

Tribal and Indigenous Fire Tradition

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USFS Six Rivers National Forest fire crew conducting a prescribed burn for enhancing beargrass for tribal basket weaving, near Orleans, Calif. June 2017

Centuries ago, indigenous people inhabited the land from coast to coast. They knew what scientists confirm today: Frequent, low intensity fires on the landscape are not just important to reducing the risk of catastrophic wildfire, but also essential to forest health.

“Fire is part of nature,” said John Waconda, a member of Isleta Pueblo and the Indigenous Partnerships Program Director with The Nature Conservancy. “It’s just like the rain, the sunrise each day. It’s a natural occurrence, a part of nature necessary to complete lifecycles of different plants and animals.”

Like any demographic of people, Tribal beliefs and tradition cannot be generalized across all Tribes. However, there is one common theme that could be considered a foundational difference between beliefs of indigenous peoples and those that came with Europeans during colonialism—a balance between humans and nature.

“When it comes to balance and fire, there can be too much, and there can be too little,” said Waconda, who also worked in the Forest Service’s Southwest Region, strengthening partnerships between the agency and Tribes. “Many of today’s extreme fires have sprung from the attitudes that people have had towards fire over the last century. That fire was bad, not good for the landscape, and that it needed to be extinguished.”

A lack of understanding of fire’s ecological role led to those attitudes, said Waconda.

“If you remove fire or try to change its natural cycle, you’re creating an unnatural environment with dense, overstocked forests that will cause repercussions later,” said Waconda. “Fire can be good. If it is practiced appropriately under the right conditions and at the right time. It can provide a wealth of benefits.”



Frank K. Lake conducting a cultural understory burn for tanoak acorns with propane torch on his property near Orleans, Calif., Oct. 2019

There are many ecological and human benefits to mitigating extreme fire. For example, extreme fire temperatures can kill trees and damage root systems just beneath the soil. Extreme fire also tends to damage tree canopies that protect the soil on the forest floor from erosion caused by heavy rainfall.

In contrast, low intensity fires on the landscape help reduce buildup of combustible debris and return nutrients to the soil, while also protecting the canopy overhead.

From a community and safety standpoint, moderating fire behavior allows firefighters the defensible space to work, to fight fire, and to save homes, businesses and lives.

Today, land managers and communities living in fire prone environments across the country are devising strategies to reduce the risk of extreme wildfire, by reintroducing these low intensity fires to the landscape.

Fire is no longer the problem. It’s part of the solution.

This shift in attitude more closely resembles what indigenous people practiced centuries ago and desire to implement again today. They learned not only to live with and manage fire, but to use it in ways to enrich their communities.



Photo of Resource Advisor Michael Sanchez (left) and Frank Lake (right) with the Red Salmon Complex wildfire burning in background. Sanchez, now with the Karuk Tribe, and Lake are working to identify and mitigate fire suppression actions on tribal, cultural and heritage resources. Both serve similar roles on prescribed cultural burns conducted in partnership between the Karuk Tribe and USFS Six Rivers National Forest.

Frank Lake, of mixed tribal ancestry, is a Forest Service research ecologist with the Pacific Southwest Research Station. He has been with the agency for 21 years and currently studies the Tribal cultural contexts of fire management.

“All land is ancestral land. All national forests and grasslands are on some indigenous people’s ancestral homeland,” said Lake. “If we don’t have that as a starting point, to consider the culture of the people and land before, then we are not acknowledging the legacy that the Forest Service inherited.”

Today there are more than 500 federally recognized tribes in the United States. Closely studying Tribal heritage gives invaluable insights on using fire to achieve balance and land management goals because those very same landscapes have been evolving with humans and their actions for many years, said Lake.

One misconception that Lake highlighted was that many areas such as Wilderness are seen as natural landscapes completely void of human interference, with natural fire regimes. But in many cases, those areas evolved with indigenous people over millennia.

“Indigenous people had been managing those lands for a long time,” said Frank. “They are actually cultural fire regimes, because they didn’t just live in harmony with fire, they learned to utilize it to create habitat for gain and support sustainable, healthy forests using cultural burns.”



A view of the mixed fire severity effects, an example of burn mosaics in mixed conifer-evergreen forest near Somes Bar, Calif. Haypress wildfire, 2017

Cultural burns are lower intensity-controlled fires much like the prescribed burns implemented by land managers today. The major difference is that cultural fire was and is still used by Tribes as an essential part of culture, to cultivate materials and food essential to centuries-long traditions.

Cultural fire is used to clear overstocked and thick foliage and open areas in the canopy. Open areas in the canopy allow sunlight to reach the forest floor, allowing understory plants to grow. These areas of greater biodiversity are often referred to as [habitat mosaics](#), because of the resemblance to a mosaic.

Habitat mosaics provide Tribe's access to traditional foods, rich sprouts, fruit, seed, and nut producing plants that would otherwise be shaded by denser canopy cover. Habitat Mosaics also support an abundance of forage for wildlife and game which are used for food, tools, and clothing.

The Karuk Tribe in the Klamath River Basin, northern California and Oregon, for example, engages in cultural burning as a means to acquire basket weaving material, such as Hazel. The Hazel plant naturally grows in tangled bushes, making it difficult to weave. However, after a cultural burn, the hazel shrub will grow back with straight, long shoots ideal for basket weaving.

“Considering Tribal cultures and their attitudes and use of fire to manage land is essential to how we manage fire sheds today and will be important to our work going forward,” said Lake, “There’s a sense of intergenerational responsibility among indigenous people to do so,” said Lake.



A Karuk/Yurok women's basket work cap-hat, a Maplewood acorn paddle (used to stir hot rocks in basket of water to cook acorn soup), and a hazel stick basket full of tanoak acorns in a recent burned area (Klamath River TREX, October 2015)

The Nature Conservancy and the Forest Service collaborate with Tribal governments to protect indigenous people's rights to maintain timeless culture and tradition. Both Waconda and Lake are advisors to the Conservancy's Indigenous Peoples Burning Network.

Support for cultural burning is mutually beneficial for all those involved: For the plants, the animals, the trees in the forest, and for communities living in fire prone environments. The Forest Service, Tribes, federal, state, and private land managers are coming together to return fire to the landscape. Together they are reducing the risk of extreme fire, upholding traditions, and once again, bringing balance back to the landscape.