# Fire Learning Network
# Notes from the Field

**October 2011**

## Fire in Pocosins Workshop

Prescribed burning in pocosins is a difficult, but necessary proposition. Pocosins, which are found along the coastal plain from southern Virginia to northern South Carolina, are dense evergreen shrub bogs that develop over deep, wet layers of peat. The word pocosin comes from a native American word meaning "swamp on a hill."

North Carolina's pocosins have experienced several huge wildfires in recent years. The Evans Road Fire, which began with a lightning strike on June 1, 2008, burned 40,704 acres of land in and close to the Pocosin Lakes National Wildlife Refuge. The fire smoldered for months in the peat soil and wasn't declared officially out until early January 2009. Suppression cost more than $20 million. The summer of 2011 saw four significant pocosin fires burn more than 88,000 acres. All of these fires blanketed large areas with heavy smoke, resulting in health warnings issued as far away as Raleigh, North Carolina.

The Nature Conservancy sponsored a workshop for researchers and practitioners in October on pocosin and fire. Presentations highlighted:

- Large peatland wildfires resulted in heavy releases of a variety of pollutants including benzene and formaldehyde.
- Large wildfires resulted in increased visits to emergency departments for respiratory and cardiovascular problems.
- Prescribed burns in pocosin produce far fewer pollutants, reduce fuels for wildfires, burn over shorter periods when smoke can be directed away from populated areas.
- Hydrologic restoration in the pocosins, which have often been heavily drained for agricultural and other purposes, helps limit soil ignition and consumption.

## Presentations

Pocosin Wildlife Refuge Wildfire 2008 Health Effects Study (Ana G. Rappold, EPA)

Fire & Pocosins Lesson Learned (Gary Curcio, IPA Fire Environment Consultants)

Prescribed Burning in the Croatan (James H. Cherry, Croatan National Forest)

Estimated Smoldering Potential: A Decision Support Tool for Smoldering in Organic Soils (Jim Reardon, USDA Forest Service Missoula Fire Lab)

Fire and Pocosins What We Know (Robert Mickler, Alion Science and Technology)

Pocosin Burn in District 8 Green Swamp (Mike Hardison, North Carolina Forest Service)

Practitioner's Lessons from Shaken Creek Preserve (Premier Forestry & Environmental Consulting, PLLC.)

Pocosin Lakes National Wildlife Refuge Cooperative Restoration Project (Sara Ward, US Fish & Wildlife Service)

Presentation slides are available for download www.southernfireexchange.org/Archive/Archive.html

**For more information, contact:**
**Hervey McIver hmciver@tnc.org**

"We have known for sometime that the pocosin ecosystem benefits from fire, but these presentations show that prescribed fire can also play a very strong role in preventing large, damaging wildfires that not only wreak havoc on the land but also pose a substantial health risk," said the Conservancy's Hervey McIver, who organized the conference. McIver says the next step is to keep the conversation going on how prescribed fire can be used effectively in the pocosin ecosystem for the good of man and the environment.

The Fire Learning Network is supported by *Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning and Restoration*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more information about the FLN, contact Lynn Decker at *ldecker@tnc.org* or (801) 320-0524. *An equal opportunity provider.*