

# Big Cypress National Preserve

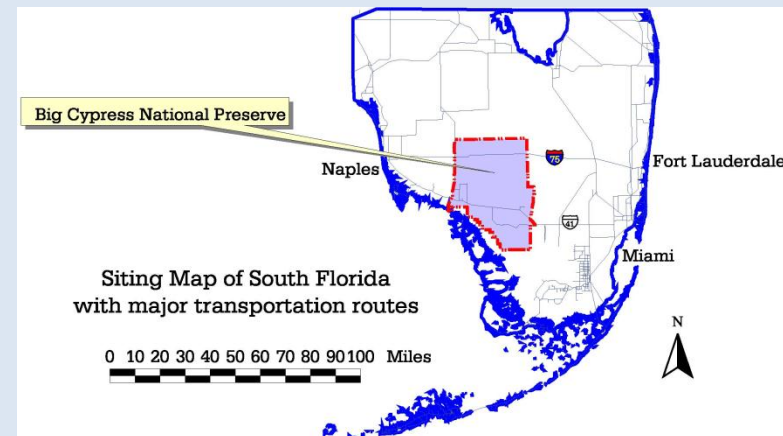
James N. Burch, PhD.

Big Cypress National Preserve



# Invasive Species Programs

- 1978- Records begin for exotics control
- 2003- Treatment of entire preserve (2950 sq. km.) completed for melaleuca
- Early 2000s- shift concentrated efforts to Schinus control
- Native habitat restoration.



# Priority Plant Species

- **Priority Plants**

- *Schinus terebinthifolius*
- *Melaleuca quinquenervia*
- *Lygodium microphyllum*

- **Newly Detected Plant Species**

- *Nymphoides cristata*
- *Lablab purpureus* (removed)



# Priority Animal Species

## Priority Animals:

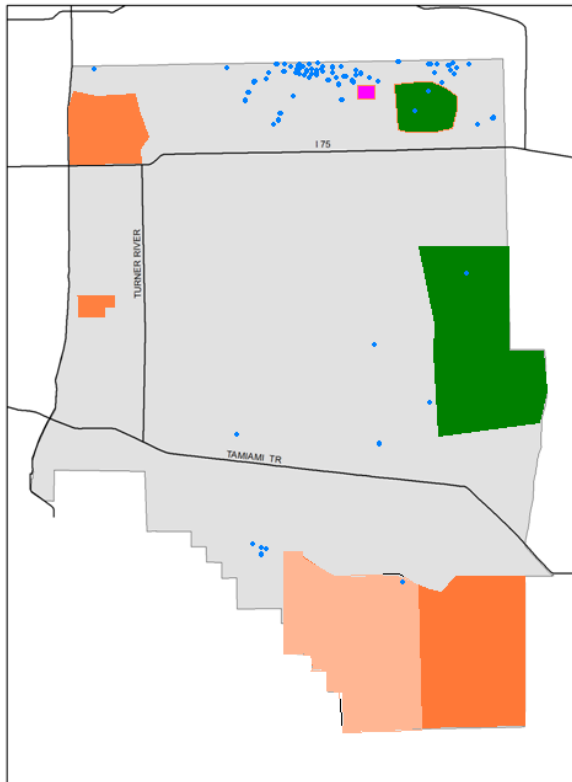
**None Formally Listed**



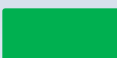
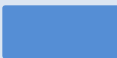

## Newly Detected Animals:

**Big Snakes (Pythons)  
Hoplos**






# Fiscal Year Treatments: FY 2010



-  Schinus Treatment
-  Planned Schinus Treatment
-  Melaleuca Treatment
-  Lygodium Treatment
-  Restoration

# Planned Treatments: FY 2011



-  Schinus Treatment
-  Melaleuca Treatment
-  Restoration

# Monitoring

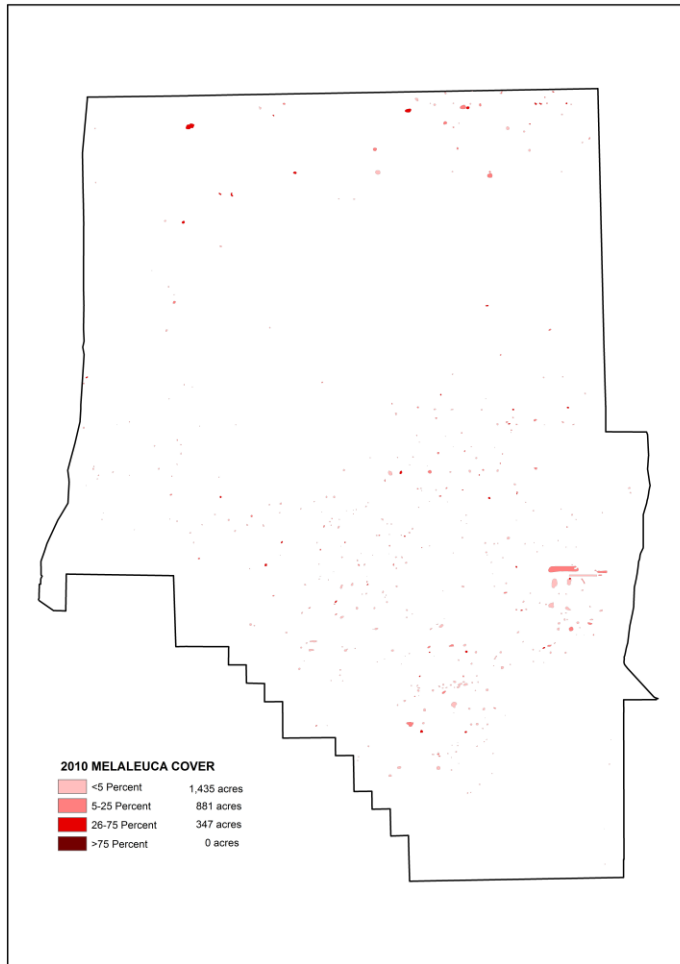
- Systematic Reconnaissance Flights
- ECISMA-wide Digital Aerial Sketch-mapping (DASM)

– Estimated Canopy Acres

	• <u>2008-09</u>	<u>2010</u>
• Melaleuca	506	342
• Schinus	2720	1668
• Lygodium	55	56

# Digital Aerial Sketch Mapping

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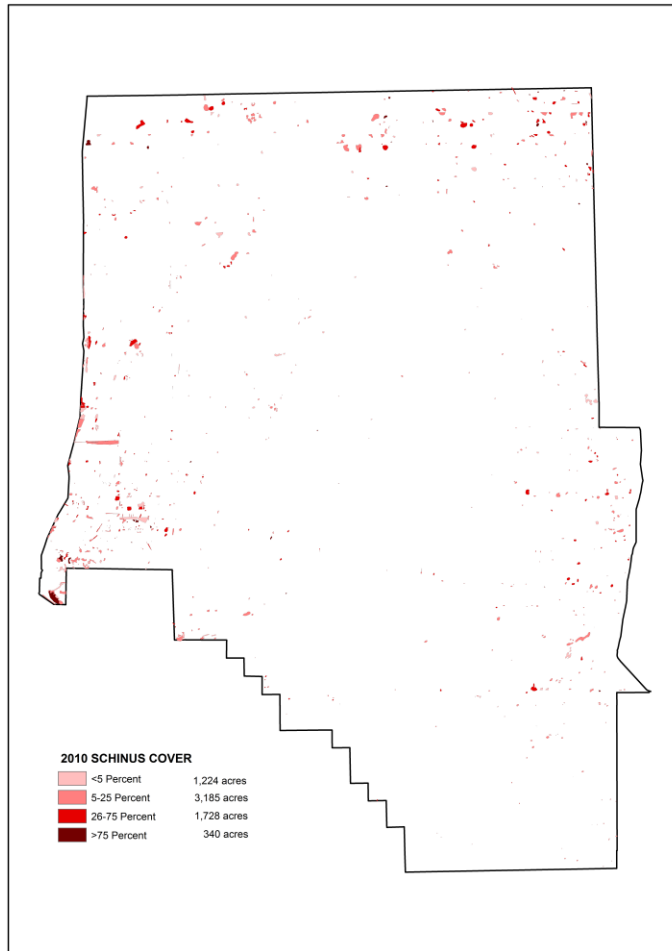
## Melaleuca

Coverage Class	Acres
High	347
Medium	881
Low	1435
Total	2663

# Digital Aerial Sketch Mapping

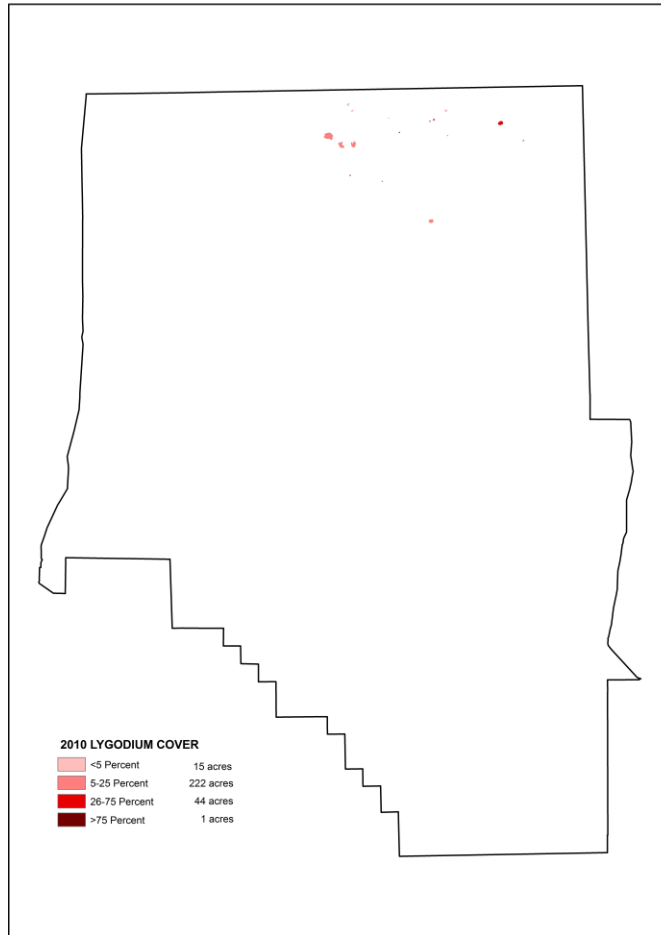
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## Brazilian Pepper



Coverage Class	Acres
High	340
Medium	1726
Low	4409
Total	6475

# Digital Aerial Sketch Mapping



Big Cypress National Preserve

## Old World Climbing Fern

Coverage Class	Acres
High	1
Medium	44
Low	237
Total	282

# Innovations and Successes



Fire as a treatment  
for Brazilian pepper



# Innovations and Successes

- Aerial Spot-spraying



E. Raits Photo



# Needs & Gaps

- Identify critical needs and gaps
  - Biocontrol agents
  - Greater specificity for herbicides
  - Labor

# Questions?



# Innovations and Successes

- {List and describe any tools, tips, techniques, experiences, methods, outreach, etc...that may be of value to other ECISMA members. Feel free to use multiple slides}

# Invasive Species Programs

- Melaleuca Control
- Description
  - Removal of Melaleuca trees using chemical, mechanical and biological controls.
- Objective
  - Restore native biological communities.
- Partners
  - FDEP, ECISMA, Miami-Dade County, NPS Fire Management, F/CEPMT
- Start/End Dates
  - Start:1978; on-going.
- Status
  - assigned
- Funding (FY): about \$100,000/year plus additional outside funding as available.
- Annual Summary
  - FY 2009: ca. 82.1 canopy acres

# Invasive Species Programs

- Brazilian Pepper Control
- Description
  - Removal of Schinus trees using chemical, mechanical and biological controls.
- Objective
  - Restore native biological communities.
- Partners
  - ECISMA, NPS Fire Management, F/CEPMT
- Start/End Dates
  - Start: 2002; on-going
- Status
  - assigned
- Funding (FY): Funding (FY): about \$100,000/year plus additional outside funding as available.
- Annual Summary
  - FY 2009: ca. 270.0 canopy acres

# Invasive Species Programs

- Lygodium Control
- Description
  - Removal of Lygodium ferns using chemical, mechanical and biological controls.
- Objective
  - Restore native biological communities.
- Partners
  - FDEP, ECISMA, F/CEPMT
- Start/End Dates
  - Start: 2000; on-going.
- Status
  - assigned
- Funding (FY): about \$5000/year plus additional outside funding as available.
- Annual Summary
  - FY 2010: ca. 17.5 canopy acres

# Invasive Species Programs

- Pine Flatwoods Restoration
- Description
  - Planting slash pine seedlings in areas of Schinus removal
- Objective
  - Restore native biological communities.
- Partners
  - USFWS
- Start/End Dates
  - Start: 2010; on-going.
- Status
  - assigned
- Funding (FY): about \$5000/year plus additional outside funding as available.
- Annual Summary
  - Not started.