

SOUTHEAST CLIMATE ADAPTATION SCIENCE CENTER



PHOTO BY ALAN CRESSLER, USGS

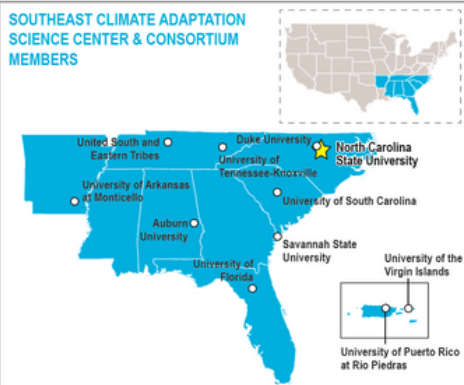
MISSION

Delivering science to help fish, wildlife, ecosystems, and cultural resources adapt to a changing climate

ABOUT

The **Southeast Climate Adaptation Science Center (SE CASC)** is a partnership of USGS and academic researchers working with partners in the Southeast to identify global change-related information needed by natural and cultural resource managers, including physical, biological, and social research, ecological forecasting, and multi-scale modeling.

SOUTHEAST CLIMATE ADAPTATION SCIENCE CENTER & CONSORTIUM MEMBERS



Producing relevant, actionable science

Identify climate science needs with input from partners in US DOI agencies, Southeast Tribal Nations, State agencies, to co-produce science and tools that directly inform on-the-ground solutions for management challenges.

Developing the next generation

Support the next generation of climate scientists by excelling in graduate education, pipeline support, and workforce development with a special emphasis on the needs of populations historically underrepresented in climate science and adaptation.

Increasing accessibility of information

Make the wealth of existing data, knowledge and tools more accessible by emphasizing science delivery, science synthesis, visualization, and other approaches to maximize accessibility to climate information.

NC STATE UNIVERSITY

Building an engaged community

Bring together scientists, managers, and conservation stewards of the region's natural resources by developing and supporting networks, communities of practice, and forums to share the latest science.

Fostering equity and inclusion

Lead with best practices in diversity, equity, inclusion, and justice in all our work, from supporting the next generation of scientists, to partnering with historically underrepresented communities and scientists in our research and abiding by the data sovereignty of Tribal Nations.



SE CASC Work in the Caribbean



Impact of Ocean Warming and Acidification on Growth of Reef-Building Corals

This study identified differences in climate vulnerability among three important reef-building coral species. Coral cores were used to examine variability in ocean temperature and coral growth over the past century. Results show that chemical signature in corals can estimate temperature.

Completed Jan. 2013
secasc.ncsu.edu/science/coral-vulnerability



Modeling Future Temperature and Precipitation for Puerto Rico and the U.S. Caribbean

This project developed a suite of dynamically downscaled climate projections for Puerto Rico and the U.S. Caribbean region. The framework provides opportunity to advance knowledge about climate change impacts on island ecosystems in the global tropics.

Completed Sept. 2016
secasc.ncsu.edu/science/caribbean-projections



Strategic Habitat Conservation and Adaptive Strategies for the Conservation of Coqui Frogs in Puerto Rico

Researchers will help recovery of two endangered “coqui” species and reduce the risk of 14 other coqui species becoming endangered. This research will inform decision-making on when to pursue translocation versus continued management.

Completed June 2023
secasc.ncsu.edu/science/coqui-conservation

U.S. Caribbean Drought Workshop

In May 2018, the USDA Caribbean Climate Hub, in collaboration with the Southeast and National CASCs, hosted the U.S. Caribbean Drought Workshop at the International Institute of Tropical Forestry in San Juan, Puerto Rico. The workshop brought together scientists and managers from the agriculture, natural resources, and water supply sectors in Puerto Rico, the U.S. Virgin Islands, and the mainland U.S. to discuss the impacts of drought on ecosystems, agriculture, and the water supply in the U.S. Caribbean.

usgs.gov/programs/climate-adaptation-science-centers/drought-us-caribbean

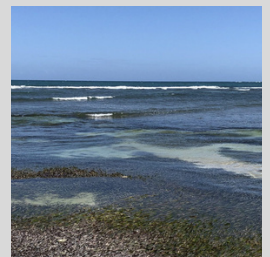


Caribbean Oral History Project

Voices of the Caribbean - Stories that help us prepare for the future

During the summer of 2018, the Southeast Climate Adaptation Science Center and the U.S. Geological Survey recorded the oral histories of resource managers attending a U.S. Caribbean drought workshop in San Juan, Puerto Rico. These stories provide insight into the science needs of the natural resource community in Puerto Rico and the U.S. Virgin Islands and provide context for what types of information could help managers effectively plan for future extreme weather events.

secasc.ncsu.edu/resources/caribbean-oral-history



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