Society for Ecological Restoration

Newsletter #4: February 2015


A series of 15 webinars largely developed from presentations made at the 2014 SERNW/GB Joint Regional Conference meeting will be hosted between January and May 2015 by the Great Basin Fire Science Delivery Exchange. In addition to SERGB, co-sponsors of the webinars include the Great Basin Native Plant Project, and the BLM Plant Conservation Program. Webinar topics include (1) the development and application of seed zones; (2) seed collection, seed increase and seed purchasing tools; (3) seeding strategies; (4) increasing diversity in seed mixes, (5) weather variability and proactive planning for restoration. A complete agenda and registration instructions for these free webinars are provided at: http://www.gbfiresci.org/

- Jan 29: The development and use of seed zones, use of seed zones in the procurement and deployment of native plant materials, and provisional seed zones for native plants. Brad St. Clair, USFS; Vicky Erikson, USFS; Andy Bower, USFS.
- Feb 11: Wildland seed collection, Kayla Herriman, USFS
- Feb 12: Procurement and application of native plant material in the BLM, Paul Krabacher, BLM
- Feb 24: Purchase instruments -IDIQ, Doug Kendig, BLM
- Mar 4: Increasing broadcast seeding success, Jeff Ott, USFS
- Mar 5: Vegetation restoration in response to pinon and juniper control treatments, Bruce Roundy, BYU
- Mar 17: Assisted succession - context and tools, Jerry Benson, BFI Native Seeds
- Mar 19: Evaluating strategies for increasing native plant diversity in crested wheatgrass seedings, Kent McAdoo, UNCE
- Mar TBA: Spray-on biological soil crusts, Jayne Belnap, USGS
- Increasing integration of pollinator-friendly forbs in wildland restoration, Byron Love, USU
- April 8: NRCS role in developing native plant materials for federal land, Derek Tilley, NRCS
- April 29: Using field studies to find the most promising seed sources for restoration, Beth Leger, UNR
- May 12: Weather variability and forecasting tools for short and long-term restoration planning, Stuart Hardegree, ARS
- May 13: Climate, weather and sagebrush seed sources - experimental insights on challenges and opportunities, Matt Germino, USGS
- May 20: Seed zones and climate change, Francis Kilkenny, USFS

Jeanne Chambers receives the GBSER 2014 Distinguished Restorationist Award at the GB/PNW SER meeting in Redmond, OR, Oct 2014

Dr. Chambers started out as a range conservationist for BLM in Idaho, but spent most of her career as a research ecologist with the US Forest Service studying riparian, rangeland and alpine systems throughout the western United States. She has a distinguished publication record in basic and applied science, but has also synthesized scientific information in a way that has informed the trajectory of science and science-management partnerships on the topics of annual weed ecology; sagebrush-steppe restoration; ecosystem resistance and resilience; and riparian ecology, restoration and management. She has been an influential advocate for Great Basin ecosystems, a regional leader in the partnership of science and management, and a key contributor to...

Your colleagues and peers value your work and thank you for all of your contributions to restoration programs in the Great Basin.

Northwest and Great Basin SER Chapter Joint Conference October 6-10, 2014, Redmond, Oregon

Contributed by Therese Meyer, SER Great Basin Utah Division of Wildlife Resources, Salt Lake City, Utah

The first joint annual conference of the Northwest and the Great Basin Chapters of the Society for Ecological Restoration took place in Redmond, Oregon, the week of October 6 - 10, 2014. Over 300 people attended, including many students and young professionals.

At the beginning of the week, early arrivers participated in an invasive plant management workshop. Each day of the conference had another workshop: native seed cleaning, use of RIVERMorph® software, and fluvial geomorphology in river restoration.

Also on Monday, the relatively new Great Basin Chapter held their chapter meeting. The week-long joint conference was an excellent recruitment event for the Great Basin Chapter, and membership in the chapter rose to nearly 100 people. The focus of the Great Basin Chapter meeting was on organizing workshops and field tours in the region.

The Northwest Chapter held their chapter meeting Wednesday morning. The highlight of that meeting was the many new people who joined to learn how they could get more involved. The conference was successful in attracting new ecologists who hadn't previously attended an SER meeting. A big factor was giving chapter memberships to all conference registrants. The NW Chapter meeting was focused on an SER overview and how people can get more involved in helping plan workshops and other restoration programming.

During the Tuesday through Thursday portion of the conference there were five concurrent sessions each day on topics such as sage steppe restoration, post-fire vegetation treatments, pollinator responses to land treatments, equipment and strategies for restoration, seed zone research, seed material sourcing and production, mycorrhizal and microbial associations in restoration plantings, climate change impacts, stream restoration methods, prairie and forest restoration, mitigation of energy development, land conservation protected areas, the critical importance of partnerships to successful restoration projects, and environmental education and stewardship programs to recruit the next generation of ecologists.

In addition to the oral presentations, a poster session hosted more than forty scientific research topics ranging from native seed germination and availability, to riparian and wetland system restoration, grazing and herbicide effects on restored sites, remote sensing for vegetation in restored or disturbed sites, upland and forest restoration, managing invasive plants, and social-community involvement in ecological awareness. Students and professional researchers were able to discuss the posters with conference attendees at two evening receptions.

A fundraising auction was supplied with interesting and in some instances ecology-oriented items, including paintings, carved wooden objects, books (donated by Island Press), and locally brewed wine and beer. Auction proceeds will be put towards a restoration project organized by the Northwest Chapter of SER.

The conference was enriched by several excellent guest speakers at the plenary sessions and the mid-week banquet. Speakers included: Mark Brunson of Utah State University on collaborative restoration, John Abatzoglou, University of Idaho, on climate change, James Molver of Oregon State University on interdisciplinary collaboration, Cara Nelson of University of Montana, and Chair of the International SER Board, speaking on emerging topics in ecological restoration and the need to increase educational opportunities for restoration practices. The banquet guest speaker was Maret Pajutee, of the Deschutes National Forest, speaking on the benefits of wide collaboration in ecological restoration projects, particularly by recruiting non-traditional partners. The conference was also addressed by Austin Green, Chairman of the Confederated Tribes of the Warm Springs Reservation, who spoke of the tribal history of natural resource conservation, and summed up certain less-than-successful attempts at restoration as “repairing the dents and dings at the demolition derby!”

Friday, the final day of the conference, featured several field trips to the surrounding countryside to experience firsthand some local restoration projects. Several of the excursions followed from the workshops held during the week, including on one fluvial geomorphology field methods and another on invasive plant management. Other tours visited the Glaze Forest Restoration site and the Bend Seed Extractory.

One excursion was a guided trip to observe Wychus Creek restoration. Wychus Creek is a tributary to the Deschutes River in central Oregon, which is the focus of several watershed-wide restoration efforts. The creek was previously channelized through forest and agricultural lands, and essentially all the flow from the headwaters was diverted into canals to deliver to the water rights holders: the farm irrigators. It was estimated that approximately half the irrigation water was lost in transit due to evaporation and porous canals and ditches. Native steelhead trout in Wychus Creek were unable to migrate upstream due to depleted water flow in the creek bed, compounded by deeply eroded sections that were too steep for fish passage.

Through careful negotiation and planning, and with a host of engaged partners, the leaky delivery ditch was changed to a piped, gravity-fed pressurized system, and irrigators installed sprinkler systems that reduced their water use by 50%. The diversion equipment was modified to screen out fish, and the deeply eroded channelized streambed was raised, re-contoured and re-directed into a meandering path to bring it back to the pre-settlement alignment. A significant amount of no-longer needed water rights were sold by the irrigators to the Wychus Creek/Deschutes River restoration organization. This water now provides consistent in-stream flows in the creek bed, at a level sufficient to maintain populations of native steelhead trout. For the first time in 50 years these fish are able to migrate upstream to spawn, and are surviving in Wychus Creek.

The joint conference of the Northwest and Great Basin Chapters of SER was an excellent gathering of minds, and the ecological restoration community will reap benefits into the future through new collaborations and sharing of expertise and knowledge.

**SER GB Student Activities:**

The Society for Ecological Restoration, Northwest and Great Basin Joint Regional Conference held in Redmond, OR on October 6-10, 2014 was attended by 45 students from 20 universities, of which over 25 participated as volunteers to provide session, registration, workshop, and field trip support. The students also engaged in various social events,
including a poster session, happy hour, and a student mentoring social. Many thanks to Lisa Chang and Keith Nevison of SERNW for the organization, coordination, active participation in the associated student activities. I would also like to thank the mentors who attended the social to share their stories, professional involvement, and experience with the student mentees.

SER GB/PNW student poster contest winners:


Second Place. Shital Dhakal (Boise State University). Title of Poster: Using Multispectral Imagery, LiDAR and Field Measurements for Aboveground Biomass in the Sagebrush Steppe, Morley Nelson Snake River Birds of Prey National Conservation Area

2015 National Native Seed Conference, 13-16 April 2015, Santa Fe, New Mexico:

The National Native Seed Conference connects Research, Industry, Land Management, and Restoration professionals, providing the premier opportunity to develop relationships and share information about the collection, research and development, production, and use of native plant materials:

- Latest research from around the world
- Species selection and seed collection
- Plant material evaluation and seed zone determination
- Field establishment and cultural practices
- Commercial native seed production
- Storage and distribution solutions
- Current methods for successful habitat restoration & rehabilitation
- Ecoregional native plant materials programs
- Economics and policies supporting restoration & rehabilitation

An overriding theme of the conference is practical information with direct implications for management. It presents a unique opportunity to exchange information among groups confronting the same issues in different parts of the world. The National Native Seed Conference is brought to you by the Native Seed Network, a program of the Institute for Applied Ecology. It is made possible by the support of our sponsors, in particular the Bureau of Land Management. Meeting website: http://nativeseed.info/

SER 2015 6th World Conference on Ecological Restoration Towards Resilient Ecosystems: Restoring the Urban, the Rural and the Wild, 23-27 August 2015, Manchester, UK.

SER 2015 in Manchester aims to be the major restoration event of the year. Building on recent successful world congresses and regional meetings such as SER Europe 2013 in Finland, we hope to attract a large number of academics and practitioners who will share good practice and network successfully in one of the homes of the industrial revolution.

The title: “Towards resilient ecosystems: restoring the urban, the rural and the wild” should provide something for everyone, whether working in highly urbanised, ex-agricultural, or natural wild environments. We mean this conference to be as inclusive as possible and are keen to showcase not only the important scientific developments, issues and solutions, but also the cultural, educational and artistic aspects of restoration ecology. We are hosting a wide range of different types of events during the conference period, with pre-conference training workshops, conference symposia posters, workshops, and oral presentations, as well as half day field trips to see landscapes at first hand.

A large range of different organisations have given us their support and indicated their intention to participate. So whether you are a student of restoration ecology, a practitioner in the field, have an academic interest in the subject area, or whether you publish or provide equipment related to this topic, or are part of an allied organisation, we hold out a warm
welcome and invite you to SER 2015 in Manchester next August. Meeting website: http://www.ser2015.org/

Great Basin Consortium (GBC) Conference
February 17-19, 2015, Boise State University, Boise, ID

The Great Basin Consortium is a collaborative network of partners whose vision is to coordinate and collaborate on science delivery to achieve sustainable and resilient Great Basin Ecosystems and human communities. This year's GBC meeting will be held at Boise State University and will feature sessions on weather and climate, dryland restoration, and geospatial technologies for natural resource management. See the conference website for more information (http://environment.unr.edu/consortium/conference4.html).

Save the Date – November 3-4, 2015.

The next Great Basin SER meeting will be held in Boise Idaho, November 3rd and 4th, 2015. The focus of this meeting will be presentations on historical, current and future scientific research and management at the Morley Nelson Snake River Birds of Prey National Conservation Area. Please put this event on your calendar and look for more information about the meeting by early summer.

SERGB Membership

Thanks to numerous enrollments as part of registration for the SERNW/GB meeting, our membership is now at 90.

An election for the vacant board position will be held soon. Stay tuned…..

MEMBERSHIP & GOVERNANCE:

2014 officers, board, & committee chairs:

**Officers**
- President: Stuart Hardegree
- Vice President: Matt Germino
- Secretary/Treasurer: Karin Kettering

**Board**
- Oregon: Berta Youtie
- Nevada: Erica Husse
- Utah: Therese Meyer
- Idaho: Vacant
- California: Dave Martin

**Chairs**
- Newsletter: Matt Germino
- Membership: all board members
- Restoration: Anne Halford
- Student Activities: Matt Fisk
- Website: Nancy Shaw

Interested in serving a role in the GBSER? There are great opportunities to get involved as a member or in the positions listed above. Please let us know, the term lengths are 2 y.

JOIN US: Membership in GBSER is open to all who have interests in restoration of the Great Basin and who are members of the Society for Ecological Restoration (http://chapter.ser.org/greatbasin/).

STUDENTS: SER has a good deal for you. Create an SER student group at your institution, and a $160 annual group membership can then cover all student members of the group. If you had 80 students, that would be only $2/student/year!