

OLD-GROWTH BOTTOMLAND FOREST RESEARCH AND EDUCATION CENTER CONGAREE NATIONAL PARK

The mission of the Old Growth Bottomland Forest Research and Education Center is to support floodplain forest research, aid the compilation and interpretation of scientific data, and to share this information with park managers, students and community members.

Research Program

The Old-Growth Bottomland Forest Research and Education Center's emphasis is to gain understanding of the rare floodplain forest system that includes the largest remaining contiguous tract of old-growth bottomland hardwood forest in North America. Current research projects at Congaree National Park are providing greater understanding of how this ancient forest is influenced, impacted, and nourished by the floodwaters of the Congaree River. A plant inventory study has revealed that the rich river sediments support the growth of more than 700 different types of plants, including at least 75 species of trees and 26 species of vines. Scientific research projects that are currently being conducted include: investigations of rare plant species and their distribution, study of forest dynamics, verification of historical plant communities through pollen collected in soil core samples, restoration of disturbed forest ecosystems, evaluation of non-native invasive species impacts, assessment of watershed contaminant sources, examination of surface and ground water movements and geologic mapping of the floodplain.

The diverse plant communities of Congaree National Park support a wide variety of wildlife. Numerous research projects are being conducted to examine these connections. Inventories of butterflies, water beetles, small mammals, amphibians, reptiles, fish and neo-tropical migratory birds have provided greater understanding of the rich biodiversity of the floodplain forest. Preliminary observations of bat species utilizing the floodplain have documented a rare bat roosting in natural tree cavities instead of man made structures where they are typically seen. The unique old-growth forest is a historical remnant of the natural habitats once used by other rare wildlife species including birds like the Bachman's warbler and Ivory-billed woodpecker. Automated recording devices recently installed in the forest will determine if any of these "extinct" species still occur within the park.

Facility

Working with partners, the park staff redesigned and refurbished the former ranger station/headquarters building into the Old Growth Bottomland Forest Research and Education Center. This facility now serves as a lodging and work space for park researchers. Numerous scientific projects have been facilitated because of this onsite lodging, saving research funds and eliminating travel time to the closest hotels 20 miles away. The Research and Education Center includes bunk space for up to twelve people, a kitchen, living room, restrooms, workshop/computer lab, and storage facilities. Overnight guests have been accommodated for a single night and for several months at a time, depending on the nature of their research.



Current research partners cooperating with Congaree National Park's Old-Growth Bottomland Forest Research and Education Center are:

Benedict College

Clemson University

Cornell University

-Lab of Ornithology

Friends of Congaree Swamp

Lexington County School District #4

-Sandhills Middle School & NASA's Goddard Space Flight Center

Richland County School District #1

-Dreher High School

South Carolina Department of Natural Resources

-Wildlife and Freshwater Fisheries Division

-Geologic Division

South Carolina Department of Health and Environmental Control

-Bureau of Air

-Bureau of Water

South Carolina Traditional Arts Network

Southern Illinois University

-Department of Plant Biology

Terra Incognita

University of Georgia

-Savannah River Ecology Laboratory

United States Forest Service

United States Geological Survey

-Biological Resources Division

-Water Resources Division

-National Wetlands Research Center

University of South Carolina

-Department of Civil and Environmental Engineering

-Geography Department

-Earth Sciences and Resources Institute

University of North Carolina

