

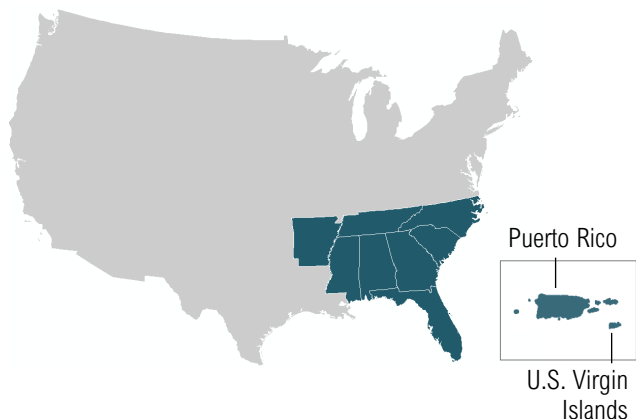


SOUTHEAST
Climate Adaptation Science Center

CLIMATE ADAPTATION SCIENCE CENTERS

ARKANSAS

Arkansas falls within the domain of the Southeast Climate Adaptation Science Center (SE CASC)



Southeast CASC Consortium Institutions

Host: North Carolina State University

Consortium:

Auburn University	University of Arkansas
Duke University	University of South Carolina
Savannah State University	University of Puerto Rico
United South & Eastern Tribes	University of Tennessee
University of Florida	University of Virgin Islands

OUR WORK IN ARKANSAS

37+
Projects

since **2010**

Key Science Topics



Science Tools for Managers



Wildlife & Plants



Forests



Grasslands & Plains



Freshwater



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Cave Conservation Management Toolbox

Cave-dwelling species have evolved to live in relatively stable climates, so they may be especially sensitive to climate change. However, it is unclear how surface climate change will affect cave climates and the species that rely on them, because caves are remote environments that have long been difficult to study.

WHAT:

The Southeast CASC is working together with scientists and managers from federal, state, and non-governmental organizations across nine southeastern states, including Arkansas, to perform underground surveys of cave climates and cave-dwelling species.

RESULTS:

Using insights from new surveys and previously published studies, the team will create a toolbox of possible management actions for conserving cave ecosystems and cave-dwelling species threatened by climate change.

IMPACT:

An adaptation strategy identified in Arkansas' State Wildlife Action Plan is to provide additional refugia for species to improve species' chances for survival. The toolbox can be used by managers when making decisions about how to conserve caves for future generations.



Image: Matthew L. Niemille

Conservation Adaptation Planning

The Southeast is currently undergoing high rates of population growth, urbanization, and land use change while also experiencing climatic changes. These changes are threatening, and will continue to threaten, wildlife and their habitats.

WHAT:

The Southeast CASC assessed how states addressed current and projected climate change in their 2015 State Wildlife Action Plans (SWAPs), which serve as important resources to help states identify and protect species and their habitats.

RESULTS:

Wildlife management goals tended to emphasize the persistence of species and habitats rather than managing for future system changes. A list of "Regional Species of Greatest Conservation Need" (RSGCN) was developed to promote regional coordination for species that are priorities in multiple states.

IMPACT:

Identifying how each state in the Southeast addresses climate change in their SWAPs enabled the identification of opportunities to assist states with additional information to incorporate climate vulnerabilities into their 2025 SWAPs and to efficiently plan and implement species conservation efforts.



Image: David Mark