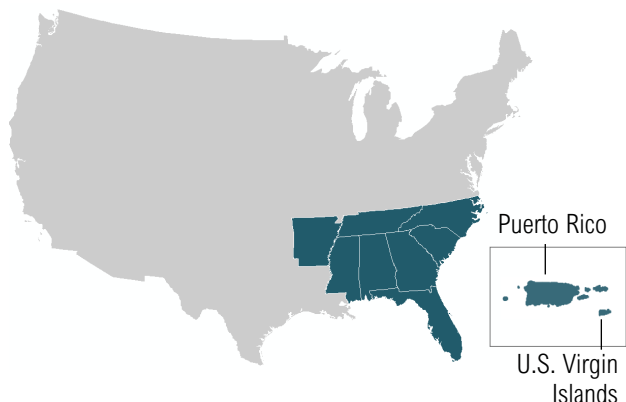




# GEORGIA

Georgia 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 GEORGIA

**51+**  
Projects

since **2010**

### Key Science Topics



Science Tools for Managers



Wildlife & Plants



Forests



Freshwater



Sea-Level Rise & Coasts



## PROJECT HIGHLIGHTS

### Supporting Effective Gopher Tortoise Conservation Decisions

*The gopher tortoise is a familiar turtle species across the southeastern Coastal Plain, but its population has declined significantly over several decades. A principal reason is that much of its primary habitat has been replaced by development or agriculture or has become degraded through the suppression of low-intensity, forage-producing ground fires.*

**WHAT:**

The Southeast CASC, in collaboration with Federal, State, and other partners, worked to better understand life history patterns and habitat suitability of the gopher tortoise and to evaluate alternative strategies for creating networks of conservation reserves.

**RESULTS:**

Integrated system of databases, computer algorithms, and monitoring designs provides a decision support system for selecting conservation actions under uncertainty and for acquiring information to reduce uncertainty.

**IMPACT:**

Results were used by Georgia DNR to inform their monitoring effort and their land acquisition initiative. Products will continue to support the design of landscapes within and beyond Georgia that promote persistence of the tortoise and associated species.



### Climate Vulnerability of Wild Turkeys Across the Southeastern U.S.

*Wild turkey (Meleagris gallopavo) is a culturally and economically important game species that has shown dramatic declines in abundance through most portions of the southeastern U.S.*

**WHAT:**

The Southeast CASC used >10 years of reproduction data from six states plus future climate scenarios to explore the combined effects of climate and hunter harvest on wild turkeys to help guide localized harvest regimes.

**RESULTS:**

Correlation of successful turkey nest initiations with measurements of temperature, precipitation, and spring “green-up” showed that turkey nesting is initiated around the same time each year with only slight shifts in timing, regardless of weather conditions. As important plant resources providing cover and food emerge earlier with increased warming, lack of adaptability of turkey nest timing may affect their reproductive success.

**IMPACT:**

The results contribute to a comprehensive understanding of the current and future threats to wild turkey population sustainability, helping managers adjust the timing of hunter harvest and bag limits if needed.

