Evaluating cultural and chemical methods to manage invasive plants in the southeastern U.S.

A McIntire-Stennis supported project

College of AGRICULTURE, FORESTRY AND LIFE SCIENCES Clemson University

Invasive plants are taking over forests across the Southeast. Species like Callery pear, Miscanthus grass, and Elaeagnus crowd out native plants and make land harder to manage. They grow quickly, spread easily, and are difficult to control with current tools. These invaders reduce biodiversity, raise fire risk, and hurt wildlife habitat.

Clemson researcher David Coyle is testing how to manage invasive plants using fire, herbicides, and other strategies that landowners can actually use. His team is:

- Studying how tree size affects the success of fire and herbicide treatments for Callery pear.
- Testing new ways to control Miscanthus in the mountains using a mix of fire and spraying.
- Partnering with conservation groups to tackle Elaeagnus infestations in native forests.

COLLABORATION

This project will be supported by several government, academic, and non-profit organizations including the USDA Forest Service, South Carolina Forestry Commission, North Carolina Forest Service, Georgia Forestry Commission, Clemson University, the University of Georgia, NC State University, Oklahoma State University, and Audubon South Carolina. Additional partners may be added as the project progresses.

About McIntire-Stennis

The McIntire-Stennis program, a unique federal-state partnership, cultivates and delivers forestry and natural resource innovations for a better future. By advancing research and education that increases the understanding of emerging challenges and fosters the development of relevant solutions, the McIntire-Stennis program has ensured healthy resilient forests and communities and an exceptional natural resources workforce since 1962.

USDA

IMPACT

The project will produce clear, practical guidance for landowners, foresters, and conservation groups. It will help people choose the best methods for dealing with invasive plants safely and effectively—reducing the need for repeated treatments and overuse of chemicals.

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Focused on 3 major invasive species: Callery pear (Pyrus calleryana), Miscanthus sinensis, and Elaeagnus spp.

400
Acres for that make up the test site for Elaeagnus control in Orangeburg County, SC

3
Number of states with study locations including South Carolina, North Carolina and Georgia.