

# SERGB Newsletter Volume 3 Number 3

AUGUST 2023

### <u>GREAT BASIN</u> <u>Chapter https://</u> <u>Chapter.ser.org</u>

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# **President's Message**

By the time you read this, we'll be well into a summer season that could be especially beneficial for restoration efforts in the Great Basin. After a long, snowy winter and a cool spring, June saw unusually frequent afternoon thundershowers. I recently drove from Logan to Reno and back, and I can't recall the last

time I saw things looking so green even in late June.

I'm happy to be able to report on several chapter activities over the past couple of months. Once again, we were able to offer a summer research award competition for university students. You'll find an article about the two award-winners elsewhere in this newsletter. Applications were down this year compared to 2022, but I think we were able to provide funds to two very worthy early-career restoration researchers.

The biggest event of the last few months was our annual meeting, held virtually on April 26. It's hard to accurately measure total attendance when people can check-in for one or two sessions and then sign off again, but I'd estimate that nearly 100 people listened in to at least one of the 11 presentations. Special thanks to Corey Gucker and Sara Barga for helping with the technology and making sure the meeting ran smoothly.

Highlights of the meeting included a keynote presentation by Alison Agneray, the Great Basin native plant materials coordinator for the BLM, who shared information about the history and future direction of her program; a talk by USDA-ARS scientist Lauren Svejcar on restoration in the face of increasing climate extremes; research presentations by Boise State faculty members Allison Simler-Williamson and Trevor Caughlin; and an update from Corey Gucker about the online forb manual being co-produced by the Rocky Mountain Research Station and Great Basin Fire Science Exchange. We also heard six presentations from current and recent graduate students studying restoration challenges in our region – it was great to hear the ideas and enthusiasm of the next generation of restoration professionals.

# President's Message Cont'd.

Also, part of the April 26 conference was our annual chapter business meeting. Attendance could have been better, but those who could join us had a lively discussion about continuing our support for university students including the summer research awards I described above, the Paul Doescher Memorial Fund to assist with travel to restoration meetings, and helping our affiliated student organizations (UNR, Utah State, BYU) meet their annual dues obligation. We also discussed possible field tour opportunities – something I hope we'll be able to sponsor more regularly in coming years.

One thing we didn't discuss at the meeting, but I want to be sure is on everyone's radar, is that the terms of our current officers expire at the end of 2023. We are served by a volunteer treasurer (Owen Baughman), newsletter editor (Anne Halford), and website manager (Sara Barga) as well as a president. Anyone interested in filling any of these roles can reach out to a current officer to let us know.

Part of the president's role is to stay connected to the parent Society for Ecological Restoration. I attend virtual meetings with other chapter officers from across the globe, and serve on a North American Coordinating Committee. The latter group is focused on the first-ever North American continental SER conference scheduled for the end of October 2024 in Vancouver, BC. The Western Canada and Pacific Northwest chapters are taking the lead, but each chapter has been asked to provide at least two volunteers to help with conference organization. We've already met that request (Lauren Svejcar and I are on event subcommittees) but additional volunteers are always appreciated.

Finally, another initiative of the parent society is *Make A Difference Week, held June 3-11* this year. This event brings individuals and organizations together to make positive changes in their local communities through volunteer events such as weed pulls, seed collections, plantings, and monitoring surveys.

On June 11, members of the Great Basin and USU student chapters partnered with the Bear River Land Conservancy to remove exotic weeds at a Conservancy preserve in Mendon, Utah. Last September SER and BRLC volunteers established a pollinator-friendly native forb garden in a part of the preserve where non-native trees had been removed. Our June event was a chance to support ongoing stewardship of the forb community, which we hope to enlarge with another event in the fall.



Cream cinquefoil - *Potentilla arguta* ssp. *convallaria*—BLM Seeds of Success—ID (POARC) -Smug Mug photo



# Summer Student Research Award Winners

#### USU Semester University of Nevada

In early June we were able to make two cash awards to support graduate student research on restoration topics in the Great Basin.

Hayley Reid received \$1,000 in support of research on "Aboveground and Belowground Limitations of Pinus monophyla Establishment after a Recent Fire." Hayley is a student at the University of Nevada-Reno, where she works with UNR Professor Peter Weisberg and Forest Service researcher Ali Urza. Her research seeks to improve post-fire restoration of pinyon-juniper communities by understanding how biotic and abiotic factors influence establishment of singleleaf pinyon pine.

Meghan-Grace Slocombe received \$995 in support of her study, "The Role of Native Aquatic Plant Communities in Supporting the Restoration of Native Fish." Meghan works with Karin Kettenring, a Her research will inform restoration of the Provo River delta on Utah Lake, with particular focus on how aquatic plant community composition influences larval populations of a federal threatened endemic fish, June sucker.

We hope both award recipients will be able to present results of this summer's research at our 2024 annual meeting.



Utah Division of Wildlife Resources Employees installing larval June sucker light—trap—image from the Provo River Delta Project.



# Sage Note—Ecosource Native Seed and Restoration Takes Pride in Project Success

Jennifer Taynton, Executive Director EcoSource Native Seed and Restoration-<u>https://www.ecosourcenativeseeds.com/</u>

The Southern Oregon Wildfire Resiliency project (<u>SOWR</u>) was a collaborative effort of multiple agencies and other entities including the Burns Paiute Tribe, Burns District BLM, Vale District BLM, High Desert Partnership, Harney County SWCD and EcoSource.

EcoSource completed several different aspects of ecological restoration starting with native seed collection throughout Harney and Malheur Counties. EcoSource also completed a 1300-acre area of ecological restoration. We did initial vegetation surveys and searched for areas appropriate for seeding.. After selecting an area that met our predetermined qualifications in accordance with the ARS (Burns Experiment Station) Ecologically Based Invasive Plant Management (<u>EBIPM</u>) process, EcoSource mapped it out and began seeding





EcoSource utilized a tractor and range drill for seeding some areas while other seeding was performed by hand or with use of UTV's and mechanical broadcast seeders.

In spring of 2023, due to high precipitation, EcoSource determined an unusually high percentage of success with our seeding of *Elymus elymoides* (Bottlebrush Squirreltail), as seen below. *Pseudoroegneria spicata* (Bluebunch Wheatgrass) and *Poa secunda* (Sandberg's Bluegrass) were also successful in this restoration project.

In 2022, EcoSource partnered with the Burns Paiute Tribe (BPT) to collect, clean, and help with restoration of an area near Jonesboro, Oregon on tribal land. We hand stripped Wyoming Sagebrush into buckets, dried and cleaned the seeds to reach a tested purity of 87%. After seedlings were grown in tribal greenhouses, EcoSource assisted BPT in hand planting 470 Sagebrush seedlings in November 2022. Monitoring of the planted Wyoming Sagebrush seedlings in spring 2023 resulted in a 70% survival rate of the seedlings after the first winter.



Figure 1. Seeds emerge from capsule fruits. Photo: Jim Cane (retired), USDA ARS



## Name That Seed

Corey Gucker, USFS Rocky Mtn. Research Station

Hint: This species is a highly variable, short-lived, tap-rooted perennial that you could find flowering now in parts of the Great Basin.

This short-lived forb ranges from the eastern slopes of the Cascade and Sierra Nevada Mountains east through central and southeastern Washington, eastern Oregon, and southwestern Idaho, and south through eastern California and Nevada. Populations also occur in high-elevation mountain ranges on the northern edge of the Mojave Desert and in Utah. It grows in sagebrush (Artemisia spp.), antelope bitterbrush (Purshia tridentata), pinyonjuniper (*Pinus-Juniperus* spp.), mountain brush, ponderosa pine (Pinus ponderosa), and subalpine vegetation from about 700 to 11,300 feet in elevation. It grows on loamy to sandy loam soils that are near neutral to slightly alkaline where average annual precipitation ranges from 8 to 24 inches.

Plants are tap-rooted and produce few to several erect stems ranging from 6 to 24 inches tall. Leaves are opposite, entire, and rather thick. Inflorescences are elongate, one-sided thyrses, and flowers (4-12) are closely spaced in false whorls. Flowering is indeterminate. Flowers are produced in the first or second year and appear from May to August depending on location. Plants often colonize steep and eroding slopes, road cuts and rights -of-way, and other disturbed sites with well-drained soils.

In pollinator surveys conducted at four Nevada sites in sagebrush communities pinyon-juniper woodland ecotones, solitary native Mason bees (Osmia spp.) comprised 50% of the observed pollinators.

The solitary pollen wasp (*Pseudomasaris vespoides*) accounted for the next most common visitor, making up 20% of the observed pollinators. These wasps may sleep in this species flowers.

This species can be used to provide striking seasonal color in gardens, parks, and urban landscapes. It should be treated as a biennial in domestic landscapes. It is also a good choice for revegetation of road cuts and other unstable sites where it functions as an early seral species. It adds diversity to seed mixes for community restoration following wildfire.

Due to its brief flowering period, it should be planted with species having different flowering phenologies to provide sequential pollen and nectar for non-specialist pollinators, especially bumblebees.

Seed is ready for harvest when the stalks and capsules are dry and straw colored, and the seeds are brown and firm. Seed maturation within inflorescences is indeterminate. However, seeds are dispersed slowly over time, so it is possible to delay collection until most or all capsules on a stalk or plant have matured. Seeds are most easily harvested from wildland stands by clipping mature inflorescences into collection bags, buckets, seed hoppers, or other containers. Gloves should be worn to protect the hands from cuts and splinters because the stalks are brittle.

Lygus bugs (*Lygus hesperus*) are predators of this species. These bugs have sucking mouth parts and can cause extensive loss of flowers, developing seeds, and leaves.

These insects are common in alfalfa fields (*Medicago sativa*) and on smotherweed (Bassia spp.) and other weeds. They can be expected to migrate into nearby seed production fields of this species. Over 10 years of irrigation trials near Ontario, Oregon, seed yields from small seed production plots averaged 108.3 lbs/ac without irrigation, 177.8 lbs/ac with 4 inches of irrigation, and 151.1 lbs/ac with 8

inches of irrigation. In one of the years of irrigation trials, seed yields were drastically reduced by lygus bug infestations.



Yellow avalanche-lily - *Erythronium grandiflorum* ssp. *grandiflorum* (ERGRG3) - ID BLM Seeds of Success Smug Mug Photo.



Smallflower miterwort—*Mitella stauropetala* (MIST3) ID BLM Seeds of Success Smug Mug photo.

# The Launch of the Video Series "Native Seed: Supplying Restoration"





The International Network for Seed-based Restoration (INSR) is excited about the release of "Native Seeds: Supplying Restoration," our nine-part video series about the native seed supply chain in the western United States. Since June 29, episodes will post weekly, at <u>ser-insr.org/native-seed-film</u>, with a release of the full-length film version on August 24. Filmed over four seasons, this documentary series explores the people working to scale up the supply of native seeds to meet the growing restoration demand, weaving together footage with seed collectors, farmers, researchers, and land managers across the western United States. We see the extensive scale of damage to vast landscapes and meet tenacious people who are finding creative, scrappy solutions to restore ecosystems. Want to get involved? Join the INSR by visiting <u>https://ser-insr.org/takeaction</u>

The webinar on the film will be on August 18. SERWebinars

https://www.ser.org/page/



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# **Announcements/Upcoming Conferences**



SOCIETY FOR ECOLOGICAL RESTORATION'S 2024 NORTH AMERICAN CONFERENCE

#### LOGO COMPETITION "CROSS-BIOME CONNECTIONS: ECOLOGICAL RESTORATION ON A DIVERSE CONTINENT"

YOU CAN DESIGN THE CONFERENCE LOGO FOR THE NORTH AMERICAN CONFERENCE (NAC) IN VANCOUVER, BC IN LATE 2024! THE WINNING CONFERENCE LOGO WILL BE USED ON ALL PRINT AND WEB PUBLICATIONS AND MEDIA TEMPLATES. DESIGNS WILL BE VOTED ON BY THE SER NAC ORGANIZING COMMITTEE. THE WINNING DESIGNER WILL RECEIVE A 75% DISCOUNT ON 2024 CONFERENCE REGISTRATION!

#### SUBMIT YOUR DESIGN BY SEPTEMBER 1ST, 2025 TO NACONFERENCE@SER.ORG





### Logo Design Criteria:

1. File/folder must be labeled

"SER\_NAC\_LOGO\_Last name of designer"

2. File/folder must be submitted as a link to file or folder on Google.

3. Logo must be designed for use on all types of media (print or web) with original high-resolution file format made available. Ensure transparent background. File types can be .png, .jpg, .psd, etc.

4. (Optional) Colours to reflect SER Brand Book

5. Submit TWO versions of the logo, 1) colour and 2) greyscale.

6. Logo must include the following:

SER 2024 North American Conference "Cross-Biome Connections: Ecological Restoration on a Diverse Continent"

Vancouver, British Columbia

October 28 - November 1, 2024

 (Optional) Indicate how your submitted logo(s) can be displayed in conjunction with <u>SER Logo</u>. Ideas available here: <u>http://ser2023.org/</u>

8. Consider the following themes and hashtags for inspiration:

#Vancouver #NAconference #biome #restoration #collaboration #ecology #biodiversity #diversity #connection #science #practicalecology #education #learning #community #expertise #generationrestoration #ser #conference2024 #continentalcollaboration #transdisciplinaryconferencecollab #westnarestorationsummit 9. Other competition requirements:

A brief artist statement and/or inspiration blurb as part of the submission process for artist promotion

### Creativity is highly encouraged, and you are welcome to submit up to two designs.

The following key criteria will be used in scoring submissions received by due date:

1. Adherence to design criteria (25%)

2. Creativity in expressing and celebrating the conference theme (40%)

3. Clarity and legibility of logo graphics and text (35%)

Questions, contact <u>naconfer-</u> <u>ence@ser.org</u>. We look forward to receiving your designs! <u>SRM 2024</u> session proposals due August 31 for final consideration.

2023 National Native Seed Conference recordings <u>now available here</u>. A portion of the NNSC23 program was recorded and those videos are now available on IAE's YouTube page.

2024 National Native Seed Conference will be held virtually on February 7 & 8, 2024. The conference will focus on Native Seed Production and Seed-Based Restoration with an emphasis on Indigenous Knowledge and Climate Change. Registration opens on August 7, 2023 and details will be updated on the website.

**9/26-30** Tenth World <u>Conference</u> on Ecological Restoration- Darwin, Australia



# Job Announcement



### **ECOSTUDIES INSTITUTE**

A nonprofit scientific organization 900 Jefferson St. SE P.O. Box 1614, Olympia, WA 98501 em: ecostudies@ecoinst.org: 305-213-8829

### POSITION DESCRIPTION

Title:	Seed Coordinator
Reports to:	Director of Partnerships
Location:	Olympia, Washington
Туре:	Project Manager, Full-time Exempt (Salaried) with benefits
Salary:	Salary range starts at \$57,024/year
Period:	Permanent (2-years funding secured)



Cooper's rubberweed - *Hymenoxys cooperi* var. *canescens* - ID BLM Seeds of Success Smug Mug photo.



Figure 2. Royal penstemon growing in southeastern Oregon. Photo: USDA USFS.

**Name that Seed Answer.** Royal penstemon (*Penstemon speciosus*). Learn more about this species and other native forbs useful for Great Basin restoration at <u>WesternForbs.org</u>

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