



TREMBLINGS

NEWSLETTER & BULLETIN BOARD

Vol. 11(2), May 2020

Partnering to preserve and restore healthy aspen ecosystems

MEMBER PARTICIPATION: The WAA is a virtual science-based community. Send us aspen items of interest 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!



Unusual times call for unusual measures. WAA Director, Paul Rogers, is spending more time in the single-ramet "forest" of his yard, rather than aspen landscapes around the West. Who knows what discoveries may be found here? As we all shelter-in-place let's take time to prioritize safety, family, friends, and our natural surroundings, if even at the most local scale (Photo: Anne Hedrich).

WAA HAPPENINGS

WAA's Spring Fundraiser—The Western Aspen Alliance is a member supported organization; we do not receive base operating funds from Utah State University. As a portion of WAA's work, we invest considerable experience and time in providing the resources found in this newsletter (i.e., current science compilation, event organization and notification, diverse expert voices, and media alerts). Thus, we are initiating an annual fundraising campaign—like public TV/radio!—to solicit [voluntary donations](#) compatible with the budgets of WAA users. The online process is easy and tax deductible. Thank you for your support and contributions to science-based aspen management. We will announce the results of the fund drive in the August *Tremblings*.

Send WAA Your Articles—We count on the WAA community to actively contribute recently published works, including peer reviewed articles, technical reports, white papers, agency reports, management plans, and miscellaneous contributions. We will post these works in *Tremblings* and also entered into the online Aspen Bibliography and Spatial Bibliography. If you are unsure whether to contribute a published work, please send it to [Paul Rogers](#) as we welcome everything! Additionally, send us links or PDFs to aspen-related articles from any media outlets. We want to publicize aspen in the news!

Help Document Aspen Seedling Events—Are you aware of any unpublished aspen seedling events in the western U.S? Mark Kreider, a graduate student at Utah State University, is building a database of aspen seedling events with which to study sexual regeneration patterns. Contact Mark [here](#).

UPCOMING EVENTS

July Aspen Ecology Webinar—The Natural Areas Association will be hosting a webinar entitled "Aspen Ecology & Conservation" by Paul Rogers, WAA Director, July 21 from noon-1:00 p.m. ET (U.S.) Check out the full 2020 schedule of [NAA webinars](#).

and don't miss their upcoming conference and aspen special session in Oct. (see below).

Conservation Biology Conference—The [North American Congress for Conservation Biology](#) will hold their annual conference in Denver, Colorado July 26-31, 2020. The conference theme is “Crossing Boundaries: Innovative Approaches to Conservation” and promises to be an engaging event covering a range of topics surrounding social, political, and ecological boundaries with a focus on the Rocky Mountain West. [COVID-19 updates at website.](#)

Restoring the West 2020—“Restoring at Lunch” 2020 is presenting a lunchtime [virtual conference](#) sessions on Oct. 6-7. Check the website for updates on topics and speakers.

Natural Areas Conference, Aspen Session—Planning is underway for the [Natural Areas Association](#) conference in Reno, NV Oct. 13-16, 2020. The WAA will be leading a Special Session addressing quaking aspen issues in the West. We anticipate a full-day aspen session covering many science-management issues, including ungulate herbivory, climate warming, fire ecology, and development pressures. Contact [Paul Rogers](#) if you'd like more information on this event. [COVID-19 updates at website.](#)

Aspen Workshops 2020—As you might have guessed, the COVID-19 pandemic has scrambled schedules for 2020 aspen workshops. As of May 7, these are the tentative dates of events:

- **Wyoming Aspen Days:** Baggs, Wyoming, August 4-6. Contact: [Ian Tator](#), Wyoming State Habitat Biologist, WY Game & Fish.
- **Sierra Nevada Aspen Workshop:** Markleeville, California, Sept. 22-24. Contact: [Coreen Francis](#), NV/CA Forestry Lead for BLM.
- **SW Montana Aspen Workshop:** Dillon, Montana, Sept. 28-29. Contact: [Emily Harkness](#), Project Coordinator, Heart of the Rockies Initiative.
- **Other Aspen Events in Your Area?** Contact the [WAA Director](#) and let us know your plans.

- **Looking at 2021:** Tentatively Colorado, Alaska, Wyoming, and Idaho. What locations do you want to see 2021?

COMMENTARY

Looking ahead at Hart Prairie Preserve

Steve Kinback, Hart Prairie Preserve Manager, The Nature Conservancy, Flagstaff, Arizona



Can we strive to be as resilient as the places, ecosystems, and species we are trying to protect and manage? I ask myself this as I make the first rounds of the year with the new seasonal staff at Hart Prairie Preserve (HPP). And my answer is yes. We must do so during these trying times, to continue to carry on with our mission and implement best management practices to give our special places a fighting chance.

The Nature Conservancy's (TNC) HPP is nestled at 8500' (2600 m) on the west side of the San Francisco Peaks near Flagstaff, Arizona. HPP is surrounded by aspen and cool mixed conifer forest, alongside a locally rare high elevation wet meadow which is home to the world's largest stand of the Bebb Willow (*Salix bebbiana*). Since acquiring HPP in 1994, TNC staff have been prioritizing projects to manage for a more resilient, historically structured, and less catastrophic-fire prone forest both within the preserve boundaries and across the fence on U.S. Forest Service lands through a master participating agreement and the Hart Prairie Fuels Reductions and Forest Health Restoration Project.

HPP supports three stands of seral aspen, all of which have seen varying levels of treatments to reduce competing conifers, hazardous ladder fuels, and concentrations of dead and down fuel. Between 2007 and 2009, in an attempt to encourage regeneration and reduce browsing by ungulates, three aspen exclosures were constructed at HPP within these stands. Now, after a decade of exclosures, we can see the strong suckering response within the fences that we anticipated. But what's next? Are we “resilient” now? Most of us realize that is not the case;

it will be necessary to adopt and modify a plethora of strategies to manage for long-term resilience.

In three seasons as manager at HPP and I have been fortunate enough to meet many local researchers, partners, and TNC staff who have helped produce the science and develop the procedures that have begun to shape my vision of future aspen at HPP. That future consists of, not just a continuation of the past strategic thinning and fencing, but complimenting these treatments with a rotation of prescribed fire across aspen and prairie vegetation types.

The objectives outlined in HPP management plans are achievable and progress has been made, but we intend to utilize HPP and our projects as a platform for innovation and learning. Last year, a Workshop on Ecological Burning was held at HPP with support of the Arizona Chapter of TNC and TNC's Fire Learning Network and brought together fire practitioners nationally to unpack all of the intricacies that go into developing a burn plan, managing fire to achieve ecological objectives, documenting what occurred, and sharing and adapting prescribed burning methods for future treatments. The workshop illuminated the benefits and need of a multifaceted approach to management at HPP. Our aspen are part of a delicate and diverse system, and our management will need to be just as equally delicate and diverse in order to work towards resiliency.

WAA Creates

WE NEED YOUR CREATIONS FOR UPCOMING TREMBLINGS!

"WAA Creates" showcases artistic aspen-related contributions. We encourage fiction, folklore, poetry, drawings, paintings, photography, and other artistic expressions. [Send your stuff](#) to share with WAA readers.

Unknown Origin

(Photo)



Lance Oditt

Seattle, WA

The artist: Lance Oditt is Photographer At-Large for the Western Aspen Alliance. His words: "A downed tree in the Pando aspen clone plays host to a hatched bird egg and a late summer leaf providing a preview of the advancing autumn gold."

Find more of Lance's work at [Studio 46.70° North](#).

RECENT ASPEN PUBLICATIONS

- Andrus, R. A., S. J. Hart, and T. T. Veblen. 2020. Forest recovery following synchronous outbreaks of spruce and western balsam bark beetle is slowed by ungulate browsing. *Ecology* 101:e02998.
- Assal, T.J. 2020. Quaking Aspen: The Iconic and Dynamic Deciduous Tree of the Rocky Mountains. In M.J. Keables (ed.), *The Rocky Mountain West: A Compendium of Geographic Perspectives*. Amer. Assoc. of Geog., Washington D.C. pp. 20-28.
- Brédoire, F., Z. E. Kayler, J.-L. Dupouey, D. Derrien, B. Zeller, P. A. Barsukov, O. Rusalimova, P. Nikitich, M. R. Bakker, and A. Legout. 2020. Limiting factors of aspen radial growth along a climatic and soil water budget gradient in south-western Siberia. *Agricultural and Forest Meteorology* 282:107870.
- Brewen, C. 2019. Multidecadal change in Aspen experiencing long-unburned, mixed-severity wildfire, and reburn disturbance regimes. Humbolt State University. [MS Thesis.] 50p.

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Ding, C., A. Hamann, R.-C. Yang, and J. S. Brouard. 2020. Genetic parameters of growth and adaptive traits in aspen (*Populus tremuloides*): Implications for tree breeding in a warming world. *PloS One* 15:e0229225.

Ghosa Mekontchou, C., D. Houle, Y. Bergeron, and I. Drobyshev. 2020. Contrasting Root System Structure and Belowground Interactions between Black Spruce (*Picea mariana* (Mill.) BSP) and Trembling Aspen (*Populus tremuloides* Michx) in Boreal Mixedwoods of Eastern Canada. *Forests* 11:127.

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Kruger, E. L., K. Keefover-Ring, L. M. Holeski, and R. L. Lindroth. 2020. To compete or defend: linking functional trait variation with life-history tradeoffs in a foundation tree species. *Oecologia* 192:893–907.

Komonen, A., L. Tuominen, J. Purhonen, and P. Halme. 2020. Landscape structure influences browsing on a keystone tree species in conservation areas. *Forest Ecology and Management* 457:117724.

Kretchun, A. M., R. M. Scheller, D. J. Shinneman, B. Soderquist, K. Maguire, T. E. Link, and E. K. Strand. 2020. Long term persistence of aspen in snowdrift-dependent ecosystems. *Forest Ecology and Management* 462:118005.

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O'Brien, M., and Coles-Ritchie, M. 2020. [Pando Clone Recovery: Repeat Photos 2014-2019](#). Grand Canyon Trust, Flagstaff, AZ. 25 p.

Potter, C. 2020. Snowmelt timing impacts on growing season phenology in the northern range of Yellowstone

National Park estimated from MODIS satellite data. *Landscape Ecology* 35:373–388.

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Terrail, R., J. Morin-Rivat, G. de Lafontaine, M. J. Fortin, and D. Arseneault. 2020. Effects of 20th-century settlement fires on landscape structure and forest composition in eastern Quebec, Canada. *Journal of Vegetation Science* 31:40-52.

WAA PARTNERS:



If your organization would like to become a WAA partner contact Director [Paul Rogers](#)



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