

Coalition for Archaeological Synthesis

People Fire and Pines Working Group



Photo credit: Lane Johnson

Final Report

August 3, 2023

Overview

The People, Fire, and Pines working group, established through support from the Coalition of Archaeological Synthesis (CfAS), first met in the fall of 2018. The five years since that meeting have included a pandemic, race riots, economic crises, political unrest, and substantial changes to the lives and families of working group members, all through multiple years of record wildfire activity. Those same years saw rapid growth in awareness and engagement across multiple spheres of social and environmental justice at the societal level, including an emerging awareness of Indigenous fire stewardship practices as key to living on many landscapes in a good way and recognition of Indigenous Knowledge as a fundamentally important guide for advancing the diversity, resilience, and well-being of cultural and ecological systems. Through this time of tremendous change, the support from CfAS helped establish, nurture, and grow relationships and a collaboration that is deeply engaged in this moment, creating real and substantial healing among communities, cultures, and ecosystems.

CfAS Supported Activities

The initial intent of the People, Fire, and Pines working group was to conduct a series of three in-person workshops that would bring together and synthesize Indigenous Knowledge and Western perspectives built from archaeological and tree-ring data to more completely, truthfully, and accurately share the long story of people engaging with the landscape through the eco-cultural process of fire. The outcomes of these synthetic collaborations were to contribute to the deconstruction of Western notions of wilderness, thereby creating opportunities for more engaged environmental stewardship to pursue sustainable societies. Two workshops were completed, the first in the fall of 2018 and the second in the summer of 2019. Planning for the third workshop was disrupted by the COVID-19 pandemic, which eventually led us to completely re-envision how we could approach completing the activities and objectives proposed in the original work plan. Importantly, the slowing down that was enabled, and in many ways required, in response to the pandemic helped the lessons learned from the first two workshops more completely permeate our thoughts and feelings, fundamentally shaping the products that emerged. As of the writing of this report, members of the working group have published three peer-reviewed papers, given over 25 invited lectures and presentations at scientific conferences, obtained additional grants worth \$512,000, released three digitally-rich story maps, produced two museum exhibits, drafted an illustrated children's book, released one film and filmed another documentary that is now in production; all of these products were shaped by the conversations that began in the fall of 2018 through the support of CfAS. Furthermore, the process of revising the Quetico Provincial Park fire management plan was shaped and a new burn plan was written for the University of Minnesota Cloquet Forestry Center. Cultural fire was returned to the Cloquet Forestry Center in the spring of 2022 through a collaboration between the Fond du Lac Band of Lake Superior Chippewa and the University of Minnesota, funded by the Bureau of Indian Affairs, and has set the stage for a resurgence in cultural fire across the Upper Great Lakes Region.

Workshop 1: In 2018, the core team of Jessica Atatise (Lac La Croix First Nation), Brian Jackson (Quetico Provincial Park), Lane Johnson (University of Minnesota Cloquet Forestry Center), Lee Johnson (USDA Forest Service), Robin Kimmerer (State University of New York College of Environmental Science and Forestry), Kurt Kipfmüller (University of Minnesota), Evan Larson (University of Wisconsin-Platteville), and Jeff Savage (Fond du Lac Band of Lake Superior Chippewa) met in person for a week-long workshop that took place at the University of Minnesota Cloquet Forestry Center, the USDA Forest Service Superior National Forest

Supervisor's Office, and the University of Minnesota Hubachek Wilderness Research Center in northern Minnesota. The workshop provided space for sharing of background, knowledge, and intent and a deep, collaborative contemplation of Western concepts of wilderness as related to traditional landuse practices and particularly Indigenous Fire Stewardship in shaping the forests of the Great Lakes Region. The workshop included presentations and outreach activities to engage members of the Fond du Lake Band of Lake Superior Chippewa and the Bois Forte Band of Lake Superior Chippewa.

Workshop 2: The second workshop took place on the Lac La Croix First Nation Reserve, which adjoins Quetico Provincial Park in Ontario, Canada, in August of 2019. Robin Kimmerer was unable to join for the workshop and connected the group with Melonee Montano, enrolled member of the Red Cliff Band of Lake Superior Chippewa and Traditional Knowledge Outreach Specialist for the Great Lakes Indian Fish and Wildlife Commission, who had strong family and cultural connections with the community at Lac La Croix. The group was additionally joined by Damon Panek, enrolled member of the White Earth Nation and Cultural Resource Specialist with Apostle Islands National Lakeshore, part way through the week. This workshop included time spent with elders of the Lac La Croix First Nation, collaborative work outlining drafts for two peer-reviewed papers and sharing a story that would eventually become an illustrated, dual-language children's book, and visits to numerous sacred sites in and around Lac La Croix and Quetico Provincial Park. The workshop served as an immensely powerful catalyst, particularly for those working predominantly from Western perspectives, to more clearly see this work through two eyes, both an Indigenous perspective and Western perspective. The conversations, listening, and learning from this week fundamentally reshaped the perspective and language incorporated in the emerging products of the working group.

Subsequent Activities: Initial plans for a third workshop, to be held in Duluth, Minnesota, to gather the diverse array of stakeholders and project partners engaged through the work and to share the outcomes of the effort were first delayed, and then set down completely in response to the COVID-19 pandemic and the associated impacts on working group members. In the following years, Brian Jackson retired from his position as Biologist for Quetico Provincial Park, Robin Kimmerer continued her meteoric rise in renown and associated demands on her time, and a host of personal impacts affected the group's ability to gather. In lieu of a third, in-person gathering, the members of the working group delved deeply into the products emerging from their work informed by the collaboration. The results of this work are detailed below, with links to resources where they are available.

Conclusions

It is difficult to fully capture the impacts of this work which is helping to reshape relationships among Indigenous and settler-colonial communities and perceptions and actions around fire stewardship across the Great Lakes Region. This final report includes descriptions of the myriad products developed through the synthetic efforts and new collaborations facilitated by CfAS support. Numerous tangible outcomes are detailed, but perhaps more importantly, the emotional, spiritual, and relational work catalyzed by this support is at the core of the current momentum around engagement with *Ishkode*, fire, that will continue to ripple outward for years to come. As described in the original call for proposals, the CfAS program was envisioned as a way to bring together diverse perspectives, data, and ways of knowing to enable transdisciplinary conversations and the emergence of radical new understanding. This has happened to substantial and dramatic results.

Products Developed and Shaped by Ideas Cultivated through CfAS Support

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Management Actions

[Collaborative Restor\(y\)ation of Fire-Dependent Places](#) - a picture essay shared by Lane Johnson and Ricky DeFoe through the blog of the Fire Adapted Communities Learning Network (FACLN) that describes the recent impacts and vision for the ongoing prescribed fire partnership between the Fond du Lac Band and University of Minnesota.

[Restoring Fire to the Cloquet Forestry Center](#) - a story and video describing the successful implementation of a series of prescribed fires at the University of Minnesota Cloquet Forestry Center conducted with guidance and collaboration of the Fond du Lac Band of Lake Superior Chippewa Fire Program and with funding from the Bureau of Indian Affairs.

[Collaboration between Ojibwe, Cloquet Forestry Center returns fire to landscape](#) - a newspaper article describing the impetus and collaboration that emerged to guide the successful restoration of cultural fire to the Cloquet Forestry Center within the Fond du Lac Reservation

[Once-Ignored Indigenous Knowledge of Nature Now Shaping Science](#) - a newspaper article on the integration of Indigenous Knowledge into forest management in northern Minnesota with fire restoration at the U of MN Cloquet Forestry Center as an example.

[Planned Fire Forged Through Partnership](#) - a local newspaper article highlighting the first collaborative prescribed fire at the U of MN Cloquet Forestry Center on the Fond du Lac Reservation

Creative Writing

[People, Fire and Pines: How Fire Use by the Anishinaabeg Shaped the Boundary Waters](#) - a Story Map by Clare Boerigter that explores the false-yet-still-dominant narrative of the Boundary Waters Canoe Area Wilderness as a wilderness “untrammelled by man,” drawing on the work and knowledge of a range of Ojibwe and non-Ojibwe experts to understand the influence of the Anishinaabeg on the forests of the Boundary Waters.

[How Indigenous Knowledge Reconnects Us All to Fire](#) - a 2022 article in yes! Magazine written by Jazmin “Sunny” Murphy that builds from the recent prescribed burns at Cloquet Forestry Center to contemplate the role of Indigenous Knowledge in shaping a sustainable society

[The Life and Times of Red Pine No. 3 of 4](#) – a 2021 Story Map detailing the tree-ring fire history of a long-lived red pine found at the University of Minnesota Cloquet Forestry Center.

[The Camp 8 Stand: The Story of the Cloquet Forestry Center's Old-Growth Red Pines](#) - a media-rich Story Map by Clare Boerigter that shares interconnections among the ecological, fire, and cultural history of land on which an old-growth stand of red pine reside within both the boundaries of the Fond du Lac Reservation and the University of Minnesota Cloquet Forestry Center.

[The Stories Trees Tell](#) - a blog post by Marie Zhuikov, communications expert with the Wisconsin Sea Grant Program, that introduces the *Nimaawanji'idimin Giiwitaashkodeng*, a project weaving Traditional Knowledge and tree-ring data together to tell a more complete story of people and fire at Zhaagawamikong Neyaashi, the landscape also known as Minnesota Point and Wisconsin Point near the sixth stopping point of the Anishinaabe migration.

[Back Forty: A tribe's quest for fire](#) - an interview by Nancy Averett, conducted for the Food & Environment Reporting Network, that talks to Melonee Montano and Evan Larson to explore the *Nimaawanji'idimin Giiwitaashkodeng* project.

Audio, Video, and Lectures

[Fire, Blueberries and treaty rights](#) - a 46-minute podcast produced by the Wisconsin Sea Grant program that explores the themes of environmental justice and equity through considering the relationships among people, fire, blueberries and pines

[Oshkigin: Spirit of Fire](#) - a 16-minute film sharing the deep cultural connections between Anishinaabe and fire. Awarded "Best of the Fest" at the 2022 Wild & Scenic Film Festival.

[Understanding Oshkigin](#) - a 56-minute video-recorded panel interview discussing ideas shared in the award-winning 2021 film *Oshkigin: Spirit of Fire*

[\[Un\]Natural Selection Ep. 5: Rekindling Wilderness](#) – a 22-minute podcast produced by Interlochen Public radio exploring notions of wilderness relative to Indigenous fire stewardship and long-term relationships between people and place.

[The Stories Trees Tell](#) - a podcast version of the story developed by Marie Zhuikov, communications expert with the Wisconsin Sea Grant Program, that introduces the *Nimaawanji'idimin Giiwitaashkodeng: We are all Gathering Around the Fire* project.

[Bringing People into the Wilderness](#) – a 2-minute episode of the Academic Minute podcast, produced by WAMC Northeast Public Radio that gives a brief overview of some of the ideas central to considering the role of people and fire in the Boundary Waters Canoe Area Wilderness

[A History of Fire in the Boundary Waters](#) – a 31-minute radio documentary on the history of fire in the BWCAW produced by Joe Friedrichs of WTIP Radio (Grand Marais) for KFAI's MinneCulture podcast.

[Fires Past and Fire's Future In the Boundary Waters Canoe Area Wilderness](#) – a 1.5 hour webinar for the W.J. McCabe Chapter of the Izaak Walton League describing a synthesis of fire history work in the Border Lakes Region, connections to Indigenous Fire Stewardship, and implications for conservation work in a changing future

[BWCA fire researchers featured in new Gunflint Trail exhibit at Chik-Wauk](#). A story produced by Joe Friedrichs at WTIP: North Shore Community Radio, that explores some of the implications of our research for wilderness enthusiasts

[Nimaawanjii'idimin Giiwitaashkodeng: Working with Fire to Heal the Land on Wisconsin and Minnesota Points](#) - a 1.5 hour lecture and webinar hosted by the River Talks speaker series that reports the results of the tree-ring research on Zhaagawamikong Neyaashi.

[Fire in Minnesota Ecosystems](#) - a series of workshops organized by the Lake States Fire Science Consortium that gathered speakers who explored a range of topics related to the important role and history of fire in the forests and prairies of the Upper Great Lakes.

Research Briefs

[Blending tree-ring fire-scar records and Indigenous memory in northern Minnesota, USA](#) – a concise, 2-page paper looking at the history of fire, forests, and blueberries at the UMN Cloquet Forestry Center, and their connection to traditional Anishinaabe landuse practices on the lands of the Fond du Lac Reservation

[Learning from the Ojibwe: Combining Culture and Dendrochronology Tools](#) – a short document describing how Chippewa National Forest staff are working with the Leech Lake Band of Ojibwe, the Leech Lake Tribal College, and the University of Minnesota to research and understand the historic use of fire in regional land management.

[Tree-ring records of human influence on historical fire regimes in the Boundary Waters Canoe Area Wilderness](#) - a 2-page review of the evidence for human-augmented fire regimes and their influences on forest structure in the BWCAW

[Fire History on Star Island \(Windigoominis\)](#) - a living document (story map) that contains information related to interdisciplinary fire history reconstructions developed for Star Island on the Leech Lake Reservation and Chippewa National Forest through a research partnership supported by the Chippewa National Forest and Minnesota Historical Society

Peer-reviewed Publications

[People, Fire, and Pine: Linking Human Agency and Landscape in the BWCAW and Beyond](#) – a peer-reviewed publication that examines the human influences on past fire regimes and the legacies of those relationships that are still present on the landscape (open access)

[Faces in the Wilderness](#) – a publication focused on the culturally-modified trees we observed across the BWCAW that includes some images of what the peels look like (open access)

[Human augmentation of historical red pine fire regimes in the Boundary Waters Canoe Area Wilderness](#) - a monograph-length paper in which we synthesize and quantitatively evaluate the full fire history dataset developed over a decade of research in the BWCAW to clearly identify the human component of a wilderness fire regime (open access)

Additional Funding

Fire history and Ojibwe landuse in the Chippewa National Forest - a 3-year, \$74,000 grant awarded to Kipfmüller, K.F. and Johnson, L.B., that supported outreach and engagement with the Leech Lake Band of Ojibwe. Minnesota Historical Society, Grant #G-HP-1903-23029

Nimaawanji'idimin giiwitaashkodeng: We are all gathering around the fire - a 2-year, \$238,000 grant awarded to Larson, E.R., Montano, M., and Kimmerer, R.W. to synthesize tree-ring data and traditional knowledge to understand the history of people, fire, and pines on *Zhaagawamikong neyaashi*, near the sixth stopping place of the Anishinaabe and at the head of Lake Superior. Wisconsin Sea Grant Award R/RCE-17

Planning: FIRE-PLAN: Merging diverse knowledge systems to advance restoration of fire-dependent lands and cultures in the Great Lakes region - a 2-year, \$200,000 planning proposal funded by the National Science Foundation that will establish a network of Fire Ecologists, Fire Practitioners, and Fire Knowledge Holders across the Upper Great Lakes Region to begin developing a larger proposal to the [Dynamics of Integrated Socio-Ecological Systems \(DISES\) Program](#) at NSF that will expand the People, Fire, and Pines effort to the scale of the entire Great Lakes

Presentations and Public Outreach (* indicates undergraduate student author)

Evan R. Larson and Melonee Montano. 2023. *Dibaajimowin Ishkode: A story of fire in the forests of the Great Lakes*. Great Lakes Indian Fish and Wildlife Commission Tribal Adaptation Menu Cohort Webinar, June 13.

Evan R. Larson, Melonee Montano, Lane Johnson, Kurt Kipfmüller, and Sean Dunham. *Indigenous Knowledge and Tree Rings Tell a Story of Reciprocity Between People and Pines in the Great Lakes Region*. Annual Meeting of the American Association of Geographers, March 23–27, Denver, Colorado.

Emily Lockling*, Ashla Ojibway*, Mocha Reynolds*, Valerie Zhaawendaagozikwe*, Melonee Montano, and Evan R. Larson. 2023. *Reconstructing a History of the Anishinaabe People Through Fire: Fire History at Zhaagawamikong Neyaashi*. Annual Meeting of the American Association of Geographers, March 23–27, Denver, Colorado.

Evan R. Larson. 2023. *Trees as Story Tellers, Healers, and Prophets*. University of Minnesota Department of Forest Resources, March 16, St. Paul, Minnesota.

Emily Lockling*, Ashla Ojibway*, Mocha Reynolds*, Valerie Zhaawendaagozikwe*, Melonee Montano, and Evan R. Larson. 2023. *Reconstructing a History of the Anishinaabe People Through Fire: Fire History at Zhaagawamikong Neyaashi*. 13th Annual St. Louis River Summit, March 8–10, Superior, Wisconsin.

Evan R. Larson. 2023. *Nimaawanji'idimin Giiwitaashkodeng: Together we are gathering around the fire*. Botany/Anthropology/American Indian Studies 474: Ethnobotany, University of Wisconsin-Madison, February 15.

Evan R. Larson, Melonee Montano, Valerie Zhaawendaagozikwe, Ashla Ojibway, Mocha Reynolds, Emily Lockling. 2023. *Using fire to heal the land*. The River Talks speaker series, Superior, Wisconsin, January 11.

Evan R. Larson. 2022. *Ishkode (fire) weaves social justice, biodiversity, and climate resiliency in Great Lakes Forests*. University of Wisconsin-Madison Environmental Engineering and Environmental Chemistry and Technology Graduate Seminar, December 9.

Evan R. Larson. 2022. *The story of people, fire, and pines in the Great Lakes*. Charles E. Brown Chapter of the Wisconsin Archaeological Society virtual presentation, December 8.

Evan R. Larson, Lane B. Johnson, Kurt F. Kipfmueller. 2022. *Fires past and fire's future in the Boundary Waters Canoe Area Wilderness*. Minnesota Division of the Izaak Walton League of America webinar, February 22.

Evan R. Larson, Kurt Kipfmueller, Lane Johnson, and Elizabeth Schneider. 2021. *The Role of People and Fire in Shaping the Pristine Forests of the Boundary Waters Canoe Area Wilderness*. Association for Fire Ecology, November 30–December 3 [Virtual conference].

Jackson, Brian, 2021. *Historical and Cultural Significance of White and Red Pine in Quetico Provincial Park*. Webinar Presentation to Nipissing Naturalists Club, North Bay ON. Nov. 9.

Jill Legault-Sorensen and Jackson, Brian. Opened in 2021. *Fire and Red Pine Display at Quetico Provincial Park Pavilion* (www.friendsofquetico.com/2021/05/29/new-red-pine-fire-history-display/)

Jackson, Brian, 2021. *Historical and Cultural Significance of White and Red Pine in Quetico Provincial Park*. Webinar Presentation to Thunder Bay Field Naturalists. April 26.

Evan R. Larson. 2021. *Forests, Fires, and People: Fire History*. Shifting Seasons Summit, April 19–21, College of Menominee Nation, Keshena, Wisconsin.

Evan R. Larson. 2021. *Paths in the Wilderness: A narrative of people and land from the rings of trees*. Headwaters Unitarian Universalist Fellowship, March 7, Bemidji, Minnesota.

Evan R. Larson. 2020. *History as guide in approaching a reciprocal relationship with fire and forests of the Upper Great Lakes Region*. Wisconsin DNR Division of Forestry Biennial Statewide Conference, February 18–20, Appleton, Wisconsin.

Evan R. Larson. 2020. *History as guide in approaching a reciprocal relationship with fire and forests of the Upper Great Lakes Region*. Fire in Minnesota Ecosystems Workshop, January 29–30, University of Minnesota Cloquet Forestry Center.

Jackson, Brian, 2020. *Red Pine Fire History in Quetico and the Heart of the Continent region*. Presentation to Heart of the Continent Partnership Winter Gathering. Quetico Centre, Atikokan ON Jan. 17

Kurt F. Kipfmueller, Caitlin Bell, Sean B. Dunham. 2019. *Tree Rings, fire, and history on Star Island, Cass Lake, MN*. Midwest Archaeological Conference, October 11, Mankato, Minnesota.

Evan R. Larson and Mishiikeh Altman. 2019. *Merging western science and Traditional Knowledge to engage learners through fire history research*. Seven Generations Inter-Tribal Leadership Summit. Lac Courte Oreilles Ojibwe Community College, October 3–4, Hayward, Wisconsin.

Evan R. Larson. 2019. *History as guide in approaching a reciprocal relationship with fire and forests of the Border Lakes Region*. Lake States Fire Science Consortium Living with Fire Workshop, July 13, Grant Marais, Minnesota.

Evan R. Larson. 2019. *Wilderness burning: The long story of people, fire, and pines in the Boundary Waters Canoe Area Wilderness*. Fried Green University, April 18, Galena, Illinois.

Jackson, Brian, 2019. *Red Pine, Fire and People in Quetico*. Presentation to Friends of Quetico Annual Meeting, Finlandia Club, Thunder Bay ON. April.

Evan R. Larson and Eugene Tesdahl. 2019. *Reconsidering wilderness*. UW-Platteville College of Liberal Arts and Education Faculty Forum lecture series, March 7, Platteville, Wisconsin.

Additional References, Reports, and Works in Progress

Larson, E.R. and Montano, M. In prep. Dibaajimowin Ishkode: A Story of Fire. This will be a dual language children's book that is drafted in English, currently being illustrated, and will be translated into Anishinaabemowin; 1,000 copies are set to be published by Black Bear and Blueberries Press, and Indigenous owned publishing house in Duluth, MN; the text will be incorporated into the Rivers2Lake Curriculum of the Lake Superior National Estuarine Research Reserve.

Jackson, B.W. 2022. Background Information for Terrestrial Ecosystem Stewardship and Fire Management Planning for Quetico Provincial Park/*Weh-weh-nih Gih nah wen dah meeng Aki mih*- Initial Draft v1.9. Quetico Provincial Park report. 104p.

Jackson, B.W. 2021. Relationship between Lightning and Fires in Quetico Provincial Park – Preliminary Analysis. Quetico Provincial Park report. 20p

Kimmerer, R. W. 2021. White Pine. In J. C. Ryan, P. Vieira, & M. Gagliano (Eds.), *The Mind of Plants: Narratives of Vegetal Intelligence* (pp. 423–432). Santa Fe, New Mexico: Synergetic Press.

Kipfmueller, K.F., Burnette, A., DeVault, D. Dunham, S.B., Gotchie, M., Johnson, L.B., Neville, M. 2021. An equitable partnership for sharing knowledge on the impacts of cultural fire use on fire-dependent landscapes of northern Minnesota. Final Report to the Minnesota Historical Society, Grant #G-HP-1903-23029

Jackson, B.W. 2020. Distribution of Red and White Pine in Relations to Shorelines in Quetico Provincial Park – Draft. Quetico Provincial Park report. 10p. +app

Godwin, Daniel; Lasky, Dave; Graeve, Matt; Johnson, Lane B; Gill, Kyle G; Priestley, Paul; Lynch, Mike. 2020. University of Minnesota Cloquet Forestry Center Programmatic Burn Plan 2020. Retrieved from the University of Minnesota Digital Conservancy, <https://hdl.handle.net/11299/216903>.

Jackson, B.W. 2019. Best Practices for Authentic Resource Stewardship Engagement between Indigenous and Non-indigenous Peoples. Quetico Provincial Park report. 7p.

Larson, E.R. 2019. A Preliminary Fire History at the Painted Rocks Site of Lac La Croix, Along the Kaministiquia Route, and their Surrounds, Quetico Provincial Park. U of Wisconsin-Platteville. 14p + app.

Jackson, B.W. 2019. Observations of the Regeneration of Red and White Pine on Islands in the Absence of Fire – Quetico Provincial Park. Quetico Provincial Park report. 16p +app.

Jackson, B.W. 2019. Fire, Disturbance and Quetico Provincial Park. Quetico Provincial Park report. 6p

Jackson, B.W. 2019. The Pines Beach – Pickerel Lake. Quetico Provincial Park report. 8p

Jackson, B.W. 2018. Summary of Red and White Pine Scar Observations – Kawa Bay of Kawnipi Lake, Quetico Provincial Park. Quetico Provincial Park report. 5p+app

Jackson, B.W. 2018. Red Pine, Fir and People: Understanding the historical human influence on surface fires in Quetico Provincial Park. Quetico Provincial Park report. 1p
https://queticofoundation.org/wp-content/uploads/2018/07/Red-Pine-poster_portrait.pdf