



Educating the public on invasive species in Georgia

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Why should I care about cogongrass?

Cogongrass, an invasive grass from Asia, is considered "the seventh worst weed in the world". It was introduced, accidentally, into Alabama in 1911 as seed in packing materials from Japan. This species is wide-spread in Florida, Alabama and Mississippi and is starting to spread in Georgia, South Carolina and Tennessee. Cogongrass now contaminates 1.25 million acres in the southeastern United States. This invasive exotic can displace native plants and animals as well as threaten the safety of people and their structures.

Ornamental introductions continue to be made in the U.S. with the numerous "red cultivars" offered by nurseries. These cultivars are subject to much debate by invasive plant researchers and managers. Horticulturists affirm that there is little potential for the red cultivars to revert to the "invasive" form; invasive plant researchers suspect that the potential is definitely present. In more northern latitudes cogongrass may not successfully overwinter but most of the Eastern U.S. and Pacific Northwest states may be at risk of invasion.

Cogongrass spreads by both seed and root fragmentation (rhizomes). Windblown seed can move several miles in air currents and plants can produce up to 3,000 seeds per season. Seed and rhizomes move even farther when hitchhiking on equipment, mulch, and fill materials. Rhizomes can form a dense mat in the upper 6 to 24 inches of soil and fragments of less than 1/4 inch can re-sprout. This makes control by disking and mowing highly ineffective and can spread populations even further.

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 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, power line installation, movement of contaminated fill dirt and other direct movement by man. Once a population is established, eradication is difficult, expensive and could take years.



Small cogongrass infestation in woods.

Photo by: Mark Atwater, Weed Control Unlimited, Inc.

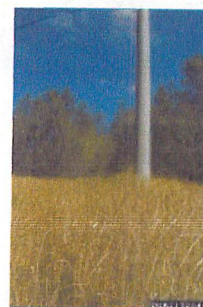
Cogongrass is a fire adapted species and thrives where fire is a regular occurrence. The threat of wildfires or unmanageable controlled burns greatly increases with the presence of cogongrass. Cogongrass fires are hotter, faster and higher than native grass fires. These factors can spell trouble for people and structures near large infestations.

Cogongrass not only replaces native plants, on which wildlife feed, it also has very high silica content, and therefore is unpalatable to native wildlife. The leaves are very stiff and can cut the mouths and damage the teeth of wildlife that attempt to ingest it. Infestations can be so dense that it impedes the ability of small animals to travel through and leaves little value for brood rearing habitat for ground nesting birds.



Large cogongrass infestation

Photo by: Chris Evans, River to River CWMA



Cogongrass infestation

Photo by: David Moorhead, University of Georgia Buwood Network

What can I do to help prevent the spread of cogongrass?

- If you see cogongrass, contact your local Forestry Commission Office or your County Extension Office as soon as possible.
- Do not mow through or near the area that has cogongrass, especially if it is flowering, as this may aid in dispersing the seeds.
- Do not do any soil work, such as disking or grading, in or near the area that has cogongrass. You could carry fragments of roots to other areas, spreading this noxious weed.
- Do not attempt any prescribed burns in areas with cogongrass before consulting with Forestry Commission personnel.
- Be sure to thoroughly clean any and all equipment that has been used in or near an infestation site.

Written by Carey Minter, Invasive Plant Species Program Coordinator, The University of Georgia Center for Invasive Species and Ecosystem Health

This publication based on: Midwest Invasive Plant Network. 2008. Why should I care about invasive plants? How invasive plants impact hunting, fishing, boating, gardening, hiking, biking, horseback riding, and other recreational activities in the Midwest. From MIPN.org/InvasivesBrochure.pdf.

The Economic Cost of Large Constrictor Snakes



photo: Lori Oberhofer, National Park Service



An American alligator and a Burmese python are locked in a struggle to prevail in Everglades National Park. This python appears to be losing, but snakes in similar situations have apparently escaped unharmed, and in other situations pythons have eaten alligators.

The U.S. Fish and Wildlife Service (Service), in partnership with many organizations, has spent more than \$6 million since 2005 finding and applying solutions to the growing problem of Burmese pythons and other large invasive constrictor snakes in Florida.

Controlling and eradicating these invasive snakes are critically important because they can cause major economic losses and expenditures. One study reported that nationwide, economic damages associated with nonnative invasive species effects and their control amount to about \$120 billion per year in the United States (Pimentel 2005).

Agencies such as the National Park Service, U.S. Department of Agriculture (USDA), South Florida Water Management District (District), U.S. Geological Survey (USGS), Florida Fish and Wildlife Conservation Commission, University of Florida, county governments and nongovernmental organizations work with the Service to combat the spread of invasive species throughout Florida and the rest of the United States. These actions include capture and removal; public education and awareness; spatial ecology and movement studies using

radio telemetry, satellite, and GPS technology; diet (stomach content analysis); thermal biology (implanted data loggers); trap development and trials; impacts analysis; pilot studies for genetics and salinity tolerance; potential use of unmanned aerial vehicles with thermal infrared cameras to detect large constrictor snakes in the field; and training dogs to find nonnative constrictor snakes.

The Service and its partners have spent an average of about \$720,000 annually on these efforts since 2005. The specific breakdown of these expenditures is as follows:

- The Service spent \$604,656 over a three-year period (2007 to 2009) to design python traps, deploy and maintain them, and to educate the public in the Florida Keys to prevent the potential extinction of the endangered Key Largo woodrat and other vulnerable endangered species.
- The District spent \$334,000 between 2005 and 2009 and anticipates spending \$156,600 more on research, salaries, and vehicles in the next several years. An additional \$300,000 will go to

the USDA's Wildlife Services for nonnative large constrictor snake control activities.

- The USDA Wildlife Research Center (Gainesville, Fla., Field Station) spent \$15,800 in 2008-2009 on salaries, travel and supplies to research snake control technologies.
- The USGS, in conjunction with the University of Florida, spent more than \$1.5 million on research; radio telemetry; and the development, testing and implementation of nonnative constrictor snake traps.
- Miami-Dade County Parks and Recreation Department, Natural Areas Management and Department of Environmental Resources Management spent \$60,875 annually on constrictor snake issues including removal from urban areas.
- The National Park Service has spent \$317,000 annually on various programs related to constrictor snake issues, such as researching snake biology for removal purposes in Everglades National Park.

These costs are incurred partly to prevent the extinction of species already endangered, two of which have been found as prey in Burmese python stomachs. From 1999 to 2009, Federal and State agencies spent \$1.4 million on Key Largo woodrat recovery and \$101.2 million on wood stork recovery. Puerto Rican parrots, although not found as prey yet, have cost Federal and State agencies \$17.2 million during that period. In addition to these three examples, many other endangered species are found in Florida and other States and territories that would be threatened by large constrictor snakes. Reducing or eliminating this threat will support the valiant efforts completed so far to recover these species.

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