

CASE STUDY: BRINGING FIRE TO THE LAND

Starting at the Pacific Ocean and weaving along a 44 mile stretch of Northern California's Klamath River, is the Yurok Reservation and ancestral lands. A group of Yurok citizens here is working together to bring fire back to this ecosystem. The Cultural Fire Management Council's mission is to further the use of fire as a means of cultural resource and land management. This region of California evolved with fire and prescribed seasonal burning, forms of knowledge and stewardship that were all but wiped out with colonial efforts at fire suppression.

Margo Robbins of the Yurok Tribe and Executive Director at The Cultural Fire Management Council, shares that for her community, fire is part of the social, food, and ecological webs. Prescribed burns in their region tend to hazel stands, which in turn, enables traditional forms of basketmaking. Without fire, hazel branches lack the tensile strength and form needed for proper basket-making. The fire rejuvenates and promotes strong new growth for these plants, as well as for edible wild iris and potatoes. Traditional burning of grasslands in cooler, wetter months also thins out young Douglas firs and Himalayan blackberries, restoring prairies and creating viable habitat for elk and deer reintroduction. The fire strengthens the food web of this place.¹

In 2014 the Cultural Fire team embarked on an educational series of exchanges, called TREX, for firefighters and wildland fire professionals through the Nature Conservancy's Fire Learning Network. This partnership broadens the scope of prescribed fire-lighting as an ecologically appropriate and legal technology that would benefit public or state managed lands as well.

The Cultural Fire Management Council is just one of many Prescribed Burn Associations (PBAs) taking form across the US in California, Illinois, Mississippi, Nebraska, Oklahoma, Texas, and more. PBAs are community based cooperatives that see private landowners coming together to bring fire back to their land. The

California PBA, for example, provides connections and resources enabling neighbors to help one another to develop and implement detailed burn plans that are responsive to environmental conditions, weather, terrain, and vegetation. These community-led associations also share labor, equipment, skills, and burn liability and embark on air-quality permitting processes together.

Zooming out in California, we see that agencies such as CALFire manage only 31 million acres of California's 100 million acres of land, meaning that in most places, state agencies don't actually have access to much of the land that needs tending to.² Private landowners working together model important visions of stewardship that are absolutely necessary in order to survive in fire-prone western landscapes.

These prescribed burns on private land work to reduce excess brush and dry growth, making less fuel available should a large wildfire move through the area. The burns are also responsive to each site in other ways.

In mixed oak grasslands, typical of California cattle grazing pasture, a small burn can thin Douglas Fir seedlings, promote oak and native bunch grass regeneration, as well as reduce populations of invasive star thistle and imported grasses (that can cause injury to both land and cattle). Ranchers benefit by way of protecting their land from catastrophic fires in addition to creating nutrient-rich pasturelands.³ After a small fire, new forage can grow in—nutritious, green, and high in protein value.

Prescribed burns also play an unexpected role in water quality for everyone in a region. With large wildfires come packed, dried, and hydrophobic soils that repel seasonal rainwater. Water that can't slowly settle into the water table, runs off quickly to reservoirs, bringing with it ash, sediment, and contaminants.⁴ We need our water to move slowly through the filtering layers of a healthy soil sponge.

All the elements work together to create a functioning ecosystem and we, as stewards of the land, farmers, ranchers, and private property owners, can be a generative part of that collaboration too. There is no one way to work with fire. It's a

practice of constant learning and attention -- a call and response full of complexity and deep listening to the land as well as those who carry on traditional forms of ecological knowledge.

If you are living in forested or drought prone Western lands and are curious to learn more about prescribed burning visit:

culturalfire.org/trex

calpba.org

nebraskapf.com/prescribed-burn-associations-pba

conservationgateway.org/ConservationPractices/FireLandscapes/HabitatProtectionandRestoration/Training/TrainingExchanges/Pages/TREX-publications.aspx

1 conservationgateway.org/ConservationPractices/FireLandscapes/HabitatProtectionandRestoration/Training/TrainingExchanges/Documents/HowWeUseTREX-MargoRobbins.pdf

2, 4 *Community-Based Burning: Caring for our Land Together* - <https://youtu.be/1DIA5TC8Txw>

3 <https://calpba.org/rx-fire-grassland> & <https://calpba.org/rx-fire-oak-woodlands>