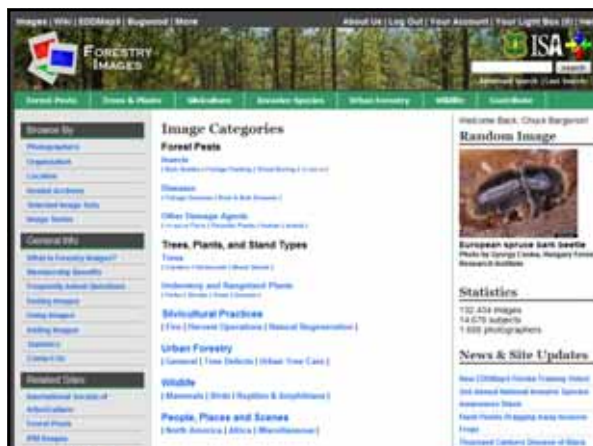




- ## Bugwood? Center?
- Started 1994 / Bugwood Network until Feb. 2008
 - Work across agency, organization and discipline boundaries
 - Long term sustainability and core funding
 - Combine Science with Technology
 - Partnership with Invasive Plant Control, Inc. to develop IT tools for on the ground applicators
 - Over \$3 million in extramural grant funds
 - \$500,000 yearly budget – 25% state funds

- ## Center Projects
- Bugwood Image Database
 - EDDMapS
 - Bugwood Wiki
 - eXtension COP – Invasive Species
 - Smartphone App Development
 - Developed First App for USFS and NPS
 - Forest A Syst
 - Website Hosting and Development
 - Bugwood Video and Presents



EDDMapS

Early Detection & Distribution Mapping System

A Tool for Reporting of Invasive Species

So, what do we need?

Common
Operating
Platform

← →

Easy
Electronic
Reporting

EDDMapS
Early Detection & Distribution Mapping System

Invasive Species Mapping Made Easy!

EDDMapS, started in 2005 with Southeastern U.S. focus, is now providing a picture of the distribution of invasive plants across the U.S.

Currently working with USFS to collect plant data and complete maps

EDDMapS
Early Detection & Distribution Mapping System

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

Invasive Species Mapping Made Easy!

- Fast and easy to use - no knowledge of GIS required
- Step-by-step training of invasive species distribution in only 90 minutes and 100% "working edge" success
- Facilitates Early Detection and Rapid Response (EDRR) and control of invasive species
- One database for both local and national data
- Data can be searched, queried and downloaded in a variety of formats
- Compatible with and aggregates data from other invasive species mapping projects
- Customized applications can be quickly and incrementally developed

What's Using It?

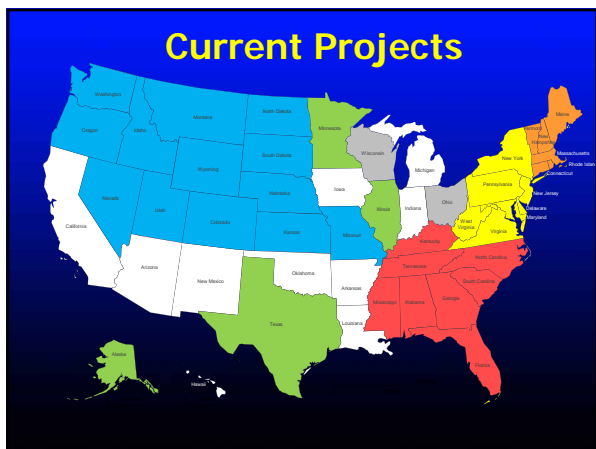
- ✓ Southeastern Plant Hardiness
- ✓ Florida Invasive Plant Information (FLIPIN)
- ✓ National Forest Invasive Control
- ✓ National Invasive Species Information Center
- ✓ National Wildlife Refuge Early Detection Network for Invasive Species
- ✓ National Invasive Species Information Center
- ✓ National Wildlife Refuge Early Detection Network for Invasive Species
- ✓ Invasive Plant Atlas of the Southeast
- ✓ Invasive Plant Atlas - Eastern Shore

Statistics

1,804,249 County Reports
1,044,723 Point Reports
2,295 Species / 9,615 Users

Educational Resources

- ✓ EDDMapS Invasive Plant Mapping Handbook
- ✓ EDDMapS Training Workshop Materials
- ✓ EDDMapS Florida Invasive Training Video
- ✓ EDDMapS Florida Invasive Training Video
- ✓ EDDMapS National Plant Hardiness Database Training Video
- ✓ EDDMapS Early Detection National Training Video



EDDMapS

Early Detection & Distribution Mapping System

National Distribution Project

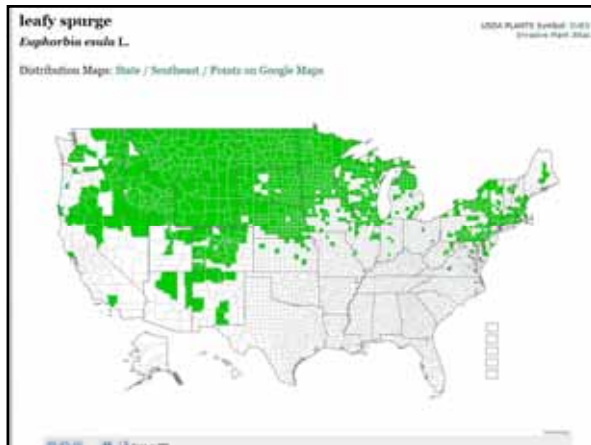
Statistics for EDDMapS

- 1.8 million records
 - incl. 1,044,486 point records
- 2,291 species
- 1,965 users (9,491 registered)
- 7.6 million hits in last year
- 382,000 visitors



Statistics for EDDMapS

Reporter	Number of Records
Biota of North America Program	346,637
USDA PLANTS Database	303,513
Forest Inventory and Analysis – Southern Region	136,117
Florida Natural Areas Inventory Database	124,497
Minnesota Department of Natural Resources	119,388
AKEPIC Database (Alaska)	118,790
Idaho Department of Agriculture	95,309
Bureau of Land Management - Oregon	93,215
Southwest Exotic Plant Mapping Program	59,962
Oregon Department of Agriculture	48,146
Other 1955 Users	418,492



EDD MapS

Early Detection & Distribution Mapping System

Easy Electronic Reporting for Early Detection and Rapid Response

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

Report an Invasive Species Occurrence

Please provide as much information about the sighting as possible.

Species:
 Single listing scientific or common name and then select species from dropdown.
 If the pest is not listed or is unknown, type and choose "unknown plant" or "unknown pest" from the list and describe the pest in the Comments section below.

Plant:

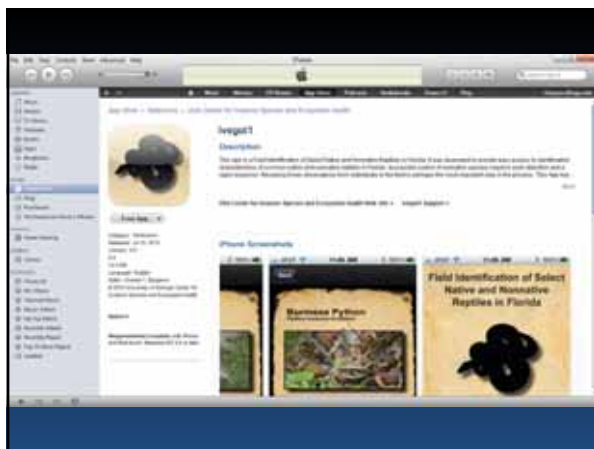
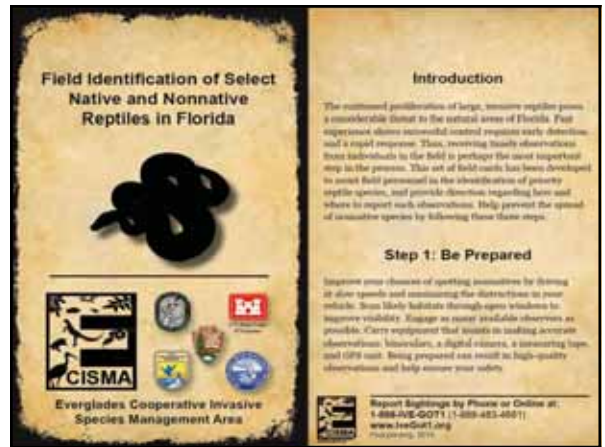
Infestation:

Observation Date: (1)
 Initial Area: (1)
 Station: (1)
 Observation Date(s): (1)
 Plant Description: Issues Spying Concerns Injuring Humans In Flower In Fruit In Seed Damaged Seed Pathogen

Location:
 Specify the location where you observed the pest. As first selecting the county from the dropdown, then move the marker on the map to the correct location. If any roads across county lines the main county will be displayed. You can also enter the lat/long in the State below and then click the "Jump to Point" button.

County: (1)

Latitude:



- Released July 15, 2010
- Over 3400 downloads
- ID Guide Only

- Released October 4, 2011
- ID and Report Animals and Plants in Florida

"Well today, we are introducing THREE revolutionary products. The first one is a widescreen iPod with touch controls. The second is a revolutionary new mobile phone. And the third is a breakthrough Internet communications device."

"So, three things: a widescreen iPod with touch controls, a revolutionary mobile phone, and a breakthrough Internet communications device. An iPod, a phone, and an Internet communicator. An iPod, a phone . . . Are you getting it? These are not three separate devices. This is one device. And we are calling it . . . iPhone! Today . . . today Apple is going to reinvent the phone. And here it is!"

January 9, 2007 and released on June 29, 2007.



Thus the Ultimate Always With You Invasive Species Reporting Tool

Invasive Species in Florida?

IveGot1 IveGot1

Yep, we've built an App for that!

IveGot1 now brings the power of EDDMapS to both your iPhone® and Android™ devices.

IveGot1 was developed by the University of Georgia Center for Invasive Species and Ecosystem Health through a cooperative agreement with the National Park Service, in partnership with the Florida Fish and Wildlife Conservation Commission and the University of Florida Center for Aquatic and Invasive Plants.

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Report an Animal

- Achatina fulica Giant African land snail
- Agama agama africana African redhead agama
- Agkistrodon piscivorus Cottonmouth
- Alopecurus aegyptiacus Egyptian geese
- Ameiva ameiva South American ground lizard
- Amia calva Bowfin
- Anolis equestris equestris Knight anole

Observation

Common boa
Boa constrictor
09-27-2011 10:04 EDT

Latitude 31.477211695941
Longitude -83.525077965587
Accuracy 50

One Multiple

Notes

Information

Burmese python
Python molurus ssp. bivittatus

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-

Animals



MRWC - EDDMapS

- Focus on State Noxious Weeds
- Reports are sent to State Weed Coordinator
- Reports are not displayed until verified



Outsmart Invasives

- USFS Northeast region project with University of Massachusetts Amherst
- Had seen IveGot1 and came to us to develop similar app for them



MAEDN

- Working with University of Maryland Extension to include regulated species and verification contacts for Mid-Atlantic region



PNEDN

- 2011 ODA Farm Bill project
- Contracted with UGA to develop app and website
- Built using existing EDDMapS frameworks

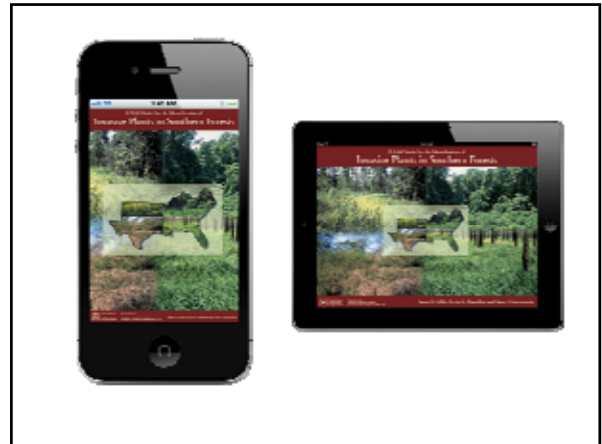


SEEDN

- Developed for non regulatory plants and pests
 - Kudzu Bug was primary focus
- Working with Clemson to modify existing SEEDN iPhone and Android smartphone apps to
 - Allow reporting of regulatory species
 - Include images and descriptions of those species
 - Include notification and review mechanism for handling these reports



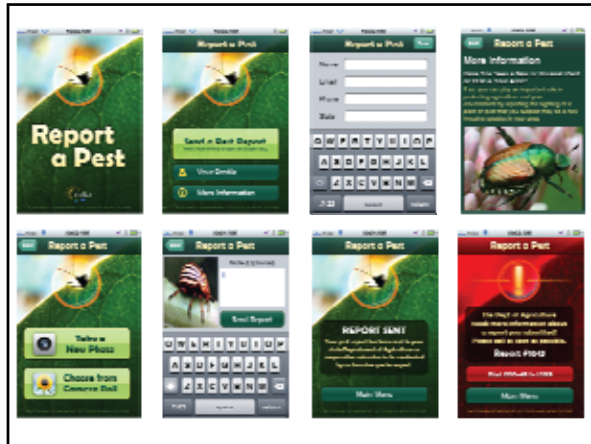
Working with Minnesota Dept. of Agriculture to implement EDDMapS for First Detectors/Master Gardeners as part of 2012 Farm Bill



Under Development

- Native Alternatives for Midwest
- Forest Insect Pests Field Guide
- iBiocontrol – Field Guide and Reporting of Biological Control Agents of Invasive Plants
- National Park Service – National Park Invasive Plant App

Other Apps



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
- It is not and was never meant to be in competition with NAPIS or IPHIS
- No regulated pests are mapped/displayed until verified (if ever)

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

EDDMapS
Early Detection & Distribution Mapping System

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