



# INTANGIBLE

A VOICE FOR WILDNESS AND WONDER

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SIGURD OLSON  
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# RESTORING RELATIONSHIPS WITH QUIET FIRE

**This is a story about fire** in the forests and ecosystems of the Great Lakes Region; by that we mean to write about relationships. The relationships we write about, however, differ depending on the storyteller. Notions of wilderness, pristine and untrammelled by humans, conflict with an understanding of people as active participants in a web of interconnected relationships. These different perspectives carry immense implications for how best to care for land and place. In particular, how are places that carry wilderness or natural area designations best served to enable thriving ecosystems? Is the right approach to keep people out and minimize their impacts? Or does that approach to protection miss an important understanding of the long history shared between people and the land? The story of fire in Great Lakes forests helps answer these questions.



TEXT AND PHOTOS BY EVAN LARSON AND LANE JOHNSON



Before we start our story, however, we ask you, the reader, to do an exercise. Take a piece of paper, pen or pencil, and a minute. Think about all the ways humans impact the environment. List them. Please, do this now and then set that piece of paper aside. We'll come back to it later.



## FIRE, PLACE, AND PEOPLE

Fire is an elemental part of Northern forests—no different than summer rain, winter snow, or autumn winds. Reminders of this connection drifted into the lives and lungs of people and communities across the Midwest on the smoke of northern fires that burned throughout the summer of 2023. In 2021, it was smoke from California, Quetico Provincial Park, or more locally from the Greenwood fire on the Superior National Forest.

A perspective offered by satellites outlines the healing scars of the 2006 Cavity Lake, 2007 Ham Lake, and 2011 Pagami Creek fires within the wilderness, while the 2013 Germann Road fire boundary overlaps with rural neighborhoods in northwest Wisconsin. Memories of the historical firestorms of Peshtigo, Hinckley, and Cloquet are held in museums, roadside monuments, and family lore, as well as the policies and mythologies that still shape fire management today.

You could call many of the events named above loud fires—they clamor through forests and the media demanding attention. Recent fires illuminate the stories of climate change, fire exclusion, and fuel accumulation, while historical fires demonstrate the damaging effects of colonization and associated landuse. Collectively, these fires demonstrate that efforts to remove fire from our lives and wildlands are not sustainable. But what if we look to the stories of quiet fires—gentler fires that were common in the past and whose history lingers among the rings of old pine trees and stumps. Where did these fires burn? Why did they stop? What can the stories of quiet fires teach us about being in better relationship with the land and each other?



## THE STORIES TREES WHISPER

To learn more about these quiet fires, we turn to dendrochronology, the science of translating stories written in the rings of trees into a language that is more familiar to people. This process helps us relate to the lived experiences of beings whose lives span multiple

human generations, beings who can share memories that are rooted in place, accurate to the year and season, and can persist for centuries, even when the human stories connected to those same places are disrupted, removed, or lost. For example, the drought of 1804, though not well-described in written weather records, was a year when the rains failed and almost every red pine growing across the Border Lakes Region laid on an extremely thin ring that stands out in stark contrast to the years of abundance that surrounded it. The summer of 1747 was a year of two seasons—heat and drought pushed trees to the brink of dormancy midseason before late summer rains arrived and most trees reinvested in growing to result in a good year. And it is more than the weather and climate that trees record.

Embedded among these patterns of wide and narrow rings are fire scars—curving gaps etched into the cells of living wood where, in the words of Robin Kimmerer, *fire-boiled resin* crystalized to preserve history. The first of these marks shares the moment that the heat of a passing fire eddied and swirled on the lee of the tree, soaked through the insulating bark, and heated the cells of the cambium to the point of death. This did not occur around the entire trunk of the tree, only a portion that now, centuries later, exists as a fire-scar circling a portion of the tree's circumference and presenting a tangible record of the first time the tree lived through a fire. Subsequent fires typically trace another scar around the first, with ripples of healing wood echoing each fire recorded in the rings of the tree. We know for a fact that these were often not the loud fires covered by the news; we know that because this tree and others around it survived. Subsequent fires recorded on the same tree were quiet, too, returning every ten to twenty years with only the fallen needles and newly grown brush of that interval available to fuel the flames. Such conditions are markedly different from what is currently seen in many forests across the region, where uninterrupted forest growth over the past one hundred years has created dense layers of living and dead trees and brush that will provide abundant fuel for the next fire.



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**INDIGENOUS FIRE  
STEWARDSHIP, DISRUPTED**

What caused this change? What moved fire from an integral part of forest ecosystems to near total absence? It was not the result of Smokey Bear and his pleas to prevent forest fires—his message and megaphone did not mature until decades after fires stopped burning in many places. Nor was it the massive investment in fire suppression efforts that followed The Great Fires of 1910, or the mechanization of fire suppression following World War II.

Why then, did a tree on Voyageurs Island in the midst of great Lake Saganaga record fires in 1702... 1718... 1743... 1758... 1770... 1780... 1795... 1823... 1842... and then stop after one last fire in 1850? The same is true on Minnesota Point at the head of Lake Superior, where red pines recorded fires in 1789, 1804, 1822, 1826, 1829, 1843, and 1846, and then no more. Or consider the University of Minnesota Cloquet Forestry Center, which lies within the boundaries of *Nagaajiwanaang*, the Reservation of the Fond du Lac Band of Lake Superior Chippewa. Here the rings of old-growth pines show recurrent fires burning across what is now the forestry center every 13 years from the start of the record in 1757 up to the last fire in 1909, the year the forestry center was established. These changes are not the result of fire suppression or of putting fires out. These changes are an expression of disrupted relationships that removed *ignitions* from the landscape.

The trees tell us the story of what happened, that quiet fires burned often and then they stopped; the explanation for why comes from the stories of people whose ancestors brought quiet fires to specific places at specific times.

Ask Melonee Montano of Red Cliff about stories shared by her elders, and she may describe the role of *Ishkode*, fire, in promoting blueberry harvests that fed her ancestors. She may tell you about the blueberry train that hauled carloads of berries from northern Wisconsin to southern urban areas. She may also share that members of her family were thrown in jail for practicing traditional land stewardship, including the cultural burns that were linked to this abundance. Ask Vern Northrup of Fond du Lac about the berries and medicines his grandma used to gather near Deadfish

Lake from plants who are dependent on fire, and how her grandmother did the same before her, as did her grandmother's grandma. Vern will tell you why, after generations of people and pines sharing lives connected through flame, the fires stopped. Suggest to Jeff Savage, director of the Fond du Lac Cultural Center and Museum, that you think the abrupt cessation of fires recorded in the Cloquet Forestry Center fire history may be an expression of interrupted Indigenous Fire Stewardship, and he may look you directly in the eyes and say, "You're just telling me what I already know."

What happens to the forest, then, when relationships maintained through millennia are suppressed to serve an extractive colonial system bent on removing people and fire from the land to pursue exhaustible natural resources? What happens when a false wilderness ideal—land untrammelled—is developed in response to rampant industry and development? The same red pines who carry

the stories of past fires across this time of removal offer further insight. And, as Western societies grapple with understanding the depth of trauma among Indigenous communities impacted by settler-colonialism, these trees ask us to consider their trauma as well.

In the absence of once-recurrent fires, stands of lingering red pine have seen the risk of severe fires mount as biodiversity declines, fuels and shade increase, and fire-intolerant species proliferate. Over the more than one century during which these changes took place, red pines have cast their seeds on increasingly unreceptive land that is choked with dense vegetation and covered in forest litter and damp shade. Generation after generation, the seeds of red pine wither and fail.

The future for most wilderness stands of red pine, despite being protected from logging and urban development, is limited. Most stands will succumb to the flames of a catastrophic blaze running through canopies and fed by one hundred years of accumulated fuel embodied in balsam fir, white pine, and spruce. Or, they will succumb more gradually to shade, wind, and the slow process of ecological succession. These eventualities will occur at all but the driest sites, and red pine will diminish across the landscape. The evidence for this future is stark—a regeneration survey that spanned 5,540





square meters of the most beautiful, glorious red pine stands in the Boundary Waters Canoe Area Wilderness documented only eight red pine seedlings. Eight.

  
**RETURNING BENEFICIAL  
FIRE TO WILDLANDS**

The wilderness ideal imagined and shared by people like Henry David Thoreau, John Muir, Aldo Leopold, and Sigurd Olson played a crucial role in pushing back against the feverish pitch of industrialization that was rapidly driving the disappearance of wildlands everywhere, but the extension of their work is problematic in ways that are revealed by the shared history of people, fire, and pines.

The 1964 Wilderness Act built on centuries of Western thought to codify people as separate from *nature*, to implicitly state that the impacts of humans are *unnatural* and, by definition, damaging to the world around us. Within this notion, prescribed fire is widely considered antithetical to wilderness, yet the rings of trees in the forests of the Boundary Waters Canoe Area Wilderness demonstrate that it is now a landscape that has been separated from its original stewards. Removing people and their fires from the stands of massive red pines that helped inspire the Wilderness Act and justify wilderness designation, both protected and doomed these trees. Because many people do not know, or understand, the story preserved in the fire-scarred rings of red pines, application of the Wilderness Act has been misguided. Fire suppression and exclusion is a trammeling effect. The return of quiet fire begins the process of *untrammeling*. It is time to revise our conceptions of wilderness.

Some Western Science practitioners have paused recently to listen attentively and with respect to the wisdom of elders, among both people and trees. The stories of these elders demonstrate that quiet fires are an integral, defining element of forests in the Great Lakes region. These frequent fires enhanced biodiversity and stabilized forest systems through periods of dramatic environmental change. They have the potential to increase forest resiliency to changing climate, unplanned wildfire, and non-native species in the years ahead. But, our current relationship with fire limits this potential. The knowledge and understanding required to reshape this relationship is just beginning to emerge in Western Science; it has always been there in the stories of our elders.

Go back to the list you wrote at the start of this story. Look over the impacts you wrote down. How many are positive or constructive? Pollution of water, air and soil, climate change, and species loss or extinction were likely included. Did you also write down “enrich biodiversity”? “Enhance balance”? “Promote resilience”? “Care for our relatives”? Were you subconsciously limited or biased by Western notions of humans as separate from nature—as unnatural? How does this limit your ability to live in good relation with the world around you? How does it limit your ability to envision a world of abundance, rooted in reciprocity? Can you imagine living within relationships that promote rich, diverse, and beautiful landscapes? Can you imagine that feelings of responsibility can be balanced by the optimism of knowing your place in the world, and that it is a good place?

The story of fire in Great Lakes Forests illuminates the way forward. Fire must be welcomed back into our wildlands, from our backyards to our most cherished wilderness landscapes. In doing this, we will create spaces for healing. Healing between people and land, healing among cultures, and healing of grasslands and forests. Healing relationships. In the same act, we can create opportunities to recognize humans as active participants and valued contributors to the complex, diverse, and beautiful systems of life that surround us. Webs of relationships, entwined through acts of reciprocity, of which we are a part. Bringing quiet fire to wilderness in partnership with communities who have done the same for millennia is the first step, and we can take it now.

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—EVAN LARSON AND LANE JOHNSON

*Sweetgrass and Red Pine, photo by Evan Larson.*