

MECHANISMS OF WILDLIFE COMMUNITY ASSEMBLY IN SOUTHERN FOREST ECOSYSTEMS



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STATE UNIVERSITY

Arthur Temple College of
Forestry and Agriculture

A McIntire-Stennis supported project

Newly initiated research at the Arthur Temple College of Forestry and Agriculture will shed light on the effects of forest management practices on the underlying mechanisms that shape ecological communities in one of the nation's most productive forest regions.

While previous studies have tended to focus primarily on traditional community and population metrics of forest management on wildlife species (i.e. species richness, relative abundance), this project takes a functional approach by focusing on the pathways and mechanisms of energy flow, resource use and community organization that drives forest community organization and ecosystem function.

As landscapes and forest management practices continue to be modified to meet the needs of society, the relationship between the altered ecological communities and ecosystem function are of increasing importance. This project will examine how top-down forest management practices affect the persistence and/or loss of wildlife and, in turn, the functional properties of ecosystems.



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.



COLLABORATION

Stakeholders and study areas include a mix of federal, state and private ownership that accurately reflect forest management of the region.



7
graduate and
undergraduate researchers
supported through this
project.

IMPACT

This research will directly augment the the understanding of how specific forest management practices affect animal communities and food-web structure of productive southern forestlands.



>37 million
Acres of pine plantations in
the Southern U.S.



\$92.9 billion
Value estimate of Texas'
forest ecosystem services
in 2013.



40%
Of the Nation's 521
million acres of timber land
is contained in the South.