

The FNAI Invasive Plants Program

*What we do and
how we can help
the Northwest FL
CISMA*

*Frank Price – Invasive Plants
Program Manager*



FLORIDA
Natural Areas
INVENTORY

Florida Natural Areas Inventory

- Staff of 32
- Part of FUS and the NatureServe network
- 100% contract funded
- Provide data and analyses that guide conservation planning and land management



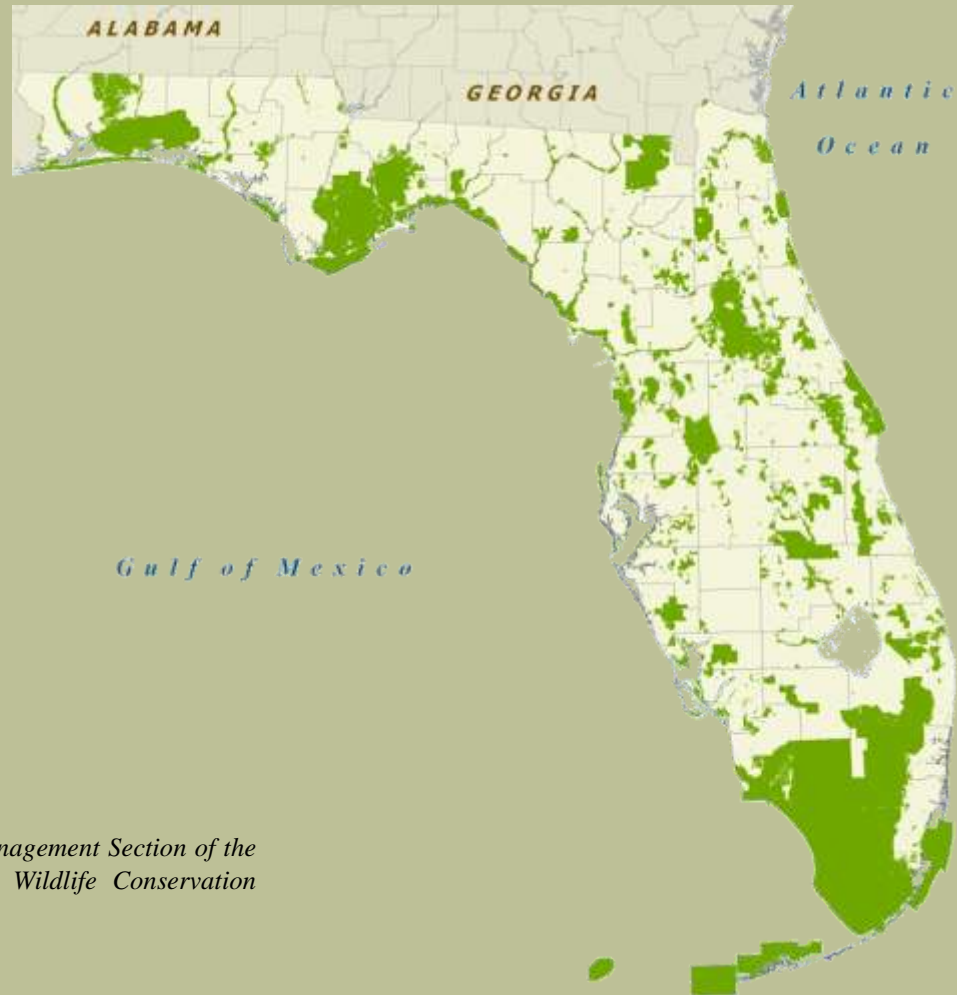
Florida Invasive Plants Geodatabase

In final year of contract to map invasive plants on all 1,684 public conservation lands in the state

“...establish a baseline record and a monitoring tool...”

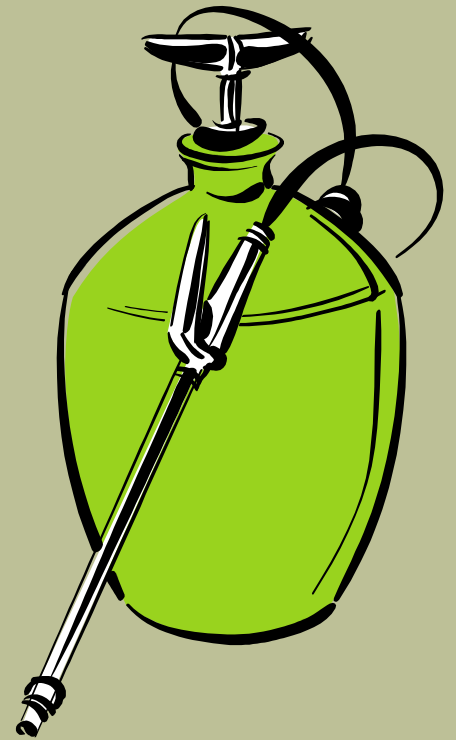


Invasive Plant Management Section of the Florida Fish and Wildlife Conservation Commission.



The value of mapping

- Money and chemicals becoming increasingly scarce
- FWC herbicide bank bracing for more cuts
- The 6 P's:
 - Pest Plant Prioritization
 - Prevents Pissing Away
 - Pesticide



Project has 3 components:

1. Create a system to map and monitor the distribution of invasive species (monitoring tool)
2. Build a baseline record
 - Species distributions
 - Infested Acres
3. Web interface for public access to data and electronic data submission (iMapInvasives)

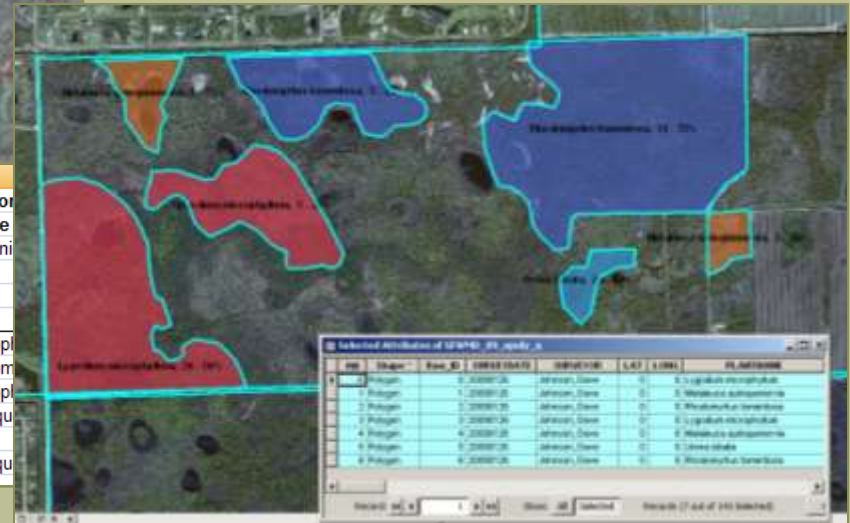
Data processing

- GIS shapefiles
- Maps + Excel spreadsheet with attributes
- Paper maps + field survey form
- Other (no napkins)

Polygons, Lines, or Points in geodatabase

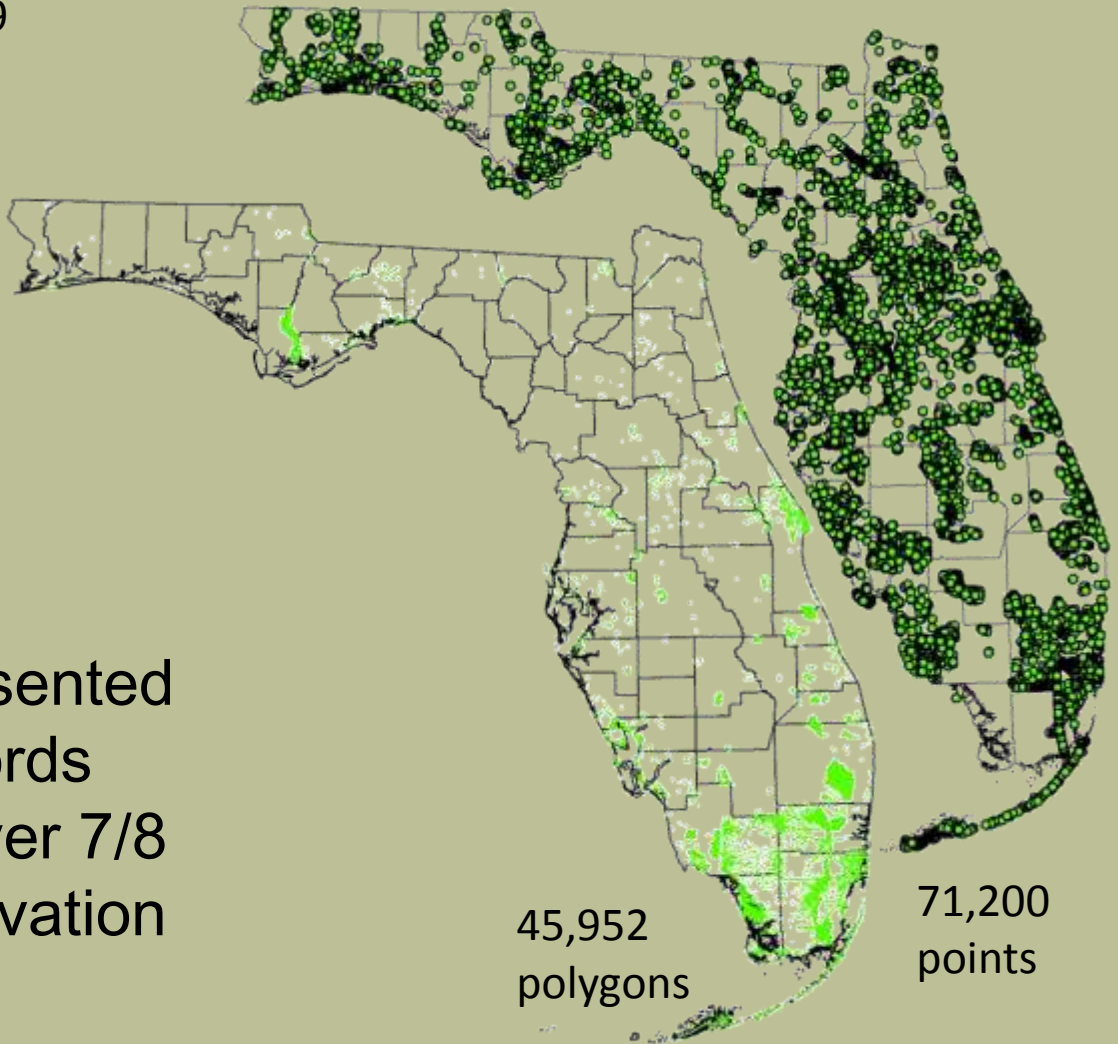
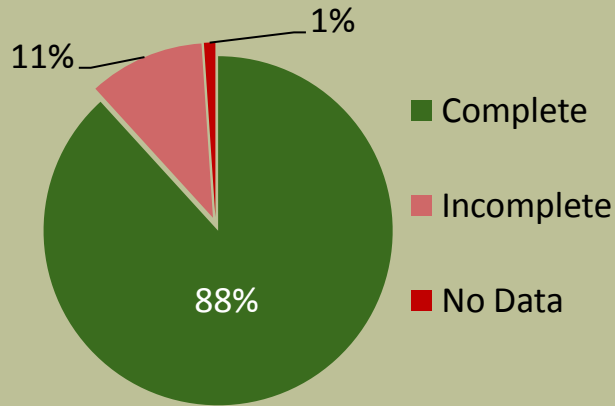


	A	B	C	D	E	F
1	FNAI Exotics Field Survey Spreadsheet. Record your data from the Field Survey Form.					
2	If using this form to relate to polygons on hand-drawn maps, be sure to use one line					
3	For records that relate to hand drawn maps, please mail us the original and send an electronic					
4						
5						
6	SITENAME	SURVEYID	SURVEYOR	POLY IDENT	POINT ID	PLANTNAME
8	Cypress Creek/Loxahatchee	20090126	Dave Johnson	2		Lygodium microphyllum
9	Cypress Creek/Loxahatchee	20090126	Dave Johnson	3		Rhodomyrtus tomentosa
10	Cypress Creek/Loxahatchee	20090126	Dave Johnson	4		Lygodium microphyllum
11	Cypress Creek/Loxahatchee	20090126	Dave Johnson	5		Melaleuca quinqueangula
12	Cypress Creek/Loxahatchee	20090126	Dave Johnson	6		Urena lobata
13	Cypress Creek/Loxahatchee	20090126	Dave Johnson	7		Melaleuca quinqueangula



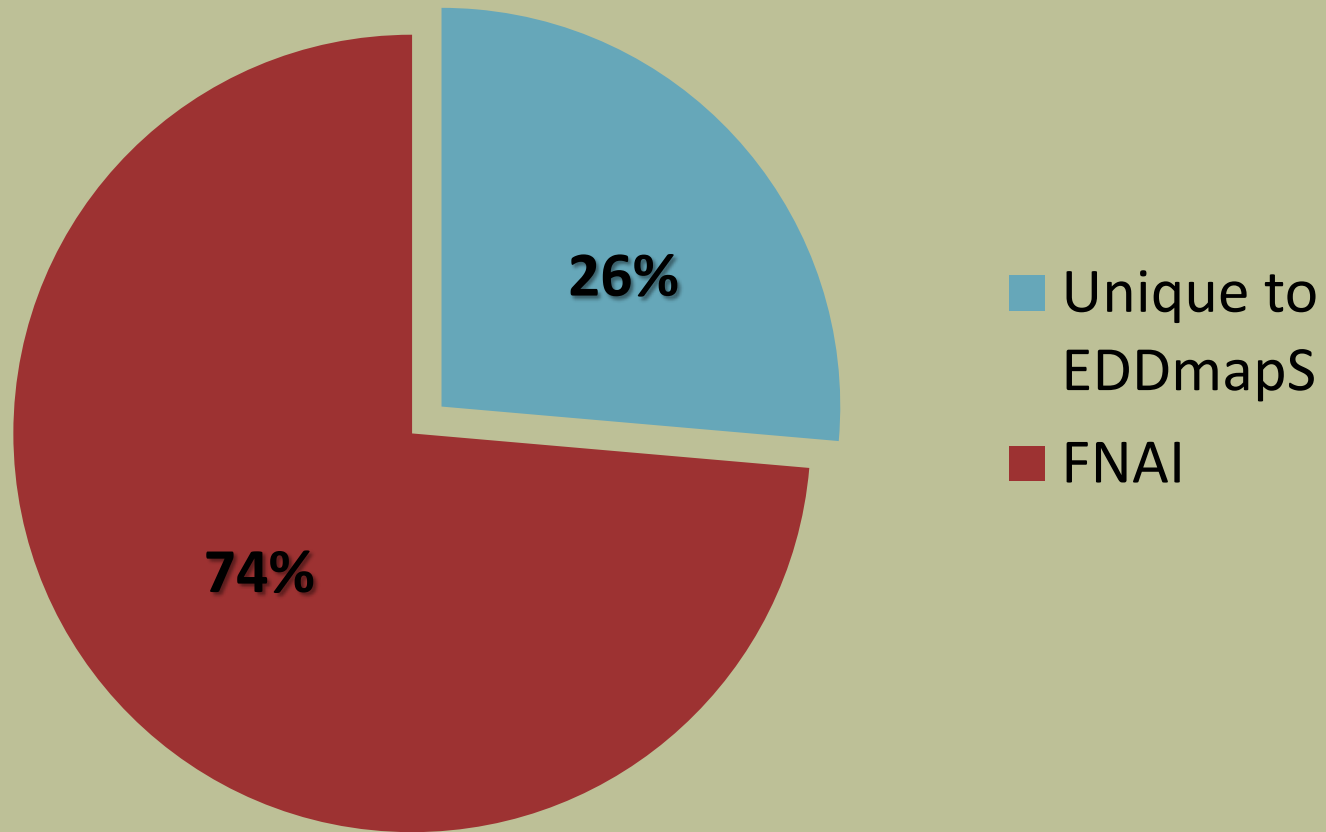
2. The baseline record

Acreage Surveyed as of Dec '09



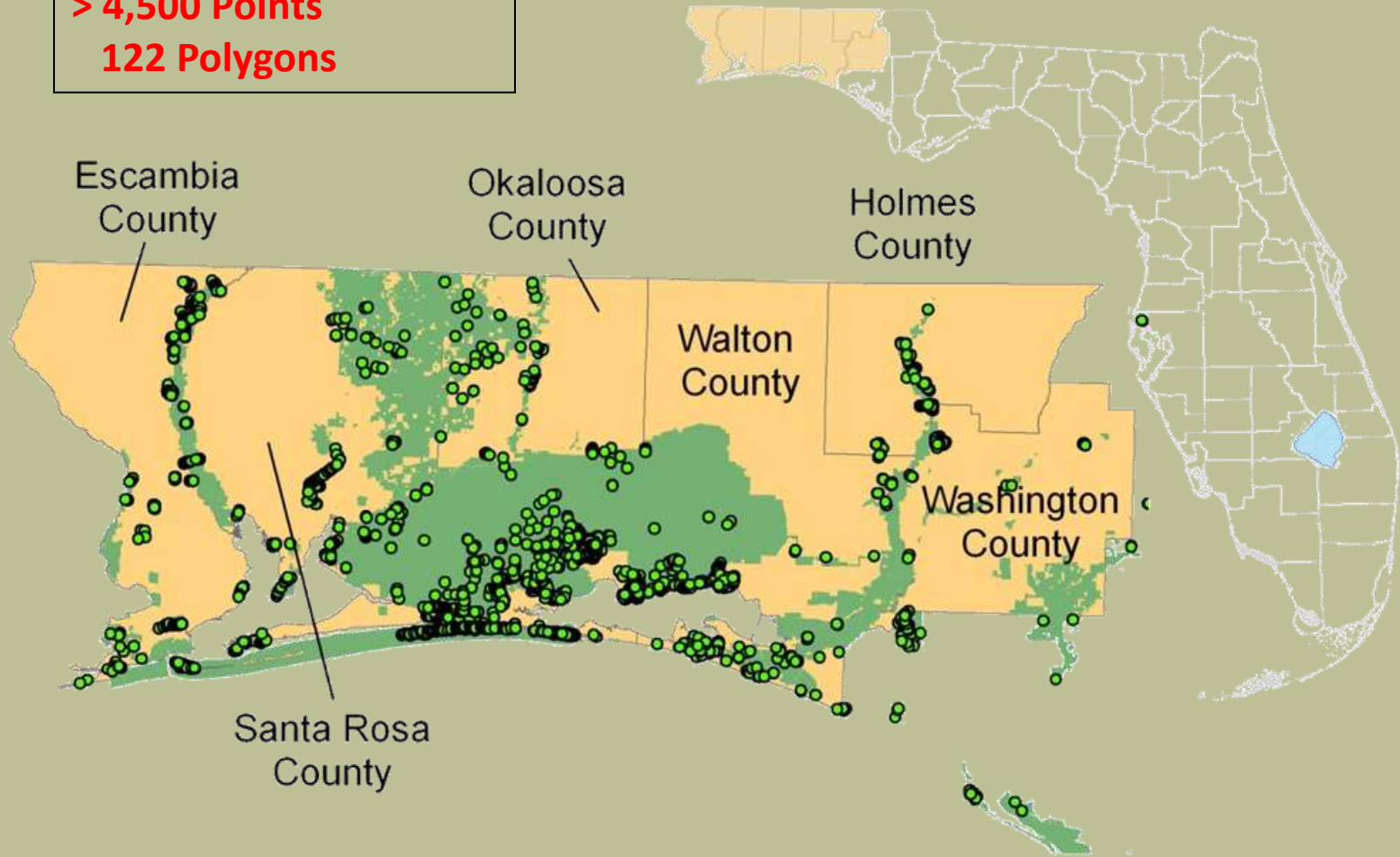
- A snapshot in time
- 139 species represented
- Over 117,000 records provide data for over 7/8 of Florida's conservation lands !

Florida Invasive Plant Data



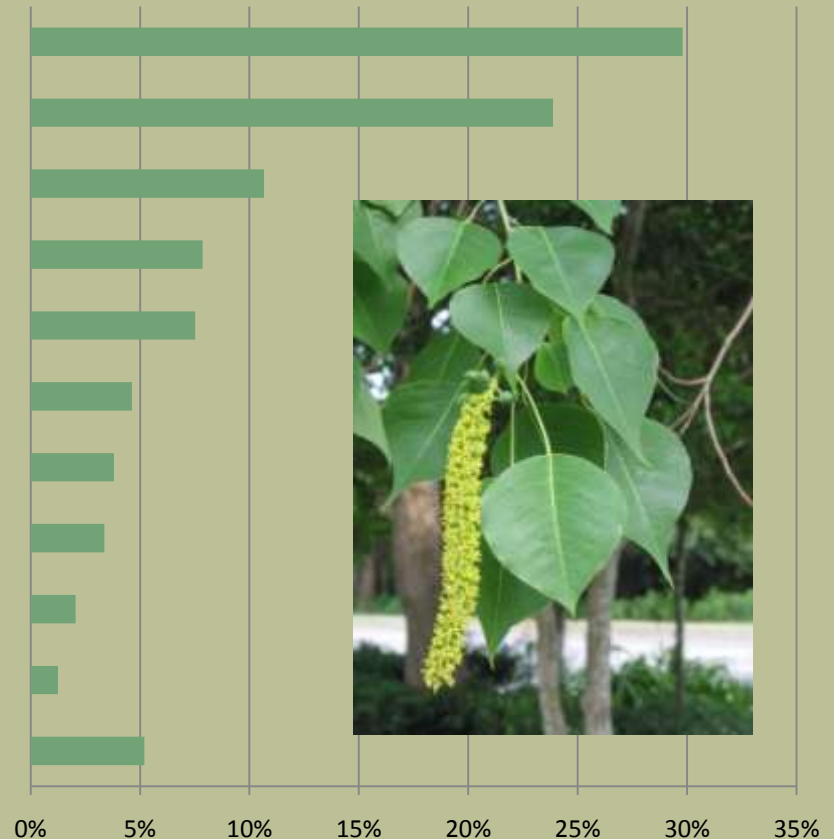
Northwest CISMA

> 4,500 Points
122 Polygons



Top 10 most frequently occurring species

1	Chinese tallow	30%
2	torpedo grass	24%
3	mimosa	11%
4	Japanese climbing fern	8%
5	Japanese honeysuckle	8%
6	Chinese privet	5%
7	cogon grass	4%
8	Chinese wisteria	3%
9	lantana	2%
10	camphor	1%
	EVERYTHING ELSE	5%



“In 2011 prioritize species on list using a ranking system (USGS, other) and best available information from CISMA partners, FLEPPC, FISP, FNAI, IFAS and EDDMapS.”

Top 10 species by Gross Acreage

<u>Plant</u>	<u>Acres</u>
Chinese tallow	936
torpedo grass	720
Japanese climbing fern	388
Chinese privet	203
mimosa	188
lantana	125
Japanese honeysuckle	122
cogon grass	106
Chinese wisteria	48
camphor tree	25




Species to Watch

“In 2011 create a list of possible EDRR species from best available information from CISMA partners, adjacent CISMAs, CISMA prevention alert system, FLEPPC, FISP, FNAI, IFAS and EDDMapS.”




Custom summaries



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32307
(850) 224-8297
(850) 681-9264 Fax
www.fnai.org

Florida Natural Areas Inventory



Florida Invasive Plants Geodatabase Data Report

Potential EDRR list for TC CISMA: FLEPPC Category I and II Species found within 150 mile buffer of TC CISMA with 10 or fewer occurrences within the CISMA

As of January 12, 2010, the Florida Invasive Plants Geodatabase contains 310 recorded infestations of Brazilian Pepper (*Schinus terebinthifolius*) on public conservation lands in northeast Florida (Nassau, Duval, St. Johns, Flagler, and Volusia counties). The level of infestation generally increases from North to South. The infestation records can be characterized as follows:


Plant Name		
Cinnamon		
Solanum	Number of polygons:	255
Albizia	(see FNAI_NE_FL_Schinus_Polys_20100112.shp)	
Leucaena	Number of points:	55
Sapium	(see FNAI_NE_FL_Schinus_Polys_20100112.shp)	
Hymenocallis		
Neyraudia	Total number of polygons:	
Peperomia		

NOTE: All records are at this scale

Invasives Acreage Example Blue Spring State Park

Figure 1: Recorded acreage by species:


Species	Grass/Acre	Invasive/Acre
Albizia julibrissin	0.01	0.0765
Ardisia crenata	218.44	4.4027
Bauhinia variegata	0.01	0.0902
Cinnamomum camphora	0.06	0.0122
Colocasia esculenta	97.49	1.3148
Dioscorea bulbifera	1.09	0.1507
Imperata cylindrica	0.01	0.0712
Lantana camara	0.12	0.0154
Lonicera japonica	0.01	0.0015
Ludwigia peruviana	0.01	0.0002
Nepenthes condifolia	2.01	1.2038
Panicum maximum	0.01	0.0002
Rhynchosytrum repens	0.01	0.0002
Ricinus communis	0.01	0.0002
Sapium sebiferum	0.01	0.0002
Solanum viarum	0.06	0.0008
Urena lobata	1.02	0.0008



Brazilian pepper on Northeast Florida Conservation Lands

A summary produced using the Florida Invasive Plants Geodatabase

As of January 12, 2010, the Florida Invasive Plants Geodatabase contains 310 recorded infestations of Brazilian Pepper (*Schinus terebinthifolius*) on public conservation lands in northeast Florida (Nassau, Duval, St. Johns, Flagler, and Volusia counties). The level of infestation generally increases from North to South.



- Analysis can answer complex spatial questions:
 - Standardized comparisons
 - How big is the problem?
 - Where to treat?
 - Prioritization?
 - Effectiveness?
 - Efficiency?

How you can get FLInv data

- Download point and polygons shapefiles from FNAI website
- View data as points on iMap Invasives or the Eddmaps/FLEPPC/CISMA websites
- E-mail Frank for special data requests or analyses



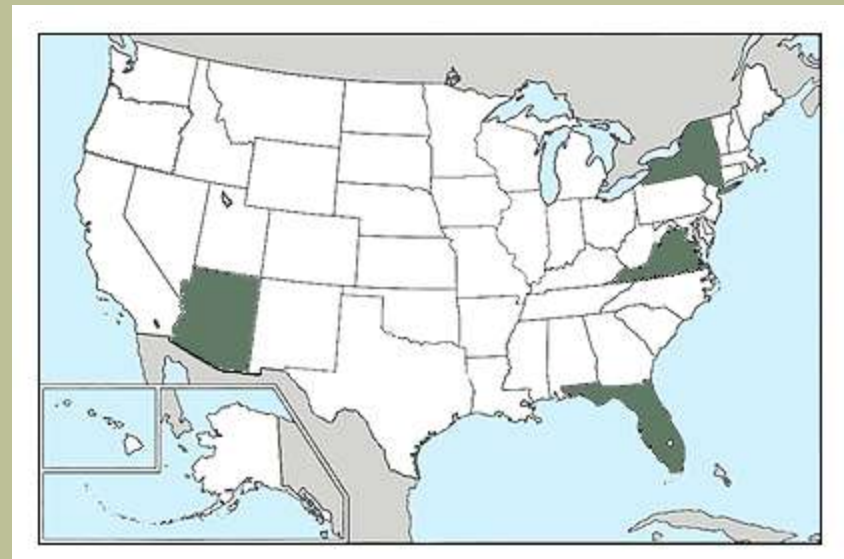
3. The web interface - iMapInvasives

- A National ALL Taxa Invasive Species Mapping Tool
- In final stages of development



Strengths of iMapInvasives

- Answering complex questions made easy
- Based on FNAI system+
- Will support mapping of infestations using polygons
- Online GIS allows spatial query, analysis and reporting



Questions? Suggestions? Requests?

www.fnai.org/invasivespecies.cfm

850-224-8207 ext 210

fprice@fnai.org

- 95,586 total in Florida EDDMapS 01/08/2009
- 53,609 from fnai
- 41,977 unique in eddm maps
- 105,462 records of fleppc species in FLInv 147439 total invasive plant records
- 72% of the invasive plant records in FL have been compiled by FNAI and we still have a backlog
- 36% of these are polygons

- An information source to guide management
- Focus more on showing with examples – tell story
- Answer the question: What is the database good for?
- Prioritization prevents... (maintenance, most bang for buck)
- Conservation land data represent the species that pose the most immediate threat to Florida's native species and natural communities - these are not always the species that are the most common on roadsides and disturbed vacant lots...
- could generate some quick analysis for each of the CISMAs (except Osceola) similar to what you did for TC-CISMA
- caveats – basically that most data is from public conservation lands and not roadsides or private lands
- MA Summary examples
- State wide analyses
- Active detection Network support...
- CFLS support
- MAPS
- Aerial Surveys