USDA Forest Service
U.S. DEPARTMENT OF AGRICULTURE

INTERNATIONAL PROGRAMS | OFFICE OF THE CHIEF | **COGONGRASS**

An invasion of cogongrass in Picayune State Park, Florida.
Photo credit: USDA ARS Greg Wheeler

Cogongrass Biocontrol Project | Initiated in 2022

Funded by the USDA Forest Service International Programs, $800,000 over 4 years.

The International Programs Office of the USDA Forest Service is partnering with USDA's Agricultural Research Service (ARS) to **identify potential biocontrol agents for cogongrass.** The project is led by Dr. Greg Wheeler at the USDA-ARS Invasive Plant Research Laboratory (IPRL) in Ft Lauderdale, Florida. The ARS lab is an international leader in the development of classical biological control agents of weeds and has collaborators in Australia, South Africa, Japan, and South Korea.

Dr. Wheeler's team is conducting surveys of cogongrass in its native range overseas—Asia, Africa, Australia—to look for natural enemies that target and weaken the grass. Together with the ARS lab in Brisbane, Australia, the project team conducted the first-ever surveys of cogongrass in Australia.

Dr Dean Brookes (left) and Dr Greg Wheeler (right) collecting soil and seeds of cogongrass in Alabama.

Progress to Date

The team has found more than 60 species associated with cogongrass in Australia, Japan, and South Korea. The team has selected a priority list of potential agents and has begun the time-intensive process of rearing these candidates in quarantine facilities to evaluate their effectiveness and safety as biocontrol agents. ARS is also conducting genetic studies of the grasses to better understand the diversity of cogongrass in its native and invasive ranges.

Additional Cogongrass Biocontrol Research Support

Two University of Florida graduate students

The UFL graduate students are working on cogongrass biocontrol research in collaboration with USDA ARS IPRL. Their research is contributing to the identification and testing of promising biocontrol agents that could limit the spread of cogongrass and reduce the need for chemical control methods.

Funding $237,728

Dr. Rene Sforza from the USDA-ARS laboratory in Montpellier, France, (the European Biological Control Laboratory)

Dr. Sforza is leading world-wide collections of cogongrass to support genetic and morphological studies, covering Africa, Australasia, Asia, Europe, and the U.S. This research will enable biocontrol researchers to better understand the diversity of cogongrass across its native range, relative to its invasive range, and guide the discovery of the most effective control agents.

THE IMPACT OF CONGONGRASS

Cogongrass (*imperata cylindrica*) is one of the ten worst weeds in the world and the most problematic invasive weed in the southeastern U.S., affecting over 1 million acres.

It has no forage value and threatens vast ecosystems by increasing fuel load for intensely hot and destructive wildfires.

It swiftly crowds out native plant regrowth with its dense mats, sharp leaves, and roots. In doing so, it negatively impacts native plants, wildlife populations, tree growth, and forest regeneration.

CURRENT METHODS & COST OF CONTROL

The current methods of control, which can cost more than $160 per acre, require annual retreatments and have not been able to keep pace with the weed's rapid expansion. Cogongrass produces extensive rhizomes and seeds which allow it to spread, persist, and dominate invaded sites. It's difficult to control with chemical and mechanical approaches.

For More Information

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