

GREAT BASIN

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President's Message



Three months ago in this space, I wrote about our plans for an in-person meeting of the Great Basin chapter to be held in Boise in March. Unfortunately, that wasn't meant to be. Due to agency travel restrictions, various conflicting meetings, and the timing of school spring break events, very few members submitted abstracts to present at the meeting. We were planning the meeting in partnership with the Great Basin Consortium, but they were running into the same challenge that we were.

Reluctantly, we decided to cancel.

However, we still very much **need to meet**. An organization like ours exists so that we can learn from each other – our successes as well as the challenges we face. For that reason, we're now planning a virtual SER-Great Basin meeting for **Wednesday, April 26**. Details are still being worked out, but you can soon expect an email with an agenda of talks from experienced restoration professionals, research scientists, and student presenters, along with a lunch business meeting. Once they're firmed up, you'll also be able to find details on our website.

In other news, I meet regularly with other chapter leaders to discuss restoration issues across the globe. SER is planning for the 10th World Conference on Ecological Restoration, to be held in Darwin, Australia, Sept. 26-30, 2023 (<https://ser2023.org>). Because travel to global conferences can be difficult for many people, the Society has also begun planning a North America conference that will take place in Vancouver, British Columbia, next year. It will be co-hosted by the Western Canada and U.S. Northwest chapters, but we may be called upon to help as the time draws nearer.

One new initiative for the World Conference is a film festival organized by student members of the Society. The competition is open to existing and new films and may be submitted by students and professionals in the field of ecological restoration as well as established or emerging film makers. More information can be found here: <https://ser2023.org/program/film-festival/>

President's Message cont'd.

I also am part of SER's Chapter Relations committee, which discusses topics of interest across the entire society, which has chapters on every continent except Antarctica. Our last session earlier this month focused on how professional chapters can assist student chapters. That was already a priority for us in Great Basin, as we have student affiliate organizations at Brigham Young University, the University of Nevada-Reno, and Utah State University. Elsewhere in this newsletter you'll hear more about what the students are doing as they prepare to be the next generation of restoration professionals.

Mark Brunson Professor
Dept. of Environment and Society,
Utah State University—
Mark.Brunson@usu.edu



Balsamorhiza hookeri—Hooker's balsamroot—
BLM Seeds of Success Smug Mug Photo.

SER at Utah State University

Utah State's newly formed SER group has been settling in and getting involved in various restoration projects this year. In the fall we participated in a pollinator planting as well as a shrub planting event. Most of the winter was spent fundraising and planning, and we just had our first real activity since it cooled down, participating in a biochar project at the Bear River Massacre site near Preston, Idaho.

Our first activity—the pollinator planting (Figure 1) — involved helping plant some pollinator friendly native plants in a site that is home to a rare species of flower, helping preserve its habitat after some trees were removed from the area. We collaborated with the Bear River Land Conservancy on this activity and we loved working with them.

Later in the fall we had an opportunity to help the US Forest Service and USU's Wildlife Society club with another planting (Figure 2). This one was an effort to restore habitat for mule deer, elk, and sage grouse by planting bitterbrush.

Over the winter we focused on fundraising efforts (Figure 3) with some craft nights and meetings to prepare for our events. We made and sold some pressed plant frames, Christmas ornaments, bookmarks, and mobiles. We then sold these at several different events to raise money for future activities.

Finally, we have recently had the chance to help with restoration efforts occurring at the Bear River Massacre site in southern Idaho as a part of a multi-organization collaboration to help restore this land to its former state. Our participation in this effort (Figure 4) involved helping out with a biochar event, burning Russian Olive trees in special kilns that control airflow and assist in trapping carbon in a more ecologically-friendly way. Overall we have been getting to a great start and are excited to get a chance to do more!



Figure 1.



Figure 2.

“Overall we have been getting to a great start and are excited to get a chance to do more!”



Figure 3.



Blue Mountain prairie clover - *Dalea ornata* (DAOR2) - BLM Seeds of Success Smug Mug Photo.



Figure 4.

UNR Restoration Club: A Look Ahead

Ranae Zauner, Aramee Diethelm, Otis Clyne, and Dr. Beth Newingham

The University of Nevada, Reno Restoration Ecology club held our first fundraiser, a holiday plant sale, in December. We are happy to report we sold nearly 40 plants during our sale! The funds generated from this sale will go toward club dues and used to establish a fund for potential upfront costs for future events. We would like to thank everyone who donated plants and volunteered time to help pot plant cuttings and water plants leading up to the sale.

We have spent the start of the first month of the Spring 2023 semester focusing on planning spring field trips to local restoration areas and are looking forward to seeing the outcome of all the rain and snow the greater Reno/Tahoe area has seen this winter. We are also in the beginning phase of organizing a film festival that will be open to the larger Reno community. We look forward to announcing the details soon!

Lastly, we would like to congratulate Laura Shriver on her recent graduation and thank her for her hard work and heavy lifting in establishing our Restoration Club at UNR. Thank you, Laura!

Name That Seed

Corey Gucker, USFS Rocky Mtn. Research Station

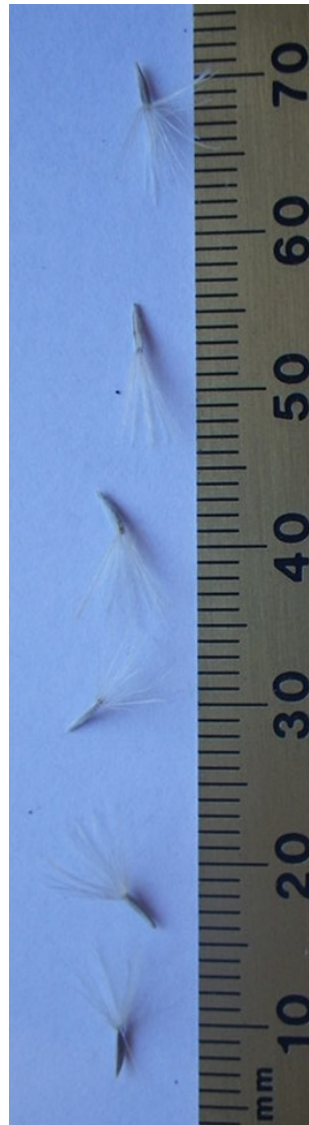


Figure 1. Seeds (cypselas or false achenes) with their pappi attached. Photo: BLM ID931 SOS.

This short-lived forb is broadly distributed throughout the West. It grows in grasslands, shrublands, woodlands, and pine forests from about 1,000 to 11,000 feet in elevation, but is most common in open, dry low-elevation sites. It grows well on medium- to coarse-textured soils with rooting depths of at least 10 inches at sites averaging at least 8 inches of precipitation a year. Plants are taprooted and produce one to many spreading or erect stems ranging from 2.5 to 40 inches tall. Flowering is indeterminate. Flowers are produced in the first year and appear any time from June to November. Plants are fast growing pioneer species that readily establish from seed on disturbed sites. Its abundance and persistence may benefit from periodic disturbance.

This species attracts a variety of pollinators and provides a valuable food to late summer and early fall pollinator food source. In some years, some flowers are still present in mid-November, depending on plant variety and weather conditions. In seed production trials conducted by the USDA NRCS Aberdeen Plant Materials Center (IPMC) in southern Idaho, flowers were visited by furrow bees (*Halictus* spp.), striped sweat bees (*Agapostemon* spp.), and European honey bee (*Apis mellifera*), bee flies (Diptera: Bombyliidae), western white butterflies (*Pontia occidentalis*), and garden white butterflies (*Pieris* spp.).

Hint: This species is broadly distributed in western North America. It is highly variable and grows as an annual, biennial, or short-lived perennial.

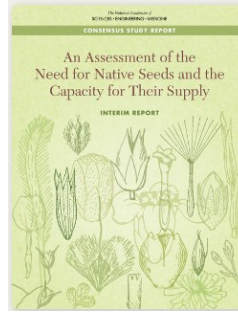
Western Indigenous peoples including the Paiute, Shoshoni, Zuni, and Navajo, used this plant medicinally to treat nose and throat illnesses, swollen jaws and glands, headaches, and to purge their systems.

Wildland seed is typically mature with 4 to 5 weeks of flowering. Seed is collected by hand stripping or shaking stems over a container. Collections are made when seed heads have dry, brown flower petals and the seeds are dry and firm. Several collections can be made from the same site over the ripening period.

Based on field growth trials, harvestable seed is available after the first full growing season and for some ecotypes two to three additional years of seed harvests are possible. When nine populations from Idaho and Utah were grown together at the IPMC, establishment ranged from 41 to 87% following fall seeding and was good even with moderate weed competition.

New Publications

An Assessment of Native Seed Needs and Capacities Final Report



Extreme weather and wildfires, intensified by climate change, are damaging the native plant communities of landscapes across the United

States. Native plant communities are foundational to thriving ecosystems, delivering goods and services that regulate the environment and support life, provide food and shelter for a wide range of native animals, and embody a wealth of genetic information with many beneficial applications.

Restoring impaired ecosystems requires a supply of diverse native plant seeds that are well suited to the climates, soils, and other living species of the system.

This report examines the needs for native plant restoration and other activities, provides recommendations for improving the reliability, predictability, and performance of the native seed supply, and presents an ambitious agenda for action.

An Assessment of Native Seed Needs and the Capacity for Their Supply considers the various challenges facing our natural landscapes and calls for a coordinated public-private effort to scale-up and secure a cost-effective national native seed supply.

Upcoming Trgs. and Conferences

3/27-31 National Native Seed Conference - Washington, DC— <https://appliedeco.org/native-seed-conference/>

4/10-13 Restoration of Sagebrush Ecosystems Course - Boise/West Meridian, ID—<https://greatbasinfireshcience.org/tools-trainings/restoration-of-sagebrush-ecosystems-class-2023/>

6/11-15 Society for Ecological Restoration - Quebec City, Canada—<https://www.re3-quebec.org/en>

9/26-30 Tenth World Conference on Ecological Restoration- Darwin, Australia—<https://ser2023.org/>

ANYTIME

Arid and Semi-Arid Lands Seed Technology and Restoration - <https://greatbasinfireshcience.org/event/arid-and-semi-arid-lands-seed-technology-and-restoration-online-course/>

Webinars

3/2 Seed zones and adaptive traits- https://us02web.zoom.us/webinar/register/WN_yxzIYjA0S6GLAkJZaTMiAw

3/3 Seed modifications- https://us02web.zoom.us/webinar/register/WN_fHA1on-IT7y_QqZSaA4AOA

3/7 Seed delivery- https://us02web.zoom.us/webinar/register/WN_yLpKviQMTyyotPtG61IHaw

3/8 Management solutions to increase the resilience of high-elevation 5-needle pine forests- <https://usfs.zoomgov.com/meeting/register/vJlscyqrjotEIXISN3LH6peyTJVBRkDY8g>

3/9 Current perspectives on seed technology- https://us02web.zoom.us/webinar/register/WN_QmDyCmqDR4ONzf-gKtLVvA



Ranunculus andersonii (Anderson's buttercup) (RAAN). BLM Seeds of Success Smug Mug Photo.



Figure 2.

Name that Seed Answer. Hoary tansyaster (*Dieteria [Machaeranthera] canescens*). Learn more about this species and other native forbs useful for Great Basin restoration in the online book, [Western Forbs: Biology, Ecology, and Use in Restoration](#).

Figure 2. Hoary tansyaster plant with flower buds, fully open flowers, and seed heads. Photo: US-DI BLM NM930N SOS