WILDLIFE CONSERVATION INITIATIVE SPOTLIGHT

BIODIVERSITY IN THE SOUTHEAST

In the most biodiverse region east of the Mississippi River, researchers are gaining a more comprehensive picture of biodiversity found within private working forests. Both the total biodiversity presence and health of terrestrial and aquatic communities in the region are being assessed.

Because species depend on various forest types within private working forests, the landscape-level approach of this study is critical to demonstrating the value of active forest management as a powerful conservation tool. Determining the region's species composition and abundance will enhance conservation efforts.

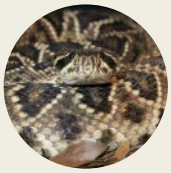
KEY COLLABORATORS

- National Alliance of Forest Owners (NAFO)
- The National Council for Air and Stream Improvement, Inc. (NCASI)
- Sustainable Forestry Initiative, Inc. (SFI, Inc.)
- U.S. Fish and Wildlife Service
- Tangled Bank Conservation
- Association of Fish & Wildlife Agencies (AFWA)

This project is investigating the entire ecosystem and the species that depend on it. Here are a few examples:

Red Hills Salamander

Swallow-Tailed Kite



Eastern Diamondback Rattlesnake

Southern Pigtoe Mussel

MULTIFACETED METHODOLOGIES

Gaining a wholistic understanding of biodiversity across a landscape requires several research methodologies. In this project, four methodologies are being used:

METHOD 1: FRESHWATER TURTLE VISUAL SURVEYS AND TRAPPING

Researchers survey freshwater turtles using several different methods, depending on the species. This includes baited nets, unbaited nets, and counting them as they bask.

METHOD 2: CAMERA TRAPPING ARRAYS AND VISUAL TERRESTRIAL SURVEYS

Game cameras in 60 sites capture species that tend to escape bucket and box traps. The cameras provide a broad picture of biodiversity. To date, cameras have captured 43 species.

METHOD 3: ENVIRONMENTAL DNA AND METABARCODING

Researchers are increasing efficiency by leveraging technology. To date, 62 species across 72 sites have been detected, including the Carolina gopher frog and freshwater mussels.

METHOD 4: AREA CONSTRAINED UPLAND PINE SURVEYS

So far, researchers have used this method to find evidence of gopher tortoises across 107 sites, as well as other species such as eastern diamond-backed rattlesnakes and the black pinesnake.

CONSERVATION SUCCESS STARTS WITH KEEPING FORESTS INTACT

We all have a hand in ensuring conservation of wildlife. When we purchase wood and forest products, we support the sustainable cycle of growing, harvesting and replanting that keeps our forests as forests. Thousands of species call working forests home, and many species thrive in actively managed working forests.

This project is made possible by the Wildlife Conservation Initiative (WCI), a collaborative partnership between NAFO, the USFWS, NCASI, and other stakeholders to conserve fish and wildlife species in private working forests. The WCI was founded on the recognition that private working forests are an important conservation tool. NAFO members own and manage more than *43* million acres of private working forests in *32* states — the scale needed to achieve meaningful conservation success. Through the WCI, the proactive and voluntary conservation efforts of government and private working forest owners are delivering positive outcomes for wildlife across the United States.

WildlifeConservationInitiative.org

NAFO National Alliance of Forest Owners