

## Fuel Reduction / Fire Restoration at Congaree National Park Congaree National Park, South Carolina National Fire Plan – Fuels Reduction

"Nearly all the original upland vegetation of the Congaree Swamp Uplands was in some way structured by fire. About 65% of rare native plants and animals in the South are in some way dependent upon fire to create or maintain their habitat"

Cecil Frost, 2001

The landscape of Congaree National Park's upland bluff areas features second growth Loblolly pine forest with remnants of the original Longleaf pine scattered within. Fire has always been a part of the natural ecosystem in South Carolina. Lightning periodically would ignite the forest, sending rows of flame burning through the underbrush and leaf litter layer. The fire would burn across the landscape until it reached a stream, floodplain, or other natural barrier. On average, these fires would occur every three to seven years keeping the forest floor clear of excess branches, leaf and needle debris.

Fire suppression, timbering, farming and hunting have resulted in an altered ecosystem. These activities have effected a reduction in the Longleaf pine community and an increase in fuel loadings. In turn, the fire danger to adjacent lands and park structures has also increased. Additionally, the endangered Red-cockaded woodpecker has been known to inhabit the area as recently as six to seven years ago, (1999 -2000). Red Cockaded Woodpeckers prefer nesting in Longleaf pine trees, due to the softer heartwood and the continuous emission of sap around the nesting cavities to protect the birds from intruders. Restoration of the Congaree longleaf habitat will serve to expand the potential range and stability of nearby populations.



Burn Unit 1-2, April 1999. NPS Photo.



Burn Unit 1-2, March 2006. NPS Photo.

On March 3, 2006, Congaree National Park completed a 575 acre burn that included the primary entrance to the park and was adjacent to numerous private residences near the town of Gadsden, South Carolina. Initially the project was planned for two days of ignition however weather forecasts indicated that favorable conditions would not continue into the next day so the decision was made to attempt to cover all of the project acres in one day if holding and safety concerns could be met. Project ignition began at 10 a.m. and continued until 5 p.m. when firing was complete.



In addition to Congaree National Park employees, assistance came from Cumberland Gap and the Great Smoky Mountain Fire Use Modules (FUMs). The FUMs provided the Burn Boss and other key personnel required to execute the burn. The park also received engine and firefighter support from Kings Mountain National Military Park and Great Smoky Mountains National Park. Monitoring of the fire was provided by the Great Smoky Mountains Fire Effects Team. Locally the Columbia-Richland Fire Service's nearby volunteer station provided a structure engine for standby protection of adjacent homes.

For portions of the total burn unit this was the eighth prescribed burn, and for other areas this was the third. Although success of the project can be accurately judged only with the passing of time, as you walk from east to west through the burn area it is remarkable to see the progress made in just those few burns. However, as Fire Manager Patrick Dege points out, "Restoration of these upland areas is likely to take upwards of a hundred years or more. We've only just begun."

The Congaree National Park Fuel Reduction / Fire Restoration Project should enable visitors to experience the park in an unimpaired condition preserving:

"... the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations"

NPS Mission Statement

Contact: Patrick Dege, Fire Manager Phone: (803) 776-4396 x 17