Everglades National Park

Burmese Pythons

Skip Snow
Everglades National Park




Priority Animal Species

(see Kline for fish)

- **Priority Animals**
  - **Burmese python** (control/suppression, containment, incipient eradication)
  - **Tupinambis species** (Black and White tegu – candidate for eradication?)
  - Spectacled caiman (status and distribution)
  - Feral pig (local control – high value tree islands/cultural sites)
  - Starlings (local control– Long Pine Key and native cavity nesters)
  - Common myna (status and distribution)
  - Sacred ibis (monitoring)
- **Newly Detected Animal Species**
  - **Northern African Python** (proximity alert – candidate for eradication?)
  - **Nile monitor** (proximity alert – candidate for eradication?)
  - Giant Whiptail (proximity alert – status and distribution)

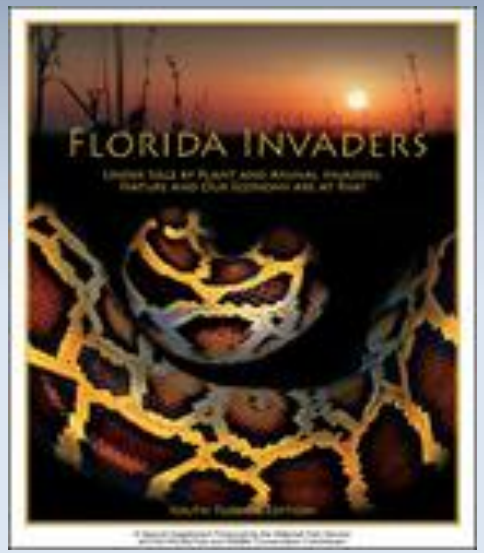
History/Background

Big Cypress hunting trip Spring 2001

History/Background

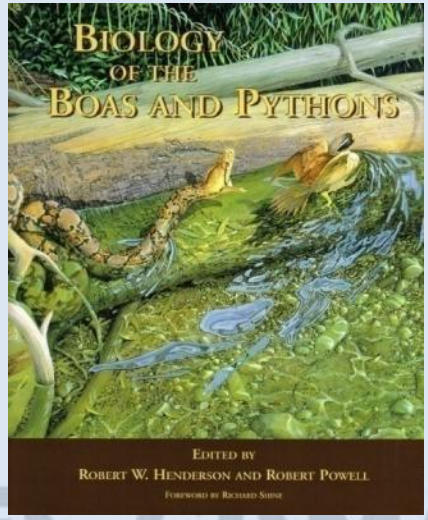
www.FloridaInvaders.org

www.nps.gov/ever/naturescience/burmesepythonresearch.htm

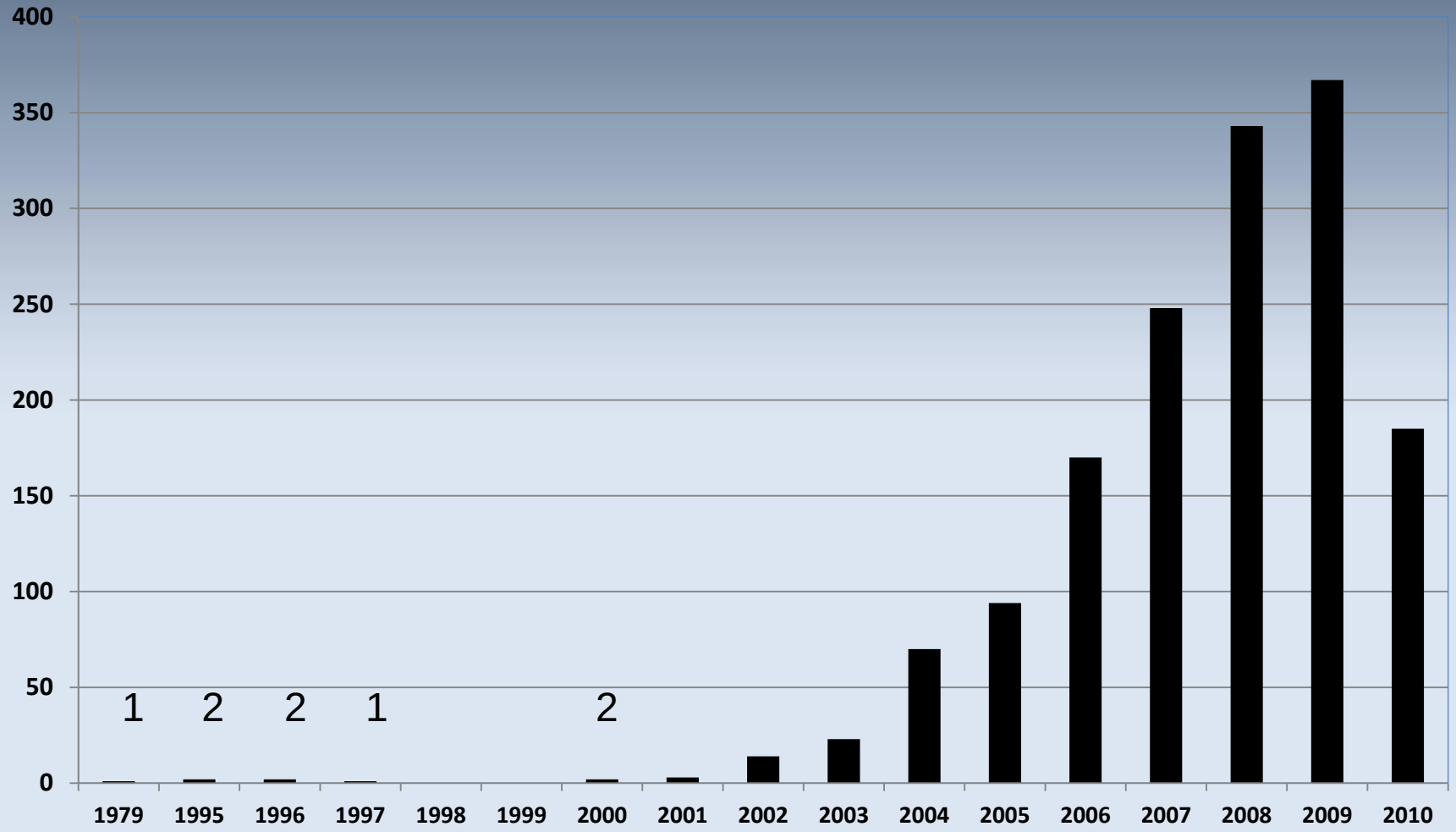


Giant constrictors: biological profiles and an importation risk assessment for nine large species of pythons, anacondas, and the boa constrictor

Robert N. Reed and Gordon H. Rodda
USGS Fort Collins Science Center, 2009



Pythons Removed*

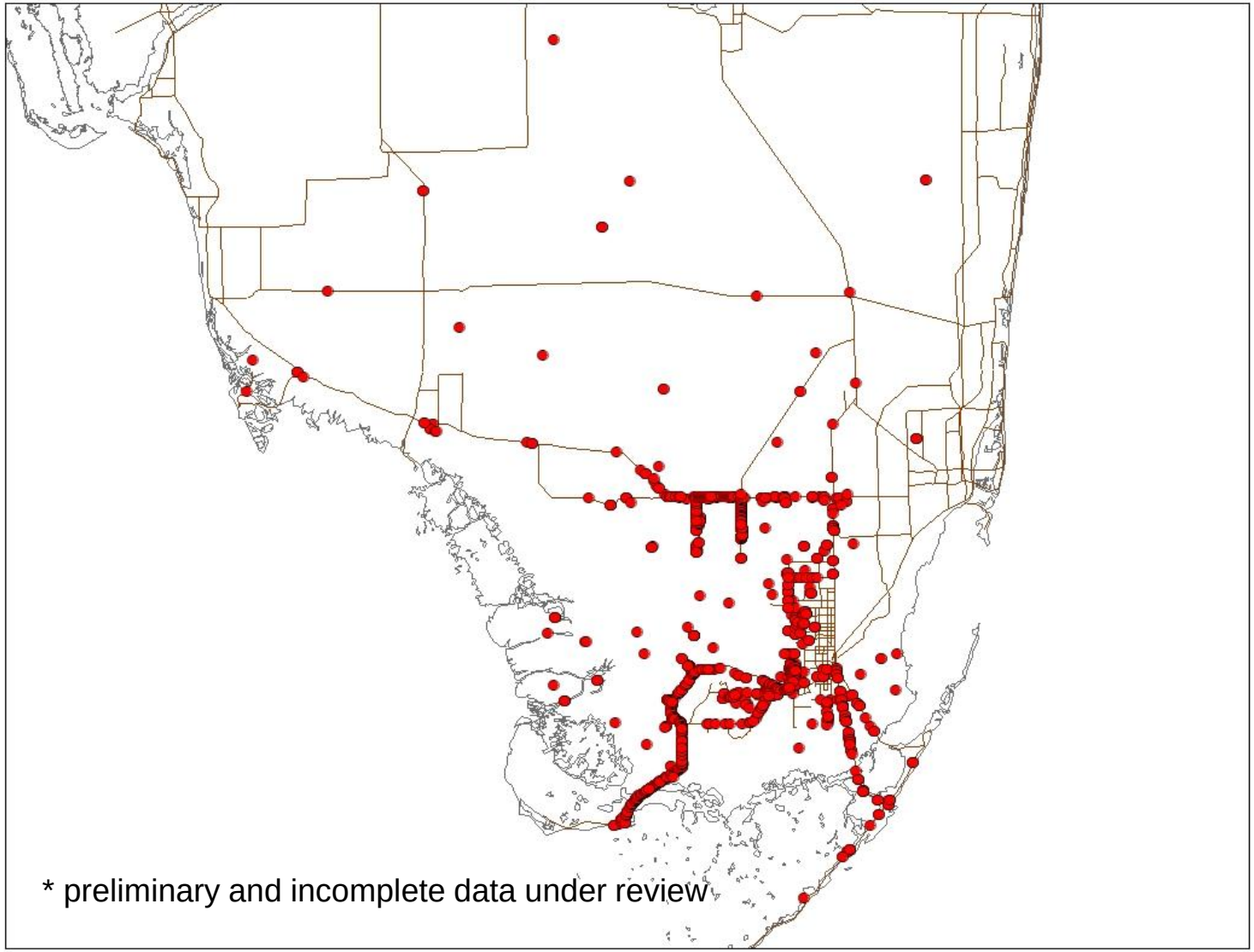


* As of 9 July 2010

2010 Everglades Invasive Species Summit

Burmese Python Distribution*

South Florida



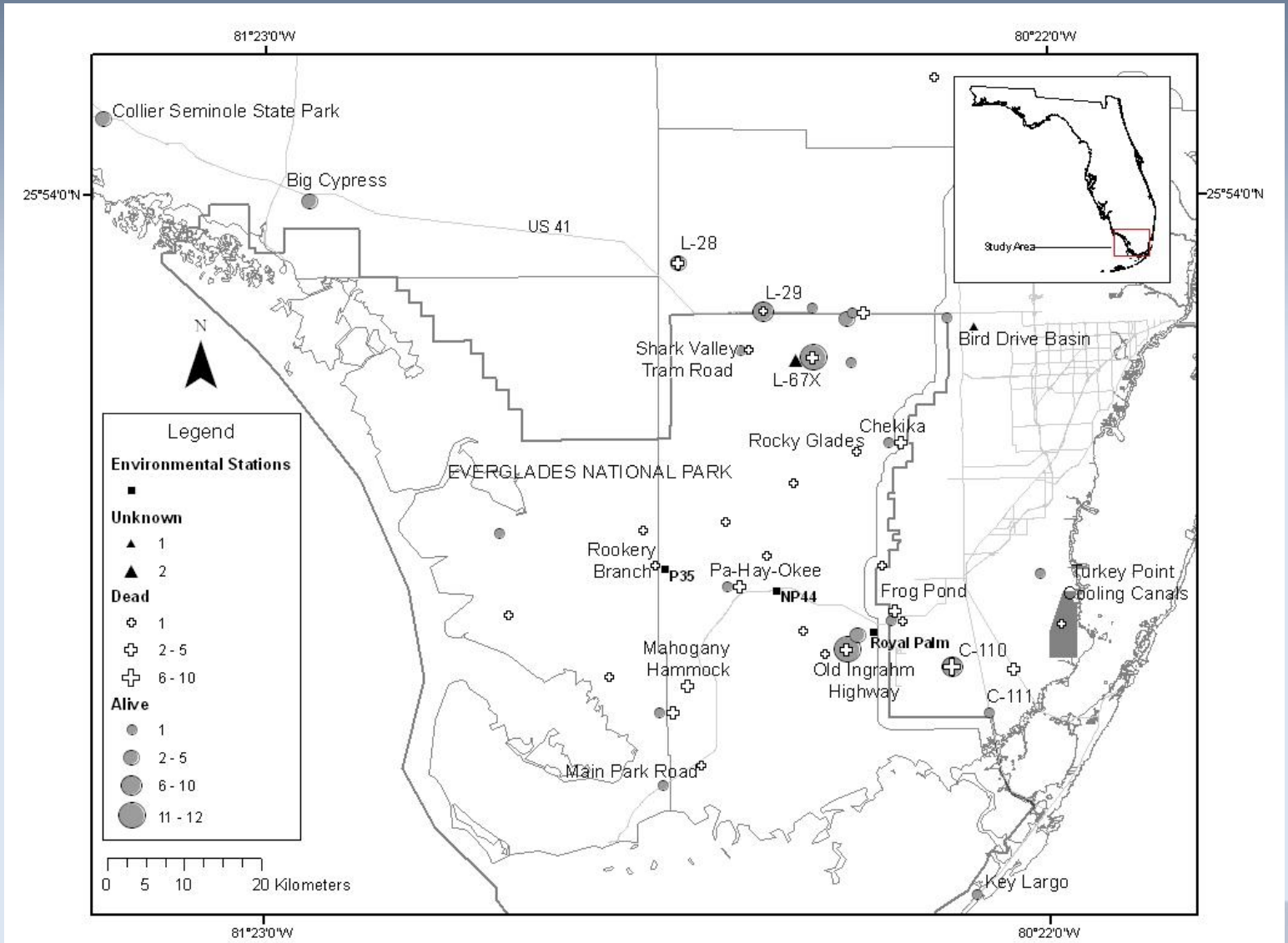
* preliminary and incomplete data under review

Cold-induced Mortality

Cold-induced Mortality

59 of 99 (60%) non-telemetered pythons for which we determined fate survived. (between 2 Jan and 4 Feb)

Cold-induced Mortality of Burmese Pythons in South Florida *



***Paper available at no charge online in Biological Invasions**

Enhanced Visual Searching

Timing rapid responses in suitable habitats during and after unusual climatic events might increase removal rates of pythons.

Python Breeding Event – March 2010

4 July 2010

A Field Trial of Trap Effectiveness for Burmese Pythons in South Florida

Figure 5 Burmese python (*Python molurus bivittatus*) captured in round entrance type trap on 13 August 2009.

Figure 2 Python trap at the Frog Pond study site situated along the edge of a tree island.

Frog Pond Trap Trials

- Traps were baited and opened on 05 August 2009 and checked daily until 16 November 2009 for a total of 6,053 effective trap nights.
- Three Burmese pythons were captured in traps during the trial for a capture rate of less than 0.05% per trap night.
- Post-trial disc-harrowing revealed 11 pythons.
- **The relatively low capture rate of the attractant-baited traps highlights the difficulty in testing control tools for cryptic top predators that rely heavily on ambush foraging strategies.**
- **The low capture rate suggests that traps alone might be ineffective for population control.**
- The authors conclude that refinement of trap technologies and further assessment of various environmental contributors to trap success will be necessary before it will be possible to produce a thorough assessment of the utility of traps for invasive giant constrictor snakes.

Life history/movement/mercury

Everglades Python Patrol

Volunteer program currently under evaluation

Future Investments

- Train and Facilitate Expansion of Early Detection and Rapid Response Teams for Large Exotic Snakes
- Maintenance and Enhancement of an Everglades Invasive Animal Web and Mobile Reporting System
- Support for Nonnative Pet Amnesty Program including Adoption Hotline
- Enhanced Visual Searching and Monitoring Protocol Development, Evaluation, and Transfer
- Assessing Python Impacts to Native Wildlife
- Assessing Areal Efficacy of Python Control Along Levees and/or Roads

Needs & Gaps

- Federal prevention initiatives for non-native wildlife (risk assessment and screening).
- More risk assessment science to support prevention initiatives.
- Development of sustainable resource sharing and reimbursement mechanisms across agencies (Federal, State, and Local levels), particularly for EDRR (consider the appropriateness of the National Interagency Fire Organization as a model).
- Research and development of tools for invasive animal EDRR.
- Establishment of Everglades EDRR Regional Coordinator(s).

Acknowledgments and Questions?

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Michael Dorcas

Miami-Dade County Anti-Venom Unit

Everglades Python Patrol

Visitors to Everglades National Park

Park Staff

Invasive Species Programs

- {Task Name-- e.g., Removal of Aquatic Growth Program}
- Description
  - {e.g., Removal of floating and submerged weeds using chemical, mechanical and biological controls}
- Objective
  - {e.g., Keep federal waterways free of aquatic vegetation for navigation, flood control and environmental stewardship}
- Partners
  - {e.g., SFWMD, FDEP}
- Start/End Dates
  - {e.g. Jan 1, 1901 – to date/on-going}
- Status
  - {choose one of following: assigned, unassigned, removed, postponed, completed or other}
- Funding (FY): {indicate current funding level for this task}
- Annual Summary
  - {total acres of plants treated or # of animals removed}

Invasive Species Programs

- This is your opportunity to give a brief background on invasive spp. management on your property. This information should be kept to 1 (or 2) slide with additional information placed on the “appendix” slides at the end of this presentation (see note below)