

Prescribed Fire Training Exchanges (TRES)

More Good Fire: Re-defining What's Possible by Working Together (2008-2018)

TREX are based on the premise that in order to get more good fire accomplished, more people have to be using fire. Agencies and land-based conservation organizations working alone—or even together—do not have the capacity to meet the scale of the need. By engaging a wider array of practitioners, TREX increase both the number of people able to contribute to the effort and to the social acceptance of fire.

The first TREX were offered on FLN landscapes in the Great Plains in 2008; in 2010, TREX made the move to its first forest landscape. By 2011 or so, the main components were in place to deliver to consistently successful events and effective strategy results. TREX gradually expanded to new landscapes, bringing in more partners and leaders. In 2016, the TREX Coaches Network was launched. Its members now lead about 15 TREX a year, mentoring and supporting each others' work.

In addition to training, TREX objectives include burning for both ecological goals and in and around communities to enhance community safety. TREX now fully embody the Cohesive Strategy, delivering events that address all three of its goals in an integrated package to a diverse set of stakeholders.



PRESCRIBED FIRE TRAINING EXCHANGES DEMONSTRATE A COHESIVE STRATEGY FOR GETTING MORE GOOD FIRE DONE

By Building Local Capacity for Safer Fire

Training exchanges that focus on providing basic firefighter training—and integrating local fire and forestry contractors, local government agencies and non-profit conservation organizations—are providing basic job skills training, creating relationships and building trust among groups. The training and certification of individuals enlarges and improves the skill level of a new workforce, the relationships and trust built help fire management service providers find qualified crews, and TREX participants find federal and private jobs in the field. Training exchanges also demonstrate how groups can cooperate and collaborate, and by working together, increase an area's available fire management capacity.

By Helping Communities Become More Fire Adapted

There is probably no better way for a community to prepare for the inevitable approach of unwanted wildfire than to burn in and around the community themselves. There is no doubt that controlled burns can reduce the damaging effects of wildfires and make communities safer. In addition to completing burns near communities and helping local practitioners gain the experience to conduct further burns, TREX events spread this message by integrating visits from local media into their agendas.

By Bringing Together Diverse Crews to Foster Learning

Diversity matters. Having a wide variety of participants, mixed together and integrated into burn teams, allows great cross-learning among various fire professionals—from federal, state and tribal agencies, as well as contract fire crews and municipal firefighters. Bringing students, scientists, researchers, private landowners and regulators into the mix further enriches the learning. This has important and potent effects. Participants are able to spend time with a wide variety of people with different backgrounds and experiences, and everyone gains knowledge, insights and learning. Participants new to wildland and prescribed fire will say, "Wow, I had no idea how organized a prescribed fire is," after participating in their first briefing, burn and after action review. And wildland firefighters learn that lots of people—from municipal firefighters and air quality regulators to private citizens and students—bring ecological and practical experience, while other participants bring knowledge and experience in policy, management and other areas.



By Giving Students Hands-on Experience with Ecologically- and Culturally-Appropriate Fire

Hands-on learning is the most effective kind. Getting out and practicing pre-burn briefings, working with a fire ecologist to establish monitoring plots, walking the range with ranchers to understand grazing patterns and rotation schedules, or working as a trainee firing boss—these are experiences that shape firefighters and other practitioners. Every year these collaboratively planned and implemented prescribed burns further the educations of university students, the next generation of forest workers and managers. Through TREX, scores of students have a newfound respect for prescribed burning, and an understanding that accomplishing prescribed burns is a reasonable expectation—and a worthwhile goal. We are nurturing a generation that will feel confident that they can scale up the use of fire and restore cultural and natural fire regimes at the landscape level.

By Supporting Interagency Cooperation

Using Type 3 Incident Management Teams to organize and host the trainings, individuals, organizations and agencies are learning that we can manage the potential liabilities of working together and on each other's lands. We use tested tools like MOUs, cooperative agreements, shared standards and collaborative planning. Federal, state and private fire teams are learning to depend on each other to support prescribed fire projects, just as they do during wildfires.

By Integrating Traditional Burning

Tribes that are still practicing fire use for traditional purposes—such as for food security, regalia and basket making materials—share learning opportunities with participants. Learning from people who have a longer and often more complex view of the role of fire in an ecosystem is a great addition to the hands-on experience TREX offer. Participants see that fire and people are inseparable, and that a full exclusion approach to fire is not only impossible, it may be undesirable.

By Working through Barriers to Burning

By having a diverse body of participants, and by including ecological, cultural, regulatory and tactical components into TREX burning, training, field trips and classroom presentations, participants learn that the barriers to implementing prescribed burns can be managed and overcome. Participants experience the power of collaborating with partners to build a team of experts that have the capacity to successfully navigate the process of achieving good fire at scale.

OREGON

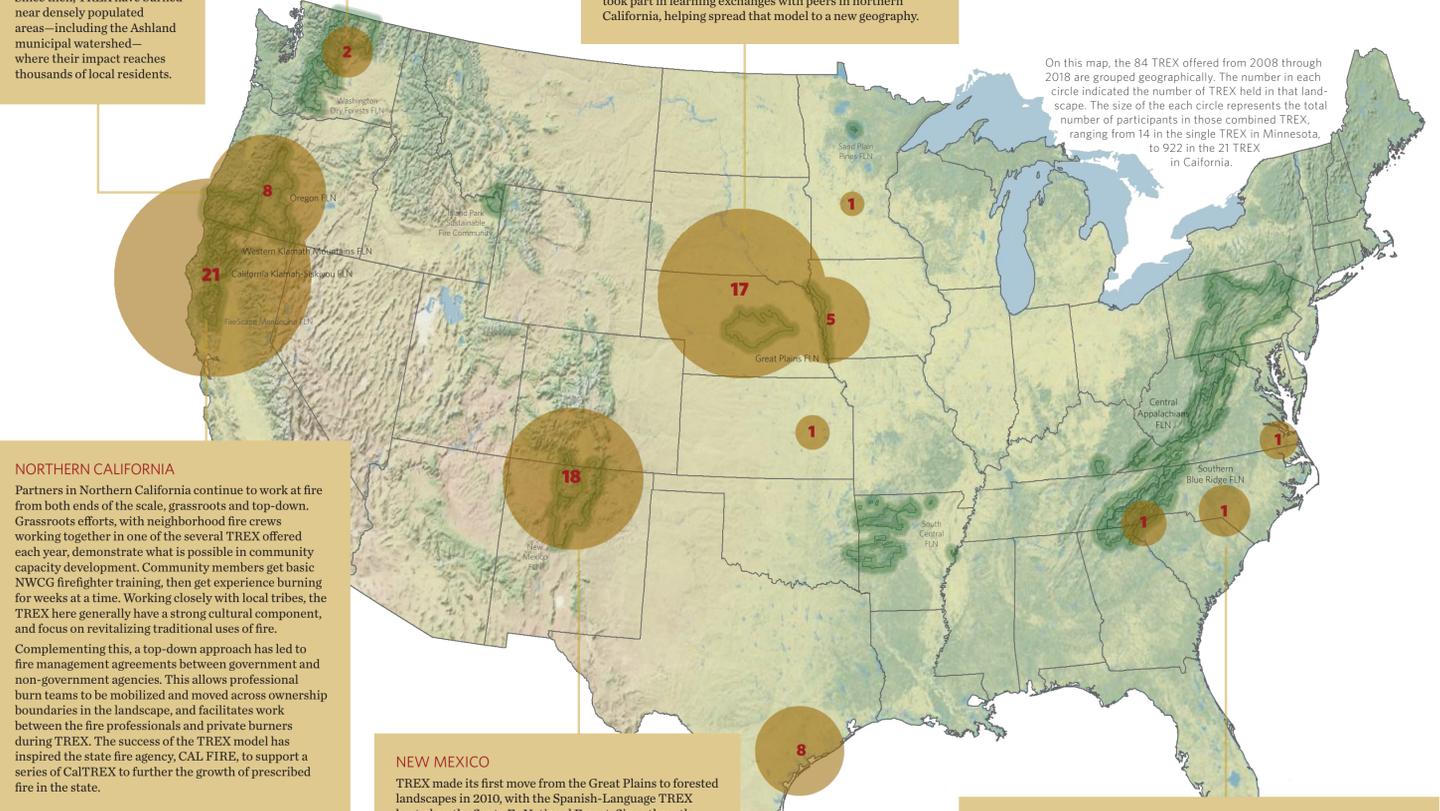
Fire Learning Network and Fire Adapted Communities Learning Network members use TREX to support their work. TREX events get fire on the ground, provide fire ecology training, focus attention on media and outreach, and increase community acceptance of fire use. In 2015, the first TREX in the state took place in the Deschutes National Forest. Since then, TREX have burned near densely populated areas—including the Ashland municipal watershed—where their impact reaches thousands of local residents.

WASHINGTON

"2014 resulted in some major changes because we literally caught on fire as a state." —Annie Schmidt
Washington State FAC Learning Network
Building on a decade of Fire Learning Network relationships, growing fire adapted communities efforts, and legislative changes supported by robust partnerships, the first Cascadia TREX was held in 2017. Among its successes was being able to burn—with public acceptance—at the very edge of Roslyn, a community recently threatened by wildfire.

GREAT PLAINS

Since 2008 the Great Plains FLN has developed and refined the TREX model under numerous scenarios. Events have ranged from two-day trainings for local volunteer fire departments to two-week events with 100 participants from across the country. Leaders in Nebraska, Iowa, Kansas, South Dakota and Texas have used TREX events to demonstrate a variety of strategies—bringing together neighbors, providing VFDs with hands-on live fire training, matchmaking between contractors and private land owners, staffing idled federal equipment with volunteer practitioners, and helping mold a generation of future managers by engaging university students in holistic controlled burning early in their careers. In 2017, members of Nebraska prescribed burn associations took part in learning exchanges with peers in northern California, helping spread that model to a new geography.



NORTHERN CALIFORNIA

Partners in Northern California continue to work at fire from both ends of the scale, grassroots and top-down. Grassroots efforts, with neighborhood fire crews working together in one of the several TREX offered each year, demonstrate what is possible in community capacity development. Community members get basic NWCG firefighter training, then get experience burning for weeks at a time. Working closely with local tribes, the TREX here generally have a strong cultural component, and focus on revitalizing traditional uses of fire. Complementing this, a top-down approach has led to fire management agreements between government and non-government agencies. This allows professional burn teams to be mobilized and moved across ownership boundaries in the landscape, and facilitates work between the fire professionals and private burners during TREX. The success of the TREX model has inspired the state fire agency, CAL FIRE, to support a series of CalTRESX to further the growth of prescribed fire in the state.

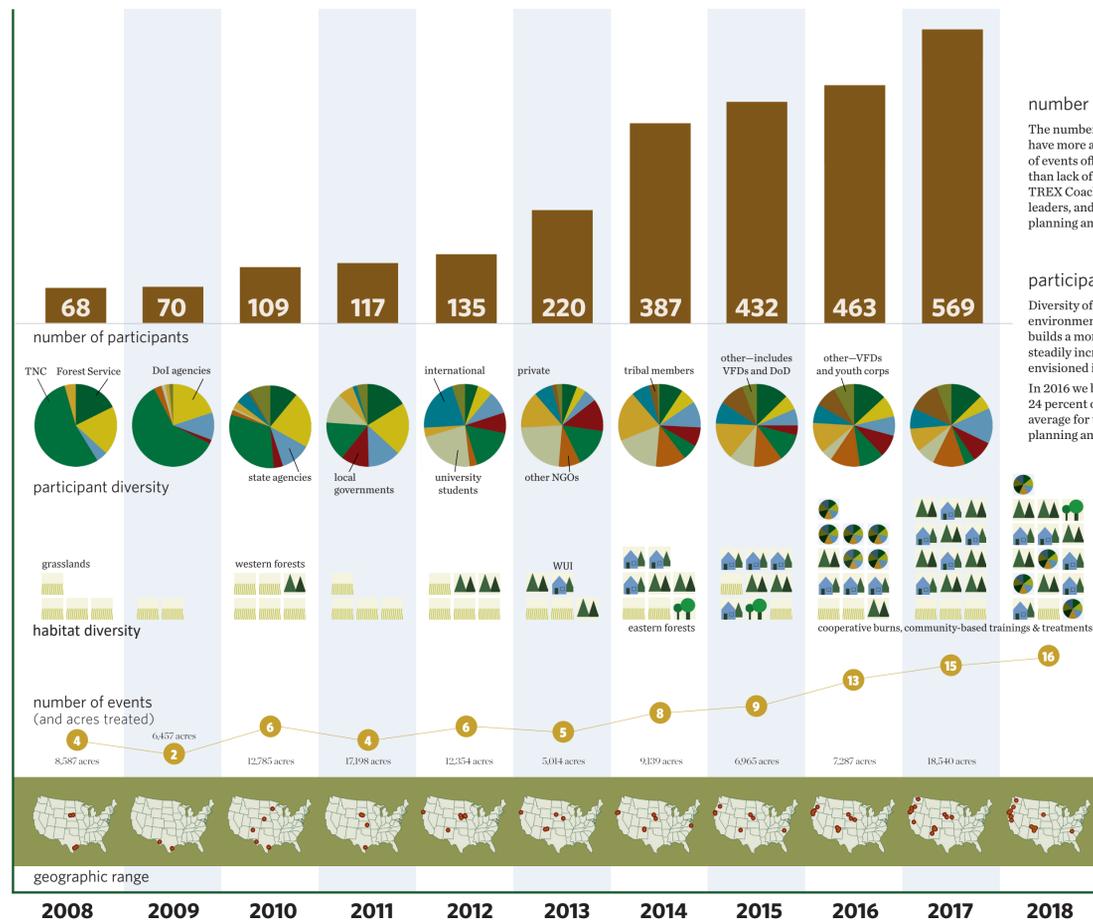
NEW MEXICO

TREX made its first move from the Great Plains to forested landscapes in 2010, with the Spanish-Language TREX hosted on the Santa Fe National Forest. Since then, the model has spread in two ways: participants in the Spanish-Language TREX introduced the strategy to Europe, starting with the 2017 Alto Minho TREX in Portugal. TREX have also caught on widely in the northern part of the state and adjacent parts of Colorado, with three TREX and a fire effects workshop being offered in the fall of 2018 alone. Many TREX in this landscape support the goals of the Rio Grande Water Fund, which is working to protect the water supply of about half the state. TREX do this directly, by applying prescribed fire treatments in the watershed, and also by supporting the development of a diverse, flexible local workforce that can address forest and fire management at the scale needed on an on-going basis.

EASTERN U.S.

Bridging the different standards, qualifications and expectations of state and federal agencies has been the key goal for TREX in the East. The Central Appalachians and Southern Blue Ridge FLNs have built solid partnerships among fire management agencies and other stakeholders. Most are supportive of managing their lands with fire—but were hindered by lack of common standards to allow them to work together. Basic NWCG courses offered for state agency staff allow them to burn with federal practitioners, and TREX have given fire managers and leaders from different agencies more experience working together. Participants from other parts of the country shed light on how challenges are met elsewhere. TREX have been an important piece of FLN strategies, and are leading to increased cooperation and sharing, which in turn boosts the efficiency, effectiveness and scale of treatments.

Trends in TREX Growth & Diversity



number of participants

The number of TREX participants has grown rapidly over time, and we often have more applications than we can accommodate. Capacity—both the number of events offered and the number of people each can accommodate—rather than lack of demand is what keeps growth from being even more rapid. The TREX Coaches Network was launched in 2016 to expand the cadre of TREX leaders, and formalize the network of peers who are supporting each other in planning and implementation.

participant diversity

Diversity of background and level of experience creates a richer learning environment, fosters new kinds of professional networks, and ultimately builds a more robust fire management workforce. Participant diversity has steadily increased over the years, and the mix of participants originally envisioned in 2008 is now seen on the ground.

In 2016 we began tracking the gender breakdown at TREX events. On average, 24 percent of TREX participants are women, about double the national average for the wildland fire field. Women are also well represented on TREX planning and incident command teams.

diverse ecological and social contexts

From a start in the grass- and rangelands of the Great Plains, TREX have expanded to encompass a wide array of natural and human communities. Each TREX is grounded in the unique characteristics of its landscape, and its relation to the larger fire picture. By selecting from the various TREX offered each year, participants have opportunities to burn in a range of fuel types, in a variety of contexts, and to meet diverse ecological and social objectives.

In the last year or so, several TREX have gone forward with little or no opportunity for burning, due to fuel or weather conditions. In addition to running mock fire exercises, participants in these TREX have conducted outreach and mechanical fuels treatments with community members.

geographic range

The first TREX events took place in Nebraska and Texas. The model then spread to other central states, and has now been adapted and expanded to sites in California, New Mexico, North Carolina, Oregon, South Carolina, Virginia and Washington. Participants from Portugal and Spain have taken the model home, offering the first European TREX in 2017.

An underlying premise of the TREX strategy is that so-called "barriers" to prescribed fire are simply challenges that have not yet been overcome. Once "can't" is no longer an option, attention and collective effort can be turned to finding a solution.



TREX provide opportunities to burn to people who don't normally have the chance—and enable their integration into crews with fire professionals—by offering basic firefighter training (S130/190) and providing personal protective equipment (PPE) needed at every TREX. © TNC (Mary Huffman)



Differences in experience, roles and organizational affiliation are strengths to be sought out. From the Incident Management Teams that run an event to the individual squads, we make sure the biologists, firefighters, managers, landowners, researchers and others are mixed together, working together and learning from each other.



Conveying the value and necessity of "good fire" is essential to long-term success. TREX embrace the media, invite them to the fireline, and provide TREX participants with training and practice in communicating their messages. © TNC (Mary Huffman)



Niobrara TREX (NE) 2011: 6,200 acres Spanish-language TREX (NM) 2013: 120 acres Niobrara TREX 2014: 3,885 acres



Above: TREX are designed to allow crews to focus solely on implementing prescribed burning for two weeks. During burn season, every day might be a burn day. TREX go forward even if the beginning of an event looks inauspicious.



TREX start every day looking to burn. But when we can't burn, there's always alternate work and learning—from running scenarios on sand tables (*upper photo*), to classroom sessions and field tours of previous burns, to scouting, unit prep or conducting assessments (*lower photo*) and helping homeowners create defensible space. © TNC (Mary Huffman); © Chama Peak Land Alliance (Caitlin Barbour)



TREX rely heavily on fire management agreements to allow burning on multiple ownerships—often combining private, state and federal lands—and with multi-agency crews. The agreements increase the scale at which TREX can work, and allow participants see the variety of laws and standards that apply to different ownerships, and how to manage for those differences.



TREX is part of Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT), a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more information about PERFACT, contact Mark Smith at mark.smith@tnc.org or (704) 681-1165. For more about TREX, contact Jeremy Bailey at jeremy.bailey@tnc.org or (800) 599-1594. In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue SW, Washington, DC 20250-9410 or call toll free voice (866) 632-9992, TDD (800) 877-8339, or voice relay (866) 377-8642. USDA is an equal opportunity provider and employer.