

FLN Networker No. 273: November 28, 2018

The FLN Networker is a publication of the Fire Learning Network—a partnership of the USDA Forest Service, agencies of the Department of the Interior and The Nature Conservancy—intended to foster communication within the network and among its friends. Submit comments, information to share, and subscription requests to Liz Rank.

For more about the FLN, visit www.conservationgateway.org/fln or contact Marek Smith.

News from the Field

California: In the wake of the catastrophic fires this month, **Lenya Quinn-Davidson** (lquinnndavidson@ucanr.edu) was [interviewed](#) on **NPR's Morning Edition** last week. The piece was titled "California's Fire Season Extends Beyond Summer Months," but might better have been called "**How Can We Live With Fire?**" as she adroitly and succinctly addressed that broad question.

California: A [great article](#) in the *North Coast Journal*—"Changing the Landscape: As Fires Rage in California, **TREX Tries to Blaze a Better Trail**"—talks about this year's **Klamath River TREX**, and looks ahead to big plans for the coming years.

California: The *Calaveras Enterprise* [article](#) "It's Really Sparked a Passion for Me ...' Prescribed Fire **Training a Success Despite Poor Burning Conditions**" captures the **Calaveras TREX** well. Particularly nice is the range of participant voices quoted in the article.

California: Members of the **FireScape Mendocino** core team recently [toured areas burned by the Ranch Fire](#)—part of the large Mendocino Complex that burned on and near the Mendocino National Forest earlier this year. They focused on impacts to vegetation, cultural resources and recreation facilities, with an eye to continued collaboration with the Forest Service in support of recovery. For more, see the [blog post](#) by **Don Amador** (damador@cwo.com).

North Carolina: Last month, partners in the **Central Escarpment** landscape of the **Southern Blue Ridge FLN** met for a day of catching up, learning and looking ahead. See the attached *Notes from the Field* for a full report on the [workshop](#).

North Carolina/South Carolina: More than **50 people** took part in the **Southern Blue Ridge TREX** that took place earlier this month, working on the [lands of seven partners across two states](#). Crews conducted three burns, and also completed 5.5 miles of handline firebreak prep to set the stage for 10 controlled burns in the coming season. The **Southern Blue Ridge Escarpment** is a high rainfall area, which provided a unique challenge with logistics, but the planning team's [adaptive management](#) maximized training and burning opportunities as weather allowed. For more, see the *Greenville Journal* [article](#) "Fighting Fire With Fire: **How Local Agencies Are Using Prescribed Burns to Prevent Massive Wildfires**" or the [letter](#) by **Mike Bozzo** and **Tom Dooley** (tdooley@tnc.org) in the *Independent Mail*. A video and storymap are also in progress, and will be posted to the [SBR TREX Facebook page](#).

Oregon: The **Northwest Fire Science Consortium** [video](#) "Restoration in a Fire Forest: The **Benefits of Burning**" features **Central Oregon TREX** participants, cadre—and burning. For more, contact **Pete Caligiuri** (pcaligiuri@tnc.org).

Tennessee: In the **Great Smoky Mountains National Park**, the Conservancy's **Southern Blue Ridge Burn Crew** supported the Great Smoky Mountains Wildland Fire Module and park staff on a recent [prescribed burn](#). Fire has a long history in the park, and returning [#goodfire](#) is important—forests in the western part of the park were once so open that [red-cockaded woodpeckers](#) were still present as recently as the 1970s. For more, see the [article](#) "Controlled Burn at Cades Cove Helps Native Species" in *The Daily Times*, or contact **Adam Warwick** (awarwick@tnc.org).

Portugal: For the **second year**, the **Alto Minho TREX** is bringing the lessons of TREX to Europe. Follow along on their [Facebook page](#).

Request for Feedback: Southern Pine Science

Southern Pine Science: **Dr. Don Bragg**, project leader for the **USDA Forest Service** longleaf and other southern pine units, is seeking help with developing the **future direction of scientific research** in these Southern Research Station units (see the [story map](#)). These research units are currently developing new charters, and both are looking for **feedback from people and organizations** that have used (or may use) the science they develop. Those interested in helping can respond via an [online questionnaire](#) or contact Dr. Bragg (dbragg@fs.fed.us) directly before **December 14**.

Resources: IFTDSS Update / Mastication

IFTDSS Update: A [two-minute video](#) highlights the **new features** available in the latest update to the Interagency Fuels Treatment Decision Support System, **IFTDSS 3.1.1**.

Mastication: The Rocky Mountain Research Station [general technical report](#) “To Masticate or Not: Useful Tips for Treating Forest, Woodland, and Shrubland Vegetation” (RMRS-GTR-381) gets deep into the weeds on **implementation details**, and includes **decision trees for equipment selection**.

Articles & Reports: Tribal Stewardship / Forest Planning Rule / Postfire Logging / Refugia / Precipitation

Tribal Stewardship: In *Ecology and Society*, the [article](#) “**Escaping Social-Ecological Traps Through Tribal Stewardship** on National Forest Lands in the Pacific Northwest, United States of America” (**Jonathan W. Long** and **Frank K. Lake**) proposes several strategies to foster sustainability—and mentions the **Western Klamath Restoration Partnership** and **TREX** as examples that show promise.

Forest Planning Rule: The *Forest Science* [article](#) “Implementing the 2012 Forest Planning Rule: **Best Available Scientific Information** in Forest Planning Assessments” looked at four forests (Chugach, Cibola, Inyo and Nantahala & Pisgah) to get an early look at how well science is being used in the process.

Postfire Logging: The *Science Findings* [report](#) “Reburn in the Rain Shadow” profiles **David Peterson’s** research on the **Okanogan-Wenatchee National Forest**. His work suggests that “postfire logging in dry forests can serve as an **effective, long-term fuel reduction** treatment by reducing future woody fuel loads and broadening the range of conditions under which **prescribed fire** can be used as a restoration tool in regenerating forests.”

Refugia: The *BioScience* [article](#) “Fire Refugia: What Are They, and Why Do They Matter for Global Change?” identifies four **dichotomies for characterizing refugia**: unburned/low severity, species/landscape process, predictable/stochastic and ephemeral/persistent.

Precipitation: The authors of the [article](#) “**Decreasing Fire Season Precipitation** Increased Recent Western US Forest **Wildfire Activity**” examined the effect of wetting rain days (WRD) during the fire season as a driver of burned area. They found that “the net effect of WRD anomalies on wildfire area burned was more than 2.5 times greater than the net effect of vapor pressure deficit (VPD), and both the WRD and VPD effects were substantially greater than the influence of winter snowpack.”

Jobs: Outreach Coordinator / Program Manager / Hotshot Crew

Outreach Coordinator: **University of Nevada Cooperative Extension** is seeking an outreach coordinator for the **Living with Fire program**. Details are on the university’s jobs page ([R0112930](#)); applications are due by **December 6**.

Program Manager: The **Mid Klamath Watershed Council** is seeking a manager for its **Fire & Fuels Program**; responsibilities will include planning and implementing the annual **Klamath River TREX**. Details can be found on the MKWC [employment page](#); applications are due by **December 15**.

Hotshot Crew: The **Utah Department of Natural Resources** is conducting outreach for its **Lone Peak Interagency Hotshot Crew**. (The Lone Peak base has longtime ties to **TREX**, often contributing leadership and other resources to events.) Details are on the Lone Peak Conservation Center [website](#); resumes are being accepted through **January 10**.

Webinars

November 29

Lessons Learned from Learn-n-Burn Events

11:30 Pacific / 12:30 Mountain / 1:30 Central / 2:30 Eastern

Jennifer Fawcett and Bobby Clontz will be the presenters for this Southern Fire Exchange webinar.

Details & registration: <https://www.eventbrite.com/e/sfe-webinar-lessons-learned-from-learn-n-burn-events-tickets-49345755483>

November 29

Prescribed Fire Policy Barriers

11:30 Pacific / 12:30 Mountain / 1:30 Central / 2:30 Eastern

Courtney Schultz and Heidi Huber-Stearns will be the presenters on this Northwest Fire Science Consortium webinar on findings from a JFSP project on challenges and strategies on federal lands across the West.

Details & registration: <http://www.nwfirescience.org/events/prescribed-fire-policy-barriers-findings-jfsp-project-challenges-and-strategies-federal-lands>

**December 4
new listing**

Toward an Understanding of How Indirect Effects of Fire May Affect Management Outcomes

11:00 Pacific / noon Mountain / 1:00 Central / 2:00 Eastern

Marcus Lashley will be the presenter on this Oak Woodlands & Forests Fire Science Consortium webinar focusing on fire-herbivory interaction.

Details & registration: <http://www.oakfirescience.com/events-webinars-source/2018/12/4/toward-an-understanding-of-how-indirect-effects-of-fire-may-affect-management-outcomes>

**December 12
new listing**

Use of Small Unmanned Aircraft on Wildfire Incidents

11:00 Pacific / noon Mountain / 1:00 Central / 2:00 Eastern

Mike Fontenot will be the presenter on this Southwest Fire Science Consortium webinar on drones.

Details & registration: <http://www.swfireconsortium.org/2018/11/25/use-of-small-unmanned-aircraft-on-wildfire-incidents/>

**January 29, 2019
new listing**

Hot Burns, Cold Burns, and Everything In Between: Exploring Prescribed Burning's Impacts on Forest Structure in the Appalachians

10:00 Pacific / 11:00 Mountain / noon Central / 1:00 Eastern

In this FLN webinar, Jean Lorber will give a short presentation about new fire monitoring results; this will be followed by case studies of individual burn units, presented by the folks that burned them, to showcase a range of fire intensities and talk about why the units burned the way they did.

Join the webinar:

<https://tnc.webex.com/tnc/j.php?MTID=m3e327fe32b89e3ada50775ad14c5e161>

Network Workshops & Field Tours

- December 6 updated** **Southern Blue Ridge Escarpment FLN / Oconee State Park, SC**
The agenda will include updates on the SBR TREX and 2019 burn plans. RSVP by December 3.
Information: Kristen Austin (kaustin@tnc.org)
- December 11** **Georgia Blue Ridge Mountains FLN / Dahlonega, GA**
The fall workshop of this Southern Blue Ridge FLN landscape.
- February 11-15, 2019** **Annual FLN Leaders-TREX Coaches-IPBN Workshop / Russellville, AR**
Regional network leads, TREX coaches and leaders from the Indigenous Peoples Burning Network will be hosted by the South Central FLN.
- April 22-26, 2019** **Fire Adapted Communities Learning Network Workshop / Ashland, OR**
FAC Net core members and key partners will meet at this national workshop.
- May 14-16, 2019** **Southern Blue Ridge FLN / Athens, TN**
Save the date for the next annual workshop of this regional FLN network.

FLN Prescribed Fire Training Exchanges (TREX)

- March 18-29, 2019 new listing** **Women in Fire Prescribed Fire Training Exchange (WTREX) / Tallahassee, FL**
Applications are being accepted for the third WTREX, which will be held at the Tall Timbers Research Station. All genders, nationalities and levels of fire experience are welcome. Applications are due by January 4.
Information: see the attached flyer
- Mar. 30-Apr 13, 2019 new listing** **Niobrara Valley Preserve Prescribed Fire Training Exchange / Ainsworth, NE**
Fire practitioners—including private landowners; volunteer fire departments; university students; municipal, state, federal and contract firefighters—and other natural resource managers, scientists and researchers seeking trainee experience in FFT2, FFT1, FIRB, ENGB and RXB2 positions are invited to take part in this TREX based at a Conservancy preserve. Applications are due by January 30.
Information: see the attached flyer
- Apr. 29-May 10, 2019** **Central Oregon Prescribed Fire Training Exchange**
[Save the date](#)—details will be available in January.
- May 13-24, 2019** **Ashland Prescribed Fire Training Exchange**
[Save the date](#)—details will be available in January.

Conferences, Workshops, Training, Etc.

- December 10-14** **15th International Wildland Fire Safety Summit and 5th Human Dimensions of Wildland Fire Conference / Asheville, NC**
Information: <https://www.iawfonline.org/event/15th-international-wildland-fire-safety-summit-and-5th-human-dimensions-conference/>
- February 7, 2019 updated** **North Georgia Prescribed Fire Council / Jasper, GA**
This meeting, hosted by the Chestatee-Chattahoochee RC&D, is intended to help grow the state council's efforts in North Georgia.
Details will be available soon: <http://www.garxfire.com/events.htm>

- March 5-6, 2019 deadline** **Wildfire Mitigation Academy and Community Mitigation Assistance Team Training / Boise, ID**
This training is a prerequisite for participation in CMAT. Applications are due by **December 1**. Information: see the flyer attached to [FLN Networker #271](#)
- March 26-28, 2019** **Wildland Urban Interface Conference / Reno, NV**
Pre-conference events will take place March 23-26.
Information: <https://www.iafc.org/events/wui>
- April 1-3, 2019** **After the Flames / Denver, CO**
This conference is being convened by The Nature Conservancy, Forest Stewards Guild and Southern Rockies Fire Science Network, and hosted by Coalitions and Collaboratives (COCO). It will include sessions on community resilience and preparation, pre-fire planning for post-fire response, and "fantastic failures" (sharing lessons from what didn't work). [Registration](#) is open (early bird rate through December 31).
Information: <http://aftertheflames.com/>
- April 29-May 3, 2019** **6th International Fire Behavior and Fuels Conference / Albuquerque, NM**
The conference theme is "Fuels of Today–Fire Behavior of Tomorrow," and will be held simultaneously in Albuquerque, Sydney (NSW Australia) and Marseille (France).
Information: <http://www.firebehaviorandfuelsconference.com/>
- July 23-25, 2019** **Fire in Eastern Oak Forests Conference / State College, PA**
Save the date for this conference organized by the Oak Woodlands & Forests Fire Consortium and Consortium of Appalachian Fire Managers and Scientists, in partnership with the Pennsylvania Prescribed Fire Council.
- October 1-3, 2019 new listing** **5th Biennial Shortleaf Pine Conference / Van Buren, MO**
Information: <http://www.shortleafpine.net/shortleaf-pine-initiative/conferences>
- October 21-24, 2019** **3rd Annual Cohesive Strategy Workshop / Plymouth, MA**
Information: https://www.iawfonline.org/event/2019_cohesive_strategy_workshop/
- Nov. 18-22, 2019** **Cultivating Pyrodiversity: The 8th International Fire Ecology and Management Congress / Tucson, AZ**
Information: <http://afefirecongress.org/>

Send News, Links & Comments

Heather Montanye – hmontanye@tnc.org – Heather is in the office.

Jeremy Bailey – jeremy_bailey@tnc.org – Jeremy is in Portugal (TREX) November 20-December 2; in Birmingham, AL December 3-5.

Marek Smith – marek_smith@tnc.org – Marek is in Asheville, NC December 10-14.

Mary Huffman – mhuffman@tnc.org – Mary is out November 30-December 4; in Asheville, NC December 10-14.

Wendy Fulks – wfulks@tnc.org – Wendy is in Boulder, CO December 5-7; in Petaluma, CA December 10-12.

Liz Rank (editor) – lrnk@tnc.org – Liz is out November 29-30.

Full Links

News from the Field—CA—NPR: <https://www.npr.org/2018/11/20/669482111/californias-fire-season-extends-beyond-summer-months>

News from the Field—CA—Klamath TREX: <https://www.northcoastjournal.com/humboldt/changing-the-landscape/Content?oid=12063326>

News from the Field—CA—Calaveras TREX: http://www.calaverasenterprise.com/news/article_ef8fd594-e901-11e8-8937-af9b5f631db2.html

News from the Field—CA—FireScape Mendocino: <https://mendocinofirescape.blogspot.com/2018/11/post-ranch-fire-recovery-duty-to-engage.html>

News from the Field—NC/SC—Article: <https://greenvillejournal.com/2018/11/15/fighting-fire-with-fire-local-agencies-begin-training-for-upcoming-wildfire-season/>
Letter: <https://www.independentmail.com/story/opinion/2018/11/17/letter-we-need-more-good-fires-our-mountains/2010756002/>
Facebook: <https://www.facebook.com/SBRTREX/>

News from the Field—OR: <https://www.youtube.com/watch?reload=9&v=yf6slNIMx6Q&feature=youtu.be>

News from the Field—TN: https://www.thedailytimes.com/news/controlled-burn-at-cades-cove-helps-native-species/article_4c75ad92-59da-553f-8def-2d65f495f869.html

News from the Field—Portugal: <https://www.facebook.com/Alto-Minho-TrEx-348124379275277/>

Request for Feedback—Southern pine science—Storymap:
<https://usfs.maps.arcgis.com/apps/MapSeries/index.html?appid=9b2e8dd054a147229cb2f65d24d4a21e>
Questionnaire:
https://docs.google.com/forms/d/e/1FAIpQLSfY6yH3oiL4VtwCv4QEOMKZQzhIhygiuGCWTP2_WAFdmjDL_g/viewform

Resources—IFTDSS update: <https://www.youtube.com/watch?v=GuNB65Oei08&feature=youtu.be>

Resources—Mastication: https://www.fs.fed.us/rm/pubs_series/rmrs/gtr/rmrs_gtr381.pdf

Articles & Reports —Tribal stewardship: https://www.fs.fed.us/pnw/pubs/journals/pnw_2018_long001.pdf

Articles & Reports—Forest planning rule: https://www.fs.fed.us/pnw/pubs/journals/pnw_2018_ryan001.pdf

Articles & Reports—Postfire logging: <https://www.fs.fed.us/pnw/sciencef/scifi211.pdf>

Articles & Reports—Refugia: <https://academic.oup.com/bioscience/advance-article/doi/10.1093/biosci/biy103/5098928>

Articles & Reports—Precipitation: https://www.fs.fed.us/rm/pubs_journals/2018/rmrs_2018_holden_z001.pdf

The Fire Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together: Collaborative Engagement, Collective Action and Co-ownership of Fire*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior.

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Fire Learning Network Notes from the Field

Southern Blue Ridge FLN Central Escarpment Workshop

McDowell County, North Carolina
October 3, 2018

After the severe wildfire season experienced by the southern Appalachians in fall of 2016, people are still wary of smoke in the air. The FLN is using this window of interest to gain traction for good fire and Firewise communities.

A Focus on Community

The Central Escarpment FLN landscape workshop drew a diverse group of partners from The Nature Conservancy, U.S. Forest Service, North Carolina Forest Service and State Parks, RC&Ds from Southern Appalachian and North Georgia regions, McDowell County Emergency Management and the local community. The 23 participants discussed the accomplishments of the Grandfather CFLRP project and how to continue momentum into its final year; controlled burn projects, including the Southern Blue Ridge (SBR) TREX; and local Firewise efforts, improvements and challenges.

Nearly every conversation seemed to develop around the same theme: building community support for fire in the southern Appalachians. Although many of these mountain ecosystems evolved with regular fire, controlled burning is not as widely accepted in the uplands as it is in North Carolina's more coastal communities. Following the 2016 wildfires, FLN partners have been pushing harder than ever to get good fire on the ground and reduce wildfire risk. Some communities, like Creston, represented at the meeting by local "spark plug" Dinese Drake, are jumping on board to become better fire adapted. McDowell County Ranger Chris Davis, with the state Forest Service, said that since the wildfires, they receive many more calls from people concerned about smoke and wildfire. On the other hand, some communities are still resistant.



Controlled burn at Osborne Ridge Knob, in the Central Escarpment FLN landscape.

© TNC (Dean M. Simon)

In general, relationships between firefighters and communities are strengthening, but participants identified a need to continue focusing fire adapted communities (FAC) outreach where there is traction. The meeting served as a platform for members to share what has been working, what hasn't, and were to focus future efforts. Public attention spans are often short, but the severity of the 2016 fires and the continued reminders raging in California have kept people engaged. FLN partners in the Central Escarpment are working to gain as much ground as possible while this window remains open.

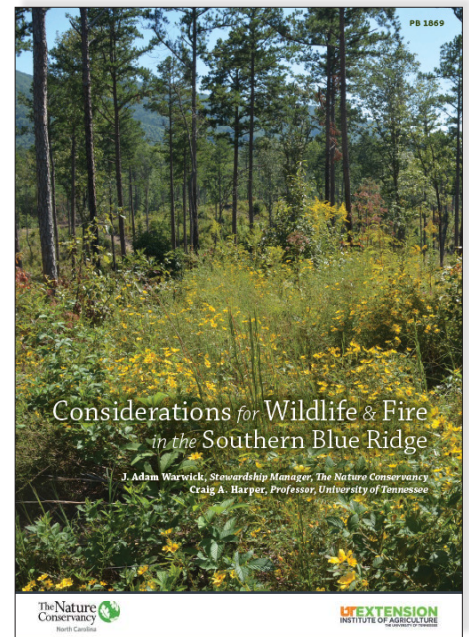
Adam Warwick—the Conservancy's SBR stewardship manager, and co-lead of the Central Escarpment Landscape—brought up a study presented by Kathryn Gaash at the regional SBR FLN workshop held in the South Carolina highlands in May. Gaash's study focused on community perceptions of wildfire and controlled burning in the Southern

Key Takeaways

- Calls about smoke have increased significantly since Gatlinburg and the fall 2016 wildfire season.
- Relationships between firefighters and the community are strengthening.
- Public workdays help build awareness and relationships.
- Focus fire adapted communities (FAC) and outreach work where we are getting traction—news of what we are doing travels best by word of mouth.
- Community meetings help jump-start Firewise work for Resource Conservation and Development (RC&D) staff—do more of these.
- The RC&D FAC Coalition will be funded for Firewise work in western North Carolina through 2020.
- There is a backlog of burning on private lands due to lack of staff and burn days. A prescribed burn association could be a solution (see the Sandhills Prescribed Burn Association), but someone needs to drive the effort.
- There is interest in holding Central Escarpment landscape meetings more often.

Appalachians. When asking about the 2016 wildfires, Gaash found that many people believed that the Forest Service actually set the fires! Jessica Hocz, with the Mountain Valleys RC&D, provided some explanation for this belief, noting that backfires used to control one of the wildfires actually accounted for more acres than the wildfire itself. This can be difficult to justify to community members and private landowners. People often

Right: The 2018 publication *Considerations for Wildlife & Fire in the Southern Blue Ridge* by Adam Warwick and Craig A. Harper provides brief summaries of the biology and most recent science of fire effects for select wildlife species. Photos are included as well as locations where habitat management for those species can be seen on public lands in the southern Appalachians. This publication provides a fantastic resource for communicating issues surrounding fire and wildlife.



overlook the overall strategy used on a fire, Ranger Chris Davis pointed out—that we could have lost more had we let the fire get out of hand.

Dean Simon, who retired from the North Carolina Forest Service and is now working as a Conservancy burn boss and helping with TREX events, added that news about accidents and fatalities catches people's attention. He stressed the need to reiterate how the strategy of allowing fires to back out, using existing lines, is part of the protocol to keep people—including first responders—safe. No one argues with "Safety first."

Resource Conservation & Development (RC&D) Councils

The Appalachian RC&D FAC Coalition reported that it has been funded for Firewise work in North Carolina through 2020. They have also applied for a Natural Resources Conservation Service (NRCS) grant that has controlled burning built into it and strategically selects places for implementation. And the coalition noted that Vicki Christiansen, the newly appointed

U.S. Forest Service chief, has a good relationship with RC&Ds, which bodes well for increased support from the Forest Service.

Lynn Sprague, from the Southwestern North Carolina RC&D, emphasized grassroots involvement. Discussions with local foresters have been helpful, and Firewise communities have been forming as a result of FLN outreach. Frank Riley, with the Chestatee-Chattahoochee RC&D and the FAC coalition, suggested starting any new outreach with RC&D folks—they live in the communities, and can help find the "sparkplug" person to take discussion beyond the meetings. "Empower them and see where it goes."

Grandfather CFLRP Project

The purpose of the Collaborative Forest Landscape Restoration Program (CFLRP) is to encourage collaborative, science-based ecosystem restoration of priority forest landscapes. The Grandfather Ranger District became a CFLRP site in 2012, building on a foundation laid by its partnership with the Central Escarpment FLN. As the

project nears the end of its eight-year term, Lisa Jennings, the recreation program manager on the Grandfather Ranger District and CFLRP coordinator, spoke about its accomplishments, and led a discussion about how to maintain momentum in its final year.

Priorities of Grandfather CFLRP project have been:

- Restoring fire-adapted ecosystems;
- Restoring wildlife habitat;
- Treating non-native invasive species in priority areas;
- Treating hemlocks for the invasive woolly adelgid; and
- Watershed restoration, including increasing connectivity for fish, streamside restoration, and trail restoration to keep sediment from getting into creeks.

Controlled Burn "Elevator Pitches"

"Wildfires are thought of as raging. Controlled burns are low-intensity, backing down a slope, cleaning up fuels, not getting rid of everything and that's not what you're trying to do. Go and look at [a regularly burned landscape] and see the burned areas and how healthy the look. Refer to good fire and bad fire."

— Chris Davis, McDowell Co. Ranger NCFs

The three basics are: fuel reduction, improving wildlife habitat, and dependency and adaptation of forest communities (promoting forest health).

Use examples people can relate to, like how house plants need more sun than shade, similarly fire helps get light to the forest floor. Arguing for pollinators resonates with gardeners, and examples of wild turkey using burned habitat resonates with hunters.

Other examples of using fire to improve wildlife habitat can be found in the recent publication by Adam Warwick and Craig A. Harper, *Considerations for Wildlife and Fire in the Southern Blue Ridge*.

Fire Learning Trails are a great way for people to see the effects of good fire with their own eyes. State parks are the best places to implement these trails because of heavier visitor traffic and rangers to lead interpretive hikes. This year the Central Escarpment is focusing on putting in a trail at South Mountains State Park.



Prescribed Fire Training Exchanges (TRES) are designed to build capacity for prescribed fire by bringing together diverse groups of fire practitioners and other stakeholders to share skills, knowledge and resources. The events have been successful in providing capacity to local partners and helping participants to get more training, sometimes in new or different habitats and fuels. Nine TRES and related events took place this fall, including the SBR TRES in South Carolina—the first TRES to have access to a helicopter. For many at this workshop, a highlight of the coming spring TRES season will be the Women in Fire TRES (WTRES) hosted at Tall Timbers, near Tallahassee, Florida.

The Grandfather project has restored about 40,000 acres to date. It also conducts monitoring through its partnership with the FLN; this includes work with Pete Bates at Western Carolina University, and the installation of wildlife cameras on a controlled burn unit this year.

Prescribed fire across the Grandfather has increased from 2,000 to 6,000 acres a year. Last year this included burning 5,500 acres in two units, using a helicopter for ignitions. During the fall 2018 through spring 2019 burn season, the project plans to burn a 3,500-acre unit in McDowell County, as well as additional smaller units as burn windows allow. Being part of the CFLRP for the past eight years has made the Grandfather a Forest Service priority in North Carolina. When CFLRP funding ends, the district is will face a transition, but is determined to keep the ball rolling.

Fire and Water

Adam Warwick talked about some of the work of the Conservancy's SBR Fire Crew. Created four years ago, it has been conducting fire effects monitoring to determine whether



Twenty-three partners from the Central Escarpment landscape met at McDowell Technical Community College in Marion, North Carolina. This 425,000-acre landscape is part of the regional Southern Blue Ridge Fire Learning Network. © TNC (Grace McLeod)

management objectives are being met with current burning practices. A recently added component of this monitoring has been looking at forest-water connections and the role of fire in that relationship. With the absence of fire, forests are shifting away from fire-tolerant oak and pine systems and towards more mesophytic communities, dominated by shade-tolerant species. The SBR FLN has partnered with Coweeta Hydrologic Laboratory, a tract of the Nantahala National Forest which functions as an outdoor living laboratory and experimental forest that has been measuring stream and groundwater flow in response to forest alterations since the 1930s. Research at Coweeta is showing that much more water is taken up by mesophytic tree species, so streamflow is reduced as forest communities shift away from their fire-adapted predecessors. This has important implications for people living downstream who need drinking water, especially as more people continue to move into the area.

The Mountain Valleys RC&D is also working closely with water quality projects, examining the overlap between firesheds and watersheds, and how forests determine water quality.

Fire and Indigenous People

Marek Smith, director of the national Fire Learning Network, gave an update on the national FLN and the cooperative agreement that supports it, PERFECT. He talked about the expansion of the FLN and PERFECT to include more tribes and indigenous

peoples through the Indigenous Peoples Burning Network (IPBN). Working with these groups provides an insight into the cultural significance of fire, as well as alternative ways to approach networking. We tend to think about expanding the network by reaching out and incorporating other agencies and organizations, but IPBN relationships are often established through family ties; growth in this direction is more successful when the new members to come to FLN and ask for resources or partnership, rather than the FLN initiating the relationship.

However the partnership grows, participants left the workshop a bit wiser, a bit more connected—and looking forward to their next gathering.

For more on the Central Escarpment FLN landscape, contact:

Adam Warwick
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Lisa Jennings
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For more on the regional Southern Blue Ridge FLN, contact:

Margit Bucher
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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 PERFECT, contact Marek Smith at marek_smith@tnc.org.

An equal opportunity provider

TRAINING ANNOUNCEMENT

Women-in-Fire

Prescribed Fire Training Exchange (WTREX)

Tall Timbers Research Station (Tallahassee, FL) - March 18-29, 2019



When the US fire management system was conceived in the early 1900s, women's roles in the workforce were much different than they are now. Even today, women constitute a relatively small proportion of the workforce, filling roughly 10 percent of wildland fire positions and only 7 in 100 leadership roles. In recent years, there has been an increased effort to recruit women into fire, yet social and cultural challenges remain. New recruits often find the dominant fire management system to be dismissive of female perspectives and strengths, even as its increasing complexity requires fresh approaches and insights. We believe that the groups who are generally under-represented in fire, including women, have unique talents and perspectives and that they can play a critical role in advancing fire problem solving.

During the Women-in-Fire Prescribed Fire Training Exchange (WTREX), we invite participants of all genders to explore the growing role of women in fire management, while conducting prescribed fire operations designed to advance their formal qualifications in wildland fire management and enhance their understanding of fire ecology and effects, communications and outreach, prescribed fire policy and planning, and more.

Key things to know about WTREX:

- The first two WTREX events were both hosted in California. This year, we will be near Tallahassee, FL at the Tall Timbers Research Station.
- WTREX is an intensive 12-day training exchange that combines practical live-fire training with indoor learning and discussion to advance participants' qualifications and experience in wildland fire operations.
- WTREX will engage participants of all genders in building a support network for female fire practitioners working to advance their leadership in wildland fire management.
- WTREX participants will work together to accomplish much-needed prescribed burning in a variety of fire-adapted ecosystems.
- The WTREX serves as an opportunity to elevate diversity in perspective, background, and talent in order to create solutions for today's complex fire problems.





Join us for hands-on burning and learning at the Tall Timbers Research Station!

Target Group: Prescribed fire and wildfire personnel and other natural resource managers involved in fire and ecosystem management - including federal, state, tribal, non-governmental, and private practitioners. Participants of all genders are invited to attend this event, though a higher proportion of female applicants will be selected.

Description: The training will be organized as an incident and will utilize the Incident Command System. Participants will serve in qualified and trainee firefighting positions on a burn team and will assist with preparing, scouting, briefing, igniting, holding, mop-up, and patrol on numerous controlled burns in the area. We will also complete pre- and post-fire monitoring, train with equipment, practice fireline leadership skills, and learn about local fire ecology and fire management. The work will take place in diverse ecosystems, including on some lands managed by the Tall Timbers Research Station. The training will include trips to prescribed fire and fuels treatment project sites, as well as presentations from local scientists, land managers, practitioners, and women who are leaders in various aspects of fire management. In addition, participants will have the chance to practice for media interviews.

Childcare: We recognize that childcare concerns can be a major barrier for people who work in fire. We are exploring opportunities to provide childcare during the WTREX for people who would not otherwise be able to attend. Please let us know on your application form if you are interested in learning more.

Requirements:

- All participants' qualifications must be current. At a minimum, everyone must have completed NWCG courses **S-130 and S-190, as well as FEMA IS-700A and ICS-100**. Self-study materials for these courses will be offered to participants who need them.
- Participants must complete a **work capacity test** at the **arduous** level **before the start** of the event. Completion of a moderate level work capacity test is acceptable if coming as a TNC volunteer and serving in a RXCM (prescribed fire crewmember) position. A practice shelter deployment will be offered to those who need it.
- All participants must have **insurance** (e.g., workers' comp, health, or travel insurance) to cover any injury they may sustain during the training exchange.
- Participants should come with **all appropriate personal protective equipment (PPE)**, including **fireline-approved boots** (all leather work boots, 8-inches tall, non-slip soles, no steel toe), a new generation fire shelter, headlamp, hard hat, Nomex clothing, leather gloves, eye protection, and canteens for drinking water. **If you do not have proper PPE, we can arrange for you to borrow some.** Please indicate your need on the application form.

Cost: Each participant is responsible for a \$300 non-refundable registration fee, due after participants have been selected and confirmed. There will not be a charge code for participants' wages during the training - wages will be the responsibility of the home unit.

Meals and Travel: Meals and camping space **will be provided** during the training. Participants are responsible for their own travel to and from the WTREX. The Incident Management Team and burn boss trainees will be expected to arrive on the Sunday, March 17, 2019 for a pre-event planning day. All other participants should arrive at the training site on Monday, March 18, 2019. Specific meeting times and locations will be announced after participants have been selected. The training concludes on Friday, March 29, 2019.

Application: Visit the application website at <https://goo.gl/forms/Dz9PBWofO6cBLT2F2> and submit your form by the end of the day on **January 4, 2019**. Email Lenya Quinn-Davidson with any questions at lquinndavidson@ucanr.edu. Space is limited to approximately 25 trainees; selections will be made with a variety of diversity and inclusion goals in mind.

WTREX is supported by *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.

This institution is an equal opportunity provider.



***** Training Announcement *****

**Prescribed Fire Training Exchange
Niobrara River Valley Nebraska, March 30- April 13, 2019.**

Objectives: To conduct a series of controlled burns on The Nature Conservancy’s Niobrara Valley Preserve to provide experiential learning opportunities to participants.

Target Group: This training is designed to integrate a diverse group of fire practitioners, including: private landowners, volunteer fire departments, university students, municipal, state, federal and contract firefighters, as well as other natural resource managers, scientists and researchers. Trainee positions most applicable to the Niobrara Valley TREX include: FFT2, FFT1, FIRB, ENGB, & RXB2. Please contact Amanda Hefner to discuss other trainee positions.

Description: The training is organized as an incident, using the Incident Command System. Participants will serve in qualified and trainee firefighting positions on a burn team and will assist with preparing, scouting, briefing, igniting, holding, mop-up, and patrol on numerous controlled burns in the area. We will also complete pre- and post-fire monitoring, train with various equipment, practice fireline leadership skills, and learn about local fire ecology and management.

There will be field trips to areas burned in recent fires and presentations from local ranchers and other community members, scientists, land managers and fire practitioners. Participants will also present briefings about the fire regimes in their home region and discuss management challenges and opportunities there.

Requirements:

1. All participants must be current and qualified NWCG wildland firefighters (FFT2 minimum).
2. Participants must have completed an arduous pack test within one year of dates they plan to attend. Pack tests must be completed prior to arriving at the training. Use of the moderate pack test is for the prescribed fire crew member (RXCM) position.
3. Participants must have personal or employer provided medical insurance.
4. Participants should come with all appropriate Personal Protective Equipment including: a Next Generation Fire Shelter, a hard hat, Nomex clothing, all leather gloves, eye protection and canteens. If you are unable to provide your own PPE, we will provide you with a complete set (excluding boots - see below)
5. Participants must bring fireline-approved boots (all-leather work boots, 8 inches tall, with non-slip soles and no steel toe).

Meals & Travel: All meals, ground transportation and lodging will be provided during the training. Participants are responsible for their own travel to and from the Niobrara Valley Preserve near Ainsworth, Nebraska. Participants should arrive at the preserve on **Saturday March 30th between 1300-1700.**

Registration: To apply, please complete the separate application form & submit to Amanda Hefner, amanda.hefner@tnc.org no later than January 30, 2019.



NIOBRARA VALLEY PRESERVE PRESCRIBED FIRE TRAINING EXCHANGE (TREX) APPLICATION

MARCH 30- April 13, 2019.

PLEASE INDICATE DATES YOU WISH TO ATTEND: _____

1. PARTICIPANT INFORMATION (PLEASE PRINT LEGIBLY OR TYPE RESPONSES <u>IN SPACE PROVIDED</u>)		
Full name (for course certificate):		
Organization and position:		
Complete work address:	Phone: cell () work ()	
	Email:	
2. SUPERVISOR INFORMATION		
Name:	Job title:	Phone:
3. QUALIFICATIONS (ALL PARTICIPANTS MUST HAVE NWCG WILDLAND FIREFIGHTER TYPE 2 TRAINING):		
Qualified positions (current only):		
Trainee position requested:		
Check here if you require introductory Wildland Firefighter Type 2 training (I-100, IS-700a, S-130, and S-190): []		
4. COURSE EXPECTATIONS (More space on second page)		
Briefly describe your expectations for this training:		
6. PERSONAL PROTECTIVE EQUIPMENT		
Participants should come with all appropriate Personal Protective Equipment (PPE) , including fireline-approved boots (all leather work boots, 8-inches tall, non-slip soles and <u>no</u> steel toe), a Next Generation Fire Shelter, a hard hat, Nomex clothing, all leather gloves, eye protection and canteens for drinking water. For individuals who do not have PPE, it is available for rent for \$50 at the beginning of the event. Check here if you require PPE: []		
7. EQUIPMENT CONTRIBUTION		
These Training Exchanges would not be possible without contributions of equipment from participants like you. The equipment we need includes engines, UTVs, chainsaws, hand tools, backpack pumps, and PPE (fire shelters and Nomex clothing). If you or your organization can provide any (or any combination) of these items, please e-mail or call Evan Suhr (esuhr@tnc.org), or (402-722-4440) to further discuss the details. List the equipment you can provide:		
8. SUBMIT APPLICATION (DUE NO LATER THAN January 30, 2019)		
Please forward any questions you may have and submit your completed application to Amanda Hefner at The Nature Conservancy, (amanda.hefner@tnc.org). Thank you for your interest!		
Logistics Information		
Gender(used for lodging assignments):	Dietary Restrictions: T-Shirt Size:	Preferred Email for TREX emails (if different than above):

Continued COURSE EXPECTATIONS (continued):

Expand on your expectations and experience:"

Questions:

Please write down any questions or inquiries you have about this training: