

Fire Learning Network Notes from the Field

Central Appalachians FLN 2016 Year in Review

In more than a decade of work together, partners in the Central Appalachians FLN have built enduring, productive working relationships and demonstrated the synergistic effect this level of collaboration can have in restoring the role of fire to an ecologically meaningful scale. The accomplishments of 2016—which included 21,341 acres of prescribed fire in the Cumberland River, Heart of the Appalachians and Keystone Appalachians landscapes—demonstrate this ongoing success.

TACKLING BARRIERS TOGETHER

Early in the year, the George Washington and Jefferson National Forests, with help from The Nature Conservancy's Virginia chapter, received critical planning and implementation funding. The successful \$750,000 USDA Forest Service FY16 Supplemental Wildland Fire Hazardous Fuels Project proposal built on a similar proposal for \$500,000 in FY15. This funding supported spring 2016 prescribed fire operations across the National Forests, as well as landscape assessments, spatial analyses and environmental information reviews to facilitate NEPA updates for numerous prescribed fire projects. Project coordinators at the Forest Service Washington Office and Southern Regional Office made it clear that engagement in the Central Appalachians FLN and successful fire management partnerships was key to receiving this funding.

The USDA Joint Chiefs' Landscape
Restoration Partnership announced a
new investment of \$32 million to improve
the health and resiliency of forest
ecosystems where public forests and
grasslands connect to privately-owned
lands. The Lower Cowpasture Restoration
Project (George Washington and
Jefferson National Forests) was one of 10
new projects selected for FY2017.



Partners had a chance to view interpretive signs developed for the Daniel Boone National Forest by the Central Appalachians FLN, Consortium of Appalachian Fire Managers & Scientists, The Nature Conservancy and the U.S. Forest Service during the Cumberland River FLN Shared Learning Event.

The project falls within the Central Appalachians FLN and spans federal, state and private lands. The project proposes to restore the health, diversity and resiliency of fire-adapted forests and rare plant communities while decreasing the risk of wildfire to adjacent communities; to improve habitat for declining early successional birds and other species important to Virginia; to improve water quality, and the function and connectivity of streams to allow full passage of aquatic organisms, including species such as brook trout and other rare fish and mussel species; and to remove non-native invasive plant species while restoring native plant diversity to promote the health of honeybees and other pollinators.

To increase the capacity to conduct prescribed burns, The Nature Conservancy (TNC), with support from the Forest Service, contracted with Wildland Restoration International for three

mobile prescribed fire modules to assist with burns in Georgia, North Carolina, South Carolina, Tennessee and Virginia. This effort—which grew from a single module used in the Virginia Scaling-up to Promote Ecosystem Resiliency (SPER)



Wildland Restoration International crew leader on the Cellar Mountain Wildfire, which burned in March on the George Washington and Jefferson NFs within Saint Mary's Wilderness. © WRI

project in 2015—contributed to more than 20,000 acres of burning in 2016. Together these modules helped address a frequently identified barrier to prescribed fire implementation, and spent three months working across federal, state, local and private lands. Working with Central Appalachians FLN partners, the Northern Appalachians Module helped with preparation on 12 burn units and conducting prescribed fires on more than 1,500 acres, and assisted on a managed wildfire in St. Mary's Wilderness.



Laurel Schablein clearing fuels from a dogleg in a burn unit during the WTREX in northern California.

Women have traditionally been an underutilized resource in fire management. Last fall's Women in Fire TREX (WTREX) addressed that by taking the established, successful TREX model and applying it specifically to women in fire leadership. Nikole Simmons and Laurel Schablein represented the Central Appalachians FLN at the WTREX in planning and participant roles. Beyond providing new qualifications for trainees, the opportunity was rich with presentations, discussions and mentorship among women and men practitioners.

MONITORING PROGRESS

Data entry for 401 forest structure and composition macroplots into a FEAT/ Firemon Integrated (FFI) database was completed by members of the Heart of the Appalachians FLN landscape Monitoring Working Group; the plots are cooperatively monitored by TNC, Virginia Department of Game and Inland Fisheries, Virginia Department of Conservation and Recreation, and the George Washington and Jefferson National Forests (GWJNF). The data, primarily from first-entry burns, along with GIS-based imagery analysis of canopy effects, are being summarized to evaluate the partnership's controlled burn treatments and inform future management decisions. Jean Lorber (TNC VA) also shared preliminary forest structure and composition data results at the Southern Blue Ridge FLN workshop in May.





At the Monitoring Working Group Annual Refresher workshop in June, participants used samples to compare traits helpful in discerning huckleberry versus blueberry, mountain laurel versus fetterbush, and one blueberry species versus another.

Twenty-seven partners from five agencies gathered for a Forest Structure and Composition Protocol and Plant Identification Workshop at Douthat State Park in June. They worked on identification of look-alike tree and shrub species, discussed recent changes in the protocol and completed assessments of mock plots. This annual workshop helps to ensure consistency of data collection, as well as providing opportunities for learning from monitoring results.

A sixth year of avian monitoring was completed in the Warm Springs Mountain Restoration Project over the summer. This subset of the fire effects monitoring plots tracks the response of bird communities to landscape-scale burning through time. Preliminary results compiled in the annual summary illustrate short-term fluctuations among several focal species based on time since burn, but suggest stable or increasing populations across the entire landscape.

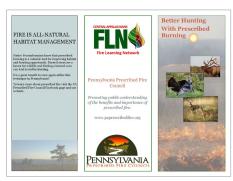
OUTREACH EFFORTS

The Heart of the Appalachians

landscape had a successful test of coordinated social media for the 371-acre multi-partner Mills Creek prescribed burn in the George Washington National Forest in April. The social media push included sharing pictures and stories on Facebook and Twitter.

Three new interpretive panels were added to the driving tour on the Stearns Ranger District of the Daniel Boone National Forest by the Cumberland River landscape. Nine additional interpretive panels were also produced by the Heart of the Appalachians landscape; these will be installed at high visibility prescribed burns on George Washington National Forest and state lands. New citizen science photo monitoring signs were also fabricated; these will use crowdsourcing through social media to



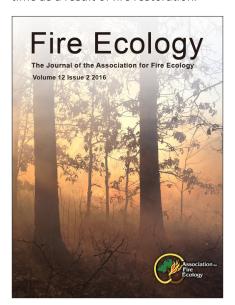


Partners in the Keystone Appalachians landscape developed the idea behind the citizen science photo monitoring signs developed by the Heart of the Appalachians landscape (right). They also produced, in partnership with the Pennsylvania Prescribed Fire Council, a new brochure (above) directed at sportsman groups on the benefits of prescribed fire for game species.

Left: A post from the Mills Creek Coordinated Media push; together, the posts got more than 200 "likes."



build a time lapse of change through time. This effort will provide a means to engage the public in a fun, technological way, while also providing real examples of how our landscapes change through time as a result of fire restoration.



INTEGRATING SCIENCE AND MANAGEMENT

The April 2016 issue of Fire Ecology focused on the fire ecology of oak forests, woodlands and savannas in the eastern U.S. The papers had been presented as part of the Fifth Fire in Eastern Oak Forests Conference in 2015, and the authors included Central Appalachians FLN partners, including Mary Arthur, Mark Ford and Tom Waldrop. Helen Mohr (Consortium of Appalachian Fire Managers and Scientists) presented highlights from several papers at the regional FLN workshop in November.

GATHERING TO LEARN

In Kentucky, the Cumberland River landscape hosted a shared learning event at Cumberland Falls State Resort Park in June. Thirty-five resource professionals from nine agencies and organizations discussed and shared experiences of management practices including controlled burning and fire surrogate activities. Six field sites provided the stage for dialogue around research relating to oak woodland creation and management, fire seasonality and intensity, benefits to pollinators and bats, transitional openings, and native habitat restoration. Some participants had previously expressed concerns about the use of prescribed fire in this landscape, but through engagement with the FLN are now actively participating in dialogue and supportive of some projects. Trust-building among partners, along with continued listening to different perspectives and understanding each other's desires and concerns, has proven essential to the success of this FLN; more of these shared learning events are planned.

More than 80 participants from 21 organization and agency units gathered in the Blue Ridge Mountains of Virginia



for the two-day annual workshop of the Central Appalachians FLN. People came from across the network's four landscapes in Kentucky, Maryland, Pennsylvania, Virginia and West Virginia, and well as from North Carolina, South Carolina and Texas. In line with this year's theme—"Bridging the Gap: Managing the Ecological Needs and Social Perceptions of Fire in the Central Appalachians"—discussions centered on the integrated management of prescribed fire and wildfires to meet ecological needs, and on social perceptions of fire, including the need for improved public engagement to support further scaling-up of restoration work.

AWARDS

In January, the George Washington National Forest Stakeholder Collaborative—which includes many partners from the Central Appalachians FLN—was awarded the Forest Service's 2015 Partners and Community Engagement award for their efforts on the George Washington National Forest Land and Resource Management Plan and Lower Cowpasture Restoration and Management Project.



And at year's end, the Central Appalachians FLN annual Partnership Award was presented to Steve Croy, Ecologist and Fire Planner for George Washington and Jefferson National Forests. Steve was instrumental in planning the initial workshop of fire management partners across the Appalachians in 2006, which led to the formation of the Central Appalachians and Southern Blue Ridge regional FLNs. He has played a major role in planning and helping to fund fire history research across the region and spearheaded the application of spatial tools, models and mapping that has helped prioritize the FLN's efforts to restore good fire on the landscape across agency boundaries.

Above: FLN partners discussed integrating fire and mechanical treatments to restore shortleaf pine communities during the field day of the annual regional workshop, held in the Blue Ridge mountains of Virginia in early November.

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Left: Sam Lindblom (TNC) presented the annual Partnership Award to Steve Croy (USFS) on behalf of the Central Appalachians FLN.

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For more on the Central Appalachians regional FLN:

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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 Lynn Decker: Idecker@tnc.org or (801) 320-0524.











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