



Fire Learning Network Notes from the Field

Building Capacity in the Appalachians

Looking Back at 2018
Looking Ahead to 2019

Partnerships Work in the Southern Blue Ridge and Central Appalachians Fire Learning Networks

Fire history studies show that fires burned frequently across the Appalachian region, maintaining open forest conditions conducive for pine, oak and, historically, chestnut. But fire has been missing in recent decades. About ten years ago, the Southern Blue Ridge and Central Appalachian FLNs identified four forest types in greatest need of fire: shortleaf pine-oak forest, pine-oak heath, dry-mesic oak-hickory forest, and high-elevation red oak forest. These systems cover about 60 percent of the FLN landscapes. As FLN land managers and partners have worked to reestablish regular fire regimes to promote healthy, resilient forests in the Appalachians, they have identified limited capacity* as a key obstacle to increasing burning to the necessary scale.

The long-standing relationship between the U.S. Forest Service and The Nature Conservancy has enabled tremendous advances in the use of prescribed fire as a tool for forest restoration in recent years. In the spring of 2015, with support from the FLN's Scaling-up to Promote Ecosystem Resiliency initiative, the Conservancy's Virginia Chapter contracted with the nonprofit Wildland Restoration International to provide a seasonal four-person fire module. The success of this crew led the Conservancy to deploy another module in 2016 with Forest Service

Supplemental Wildland Fire Hazardous Fuels funding. Additional modules were added in Georgia, Kentucky, North Carolina and South Carolina in 2016 and 2017 with funding through an agreement with Forest Service Region 8. And now a national participating agreement between the Forest Service and the Conservancy—facilitated through the FLN—continues to expand this effort in the Southern Blue Ridge, Central Appalachians and other landscapes across the country.

These modules have been effective in building capacity, assisting with 20,000 acres of burning. Modules adopt different approaches in response to local landscape needs and opportunities; this adaptability, along with increased support from the Forest Service and Conservancy, has enabled further scaling up of capacity over time.

Scaling Up in 2018

Over the course of the 2018 fiscal year,** effective collaboration enabled federal and state programs in the region to better meet their fire and land management goals.

The Conservancy's Southern Blue Ridge Fire Crew—an "as needed" crew

funded through a Forest Service Region 8 agreement—helped conduct 15 controlled burns totaling 8,696 acres in North Carolina and Tennessee. These included burns on U.S. Forest Service (Cherokee and Pisgah National Forests) and North Carolina Wildlife Resources Commission lands, as well as on private lands through the North Carolina Forest Service. The goal for most of these sites is to achieve a fire-return interval of three to six years, which will help restore native groundcover, maintain forage for deer, support pollinator habitat and enhance woodland shrub cover for turkey and songbird nesting, among other benefits.



"The Nature Conservancy's squad of five people came out and helped us burn. They helped fire and hold half a mile of steep dozer line with no water readily available. They accomplished the mission without complaint (ate a lot of smoke) and did a great job. I know to expect quality and experience with this crew, and they are always a pleasure to work with."

Fire Management Officer
Cherokee National Forest

* Narrow burn windows, smoke management issues and liability concerns also affect the ability to burn at scale.

** This refers to the Conservancy's fiscal year, or July 2017-June 2018, encompassing the fall 2017 and spring 2018 prescribed burn seasons

“The Conservancy fire crew has proven to be critical for holding fire lines, attack of slopovers, securing base lines and strategic interior ignitions. All crew members were highly competent, knowledgeable, positive in thinking, willing to work hard and willing to do all requested tasks.”

Mountains Wildlife Forester
North Carolina Wildlife Resources Commission



In Kentucky, the Conservancy worked with Kentucky Division of Forestry staff to augment prescribed fire resources from the Forest Service and partner agencies in and around the Cumberland River FLN landscape. Using the Region 8 subaward model, the Conservancy funded the state forestry agency to provide a Type 6 engine (staffed with an engine boss and firefighters), an on-call dozer and three or four additional on-call personnel per burn. This provided assistance on about 12 burns totaling about 10,000 acres. This partnership shows great potential, and the Kentucky Division of Forestry is interested in building additional controlled burning experience.

Building Capacity Through Learning and Networking at TREX

Since 2008, Prescribed Fire Training Exchanges (TREX) have helped develop capacity for prescribed burning by bringing participants from various backgrounds and organizations together to share and build knowledge. Over the last couple of years, the leadership of TREX events has become increasingly local—and increasingly networked—with leaders traveling to assist in one another’s events. As a result, this fall saw a record nine events that took place over eight weeks in California, Colorado, New Mexico, Washington and—for the first time—in the Southern Blue Ridge.

The Southern Blue Ridge TREX, hosted by the Conservancy’s South Carolina chapter and the Consortium of Appalachian Fire Managers and Scientists, took place from October 29 through November 9. The objective of this two-week TREX was to facilitate peer-to-peer experiential learning for prescribed fire professionals and others interested in advancing their understanding of innovative tools to restore fire-adapted ecosystems.

More than 50 people took part in the event. From their base in Pickens, South Carolina, they worked on lands owned by seven of the ten FLN partners across the Southern Blue Ridge Escarpment landscape in North Carolina and South

Carolina. In addition to conducting three burns, they established 5½ miles of firebreak, setting the stage for 10 controlled burns in the coming season.

The Southern Blue Ridge Escarpment is a high rainfall area, and rain certainly provided a unique challenge with logistics for the training. But the planning team’s leadership in adaptive management made certain every opportunity to burn was seized, while offering other training opportunities on rainy days. It was a great example of the importance for good planning and execution under shifting conditions, which are important factors to a successful burn program.



In the Southern Blue Ridge Escarpment area, state and private partners are just starting their burn programs after collaboratively identifying burn needs. Hosting a TREX was an ideal opportunity for learning and building partnerships and trust.

Conservancy Highlights: Forest Service Regional Support Means Great Plans for 2019

In Georgia, the Conservancy fire program will continue to support a four-person prescribed fire module in the Georgia Blue Ridge Mountains landscape. Work will be conducted with an all-lands approach, on FLN partner lands including national forests and state parks and wild-life management areas in Georgia and South Carolina. Priority will be placed on preparing burn units and assisting with the implementation of prescribed fires as the most cost efficient ecological management tool at a significant scale. Based on accomplishments in previous years, the module is expected to conduct 15-25 controlled burns (10,000-15,000 acres) over 14 weeks. On days when burning isn't possible, the crew will work on ecological projects that support the role of fire in restoring habitat for rare species such as bog turtles, carnivorous pitcher plants and smooth coneflower. The module coordinator will also be available for assistance on similar projects and is tasked with setting up project work for the prescribed fire module and other volunteer teams to enhance public lands throughout the year.

The Conservancy's Kentucky program will build two fire crews to help coordinate and implement controlled burning in the Cumberland River FLN landscape in and around the Daniel Boone National Forest. The controlled burning target in this landscape is 10,000 acres a year.

For the fifth year running, the Conservancy's North Carolina program will hire a 20-person on-call fire crew. Based in Asheville, the crew will aid in controlled burn operations in North Carolina, South Carolina and Tennessee. The crew hopes for 25 burn days, to accomplish about 16,000 acres of burning on FLN partner. Arrangements are in place for the crew to work under Conservancy agreements with the U.S. Forest Service, National Park Service, and state agencies in North Carolina (Forest Service; State Parks; Wildlife Resources Commission) and South Carolina (State Parks; Department of Natural Resources). Their work will include burning, fire line preparation and some mechanical treatments.

And in Virginia, the Conservancy's fire program will continue its work on a seasonal module with FLN partners in the state—the U.S. Forest Service, along with the National Park Service and state agencies (Forestry; Game and Inland Fisheries; Conservation and Recreation). The module is co-managed by a small interagency team, who take a truly collaborative approach to set priorities and handle competing requests on burn days. This module focuses mainly on controlled burn treatments, but is available for local wildfire assignments on occasion. It generally completes 8,000-10,000 acres of preparation and burning per year.

Conservancy Fire Program Leads in the Appalachians

Georgia	Erick Brown	erick_brown@tnc.org
Kentucky	Chris Minor	cminor@tnc.org
North Carolina	Adam Warwick	awarwick@tnc.org
Virginia	Sam Lindblom	slindblom@tnc.org



Learn more about the Southern Blue Ridge TREX on its website:

<https://apfire.wixsite.com/sbtrex2018>
or on its Facebook page:
<https://www.facebook.com/SBRTREX>

Learn more about the SBR on-call fire crew:
<http://www.sbrfln.com/fire-crew-poster.html>

For more on the Central Appalachians regional FLN, contact:

Sam Lindblom
slindblom@tnc.org

Laurel Schablein
lschablein@tnc.org

For more on the Southern Blue Ridge regional FLN, contact:

Beth Buchanan
bbuchanan@fs.fed.us

Margit Bucher
mbucher@tnc.org

or visit:
<http://www.sbrfln.com>

The Fire Learning Network is part of *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more information about PERFACT, contact Marek Smith at marek_smith@tnc.org.

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