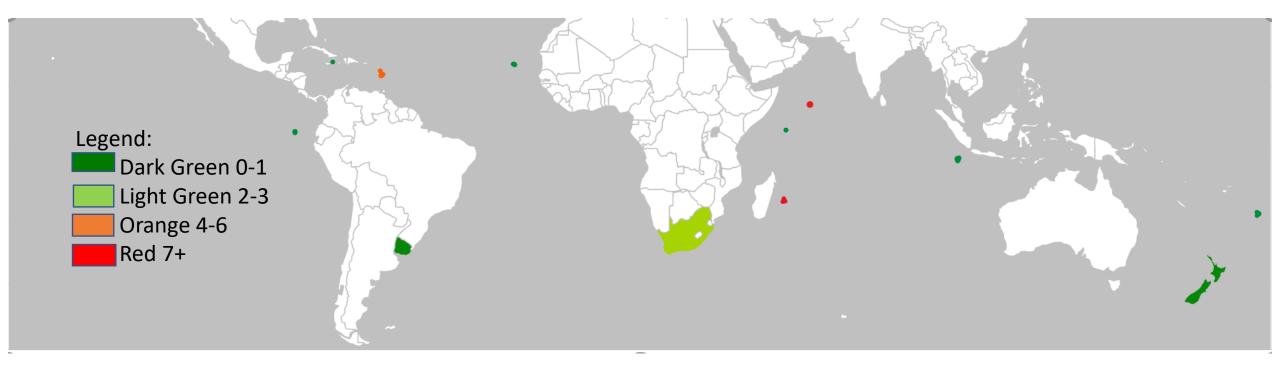
**Reasons for Extinction** 

#### Mainland vs Island Extinctions



Island Mainland

#### Spatial Distribution of Extinctions



# Summary

- More reptiles have become extinct in recent years
- Invasive and problematic species are a leading cause of reptile extinction
- Reptiles living on islands are more at risk for extinction
- All Reptile extinctions have taken place around the southern hemisphere, near the equator.