

ECOLOGY AND CONSERVATION OF FOREST-DWELLING NORTH AMERICAN BATS

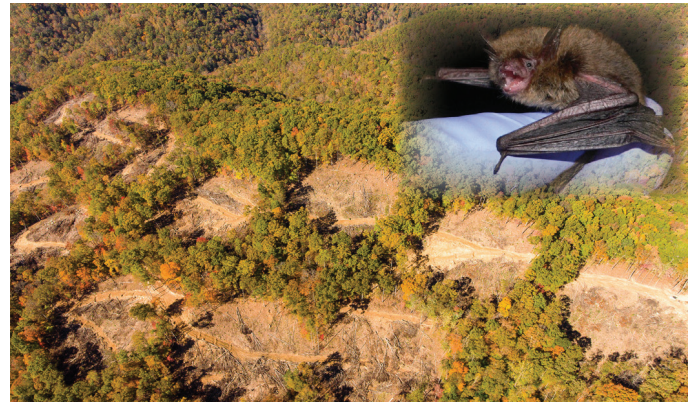


Forestry and Natural Resources
College of Agriculture, Food and Environment

A McIntire-Stennis supported project

Threatened and endangered species, including a number of forest dwelling bats, are an important ecological concern and also pose challenges for forest operations throughout the US, potentially impacting economically feasible access to billions of dollars in timber assets. Bats are experiencing significant declines from disease, climate change, pesticides, wind power development, and a host of changes to our forested landscapes. McIntire-Stennis supported research at the University of Kentucky Department of Forestry and Natural Resources has focused on management of forested landscapes for bats, addressing timber extraction, prescribed fire, and impacts from white-nose syndrome, a disease specific to populations of bats in Kentucky and the eastern US.

Research efforts have been directed at understanding specific dietary, roosting, and foraging requirements of bats, and how these needs are influenced by changes in land use practices. The goal of this research is to educate management efforts for imperiled bat species by providing a better understanding of the ecology and habitat requirements of these bats and how they are likely to be affected by proposed and existing forest management policies.



Imperiled northern long-eared bat and research in eastern Kentucky using timber harvesting to systematically create forest openings where bat use is being investigated.

COLLABORATION



Researchers at the University of Kentucky are working in partnership with US Fish and Wildlife Service, US Forest Service, National Park Service, Bureau of Land Management, Kentucky Department of Fish and Wildlife Resources, Kentucky Nature Preserves, and Industry TIMOs.

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.



IMPACT

Understanding the biology and requirements of imperiled bat species along with their response to forest use and change allows us to develop better management strategies and help inform policies that can aid in benefiting these species and help ensure continued conservation and use of our forests.



68 and 100+

students, undergraduate and graduate, trained and scientific publications generated from this on-going research.



13 Million

acres of forest lands spanning 8 states in eastern, Midwestern and northwestern US, have instituted management changes to improve bat habitat.