WESTERN ASPEN ALLIANCE

TREMBLINGS

NEWSLETTER & BULLETIN BOARD

Vol. 16(2), May 2025

Partnering to preserve and restore healthy aspen ecosystems

MEMBER PARTICIPATION: The WAA is a virtual science-based community. Send us aspen-related publications, management plans, and media mentions and we'll help spread the word. Contact Paul Rogers, Director: p.rogers@usu.edu.

Share *Tremblings* with your friends and colleagues.

New members welcome! Sign up here

WAA HAPPENINGS

Show Me the WAA—We'd love to get your input on the future direction and financing of the Western Aspen Alliance. As a non-profit housed at Utah State University, we gain no funding directly from the university and are responsible for independently attracting our own resources. Alternative proposals, for instance partnering with other regionally established science-based institutions, are welcome, too! If you value accessible aspen conservation science and have ideas about how we can achieve this lofty goal, please contact Paul Rogers with your suggestions.

Support Federal & University Partners—A broad network of university, federal/state government, NGO, and private citizens comprise WAA partners. Many of those entities are facing direct or indirect impacts of funding and personnel cuts in recent months. Among other things, institutional moral impacts aspen resilience. The WAA pointedly collaborates across disciplinary and ownership boundaries for sustainability of aspen ecosystems. This successful network of science-based stewardship could not work without all of you! Thank you, land/wildlife/water managers and scientists for your service and dedication to healthy aspen landscapes!

Forest Bathing with Aspen at Aspen, CO—Numerous cultures extol healing properties of immersing oneself in aspen groves. A recent article in *The Aspen Times* discusses the Japanese tradition of forest bathing. According to at least one enthusiast, quaking aspen are an ideal environment for this activity. Perhaps in our current challenging, overstressed condition a quick forest dunk centered in a local aspen clone is just what the doctored ordered.

Aspen's Winter Growth, A 'Cheery' Site—This article for general audiences from Susan Pike at *Seacoastonline* contemplates aspen's winter growth. The author points out how the cheery greenish tint to the bark powers the species year-round!

Newly emerged Eurasian aspen (Populus tremula) leaves *have a prominent rust color. Their more pronounced marginal serration and roughened bark distinguish them from North American* P. tremuloides. *Globally aspen perform similar important ecological functions, while facilitate greater biodiversity (Photo: Paul Rogers, April 19, 2025, Poiana Brasov, Carpathian Mountains, Romania).*

WESTERN ASPEN ALLIANCE

TREMBLINGS

NEWSLETTER & BULLETIN BOARD

Vol. 16(2), May 2025

UPCOMING EVENTS

Upcoming Poplar & Willow Conference: The annual meeting of the Poplar and Willow Council of Canada will take place in Amos, Québec from August 17 to 20. The program includes oral and poster presentations by national and international experts addressing all topics related to poplars (including aspen) and willows in North America and globally. Abstracts can be submitted online until May 30th 2025. Details of the program and procedures related to this conference may be found at the Poplar and Willow Council of Canada website. Specific questions may be directed to John Kort here.

Summer 2025 Aspen Workshops:

- July 21-22, Ovando, Montana – Hosted by the Blackfoot Challenge, the workshop will include a half-day classroom session addressing various aspects of aspen conservation science, as well as local case studies, followed by a full-day of field-based discussions. Contact Elaine Caton (Blackfoot Challenge, Education Coordinator) if you are interested in this workshop.

If your group is interested in scheduling an aspen workshop in 2025, contact WAA Director Paul Rogers. This may be the final year of the WAA co-hosting such events.

COMMENTARY

Aspen, Fire, and People: Then and Now

Eva Strand. Professor of Rangeland Ecology, University of Idaho

People living and working in the Great Basin, USA, are observing changing fire conditions. Larger and more frequent fires across the West are well-documented, but less is known about how these changes manifest across Great Basin ecosystems, including in quaking aspen. In our recent *Ecosphere* paper, mean fire return interval (mFRI) changes across major Great Basin vegetation types between 1961–1990 and 1991–2020, were compared with LANDFIRE's historical (pre-1900) estimates. For those not familiar with mFRI, it is the average number of years between successive fires at a specific location in a given vegetation type.

In quaking aspen woodlands, the 1991–2020 mFRI was an estimated 250 years in the Central Basin & Range and 100 years in the Northern Basin & Range, considerably longer than historical estimates of ~30 years. During 1961–1990, mFRI exceeded 1,000 years in quaking aspen and several other ecosystems. This extremely long mFRI was likely due to cooler climate conditions, effective fire suppression, and reduced fine fuels from grazing. Long fire-free intervals also help explain conifer dominance due to advancing succession observed in quaking aspen stands during the 20th century.

While these results offer a broad-scale view of fire in aspen in the Great Basin over the past decades, fire dynamics in these woodlands are complex. Recent studies rarely report fire scars on quaking aspen, suggesting that low-severity fires, or fires in general, are not common in these woodlands. Quaking aspen is largely considered fireproof and

WESTERN ASPEN ALLIANCE

TREMBLINGS

NEWSLETTER & BULLETIN BOARD

Vol. 16(2), May 2025

not likely to burn naturally during a normal fire season. Yet, earlier fire studies from the 1920s report fire scars on quaking aspen, likely resulting from Indigenous burning. LANDFIRE models therefore suggest historical mFRI of aspen that succeed to conifers of about 70 years for stand-replacing events and mFRI of about 30 years for low to moderate severity fires in these woodlands. The *Tremblings* (Feb 2025) commentary by James Calabaza (Indigenous Lands Program) confirms that Indigenous burning was historically common in quaking aspen for rejuvenation, fuel reduction, and to promote diversity. A recent Great Basin Fire Science Exchange publication (Stone 2024) describes how Shoshone-Bannock Indigenous burning in quaking aspen is both historical and ongoing.

Looking forward, increased fire frequency in quaking aspen woodlands that approaches historical mFRI for high-severity fire has the potential to benefit quaking aspen stands that are seral to conifers. More fire may also open suitable sites for seed regeneration and new clone establishment, which have seen widespread documentation in recent years. Observed changes are likely driven by climate shifts, including rising temperatures, earlier snowmelt, and higher vapor pressure deficits (a fire risk indicator).

A warmer climate with longer, drier summers could reduce water availability in some quaking aspen stands, although future moisture predictions are variable and dependent on local hydrology. Drier conditions may also increase fire intensity and severity, which have consequences for post-fire recovery. Indigenous burning is a piece of the puzzle often overlooked in Western science. As James Calabaza indicated, there is much to reflect on and learn from in the nexus between Western science and Native Cultural practices related to quaking aspen, fire, and people. Quaking aspen is resilient and fire-adapted, but future management must consider both traditional knowledge and scientific research, embracing both adaptation and experimentation.

WAA *Creates*

"WAA Creates" requests diverse aspen-related art from across our membership. We encourage fiction, folklore, poetry, drawings, paintings, photography, and other artistic expressions. Send your stuff to Tremblings.

Peeking Through
(water color)

Margaret Pettis
Hyrum, Utah

From the artist: *Aspen are as much about sudden, stark, bright light in a forest as their papery patter in a swelling breeze. I feel welcomed to wander among them, invited on a silent walk through their world, leaving noise behind.*

.

Find additional art by Margaret at: margaretpettis.com.

RECENT ASPEN PUBLICATIONS

A word on Open Access: The Western Aspen Alliance strongly supports open access publishing (CC-BY). Articles with hyperlinks below are available for download and sharing following Creative Commons rules for attribution.

WESTERN ASPEN ALLIANCE

TREMBLINGS

NEWSLETTER & BULLETIN BOARD

Vol. 16(2), May 2025

Cline, A. V., and C. P. Laroque. 2025. Below-ground carbon gradients surrounding Saskatchewan's native agricultural copses. Science of The Total Environment 979:179525.

Gifford, T. S., and J. M. Zobel. 2025. Dominant/Codominant Height and Site Index Models for Aspen in the Lake States. Forest Science:1-21.

Hernández-Velasco, J., J. C. Hernández-Díaz, S. L. Simental-Rodríguez, J. P. Jaramillo-Correa, D. S. Gernandt, J. J. Vargas-Hernández, I. Porth, R. Goessen, M. S. González-Elizondo, M. Fladung, C. Sáenz-Romero, J. G. Martínez-Ávalos, A. Carrillo-Parra, E. Mendoza-Maya, A. Blanco-García, and C. Wehenkel. 2025. Causes of heterozygosity excess: the case of Mexican populations of Populus tremuloides. Plant Diversity.

Jouy, F., M. Schüle, Y. Adhikari, A. Binder, D. Clerc, W. Gerwin, T. Heinken, T. Raab, F. Repmann, and S. Rönnefarth. 2025. Factors impacting the variability of post-fire forest regeneration in central European pine plantations. Restoration Ecology:e70017.

Kramer, L. 2025. Climate-Adapted Forests in Arizona and New Mexico: An overview of forest composition and review of common garden studies. USDA Southwest Climate Hub. 29 pp.

Rogers, P.C. 2025. Bryce Canyon Aspen: Recent Trends, Future Actions. Report to USDI, National Park Service, Bryce Canyon National Park. Western Aspen Alliance, Utah State University, Logan, Utah. 22 pp.

Shah, A., E Hamant, JG Rubalcaba, B Larkin, AA Forbes, HA Woods. 2025. Contrasting effects of climate warming on hosts and parasitoids: insights from Rocky Mountain aspen leaf miners and their parasitoids. Proceedings of the Royal Society B 292:20242679.

Strand, E. K., K. Blankenship, C. Gucker, M. Brunson, and E. MontBlanc. 2025. Changing fire regimes in the Great Basin USA. Ecosphere 16:e70203.

Wang, D. 2025. Potential of using trembling aspen to make structural engineered wood products. University of New Brunswick, St. Johns, New Brunswick, Canada. 216 pp.

Zhang, M. 2025. Feasibility of Producing Non-structural Wood Products Using Trembling Aspen Lumber. University of New Brunswick, Saint John, New Brunswick, Canada. 275 pp.

CONTACT WAA:

Paul C. Rogers, Director, Western Aspen Alliance, Utah State University, Logan, UT: Email

Emmon H. Rogers, *Tremblings* Reviewer/Editor, Lewis & Clark Library, MT

Website: http://www.western-aspen-alliance.org/

Consider a tax deductable
DONATION
To ensure the 'sucker born every minute' will survive!

You are receiving this newsletter as a WAA subscriber. To unsubscribe from this list, please email sympa@lists.usu.edu with "Unsubscribe" in the subject line, leaving the body of the message blank