INTEGRATED PEST MANAGEMENT PLAN UPDATE

OUTLINE

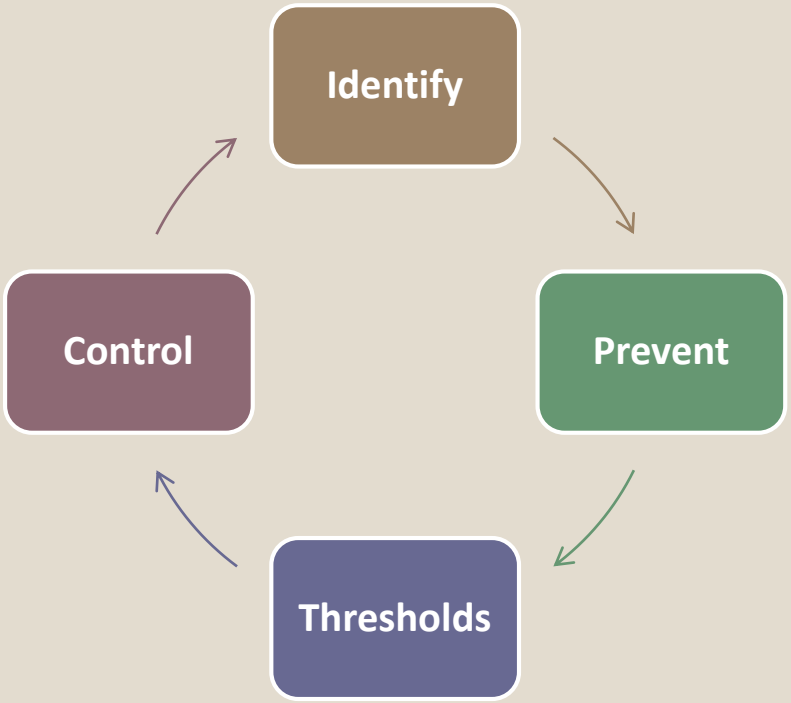
- Background on IPM
- Procedural Guidelines
- IPM Program
- Aquatic Weed Test Sites
- Alternative Technologies

INTEGRATED PEST MANAGEMENT

BACKGROUND

- On September 25th the Board directed staff to implement an Integrated Pest Management (IPM) Program
- The Pesticide Stewardship Working Group has been tasked with developing the IPM Program
- Consists of members from the Parks, General Services, Growth Management, Utilities and Solid Waste, Public Works Departments, and UF/IFAS Extension

INTEGRATED PEST MANAGEMENT



- Effective and environmentally sensitive
- Focuses on prevention
- Control is based on action thresholds

PROCEDURAL GUIDELINES

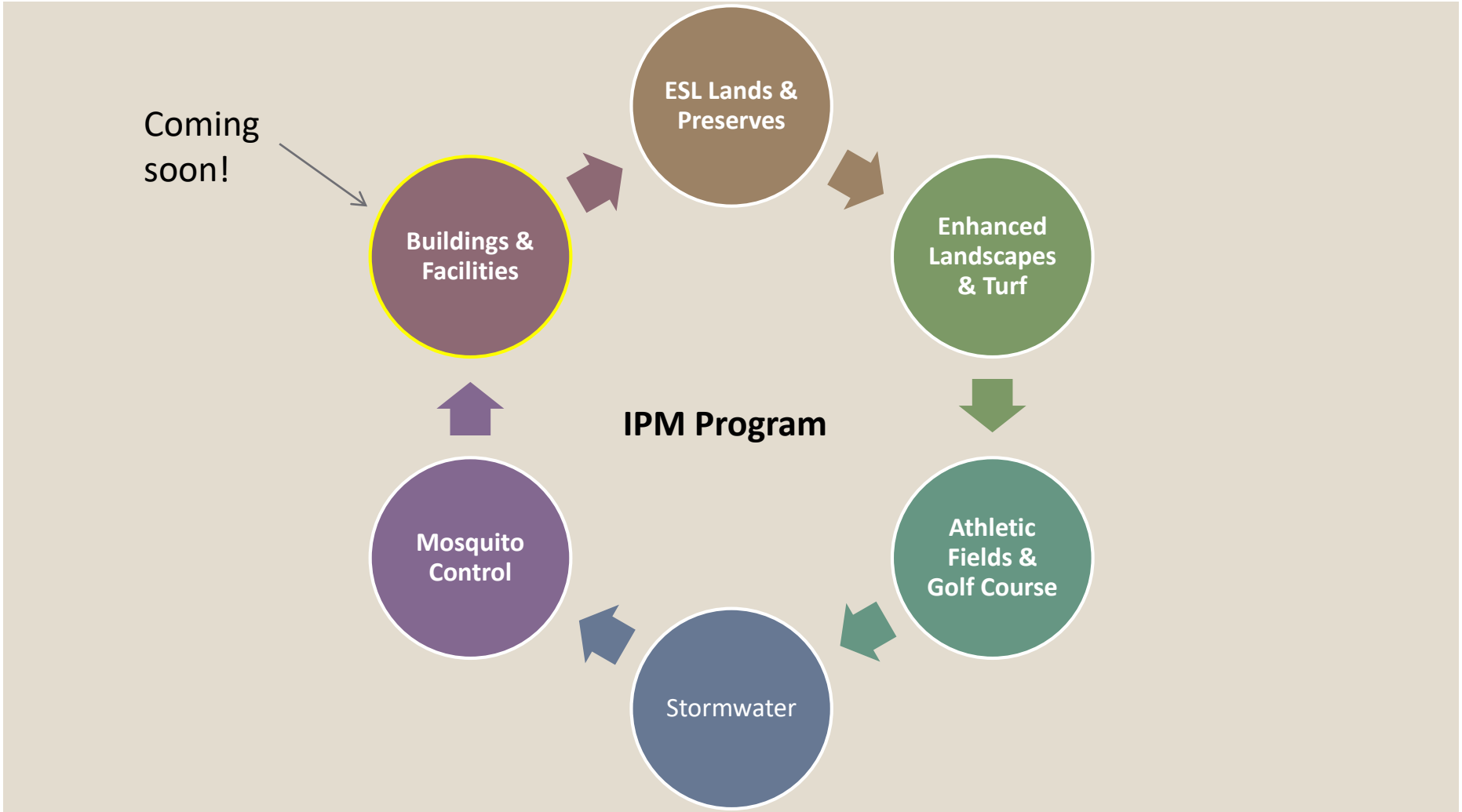
PROCEDURAL GUIDELINES

- Describes the reason behind the IPM program
- Provides definitions and outlines the protocol to follow for developing the IPM program
- Outlines Pesticide Stewardship Working Group, Department, Applicator, Contract Manager, and Contractor responsibilities

MARTIN COUNTY IPM PROGRAM

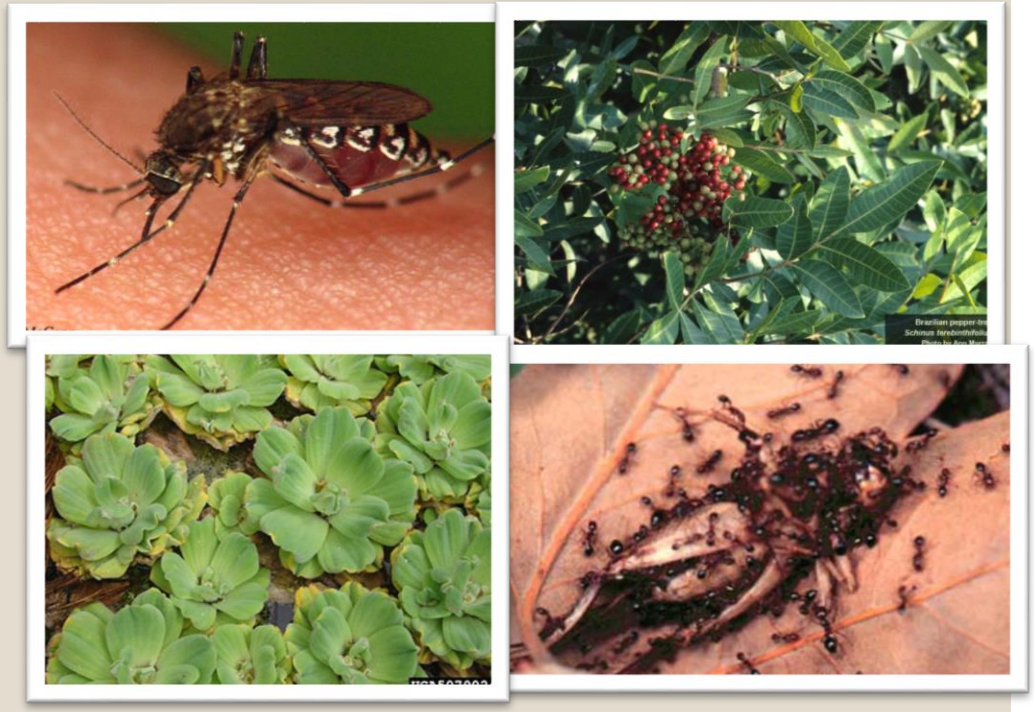
IPM PROGRAM DOCUMENT

- Areas of responsibility and maintenance
- Common pest problems
- Scouting and inspection procedures
- Control options
- Personnel and licensing
- Pesticide storage facilities
- Current contracts
- Cooperative agencies
- Preserve area management plans


Coming soon!
ESL Lands & Preserves
Enhanced Landscapes & Turf
Athletic Fields & Golf Course
Stormwater
Mosquito Control
Buildings & Facilities
IPM Program

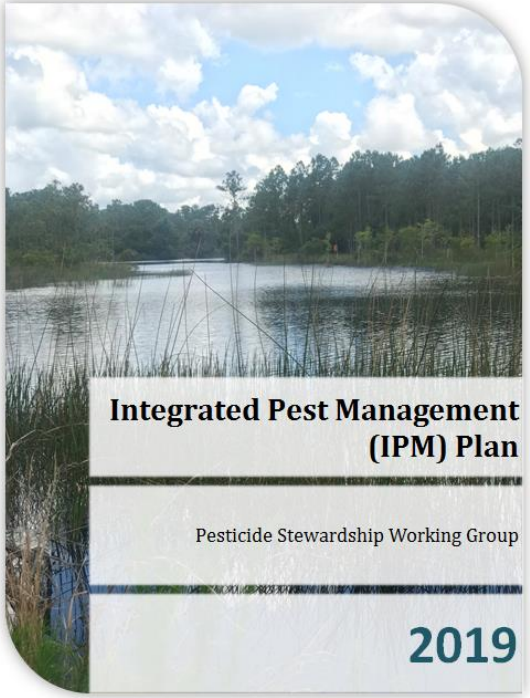
PESTS, SCOUTING, CONTROL

- Outlined the highest priority pests
- Set inspection frequency
- Set action thresholds
- Outlined control options



LIVING DOCUMENT

- Continue to update plan as new technologies and best practices are implemented
- Continue to evaluate alternatives
- Building and facilities sections



AQUATIC WEED TEST SITES

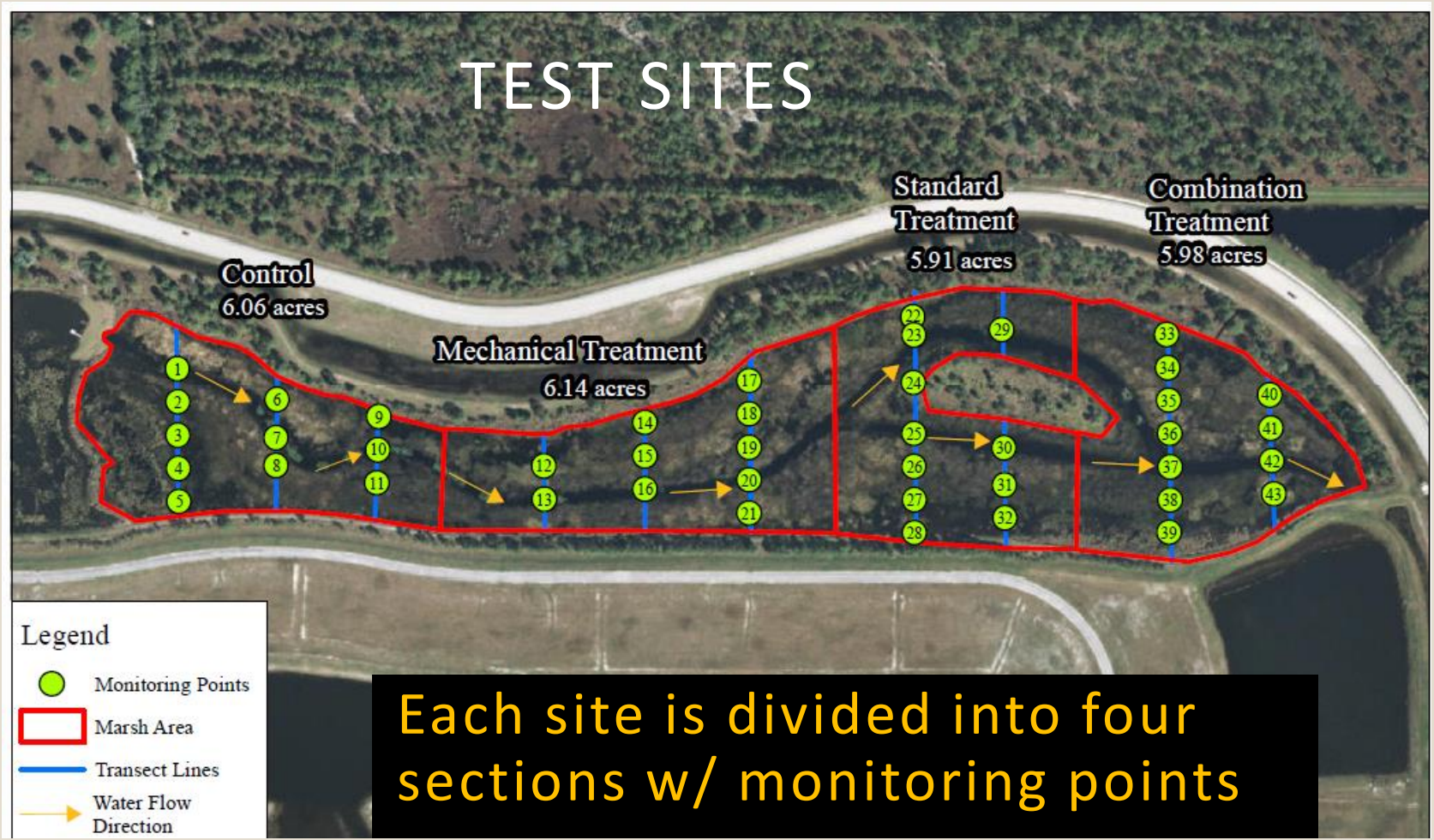
AQUATIC WEED CONTROL

- Concerns over use of herbicides in and around waterbodies
- Goal is to find management strategy to minimize use in these areas

TEST SITES

- Established 3 test sites to assess control options over a 9 month period
  - Citrus Blvd STA
  - Manatee Creek STA
  - Willoughby Ditch

TEST SITES



Each site is divided into four sections w/ monitoring points

SITE MONITORING

- Conduct vegetative surveys at monitoring points
- Identifying species present
- Classifying native vs. invasive coverages

PRELIMINARY RESULTS

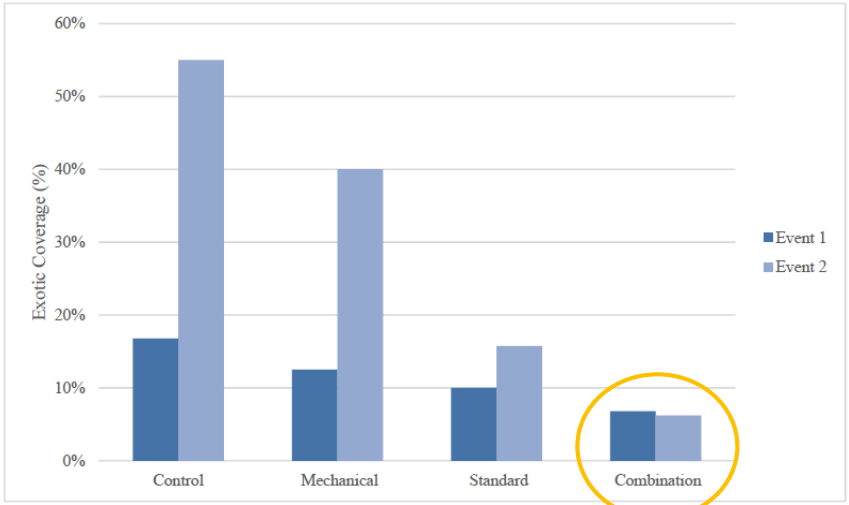


Figure 2. Exotic coverage comparison at Manatee STA amongst the four different treatments.

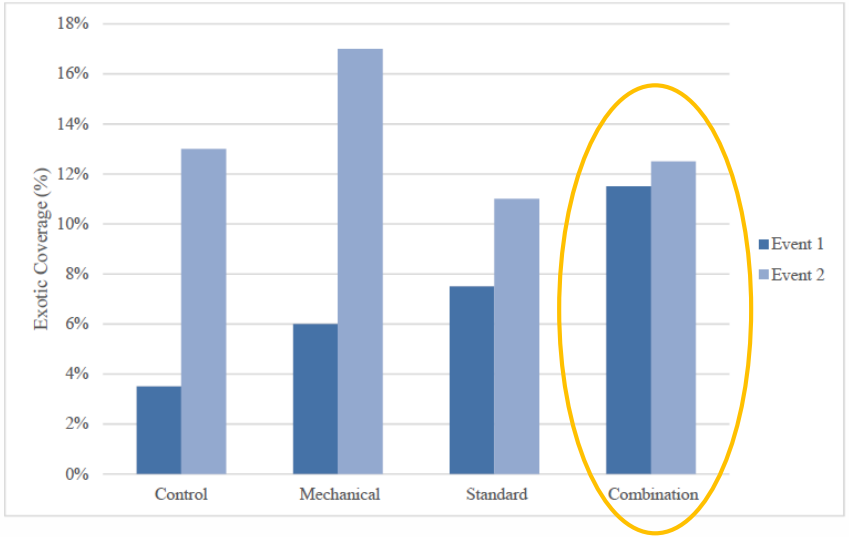


Figure 3. Exotic coverage comparison at Mosquito Ditch AD 280 amongst the four different treatments.

- At Manatee and mosquito ditch AD280, combination was the most effective treatment method

PRELIMINARY RESULTS

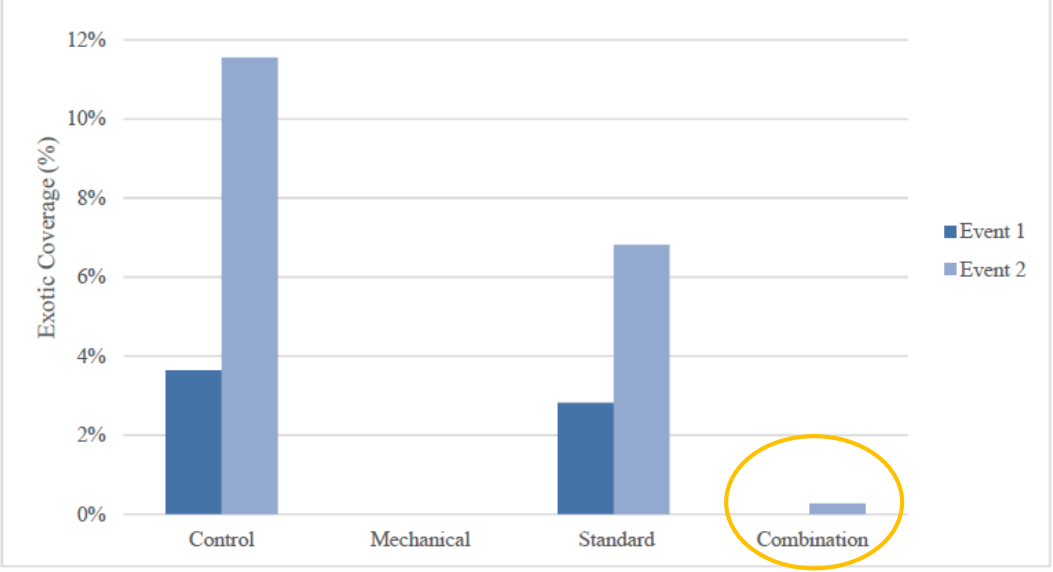


Figure 1. Exotic coverage comparison at Citrus STA amongst the four different treatments.

- At Citrus, mechanical treatment area had zero % exotics during both monitoring events. However, out of the other three treatments, combination was the most effective.

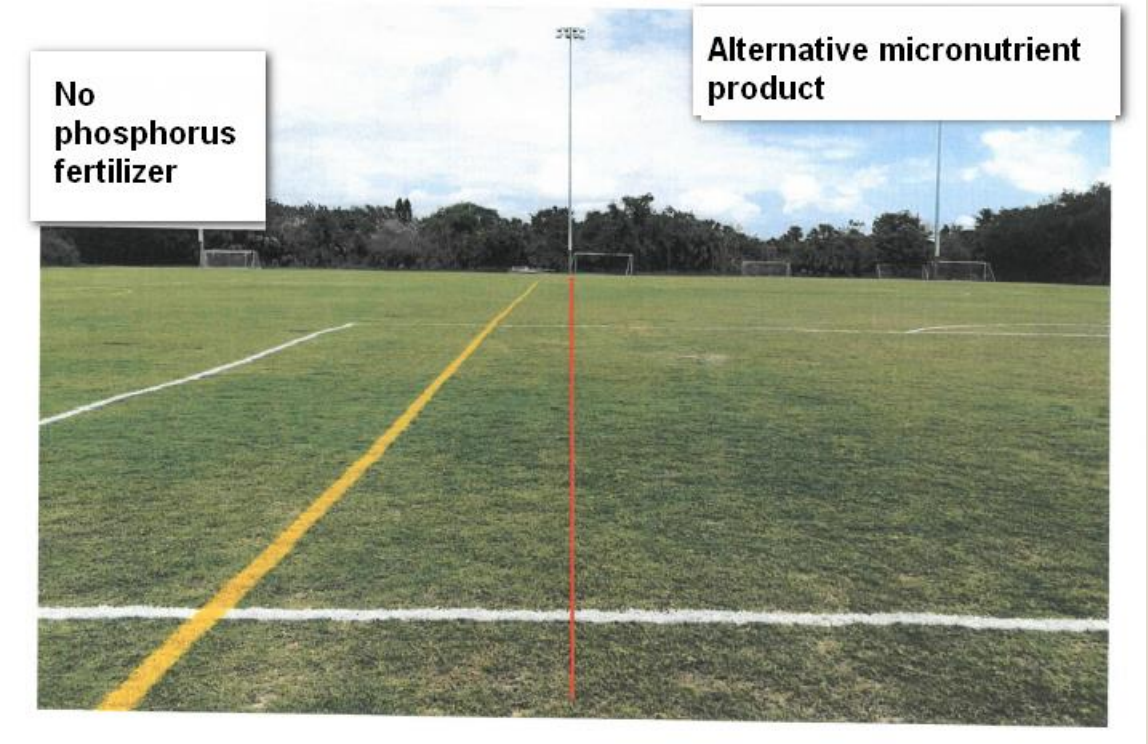
ALTERNATIVE TECHNOLOGIES

ALTERNATIVE TECHNOLOGIES

- Ongoing initiative
  - Fertilizer alternatives
  - Mechanical weed removal (Aquatic and Terrestrial)
  - Biological control agents
  - Glyphosate alternatives
  - Steam

FERTILIZER ALTERNATIVES

- Evaluated a fertilizer alternative product at Doc Myers Park



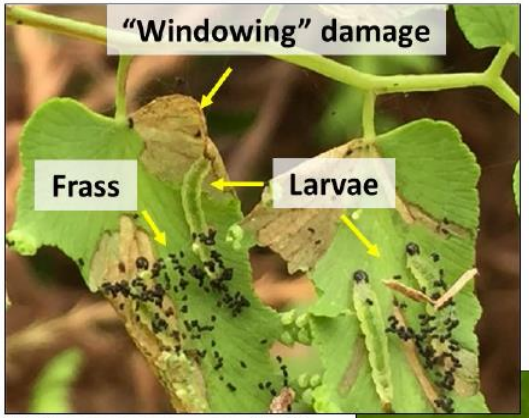
MECHANICAL WEED REMOVAL

Removal of Water Lettuce

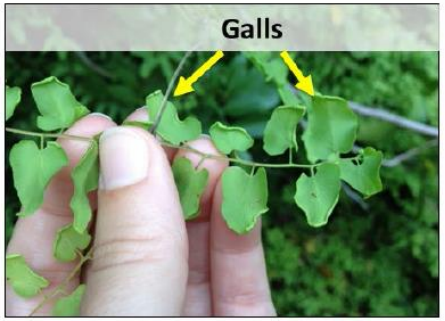
Aquatic Maintenance Vessel

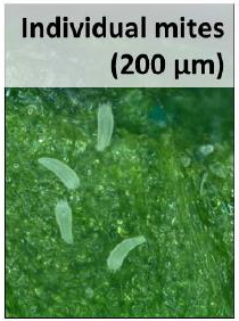
Skid Steer-Mounted Shredder

BIOLOGICAL CONTROL AGENTS



Brown Lygodium Moth





Lygodium Mite

GLYPHOSATE ALTERNATIVES

- Torpedo and para grass can be difficult to control
- Testing alternative chemicals- sethoxydim

QUESTIONS