# SCHOOL OF FOREST RESOURCES & CONSERVATION

# **UF FOREST ENTOMOLOGY LAB** A McIntire-Stennis supported project since 2012

Bark and ambrosia beetles are impacting trees and forests throughout the US and the world. Scientists with the Hulcr Lab at the University of Florida's School of Forest Resources and Conservation are leveraging their expertise to help protect American trees from being killed by future outbreaks of bark and ambrosia beetles.

Many of these beetles carry fungi with them as their food source. Some are native to the US and others enter US ports through trade with other countries. The invasive beetles that are not from the US frequently become harmful to our forests and the fruit industry.

This portfolio of projects will assist USDA and protect American forests by assessing risks posed by exotic species of beetles before they arrive. DNA from the beetles and fungi will be analyzed to determine whether they are closely related to other species known

to be threats. Lures that could be used to trap the beetles will be tested and natural predators may be identified. Simultaneously, the Hulcr Lab will continue to offer their 'Bark Beetle Academy' training sessions. Scientists and foresters will be trained to gather samples of beetles and damaged wood and learn how to identify many types of beetles. This will enable a early warning system, allowing new infestations of invasive insects to be stopped before significant damage is done.

# COLLABORATION

Providing data, training and recommendations to the US Forest Service, USDA and APHIS



## Over 1,000 Stakeholders Online

The first comprehensive online tree health diagnostics service

# Over 180k samples

The Hulcr lab has the world's largest collection of bark & ambrosia beetle tissues.



# About McIntire-Stennis

The McIntire-Stennis program, a unique federalstate 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.



### Force Multiplier

Enabling state and federal agencies to quickly identify and stop bark beetle outbreaks



### Policy assistance

USDA & APHIS have adjusted their forest pest priorities based on the Hulcr lab's research.

# IMPACT

Protecting American forests from invasive pests by identifying future invaders before they arrive.