

Cogongrass Distribution and Spread Prevention

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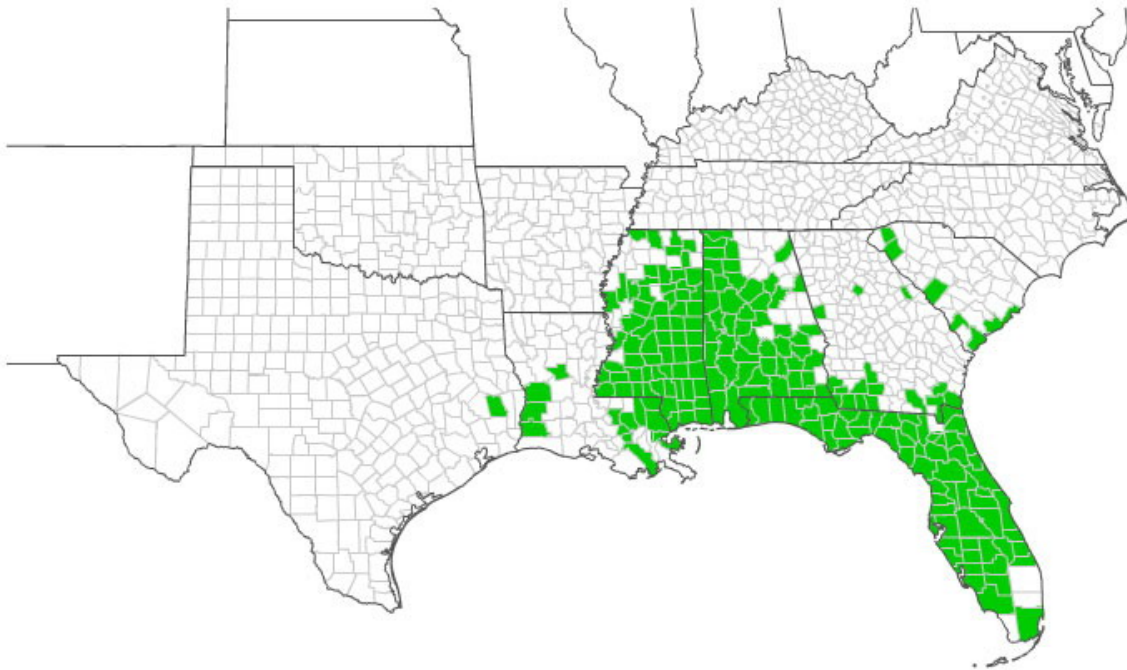
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Cogongrass Distribution

The introduction of Cogongrass into the United States was initially accidental though use as a packing material for shipment of orange plants from Japan to Grand Bay, AL in the winter of 1912. Other early introductions were made in Mississippi and Florida in forage test trials and for erosion control. Since that time it has spread throughout the southeastern states from Alabama west through Mississippi to Louisiana and east to South Carolina. Currently there are over 1 million acres in Florida and several thousands of acres in Alabama and Mississippi.

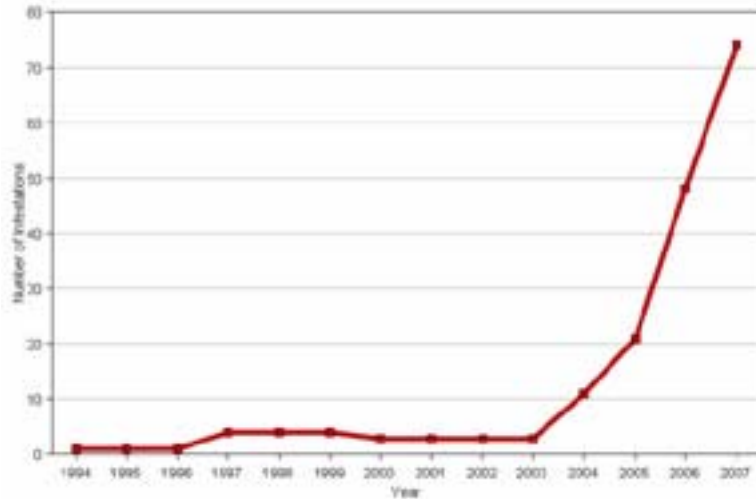
Ornamental introductions continue to be made in the U.S. with the numerous “red cultivars” offered by nurseries that are subject to much debate by invasive plant researchers and managers as to their “stated” lack of potential to revert to the “invasive” form. In more northern latitudes cogongrass may not successfully overwinter but most of the Eastern U.S. and Pacific Northwest states may be at risk .

Cogongrass Distribution - Southern U.S.



County level infestations of cogongrass. October 2007. EDDMaps – Bugwood Network.

The Spread of cogongrass in Georgia. The recent spread/detection in Georgia over the past 10 years has accelerated to 25 new infestations per year.



Number of infestations of cogongrass in Georgia tracked over the past 13 years.

Vectors of Cogongrass Spread

Cogongrass spreads by both seed and rhizomes. Windblown seed can move several miles in air currents and both seed and rhizomes move even farther when hitchhiking on equipment, mulch, and fill materials. Vegetative spread in existing infestations was recently found to exceed 200 sq ft per day in drought conditions in the Florida Panhandle (C. Ramsey, USDA APHIS-PPQ-CPHST, personal communication). Spread along highway right-of-ways through road construction and other maintenance activities has resulted in widespread movement throughout Alabama, Mississippi and Florida. To date, most infestations in Georgia and South Carolina have been introduced by contaminated equipment used for site preparation, tree planting, wildlife food plot preparation, powerline installation, as well as movement of contaminated fill dirt and other direct movement by man.

Elements of Prevention Programs

Creating awareness of the potential of spread and impacts on management is a critical outreach programming component and the audience is vast. The call for participation in this conference shows the comprehensive need to inform and educate "...land owners and managers, contractors and consultants, State and federal agency management staff, policy makers, researchers, citizens, commodity group leaders, lawmakers, equipment and herbicide manufacturers, distributors, and retailers in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas. Participation is particularly encouraged by State departments of agriculture, conservation, transportation, and forestry; State cooperative extension leadership, specialists and agents; State and County Highway and Roads Departments; Soil and Water Conservation Districts and Resource Conservation and Development leadership and staff; USDA Natural Resources Conservation Service, USDA Forest Service, USDI Park Service, and U.S. Fish and Wildlife Service leadership and staff. "

Heightening awareness among land managers, loggers, highway, ROW, and utility contractors, hunters, farmers, nursery operators, and the general public will be necessary to reduce the potential movement of cogongrass that can be associated with their every day

management activities. In an effort to reduce the introduction of new infestations, preventative measures, including equipment sanitation and off-site material quarantines, should be highlighted through educational programs for foresters, natural resource managers, highway and ROW maintenance workers, farmers, landscapers and the general public.

Encouraging proper equipment sanitation practices when operating on infested sites and moving equipment to other locations to prevent spread include:

- **Cleaning of radiators, screens, and equipment parts that collect seed or come into contact with the soil and rhizomes;**
- **Inspecting sources of off-site material including soil, gravel, and mulch for invasive species; and**
- **Establishing central staging areas on a property when equipment and material from off-site are stored or staged to allow easy inspection and monitoring for the introduction of invasives.**

Improved cogongrass identification, detection, and reporting. State Department of Agriculture nursery inspectors in Georgia and South Carolina have recently received training in order detect cogongrass in routine nursery inspections. In-service training sessions and field tours on cogongrass identification and management are being conducted across the South by State, Federal and University personnel.

Early Detection, Rapid Response

While cogongrass has been established in several of our southeastern states for more than 90 years, its continued spread throughout the southeast, with potential into the Atlantic, Midwestern and West Coast states, requires a need for concerted efforts in Early Detection and Rapid Response (EDRR). Aggressive educational efforts to help reduce the vectors of spread along with “eyes on the ground” to rapidly identify new infestations followed by effective initial treatment, follow-up and rehabilitation/restoration can limit the expansion of cogongrass.

All of the southeastern states have implemented programs to control existing populations at various levels. In Georgia and South Carolina, presently at the forefront of the advance, state-level EDRR programs have been implemented. With support from USDA Forest Service, USDA APHIS-PPQ, USGS, state agencies, state Exotic Pest Plant Councils, and university cooperators, infestations are being mapped and treated.

Through the Bugwood Networks Early Detection and Distribution Mapping System (EDDMapS) a database with all information on Georgia’s cogongrass infestations and treatments is stored in a Microsoft SQL 2005 Server. New infestations and treatment records are sent to Bugwood personnel for entry into the database. All dates and types of treatments are kept in a separate table and tied to each individual infestation to allow for easy report generation and program evaluation. With additional data provided by the other southeastern states, the database is used to dynamically create both the county-level and point distribution maps across the South.



Cogongrass Information Resources

The University of Georgia's Bugwood Network (www.bugwood.org) develops and provides information and support for invasive species education, outreach, control and mapping across the South, as well as programs nationally and internationally on all taxa of invasive species along with links to the Southeast Exotic Pest Plant Council (SE-EPPC), state EPPCs and to EDDMapS through www.invasive.org.

Of specific relevance to cogongrass efforts is www.cogongrass.org which provides comprehensive information on cogongrass in Georgia along with links to other southeastern state efforts on cogongrass. To date, Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina and Texas have on-going research, education and/or control programs that are supported by university, state and federal agency cooperators. See www.cogongrass.org/links.cfm for links to state programs and cooperators.

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