Ten Years of Invasive Species Data Collection in the Greater Everglades

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Tifton GA
Center for Invasive Species and Ecosystem Health

• Partnership between College of Agricultural and Environmental Sciences and School of Forestry and Natural Resources

• Focus on Invasive Species, Integrated Pest Management and Forest Health

• Use Information Technology to provide information to scientists, professionals & the public

• Build partnerships across agencies, organizations, disciplines and borders
What is EDDMapS?

- Existing range and leading edge of invasive species
- Uses standardized data collection protocols
- Aggregate database
- Tools for data submission
- Verification system
Partners
Website
How Can I Help?
- Educate yourself on known invasive species in your area
- Never plant, transmit, spread, or release invasive species
- Report invasive species occurrences to your local county agent
- Report invasive species to EDDMapS

Smartphone App
IveGot1 brings the power of EDDMapS to your iPhone. Now you can submit invasive species observations directly with your device from the field. These reports are uploaded to EDDMapS and e-mailed directly to local and state verifiers for review.

EDDMapS: Invasive Plant Mapping Handbook
EDDMapS Training Video
REDDy: Reptile Early Detection and Documentation Observer Training Course
Step-By-Step Instructions for Reporting an Invasive Animal Sighting in EDDMapS
Report an Invasive Plant Occurrence

Red fields are required.

Species

*Species*:

Search for a species

Infestation

Status:
- Positive ( )
- Negative ( )
- Treated ( )

Observation Date:

1/02/2015

Infested Area:

Rabbit:

Abundance:

Plant Description:
- Mature
- Sapling/immature
- Seedling/Rosette
- In Flower
- In Fruit
- Seeds
- Comm. Dead
- Unknown

Damage:
- Yes ( )
- No ( )

If you select "Yes", please upload a photo of a leaf with damage below. If possible, please place a blue or white background behind the leaf. Include the word "damage" in the caption.

Location

In addition to State and County, please provide details by placing a marker or listing the physical address on where the sighting occurred.

State:

Florida

County:

Longitude:

Latitude:
Bulk Data Uploader

Batch Name (something you will recognize)

Reporter Name (who should these reports go under)

Joe LaForest

Select files
Add files to the upload queue and click the start button.

<table>
<thead>
<tr>
<th>Filename</th>
<th>Status</th>
<th>Size</th>
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<tr>
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Drag files here.

Add Files

Upload clear

If you are receiving a File Extension error or having trouble uploading a file please email mdfiles@uga.edu or bugwood@uga.edu and we will add your file extension to our accepted list.
**Brazilian peppertree**

*Schinus terebinthifolius* Raddi

<table>
<thead>
<tr>
<th>States</th>
<th>Counties</th>
<th>Points</th>
<th>GIS</th>
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**Record ID:** 4130966

**Status:** Positive

**Location:** Miami-Dade County, Florida

**Source:** Everglades Digital Aerial Sketchmapping

**Project:** EDDMapS Florida

**Comments:** Everglades Digital Area Sketchmapping data 2012-2013

**Gross Area:** 3.8648050833 acres

**Coordinates:** 25.7209803155, -80.6856253052

**Surveyor:** LeRoy Rodgers and Tony Parnas

**Observation Date:** January 1, 2012

**Date Entered:** December 1, 2014

**Year Accuracy:** To the Year

**Percent Cover:** 15

**Source Type:** Joint Federal/State/County
Verification System
Smartphone Apps
IveGot1 Smartphone App Stats

iOS – iPhone and iPad
40,957 downloads +4,594 last year
117,512 upgrades
59 IveGot1 Español

Android
5,830 downloads +823 last year
9,720 updates
4 IveGot1 Español
Elaphe guttata
Corn snake

Status: Native

Length: Maximum length 3½ feet

Body: Slender

Pattern: Back and sides bear alternating reddish, black-bordered blotches; underside boasts a black-and-white checkerboard pattern

Head: A pair of black-edged brown lines converge to form a V-shape on the crown; mouth bears alternating black and white markings

Notes: These snakes are found in a variety of habitats and are frequently encountered throughout the state.
**Python molurus**  
**Burmese python**

**Status:** Nonnative, Invasive

**Length:** Maximum length 25 feet

**Body:** Not as stout as other python species

**Pattern:** Network of dark blotches along back and sides (like the pattern of a giraffe); blotches are irregular, not net-like, diamond-shaped, or round.

**Head:** Dark arrowhead on top of the head; light-colored, longitudinal line; dark wedges almost always present behind and below each eye.

**Notes:** A large wild population is well established in Everglades National Park and surrounding areas.
Schinus terebinthifolius
Brazilian pepper

Appearance: Evergreen shrub or tree to 13 m (43 ft) tall, often with multi-stemmed trunks and branches arching and crossing, forming tangled mazes.

Leaves: Alternate, odd-pinnately compound, with 3–11 leaflets (usually 7–9); elliptic-oblong, 2.5–5 cm (1–2 in) long, with upper surfaces dark green, lower surface paler, and leaflet margins often somewhat toothed. Leaves aromatic when crushed, smelling peppery or like turpentine.

Flowers: Unisexual (dioecious), small, in short-branched clusters at leaf axils of current-season stems; 5 petals, white to 2 mm (0.07 in) long.

Fruit: A small, bright-red spherical drupe.

Ecological threat: Forms dense thickets of tangled woody stems that completely shade out and displace native vegetation. Has displaced some populations of rare listed species. Produces certain agents which appear to suppress other plants growth. FLEPPC Category I.
IveGot1 español – Now Available

Translation by Ernesto Lasso de la Vega, Lee County Hyacinth Control District
Statistics
EDDMapS Florida Statistics

Overall
318,433 County Reports
291,482 Point Reports
1,683 Species
3,788 Reporters

Last Year
13,866 Reports (includes bulk data)
347 Species
950 Reporters

5,838 Web Reports
2,157 iPhone Reports
1,382 Android Reports

971 Web Reports
457 iPhone Reports
257 Android Reports
EDDMapS Florida Statistics

Overall
- Animals: 52%
- Plants: 48%

Last Year
- Animals: 77%
- Plants: 23%
Number of Florida Reporters by Number of Reports

Number of Reporters:
- 3063
- 805
- 123
- 86
- 30
- 18
- 40

Number of Reports:
- 1
- 2-5
- 6-10
- 11-25
- 26-50
- 51-100
- >100
Reviewed data in Florida by number of reporters by year by source type.
Reviewed data in Florida by category by source

Wildlife
- 65% Web
- 24% iOS
- 11% Android

Plants
- 54% Web
- 28% iOS
- 18% Android
Reviewed bulk data in Florida by category

- Bulk Data: 249,219
- Diseases: 62,484
- Insects: 3,388
- Plants: 1,315
- Wildlife: 249,219

Center for Invasive Species and Ecosystem Health
UNIVERSITY OF GEORGIA
Reviewed data in Florida by year by source

Number of Reports

Source
- Web
- Android
- iOS

Years
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
Reviewed bulk data in Florida by year

Bulk Data Count

Record Count


0 10,000 20,000 30,000 40,000 50,000 60,000 70,000
A boater on the St. Johns River spotted an interesting, nonnative visitor while he was fishing near the Brevard/Orange County line.

He quickly called The FWC and officers responded to retrieve the 9+ foot green anaconda. Thanks to the quick reporting by the caller, the officers were able to euthanize the nonnative constrictor before it could escape into the water.

This incident shows how important it is to report sightings of nonnative wildlife including constrictor snakes like this one. If you see nonnative fish and wildlife please report them to our Invasive Species Hotline at 1-888-IveGot1 (1-888-483-4681), online at IVEGOT1.org or by using the free smart phone app IVEGOT1.

If you would like to provide hands-on help to combat nonnatives in Florida, register for the Python Challenge.
What’s Next
Positive
Negative
Treated
Eradicated
Wild Spotter™ - Engaging and empowering the public to help find, map, and prevent invasive species in America’s wilderness areas, wild rivers, and other natural areas. Become a Wild Spotter citizen scientist volunteer, download the Mobile App, and help protect America’s Wild Places!
Facebook: Build Community

PROTECT YOUR BACKCOUNTRY

WILD SPOTTER™
Mapping Invasives in America's Wild Places

Wild Spotter
@mappinginvasives

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Pilot National Forests
Promotional Materials

- Brochures
- Posters
- Stickers
- Rack Cards
- Lapel pins
Welcome to the Spatial Invasive Infestation and Priority Analysis (SIIPA) Tool in EDDMapS

Overview

The Spatial Invasive Infestation and Priority Analysis (SIIPA) tool's webmap version is designed to use data from the Early Detection Distribution and Mapping System (EDDMapS) and apply a prioritization framework to the data, with the goal of assisting property owners, land managers, and project managers with designing a treatment plan for their invasive plant populations.

Prioritization Basics

The SIIPA Model

SIIPA Model in EDDMapS

Contact Us

E-DD MapS

Spatial Invasive Infestation and Priority Analysis

Vers. 1.2 RELEASED OCTOBER 2017

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Do not show this splash screen again.
Select Your Weed Records

- **Directions**
  - First: Zoom into your area of interest on the map. As you zoom in, you will begin to see all of the weed points.
  - Next: You can filter the data by applying any of the **optional** filters:
    - Common Name
    - Scientific Name
    - Weed Rank (Florida Exotic Pest Plant Council class 1 or class 2 weeds)
    - Year
    - State Name
    - County Name
  - Finally: Select one of drawing tools in the tool bar and draw the polygon around your area of interest.

The model will **automatically move you** through the steps as you execute each function.

- Common Name is
- Scientific Name is
EDDMapS 2019

- New responsive modern website design
- Unified branding
- Unified apps
- Annual training and feature release
Key Points

- Available Now!
- Fast and easy to use - no knowledge of GIS
- Aggregate data (not replace) from other systems
- Working toward “complete” county level distribution
- Tool/platform to Facilitate Early Detection and Rapid Response implementation with online data entry forms, e-mail alerts and network of expert verifiers
Key Points

- EDDMapS is a tool that can be used to enhance existing programs
- It is up and working now, and was built to be easily customizable
- Free to use, long term commitment from UGA to support as key product of Center
- Groups don’t have to “buy” in and data is freely shared – costs are for customizations, custom interfaces/apps
Key Points

• One important point to remember is that the public needs something as easy as possible, thus integrating regulated pests with non regulatory plants make sense (IveGot1 model)

• However, we must all work together to make this happen and provide feedback to user when they report something
Talking Points

• How can this help your programs?
• What features are coming?
• What features are needed?
• How can this tool be used for professionals and citizen scientists?
• Where are we going to be in 5, 10, 20 years?
Thanks

www.ivegot1.org
www.eddmaps.org
www.bugwood.org

cbargero@uga.edu