

Following the Smoke: A Co-Stewardship Project of Karuk Indigenous Basketweavers and the US Forest Service

BEVERLY R. ORTIZ with RENEE STAUFFER and DEANNA MARSHALL

ABSTRACT

In 1997, Karuk Indigenous Basketweavers and the Orleans Ranger District of Six Rivers National Forest in Northern California established Following the Smoke, a multiple-years-long, award-winning project initiated and led by LaVerne Glaze (Karuk, 1932–2017) and other Karuk Indigenous Basketweavers members. Initially conducted under the aegis of the US Forest Service (USFS) Passport in Time (PIT) program to “engage volunteers” in the USFS heritage program, and later under the aegis of California State University, Humboldt (now California State Polytechnic University, Humboldt), Following the Smoke, which concluded in 2013, has inspired other similar projects on public lands in the state, including Following the Smoke II of the California Indian Basketweavers Association. This article will detail the intent, content, and outcomes of Following the Smoke, which centered on a robust, organizational effort to encourage the appreciation of the need for culturally appropriate stewardship and management of vital ethnobotanical “resources” and the application of cultural burning to achieve those ends. It ends by providing two examples of programs and initiatives through which the convenors and facilitators of and participants in Following the Smoke continue to magnify its teachings, followed by a discussion of contemporaneous collaborative research being conducted by the Karuk Tribe about cultural burning and related topics.

INTRODUCTION

When you get the Native people working with the forest managers, I think that you come up with a better ecosystem plan... The Spirit People told us ... how we were supposed to behave and what we were supposed to do. I think that when you live your life like that, realizing that everything has as much right to be there as you do, then that's a good balance. It's a holistic way of looking at things instead of a beginning and an end. Like when some agencies are managing, the beginning is the cutting of the trees, and the end is the planting of the trees. For us it's a circle that's totally different from that. It's getting resources, gathering acorns, gathering mushrooms, gathering pepperwood nuts, gathering basket materials all year long... It's a process that we keep going through... I think that's where it's a real benefit to agencies to ... bring Native people into the management process, because you're going to find out a lot of things that you will never, ever find out if you don't work with the people.

—Kathy McCovey (Karuk), *heritage resource specialist, Six Rivers National Forest*

We need the agencies out there: CDF [California Department of Forestry and Fire Protection], Forest Service, BLM [Bureau of Land Management], Park Service, whoever. We need their assistance. We need to work together.

—Millie Black-Graber (Karuk), *Native American program manager for the Ukonom Ranger District, Six Rivers National Forest*

CORRESPONDING AUTHOR **Beverly R. Ortiz**, PhD, chair of the Native California Research Institute, first began collaboratively documenting and publishing about Native Northwest California in December 1978. Those collaborations have included her participation in every Following the Smoke camp and in a US Forest Service/California Indian Basketweavers Association Challenge Cost-Share Agreement to document the herbal medicines of the late Karuk/Shasta/Abenake Elder Josephine Peters. beverly.ortiz@nacri.institute

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I deal with so much conflict every day over public forest issues. It was truly rewarding for me to see different Tribes and people from all walks of life working and having fun together out in the woods. “Following the Smoke” was an uplifting experience for me.

—Jon Martin, district ranger; Orleans and Ukonom Ranger Districts, Six Rivers National Forest

I truly believe the basket weavers are national treasures.... We all need to support them, because a little bit of all of us would die if something happened and this wasn't going on.

—Ken Wilson, Six Rivers National Forest heritage resources program manager

In 1997 an unobtrusive announcement appeared in the USDA Forest Service's “PIT Traveler” bulletin describing a new US Department of Agriculture Forest Service (USFS) Passport in Time (PIT) volunteer project. Called Following the Smoke (FTS), this project, led by Karuk Indigenous Basketweavers members, would bring PIT volunteers together with Karuk basketweavers to tend, gather, process, and use basketry materials and to gain insights into the interconnectedness of these and other cultural traditions with overall forest health.

The PIT program was established in Minnesota and Wisconsin in 1988 by Gordon Peters, an archaeologist in Minnesota's Superior National Forest. By 1991, it had become a national program focused on bringing individuals and families together with heritage professionals in the implementation of archaeological site surveys, evaluation, and excavation; historic structure restoration; oral history and archival research; and artifact curation.

The impetus for undertaking the ground-breaking FTS PIT project resulted from conversations between Six Rivers National Forest Heritage Resources Manager Ken Wilson and Karuk basketweavers whom he had come to know through his work with the national forest around issues of mutual concern. Not only had Ken helped forge positive working relationships between weavers and the national forest, he also found inspiration in his relationships with statewide weavers, whom he had come to know in his role as a long-time volunteer at annual California Indian Basketweavers Gatherings,³ events which some of the weavers and other agency staff associated with FTS also participated in.

Following the Smoke, one of more than 100 PIT projects then offered throughout the country, creatively expanded the scope of the PIT program by bringing Karuk basket-



▲ Following the Smoke convenors LaVerne Glaze (Karuk) and Ken Wilson at the locale of most of the project's camps, Camp Creek, west of Orleans, April 29, 2012. BEVERLY R. ORTIZ

weavers together with volunteers and agency staff to promote access to their cultural materials and the efficaciousness of Native land management practices for purposes of cultural preservation and ecological restoration. FTS's focus on cultural exchange and policy changes was another unique contribution. As PIT National Coordinator Pam Osborne noted in 1998, “I think more of the projects will go this way—working with the people and the communities, getting that exchange going, and changing our land management policies because of that kind of involvement.”³

During its many years as a PIT project, FTS received more than 100 applications annually from prospective volunteers. From these, Karuk basketweavers LaVerne Glaze (1932–2017), Ginnie Larsen, Renee Stauffer, and Zona Ferris (1924–2021) selected 23 participants,

mostly teachers and other professionals from all over the country, based on their ability to magnify the educational goals of the project by carrying its message forward through the agencies, schools, institutions, and communities with which they were associated.

THE PROGRAM

The basketweavers brought great purpose, grace, generosity, patience, and humor to the four busy days over which FTS unfolded, touching hearts and expanding minds. Across those four days, they took participants in various agency vans on field trips to gather basketry materials, returning each day to the main camp to process and prepare these for later gifting to Elder weavers who could no longer gather on their own.

Depending on their suitability for gathering in given years, basketry materials gathered included bear-grass (*Xerophyllum tenax*) blades, maidenhair fern (*Adiantum aleuticum*) stems, sandbar willow (*Salix exigua*) shoots and roots, tick brush (aka “ceanothus” and “deer brush”) (*Ceanothus thrysiflorus*) shoots, woodwardia (*Woodwardia*

fimbriata) fern, and alder (*Alnus rubra*) bark. One year, Six Rivers National Forest Heritage Resource Specialist Kathy McCovey (Karuk) even brought to camp a road-kill porcupine skin for processing of the quills.

The weavers also took the volunteers on field trips to prepare basketry materials gathering sites for later cultural burns. This included the clearing and piling up of highly flammable brush and downed wood into burn piles, making the area free of the types of ladder fuels that might carry the burn into the forest canopy, so the eventual burn would be relatively cool, slow, and low, rather than hot and fast. It also included the clearing of fire lines.

Time was set aside for a team of Karuk weavers to demonstrate weaving with cured basketry plants brought from home and to teach the volunteers to weave miniature, gender-appropriate baskets with commercially purchased cane and raffia. All of the weavers took great delight and pride in baskets woven by the volunteers. For added inspiration: A display by LaVerne Glaze, Wilverna Reece (Karuk), and Clarence

▼ Burn pile at Daryl “Day Pay” McCovey Memorial Park, Orleans, April 27, 2013. This park was one of the sites where Following the Smoke volunteers cleared brush and downed wood in preparation for cultural burns. BEVERLY R. ORTIZ





▲ Deanna Marshall and Wilverna "Verna" Reece, both Karuk, photo by Beverly R. Ortiz, April 27, 2013. Deanna is sorting willow sticks and roots in preparation for starting a basket at the Camp Creek campsite.

▼ Deanna (right) weaving a basket with Verna's mentorship, April 27, 2013. BEVERLY R. ORTIZ

▼ Display of Karuk baskets and other cultural objects at the 2012 Following the Smoke camp, Camp Creek, April 29, 2012. BEVERLY R. ORTIZ



Hostler (Hupa/Yurok/Karuk) of Karuk baskets old and new made for a variety of utilitarian purposes, most by family members. About Clarence, it should be noted that during FTS he also presented stories, songs, and cultural demonstrations.

Presentations about the cultural uses of non-basketry plants growing in the larger camp area expanded volunteer understanding of the breadth and depth of the thousands-of-years connection between the Karuk and their homeland, taught in some years by the late herbalist Josephine Peters (Karuk/Shasta/Abenake); in others, by Kathy McCovey.



▲ Kathy McCovey (Karuk) sharing medicinal plant uses with *Following the Smoke* participants, Camp Creek, April 27, 2013. In her left hand she's holding herbs gathered and dried by Karuk/Shasta/Abenake herbalist Josephine Peters. BEVERLY R. ORTIZ

Born in 1923 and raised at a ranch on the Salmon River near Somes Bar, Josephine first began to learn about medicinal plants as a child:

When you live with old people, you learn a lot. Of course, we were a hundred miles from any doctors, and we were kids, and the only time we ever got out of there was when we'd break a bone. And when old grandfather was alive, he could set bones.

Josephine's repertoire at FTS ranged from plant-based cures for burns, sores, blisters, rashes, indigestion, and coughs, to those for kidney stones, stroke, and cancer. She described the use of wormwood as a tick repellent when rubbed on one's arms and legs, a decoction of yerba buena for fevers, trillium bulb tea to ease labor pains, and Oregon grape root steeped in hot water as a blood purifier. Throughout her presentation, Josephine added cautionary

examples of the destruction of some of her medicinal plant-gathering locales by logging activities, herbicide spraying along roadsides by the California Department of Transportation (CalTrans), and thoughtless greed:

When I go out, I just gather what I think I need.... We don't have any ginseng in the area anymore. It's been all picked out. We used to go up the creek where I live, but they've gathered it all out. They don't leave anything for seed.

If properly cared for, Josephine emphasized, "There's enough herbs on the earth to cure everything."

Unlike most PIT projects, where volunteers are asked to bring their own food, this one's Karuk hosts brought everything needed to feed their guests sumptuous meals throughout, emblematic of the hospitality widely practiced at Native gatherings, with the volunteers signing up to help with cooking, dishwashing, and other tasks to keep the camp clean and comfortable.

In the evenings, participants gathered around the campfire to converse and share stories, music, and songs, including, for several years, the presentation of folk songs by a talented volunteer family foursome. Accompanied by the rapid beat of the square hand drum, Karuk men shared cultural songs, old and more recent, such as skunk, lizard, and war songs, and those for gambling.

Crews from the Northern California Indian Development Council (NCIDC) provided logistical support before, during, and after the event, including setting up and taking down camp; hauling supplies, such as wood and water; and helping with the cooking in the elaborate, but temporary, outdoor kitchen. NCIDC crews also assisted with various projects year-round, including helping to burn basketry materials, preceded by the planning of these burns by the Forest Service and the Karuk Tribe's Natural Resources Department. As crew member Stephanie Ferris (Karuk) explained, "We ... maintain the line so it doesn't get out of control. We get right in there and burn with them. We make sure that they're not burning big trees or killing anything," in this case "they're" referring to the personnel with the required training and certification to oversee these burns, Native and non-Native. The NCIDC crew also assisted in setting up experimental plots for comparing the effectiveness of burning, chainsawing, and pruning hazel to stimulate shoot regrowth for basketry.

Family, community, place. These themes reached their zenith on FTS's final day, when Karuk cultural practitioners

from near and far converged on the camp to demonstrate a variety of cultural skills, including carving, bear-grass braiding, and whole-shoot, open-work willow basketry. They also involved the volunteers in the cracking, shelling, and cleaning of dried tanoak acorns for later stone boiling and serving at the evening meal. Other cultural demonstrations: cooking eel over hot coals on a wire grill; “cooking salmon on sticks,” where strips of coho salmon are threaded onto carved redwood stakes arranged around an oval bed of hardwood coals; and pit oven cooking of “Indian potatoes.”

As the afternoon progressed, Karuk Council and community members, and agency managers and staff, began to arrive at the invitation of the weavers to see the demonstrations and join everyone for the evening meal

▼ Frank Lake (Karuk) “cooking salmon on sticks” for serving with the evening meal, Camp Creek, April 27, 2013. BEVERLY R. ORTIZ



and presentations afterwards of a Brush Dance and traditional stories and songs.

LESSONS IN CULTURAL BURNING

I worry about insects and diseases in the acorns, and that's, I think, because of lack of fire. We haven't put fire through the forest, so there's nothing to kill the bugs. They're just starting to get more and more of them. And also the funguses and the stuff that attack our acorns and our trees and cause diseases....

Everything is linked to each other. So, fire in a way will allow areas to start over again. To start with the pioneer plants, which will bring the deer in and the other animals, and then the brush species, and then the trees.... You always have this mosaic where fire is influencing the plants. If you use fire in the spring, it will give you a different result than if you use fire in the fall.

—Kathy McCovey

In the old days, Native peoples managed the landscape by setting fires in seasonal rounds. These fires kept woodlands and forests open and filled with mature trees; ensured that seed harvests would be plentiful; killed disease organisms that thrived in the duff and decaying debris that accumulated in unburned areas; and readily returned nutrients to the soil. Where fires burned, new growth proliferated, which in turn provided cultural materials for humans and food for deer, elk, and antelope. In short, the fires set by Native peoples helped renew the land, ensuring its health and productivity, and that of the plants and wildlife upon which the people depended for sustenance.

This eons-old practice of setting fires was outlawed by non-Indians as their large-scale logging, agricultural, ranching, and development activities began to overwhelm Native subsistence practices. For basketweavers, this meant they could no longer count on having a reliable supply of high-quality plant materials. In Northwest California, their only recourse lay in “following the smoke” that trailed from slash piles burned in old logging sites, hoping that by happenstance some basketry plants might have been burned too, but not so hot that they wouldn't come back.⁴

Slash burns took place in the open rather than beneath a canopy of trees, where the basketry materials could “stretch to the sun,” as Wilverna Reece described it. Instead of the long, straight, flexible, relatively slim shoots optimal for weaving a shapely basket, slash burns resulted in the regrowth of “stocky” shoots, although

these were better than no burning at all. To bring about the best regrowth, “Downriver” in Yurok country weavers risked the potential consequences of setting illegal burns, hoping that the fire departments and foresters wouldn’t extinguish the flames of these too quickly.

Today, weavers no longer need to rely on the serendipity of slash burning or lightning strikes, nor risk arrest for setting fires to manage basketry plants. Instead, they’ve worked long and hard for decades to advocate for the prescribed burning of basketry plants on Forest Service and other lands. As part of that advocacy, they must continually educate the general public, agency managers and staff, and policy-makers about their ongoing need for cultural burns in the right places and seasons.

To this end, at FTS the basketweavers taught participants how burning eliminates the dead, decayed, dry bear-grass blades from previous years’ growth and encourages the sprouting of supple new ones, the most sought-after for basketry located in the center of the plant; and how fire keeps the fuel load from building up—a crucial consideration since the best bear-grass blades come from plants that grow in the partial shade of trees. Without burning, the blades are sharp, brittle, and breakable at times and thick and lacking in pliability at others.

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Another example: Without burning, hazel (*Corylus cornuta subsp. californica*) bushes attain a “stumpy” growth pattern; with fire, they develop long, straight shoots. Ideally, hazel burning should take place in the fall every two years in the same area, three at most. Burning stimulates the spring growth of the particularly strong, straight, and flexible hazel shoots favored by the weavers for foundation material.

Fire also eliminates the insect infestations that seem to plague untended sandbar willow and mountain or red willow (*Salix laevigata*), the two species harvested by Native Northwest basketweavers.

The late Ramona Starritt (Karuk), a seamstress and, at 92 years of age, the eldest of the Karuk who visited with

the weavers and participants at the FTS project during its first year, described her memories of the local landscape before the implementation of fire suppression by the Forest Service. A vivacious and witty woman, Ramona, whose father worked at the Benali Mine, was born on a “large Indian ranch” on the Salmon River.

My mother made baskets when she was very young.... Those days, you had to walk. You didn’t have a car.... But of course, they all had their favorite spots in those days. I mean, they could. The Indians burned all over. They burned the whole country before. The earlier years it would just burn, burn, burn, until the sun looked like a big orange. It just burned itself out. That was that.

They did it for the purpose of their basket weaving, and for the animals. The deer had to eat. They ate the young sprouts [that came up after a fire]. And you could see for miles. You weren’t hemmed in with brush....

The trees were not hurt in any way. No burns [on their bark], or anything, because the vegetation was not so high as it is now. There was no brush. Brush was burnt out....

They were very nice trees. You go to where the Indians lived and burned, you’ll see really tall fir trees; and pine trees and madrone trees were large.... The change came when the highways came in.... That was in the late ’20s....

When asked if she recalled how often the burns occurred, Ramona responded,

Well, every fall they burned. You didn’t have any brush.... A lot of times it didn’t burn too long, because it was clean. Nothing to burn. And it didn’t hurt the trees. You go to any old Indian ranch, you’ll see the trees tall and healthy looking....

Of course, now they seem to like the brush. For what, I don’t know. You can’t see out, you know. When I was young, you could see clear across the gorge. You could look over. See a bear climbing up the mountain, or a deer, or anything. You saw those things.

In the old days, as Six Rivers National Forest Ukonom Ranger District Native American Program Manager Millie Black-Graber (Karuk) explained, the Karuk and Yurok set fires as they moved from the “High Country,” where summer storms occurred, down to lower elevations. Such fires, set on a regular basis, kept dry, flammable duff, brush, logs, and other debris from accumulating. Now, after the clearing of debris, the

Forest Service measures for proper humidity, wind, and air temperature before burning.

Paula McCarthy (Karuk), a liaison on burns between the Karuk Tribe and the Forest Service, explained how prior to a burn, a Tribal member joins an archaeologist to assess the burn area for sensitive cultural materials, including plants. If the site checks out favorably, the silviculture staff works with Tribal people to clear the area in preparation for an underburn. This includes the creation of fire lines around burn areas, which can range from four or five acres to twenty or thirty. She also explained that the burning was weather dependent, with underburns conducted when the weather cools down. If the cooling coincides with heavy rains and flooding, the burn can't take place.

When burning programs for cultural materials first began in the Forest Service, agency policy dictated that burns take place in the winter, the wrong time to burn for a weaver. As Ginnie Larson (Karuk) noted, however, the weavers were so desperate to have a burn take place, they agreed to the alternate timing.

Lack of coordination among Forest Service staff meant that places slated for burns were unexpectedly logged or planted in trees. But now, the situation has vastly improved, and the weavers look forward to one day bringing the fuels back to a maintenance level. As Millie Black-Graber elaborated, fire “doesn't just enhance the basketry materials. It's healthy for all of the forest.”

According to Orleans/Ukonom District fuels specialist, the late Stan Pfister, the return of fire as a management tool for basketry and other culturally important plants in Six Rivers National Forest was a “true team effort”:

A meeting with the Forest Service, the gatherers, and the basketweavers was held in December 1991. The objective of the meeting was to discuss how the Forest Service could better provide culturally significant materials for traditional Native American users. A pledge to start burning bear-grass came from several Districts. Although bear-grass is normally burned in the fall, when fuels are drier, the Orleans District was urged to try winter burning. So, Jill Dondero, Kirk Terrill and I tried to burn individual plants, using two types of diesel torches, since it was too wet for the fire to carry.

After a field review with LaVerne Glaze, who acts as a liaison between the weavers-gatherers and the District, it was decided that the residual diesel odor on the plants would be a problem. In another attempt that spring, Jill, LaVerne,

Randy Nulph, Fuels Technician, and I tried to burn in two different areas using propane torches. The areas burned with propane torches did provide some useable bear-grass, but it was decided that the quality could still be improved. With the support of District Ranger John Larson, and budgetary help from Forest Vegetation Specialist Lucy Salazar, an area was planned for a low-intensity understory burn.

In the Fall of 1993, a five-acre understory burn in a bear-grass area was implemented. This type of burning seems to have produced the best results so far. Since then, we have tried to identify more bear-grass areas to burn and to develop a program that can have areas burned on a rotational basis. Weather does not always cooperate, but we would like to be able to burn 10–20 acres annually. With the continued support of local weavers and gatherers, and excellent information from Kathy McCovey, archaeologist and local weaver-gatherer, we are now looking to expand the burning program to provide more materials like hazel, princess pine, and Oregon grape, and to improve tanoak acorn and mushroom areas.

The truly amazing thing for me has been the enthusiastic support from the local weavers-gatherers even when we are not able to get our burning accomplished each year. I have learned a lot of fantastic information about what goes into collecting and gathering usable materials from working with these supportive and knowledgeable people. Above all, I have learned it is not just a job to go out and gather material, but much more of a spiritual and social activity.

Retired Forest Service employee Jill Dondero found herself likewise touched by the spiritual and social aspects of gathering:

They stopped the entire burning program with about forty people there ready to burn, and they said, 'Hey. Stop. We're going to do a prayer for you all....' And this knot of weavers went out into the woods where we were going to burn, and they held hands.... They prayed [in Karuk] for ... the grass that was about to be burned, for their culture ... and more than that they prayed for the Forest Service bureaucracy.

Prior to a burn, a Tribal member joins an archaeologist to assess the burn area for sensitive cultural materials, including plants.

OTHER LAND-BASED CONCERNS HIGHLIGHTED THROUGH FOLLOWING THE SMOKE

There's a lot of Tribal members out there using resources from the forest that [the Forest Service is] not aware of. They don't see them go out and use it. It's such a low-key level of use that they haven't even been aware of it, so along comes a lot of commercial users who want to use the stuff, and the Forest Service was just handing out the permits, because they were unaware that it was being used by somebody else....

There's an international market for [bear-grass]. They use it for interior decorating. You've probably seen it in flower shops. They dye it; spray it different colors. When we've seen them come through and collect, they take the whole plant. And they just load their vans up with the plants and then take it off to somewhere else. They only select the ones they want, and then they throw the rest away. We don't take the plant. We just take a few blades off of each plant, and I'm not saying, 'They're wrong. We're right.' It's just different, and we try to do it in a way that is respectful to all the life in the forest. We give our prayers, our offerings, our thanks when we do gather anything, and we don't take all of one item that we see out there. It's just a major difference in values....

Illegal immigrants harvest the materials and sell it to the brokers. These are people that come from destitute countries, and they've known some really hard times. They've learned ways to survive that we probably haven't even imagined.... We have compassion for that side of it, but it doesn't need to be that way. In my opinion, we can work it out. I think there's enough for everybody. But not to just let them go out and do it, however, in a way that's, in my opinion, really greedy and not respectful of the natural world.... I think there's some countries that have pretty much devastated [their] resources, and I don't think we should allow that to happen here.

Our concerns aren't focused on our own needs. The prayers are for all that is. All of life. To improve it. To pray that we all could learn to treat it more respectfully. To, in my opinion, be more humble about our place, our role amongst all of this beautiful life on this planet that we're privileged to be a part of. I see it as we're part of it. We're not here to rule over it....

I wouldn't say basketry is my primary concern. It's the cultures. The basketry is just an important part of it.... Basketry is not an artsy-craftsy thing for us. It's not a 'do for profit' type of activity for us. It's a very integral part of our culture.

—*Millie Black-Graber*

What I mainly wanted to stress here was how important it is to protect our plants. There's a lot of people who are interested in gathering materials out there who don't take the time to learn how, and in the future, we're going to lose our plants because of that.

Another concern is that ... there's a lot of people getting involved for the wrong reasons.... Gathering materials just to sell so that they can have money for who knows what. There's a wrong reason to gather, and there's a right reason to gather, and a lot of people are doing it for the wrong reason. And eventually the plants are going to be destroyed because of that.

I have major concerns about the Forest Service allowing people to buy permits and gather as many plants as they like on Forest Service lands, and that's ruining different areas that we gather different teas and medicines that our Tribes use for sick people.

—*Wendy Ferris-George (Karuk)*

I don't put [basketry materials] in my mouth like we should, to hold it for tightness to work on.... I don't like to put anything in my mouth because of the pesticides.

—*Wilverna Reece*

A lot of times we wonder if the plant's been sprayed with herbicide, because we put all our materials in our mouths to chew on.... I wonder if this is really safe. Has it been sprayed with something that's poisonous to our system...?

Another concern I worry about: ... if it would be commercially used.... We're sitting here wondering, 'Well, what's going to happen to our material...?'

People should try to work with their local government and agencies and form a good relationship with them, because that's easier than fighting.

—*LaVerne Glaze*

The other issue is gathering areas—that we will be able to go out and gather without being harassed.... There's only certain places that you can get good plants, so for me, a lot of times I'll have to be on somebody's private property down by the river getting my willows, and it causes me concern, because I don't want to get in trouble for trespassing. Some people are really understanding and will let you go, but some people are just really protective of their private property....

What I think is really frustrating for the Karuk people is that we're a landless Tribe. We had to buy 1.8 acres in 1975 to be recognized by the federal government. And our land was sold out from under us by the BIA [Bureau of Indian Affairs]. Individuals sold it. People came in and said, 'Well, this isn't suitable for agricultural purposes. It's better off for timber production, so now we're going to make it part of the National Forest.' To the Karuk people, we're a landless Tribe within our traditional aboriginal territory, and it makes it really, really difficult to go out and live like our ancestors did, to a certain extent off the land, because of all these rules and regulations that go along with the national forest system. And it is really frustrating. A lot of times I tell the Forest Service [laughs], 'I don't live here on the river because I work for you. I work for you because I live here on the river.' And once they understand that they'll understand me. And I think they'll understand a lot of my people.

—Kathy McCovey

FOLLOWING THE SMOKE AND CONTEMPORANEOUS SCHOLARLY RESEARCH ABOUT CULTURAL BURNING

Three of FTS's Karuk presenters have been, and continue to be, involved in scholarly studies about the effects of cultural burning (aka "good fire") on basketry and other plants materials, Frank Lake, Erin Rentz, and Kathy McCovey,⁵ as has at least one of its Karuk participants, Carolyn Smith,⁶ and one of its agency participants, Jennifer Sowerwine.⁷ One of their primary motivations to do so has been the realization that in order to convey to agency managers and scientists that Traditional Knowledge is science, it's necessary to conduct Western science-based studies to prove the positive ecological benefits of cultural burning.

To this end, in addition to the many other cultural materials, foods, and presentation contributions that Frank brought to FTS, a field trip he led one year to his dissertation study area, an extensive sandbar willow patch along the Klamath River near Orleans, stands out. From there, he detailed his quantitative approach to measuring the beneficial impact of burning on willow growth, productivity, and health.⁸

As for Erin, on another field trip she described the beneficial impact on the cellular level of fire on bear-grass growth and health, the topic of her MA thesis.⁹

SENDING A MESSAGE THROUGH FOLLOWING THE SMOKE

We looked for people who could take a message away. We always have something to say, and we need somebody to listen.... I'm aware that some people feel ... if you're not Native American from that area, then you shouldn't know



▲ Frank Lake sharing with *Following the Smoke* participants the methods and outcomes of his dissertation research on the impact of cultural burning on basketry willow, Klamath River, west of Orleans, April 27, 2013. BEVERLY R. ORTIZ

some of the things; that it's better off if you don't know, because that lessens the chance of exploitation and damage to what we have. But in the other sense, people need to know about our lifestyle, the plants we use, and that the Indian culture is alive and well and thriving and getting stronger every day.... There's a strength in numbers, and if you have a lot of people [learning] about the rights of other people to live as their ancestors have done for thousands of years, you don't just have the Indian people saying that, but you have a population backing you.

—Kathy McCovey

The FTS project touched everyone who participated in deep and meaningful ways. Here's some examples of agency staff outcomes:

It gives me more of an insight now what the women are doing.... I've always just passed [basketry] through and said,

“Well, that’s women’s work,” and walked away from it. Now I’m honored that I’m sitting here with them trying to weave, and it’s not an easy thing to do [laughs].

—Rocco Charley, *Choyinimne Mono from the Fresno area, born and raised in Dunlap, Native American program manager for the Plumas National Forest and fire engine captain on the Feather River Ranger District*

I work for the Interior Department ... and deal with heritage, religious preservation, and sacred sites protection, working with Native American people, particular[ly] traditionalists and Elders, to help preserve landscapes for places that they need to carry out traditions or to simply help to support traditions, to help preserve culture, as well as to recapture some of my own culture....

I really wanted to come and represent the BLM here ... and personally I came because I had to come. I needed to be outside. I needed to be with these people.... I think of myself as being somewhat in touch with the land and knowing the plants and knowing the ecology, but there’s no substitute for touching nature and to be guided to do so. To know what you’re touching, and then to learn from

it and take it within yourself ... that’s what it did for me.... The overall harmony of the basket weaving experience is what I wanted [and] what I got....

I’m heartened by it. I’m very heartened.... We’re talking about doing one next year as a co-partnership between the BLM and Forest Service.... So, I look forward to that.

—Bruce Crespin, *Ajachmem, Native American Program Office, Bureau of Land Management, Santa Fe, New Mexico*

What they’re doing here is incredible. Actually sitting down with the Tribes and working with the Tribes as a cooperative is something you wouldn’t see much at all in the State of Arizona, especially on the Tonto.... We’re just starting to work with the Tribes now. This is great!

—Esther Morgan, *district archaeologist, Paysen District, Tonto National Forest*

As for Karuk basketweaver perspectives on the project:

We’ve made some friends. We’ve shared some information with people who value it. They’re here by choice.... It’s not like in a classroom where we’re going and talking to people

▼ Humboldt State University students and other *Following the Smoke* participants eating lunch during a field trip while Frank Lake shares with them the overall importance of good fire, May 1, 2010.
BEVERLY R. ORTIZ



who really maybe don't want to hear what we have to say. It feels like the people who have come here have become ambassadors of our concerns and values. They'll go away, and maybe some of them will take the values with them and feel them themselves, or they can share them with other people. Somewhere along the line something will be shared with somebody that can make a difference—help in policy changes and, if nothing else, just have more people understand.

—*Millie Black-Graber*

I just hope that they get an understanding of how we feel about our plants, and not to abuse it. How much work we really put into a basket. It's not like just going and it's there; you're just weaving. I think everybody got enlightened [that] this is picked.... You've got to go out and get your materials. You've got to process it at the right time.... I think they've learned that.

These gatherings are wonderful for getting people together and learning. I think it helps people understand a little bit about the Indian way. It wasn't just easy. You don't just go out and pick some sticks and make a basket.

—*Thelma McNeal*

I enjoy meeting all the different people. They're so friendly, and they want to know what goes into the baskets.... They're full of questions, which is nice to be able to answer, and to let them know that [you can't just] whip up a basket. There's a lot more to it.

—*Wilverna Reece*

[I hope people take away with them] the knowledge that every plant has a use and that the Indigenous people who've always been in the land that these participants are in have a special knowledge and love of the area that their people have been in for hundreds and thousands of years. It's a very special knowledge, and it should be treated as such. It should be used. The forest managers and the land managers should work hand in hand with the Native peoples.

I was really surprised about how many [of] the participants here had no idea about the alternate uses of plants. One lady this morning, she looked at me, and she said, 'If I take

nothing else away from here, I will always know that every plant has a use.'

Sometimes I think when the agencies manage the land, they don't account for the acorn trees and the mushrooms and basket materials, because they don't live off the land like we do. All the plants are very important to us. They're part of us. We're part of them.

We chose people who could take a message out to other people, because sometimes the managing agencies look at the Karuk people and say, 'Why should we manage for you? You're just another special use group.' And we're not. The knowledge that our people have about this area is very specialized. It's very precious. We need to keep that knowledge and keep using that knowledge. This area has been managed for hundreds and thousands of years already, and the people who were here before us knew how to live in harmony with their environment and knew where these certain plants grew and went there and harvested them there. They didn't try to change and put plants that didn't belong there because they wanted them there....

Hopefully, they'll leave here with a different view about the forest, because a lot of people view the forest as wilderness, as a wild place, but it's our home. I'm more comfortable here out in the woods than I am down in the city.

The trees are full of spirits—the plants, the animals, the bugs—and so once they get to know these creatures and plants as intimately as I do, they'll view them more as their friends, and that they have every right to be here as the people do.

—*Kathy McCovey*

FTS focused on the plants—the need to respect them, to care for them, to nurture them. As Deanna Marshall put it, "I'm hoping that they see that this is still alive. It's not in the past." At FTS, that message was heard by representatives from the Forest Service, Bureau of Land Management, National Park Service, CalTrans, California Department of Forestry, a member of the Governor's Council on Biodiversity, individual citizen educators, and Native people who could spread the message through their network of family, friends, and colleagues. This heartens the weavers, who expect that things will continue to improve. As LaVerne Glaze put it, "It's up to us to see that it does."

FTS AND UNIVERSITY STUDENTS

After meeting Ken Wilson and hearing about FTS, Professor Mary Beth Glenn of California State University,

*F*TS focused on the plants—the need to respect them, to care for them, to nurture them.

Humboldt (as it was known then) became interested in the possibility of university student participation in the project. In 2002 and 2003 that interest led to two versions of FTS occurring: the PIT project version, and a shorter one held at Dolan's Bar, a Forest Service campground near Orleans, where university students learned from the basketweavers and other Karuk culture bearers.

Five years later, the two events started to merge, with FTS run solely under the auspices of the University by the time it concluded in 2013. Reflecting back on the rare opportunity to bring experiential learning of the type embodied by FTS to university students, Mary had this to say:

For me, I think the best thing that came out of the Humboldt State University [now Cal Poly Humboldt] ethnobotany courses was not just the chance for college students to learn from Tribal Elders and members about traditional practices, but the fact that the course ended up being an extension of the deep dialogue between the Tribes and Federal land management leaders that began with Following the Smoke. That is probably something I am most proud to have been a small part of.¹⁰

MAGNIFYING FOLLOWING THE SMOKE'S TEACHINGS

Today, the convenors and facilitators of and participants in Following the Smoke continue to magnify its teachings through a variety of educational, agency, and community initiatives with which they are currently involved, including MKWC and TREX.

Developed in 2008, the Prescribed Fire Training Exchanges (TREX) program was designed to "increase the number of qualified, experienced prescribed burners and enable more prescribed fire projects," addressing "unique landscape needs while keeping community values in mind."¹¹ In so doing, TREX focuses on conducting the types of prescribed and cultural burns that the Forest Service once implemented, but no longer can, with its resources largely diverted into addressing the dramatic increase in fires occurring due to climate change.

Currently, Kathy McCovey serves as co-deputy director of the Mid Klamath Watershed Council (MKWC), which "collaboratively plans and implements ecosystem restoration, promotes community vitality, and involves people in land stewardship"¹² through the four programs that it runs: Fisheries, Fire and Forestry, Plants, and Community and Stewardship. All include Traditional Knowledge and perspectives in their vision and implementation, and all reflect stunning synergies with

the messaging of FTS. Here's an illustrative example from the purpose statement of MKWC's Fisheries program: "Through collaborative implementation of strategic restoration goals and community engagement, the fisheries program implements and monitors projects for the health of our diverse river communities, focusing on fish health and abundance, and the understanding, application, and propagation of the best available science, including traditional ecological knowledge."

IN CONCLUSION

From its inception in 1997 by the Karuk Indigenous Basketweavers, through its concluding camp in 2013, the Following the Smoke Passport in Time program not only served as a model for the positive outcomes that result from integrating the knowledge of Native cultural practitioners into the ecosystems management plans of public land management agencies, and a framework for the initiation of similar programs, but its Karuk presenters and agency, educator, and researcher participants continue to bring its messages forward through their varied Tribal, professional, organizational, and academic endeavors.

Today, the convenors and facilitators of and participants in Following the Smoke continue to magnify its teachings through a variety of educational, agency, and community initiatives.

POSTSCRIPT: A KARUK COUNTRY EXEMPLAR OF COLLABORATIVE NATIVE LAND MANAGEMENT RESEARCH

In 2003, close to the midpoint of FTS's existence, Gerald W. Williams, a Forest Service historic analyst, compiled a 95-page list of "References on the American Indian Use of Fire in Ecosystems,"¹³ with 17 of those pages focused on California. At that time, collaborative research on this topic by or with Tribes was rare. Gratefully, this dynamic has begun to shift,¹⁴ with the Karuk Tribe of California providing an example of the types of publications that can result, nearly all available for downloading from the Tribe's Natural Resources Department webpages and the others from the US Climate Resilience Toolkit website.

While some of the Tribe's publications have Karuk cultural practitioners as co-authors, their knowledge and

input guided the completion of all; and all revolve around the Tribe’s “eco-cultural revitalization efforts,” directed for the Tribe by Bill Tripp (Karuk). As he puts it, they are “centered around fulfilling the responsibilities we have as Karuk people to all our living relations, ancestors, and descendents [sic]. Since time immemorial Karuk people have remained steadfast in our commitment to this land and its resources.”¹⁵

The Tribe’s eco-cultural publications include a 2016–2022 collaboration with Kari Norgaard, professor of sociology and environmental studies at Oregon State University; Kirsten Vinyeta, assistant professor of sociology at Utah State University; and others on the production of six reports related to Traditional Knowledge and climate change. This collaboration culminated in the completion of the Tribe’s 2019 *Karuk Climate Adaptation Plan*, co-authored by Kari Norgaard and Bill Tripp, which includes a discussion of the re-establishment “of traditional fire regimes adapting to the modern climate,” and the Tribe’s 2022 *Karuk Climate Transportation Adaptation Plan Brief*.¹⁶

Collectively, the Karuk Tribe’s research and publications provide an exemplar of collaborative Native land management research.

An example of recent Karuk cultural practitioner plant-based studies and publications includes a collaboration between Frank Lake, currently a research ecologist with the Pacific Southwest Research Station of the Forest Service; Tony Marks-Block, assistant professor of anthropology, geography and environmental sciences at California State University East Bay; and others on 2019 and 2021 quantitative studies of the effects of cultural burning on hazel stem production for basketry.¹⁷

Concerning cultural burning (aka “good fire”), a centerpiece of the FTS project, on March 5, 2024, the Tribe published *Good Fire II: Current Barriers to the Expansion of Cultural Burning and Prescribed Fire Use in the United States and Recommended Solutions*,¹⁸ a 71-page report that built upon the Tribe’s prior 48-page, California-focused *Good Fire: Current Barriers to the Expansion of Cultural Burning and Prescribed Fire in California and Recommended Solutions*.¹⁹ As described by the Tribe on its website, *Good Fire II* takes the recommendations of its predecessor publication “to a

larger scale, calling for transformational change at both the state and federal levels, and providing a roadmap to revitalizing the relationship between humans and fire and the systems used to steward it”:

Good Fire II was developed to complement the [Biden-Harris Wildland Fire Mitigation and Management Commission Report](#). Bill Tripp, Director of Natural Resources and Environmental Policy for the Karuk Tribe and co-author of *Good Fire II*, also served as the designated Tribal Government representative on the Commission. *Good Fire II* provides additional detail to support policy reforms necessary to implement the Commission’s more general recommendations, while supporting Tribal sovereignty and prioritizing Tribal leadership at all levels of stewardship and fire management.

Good Fire was co-authored for the Tribe by Sara A. Clark, who, as a partner in public interest law firm Shute, Mihaly & Weinberger LLP, focuses, in part, “on advocating for protection of cultural and natural resources important to Tribes”; Andrew Miller, an attorney at the same firm; and Don Hankins (Miwko?), a professor of geography and planning at California State University Chico, field director of Chico Ecological Reserves, and a cultural practitioner whose research includes cultural and prescribed fires. In addition to Bill Tripp, all three co-authored *Good Fire II* with Colleen E. Rosier, a Karuk Tribe senior researcher and policy advisor; and Isobel Nairn, a prescribed fire and cultural burning fellow at the Stanford Climate and Energy Policy Program.

Collectively, the Karuk Tribe’s research and publications provide an exemplar of collaborative Native land management research.

ENDNOTES

1. Unless otherwise indicated, all quoted material in this article comes from 1997 and 1998 interviews conducted by the author with Following the Smoke participants, with the professional affiliations those that each person had at the time of their involvement with the project. For more about the first two camps, see two articles published about them by the author in *News from Native California* (NNC): “Following the Smoke: Karuk Indigenous Basketweavers and the Forest Service,” *NNC* 11(3): 21–29 (1998), “Following the Smoke II: Plants and the Karuk,” *NNC* 12(3): 13–16 (1999).
2. For more about these Gatherings, see “The California Indian Basketweavers Association and Its Organizationally Based Land Stewardship and

- Management Initiatives” elsewhere in this issue of *Parks Stewardship Forum*.
3. Indeed, as predicted by Osborne, FTS inspired two other forest-based projects with basketweavers, one with Wailakis in the Sinkyone Wilderness State Park and the other with Northern Mewuks in the Stanislaus National Forest, each with their own unique foci and approaches.
 4. For more about this and the range of culturally important forest plants, see Kathy Heffner, “*Following the Smoke*”: *Contemporary Plant Procurement by the Indians of Northwest California* (Eureka: Six Rivers National Forest, 1984).
 5. See, for instance, Megan Mucioki, Jennifer Sowerwine, Daniel Sarna-Wojcicki, Kathy McCovey, and Shawn D. Bourque, “Understanding the Conservation Challenges and Needs of Culturally Significant Plant Species through Indigenous Knowledge and Species Distribution Models,” *Journal for Nature Conservation* 70 (2022); <https://doi.org/10.1016/j.jnc.2022.126285>.
 6. See, for instance, Carolyn Smith, *Weaving Pikyav (To-Fix-It): Karuk Basket Weaving In-Relation-With the Everyday World*, dissertation in anthropology (Berkeley: University of California, Berkeley, 2016); <https://escholarship.org/uc/item/8hx01626>.
 7. See, for instance, Megan Mucioki, Jennifer Sowerwine, Daniel Sarna-Wojcicki, Kathy McCovey, and Shawn D. Bourque, op. cit.
 8. Frank Lake, *Traditional Ecological Knowledge to Develop and Maintain Fire Regimes in Northwestern California, Klamath-Siskiyou Bioregion: Management and Restoration of Culturally Significant Habitats*, dissertation in environmental sciences (Corvallis: Oregon State University, 2007); https://search.library.oregonstate.edu/permalink/01ALLIANCE_OSU/1c3q896/alma99111783001865.
 9. Erin Rentz, *Effects of Fire on Plant Anatomical Structure in Native Californian Basketry Materials*, MA thesis in biology (San Francisco: San Francisco State University, 2003).
 10. Pers. comm. with Beverly Ortiz, September 2, 2024.
 11. usda.gov/media/blog/2019/08/23/prescribed-fire-training-exchanges, accessed September 4, 2024.
 12. mkwc.org, accessed on September 4, 2024.
 13. <https://rangelandsgateway.org/sites/default/files/2024-06/ndianuseoffireinecosystems.pdf>
 14. See, for instance, Skye M. Greenler, Frank K. Lake, William Tripp, Kathy McCovey, Analisa Tripp, Leaf G. Hillman, Christopher J. Dunn, Susan J. Prichard, Paul F. Hessburg, Will Harling, and John D. Bailey, “Blending Indigenous and Western Science: Quantifying Cultural Burning Impacts in Karuk Aboriginal Territory,” *Ecological Applications* (2024): 1–22; <https://doi.org/10.1002/eap.2973>; Deniss J. Martinez, Bruno Seraphin, Tony Marks-Block, Peter Nelson, and Kirsten Vinyeta, “Indigenous Fire Futures: Anticolonial Approaches to Shifting Fire Relations in California,” *Environment and Society: Advances in Research* 14 (2023): 142–161; <https://doi.org/10.3167/ares.2023.140109>; Tony Marks-Block and William Tripp, 2021, “Facilitating Prescribed Fire in Northern California through Indigenous Governance and Interagency Partnerships,” *Fire* 4(3):37; <https://doi.org/10.3390/fire4030037>; and Frank K. Lake and Amy Cardinal Christianson (2019), “Indigenous Fire Stewardship,” in *Encyclopedia of Wildfires and Wildland-Urban Interface (WUI) Fires*, Samuel L. Manzello, ed. (Cham, Switzerland: Springer); https://doi.org/10.1007/978-3-319-51727-8_225-1.
 15. <https://www.karuk.us/index.php/departments/natural-resources/ecocultural-revitalization>, accessed on December 8, 2024.
 16. The six reports, listed here in chronological order of publication, are the Tribe’s: (1) 81-page *Retaining Knowledge Sovereignty: Expanding the Application of Tribal Traditional Knowledge on Forest Lands in the Face of Climate Change* (2014), downloadable at <https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2016/05/final-pt-ii-retaining-knowledge-sovereignty.pdf>; (2) 62-page *Karuk Traditional Ecological Knowledge and the Need for Knowledge Sovereignty: Social, Cultural and Economic Impacts of Denied Access to Traditional Management* (2014), downloadable at <https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2016/05/final-pt-1-karuk-tek-and-the-need-for-knowledge-sovereignty.pdf>; (3) 205-page *Karuk Tribe Climate Vulnerability Assessment: Assessing Vulnerabilities from the Increased Frequency of High Severity Fire* (2016), downloadable at <https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2016/11/final-karuk-climate-assessment1.pdf>; (4) 232-page *Karuk Climate Adaptation Plan* (2019), downloadable at https://www.karuk.us/images/docs/dnr/FINAL%20KARUK%20CLIMATE%20ADAPTATION%20PLAN_July2019.pdf; (5) 50-page *Karuk Climate Transportation Adaptation Plan Brief* (2022), a joint project of the Tribe and the California Department of Transportation’s Division of Transportation Planning, downloadable at <https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2022/03/final-2022-karuk-climate-transportation-adaptation-plan-brief-1.pdf>; and (6) 168-page *Karuk Climate Transportation Adaptation Plan* (2022), downloadable at <https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2022/03/karuk-climate-transportation-adaptation-plan-final-2022-1.pdf>.
 17. Tony Marks-Block, Frank K. Lake, Rebecca Bliege Bird, and Lisa M. Curran (2021), “Revitalized Karuk and

- Yurok Cultural Burning to Enhance California Hazelnut for Basketweaving in Northwestern California, USA,” *Fire Ecology* 17(1); <https://doi.org/10.1186/s42408-021-00092-6>; and Tony Marks-Block, Frank K. Lake, and Lisa M. Curran (2019), “Effects of Understory Fire Management Treatments on California Hazelnut, an Ecocultural Resource of the Karuk and Yurok Indians in the Pacific Northwest,” *Forest Ecology and Management* 450: 117517; <https://doi.org/10.1016/j.foreco.2019.117517>.
18. Sara A. Clark, Bill Tripp, Don Hankins, Colleen E. Rossier, Abigail Varney, and Isobel Nairn for the Karuk Tribe (2024), *Good Fire II: Current Barriers to the Expansion of Cultural Burning and Prescribed Fire Use in the United States and Recommended Solutions*, downloadable at <https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2024/03/good-fire-ii-march-2024.pdf>.
19. Sara A. Clark, Andrew Miller, and Don L. Hankins for the Karuk Tribe (2021), *Good Fire: Current Barriers to the Expansion of Cultural Burning and Prescribed Fire in California and Recommended Solutions*, downloadable at https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2021/03/karuk-prescribed-fire-rpt_final-1.pdf.