

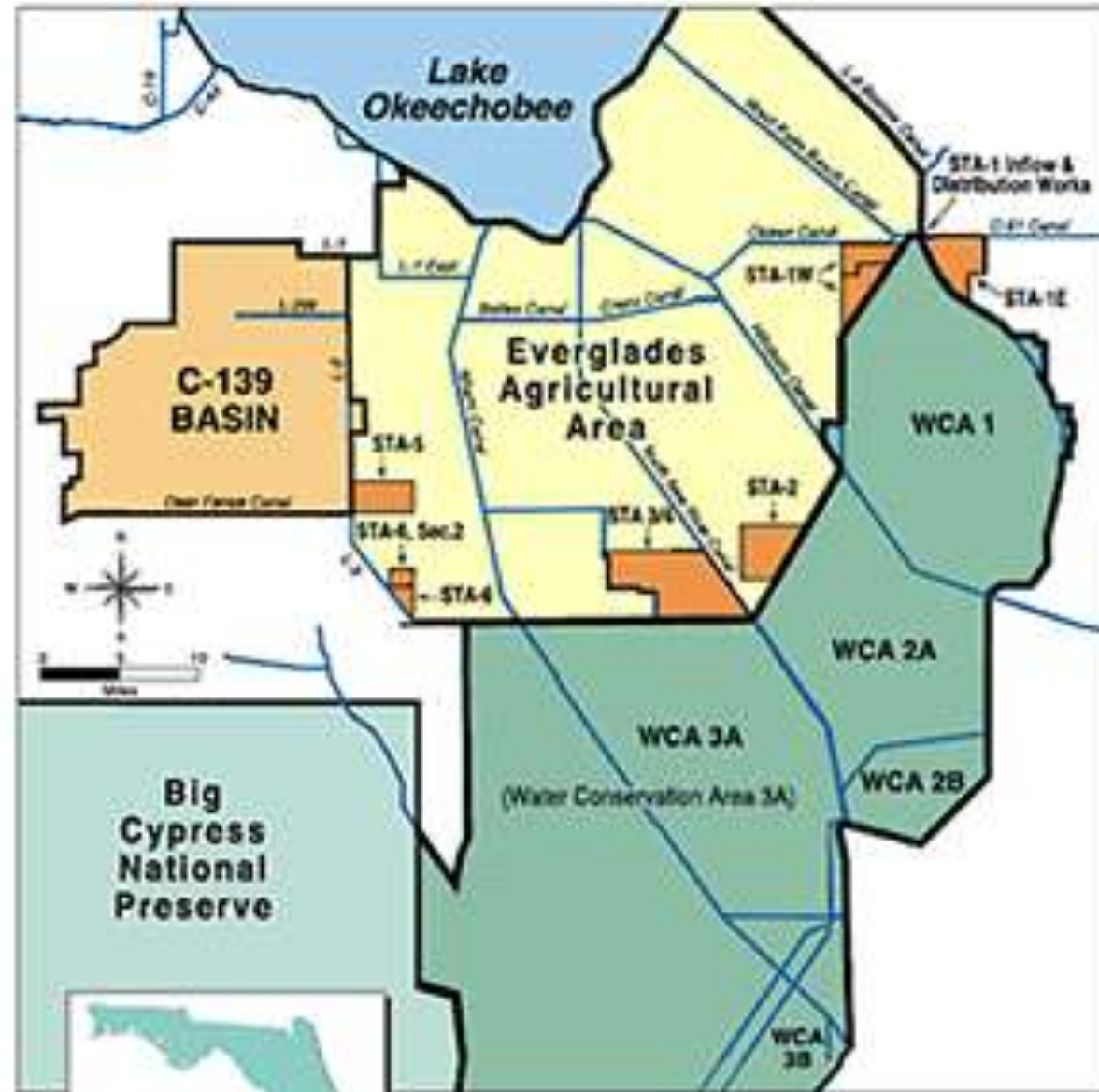
Surveys for
Lygodium microphyllum
and Other Exotic Species in
Water Conservation Area 3A

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STA LOCATER MAP

STAs are shown in orange

Study Objectives



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3. Assess island vegetation

Record species and
percent cover



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2. Determine island elevations

Measure water depths at
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1. *Lygodium microphyllum* surveys

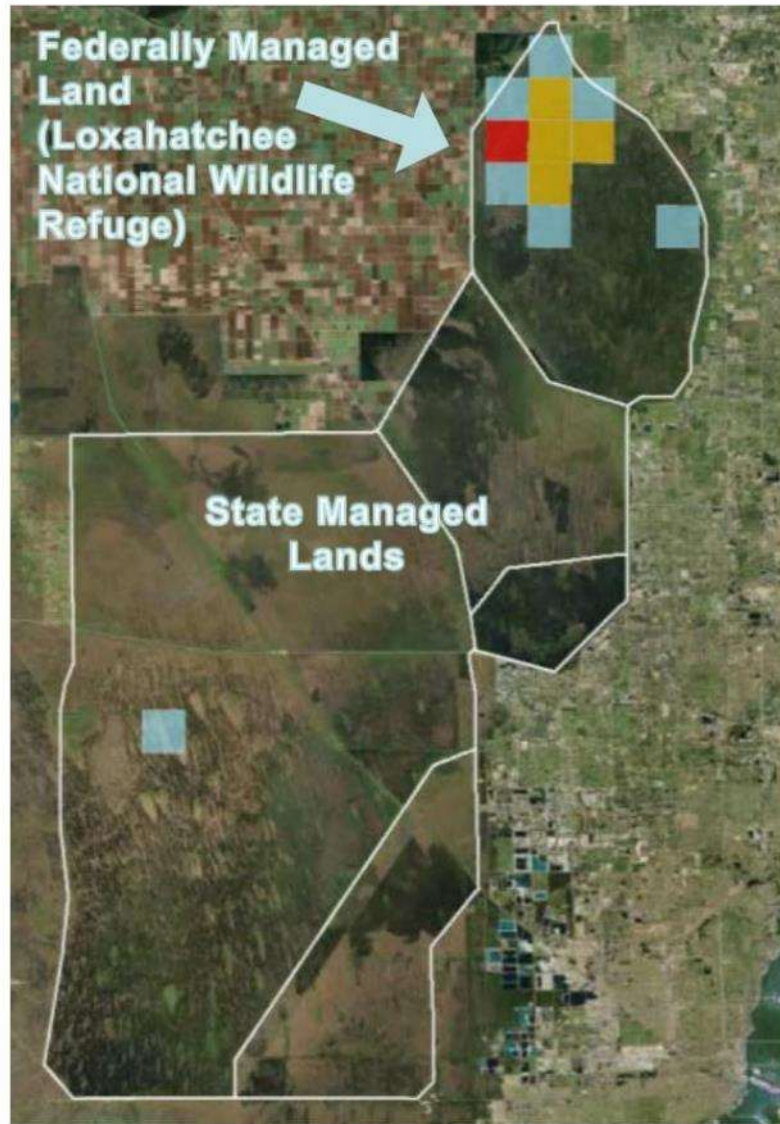
Document the presence
of *L. microphyllum* and
other exotic plants in
tree islands of WCA-3A





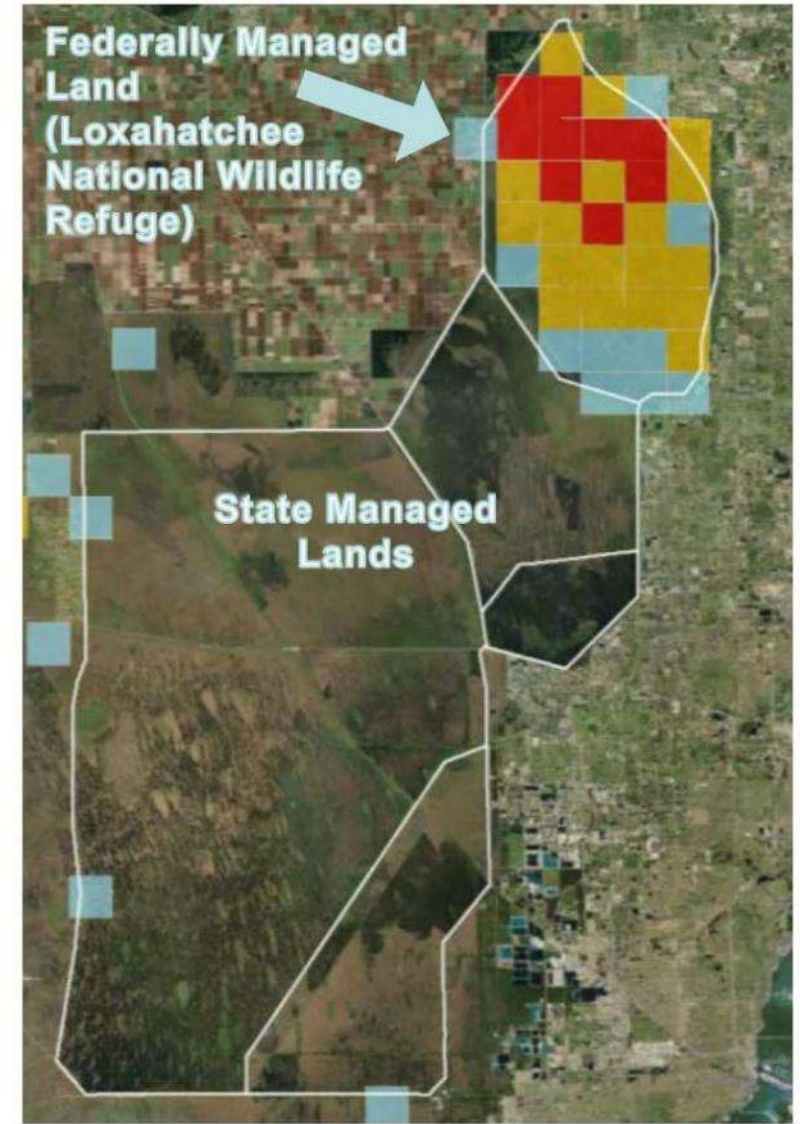
Old World Climbing Fern (*Lygodium microphyllum*) expansion in the Northern Everglades over 20 years.




1995



20 YEARS

2015



-  High infestation
-  Intermediate
-  Low infestation

Locate and Treat

- Physical removal
- Spray with 3% glyphosate
- Report location and description to SFWMD
- Recommend further action if needed



L. microphyllum Assessments

- The plant is flagged, photographed and geo-referenced.
- Ecological data including area, height and reproductive state are recorded.
- A 5 meter radius surrounding *L. microphyllum* is searched for additional growth.
- Location and details of *L. microphyllum* are reported to SFWMD.

***Lygodium* Assessment**

Date: _____

Surveyor: _____

Island: _____

Coordinates: N _____ W _____

of individuals: _____

Life stage: Juvenile / Adult

Reproductive: Yes / No

In canopy: Yes / No

Height (m): _____

Vertical coverage (m): _____ x _____

Horizontal coverage (m): _____ x _____

Water depth (cm) N: _____ E: _____ S: _____ W: _____

Dominant canopy species: _____

Dominant herbaceous species: _____

Notes:

Findings and Correlations

- Light – *L. microphyllum* usually not found in very shaded areas like thick *C. icaco*
- Water level – this survey began recording referenced elevations based on benchmarks
- No apparent spatial pattern, although often found multiple times on same island

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Measuring Elevation

The crew visits the nearest surveyed benchmark and measures water level



In the center of the head of the island, water depth is measured.

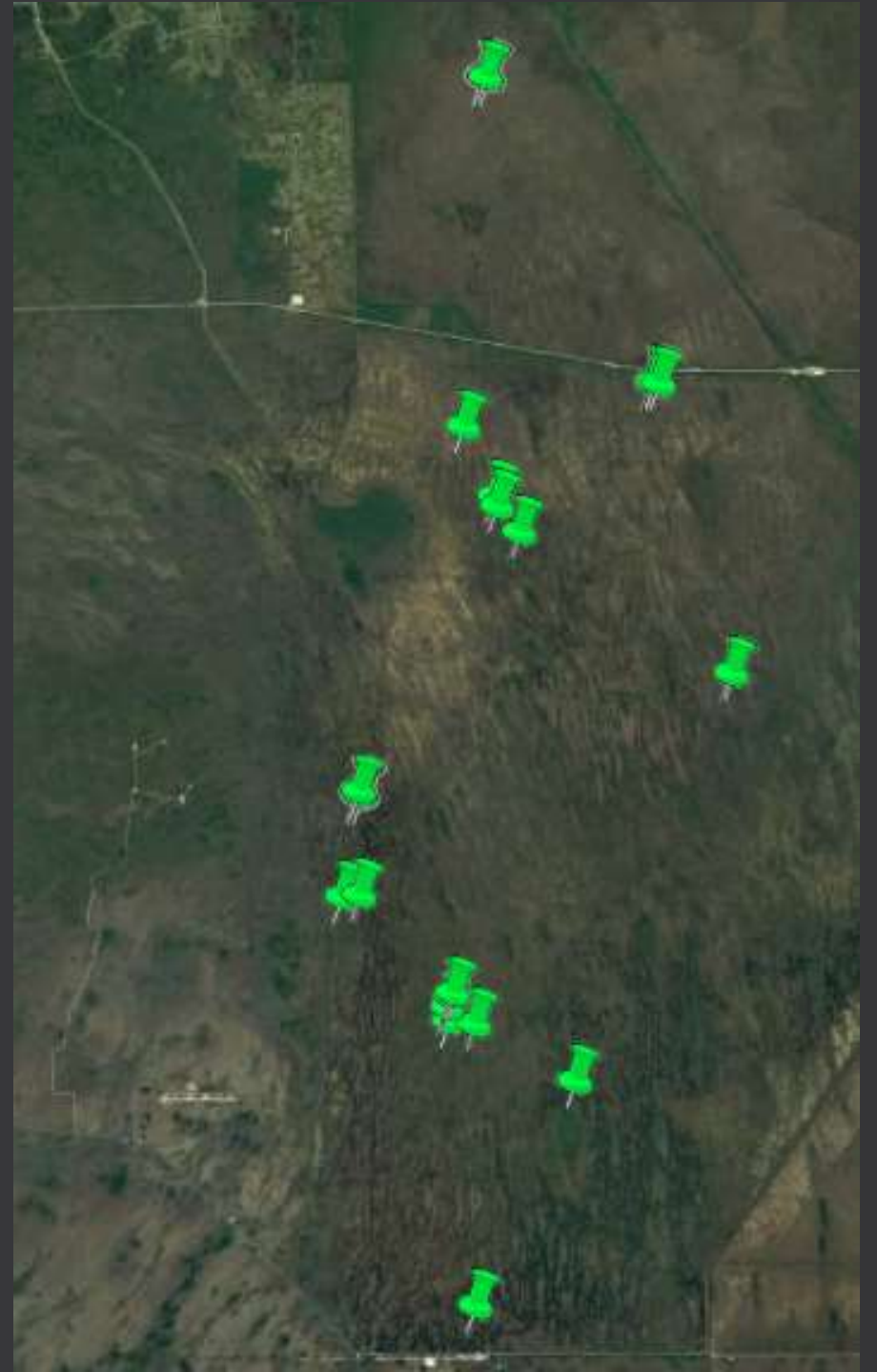


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Previous Surveys (2007-2015)

- *L. microphyllum* was found in 12 islands in 3A

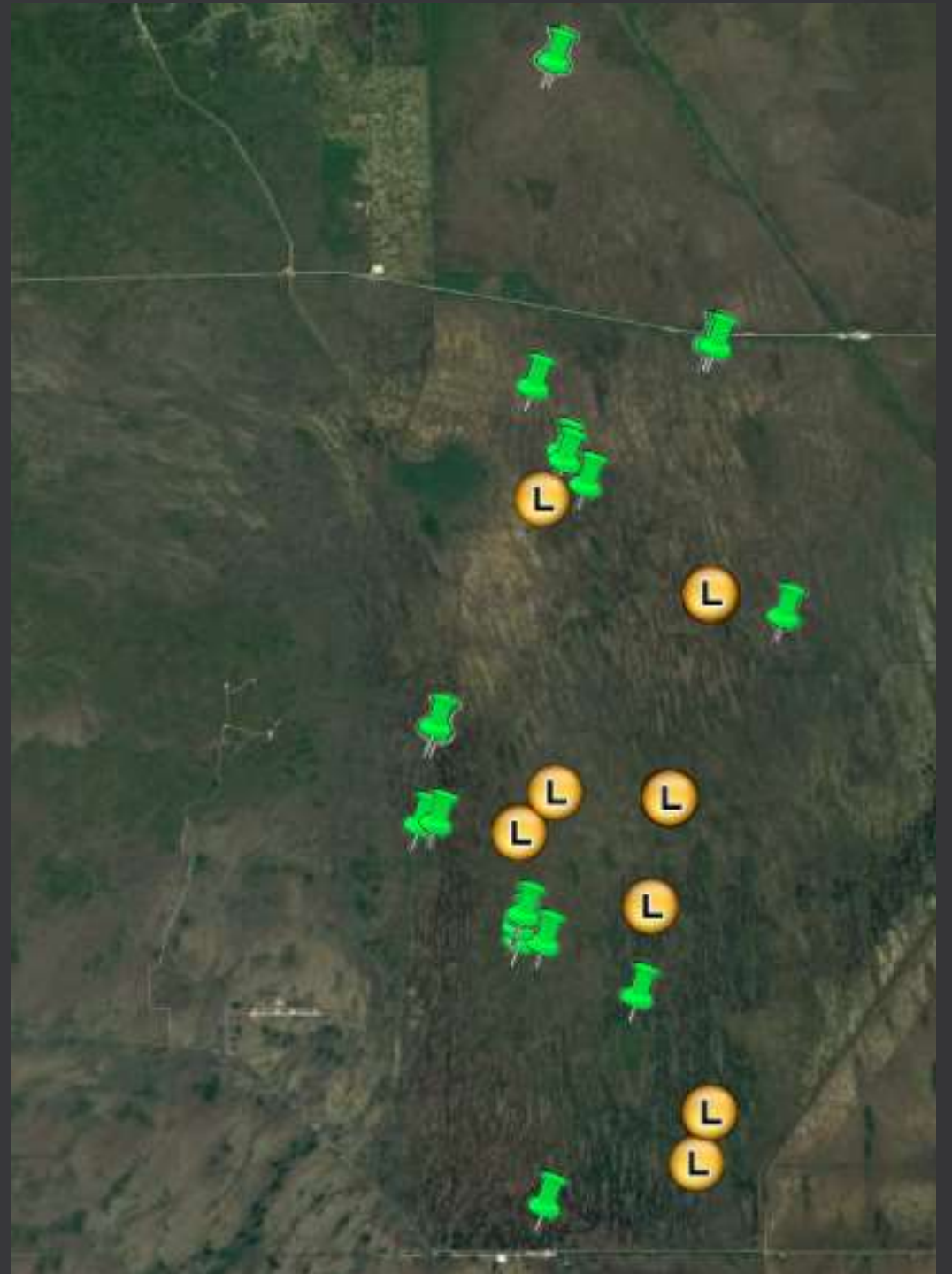


Previous Surveys (2007-2015)

- *L. microphyllum* was found in 12 islands in 3A

Current Survey (2016-2017)

- *L. microphyllum* has been found in or near 8 islands in 3A. Surveys are ongoing.





Current Survey (2016-2017)

C: *Casuarina equisetifolia*

L: *Ludwigia peruviana*

M: *Melaleuca quinquenervia*

O: *Oeceoclades maculata*





















