

Forest Restoration and Herpetofaunal Diversity: Mechanisms and Functions



A McIntire-Stennis supported project

Many forests in the US were converted or modified for timber production in the past. Current management strategies places greater emphasis on ecosystem management with the goal to continue using forests for economic purposes while maintaining or restoring ecosystem integrity.

The goal of this research is to assess the effects of prescribed forest fire and thinning practices on the amphibian and reptile communities. We want to understand the mechanisms and functional relationships between forest habitat changes and herpetofaunal diversity and structure, particularly from long-term perspectives. This project is a continuation of a research established jointly by AAMU and USDA Forest Service (FS) in 2004 at the Bankhead National Forest (BNF).

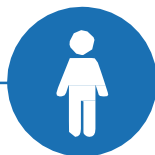
The project provides collaborative and training opportunities with FS, particularly, the Southern Research Station, local landowners and resources managements through workshops and demonstration field trips.



Project PI: Yong Wang

COLLABORATION

USDA Forest Service:
Bankhead National Forest,
Southern Research
Station.



36

experimental forest stands
of prescribed fire & thinning
for long-term study.

IMPACT



5,064

trap nights for sampling
amphibians and reptiles at
the experiment stands



10

students involved in the
project, including 1 Ph.D.
and 2 MS used the project
for their thesis/dissertation
research topics.



7,200

captures of amphibians
and reptiles of 51 species

The findings of this study provide basis for understanding relationships of forest habitat and herpetofaunal community, which are essential for landowners and forest managers to make sound decisions and for policymakers to reliably assess their decision impacts.