



Prescribed Burn at Lynn Hollow Accomplished Fuel Reduction and Ecological Restoration Along the Wildland Urban Interface

The National Cohesive Wildland Fire Management Strategy is a national collaborative effort to bring a broad cross-section of stakeholders together to address wildland fire management challenges. The Strategy directs wildland fire planning activities and has three primary goals: restore and maintain landscapes, develop Fire-Adapted Communities, and improve wildfire response.

Activity	Impact
# burns since 2012	2
Endangered plant species at Lynn Hollow	Pink lady slipper orchid

The Lynn Hollow prescribed burn of 2014, in the mountains of East Tennessee, was a watershed event that simultaneously achieved community wildfire protection and ecological restoration. Lynn Hollow is a 300-acre site located within the boundary of the Great Smoky Mountains National Park in Blount County, Tennessee. It is home to old-growth shortleaf pine and oak woodlands, forests sustained by periodic fire. Sharing the same Park boundary, the Top of the World Community (TOWC) lies in an area where frequent wildfires threaten human safety and property. Partners involved in this project, including the National Park Service, TOWC Land Owners Association, Tennessee Department of Forestry, and the Blount County Fire Protection District, have worked together over 15 years to achieve two missions: protecting human life and property and preserving a unique, old-growth forest.

The natural heritage and ecological resilience of the Lynn Hollow landscape are threatened by vegetation changes that occur in the absence of fire. Research at the University of Tennessee and Texas A & M University revealed how frequent fires once maintained pine-

oak woodlands at Lynn Hollow. It also demonstrated how these woodlands can disappear without fire, with pine and oak being replaced by less fire-tolerant species. Aside from the ecological imperative to restore this magnificent forest type, park managers also recognized the risk posed to surrounding communities by the wildland fuel loads that accumulated from 80 years of fire exclusion.

Early on, Great Smoky Mountains National Park sought to restore and maintain the pine-oak woodlands. The Park burned 60 acres of Lynn Hollow in June 1999, one of the earliest prescribed burns completed in Park history. Since that time, two additional burns have occurred, the first in 2012 and, second, in late March and early April 2014. The most recent burn was highly successful in achieving the ecological and community protection objectives originally outlined, including significant reduction in fuel loads, protection of old growth trees, and improved habitat for numerous plants and animals. A profusion of endangered pink-lady-slipper orchids (*Cypripedium acaule*) flowered soon after the 2014 burn, symbolizing the positive effects of the treatment.

Success stories highlight regional wildland fire accomplishments that support implementation of the National Cohesive Wildland Fire Management Strategy in the Southeast. The stories demonstrate how the Southeast is improving its "fire resiliency" through technology, education and outreach, forest management, collaboration, and more. Success stories also serve as a model for other communities to follow.

Meanwhile, homeowners at TOWC increased their efforts as a Fire Adapted Community by working with Blount County Fire Protection District and the Tennessee Department of Forestry. Their initiative resulted in a \$500 Wildfire Community Preparedness Day award from the National Fire Protection Association, used to reduce woody debris and hazardous fuels around community homes.

Multiple partnerships on the federal, state, and local level were instrumental in overcoming obstacles that returned prescribed fire to the distinctive, shortleaf pine-oak forests at Lynn Hollow.



March 21, 2014 prescribed burn at Lynn Hollow. Great Smoky Mountains National Park, Tennessee. Credit: Eric Worthington.



Grant Award to the Top of the World Community, Tennessee. Credit: Dr. Ellen Rudolph.



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Partners: : Great Smoky Mountains National Park Fire Management Program and Resource Management and Science Division, Cumberland Gap National Historic Park Wildland Fire Module, Blount County Fire Protection District, and Tennessee Department of Forestry, Top of the World Land Owners Association, U.S. Fish and Wildlife Service - Cookeville, Tennessee (TN) Field Office, The Nature Conservancy -TN and North Carolina Chapters, National Parks Conservation Association, University of TN, Texas A & M University, Knoxville News Sentinel, The Daily Times, Maryville, TN, National Fire Protection Association, State Farm Insurance Company



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