Prescribed Fire Training Exchanges and Cooperative Burning

Experiential training events in support of landscape restoration and resiliency, fire adapted communities and workforce capacity-building

Spanish-language TREX © José Luis Duce

PERFACT staff and partners continue to deliver capacity-building training to diverse participants through Prescribed Fire Training Exchanges (TREX). The events strategically address barriers to safe and effective implementation of prescribed fire at the scale needed to meet restoration and community safety needs.

These experiential trainings provide opportunities for professional federal, state and tribal agency fire practitioners to gain experience, learn about integrating conservation and cultural issues into fire management, and receive position task book evaluations in trainee positions. TREX also actively engage others interested in integrating fire training into their experience—including tribal members, ranchers and private contractors—in events that meet NWCG standards, helping these practitioners work more safely and effectively together. In addition, some participants may have never burned before: university students, resource managers, regulators and researchers, for example, have taken part in TREX to better understand how fire affects their work so they can make more informed fire-related decisions.

This fall there were three full TREX events, and a fourth one—the Yurok TREX—was reconfigured into other training opportunities, when the weather failed to cooperate. Other training related work during this period included a late-summer wildfire training exchange, two multi-day cooperative burns with strong learning components, and planning for six spring TREX and the TREX coaches network.

Fall TREX

Spanish-Language TREX

Northern NM September 14-30

The Intercambio y Entrenamiento en Quemas Prescritas en Español was hosted this fall by the Cottonwood Gulch Foundation and the Santa Fe National Forest. The goal of this annual TREX is to integrate the international experience and knowledge of fire practitioners and students from Spanish-speaking countries with their

local counterparts, sharing approaches and experiences about fire and conservation across different cultural and natural systems. Many firefighters and managers in New Mexico are bilingual, so this location provides a unique opportunity to effectively conduct fire operations while sharing perspectives with a wider geographic

Fall 2016 TREX, Cooperative Burning & Training				
			people	acres
The state of the s	Spanish-Language TREX	NM	22	806
PRECEDEN	Klamath River TREX	CA	88	406
FIRE	Women in Fire TREX (WTREX)	CA	43	172
	Wildfire training exchange	UT	18	n/a
	Black Lake Cooperative Burn	NM	38	500
	Yurok Cooperative Burn*	CA	10	8
	Chama Cooperative Burn	NM	17	549
	Family burn training*	CA	10	n/a
© Stormy Staats	* Yurok TREX alternative actions	TOTAL:	230	2,441

and cultural reach than other TREX. The TREX crew worked with local volunteer fire departments and crews from federal agencies and the city of Santa Fe's Wildland Fire Division, completing prescribed burns on both private and public lands, and also worked on wildfires that were being managed for resource benefit.

Klamath River TREX

Northern CA

October 3-15

TREX are organized as incidents, generally using a Type 3 Incident Management Team. In the Klamath, the IMT is community-based, and the level of local engagement is high—about half of the burn team is made up of local landowners, tribal members, volunteers and employees of non-profit organiza-

tions in the area. This local focus is part of a strategy to build community capacity for managing wildfire, and the burning done during the TREX provides community protection from future wildfires by burning around homes and in strategic locations that will help firefighters protect the community. Unique to the Klamath River TREX is its size—about 90 personnel mobilized this fall—and that they are split into two burn teams and based in two locations, Happy Camp and Orleans. Managing two burn teams requires a larger Type 3 team than other TREX events, but also increases its impact: this fall the two teams burned a total of 43 strategically-placed units, which ranged in size from a half-acre to nearly 100 acres.

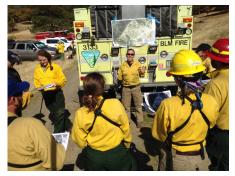


WTREX briefing

Women in Fire TREX

Northern CA October 18-28

Organized and led by women, the WTREX hosted both men and women. though in proportions that were the reverse of what is often seen in the field, with about 90 percent female participants. And unlike any other prescribed fire training event to date, the WTREX focused on women in fire. explicitly recognizing and reinforcing the importance of female perspectives. Women 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. WTREX also provided a supportive environment for women and men to understand and elevate the need for diversity—not only in numbers, but also in approach.



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About half the participants came from federal agencies—the Forest Service. BIA, BLM and National Park Service and worked alongside women and men from state and local agencies, NGOs, universities, private contractors and several international participants. Over the course of the event, 24 incident trainees had opportunities to work on position task books, with assignments ranging from Firefighter 1 to Burn Boss; eight of them received final evaluations and were recommended for agency certification. More important, in the words of one participant, "the women and men I met there have inspired me. They've made me believe that we are capable of creating a new kind of fire community that can be a good fit for anyone who wants to be a part of it."

Yurok TREX—Resilience in Action

Weitchpec, CA (several dates)

TREX are intentionally led by managers and practitioners who are determined to burn, build flexibility into their planning, and refuse to cancel their work. This was highlighted this year by the Yurok TREX, planned for September. During the first part of their burn window, CAL FIRE burn restrictions were insurmountable; this was immediately followed by an "atmospheric river" weather pattern—torrential rains—that essentially eliminated the ability of fire to consume fuels. So the Yurok TREX as planned was impossible.

But the organizing team did not outright cancel the training. Instead, they restructured, and offered several smaller events that, together, met the goals of the TREX: cultural and occupational fire training, and good fire in

support of cultural resources. This nimble approach resulted in two NWCG courses (S-211 and S-212, on using pumps and chain saws) to strengthen the job-related fire skills of youth. A two-day cooperative burn provided hands-on experience, and put fire into an area rich in fire-dependent cultural resources. And a family-based burning workshop supported the strategic direction being worked out in the Yurok-Hoopa-Karuk landscape as part of their Indigenous Peoples Burning Network planning.

The result did not look anything like a typical TREX—except in the final analysis, where TREX are about doing what is needed to ensure that people continue to work together to get more good fire on the ground, and learn while doing so.

"Perhaps the best part of being part of the training was the opportunity to interact with such an impressive group of people, experience their passion for fire management, and the effort they are willing to put into ensuring the best outcomes possible, for everyone. I have had some great opportunities in my 15 years with the USFS but this [WTREX] was one of the most positive—and fun—activities I have been involved in to date."



Black Lake burn

© Forest Stewards Guild

Cooperative Burns

TREX events are effective because they put equal focus on training, treatments and outreach. But while a full TREX is not the best fit for every circumstance, the model is still contributing to improved fire management. This year saw the rise of cooperative burning that takes the best management practices learned from TREX events and applies them to local situations where federal, state and private managers are applying an "all hands, all lands" approach to increase their scale and impact. In addition to the cooperative burn that was part of the Yurok TREX alternative, two cooperative burns in New Mexico this fall highlighted opportunities for federal, state and private fire practitioners to assist one another and overcome concerns about liability and responsibility.

Black Lake Cooperative Burn

Over the course of two weeks of cooperative burning in October, crews completed units that have been a priority for local partners since their 2013 and 2014 TREX. They returned fire to more than 500 acres of meadows and ponderosa pine, aspen and mixed conifer forests, and brought broadcast burns very close to homes in the community of Angel Fire, reducing dangerous fuels there. Among the nearly 40 people taking part in this burning (and the associated NWCG trainings) were members of the local Youth Corps and veterans in the New Mexico State Forestry Returning Heroes Wildland Firefighter Program.

Chama Cooperative Burn

Thirteen practitioners from California, Colorado, Missouri, Oklahoma, Oregon, South Carolina, Utah and Washington (and almost as many organizations) joined four northern New Mexico partners from the Forest Stewards Guild and City of Santa Fe to conduct 549 acres of

burning in the Upper Chama Watershed. The burns had been identified as high priority areas by the Rio Grande Water Fund.

Wildfire Training Exchange

Wasatch National Forest August 9-23 Getting sufficient training and evaluation opportunities on wildfires can be a bottleneck in the development of a robust Burn Boss workforce—wildfire assignments are required for the FFT1. Single Resource Boss and ICT4 positions needed for Burn Boss qualification. After years of laying the groundwork, in late summer PERFACT mobilized a Type II Crew made up of prescribed fire practitioners who needed opportunities to work on 'W' tasks in their position task books. The Uinta-Wasatch-Cache NF hosted the crew, assigned to a small lighting-strike fire being managed under a "confine" strategy. All 20 people on the crew—from the Forest Stewards Guild, Pottawattamie County (Iowa), The Nature Conservancy and Wildland Restoration International, as well as

the BLM and Forest Service—were able to work on specific firefighting skills, as well as learn from local Forest Service and Utah DNR firefighters. According to the Conservancy's Director of Fire Management, "Getting folks these wildfire training experiences is an important step to expanding our reach and impact in prescribed fire and habitat restoration."

Looking Ahead

In addition to delivering these events, planning work is well under way for a very active spring prescribed fire season, with two TREX each planned for Nebraska, Oregon and New Mexico, and a cooperative burn week planned in Iowa. Staff have also provided some guidance for partnerships that will be holding training exchanges based on TREX in Oklahoma and South Dakota, and continue development on the TREX Coaches Network, which will enable further expansion of TREX, beyond those directly supported by PERFACT.

MORE ONLINE

Wildfire Training Exchange—An FLN Notes from the Field about the "TNC Crew 10" has more about this first-time offering:
http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/USFLNPublications/Pages/Notes-WildfireTraining-2016.aspx

Women in Fire TREX—Several participants wrote an FLN Notes from the Field that includes long quotes with personal stories from the event: http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/USFLNPublications/Pages/Notes-WTREX-2016.aspx Prescribed Fire Training Exchanges are supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together* (PERFACT), a cooperative agreement between The Nature Conservancy, the USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at (Idecker@tnc.org) or (801) 320-0524. *PERFACT is an equal opportunity provider.*

In Others' Words

Klamath River TREX:

"I've watched the TREX people on the ground and now listened to this broadcast. It's an impressive program to take ownership of our future in our towns along the river. Everybody around here knows that with fire it's not 'if' but 'when.' Smart communities don't wait and hope. They take action. Sophie Neuner and José Luis Duce nail it in this broadcast."

Comment on link to radio interview posted on local Facebook page, referring to "Fire Training In The Fire-Prone Klamath," broadcast on Jefferson Public Radio October 11, 2016. http://ijpr.org/post/fire-training-fire-prone-klamath#stream/0

Spanish-Language TREX:



© TNC (Jeremy Bailey)

"Among the different activities the group accomplished, maybe the most interesting one was spending one day with a group of more than 60 middle school students from Albuquerque, teaching about fire ecology and the importance of fire, safety, good fire effects, tools and actions ... Incredible experience!"

Final Report on Spanish-Language TREX by three participants

TREX Strategy:

TREX "partnerships do more than help the non-governmental people; they also spur innovation within governmental agencies through exposure to the differing goals and approaches of outside entities, whether they are environmental activists, for-profit enterprises or tribal nations."

from the article "U.S. Federal Fire and Forest Policy: Emphasizing Resilience in Dry Forests" (*Ecosphere*, November 11, 2016)

http://onlinelibrary.wiley.com/doi/10.1002/ecs2.1584/full

Women in Fire TREX:



Photo: NPS (Kelly Martin)



© UC Extension (Lenya Quinn-Davidson)

"This is not the fire world I know. This is a new fire world, and I thoroughly, thoroughly enjoyed it. How to explain how powerful this experience was? It was powerful; it was healing; it was motivating; it was inspiring; it was energizing. I watched women leaders collaborate, listening to others for information and ideas and then making clear decisions. I experienced some of the most honest and educational AARs I've ever been a part of. I heard women ask questions and express difficulties that I've had, and I saw women answer those questions and offer solutions."

"The thing that hit me the hardest was that there is a very big problem in fire, and that I'm a part of the problem. I've always thought I was a good guy, but through the discussions at WTREX, listening to all these women speak candidly about their experiences as women in a man's world, I realized how complicated the problems are.... And I found myself guilty of using common language and terms that are hurtful.... I'm conscious of these problems now, and I'll be able to self-evaluate and check myself. I'll also share these things with the people I love—my crew...

WTREX participant (male)