Ten Years of Invasive Species Data Collection in the Greater Everglades

Chuck Bargeron and Rebekah Wallace
University of Georgia
Center for Invasive Species and Ecosystem Health
Tifton GA

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UNIVERSITY OF GEORGIA

EDDMapS
find map track

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

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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

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NAISMA

NORTH AMERICAN INVASIVE SPECIES MANAGEMENT ASSOCIATION

FISP

Florida Invasive Species Partnership

National Association of Invasive Plant Councils

SOUTHEAST EXOTIC PEST PLANT COUNCIL

SE-EPPC

CISMA

Everglades Cooperative Invasive Species Management Area

CENTER FOR AQUATIC
AND INVASIVE PLANTS

The Nature Conservancy
Protecting nature. Preserving life.®

FLORIDA
Natural Areas
INVENTORY

Website

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EDDMapS
Early Detection & Distribution Mapping System

EPPC

FISP
Florida Invasive Species Partnership

Home | Report Sightings | Distribution Maps | Species Information | Tools & Training | My EDDMapS | About | sign out

Statistics

321,748 County Reports
294,513 Point Reports
1,715 Species

Recent Reports in Florida

- New Guinea flatworm by Felix Gonzalez in Miami-Dade County, Florida
- New Guinea flatworm by Melissa Brown in Orange County, Florida
- brown anole by Emily Wagner in Santa Rosa County, Florida
- knight anole by Tom Dussault in Collier County, Florida
- knight anole by Tom Dussault in Collier County, Florida
- More Reports

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.

Download on the App Store | ANDROID APP ON Google play

Educational Resources

- 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

EDDMapS
Early Detection & Distribution Mapping System

FISP

Home | Report Sightings | Distribution Maps | Species Information | Tools & Training | My EDDMapS | About | sign out

PLANTS INSECTS DISEASES WILDLIFE

Report an Invasive Plant Occurrence

Red fields are required.

Species

Pest (?) :

Search for a species

Infestation

Status: Positive (?) Negative (?) Treated (?)

Observation Date (?):

11/02/2018

Infested Area (?):

Select One

Gross Area (?):

Select One

Habitat (?):

Select One

Canopy Closure (?):

Select One

Abundance:

Select One

Plant Description:

Mature | Sapling/Immature | Seedling/Rosette | In Flower | In Fruit | Seeds | Dormant/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

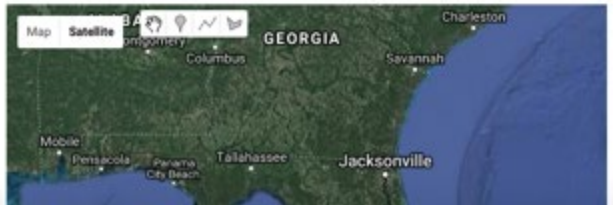
County:

Latitude (?):

Must be expressed in Decimal Degrees (XX.XXXX), and DATUM NAD83/WGS84.

Longitude (?):

Must be expressed in Decimal Degrees (XX.XXXX), and DATUM NAD83/WGS84.



Overview
Reports
Download
Alerts
Projects
Edit Profile
View Profile
My Uploads

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.

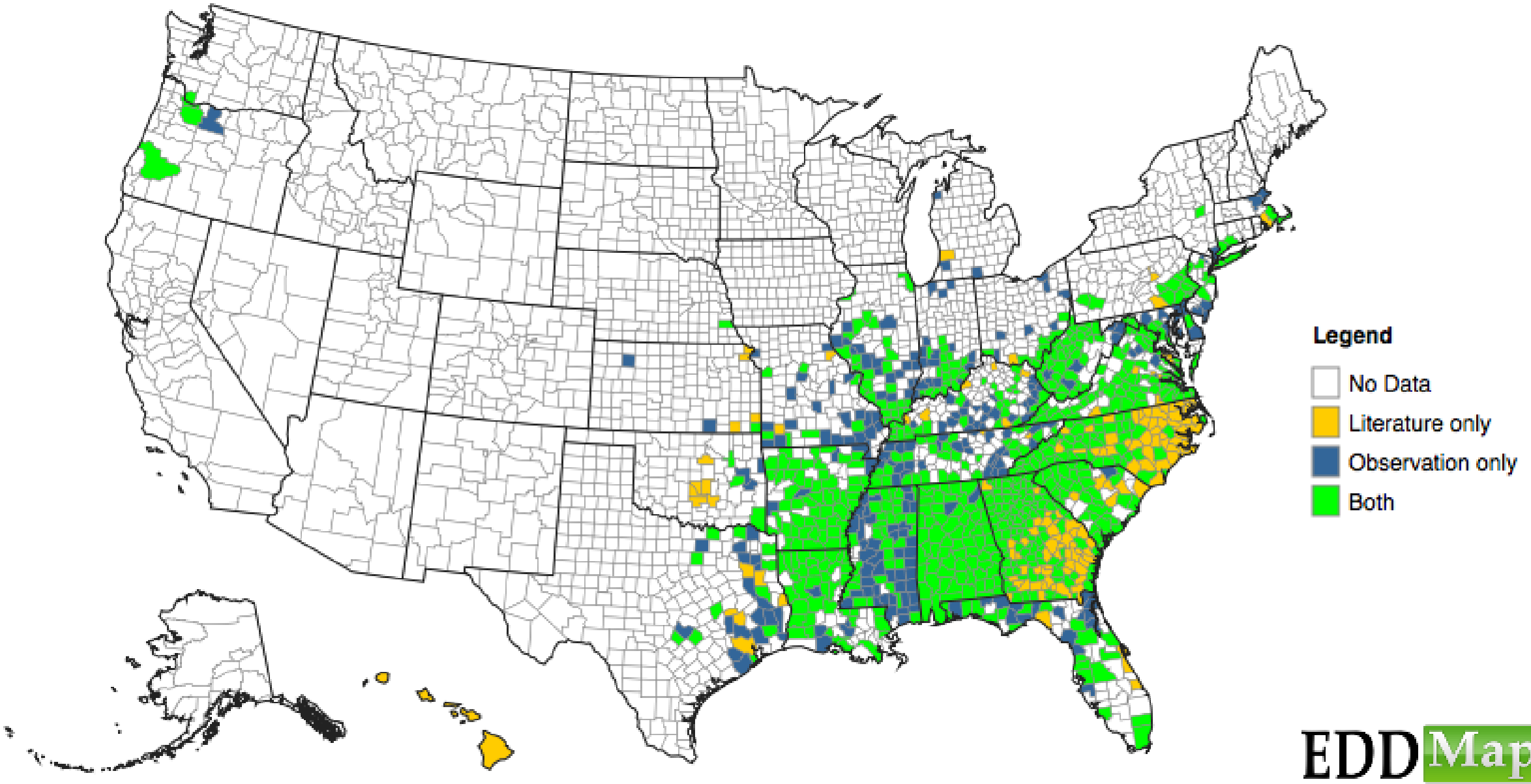
Filename	Status	Size
Drag files here.		

Add Files 0% 0 kb

Upload clear

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

kudzu (Pueraria montana var. lobata)



EDDMapS
Early Detection & Distribution Mapping System

Brazilian peppertree
Schinus terebinthifolius Raddi

USDA PLANTS Symbol:SCTE
Invasive Plant Atlas

States | Counties | Points | GIS

XLS KML GPX Shapefile

32603 points

Share Flag Fullscreen

Brazilian peppertree
Schinus terebinthifolius Raddi

USDA PLANTS Symbol:SCTE
Invasive Plant Atlas

States Counties Points GIS

Download Record (pdf)

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	3.86460804939 acres
Coordinates	25.7205963135, -80.6956253052
ReporterAffiliation	SFWMD/USNP
Surveyor	LeRoy Rodgers and Tony Pernas
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

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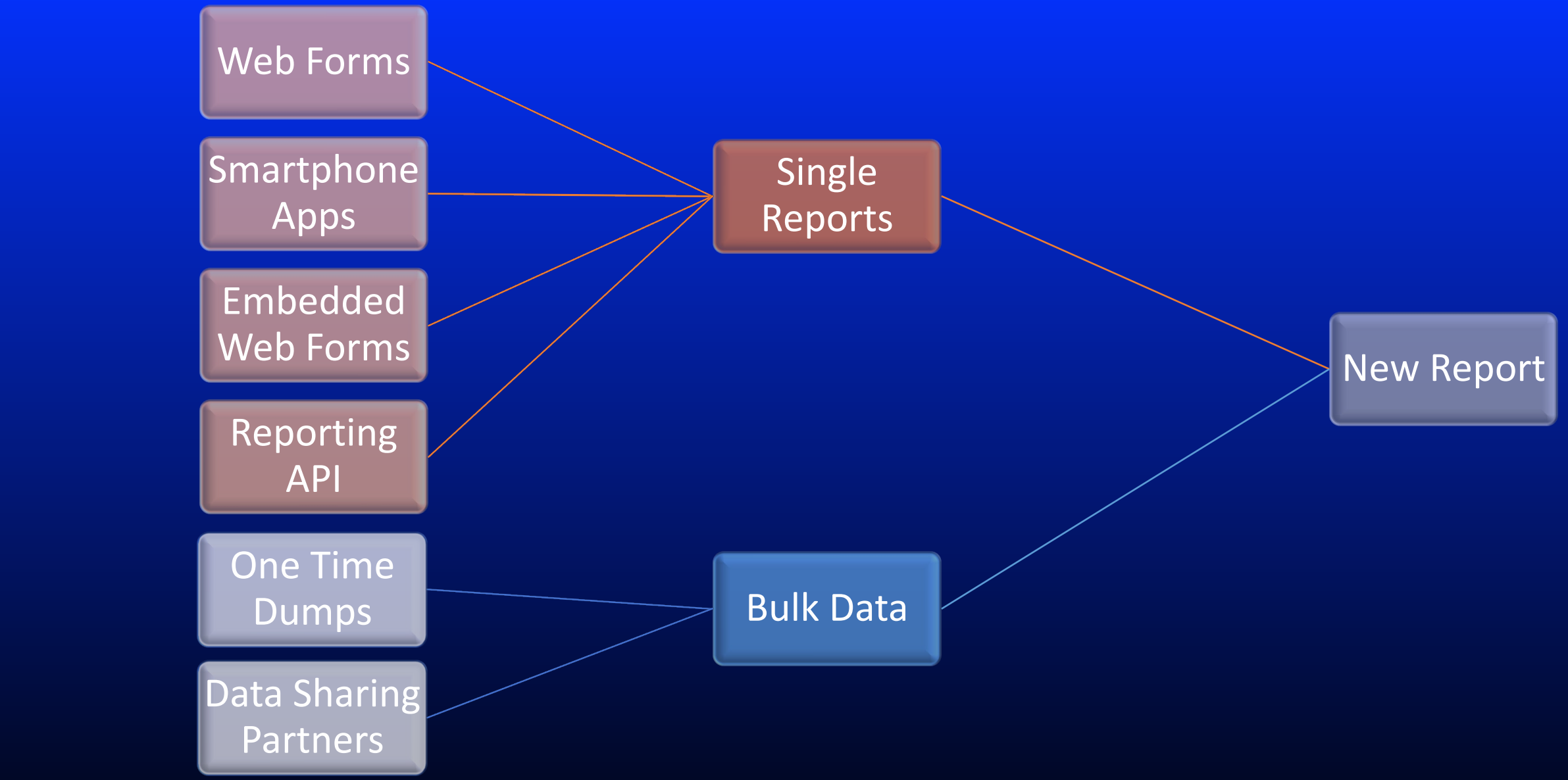

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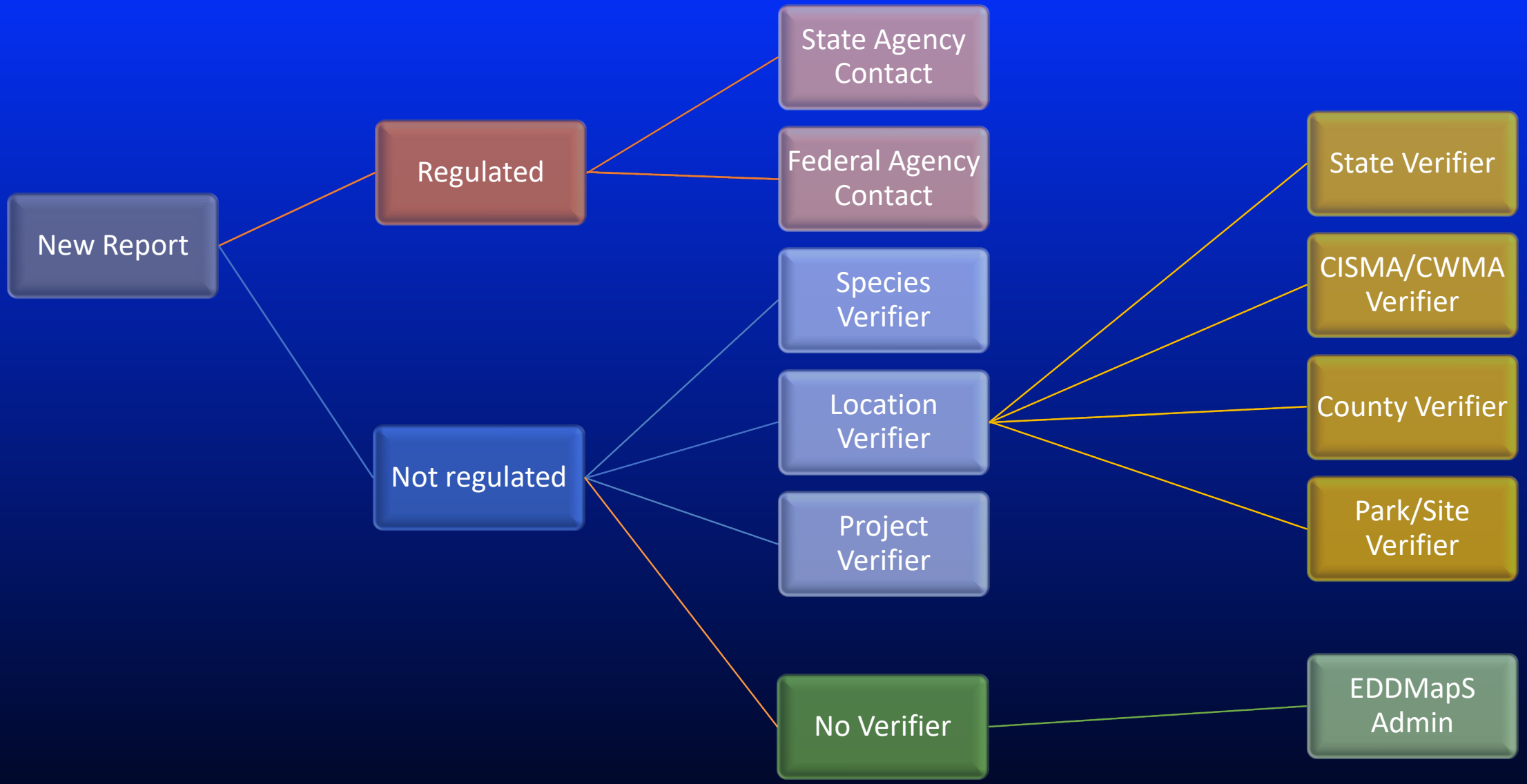

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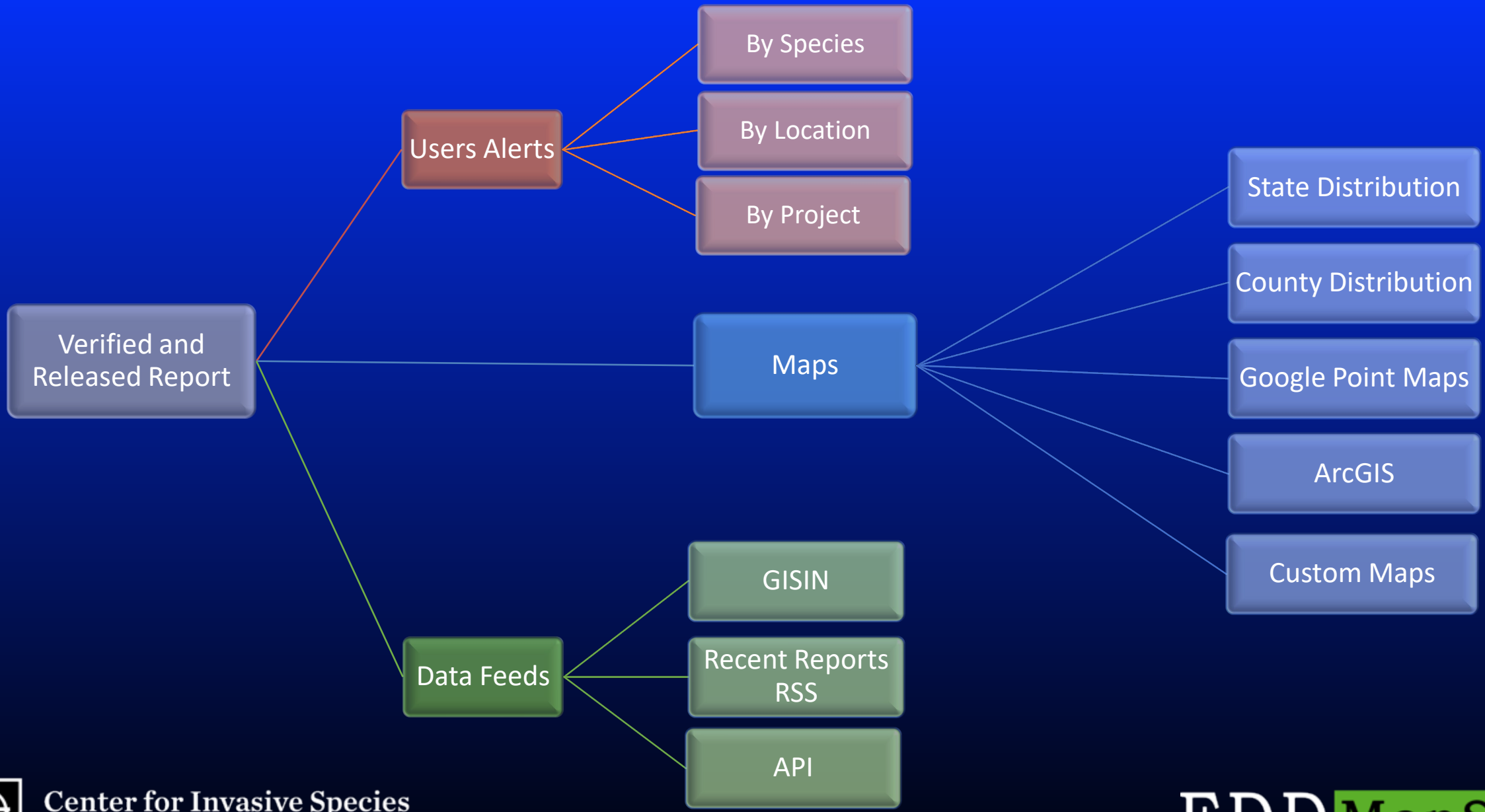

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Smartphone Apps

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IveGot1
Identify and Report
Invasive Animals and Plants
in Florida
EDDMapS
UF
FLORIDA

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

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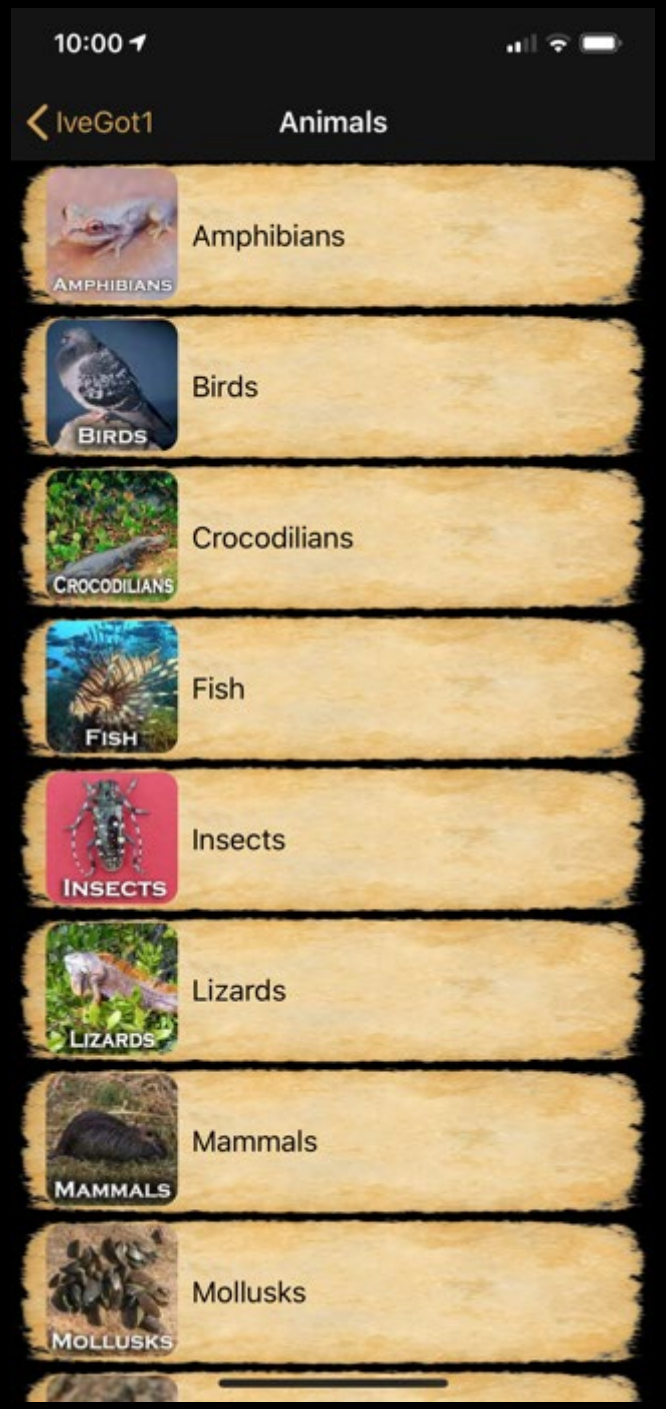
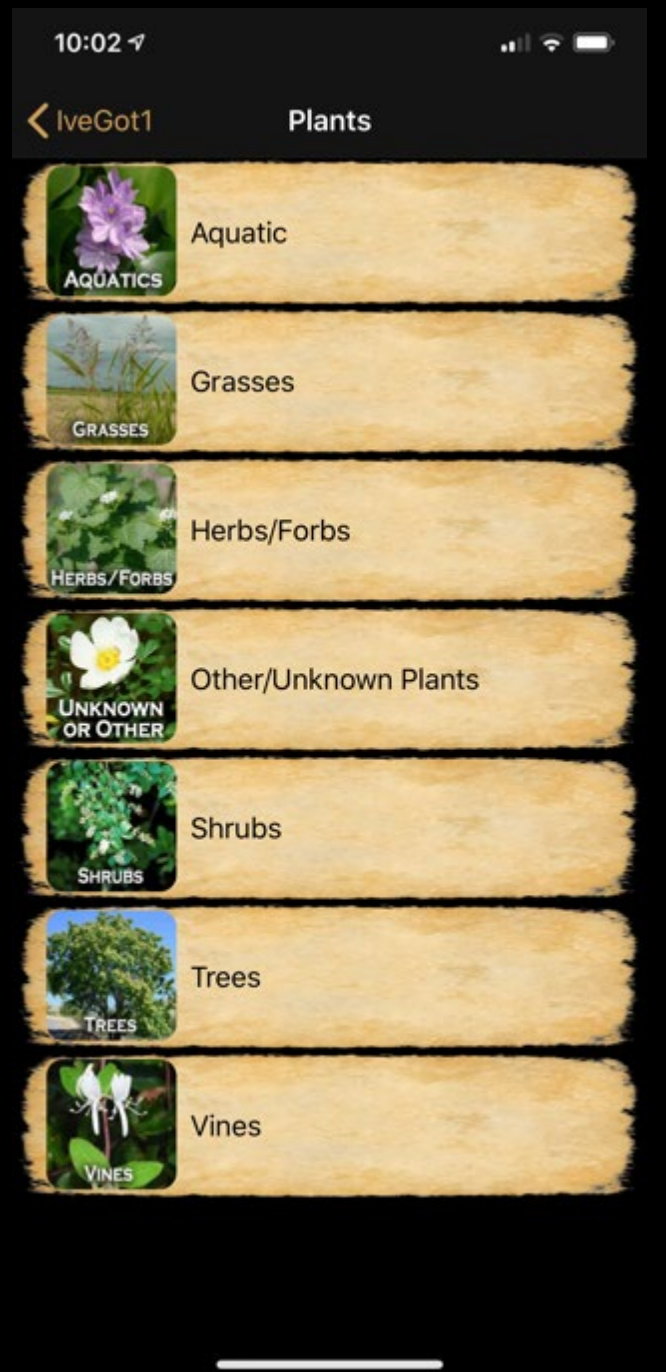
EDDMapS find map track


10:00
IveGot1
ANIMALS
PLANTS
ALL SPECIES
MY LIST
NEGATIVE SURVEY
UPLOAD QUEUE
NEWS FEED
EDDMapS
LOGIN


10:00
IveGot1
Animals
Amphibians
Birds
Crocodilians
Fish
Insects
Lizards
Mammals
Mollusks


10:02
IveGot1
Plants
Aquatic
Grasses
Herbs/Forbs
Other/Unknown Plants
Shrubs
Trees
Vines

10:01

Animals | Snakes | Scientific

Search

Native

- **Brown watersnake** — Nerodia taxispilota
- **Corn snake** — Elaphe guttata
- **Cottonmouth** — Agkistrodon piscivorus
- **Eastern diamondback** — Crotalus adamanteus
- **Eastern indigo snake** — Drymarchon couperi

Non-native

- **Ball python** — Python regius
- **Burmese python** — Python molurus
- **Common boa** — Boa constrictor
- **Green anaconda** — Eunectes murinus
- **Northern African python** — Python sebae
- **Reticulated python** — Python reticulatus
- **Unidentified python** — Python spp.
- **Yellow anaconda** — Eunectes notaeus

10:01

Back | Add to My List

Images | Details | Map

10:01

Back | Add to My List

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.

Images | Details | Map

10:01

Back Add to My List

Images Details Map

10:01

Back Add to My List

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

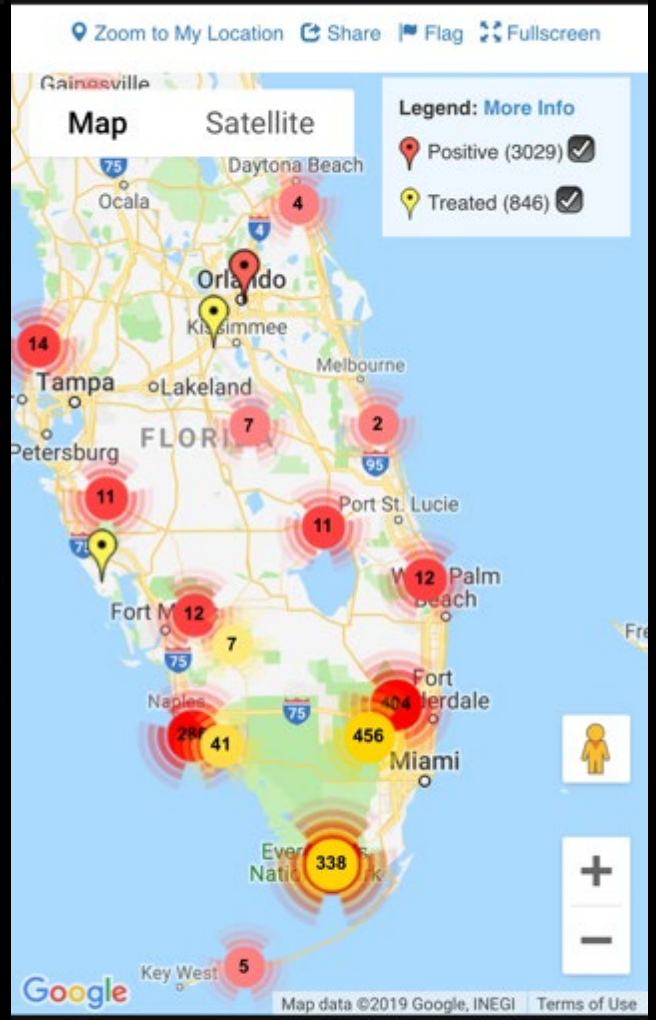
Head: Dark arrowhead on top of the head; light-colored, longitudinal line; dark wedges almost always present behind and below each eye

Notes: A large wild population is well established in Everglades National Park and surrounding areas.

Images Details Map

10:02

Back Add to My List



Back

Images Details Map

10:02

Snakes

Python molurus

Burmese python

2019-04-22 10:02 AM

Tap Here to Add Photo

Latitude 31.47734

Longitude -83.52518

Accuracy 8.3 m

Time Spent in Minutes

5 10 15 30 45 60

One Multiple

Any Extra Information Goes Here

Save

10:03

Back Add to My List

Images Details Map

10:03

Back Add to My List

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 masses.

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 surfaces 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.

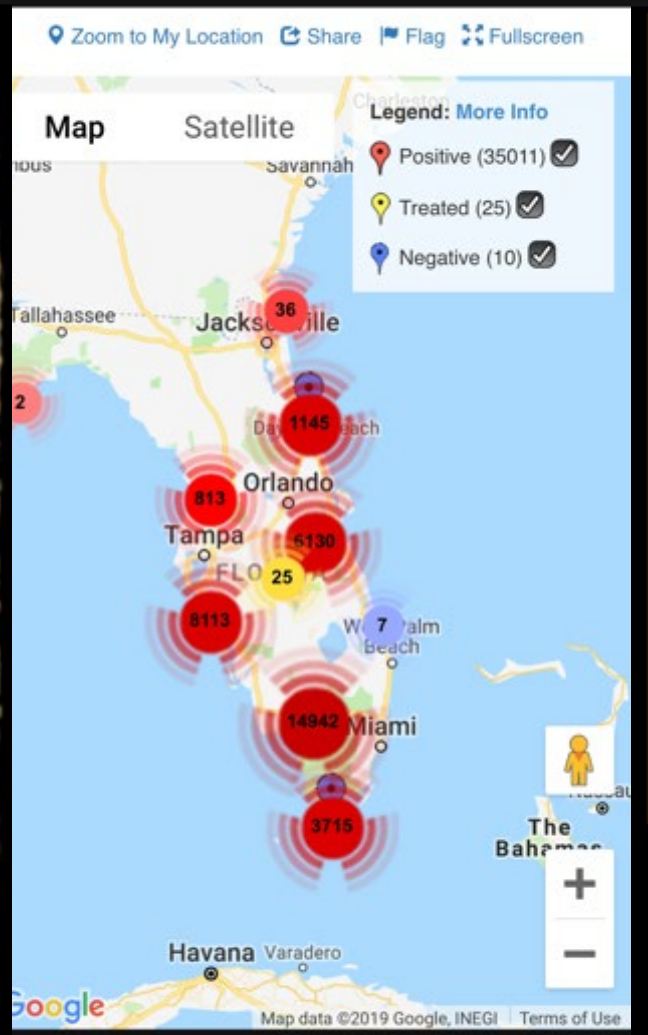
Ecological threat: Forms dense thickets of tangled woody stems that completely shade out and displace native vegetation. Has displaced some populations of rare listed species. Produces certain agents, which appear to suppress other plants growth. FLEPPC Category I

Images Details Map

10:03

Back Add to My List

Zoom to My Location Share Flag Fullscreen



Back

Images Details Map

10:03

Trees

Schinus terebinthifolius

Brazilian pepper

2019-04-22 10:03 AM

Tap Here to Add Photo

Latitude 31.47727

Longitude -83.52517

Accuracy 8.1 m

Time Spent in Minutes

5 10 15 30 45 60

Area ## Acres Sq Feet

Density Low Medium High

Any Extra Information Goes Here

Save

IveGot1 español – Now Available

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

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Statistics

EDDMapS Florida Statistics

Overall

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

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

Last Year

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

971 Web Reports
457 iPhone Reports
257 Android Reports

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1785

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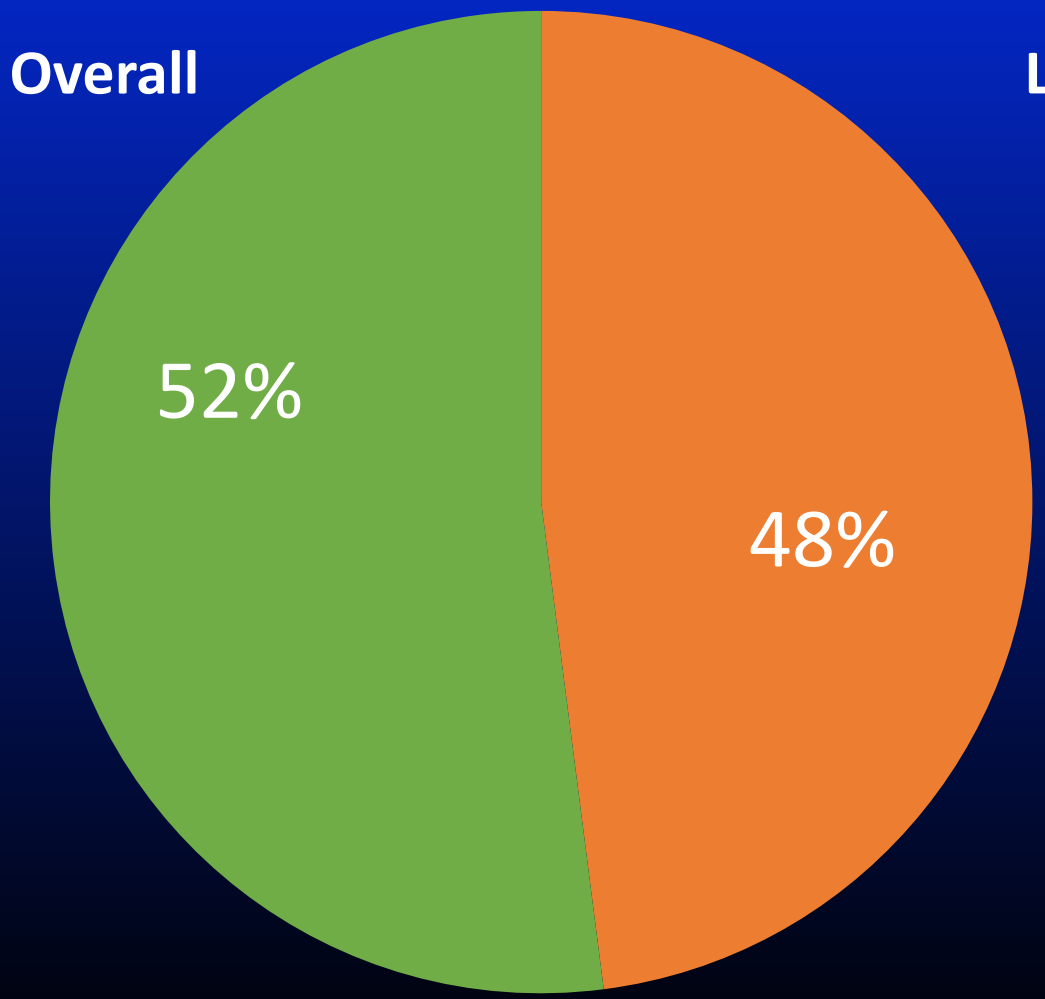
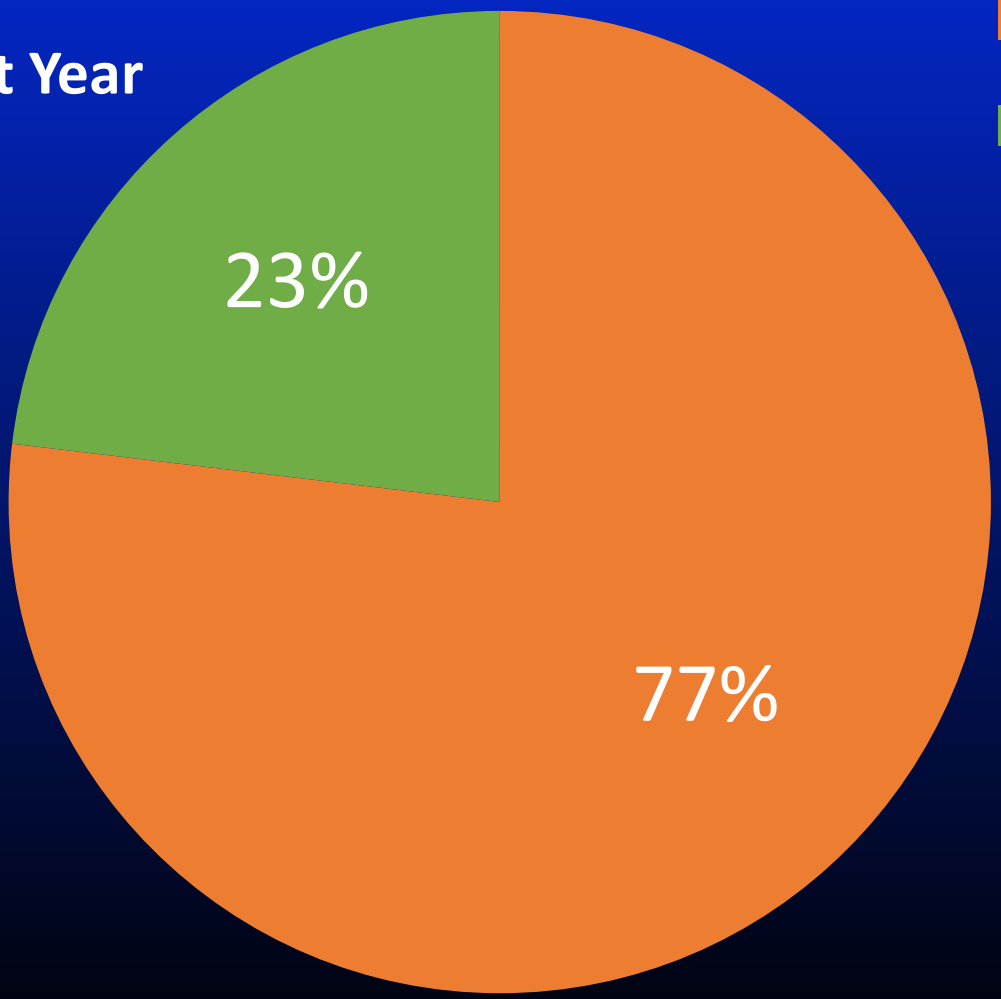
EDDMapS Florida Statistics

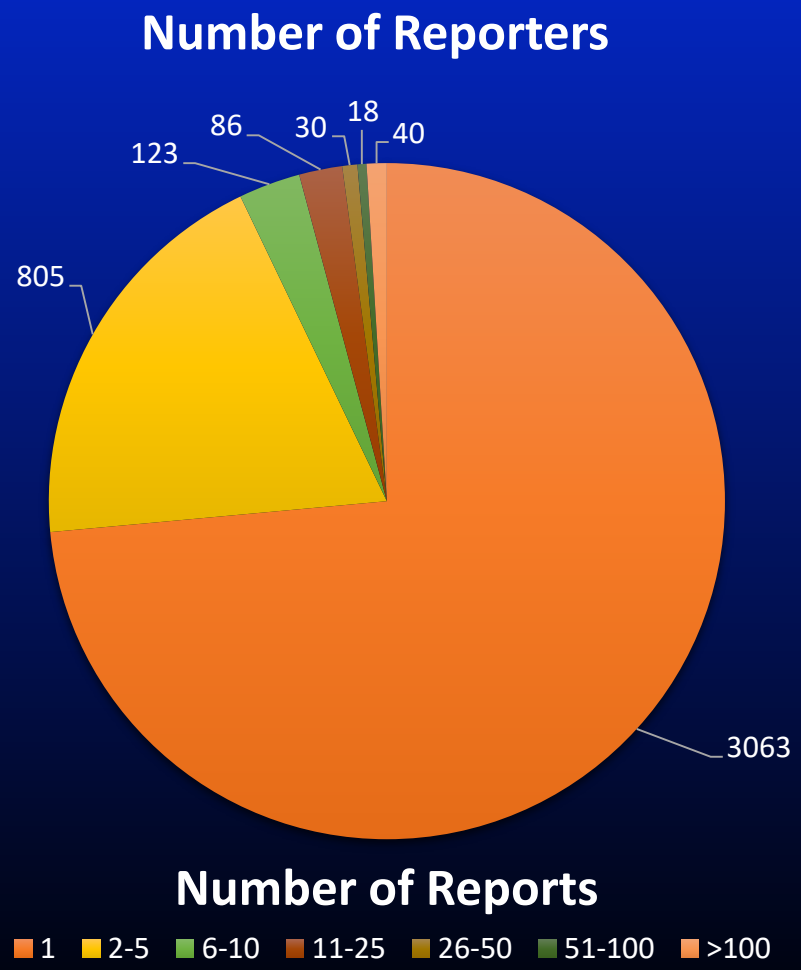




Animals

Plants

Number of Florida Reporters by Number of Reports



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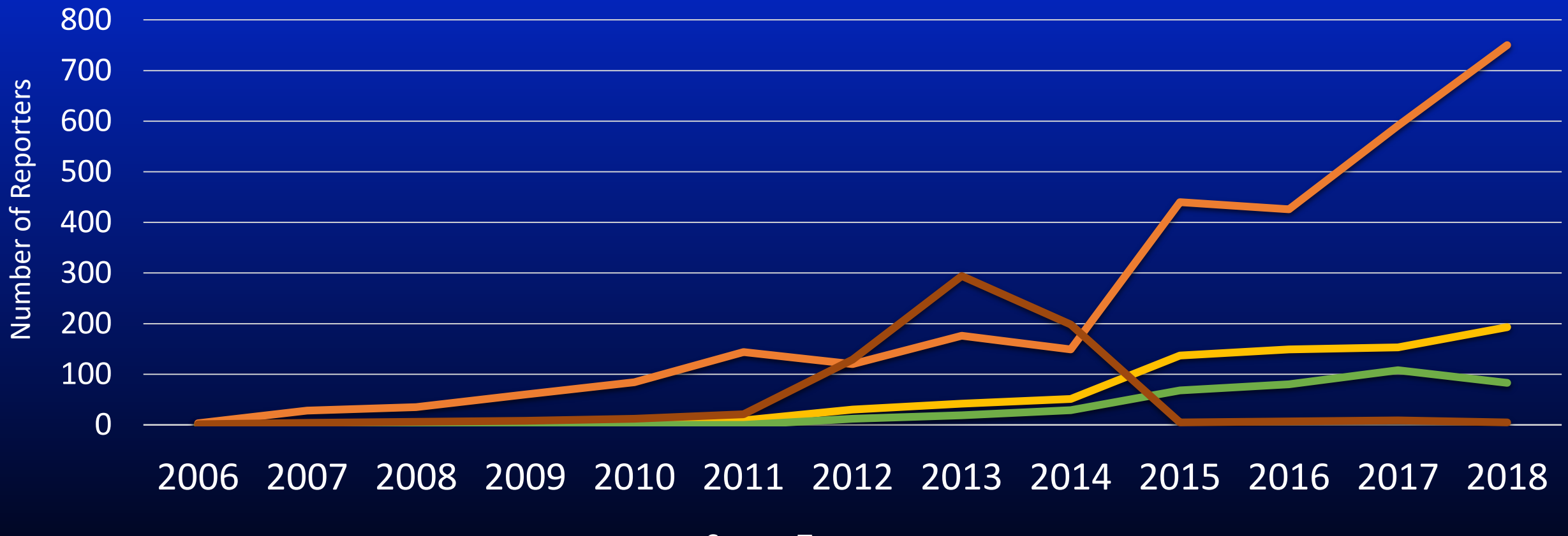
Reviewed data in Florida by number of reporters by year by source type



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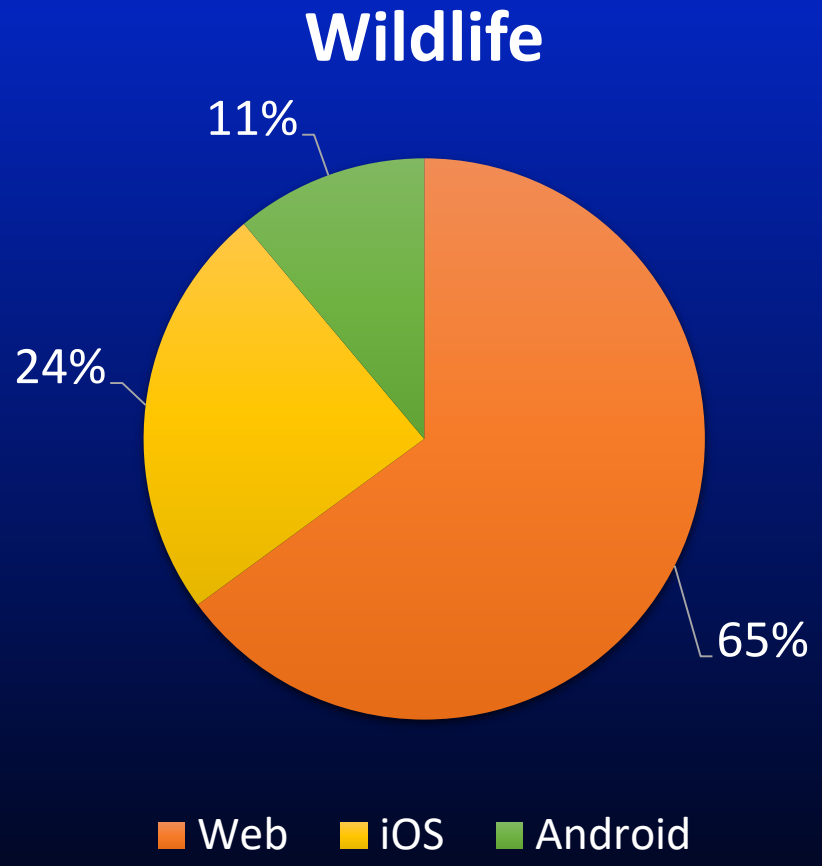
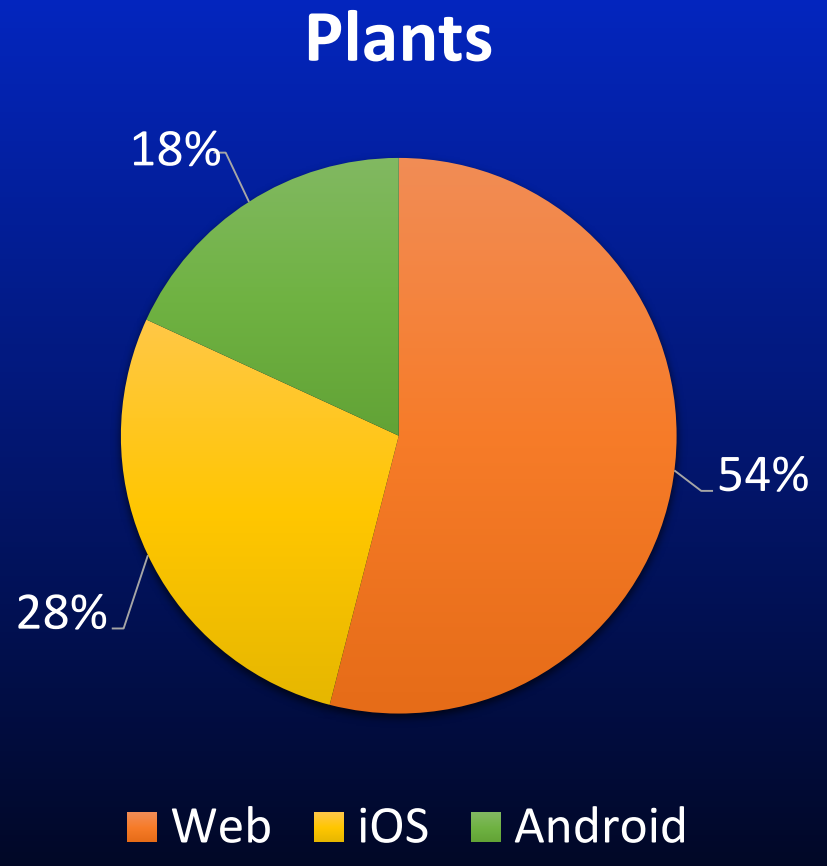
Reviewed data in Florida by category by source





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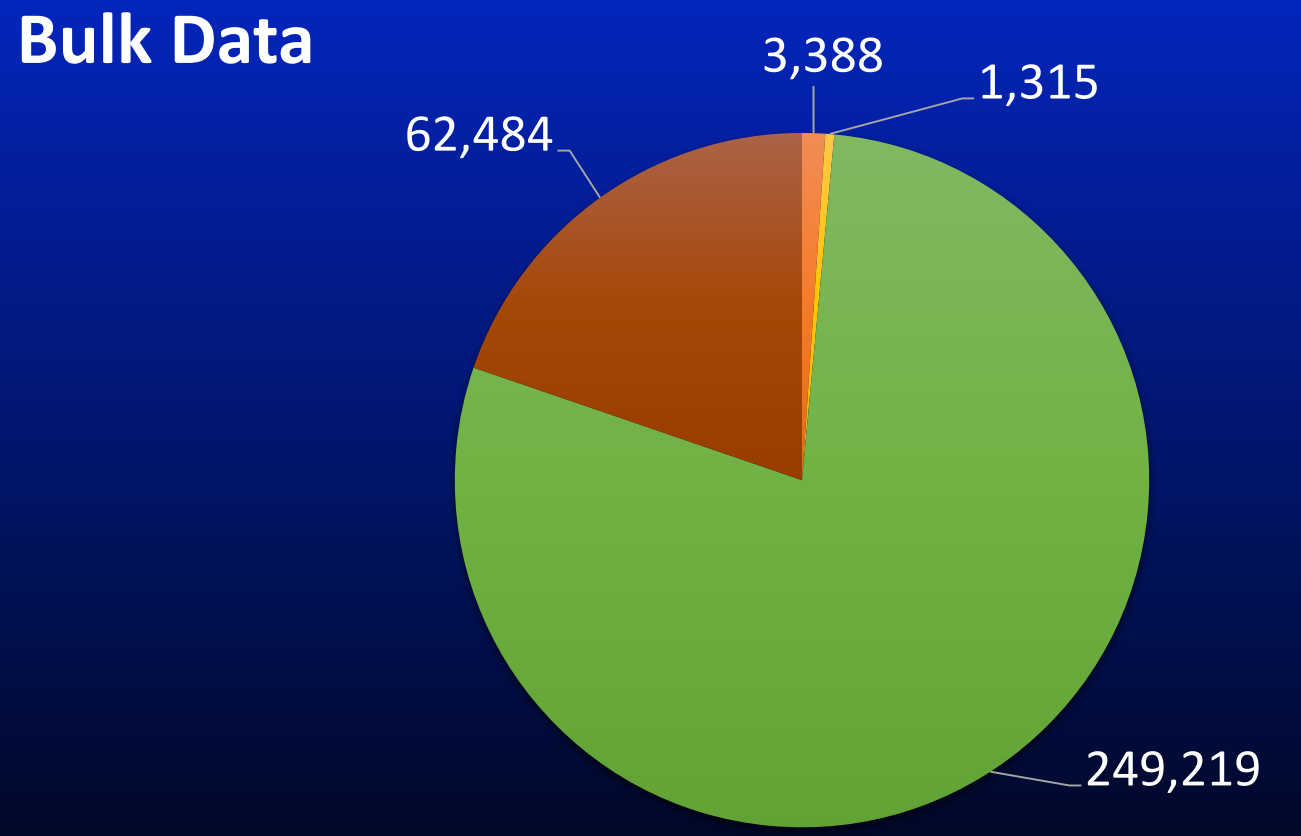
Reviewed bulk data in Florida by category



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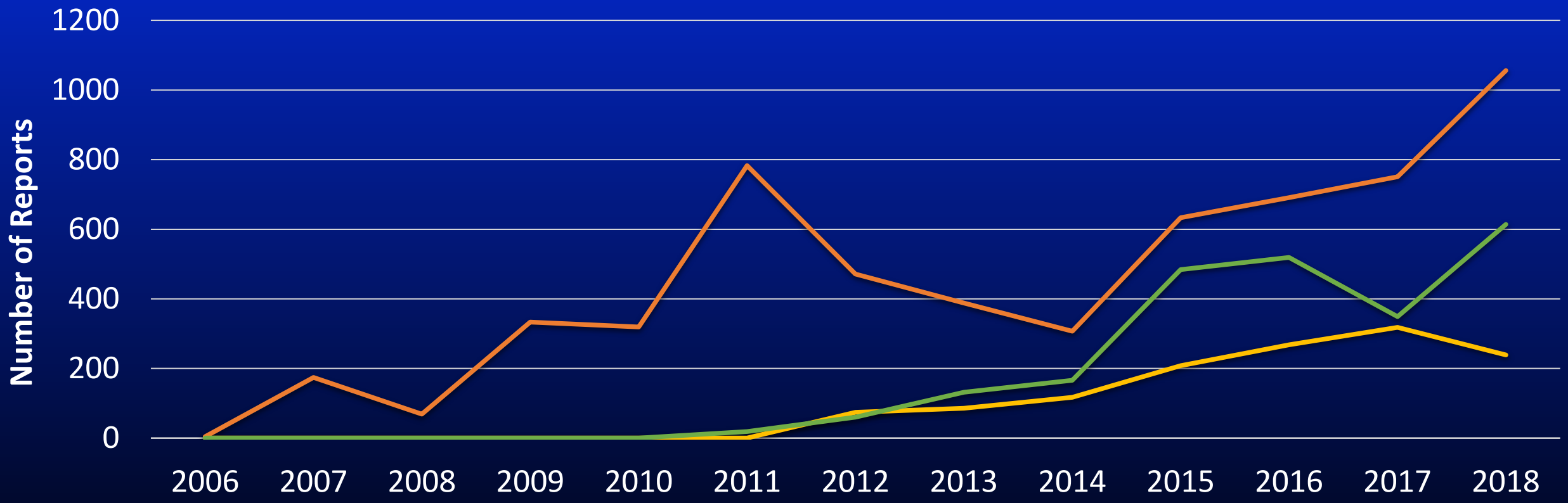
Reviewed data in Florida by year by source



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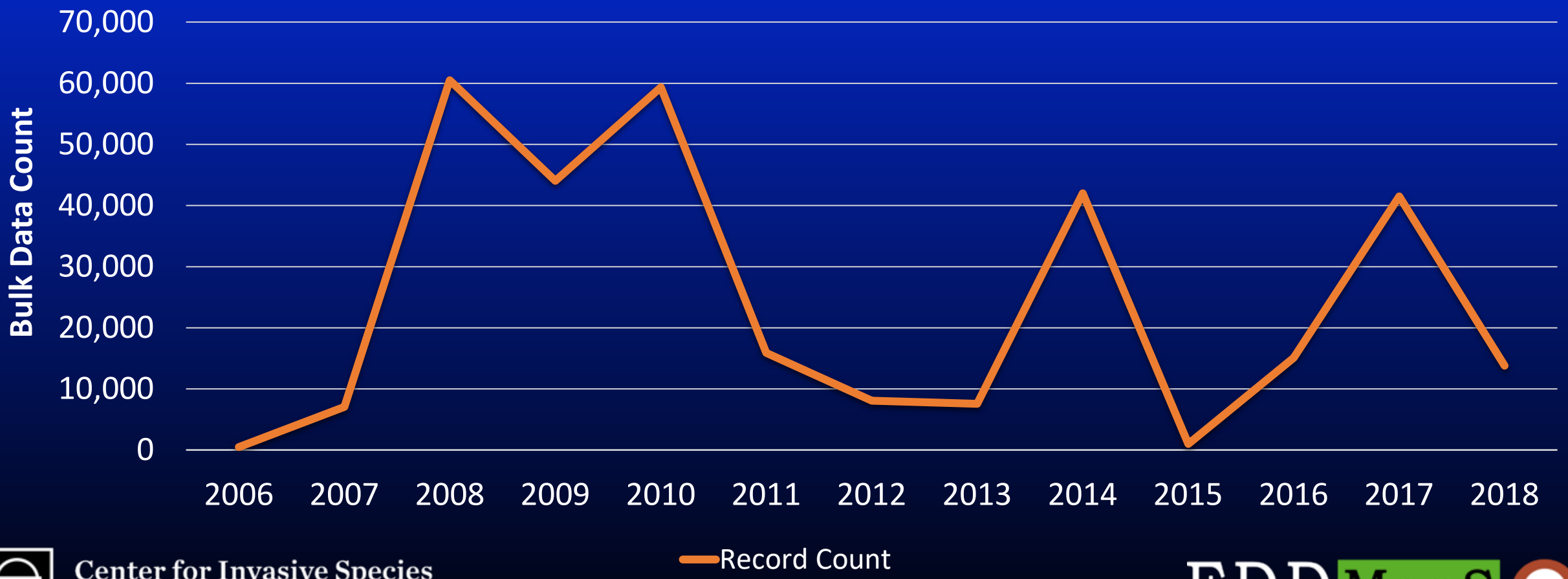
Reviewed bulk data in Florida by year



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USA TODAY

Subscribe

Anaconda found swimming St. Johns River in North Florida

10 NEWS STAFF | WTSP | 12:08 pm EST
December 2, 2015

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 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 (**1-888-483-4861**), 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

EDDMapS Pro

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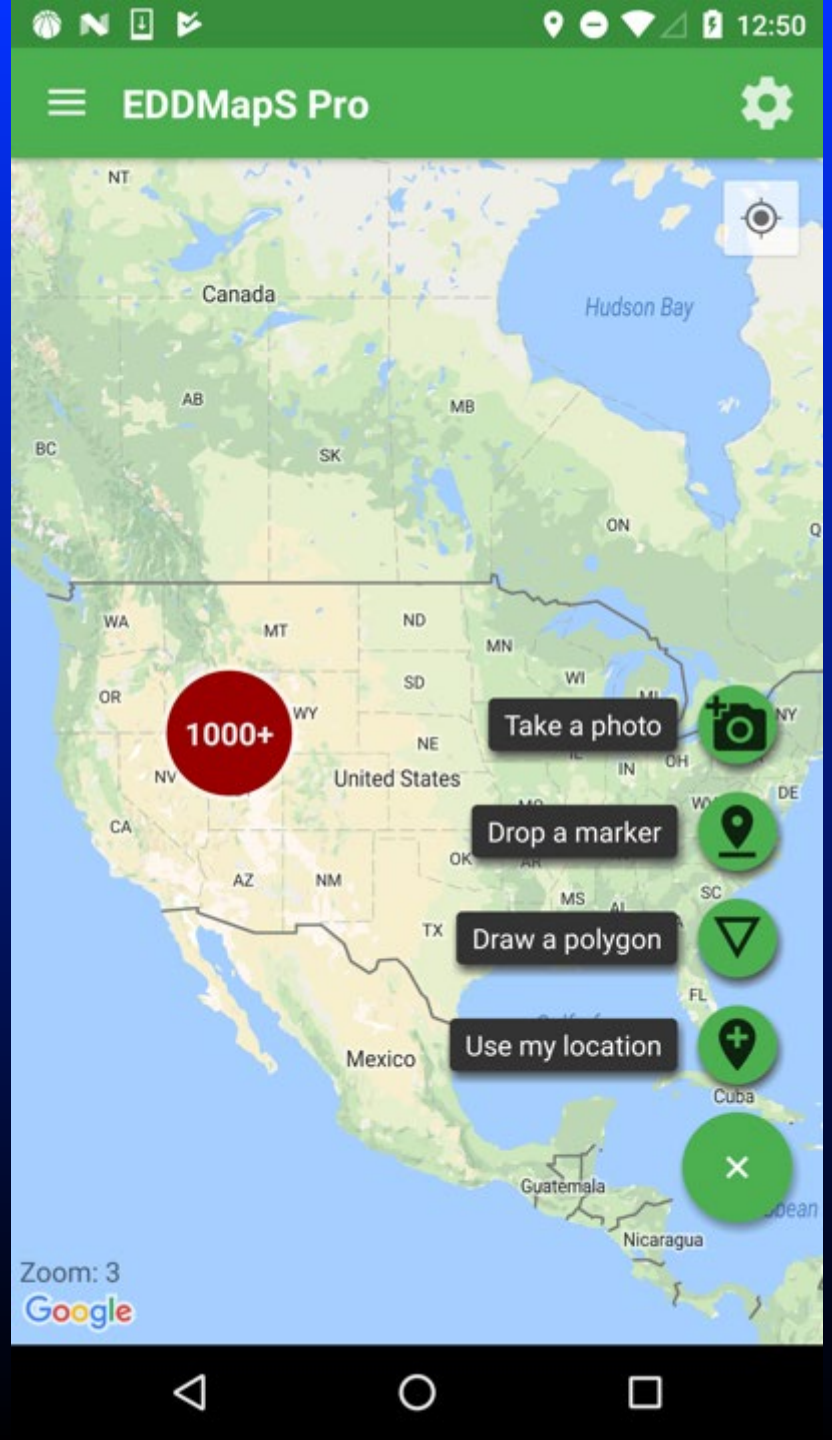
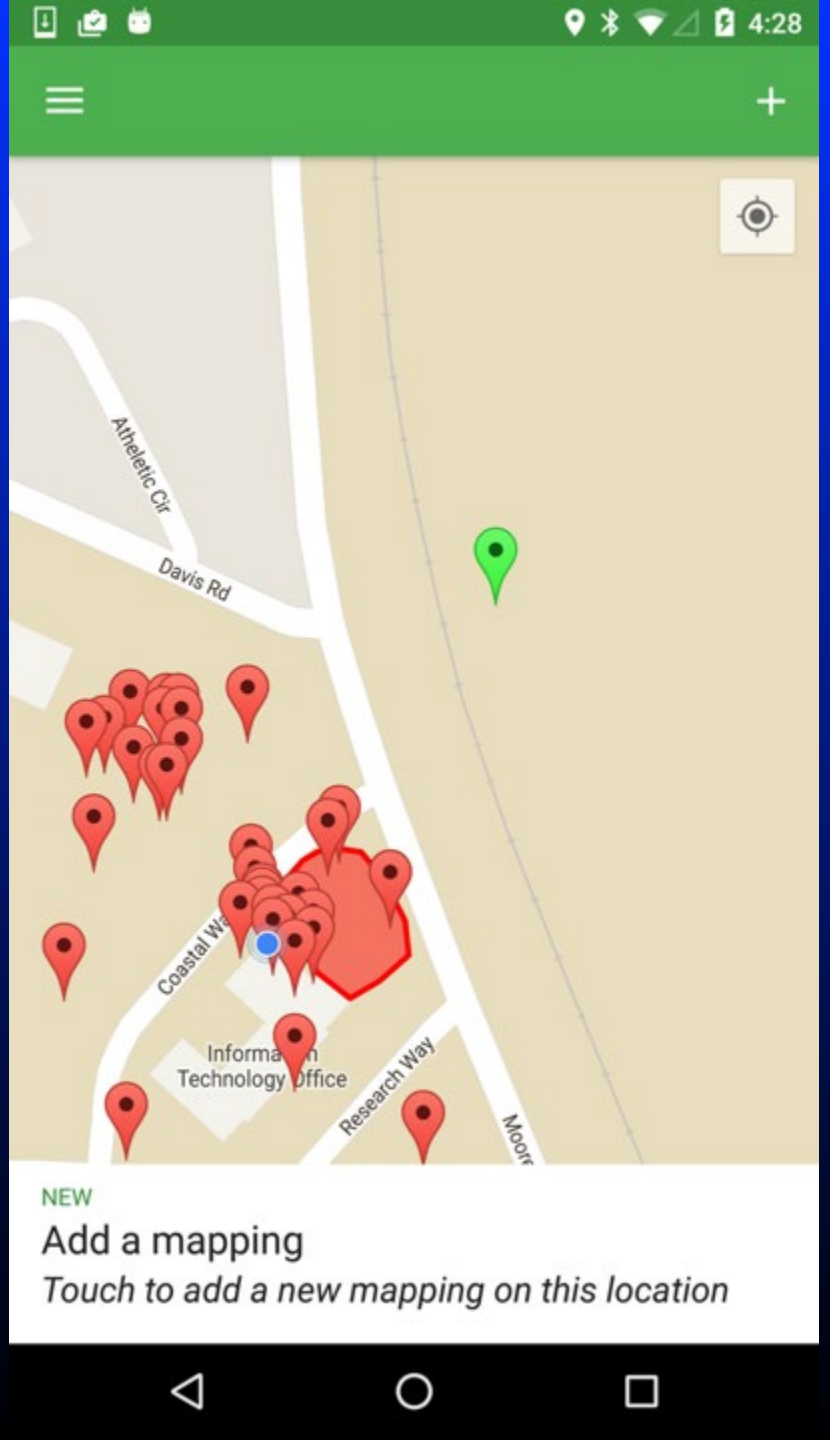

12:50
EDDMapS Pro
Canada
Hudson Bay
AB
MB
BC
SK
ON
WA
MT
ND
MN
OR
SD
WI
WY
NY
1000+
NE
United States
NV
IN
OH
DE
CA
OK
AZ
NM
MS
SC
TX
FL
Take a photo
Drop a marker
Draw a polygon
Use my location
Mexico
Cuba
Guatemala
Nicaragua
Zoom: 3
Google


4:28
Athletic Cir
Davis Rd
Coastal Way
Technology Office
Research Way
NEW
Add a mapping
Touch to add a new mapping on this location

Positive

Treated

Negative

Eradicated

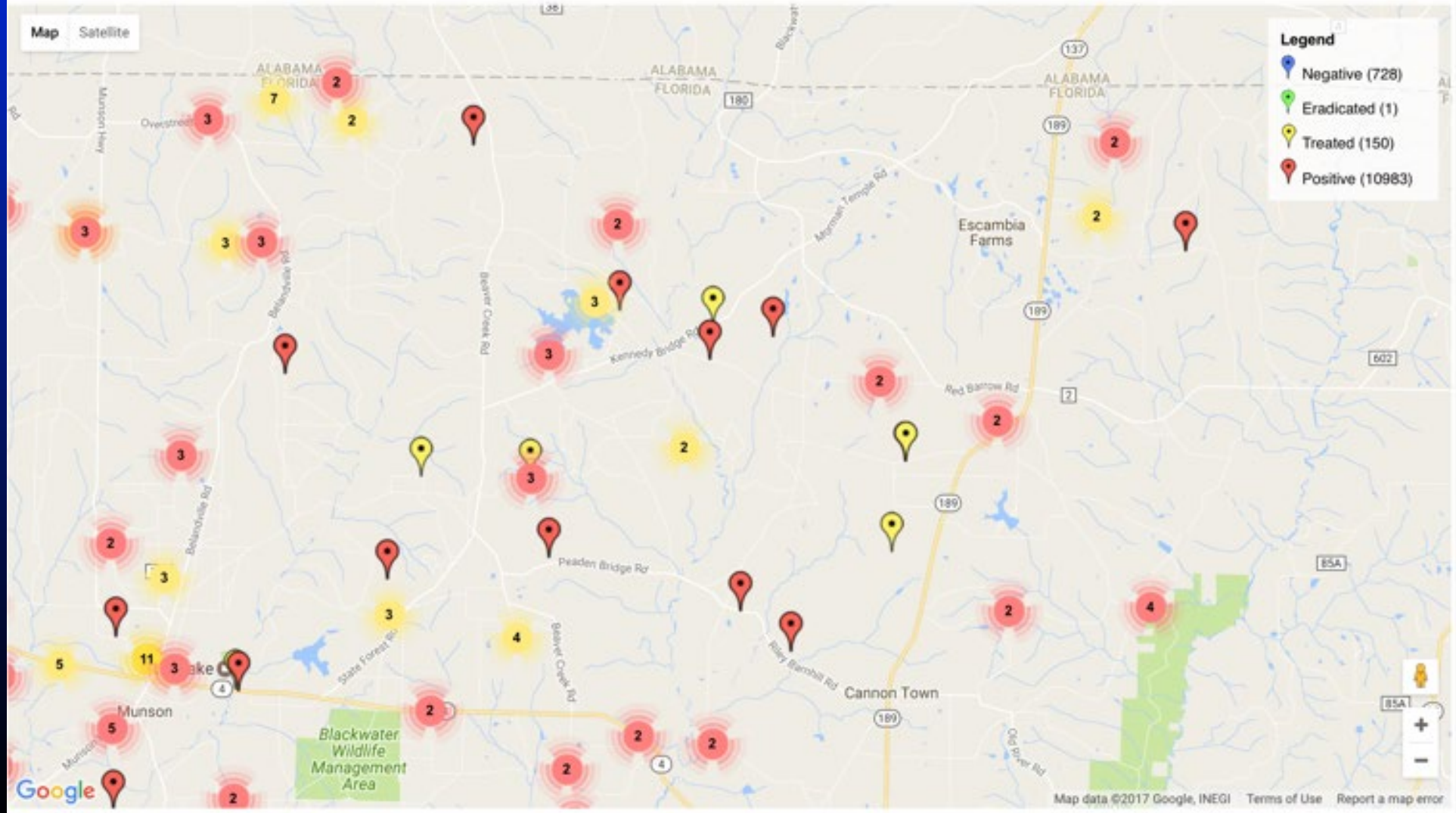
Japanese honeysuckle
Lonicera japonica Thunb.

USDA PLANTS Symbol:LOJA
Invasive Plant Atlas
Species Information

States | Counties | **Points** | List

CSV KML GPX Shapefile

Zoom to My Location | Share | Download | Flag | Fullscreen



WILD SPOTTER™

Mapping Invasives in America's Wild Places™

UNIVERSITY OF GEORGIA

Wildlife Forever

FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE

WILD & SCENIC 50 YEARS 1968–2018 RIVERS

NATIONAL TRAILS SYSTEM 1968 50 YEARS 2018

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!

Carrier 4:39 PM

WILD SPOTTER
Mapping Invasives in America's Wild Places™

Species ID

Report

Locate

About

Lincoln National Forest

Carrier 4:40 PM

Home
Species List
Wild Place Map
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Login
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Species

Locate

Lincoln National Forest

Carrier 4:40 PM

Back

Dalmatian toadflax
Linaria dalmatica

2018-06-27 16:39 PM

Images

Tap Here
to Add Photo

GPS Location

Latitude 31.47762
Longitude -83.524...
Accuracy 5.0

Time Spent in Minutes

5 | 10 | 15 | 30 | 45 | 60

Observation Data

Area 0.0 Acres | Sq Feet

Notes

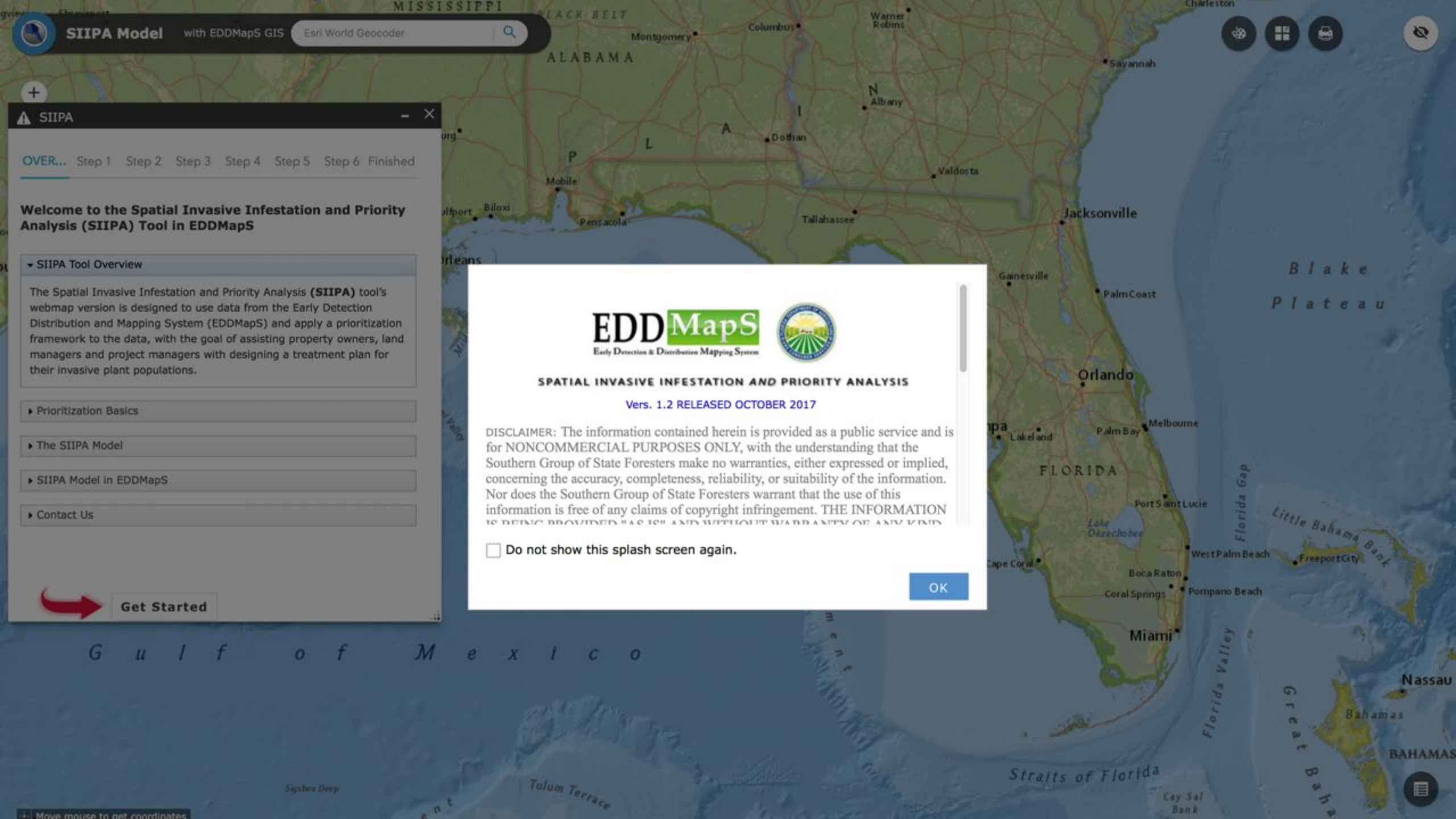
Any Extra Information Goes Here

Save

Facebook: Build Community

Pilot National Forests

Promotional Materials


SIIPA Model
with EDDMapS GIS
Esri World Geocoder
SIIPA
OVER... Step 1 Step 2 Step 3 Step 4 Step 5 Step 6 Finished
Welcome to the Spatial Invasive Infestation and Priority Analysis (SIIPA) Tool in EDDMapS
SIIPA Tool 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
Get Started
EDDMapS
Early Detection & Distribution Mapping System
SPATIAL INVASIVE INFESTATION AND PRIORITY ANALYSIS
Vers. 1.2 RELEASED OCTOBER 2017
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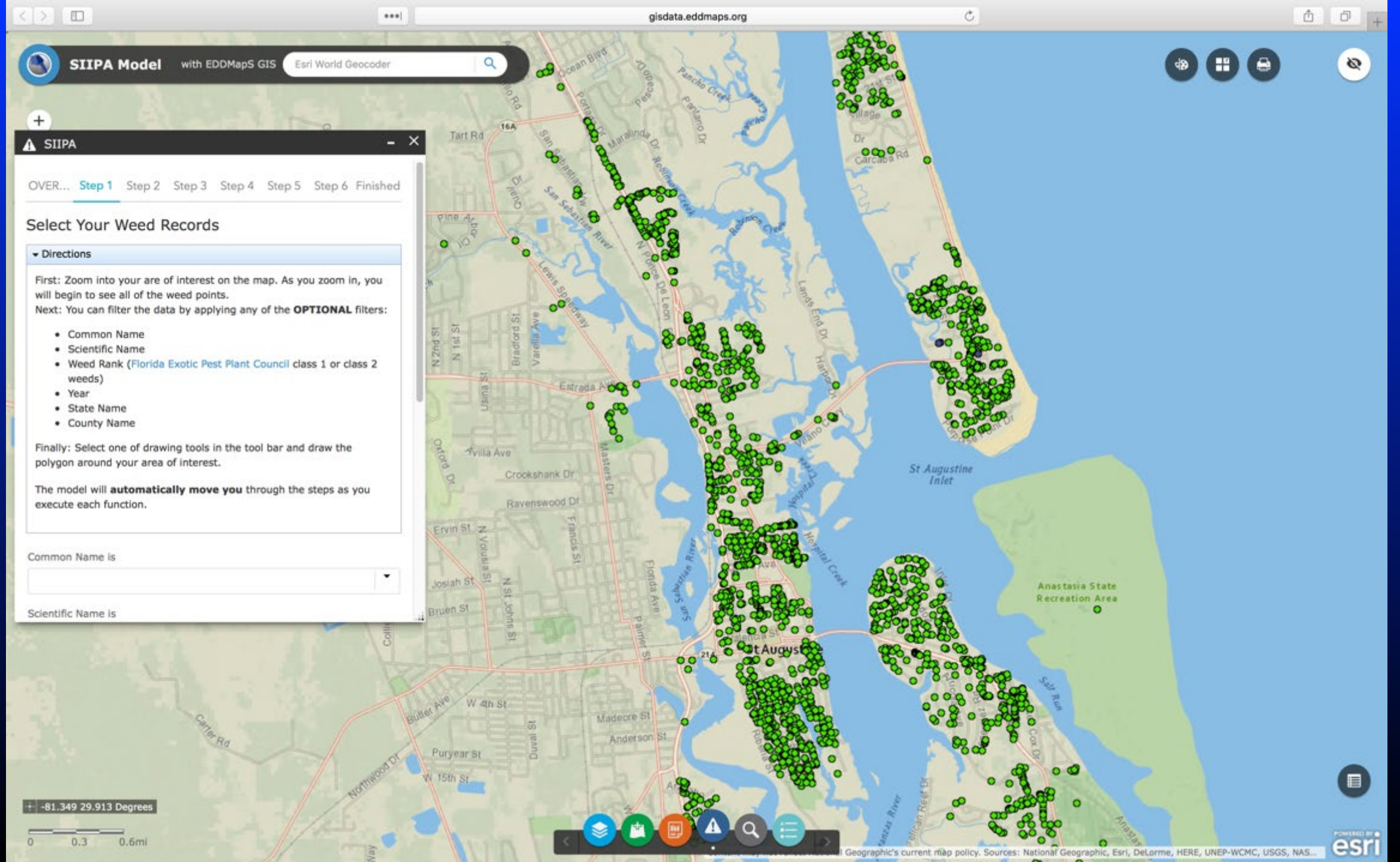
Gainesville
Palm Coast
Orlando
Lakeland
Palm Bay
Melbourne
Port Saint Lucie
Lake Okeechobee
West Palm Beach
Boca Raton
Pompano Beach
Coral Springs
Miami
Cape Coral
Sayannah
Charleston
Blake Plateau
Florida Gap
Little Bahama Bank
Florida Valley
Great Bahama
Nassau
Bahamas
BAHAMAS
Straits of Florida
Gulf of Mexico
Tulum Terrace
Cay Sal Bank
Move mouse to get coordinates


gisdata.eddmaps.org
SIIPA Model
with EDDMapS GIS
Esri World Geocoder
SIIPA
OVER...
Step 1
Step 2
Step 3
Step 4
Step 5
Step 6
Finished
Select Your Weed Records
Directions
First: Zoom into your are 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
St Augustine Inlet
Anastasia State Recreation Area
-81.349 29.913 Degrees
0
0.3
0.6mi
esri

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

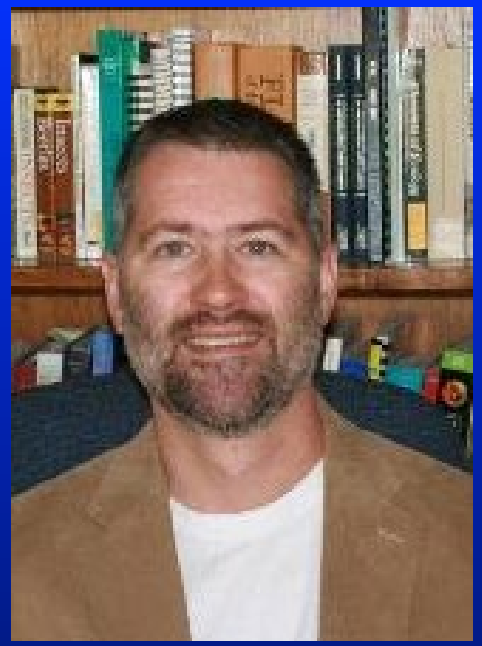
- EDDMapS is a tool that can be used to enhance existing programs
- It is up and working now, and was built to be easily customizable
- Free to use, long term commitment from UGA to support as key product of Center
- Groups don't have to "buy" in and data is freely shared – costs are for customizations,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







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EDDMapS
find map track






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Thanks

www.ivegot1.org

www.eddmaps.org

www.bugwood.org

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