



# A NEW WEB RESOURCE FOR INVASIVE SPECIES MANAGEMENT

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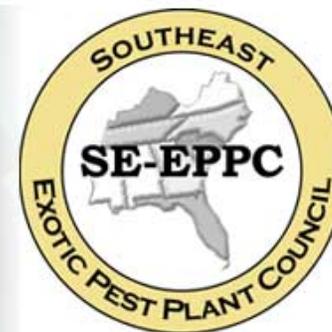
James H. Miller  
USDA Forest Service  
Southern Research Station  
Auburn University  
-and-  
Chuck Bargeron  
Center for Invasive Species and Ecosystem Health  
The University of Georgia



# SE-EPPC

Southeast Exotic Pest Plant Council

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STATE CHAPTERS
<a href="#">Alabama</a>
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<a href="#">Kentucky</a>
<a href="#">Mississippi</a>
<a href="#">North Carolina</a>
<a href="#">South Carolina</a>
<a href="#">Tennessee</a>

RELATED ORGANIZATIONS
<a href="#">National Association of EPPCs</a>
<a href="#">Mid-Atlantic EPPC</a>
<a href="#">Midwest Invasive Plant Network</a>
<a href="#">Invasive Plant Atlas of New England</a>
<a href="#">California Invasive Pest Plant Council</a>

## Southeast Exotic Pest Plant Council

The mission of the Southeast Exotic Pest Plant Council is to support the management of invasive exotic plants in natural areas of the Southeast U.S. by providing a forum for the exchange of scientific, educational and technical information. The Southeast Exotic Pest Plant Council is a non-profit organization and is not a regulatory agency.

### E-Newsletter

- » [June 2008](#)
- » [February 2008](#)
- » [November 2007](#)
- » [August 2007](#)
- » [April 2007](#)

### Internodes

- » [Fall 2008](#)
- » [Summer 2008](#)
- » [Spring 2008](#)
- » [Winter 2007](#)
- » [Fall 2007](#)

### Other Resources

- » [SE-EPPC ListServ](#)
- » [Wildland Weeds](#)
- » [2005-2010 Platform](#)
- » [Advertise in Wildland Weeds](#)

## Invasive Plants in the News

- » [Maps now available - Princeton Invasive Mapping](#)
- » [Georgia Department of Agriculture bans sale of cogongrass](#)
- » [Hydrilla causing bald eagle deaths in the southeast U.S.](#)
- » [NPR segment on invasive plants](#)
- » [Exotic Pest Plant Council National Conference](#)
- » [More News from the SE-EPPC Blog](#)

## EDDMaps

Early Detection & Distribution Mapping System

- [View Distribution](#)
- [Report Infestations](#)
- [Presentations](#)
- [Documentation](#)

### UPCOMING MEETINGS

#### Register Now!



[Exotic Pest Plant Council National Conference](#)

## **USDA Forest Service Southern Regional Task Force for the Assessment of Nonnative Invasive Species**

James H. Miller, Task Force Coordinator , Southern Research Station (SRS)  
Erwin Chamliiss, SRS Senior Technician, Database Manager

### Technical Advisory Committee

Alix Cleveland, Southern Region Non-native Invasive Species Coordinator  
Danny Lee, SRS Project Leader and Director Eastern Forest Environmental  
Threat Assessment Center

Don Duerr, Southern Region FHP Entomology Group Leader

Leigh Ann McDougal, Southern Region Fisheries Program Manager

John Taylor, Southern Region FHP Integrated Pest Management Specialist

Kier Klepzig, SRS Project Leader, Insects, Diseases and Invasive Plants  
Research

Dale Starkey, Southern Region FHP Pathologist

Don Tomczak (now retired), Southern Region Staff Forester

Carl Petrick, National Forest Systems (NFS) of Florida Staff Officer for  
Ecosystems

Jim Hanula, SRS Research Entomologist

Victor Rudis (now deceased), Research Forester, SRS Forest Inventory and  
Analysis

Tom Philipps, Botanist, NFS Texas

Pauline Spaine, SRS Pathologist



# Nonnative Invasive Species in Southern Forest and Grassland Ecosystems



THE UNIVERSITY OF GEORGIA  
**CENTER FOR INVASIVE SPECIES AND ECOSYSTEM HEALTH**  
WARREN SCHOOL OF FORESTRY AND NATURAL RESOURCES COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES

- Home
- High Priority
- Watch List
- All Plants
- All Pathogens
- All Invertebrates
- All Vertebrates
- All South Florida

- ### Worst Species
- tallowtree
  - tree of heaven
  - privet
  - kudzu
  - cogongrass
  - microstegium
  - European waterfoil
  - hydrilla
  - dogwood anthracnose
  - laurel wilt
  - redbay ambrosia beetle
  - balsam woolly adelgid
  - hemlock woolly adelgid
  - gypsy moth
  - feral hog
  - starling
  - snakehead fish
  - zebra mussel
  - Canadian nightcraw



Hydrilla verticillata - hydrilla - photo by D. Moorhead

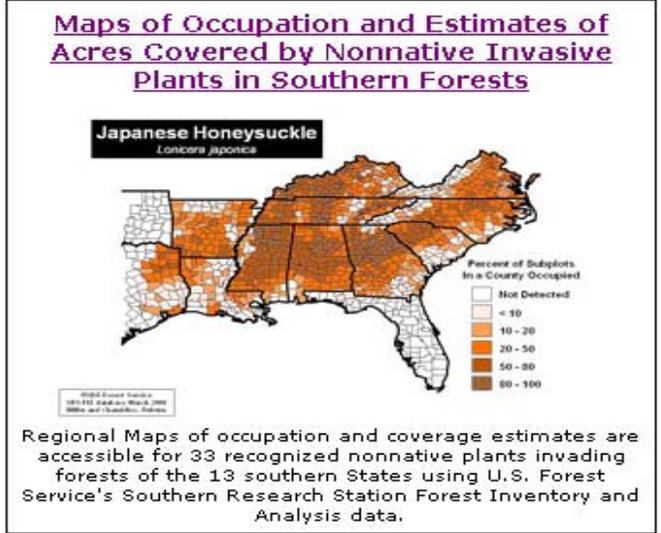
### [USDA Forest Service Southern Regional Task Force for the Assessment of Nonnative Invasive Species](#)

The Southern Region Task Force for assessing nonnative invasive species (NNIS) was assembled in August 2006 to prioritize NNIS

[INVASIVE.ORG/SOUTH/](http://INVASIVE.ORG/SOUTH/)

- ### Threats
- sudden oak death
  - emerald ash borer
  - sirex woodwasp
  - didymo algae

### Full List of the Worst Species



### Links

- [Lacey Act Prohibited List of Injurious Wildlife](#)
- [USGS Nonindigenous Aquatic Species](#)
- [Southeast Exotic Pest Plant Council](#)
- [Plant Conservation Alliance's Alien Plant Working Group's Least Wanted List](#)
- [NatureServe's U.S. Invasive Species Impact Rank \(I-Rank\)](#)
- [NBII Invasive Species Information Node](#)
- [North American Forest Commission's ExFor](#)
- [University of Florida's Institute for Food and Agriculture](#)

# Knowledge and Information on Invasive Species of Southern Forests and Grassland Ecosystems – Draft June, 2008

- **High Priority NNIS Database** according to: NatureServe and IFAS Assessments for Plants & N. Amer. Forestry Comm. ExFors
- **Early Detection Watch List of NNIS by Categories:** Not in US, In US but not in Region, & In Region but restricted
- **Databases for ALL Currently Recognized NNIS**
- **A “Worst List of NNIS” to focus communications**
- **A Map detailing Invasion Zones**
- **Web Links to Invasive Sites**



# Nonnative Invasive Species in Southern Forest and Grassland Ecosystems



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Hydrilla verticillata - hydrilla - photo by D. Moorhead

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# INVASIVE.ORG/SOUTH/

## [Maps of Occupation and Estimates of Acres Covered by Nonnative Invasive Plants in Southern Forests](#)

### Japanese Honeysuckle *Lonicera japonica*



Regional Maps of occupation and coverage estimates are accessible for 33 recognized nonnative plants invading forests of the 13 southern States using U.S. Forest Service's Southern Research Station Forest Inventory and Analysis data.

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## Full List of the Worst Species

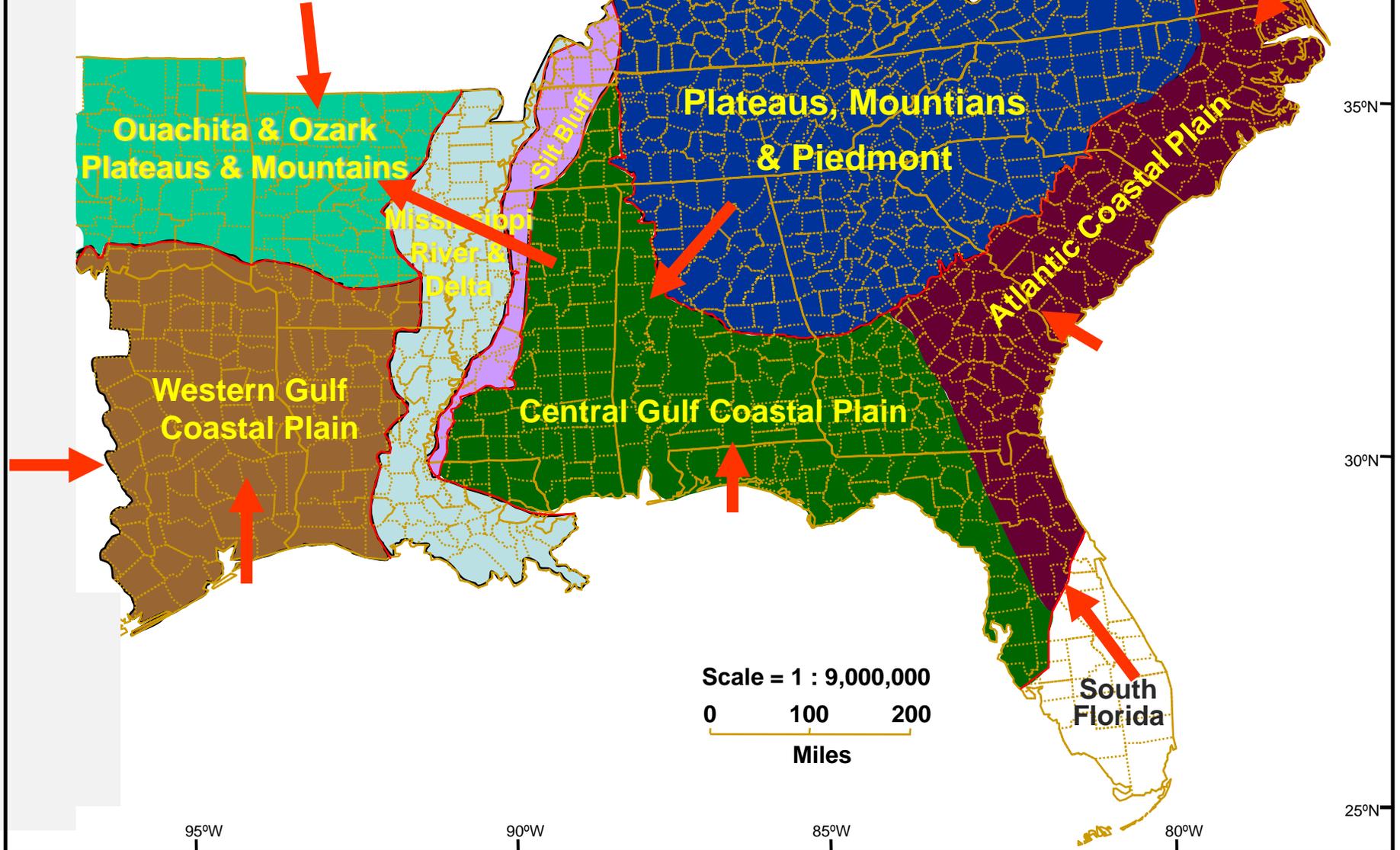
from multiple existing databases and through surveys of Forest Service regional staff. Existing risk assessments for these NNIS were assembled for study. Through this process three databases were compiled of NNIS that currently or have potential to damage forest interiors, margins, openings, roadsides, waterways, and wetlands along with grasslands and special embedded habitats. These three databases as of June 2008 are available here for your use and review.

- [A High Priority NNIS Database](#) that will be used to focus programs and management
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- [A Database of All NNIS Currently Recognized in the Southern Region with a separate database for Tropical South Florida to assist in determining the scope of the](#)

# Forest Invasive Taxa **High Priority** **Complete** **EDRR**

Terrestrial Plants	65	379	76
Aquatic Plants	10	48	16
Pathogens (mainly fungi)	6	21	3
Insects	10	67	7
Crustaceans	1	6	2
Mollusks	2	72	2
Jellyfish	1	1	0
Earthworms	2	11	0
Tapeworms	1	1	0
Mammals	7	8	1
Birds	5	5	0
Fish	8	22	5
Reptiles, amphibians, & lizards	0	43	4
	<u>118</u>	<u>619</u>	<u>116</u>

# Southern Region Forest Invasion Zones





# Nonnative Invasive Species in Southern Forest and Grassland Ecosystems



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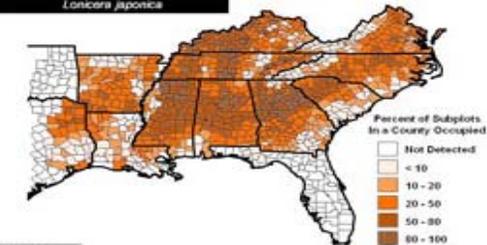
**INVASIVE.ORG/SOUTH/**

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**Maps of Occupation and Estimates of  
Acres Covered by  
Nonnative Invasive Plants in  
Southern Forests**

**James H. Miller, Research Invasive Ecologist**

**Erwin B. Chambliss, Research Associate  
USDA Forest Service Southern Research Station  
Auburn, Alabama**

**Christopher M. Oswalt  
USDA Forest Service Southern Research Station  
Forest Inventory and Analysis  
Knoxville, Tennessee**

# FIA Survey Guide

## Nonnative Invasive Plants of Southern Forests

A Field Guide for Identification and Control



[www.invasive.org](http://www.invasive.org)



United States  
Department  
of Agriculture

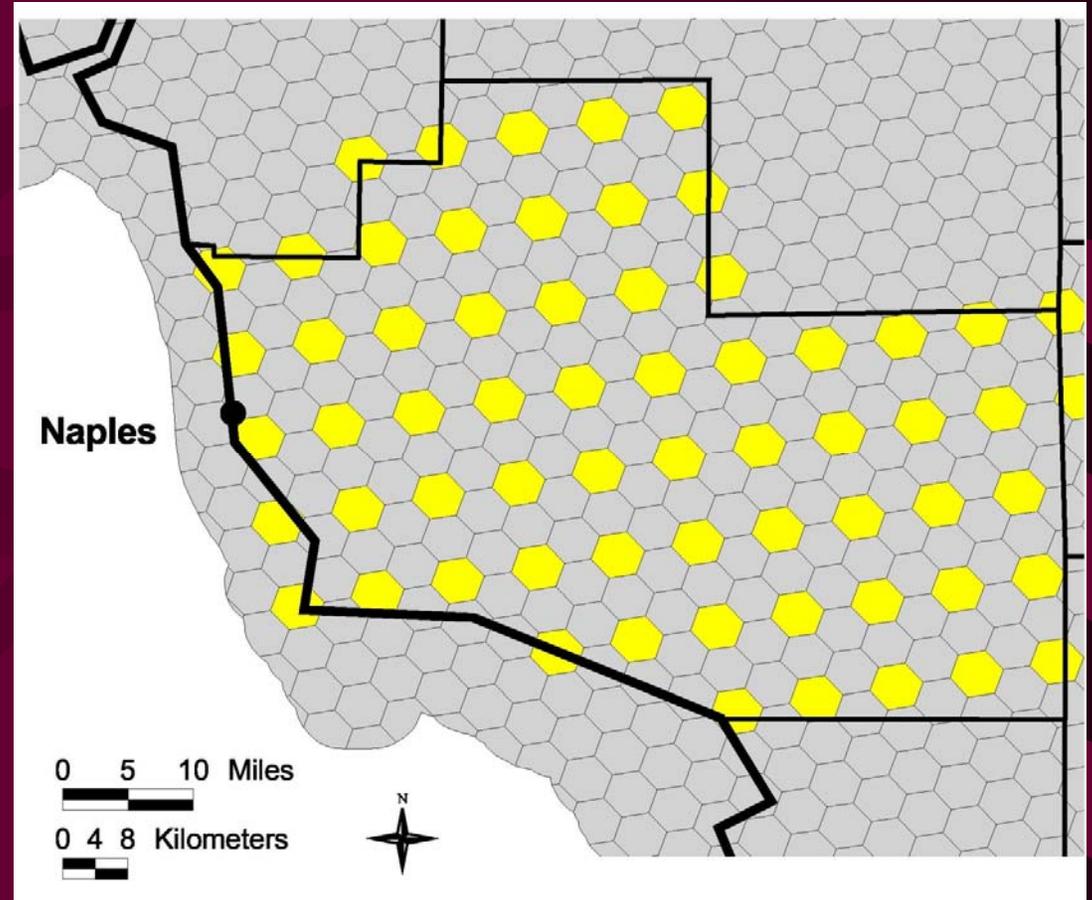
Forest Service  
Southern Research Station  
General Technical Report SRS-XX

James H. Miller

# *Survey of Invasive Plants*

20% of hexagons  
sampled every year

1-7 years to complete  
a State  
then cycle reinitiates

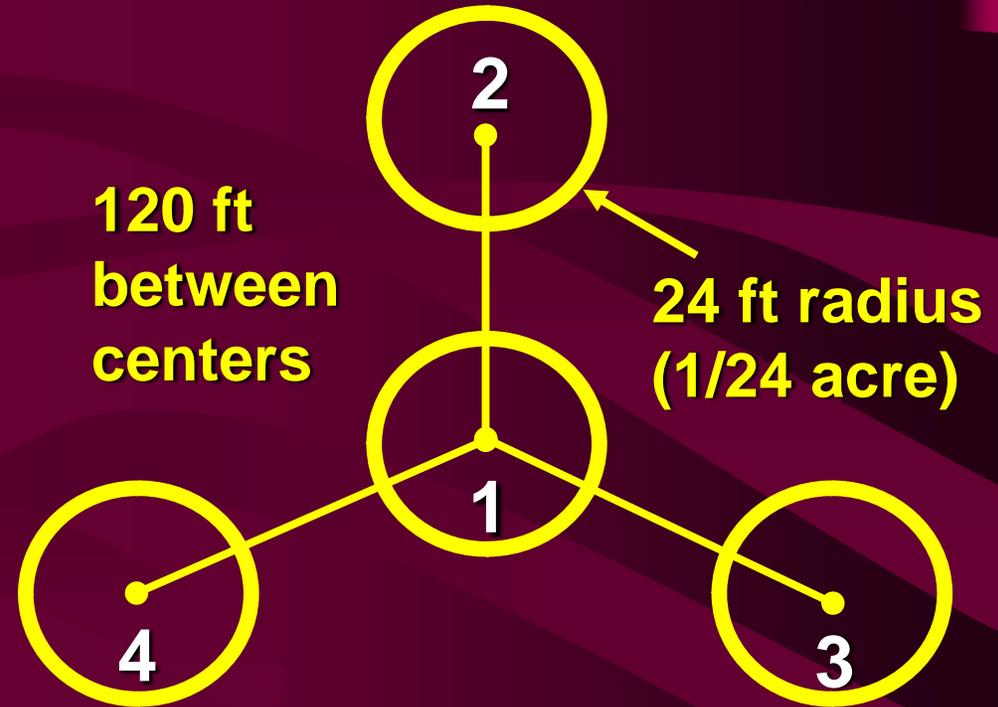


# *FIA Forest Survey Plots*

A Sample Plot is randomly positioned within each hexagon

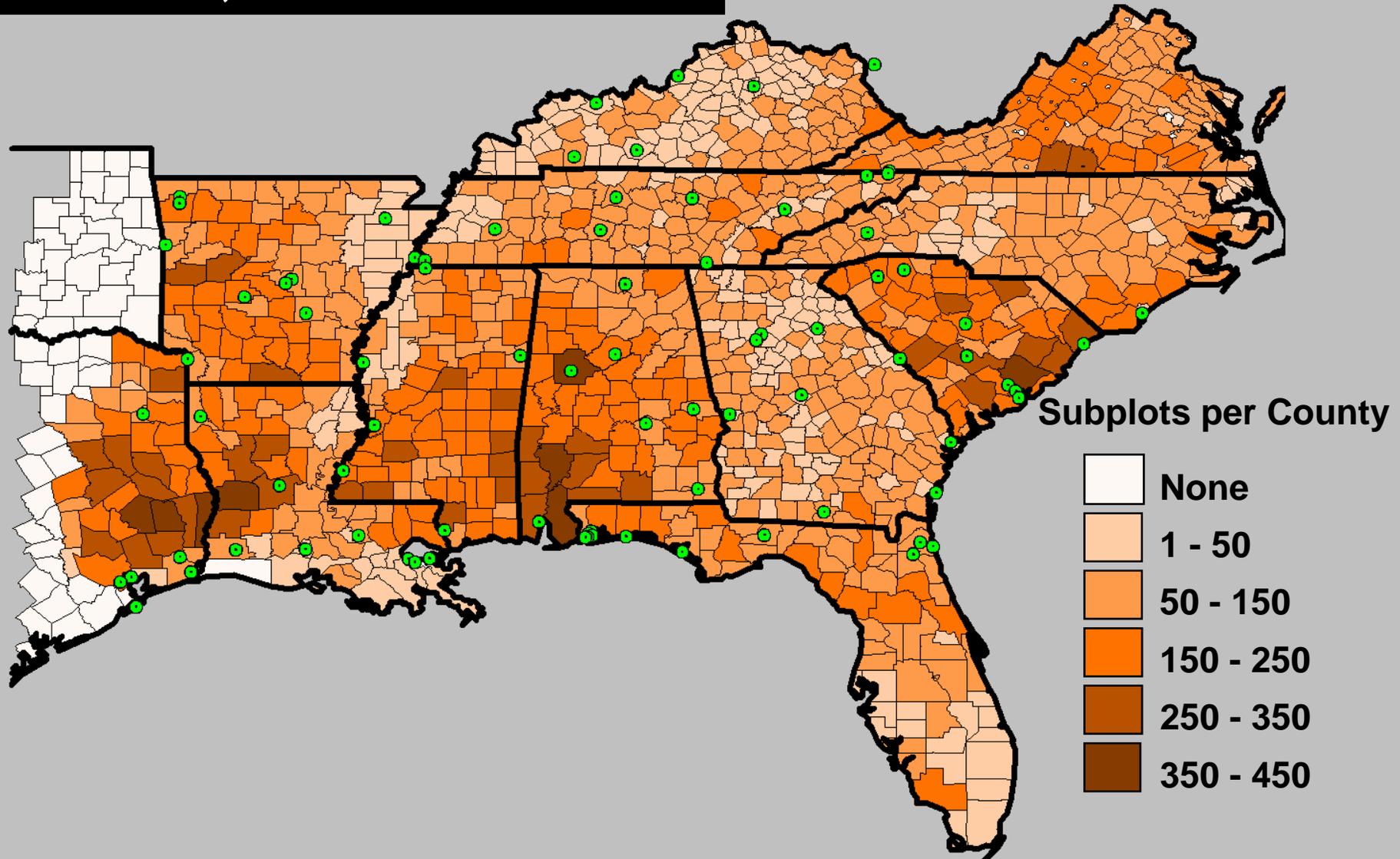
Sample Plots contain  
4 Subplots  
each 1/24 acre

1 subplot = 1,500 acres



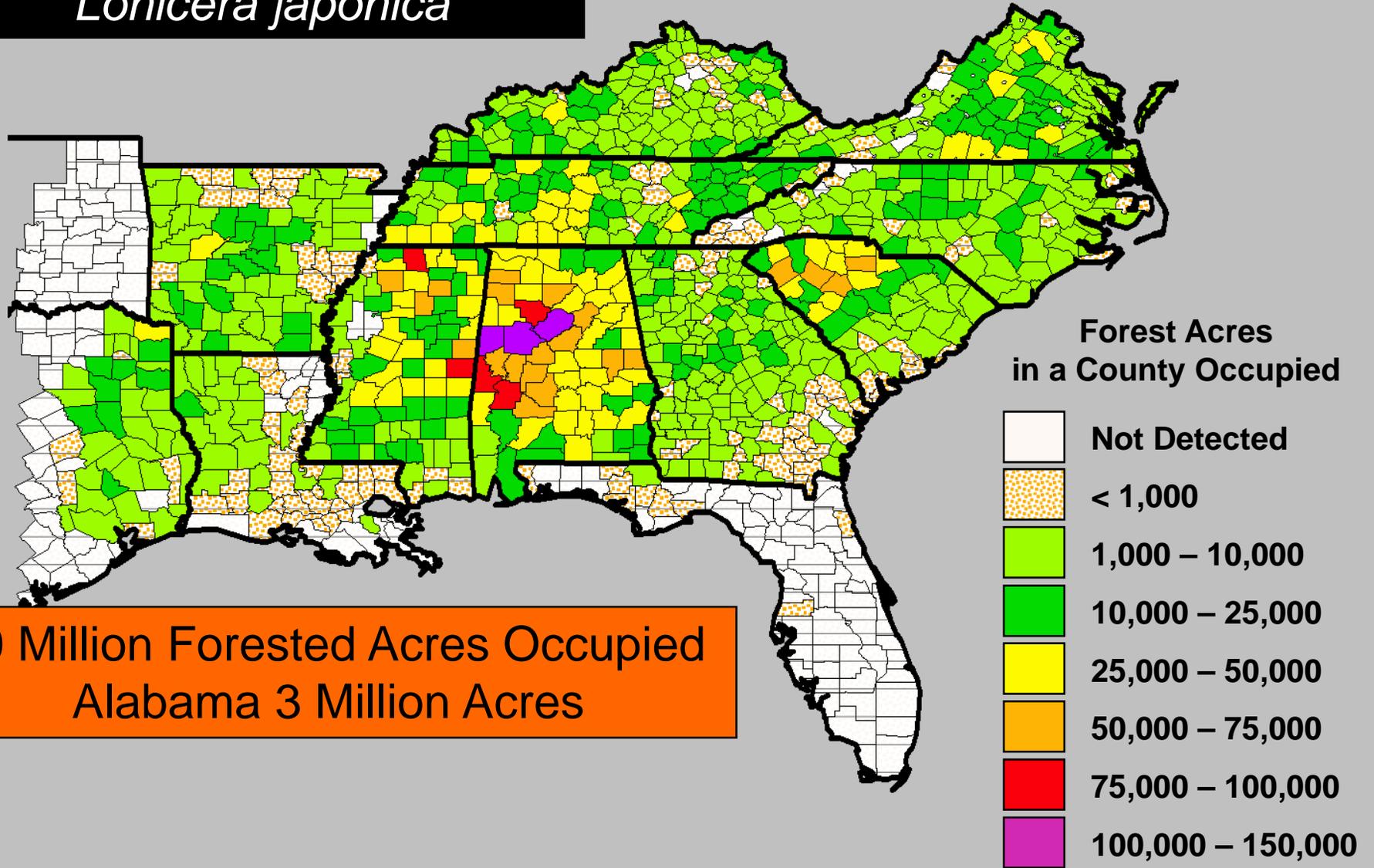
# Number of Subplots / County

162,000 Total



# Japanese Honeysuckle

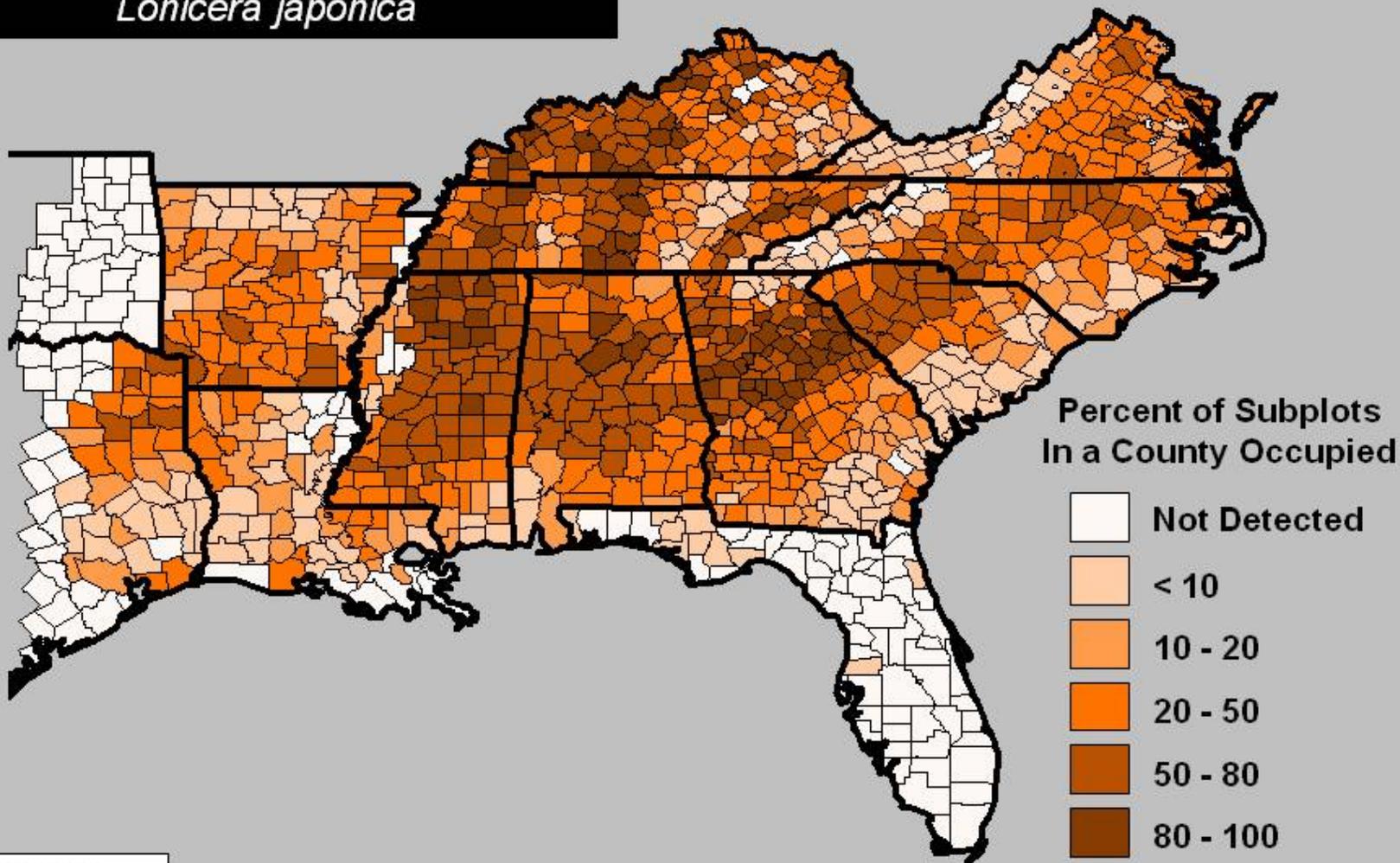
*Lonicera japonica*



10 Million Forested Acres Occupied  
Alabama 3 Million Acres

# Japanese Honeysuckle

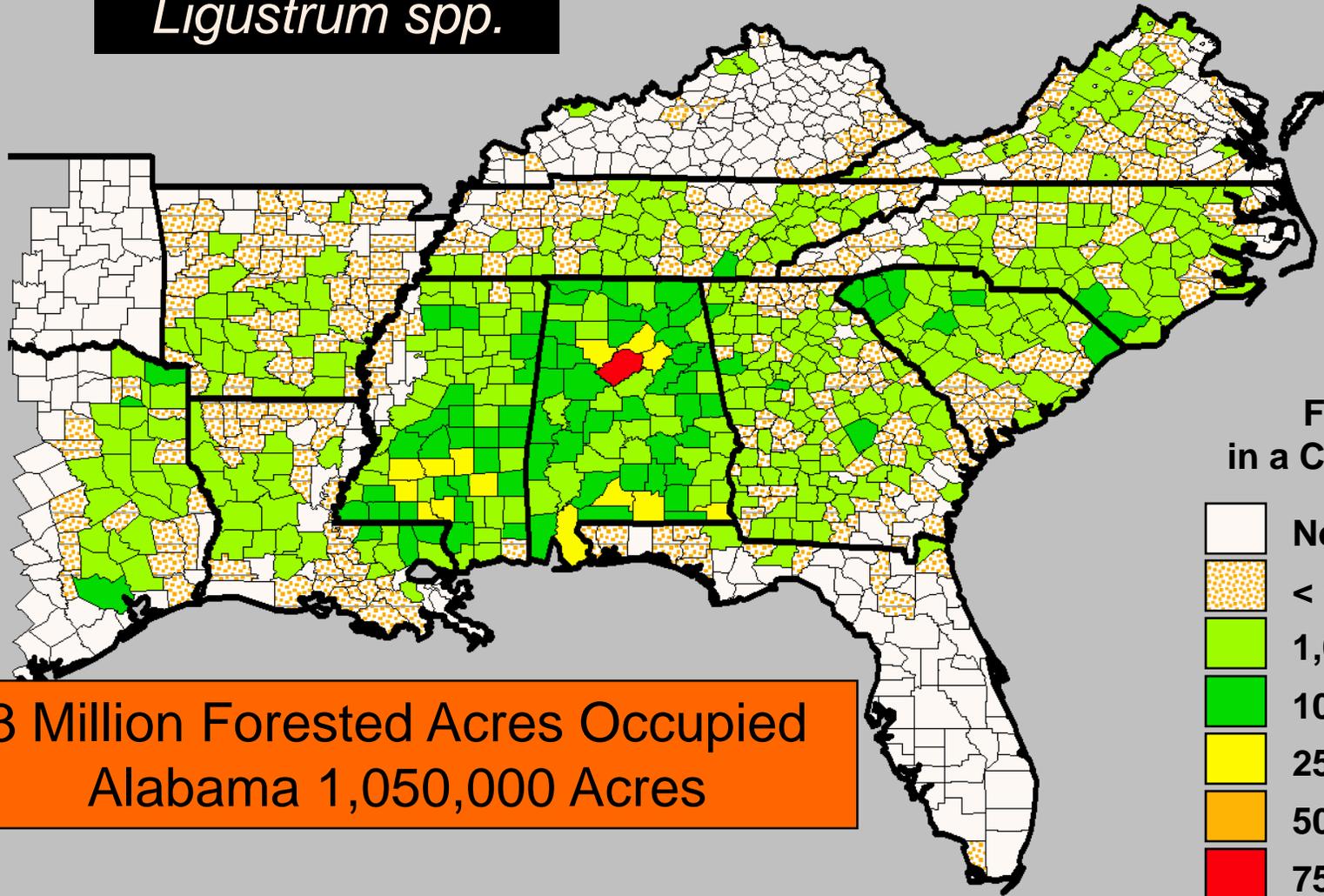
*Lonicera japonica*



USDA Forest Service  
SRS FIA database March 2008  
Miller and Chambliss, Auburn

# Privet Species

*Ligustrum spp.*



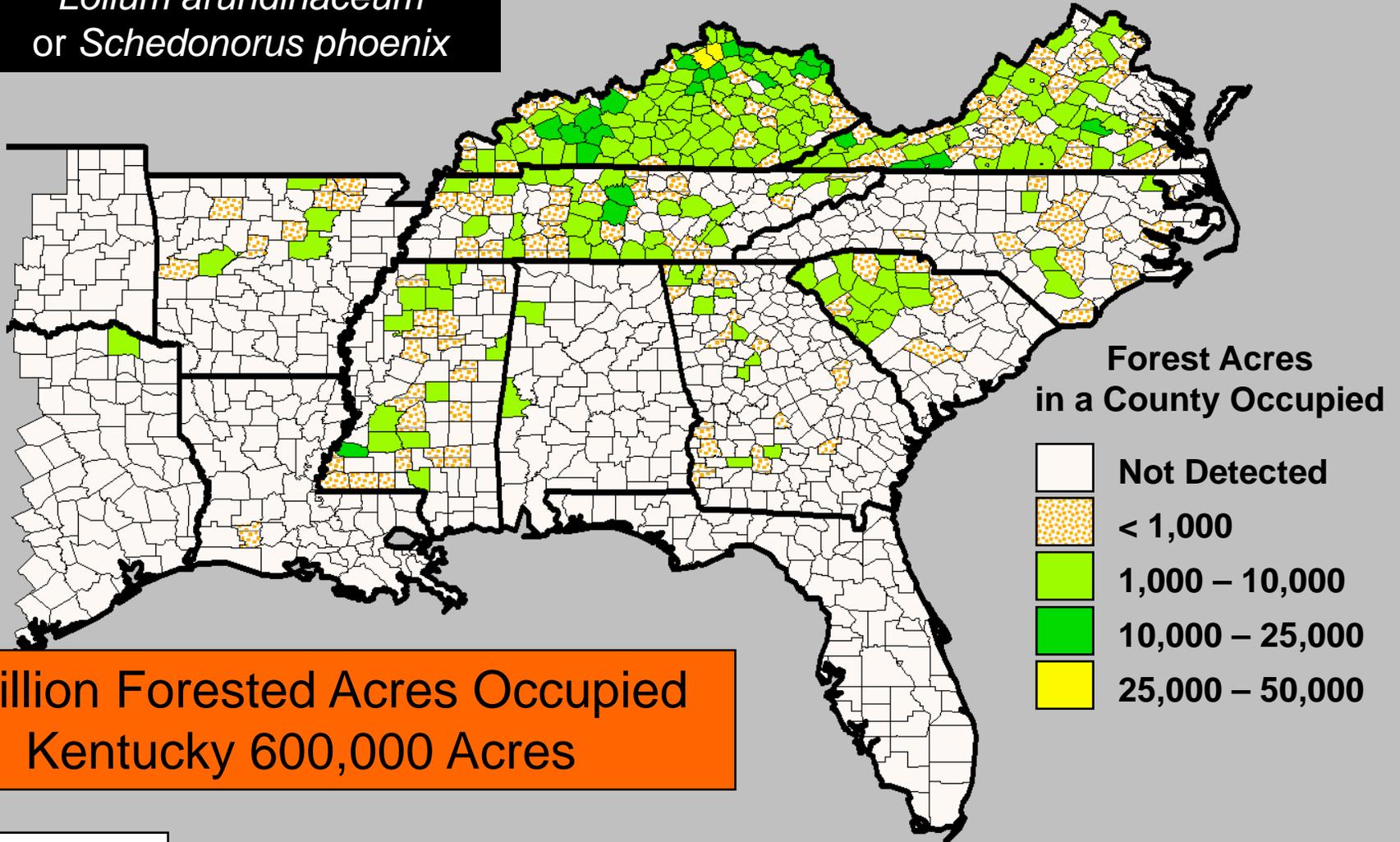
Forest Acres  
in a County Occupied

- Not Detected
- < 1,000
- 1,000 – 10,000
- 10,000 – 25,000
- 25,000 – 50,000
- 50,000 – 75,000
- 75,000 – 100,000

3 Million Forested Acres Occupied  
Alabama 1,050,000 Acres

# Tall Fescue

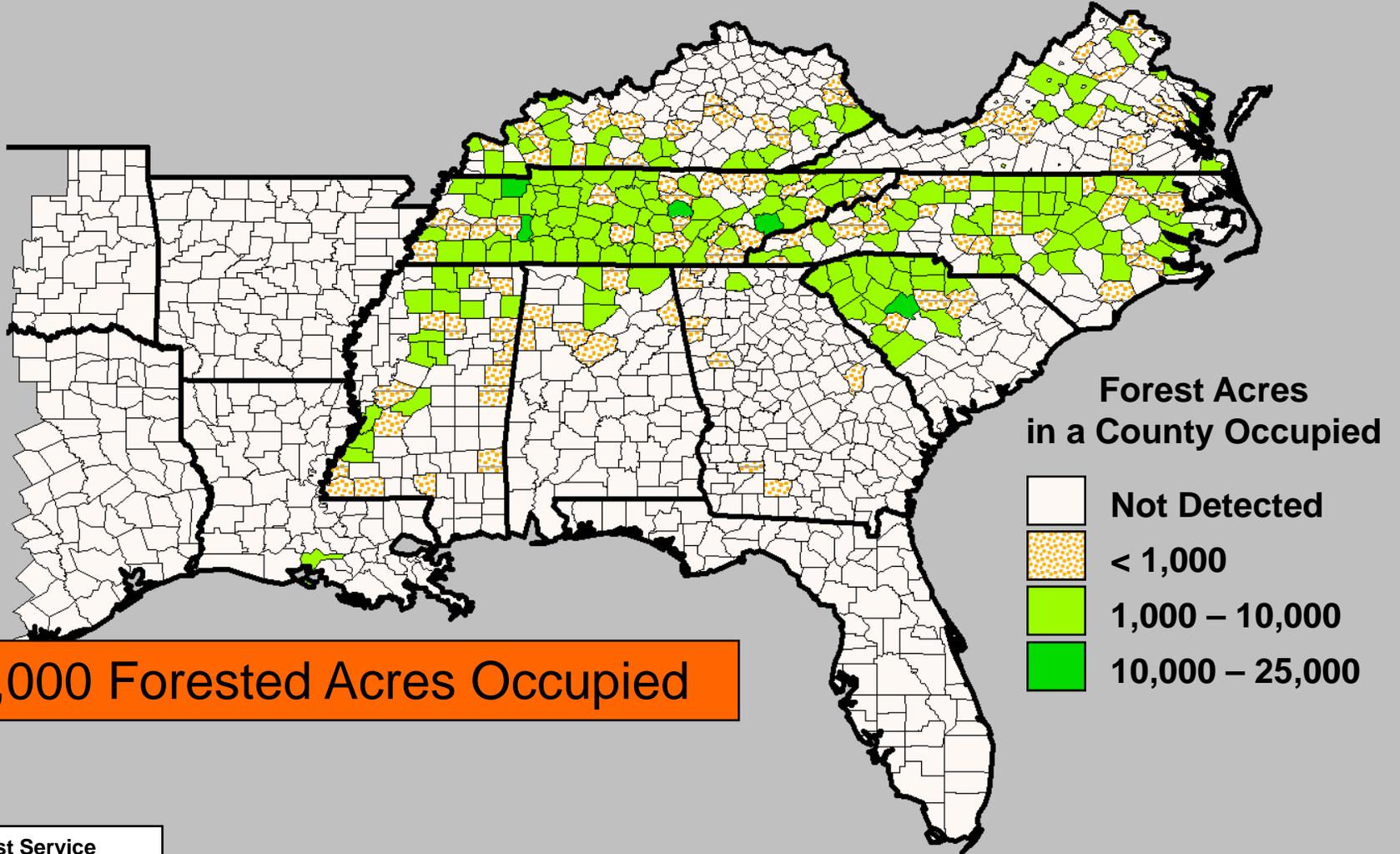
*Lolium arundinaceum*  
or *Schedonorus phoenix*



1 Million Forested Acres Occupied  
Kentucky 600,000 Acres

# Nepalese Browntop, *Microstegium*

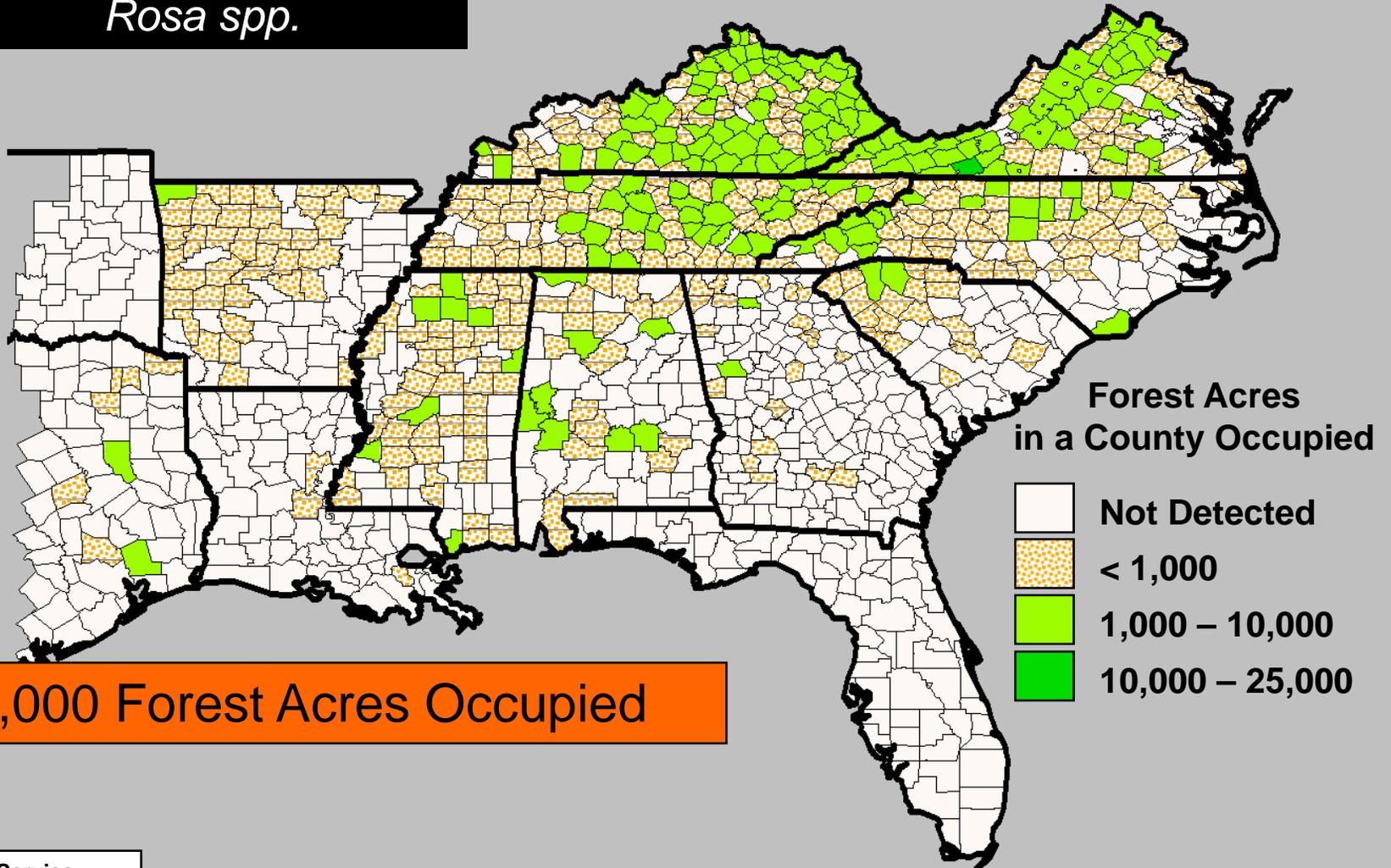
*Microstegium vimineum*



650,000 Forested Acres Occupied

# Nonnative Roses

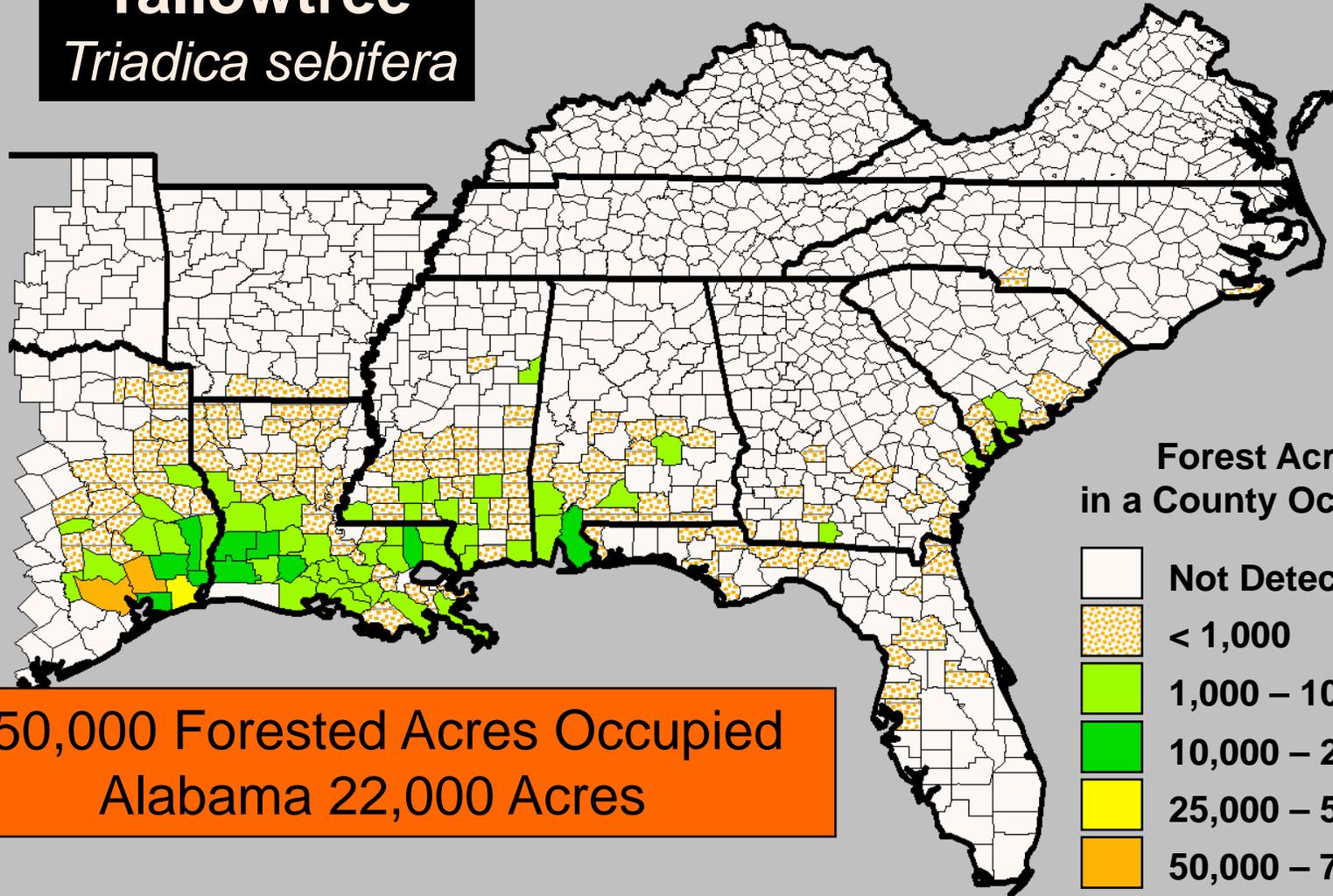
*Rosa spp.*



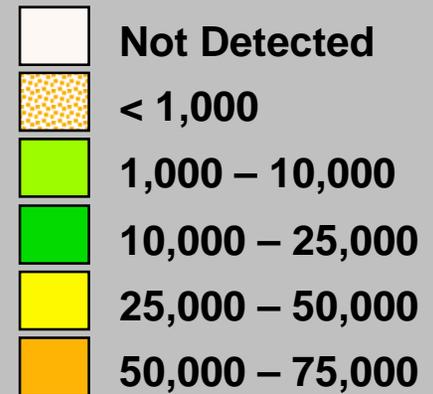
600,000 Forest Acres Occupied

# Tallowtree

*Triadica sebifera*



## Forest Acres in a County Occupied



450,000 Forested Acres Occupied  
Alabama 22,000 Acres



Photo courtesy: Alabama Forestry Commission

COMING SOON !!!!



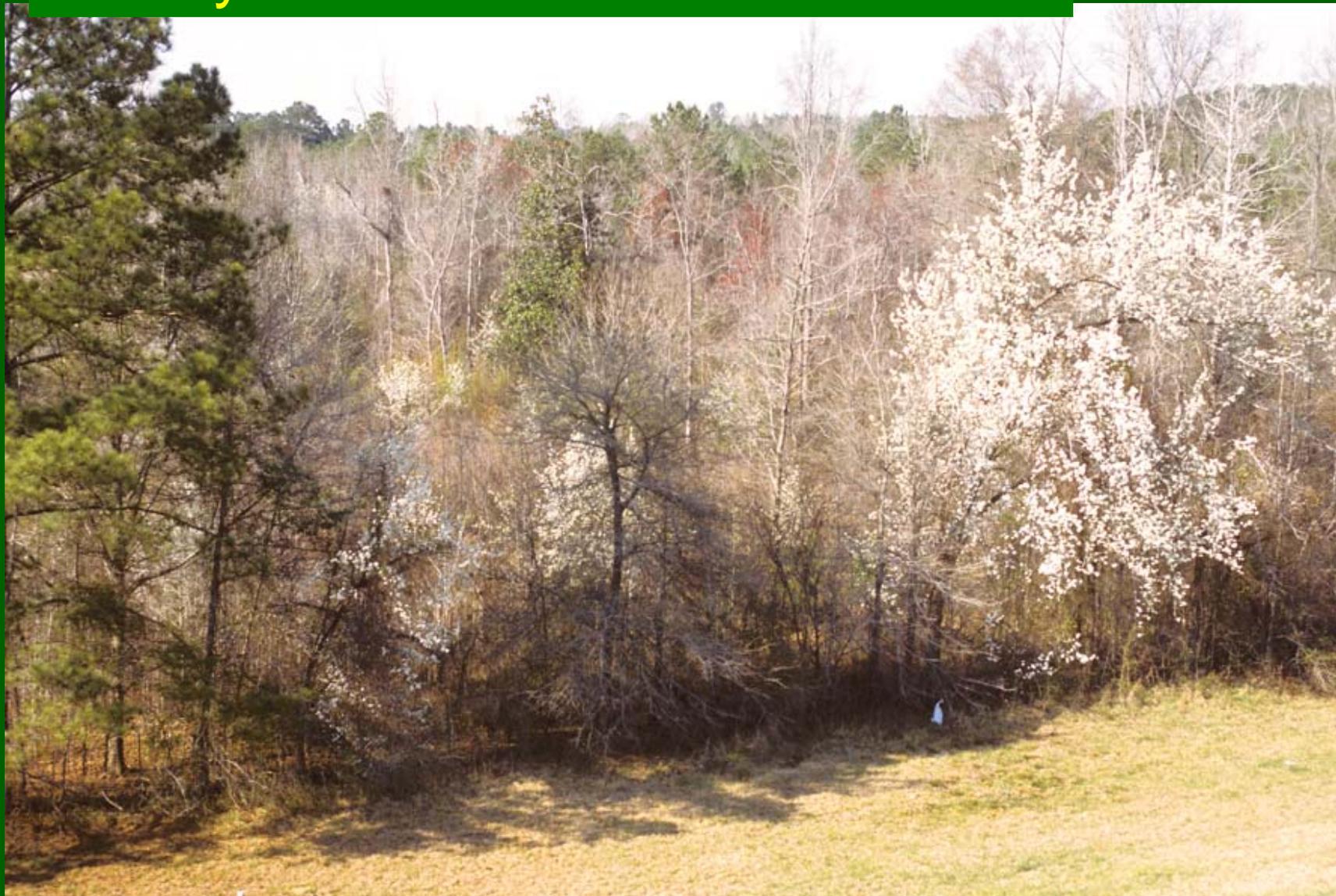
**A Field Guide for the  
Identification of Nonnative  
Invasive Plants in  
Southern Forests**

**Miller, Chambliss, and  
Loewenstein**  
Reviewers: Hansen, Lance,  
Manning, Minter, & Nation

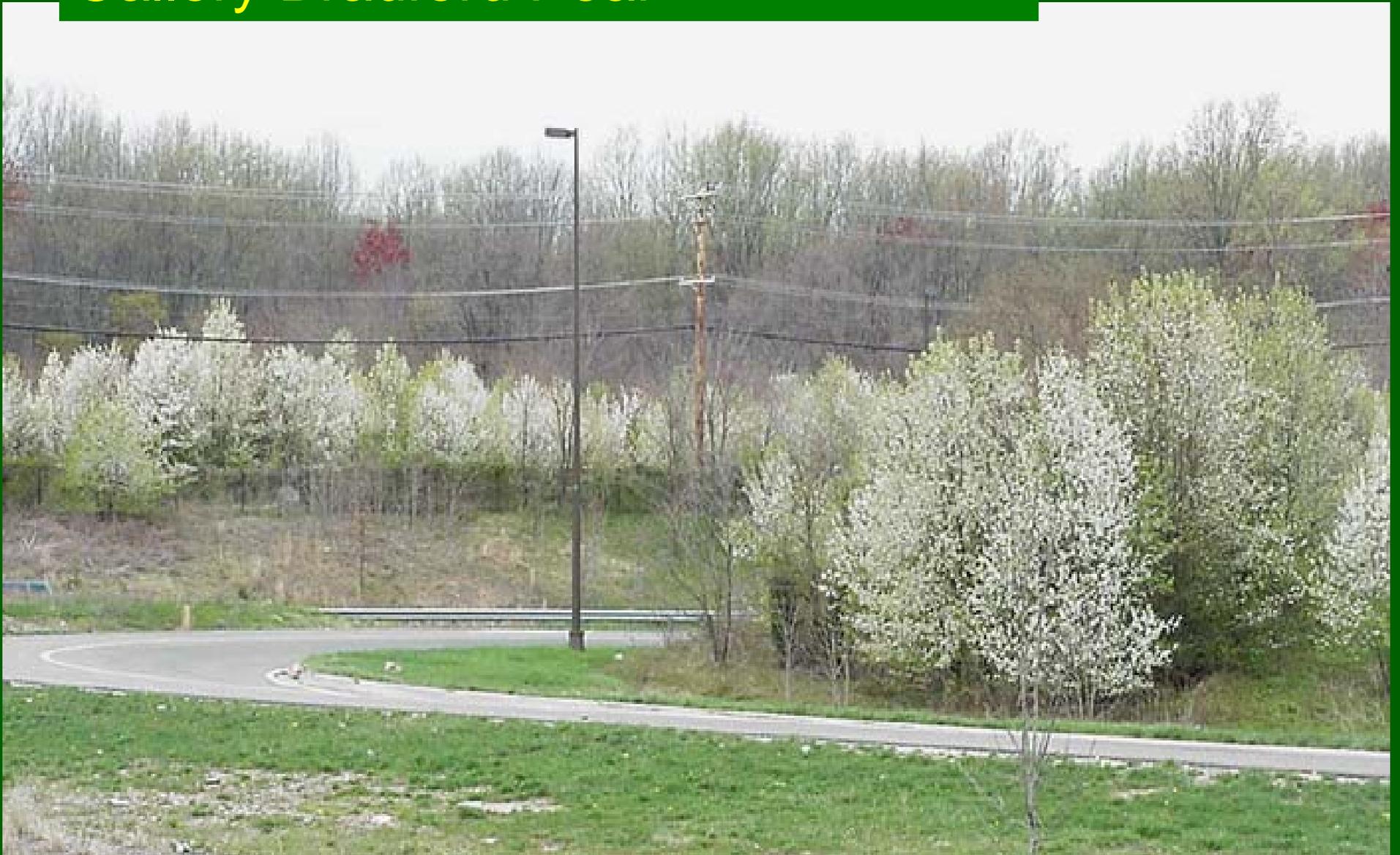
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Reviewers: Evans, Fraley, Minogue,  
Moorhead, & Nespeca

# Callery Bradford Pear



# Callery Bradford Pear



# Beale's barberry, leatherleaf mahonia

(*Mahonia bealei*)



# Beale's barberry, leatherleaf mahonia

(*Mahonia bealei*)

**Dr. Nancy Loewenstein**

UGA2154028



# Japanese Knotweed



**We Must Have a Cadre of Trained and Professional  
Applicators like the  
US Park Service's Southeast Exotic Plant  
Management Team**



**We Must Have a Cadre of Trained and Professional**

**US Pa**

**otic Plant**

