

A photograph of a pine forest with a large field of cogongrass in the foreground. The grass is tall and green with white seed heads. The pine trees are tall and thin, forming a dense stand in the background.

Cogongrass in Georgia

An EDRR Success

**Dave Moorhead,
University of Georgia**
**Mark McClure, James Johnson, Chip Bates,
Georgia Forestry Commission**

Numbers

- **37 million**
- **24.4 million**
- **188**
- **4,356**



Early Detection and Rapid Response (EDRR)

Even the best prevention efforts cannot stop all invasive species. Early detection, rapid assessment and rapid response is a critical second defense against the establishment of invasive populations. EDRR increases the likelihood that localized invasive populations will be found, contained, and eradicated before they become widely established. EDRR can slow range expansion, and avoid the need for costly long-term control efforts. Effective EDRR depends upon the timely ability to answer critical questions such as¹:

1. What is the species of concern, and has it been authoritatively identified?
2. Where is it located and likely to spread?
3. What harm may the species cause?
4. What actions (if any) should be taken?
5. Who has the needed authorities and resources?
6. How will efforts be funded?

Successful Early Detection and Rapid Response Programs include²:

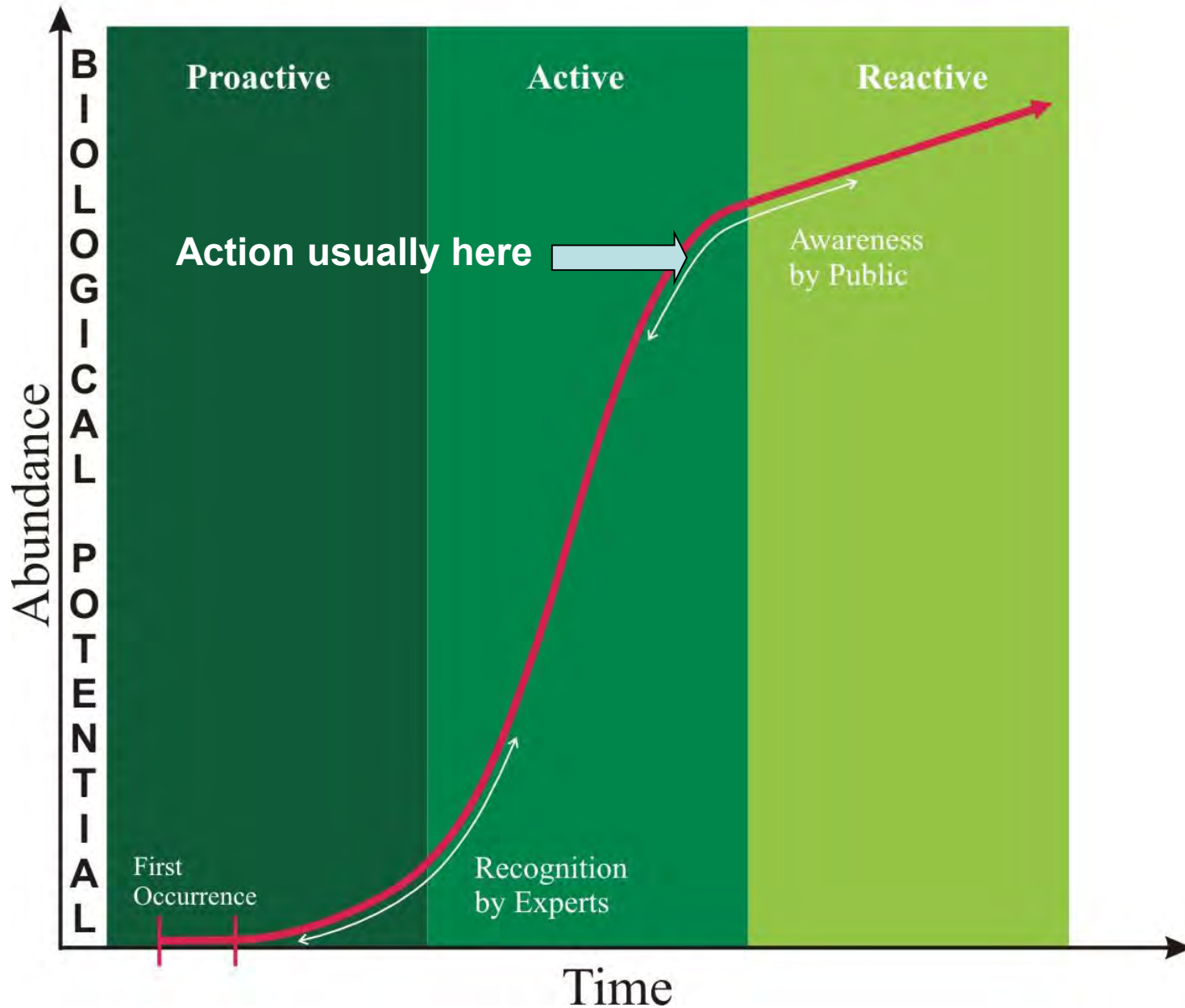
1. potential threats are being identified in time to allow risk-mitigation measures to be taken;
2. new invasive species are being detected in time to allow efficient and environmentally sound decisions to be made;
3. responses to invasions are effective and environmentally sound and prevent the spread and permanent establishment of invasive species;
4. adequate and timely information is being provided to decision-makers, the public, and to trading partners concerned about the status of invasive species within an area; and
5. lessons learned from past efforts are being used to guide current and future efforts.



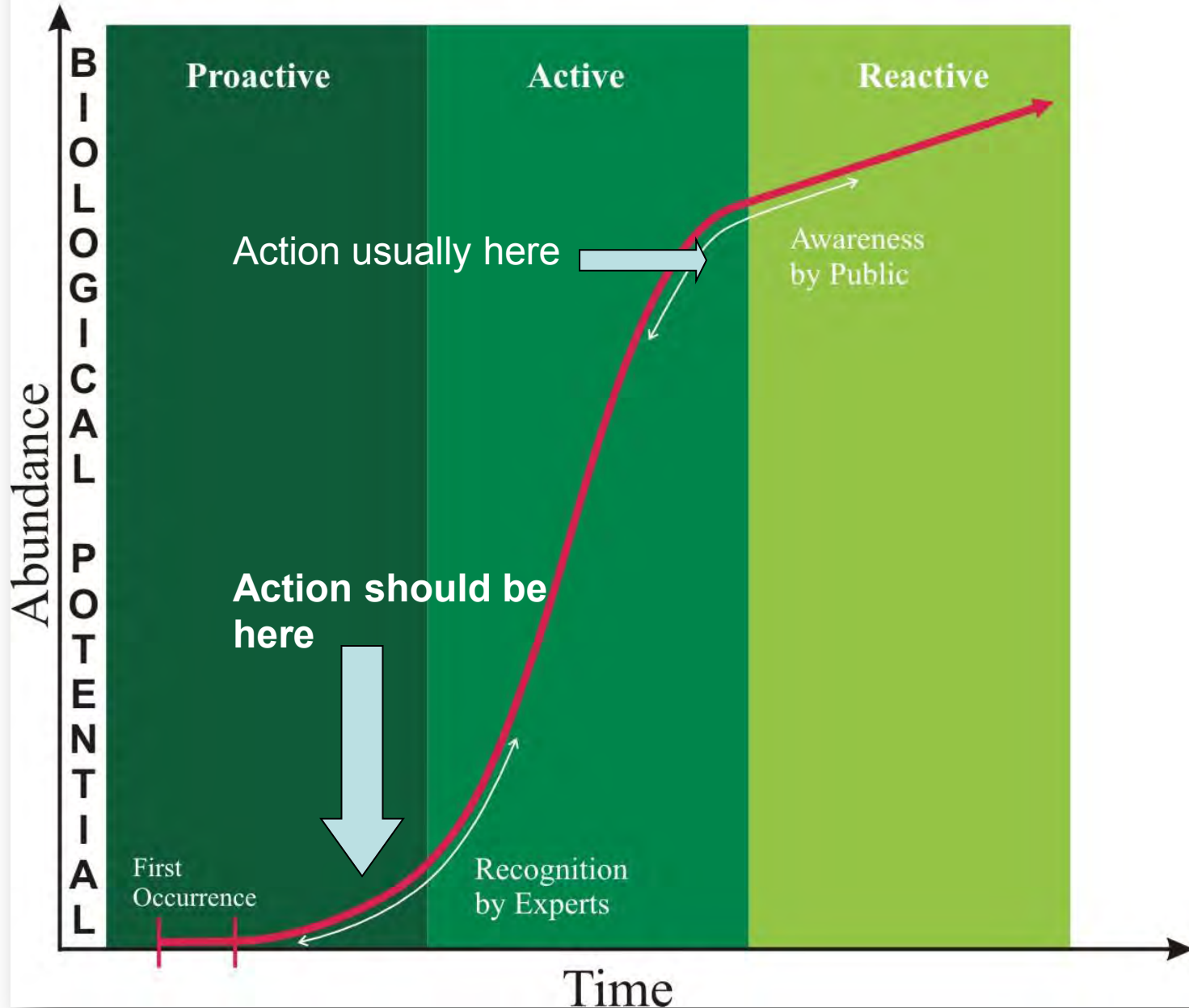
Taking GPS coordinates of Chinese fallow tree infestation

Photo by: David Moorhead, UGA

Perception of an Invasive Species



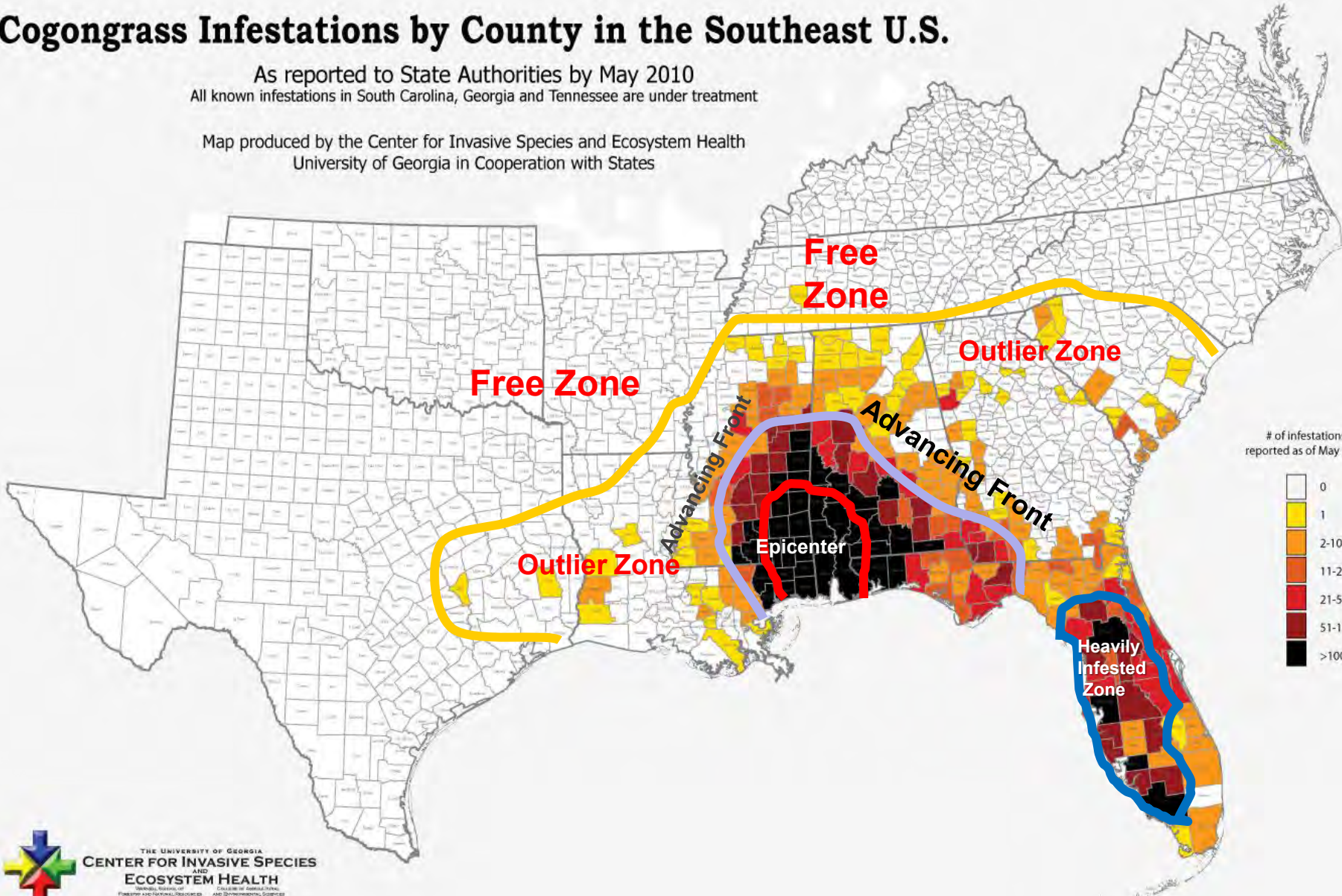
Perception of an Invasive Species



Cogongrass Infestations by County in the Southeast U.S.

As reported to State Authorities by May 2010
All known infestations in South Carolina, Georgia and Tennessee are under treatment

Map produced by the Center for Invasive Species and Ecosystem Health
University of Georgia in Cooperation with States





Art Miller, APHIS, PPQ
1994 to 2004 - fewer than 10 known cogongrass spots

**2004 Mitchell County
Wayne Williamson, APHIS, PPQ**



Cogongrass Training

- 2005 – UGA Cogongrass Training
 - *83 attendees from UGA, GFC, APHIS, GDA, DNR*

Cogongrass Support

- **2004** - Georgia Forestry Commission receives invasive species grant from US Forest Service, Forest Health Protection/State & Private Forestry
 - **Forest Health Specialists, Education & Eradication Efforts**
- **2005** - State Task Force formed

Cogongrass Training

- **2005** – UGA Cogongrass Training
– *UGA, GFC, APHIS, GDA, DNR*
- **2006** – ROW Training
– *Georgia DOT, County Road Crews*
- **2005 to 2013** - Loggers, Tree Planters, Utilities, Foresters, Land Managers, Homeowner programs
– *1,000 presentations to 50,000+*

Field Guide to the Identification of Cogongrass

With comparisons to other
commonly found grass species in
the Southeast



USDA Forest Service
University of Georgia - Bugwood Network

Cogongrass Threatening Georgia

Use this guide to identify
and report suspected
infestations.

Report Cogongrass to
1-800-GA-TREES

www.cogongrass.org

Cogongrass

Imperata cylindrica

[Identification](#)[Control](#)[Distribution](#)[Proceedings](#)[Publications](#)[Images](#)[Videos](#)[Report](#)[Links](#)

Cogongrass Infested States

Click on State to find State Resources



Georgia County Road Crew Training Resources



Information and resources for Georgia Extension agents to conduct a short informational training program for their county road crews. [More](#)

The Cultivar 'Red Baron'?



The 'Red Baron' cultivar of *Imperata cylindrica* has bright, showy, blood-red leaf edges. It is frequently sold across the U.S. in plant nurseries and is widely available over the Internet for ornamental use. It is often described as being non-invasive, although published proof of this claim is lacking. [More](#)

Alabama Cogongrass Aerial Photographs



In open fields and forests cogongrass initially forms circular infestations that appear light green in summer and light brown in winter as can be viewed in these oblique aerial photographs. In later stages of invasion, circular infestations can merge and linear infestations can form along highways, fences, and around water bodies. [More](#)

Identification Field Guide



Cogongrass has a unique combination of characteristics that make field identification possible. This [field guide](#) describes and illustrates these characteristics and compares them to other grass

News:

[Cogongrass confiscated at Savannah port](#)

[Six Million for Cogongrass in Alabama](#)

[Florida Cogongrass Cost-Share Program](#)

[More News from the Bugwood Blog](#)

Supported by:



Partners:



Cogongrass

Imperata cylindrica

[Identification](#)[Control](#)[Distribution](#)[Proceedings](#)[Publications](#)[Images](#)[Videos](#)[Report](#)[Links](#)

Georgia County Road Crew Training Resources

Cogongrass (*Imperata cylindrica*) is one of the worst invasive plants we have in the South. Infestations of this grass are widespread in Florida, Alabama and Mississippi, but at present, we have relatively few infestations in only 28 Georgia counties. Lessons learned from these other states can help prevent spread in Georgia. In 2008, a Cogongrass Cooperative Weed Management Area was established for Georgia to combat this invasive weed.

State, federal and private agencies are partners in this effort and Georgia is fortunate to have an innovative program through the Georgia Forestry Commission to treat cogongrass infestations at no cost to the landowner. This spring there will be a state-wide effort to educate the public and land managers on cogongrass. A key part of this will be training for county road crews on protocols to ID and reduce spread during their maintenance activities. This link has information and resources for Georgia Extension agents to conduct a short informational training program for their county road crews.

Resources

- [Setting Up a Cogongrass Training for Road Crews](#)
- [Narrated Cogongrass Video Presentation](#)
- [Download PowerPoint Presentation](#)
- [Cogongrass Threatening Georgia mini-brochure](#)

Contact

For program information and resources, contact:

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With Support from:





Help us eliminate this invasive plant in Georgia. Report cogongrass.

ONLINE SERVICES

- [Burn Permits Online](#)
- [Rate Our Customer Service](#)
- [Report Cogongrass](#)
- [Ask the Arborist](#)
- [GFC Careers](#)
- [Learn with Tree Talk](#)



Welcome to the Georgia Forestry Commission

Cogongrass in Georgia

Cogongrass, *Imperata cylindrica* (L.), is considered the seventh worst weed in the world and listed as a federal noxious weed by USDA Animal and Plant Health Inspection Service – Plant Protection and Quarantine. Cogongrass was first introduced into the United States near Grand Bay, Alabama in 1911 via seed packing material in shipping containers from Japan.

Since its introduction, it has become widespread throughout Alabama, Mississippi, and Florida and is moving into Georgia and South Carolina. This grass suppresses and eliminates natural vegetation thereby significantly reducing tree & plant regeneration, wildlife habitat, forage, and ecological diversity.

- [Report a potential cogongrass sighting](#)
- [Field Guide to the Identification of Cogongrass](#)
- [Cogongrass in Georgia \(13 min\)](#)
- [Cogongrass in Georgia PSA \(30 seconds\)](#)

2008 State MOU

Cogongrass WMA

- 1. **GFC** – education, detection, field visits, eradication treatments
- 2. **UGA** – education, detection, web support, publications
- 3. **USDA APHIS (PPQ)** – detection, eradication treatments
- 4. **U.S. Forest Service** – funding, education

2008 State MOU

Cogongrass WMA

- 5. **Jones Ecological Center** – education, outreach
- 6. **Georgia Department of Agriculture** – plant industry regulation, enforcement
- 7. **Mark Atwater** – Weed Control Unlimited, Inc

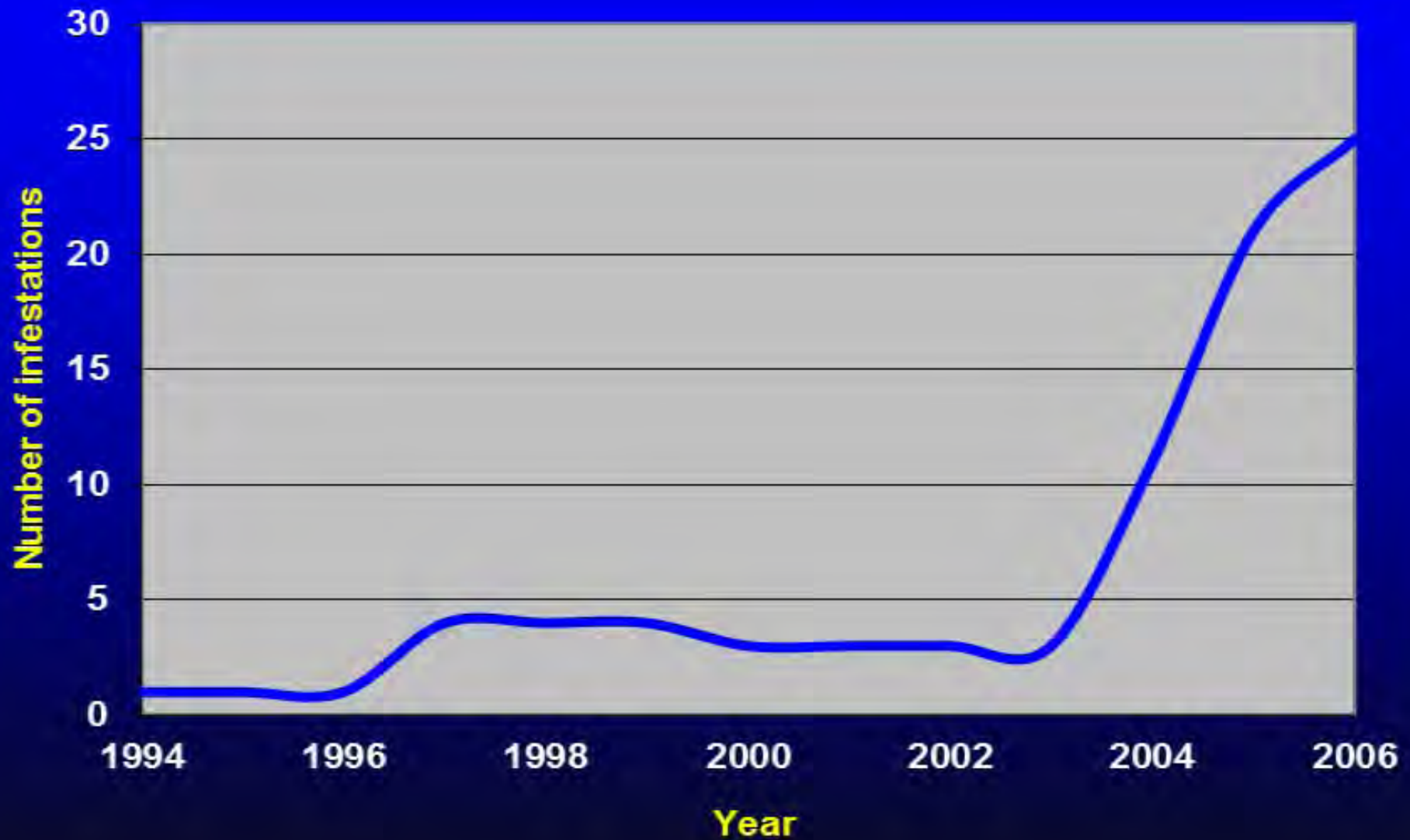
Cogongrass Support

- **2008** – Georgia Department of Agriculture specifically bans Red Baron & any ‘cultivar’ in the Genus *Imperata* for sale in GA



**Art Miller, APHIS, PPQ
1994 to 2004 - fewer than 10 known cogongrass spots**

Cogongrass spread in Georgia (1994-2006 Surveys)





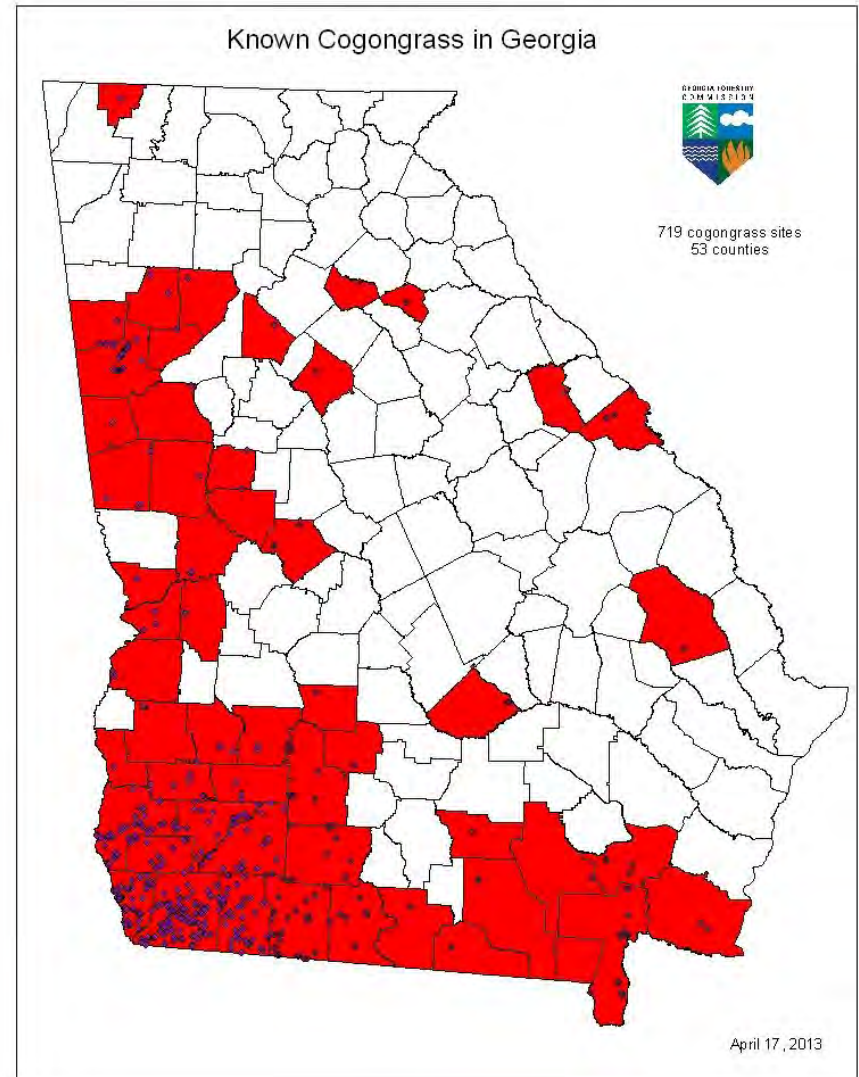




Cogongrass Infestations in Georgia

Summary of Georgia Cogongrass Sites:

- **719 Locations** (4/17/13)
- **53 Counties**
- **188 acres total**
- **All sites are being treated!**





Reports of Cogongrass as of 4-17-2013

- **1994-2006:** **59** total sites
- **2007:** 37 sites reported; **96** total sites
- **2008:** 131 sites reported; **227** total sites
- **2009:** 110 sites reported; **337** total sites
- **2010:** 135 sites reported; **472** total sites
- **2011:** 130 sites reported; **602** total sites
- **2012:** 87 sites reported; **689** total sites
- **2013:** 30 sites reported; **719** total sites

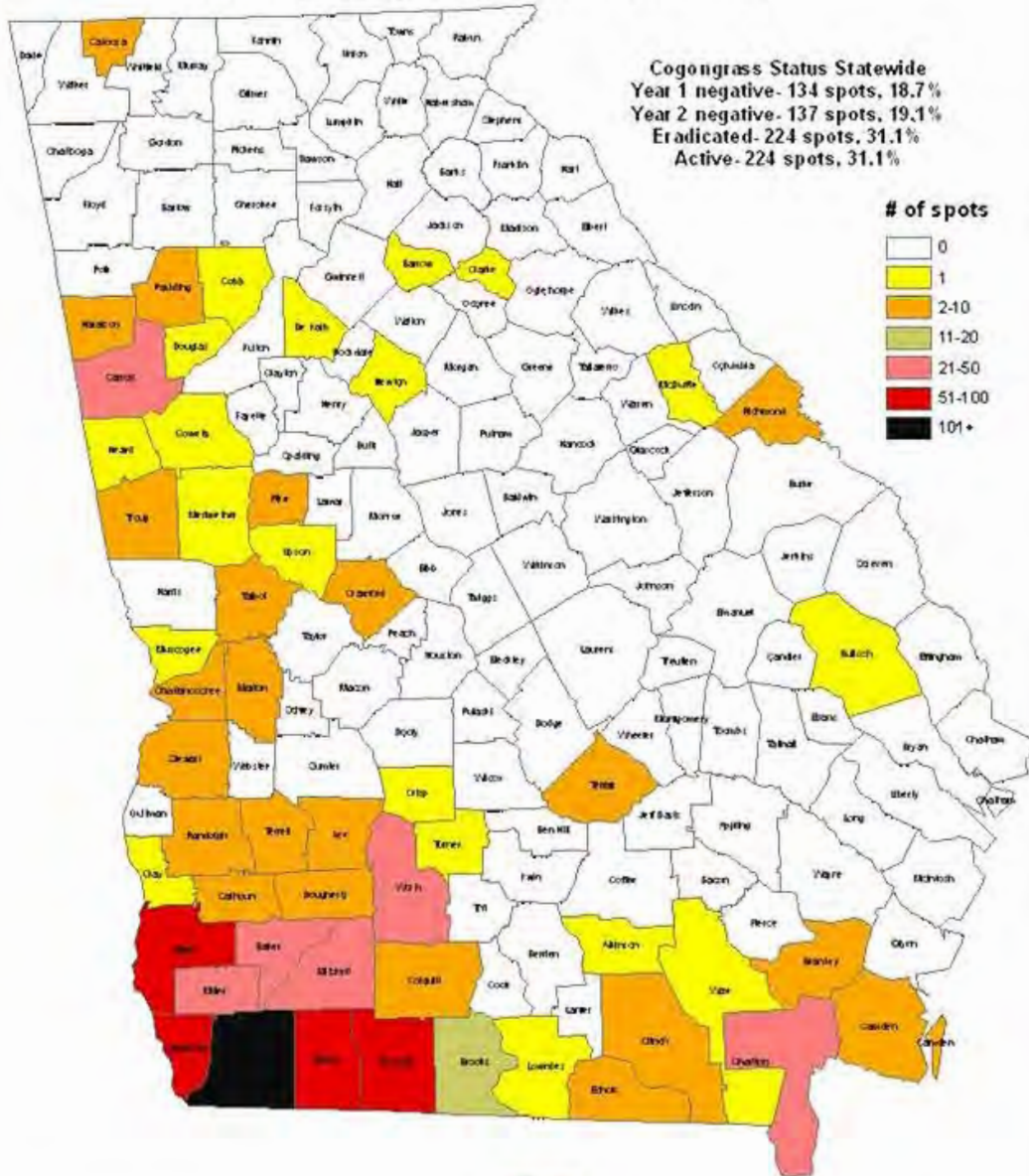


Georgia Counties with Known Cogongrass Infestations

• Atkinson	1	• Cowetta	1	• Mitchell	27
• Baker	23	• Crawford	3	• Muscogee	1
• Barrow	1	• Crisp	1	• Newton	1
• Brantley	4	• Decatur	159	• Paulding	2
• Brooks	12	• DeKalb	1	• Pike	3
• Bullock	1	• Dougherty	3	• Randolph	7
• Calhoun	10	• Douglas	1	• Richmond	3
• Camden	2	• Early	65	• Seminole	82
• Carroll	49	• Echols	8	• Stewart	3
• Catoosa	2	• Grady	55	• Talbot	8
• Charlton	24	• Haralson	3	• Telfair	2
• Chattahooche	3	• Heard	1	• Terrell	7
• Clarke	1	• Lee	2	• Thomas	51
• Clay	1	• Lowndes	1	• Troup	4
• Clinch	2	• Marion	9	• Turner	1
• Cobb	1	• McDuffie	1	• Upson	1
• Colquitt	8	• Meriwether	1	• Ware	1
		• Miller	33	• Worth	22

53 of GA's 159 counties with a total of 719 sites as of April 17, 2013 ranging in size from <0.1 to >10.0 acres totaling 187.7 acres

County Cogongrass Densities





Cogongrass locations

Pine timber	71.3%
Right-of-ways	21.2%
Open	5.0%
Yard	1.0%
Planted	1.1%
Food plots	0.4%

- Logging Equipment and a small number of tree planter introductions.
- R-O-W includes both highway and powerline.
- Open includes pastures, pond dams, woods roads, landfill, barrow pit and baseball field.
- Yard includes flower beds & balled landscape trees.
- Planted-planted as pasture decades back.



Herbicide Treatments & Monitoring

Loblolly pine

1-3% Chopper® + 1% glyphosate (Accord XRT II)+ 1% surfactant (Dyne-a-pak)

1-1.5% Arsenal AC® + 1% glyphosate (Accord XRT II)+ 1% surfactant (Dyne-a-pak)

Slash & Longleaf Pine

1.0% Chopper® + 3% glyphosate (Accord XRT II)+ 1% surfactant (Dyne-a-pak)

Hardwood Sites

3-4% glyphosate (Accord XRT II)+ 1% surfactant (Dyne-a-pak)

- **Treatments being made mid-May thru October.**
- **If possible, burn in winter prior to spraying to remove dense litter layer.**
- **Monitor annually for 5+ years**



Cogongrass Success



Pre-treatment



2-3 months after first year treatment



1 year after treatment

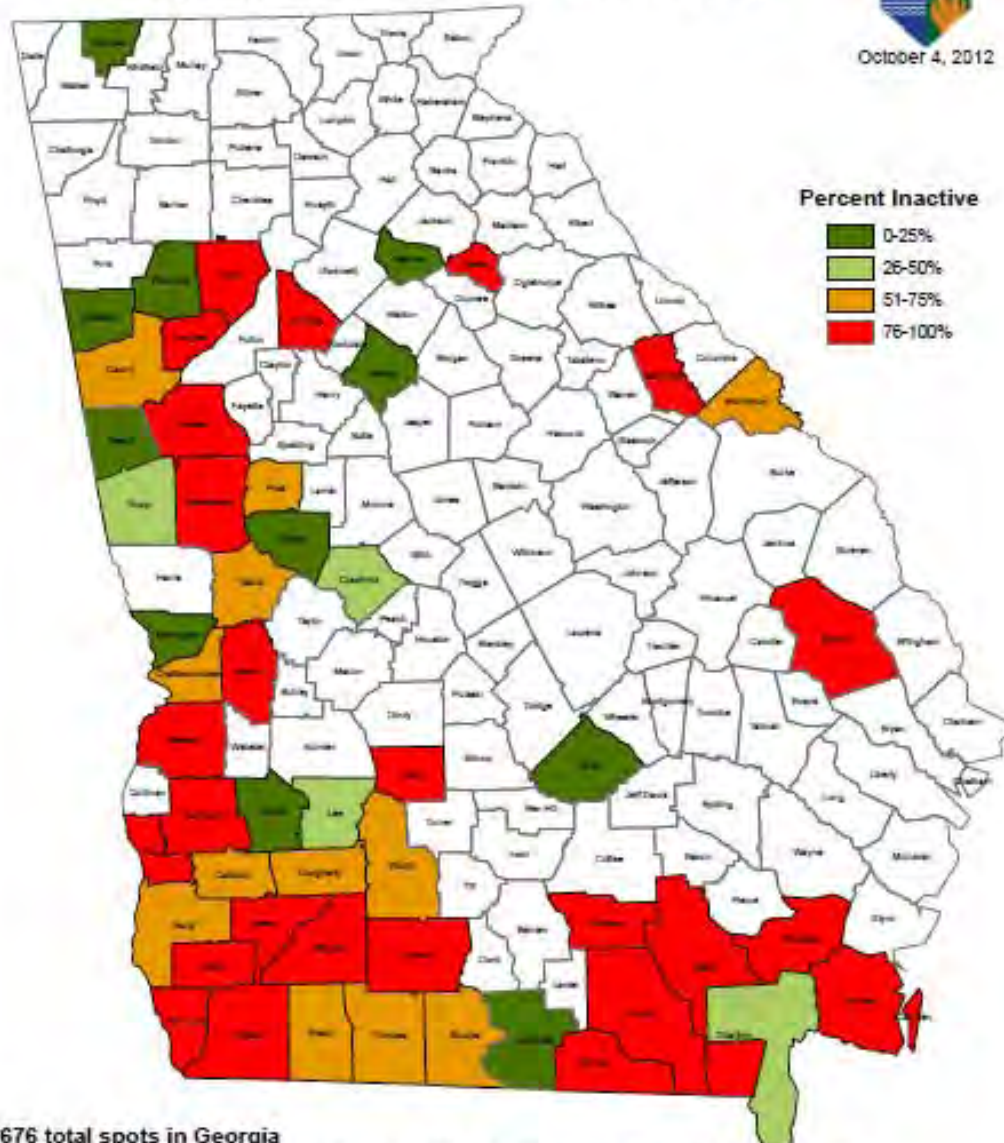


2 years after herbicide treatment

Cogongrass Percent Inactive Map



October 4, 2012



*676 total spots in Georgia
188 Active
131 Year 1 Negative
137 Year 2 Negative
220 Eradicated

Overall: 72% of all cogongrass spots are negative

* These figures change frequently as additional spots are detected and site reinspections are made.



Status of Cogongrass spots (4/17/13)

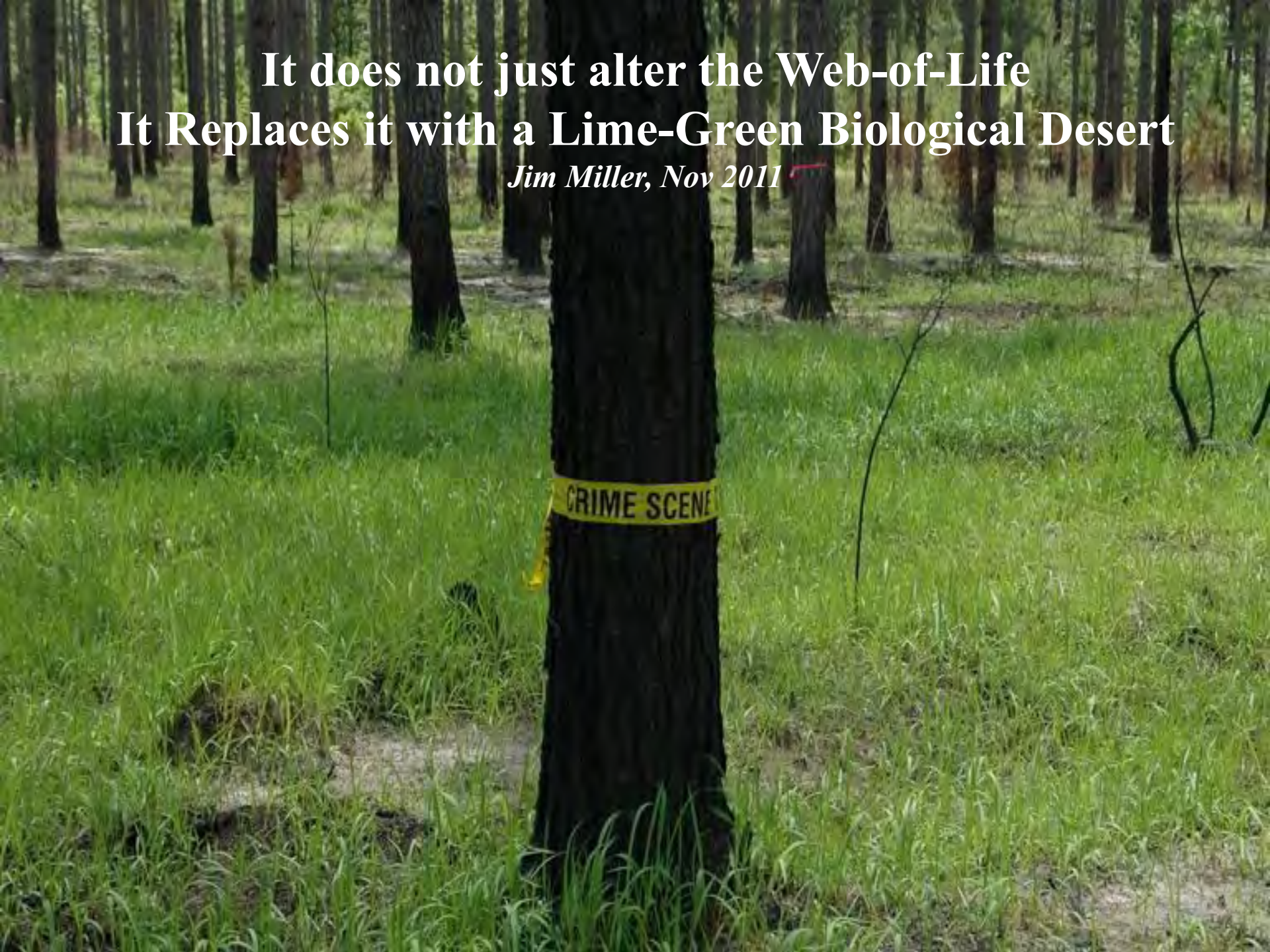
Year 1 Negative	134	18.5%
Year 2 Negative	137	19.1%
Eradicated	224	31.2%
Active	224	31.2%
TOTAL	719	100.0%

Numbers

- **37 million acres in Georgia**
- **24.4 million acres of forest lands**
- **188 acres of cogongrass spots**
- **4,356 square feet = average infestation**

**It does not just alter the Web-of-Life
It Replaces it with a Lime-Green Biological Desert**

Jim Miller, Nov 2011



Special Thanks

The Georgia Forestry Commission & its partners involved with cogongrass education, detection & eradication in Georgia thank the U.S. Forest Service for its support and financial assistance in making cogongrass EDRR a success story in Georgia.

