

BY DEBRA UTACIA KROL

In Montana, climate change is prompting a move to more traditional forest management

FIGHTING FIRE WITH FIRE





The Chippy Creek Fire, which was an uncontrolled blaze located in the northwest portion of the Flathead Reservation in Montana, ravaged almost 100,000 acres over several weeks in 2007.



AS THE CLIMATE CHANGES, NATIVE peoples are increasingly taking charge of their land and ecological management. Many communities have determined that one way to survive — and even thrive — in a rapidly changing environment is combining Western science models with the knowledge gleaned from millennia of living on their land.

The Confederated Salish and Kootenai Tribes (CSKT) of Montana have been bringing together elders with forest, land, and fire managers to devise a new approach, creating a more holistic and ultimately more sustainable system aimed at healing the forests and lands after more than a century of systemic fire exclusion and commercial exploitation.

Building on Tradition

The 7,400-member community consists of three tribes: the Bitterroot Salish, the Upper Pend d’Oreille, and the Kootenai. Their modern-day home is the 1.3 million-acre Flathead Reservation in the Northern Rockies of western Montana, where about 65 percent of the membership lives. Before the Euro-Americans arrived, fire was essential for maintaining biodiversity. As noted in the CSKT’s multi-

media project “Fire on the Land: A Tribal Perspective” (cskt.org/tr/fire_firehistoryproject.htm), the first non-Indian settlers confronted not an environment untouched by humans, but a “cultural landscape.”

As the project explains, indigenous people managed their resources over thousands of years of “observation, experimentation, and spiritual interaction with the natural world, creating a body of knowledge about the environment closely tied to seasons, locations, and biology.” In contrast to Western notions of conquering nature, the Native respect for and legacy of living with the environment created a haven for plants, animals, and humans to thrive. As the late Pend d’Oreille elder John Peter Paul said in “Fire on the Land,” “This is why my elders — my father and his father and beyond — that is why they would burn; for the animals and for the huckleberries and the medicine.”

As good stewards of Mother Earth, tribal members observed and recorded in oral histories and tribal lore how their environment changed over the centuries. James Durglo,

forestry department head of the CSKT, told the *Missoula Independent* in 2012, “Going back to the...tribal coyote stories, there’s a discussion about the receding of the glaciers and things like that, so the tribes’ presence on the land base speaks to climate change.”

Leroy Little Bear of the SEED Graduate Institute in Albuquerque, N.M., which seeks to bring together Western scientific models with indigenous worldviews, likens this type of Native scientific thought to quantum physics, which emphasizes the “ebb and flow” of the universe over the classic linear Western scientific model.

The Ecological Cost of Neglecting Tradition

Fire was an essential part of Native ecological management. Doug MacCleery, a noted forest expert, wrote in his report *Understanding the Role the Human Dimension Has Played in Shaping America’s Forest and Grassland Landscapes*, “Indian use of fire as a management tool changed in profound ways the entire ecology of the forest and the plant and animal communities associated with it. The



AP IMAGES (CHIPPY CREEK FIRE)

wildlife communities that characterized these cultural landscapes, such as the red-cockaded woodpecker/gopher tortoise community in the South, were in large measure products of thousands of years of human intervention. And it will take continued human intervention to maintain them.”

In fact, Native people set about twice as many fires as occurred naturally to maintain healthy stands of forest, stimulate the growth of beneficial plants like elk sedge, and eliminate the dangerous buildup of material like dead grass and pine needles.

Then in the 1800s, many Western tribes were forced onto reservations that were a small fraction of their once-vast lands. For the CSKT, that day came in 1855 with the Treaty of Hellgate, which cost the three tribes the lion’s share of the lands they once controlled. Their lands were further eroded after the 1904 Flathead Allotment Act, which allowed white settlers to take large portions of what remained.

With the influx of settlers — the cultural erosion that was the legacy of the boarding schools, devastating diseases, and economic pressure to provide for families after the loss

of subsistence lifestyles — the old ways of how best to care for the land faded.

Instead of seeing prescribed fires as a way to cleanse the land before it became choked with underbrush, and to release nutrients back into the soil to nurture mature trees and grasses, the new settlers discouraged what they considered the destruction of an economic resource. Grasslands were put to the plow, or fenced off as pasture for cattle. Forests became “tree factories,” yielding millions of board feet of valuable lumber. The Great Fire of 1910, which scorched 3 million acres in Montana, Idaho, and Washington, also sparked a cry to keep fire out of the region.

Consequently, the diversity of the forest and grasslands suffered. Open forests rich with succulent grasses for deer and elk became choked with smaller trees, brush, and debris, creating perfect conditions for the very fires the federal government aimed to prevent.

Climate Change Inspires a New Plan

The increasingly hotter, drier climate in the West is only hastening this fire-friendly trend. In the past 30 years, glaciers have continued to retreat in Montana. Elders have noted that

pollution has caused the weather to change from when they were young, a notion that has been borne out by scientific evidence.

Some wetlands are drying up. The winter precipitation patterns are changing with less snow and more rain; summer — and the fire season — is stretching ever longer. Drier conditions and warmer winters are also factors in infestations such as pine beetles, as drought-stressed trees are less able to fight off disease. Many small human-placed fires now spread into huge fires that burn thousands of acres and damage, sometimes irreparably, the ecosystem and even the soil itself.

Alarmed by what they were seeing, the CSKT’s Forestry Department agreed in 1995 to a compact with the federal government, under the authority of the Tribal Self-Determination Act, to assume responsibility for managing its own lands and forest resources.

By 2000 the tribe had devised a new strategy. “This plan is a long-term-based resource management system that involves elders,” Durglo says. According to “Fire on the Land,” the tribe believes that even though the state of the forests has changed dramatically, their

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basic ecology has not. Sooner or later, those forests will burn — the only question is when and how.

The new plan enables the tribe to incorporate traditional management protocols into forestry operations. Initially, one point of contention was communication. The elders' view of the forest baffled the forestry staff, which was trained in Western forest science. The elders in turn were confused by the technical terms used by forest managers.

To resolve this, the Forestry Department solicited elders' insights to learn about Native management and how elders see the bigger picture of climatic changes. Durglo noted in an article published in *Evergreen* magazine that Native place names were identified, including literal translations from the Salish and Kootenai languages. This naming process helped further narrow the "cultural gap" between elders and cultural practitioners and the Forestry Department, which in turn benefited from the elders' unique perspective.

According to Durglo, the CSKT Forestry Department now recognizes that they are resource managers whose role entails strengthening relationships with the community.

Tribal elders are active participants in forest planning. "With more participation and voice of elders, there's a greater awareness of cultural and traditional use," says Durglo.

Elders also are working with tribal officials to direct the resurgence of tribal cultural practices, including ecosystem stewardship, which had been shredded by the events of the past two centuries. The Forestry Department has recently initiated field trips into forest areas, including several trips to see how lands impacted by the 2007 Chippy Fire were recovering.

Durglo adds that he feels fortunate to have elders, including his aunt, willing to participate in the planning process. "I went through the university system, and then went home and got to visit with elders again," he says. "It's a learning process for me as well. It's a different world view that [elders] have."

Currently, the forest management plan is focused on ecosystem management, including sustainable logging operations. Durglo says that the plan also sees wildfires as having an important function in the ecosystem.

But reclaiming land and forest management don't benefit just the ecosystem —

they are another mechanism for reclaiming tribal sovereignty. "The Forest Management Plan of 2000, the first management plan written since the self-governance compact, is one method the Tribes will employ to secure their sovereignty," Durglo wrote in *Evergreen*. Stephen Pyne, a historian in the School of Life Sciences at Arizona State University, has collaborated with CSKT's tribal foresters, and he sees the new forestry management system as an example of how interest in restoring fire can complement the cause of recovering tribal heritage.

Honing the new plan gives the community revitalized strategies and newfound support to meet the unfolding challenges of maintaining forest health, structure, and function. In 2012, the tribe embarked on a pilot project in partnership with the U.S. Forest Service and the University of Leeds in Britain to evaluate how changes in the climate will shape their lands in the future. This reflects a wider trend in forest management: Pyne motions that everyone is moving toward cooperative models because no one can do it alone. "Fire doesn't care," he says. "It has its own logic, and it won't wait for us." ■



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