

FLN Networker No. 137: July 24, 2013

The FLN Networker is a publication of the Fire Learning Network—a partnership of the USDA Forest Service, Department of the Interior (BIA, BLM, National Park Service, US Fish & Wildlife Service) and The Nature Conservancy—intended to foster communication within the network and among its friends. Submit comments, links and subscription requests to Liz Rank.

For more about the FLN, visit www.conservationgateway.org/fln or contact Lynn Decker.

News from the Field

California: **Applications** for the northern California **Prescribed Fire Training Exchange** are due this Friday, **July 26**—see the attached flyer for full information.

California: According to **Lynn Jungwirth** (lynnj@hayfork.net), “in the West we have identified 6,200 communities at risk. If each of [those communities] had a 20-man crew that was a conservation crew / fuels crew / fire crew, you’ve got 120,000 more firefighters that you don’t have to pay for every single day.” For more on how **funding local capacity** can make **good economic sense** (as well as all sorts of other kinds), see the July 15 [blog on wildfireX.com](#) in which she’s quoted.

Montana: Last Sunday, **NPR’s Weekend Edition** ran the [story](#), “Fighting Fire with Fire: **Why Some Burns are Good for Nature**.” In the story, which is based on interviews and photos from a May visit to the **Centennial Valley**, **Nathan Korb** (nkorb@tnc.org) talks about a **prescribed burn** that is planned as part of the **Scaling-up to Promote Ecosystem Resiliency** (SPER) implementation work being done in the landscape.

New Mexico: **Borrowing some lessons learned** from recent prescribed fire training exchanges, the Forest Guild and other organizers of the **prescribed fire at Black Lake** training event planned for the fall are already **preparing the community** for the upcoming burning with outreach through the [local paper](#). For more information about the burn, contact **Eytan Krasilovsky** (eytan@forestguild.org).

Pennsylvania: A **partnership** among the Bethlehem City Water Authority, Pennsylvania Game Commission and The Nature Conservancy has been working since 2009 to manage over **9,000 acres of rare scrub oak barrens**. They have mechanically **treated** and/or burned **close to 2,000 acres** of the landscape to date. In October, the **Pennsylvania Prescribed Fire Council** will host a **field review** of some of the work; for details, see the Training (etc.) listings below or contact **Jennifer Case** (jcase@tnc.org).

Southern Blue Ridge: This network’s fire effects **monitoring effort** has gotten a big boost, with funding found to **hire a fire effects data analyst**. This will allow the **analysis and archiving of data** from **monitoring plots** established by the **SBR FLN** to evaluate prescribed fire effects in four target forest communities (shortleaf pine-oak, pine-oak-heath, mesic oak-hickory and high elevation red oak). For more information, see the Jobs section below.

National: **Fire** is currently hot at **The Nature Conservancy**—a fire ecologist is on the cover of the [Nature Conservancy magazine](#) that is arriving in homes this week, and the issue also has an **interview** (attached) with **Jeremy Bailey** (jeremy_bailey@tnc.org) at a **prescribed fire training exchange** in Nebraska this spring. (One of the editors described the piece as “one of my favorite interviews, ever.”) Further **supporting material** on [fire’s role](#) in nature and [on-the-ground work](#) with fire and conservation (including the **FLN**) is highlighted on nature.org.

For more on **communicating about fire**, contact **Wendy Fulks** (wfulks@tnc.org) or **Jon Schwedler** (jschwedler@tnc.org).

Resources: What's WUI? / LANDFIRE 2010

What's WUI: If you find yourself needing a **definition of wildland-urban interface** that is more robust (and accurate) than “where wildlands and houses meet” and less technical (and perhaps more accurate) than the formulas used to make maps of it, try the article “The WUI Revisited,” by **Molly Mowery** (mmowery@nfpa.org). Key to the definition is that WUI is most usefully considered **not as a pre-established location** but as a **set of conditions** that can exist in nearly every community.”

LANDFIRE 2010: Many of LANDFIRE's data sets have been **updated** to reflect conditions as of about 2010; this includes changes due to **natural disturbances**, **management** activities and **urban expansion**, as well as agricultural and wetlands **refinements**. For more, visit the [data distribution site](#) or view the [recorded overview](#) webinar.

Reports & Articles: Firewise Barriers / Trees, Water & CO₂

Firewise Barriers: The [report](#) “Overcoming Barriers to Firewise Actions by Residents,” is just out. It is based on a JFSP study designed to improve the understanding of **individual and community actions** that homeowners do—or might—take to protect their homes, and the **barriers to implementation** of Firewise treatments identified by survey respondents.

Trees, Water & CO₂: It just gets more complicated. An [article](#) in the *New York Times* (“Some Trees Use Less Water Amid Rising Carbon Dioxide, Paper Says”) discusses a recent paper published in *Nature* (“**Increase in Forest Water-Use Efficiency as Atmospheric Carbon Dioxide Concentrations Rise**,” [abstract](#)). Punchline: it appears that higher CO₂ levels may let some trees get enough of the gas with partly closed pores (and so, less transpiration); if so, some coupled vegetation-climate models may need to be re-evaluated.

Jobs: Natural Resource Specialist / Fire Effects Data Analyst

Natural Resource Specialist: The **Grandfather Ranger District** of the Pisgah National Forest will be hiring a natural resource specialist to be stationed in Nebo, North Carolina—within the **Southern Blue Ridge FLN**. A primary focus will be providing leadership and **program management** for the **Grandfather Ranger District CFLRP project**. See the job announcement number [13-1108110005-1674D-CD](#) on usajobs.gov for more information; applications are due by **August 8**.

Data Analyst: The Department of Geosciences and Natural Resources at **Western Carolina University** is seeking a **fire effects data analyst**. The primary duties of this position will be to analyze and archive data gathered from **Southern Blue Ridge Fire Learning Network** monitoring plots. Fire effects were evaluated prior to each prescribed burn, and periodically thereafter. It is expected that the results of this work will result in one or more publications in peer-reviewed journals. There may also be opportunities to participate in field data collection. The project is housed at Western Carolina University (Cullowhee, NC), but relocation is not required; the position is funded through November 2013. For full information, visit the WCU [employment site](#) and search by job title.

Webinars

July 25

Fire and Fauna in the Southeast: Lessons Learned from Recent Research

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

In this Southern Fire Exchange webinar, Dr. Chris Moorman of NCSU will discuss results of recent research to investigate wildlife response to prescribed fire applications in the southeastern United States.

Information: http://www.southernfireexchange.org/etc/F&F_SE_Webinar.pdf

July 31 **Can Our Forests Take the Heat? Fire, Climate Change and Tree Mortality in the Western U.S.**
noon Pacific / 1:00 Mountain / 2:00 Central / 3:00 Eastern
In this Southern Rockies Fire Science Network webinar, Phil van Mantgem will present the results of a study that synthesized existing information from plot-based prescribed fire monitoring databases across the western U.S.
Information: [Register](#) for the webinar.

August 20 **Fire Management, Fuels, and Climate Change Tipping Points**
1:00 Pacific / 2:00 Mountain / 3:00 Central / 4:00 Eastern
This Southern Rockies Fire Science Network webinar will examine whether fuels treatments will continue to be effective in the future, and at what level of climate change major shifts in landscape composition and structure may occur.
Information: [Register](#) for the webinar.

FLN Workshops

July 26-27 **FireScape Monterey / Carmel, CA**
This workshop a discussion of federal wildfire policy as applied to the Los Padres NF, an update on the community fuelbreak improvement project, and a field tour where sudden oak death; grazing, fire and weed management, defensible space; and roadside fuel management will be discussed. Participants should **register now** by sending a brief message to FireScapeNow@gmail.com
Information is posted at: <http://firescape.ning.com/events>

July 29-30 **Middle Klamath Restoration Partnership / Orleans, CA**
Information: **Will Harling** (will@mkwc.org) or **Bill Tripp** (btripp@karuk.us)

October 8-10 **Appalachian FLN**
See the Wildland Fire in the Appalachians conference listing, below.

October 22-25 **Parashant Partnership / St. George, UT**
The partnership's fall workshop will include a 2½ day working field trip to Mount Trumbull and the Bar 10 Ranch, as well as a day-long work session in St. George. Participants will gather information and begin to draft comments for the NEPA scoping process on the BLM Uinkaret Mts. Vegetation Management Plan.
Information: **Eli Lauren-Bernstein** (eli.bernstein@nau.edu)

Training, Conferences & Workshops

September 24 **Learn to Plan for Contingencies / Pickstown, SD**
This Great Plains Fire Science Exchange training will help participants—including public and private land managers and prescribed fire associations—"think like a burn boss," using sand table exercises to simulate their own burn units. Space is limited, so pre-registration is required.
Information: <http://blogs.missouristate.edu/gpfirescience/2013/05/21/learn-to-plan-for-contingencies/>

September 25-26 **Patch Burn Grazing Working Group Conference / Gary, SD**
Save the date for this meeting—registration information coming soon.
Information: Pete Bauman (peter.bauman@sdstate.edu)

- October 3**
new listing **Field Review of Bethlehem Authority Lands / Monroe County, PA**
The Pennsylvania Prescribed Fire Council is hosting a review of treatments conducted by a successful partnership on this 9,000-acre oak barrens complex. Information: see the attached flyer
- October 5-11**
new listing **Engine Academy / Camp Blanding, FL**
Save the date—details will be available soon.
- October 8-10** **Wildland Fire in the Appalachians / Roanoke, VA**
This conference, sponsored by the Consortium of Appalachian Fire Managers and Scientists and the Association for Fire Ecology, will **likely take the place of the Appalachians FLN annual fall meeting**, so network leads are encouraging everyone to attend.
The deadline for poster submissions has been extended until all slots are filled. Some [student travel grants](#) are available; applications are due by **August 15**
Information: <http://appfireconference.org/>
- October 15-17** **Tenth Symposium on Fire & Forest Meteorology / Bowling Green, KY**
See the call for papers in the sidebar for a list of topics for this American Meteorological Society conference.
Information: <http://www.ametsoc.org/MEET/fainst/201310fireforest.html>
- October 21-24** **IAWF International Smoke Symposium / Adelphi, MD**
Information: <http://www.iawfonline.org/2013SmokeSymposium/>
- Oct 21-Nov 3** **Prescribed Fire Training Exchange / Arcata, CA**
The **Northern California Prescribed Fire Council, FLN** and local partners will be hosting this training in the forests and grasslands of northwestern California. Applications are due by **July 26**.
Information: announcement and application form are attached
- November 13-19** **Agency Administrators' Prescribed Fire Workshop / Florida**
This workshop offered by the Prescribed Fire Training Center uses group and field exercises as well as classroom presentations to cover prescribed fire program management, risk management and burn plans. The application deadline in **September 20**.
Info: www.fws.gov/fire/pftc/training_opportunities.shtml#AgencyAdministrators
- November 14-16** **Backyards & Beyond: Wildland Fire Education / Salt Lake City, UT**
This National Fire Protection Association conference will bring together wildfire experts, Firewise community representatives, community planners, civic leaders, homeowners, insurance professionals, landscape architects and others for a chance to network and share best-practices.
Info: <http://www.firewise.org/courses-and-training/backyards-and-beyond.aspx>
- May 19-23, 2014** **Large Wildland Fires: Social, Political & Ecological Effects / Missoula, MT**
The call for workshops and special sessions for this conference co-hosted by the Association for Fire Ecology and the International association of Wildland Fire is now open.
Info: <http://largefireconference.org/>

Send News, Links & Comments

Lynn Decker – ldecker@tnc.org – Lynn is in California July 25-30, in Atlanta August 5-8.

Jeremy Bailey – jeremy_bailey@tnc.org – Jeremy is out through July 26.

Wendy Fulks – wfulks@tnc.org – Wendy is out August 6-9.

Mary Huffman – mhuffman@tnc.org – Mary is in California July 25-31.

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

Liz Rank (Networker Editor) – lrnk@tnc.org – Liz is in the office.

To stop receiving the FLN Networker, please reply to this message and include your request in the body of the message.

Full Links

News—California—Jungwirth: <http://www.wildfirex.com/2013/07/15/wildfires-think-local-act-local/#comment-1394>

News—Montana: <http://www.npr.org/2013/07/21/203245958/fighting-fire-with-fire-why-some-burns-are-good-for-nature>

News—New Mexico: http://www.sangrechronicle.com/articles/2013/07/18/angel_fire/doc51e728737e047034981282.txt

News—National—Magazine: <http://magazine.nature.org/>

Fire's role in nature: <http://www.nature.org/ourinitiatives/habitats/forests/howwework/maintaining-fires-natural-role.xml>

Site-based solutions: <http://www.nature.org/ourinitiatives/habitats/forests/howwework/fire-and-conservation-site-based-solutions.xml>

Resources—What's WUI?: <http://www.nfpa.org/newsandpublications/nfpa-journal/2013/july-august-2013/the-experts/wildfire-watch>

Resources—LANDFIRE 2010—Data site: <http://landfire.cr.usgs.gov/viewer>

Webinar recording: <http://www.youtube.com/watch?v=sPBz7wEaRa0>

Reports & Articles—Firewise barriers: http://gallery.mailchimp.com/2263fe298f4df255d22b80097/files/10_3_01_15_final_report.pdf

Reports & Articles—Trees, Water & CO₂: <http://www.nytimes.com/2013/07/11/science/earth/some-trees-use-less-water-amid-rising-carbon-dioxide-paper-says.html>

Jobs—Natural resources specialist: <https://www.usajobs.gov/GetJob/ViewDetails/347708800?share=email>

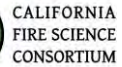
Jobs—Fire effects data analyst: <https://jobs.wcu.edu/applicants/jsp/shared/frameset/frameset.jsp>

Webinars—Can our forests take the heat?: <https://www1.gotomeeting.com/register/245252328>

Webinars—Fire management, fuels & climate tipping points: <https://www1.gotomeeting.com/register/783334704>

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.

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Training Announcement

Prescribed Fire Training Exchange Northern California, October 21-November 3, 2013

Objectives: A diverse group of international and domestic fire practitioners will work together to share and build their experience in prescribed fire practices, fire effects, and other conservation efforts affecting forests and grasslands in northwestern California.

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.

Tuition: \$200 (some tuition waivers are available based on need; see the registration form)

Description: Participants will serve in firefighting positions on a prescribed burn crew and assist with holding and ignitions on numerous prescribed fires in the region. We will also complete pre- and post-fire monitoring, scout and prepare burn units, train with equipment, and practice fireline leadership skills. The work will take place in a diversity of forest and rangeland ecosystems in northwestern California, including open prairies, oak woodlands, and mixed-conifer forests. There will be field trips to areas burned in recent wildfires and to prescribed fire and fuels treatment project sites, and there will be presentations from local scientists, land managers, and practitioners. Each participant will also prepare and present a briefing about the fire regimes in their home region and discuss management challenges and opportunities there. In addition, participants will get practice preparing for interviews with local media.

Requirements:

- All participants must complete basic US federal firefighter safety courses IS100, S130, and S190. These will be offered to participants who need them.
- Participants must complete an arduous pack test before participating in the training, confirming the ability to walk 3 miles with 45 pounds in 45 minutes.
- Participants must bring fireline-approved boots (all-leather workboots, 8 inches tall, with non-slip soles and no steel toe). All other safety gear (personal protective equipment) will be provided.

Meals & Travel: All meals, ground transportation, and lodging will be provided during the training. Participants are responsible for their own travel to and from Arcata, California. Participants should arrive in Arcata (ACV) between noon on October 19 (Saturday) and noon on October 20. The training concludes on Sunday, November 3. Departure flights should be scheduled no earlier than the morning of November 4.

Registration: To apply for this training, complete the registration form and submit to Lenya Quinn-Davidson (nwcapfc@gmail.com) by **July 26, 2013**. Space is limited to 30 participants; selection will be made to ensure a diverse group. Those selected will receive an acceptance letter and invitation from The Nature Conservancy and the Northern California Prescribed Fire Council to use for travel planning.



This training is hosted by the Fire Learning Network, Northern California Prescribed Fire Council, and other local partners.

The Fire Learning Network is a cooperative program of the Forest Service, Department of the Interior agencies and The Nature Conservancy with a ten-year track record of helping to restore our nation's forests and grasslands and making communities safer from fire.

This institution is an equal opportunity provider.

PRESCRIBED FIRE TRAINING EXCHANGE REGISTRATION—2013

I. PARTICIPANT INFORMATION			
Full name (for course certificate):			
Organization and position:			
Work address (street, city, state, zip/postal code, country):			
Work phone:	Cell phone:	Email:	
II. QUALIFICATIONS:			
Qualified positions:			
Trainee positions:			
Can you contribute equipment? If so, please explain.			
III. IN CASE OF EMERGENCY:			
Name:		Phone number(s):	
Relationship (family, supervisor, friend, other):			
IV. MEDICAL INFORMATION AND DIET			
Do you have any allergies, medical problems or other conditions that could affect your ability to conduct prescribed fire or take part in other field exercises? If so, please describe below (continue on reverse if needed).			
Are you vegetarian? Do you have any food allergies or other dietary restrictions?			
V. TRANSPORTATION COORDINATION (TRANSPORT TO AND FROM THE ARCATA AIRPORT WILL BE PROVIDED IF FLYING)			
Arrival date:	Airline:	Flight #:	Time:
Departure date:	Airline:	Flight#:	Time:
VI: COURSE EXPECTATIONS			
Briefly describe your expectations for the training. What do you expect to learn, to bring to the course, and to experience? How will this benefit your workplace, organization, and career?			
VII: SUPERVISOR INFORMATION			
Name:		Phone:	
Job title:			
VIII: OPTIONAL—FINANCIAL ASSISTANCE REQUEST			
A limited number of tuition waivers will be available for participants whose organizations are unable to cover their expenses. If you would like to be considered for a waiver of the \$200 tuition, please mark all that apply:			
<input type="checkbox"/> I must pay the tuition myself		<input type="checkbox"/> I must pay my own travel expenses (estimated amount _____)	
<input type="checkbox"/> I will take unpaid leave to attend		<input type="checkbox"/> My agency may have trouble covering the full cost	
<input type="checkbox"/> Other financial hardship (describe) _____			





ALIGHT: Jeremy Bailey manages what he calls “good fire”—a burn that helps restore habitat—at the Niobrara Valley Preserve in Nebraska.

.....
“We want the right kind of fire in the right place at the right time.”

grabbed me by the collar and lit into me. I never did that again.

And I thought you were just going to say you incinerated ants using a magnifying glass outside. Insects are so important ecologically. I do not advocate burning insects.

Good to hear. But these days you do advocate burning certain forests and grasslands. Why? For ecological restoration. Eighty percent of the vegetated areas in North America are fire dependent. When you allow good fire to roam across the greater landscape, it’s better for plants, animals and the water supplies that support human communities.

I’ve never witnessed a controlled burn. Describe the scene. One of the most magical moments I’ve had was on the White Mountain Apache Reservation in northeastern Arizona. We were just walking and flicking matches onto the ground in a forest that had been thinned. We walked miles through healthy, open stands. And those fires were small, moderate in intensity and doing really good work. When you see good fire moving through a forest or grasslands, it doesn’t look destructive. It looks like rain and sunshine.

That sounds very peaceful. But starting a fire with matches is unusual; typically

Jeremy Bailey

One of The Nature Conservancy’s top burn bosses talks about his dramatic evolution from firefighter to fire lighter.

You began your firefighting career way back in middle school, volunteering for a city fire department and ultimately leaving college early to work as an elite “hotshot” for the Forest Service. Now, tell me about the first time you started a fire. I was probably 8 or 9 years old; I had

built a fort and some of the bigger boys in the neighborhood stole my fort material to build a treehouse. I found it and burned it down.

Wow. Were you caught? Yeah, when I told a neighbor to call 911. He

you use a drip torch. What's that like?

A drip torch is a two-gallon can of diesel-and-gas mix with a wick that slowly drips out fire onto the vegetation. It's exhausting but it's still the best job in the business. Absolutely everybody wants to carry the drip torch.

How does starting a prescribed fire compare with your experiences fighting fires for 14 years? It's different. As a municipal firefighter, handling a structure fire is like a sprint. Wildland fire is more like a marathon. Now, as a burn boss, it's like I'm organizing a track event with both sprints and marathons embedded in it. I am responsible for both the success and failure of the process; my name is on the burn plan.

As the burn boss, you tell your crew, "eyes in the green, head on a swivel." What does that mean? The area where we do not want fire, we call it "the green." The area we are going to burn or recently burned is "the black." We remind them to stop looking at that beautiful fire. Your head is on a swivel because you're always looking around for the next problem. When you're in the woods lighting fire or fighting it, you do not have room for error.

When you were introduced to the concept of setting controlled burns as a means of preventing catastrophic wildfires, what was your impression? When I moved to Santa Fe, I began using a lot of prescribed fire in the ponderosa pine forest. I remember realizing that this was the real answer to managing wild-fire. Suppressing fire is clearly not the answer. The firefighting community has known that for at least 50 years. But it's hard to keep lighting fires and to allow fires started by lightning strikes to burn themselves out. It takes a lot of courage; you cannot be risk averse.

But you also can't ignore the real danger to people, right? There are certain reasons why we have to put some fires out as quickly as possible: We don't want homes to burn up, or fields or forage for cattle. We don't want big, hot fires that can hurt old-growth forest. That's not what we want. We want the right kind of fire in the right place at the right time of year.

You preach the gospel of "good fire" all across the country as a coordinator of the Fire Learning Network—a program run by the Conservancy, the Forest Service and various Interior Department agencies.

November, back to Florida. If you had a 'bago, you could save airfare.

I take it that ploy failed. How are you doing on your mission to teach people that fire can be good? In 2012, I led a training session for firefighters, land managers and meteorologists from Argentina, Mexico and other Latin American countries. The crew spent two weeks conducting controlled burns in the Santa Fe National Forest. Then they took off a few days. Several people returned with stories of being thanked—for lighting the fire. As firefighters on wildfires, we're always thanked for our efforts



THE TRAINER: Often called a "matchmaker" for fire practitioners, Bailey spends much of his time teaching others and nurturing a network of fire professionals trained to safely burn natural areas.

I heard you even lobbied for a Winnebago to take your educational show on the road. On any day in any month, there's always someplace that's ready to be burned for some ecological reason. In January and February, we could be down in Texas on the central plains; in March and April, up in Minnesota. In September, New Mexico, Colorado and Idaho; in

to protect homes and communities. But last year, when the New Mexicans thanked us for *starting* fires to protect their homes and communities, that was really powerful. I had the impression that maybe we are getting somewhere. ■

Read how forest thinning and burning saved an Arizona town in "Catching Fire," page 30.



Pennsylvania Prescribed Fire Council

FIELD REVIEW OF BETHLEHEM AUTHORITY LANDS

LONG POND, MONROE COUNTY

OCTOBER 3, 2013

- A large, early successional habitat restoration project being managed by mechanical treatments and prescribed fire since 2009
- Rare oak barrens ecosystem and species response to fire management
- Target game species response to prescribed fire
- Successful partnership between Municipal, State and Private entities to manage a landscape scale barrens complex of over 9000 acres
- Successful fuels management for a fire-suppressed vegetation community



FOR MORE INFORMATION PLEASE CONTACT:

J. Case at jcase@tnc.org, 570-643-7922, ext. #29

The mission of the Pennsylvania Prescribed Fire Council is to promote the exchange of information, techniques, and experiences of the Pennsylvania prescribed fire community, and to promote public understanding of the importance and benefits of prescribed fire.