

MANAGING FORESTS TO CONSERVE WILDLIFE POPULATIONS AT SOUTHERN RANGE LIMITS

A McIntire-Stennis supported project



UNIVERSITY OF
GEORGIA

Warnell School of Forestry
& Natural Resources

Wildlife provide numerous recreational and hunting opportunities that benefit rural economies and communities in the southern Appalachian Mountains. However, many of the wildlife populations in this region are restricted to high elevations near their southern range limits, and many of these “trailing-edge” populations appear to be declining as ranges shift northward in response to climate change. The loss of trailing-edge populations would reduce recreational and hunting opportunities, and it would impact forest ecosystems because many of these species play important roles in controlling pests, cycling nutrients, and structuring forest plant communities. To conserve trailing-edge populations, information is needed about the factors that limit their distributions and contribute to range shifts.



Photo by Jared Feuera

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



We are collaborating with scientists at the US Forest Service, the Smithsonian Migratory Bird Center, Plymouth State University, and Environment Canada.

Two universities, two federal institutions, and one international collaboration.

IMPACT

This project will identify limiting factors and provide information needed to conserve wildlife populations in the southern Appalachian Mountains.



Several graduate, undergraduate, and high school students are being trained in ecological research and statistical modeling.



Results will be communicated to stakeholders via workshops and publications.



Predictive models will be provided to managers, allowing them to forecast impacts of management actions.