Beyond Recovery: Restoration for the Future

On behalf of the SERCAL Board of Directors, we would like to thank you for your support and participation at the 26th Annual SERCAL Conference in Santa Barbara! We had such an incredible three days with so many great elements including an amazing gathering at the Santa Barbara Botanic Garden for sponsors, insightful plenary presentations, inspiring field tours, delicious food, and a great setting across the street from the Pacific Ocean!

It was exciting to see practitioners, researchers, students, biologists, engineers, planners, regulators, educators, etc., come together, share insights on how to accomplish ecological restoration, think creatively on restoration for the future, and have a good time. Seeing the conference take shape from the beginning planning stages, through to the last day of sessions and field tours, is an incredible journey. We are thrilled that our vision for the conference became reality and that we were able to bring our restoration community together to participate, network and share information on restoration.

When we were sharing ideas for the conference theme, we wanted the theme to be relevant to what our community had been going through. As the State of California had just gone through some of the worst fires (Thomas and Carr Fires) in recent history and subsequent debris flows in Santa Barbara, our thoughts turned to “How can we bring our colleagues together and learn from these catastrophic events?”

Seeing the restoration community come together around this theme in Santa Barbara was very inspiring for us. The session chairs did an incredible job of pulling together such a great set of speakers for their sessions. There was such a tremendous knowledge base at the conference and we hope you were able learn from the speakers and make connections that will allow you to work on restoration projects for the future.

For The Future!

Will Spangler & Mauricio Gomez, 2019 SERCAL Conference Co-Chairs
We have all heard versions of the “catastrophic wildfire” narrative more times than we can count. We have been told that large fires “nuke” the forest and create a “moonscape”, and now burn so hot that they sterilize the soil and nothing will grow. We have heard that such fires are unprecedented, and that they destroy wildlife habitat. And, we have been barraged by the message that our forests are “overgrown”, and that we cannot let more lightning fires burn in remote forests ostensibly because they will burn too severely. The solution that is frequently offered by land management agencies and some policy-makers—often under the banner of ecological restoration—is increased logging and fire suppression.

There is perhaps no forest fire in recent memory that has been the target of this catastrophic wildfire narrative more than the Rim fire of 2013. At approximately 257,000 acres, the Rim fire was the largest forest fire in California at least since the early 20th century. For months it spread along the western slope of the central Sierra Nevada, mostly on the Stanislaus National Forest but also partly on the western portion of Yosemite National Park, and some private timberlands. Almost instantly, pro-logging politicians, and representatives of land management agencies that are involved in commercial logging, began to use the Rim fire as their prime example of the catastrophic wildfire narrative, and began advocating for rollbacks of environmental laws and increased logging, including post-fire logging, on federal lands of the western U.S. as a response to the fire.

Yet there is a deep and wide canyon between the political mythology of the Rim fire and the biological reality of it, and the profound gap between the two provides an important space in which to explore and critically examine common notions about forests, wildland fire, and ecological restoration. So, what is the truth about the Rim fire?

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The “Megafire” that Restored a Forest

by Chad Hanson, Ph.D. cthanson1@gmail.com Photos courtesy the author

We have all heard versions of the “catastrophic wildfire” narrative more times than we can count. We have been told that large fires “nuke” the forest and create a “moonscape”, and now burn so hot that they sterilize the soil and nothing will grow. We have heard that such fires are unprecedented, and that they destroy wildlife habitat. And, we have been barraged by the message that our forests are “overgrown”, and that we cannot let more lightning fires burn in remote forests ostensibly because they will burn too severely. The solution that is frequently offered by land management agencies and some policy-makers—often under the banner of ecological restoration—is increased logging and fire suppression.

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The photo on the left shows naturally regenerating snag forest habitat in the Rim fire, while the photo on the right shows the damage and habitat loss resulting from U.S. Forest Service's notion of "ecological restoration" in the Rim fire, due to post-fire logging.
Many thanks to forest and fire ecologist Dr. Chad Hanson, not only for his plenary presentation at SERCAL 2019, but also for contributing this article to *Ecesis*.

In his presentation, *Are Large Forest Fires Ecological Restoration?*, Hanson discussed the surprising, and often seemingly counter-intuitive, scientific evidence emerging regarding fire in our forests, focusing in particular on large fires in California’s forests. He described current fires in the context of historical fire regimes and forest conditions, and addressed the notable disconnection between widely-held assumptions about large forest fires versus the ecological reality of these areas based on field studies. Particular attention was paid to a unique forest habitat type — "snag forest habitat" — created by patches of high-intensity fire, and the remarkable native biodiversity and natural forest regeneration found in this habitat.

A research ecologist — he has a Ph.D. in ecology from the University of California at Davis, with a research focus on fire ecology in conifer forest ecosystems — Hanson is director of the John Muir Project of Earth Island Institute, a member of the Sierra Club’s national Board of Directors, and co-editor and co-author of the 2015 book, *The Ecological Importance of Mixed-Severity Fires: Nature’s Phoenix* (Elsevier, Inc.). He has published 29 scientific studies and articles in peer-reviewed journals pertaining to forest and fire ecology. Studies published by Dr. Hanson cover topics such as: habitat selection of rare wildlife species associated with habitat created by high-intensity fire; adverse impacts to wildlife caused by logging; post-fire conifer responses and adaptations; fire history; and current fire patterns. He became involved in forest conservation work after hiking the entire length of the Pacific Crest Trail from Mexico to Canada in 1989 with his older brother, and seeing firsthand the devastation to forests caused by the commercial logging program on federal public lands in the U.S. The *New York Times* described Dr. Hanson as being on “the cutting edge of ecological research” ([www.nytimes.com/2017/08/06/science/let-forest-fires-burn-what-the-black-backed-woodpecker-knows.html](http://www.nytimes.com/2017/08/06/science/let-forest-fires-burn-what-the-black-backed-woodpecker-knows.html)). Dr. Hanson regularly authors opinion-editorial articles that are published in national newspapers, including *The New York Times, Los Angeles Times*, and *Washington Post*.

**The “Megafire” that Restored a Forest continued**

**Overgrown Forests?**

The U.S. Forest Service has produced studies, based on early 20th century Forest Service surveys, reporting that there were only about 20 to 30 trees per acre in the Rim fire area a century ago, and that the forests were very open and parklike with sparse understories. However, a more complete and detailed review of the historical records in the National Archives later revealed that these surveys were based on visual estimates that the early Forest Service found had consistently underestimated forest density, by about threefold. Further, the Forest Service studies excluded oaks and small trees from the overall tree density count. When all of the previously-omitted historical tree data were included, it was revealed that, historically, there were over 150 trees per acre on average, not including seedlings and saplings, which contributed an additional 339 trees per acre for conifers alone, and shrub cover averaged 34% within mature conifer stands. And the heterogeneity of forests was tremendous, ranging from tree densities in the low dozens per acre to thousands per acre, while natural early-successional habitat from high-intensity fire and other natural disturbances generally comprised over 20% of the landscape. In other words, far from being sparsely forested with open understories, the historical forests had hundreds of trees per acre and an abundance of native shrub patches. The Forest Service studies also omitted a wealth of historical data, available in the National Archives, regarding extensive high-intensity fire patches in conifer forests of the Rim fire area in particular, and the western Sierra Nevada in general.

Moreover, fire intensity is driven mainly by weather and, therefore, climate, not the density of the forest or the number of snags or downed logs present, and increased logging tends to make fires burn more intensely, not less, by creating slash debris and spreading combustible invasive grasses.

**Moonscapes?**

I have been doing field research in large forest fire areas for 16 years now, and I have yet to find a single acre on which the soil was sterilized by the fire, and nothing will grow. In fact, even in the largest high-intensity fire patches in the Rim fire, the natural post-fire forest regeneration is vigorous and lush—even hundreds of yards from the nearest live tree. It turns out that nature is quite resilient to large forest fires, and large high-intensity fire patches, and does not need our assistance to “reforest” such areas.
The “Megafire” that Restored a Forest continued

Lost Wildlife Habitat?

It may seem counter-intuitive at first, but the science is telling us loudly and clearly that large forest fires create incredibly important wildlife habitat. This includes large high-intensity fire patches occurring mature conifer forest, which creates “snag forest habitat” (more technically known as “complex early seral forest”). This unique forest habitat type, which is defined by an abundance of snags (standing dead trees), downed logs, shrub patches, heterogeneous natural conifer regeneration, and wildflowers, is comparable to old-growth forest in terms of native biodiversity and wildlife abundance, and many native cavity-nesting and shrub-nesting species have evolved to depend on this habitat. It may surprise many to know that, due to fire suppression, we currently have a substantial deficit of wildland fire in our forests—of all intensities.

After the Rim fire, California spotted owl occupancy reached record levels, but declined sharply in areas where post-fire logging had occurred. While spotted owls nest and roost in areas with lower-intensity fire effects, they benefit from the high abundance of small mammal prey in the snag forest habitat created by high-intensity fire, but post-fire logging removes these vital hunting grounds.

The Take Away

The lesson that is emerging from the current science is that the Rim fire itself was ecological restoration, and the fire area does not warrant our intervention, ecologically. Much important and essential work can be done through ecological restoration to remove harmful vestiges of human impacts on the environment, such as invasives and roads, and to restore native species where they have been extirpated by past land management. However, we should always consider our actions under the precautionary principle, and mindfully seek to recognize and appreciate when natural processes are doing the work of ecological restoration for us. This is especially important when such processes are operating on a relatively grander and more dramatic scale, like the Rim fire. Such large events can be jarring or scary for many people. But that fear can lead to harmful actions under the guise of ecological restoration.

Unfortunately, that is precisely what is occurring right now in the Rim fire, where $28 million in federal grant funds from the Department of Housing and Urban Development (HUD)—funds that were supposed to be used for community disaster recovery and rebuilding—are being improperly routed through the state of California to subsidize clearcutting of several thousand acres of ecologically-vital, naturally-regenerating snag forest habitat in the Rim fire on the Stanislaus National Forest. The good news is that there is still time to urge California Governor Gavin Newsom to change course on this terrible idea, and instead use these HUD funds to help lower-income residents of Paradise recover and rebuild, in a fire-safe way, from the Camp fire of 2018 (see action alert below).

Citations


Though cultures all over the world have been managing landscapes throughout history, the practice of ecological restoration is young. Technological innovations in restoration are continuously progressing as the also-young science of restoration ecology advances the chances of success. But because the practice of restoration is younger than the dynamic ecosystems being restored, I argue that successful restorations may require generational time scales. Teaching restoration ecology and creating a sense of stewardship for future generations is necessary for the future success of any restoration project and we are innovating the programs and teaching strategies involved. Pedagogies for technologies such as arithmetic, which is millennia and hundreds of generations old, are still being developed today! So how will we be teaching ecological restoration in the future?

The Cheadle Center for Biodiversity and Ecological Restoration (CCBER) implements and manages numerous current and long-term restoration projects on the UCSB campus and adjacent areas. The close proximity of these sites to UCSB and the community provide unique opportunities for research, education, outreach, and public involvement. Educational services provided by CCBER include UCSB courses, seminars, workshops, interpretive media, and Kids In Nature (KIN), an award-winning K-12 environmental education program.

For almost 20 years, CCBER has hosted the KIN program at UCSB. Initially founded to promote science education in local underserved K-12 classrooms, KIN has been growing and evolving ever since. More than just an environmental education program, KIN is offered through a UCSB education practicum where college students are trained to teach and mentor kids on field trips and in the classroom. UCSB students enrolled in the course help to design the K-12 curriculum, integrating environmental science with nature connection, using hands-on activities and utilizing nearby open spaces and active restoration sites. Place-based curricula — aligning with Next Generation Science Standards (NGSS) and the California Education and the Environment Initiative (EEI) and adapted to local

A UCSB student teaching an elementary student in the native plant garden.

Restorationists of the Future

by Andy Lanes lanes@ccber.ucsb.edu Photos courtesy the author

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ecosystems — are developed by CCBER staff, interns, and students. Native plant gardens have also been established in a number of local schools, and as part of the year-long program, elementary school students adopt and monitor a plant of their choice. They even fill out adoption papers.

More recent large-scale wetland restoration projects adjacent to the UCSB campus and community have opened up even more opportunities for education and community involvement. UCSB’s North Campus Open Space (NCOS) — once a tidally influenced wetland that was filled in to build a golf course in the 1960s — is now again an estuary and an active habitat restoration project. CCBER’s outreach programs at NCOS are diverse and inclusive and everyone is invited to participate. A preschool within walking distance is utilizing the site, and our staff is developing pre-K curriculum for the school as toddlers wander through the restoration site searching for bugs and looking at flowers. Younger grades that visit rotate through activities learning about food webs, watersheds, pollinators, plant adaptations, and local fauna. Older students are introduced to wildlife and vegetation monitoring. Of course, restoration work is done too. Thousands of native plants have been planted in the last year alone during educational visits to NCOS, and the kids actually enjoy weeding. Public schools, private schools, after school programs, Boys and Girls Clubs, Boy Scouts, Girl Scouts, Girls Inc., day care centers, fraternities and sororities, school clubs, retirement communities, and even more members of the community are all participating, and everyone gets dirty!

Technological innovations in restoration ecology are continuously progressing, necessitating development in the pedagogy associated with teaching new concepts in the field. The practice of ecological restoration itself is also gaining recognition as a promising tool for teaching science concepts and for creating an important sense of stewardship for the land and meaningful relationships with the natural world for future generations. The Cheadle Center for Biodiversity and Ecological Restoration (CCBER) implements and manages numerous current and long-term restoration projects on the main UCSB campus and in adjacent areas. The close proximity of these sites to UCSB and the community provides unique opportunities for research, education, outreach, and public involvement. Educational services provided by CCBER include UCSB courses, seminars, workshops, interpretive media, and Kids in Nature (KIN), an award-winning K-12 environmental education program. KIN is a yearlong, place-based program instructed by CCBER faculty and staff in which UCSB students develop new curriculum and mentor younger students through hands-on activities utilizing UCSB open spaces and involvement in restoration work. Through new approaches to education via ecological restoration, CCBER is able to profoundly impact the greater Santa Barbara community and beyond.

Lanes wears many hats at CCBER — Manzanita and San Clemente Restoration Coordinator, CCBER Education and Outreach Coordinator, and Kids in Nature Associate.

Many thanks to Andy Lanes for contributing this article. Lanes spoke in the “Thinking Outside the Box”, a SERCAL 2019 technical session chaired by Kevin MacKay (ICF and SERCAL Board of Directors). He also co-led the post-conference fieldtrip to UCSB’s North Campus Open Space. In his presentation, Teaching Ecological Restoration to Future Generations, Lanes echoed the imperative of SERCAL 2015’s Restoration for the Next Generation. His technical abstract follows:

Technological innovations in restoration ecology are continuously progressing, necessitating development in the pedagogy associated with teaching new concepts in the field. The practice of ecological restoration itself is also gaining recognition as a promising tool for teaching science concepts and for creating an important sense of stewardship for the land and meaningful relationships with the natural world for future generations. The Cheadle Center for Biodiversity and Ecological Restoration (CCBER) implements and manages numerous current and long-term restoration projects on the main UCSB campus and in adjacent areas. The close proximity of these sites to UCSB and the community provides unique opportunities for research, education, outreach, and public involvement. Educational services provided by CCBER include UCSB courses, seminars, workshops, interpretive media, and Kids in Nature (KIN), an award-winning K-12 environmental education program. KIN is a yearlong, place-based program instructed by CCBER faculty and staff in which UCSB students develop new curriculum and mentor younger students through hands-on activities utilizing UCSB open spaces and involvement in restoration work. Through new approaches to education via ecological restoration, CCBER is able to profoundly impact the greater Santa Barbara community and beyond.

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In April, the California Society for Ecological Restoration held their 26th annual conference in Santa Barbara. It was three great days of learning from colleagues, experts in their fields and making new partners and contacts. As part of each conference, SERCAL has a poster presentation competition for college students across the state. This year, younger students from Oxnard also took part. Sixth Graders from Rio Vista Middle School created presentations on three topics — their Trout in the Classroom project, Endangered Species of California, and Solutions to Plastic Pollution.

This past school year, the students went on field trips funded by the Coastal Conservancy’s Explore the Coast Grant and run by Friends of the Santa

continued next page
Restorationists of the Future continued from page 7

The open space is public and we encourage participants to return by making the restoration fun, engaging, and free to the community.

From this we see that fun, outdoor learning boosts student achievement in all ages. We see that when introduced to the university setting at a young age, college becomes less intimidating to the kids. They look up to their UCSB mentors and many are opened up to the possibility of attending college themselves someday, maybe even studying biology, maybe even restoration ecology. Most importantly, we see that immersion of the students into the local landscapes creates a new connection to their land base, respect for life, and leads to a deepened sense of stewardship for their local environment. Students learn about the functions and importance of wetlands in an actual wetland. They see that it is possible to recover a buried wetland ecosystem and they are eager to help. They care about that wetland because it’s theirs — they helped to recreate it and they will be caring for it in the future.

We hope to provide continuous, engaging, free involvement in ecological restoration projects to the community for all ages and we will continue to educate and inspire the youth of today, for they will be the restorationists of the future.

SERCAL

Sixth Graders continued

Clara River (FSCR). On the trips they explored their local coastline and had fun learning outdoors about nature. They also studied their local Santa Clara River and learned about its restoration.

The SERCAL conference gave a great connection for the college and middle school students through ecological studies and ideas which the conference made possible. This project was entirely a teamwork effort! As well as all the students, special thanks go to RVMS teachers John Franckowiak and Ronda Plomteaux who gave their time to help their students make the posters. Many thanks go to SERCAL, FSCR, Channel Islands Restoration and all the staff at Rio Vista School District in Oxnard. Awesome teamwork helping the next generation have fun whilst learning about protecting nature and the environment for all wildlife including humans!
Lifetime Achievement: Victor Schaff

Victor Schaff, the founder of S&S Seeds, Inc., recognized the need for low water use plants when he moved to California in 1964. The company was founded in 1975 and has been at the forefront of collection and conditioning of California native seeds ever since. Over time S & S Seed, Inc., has expanded its product offerings and has evolved into a single-source materials provider for the seeding market in Southern California.

At its inception, S & S Seeds marketed seed for both California native and non-native drought-tolerant species. In the beginning Victor was the primary seed collector. As a result of traveling much of California to collect seeds, he learned not only about the seeds but also about the plants and the habitats to which they were best adapted. This knowledge and the availability of seeds for a large variety of species contributed to the market growth and education on the advantages of California native species. The company focused its efforts on the highest quality California native seed and developed quality standards that are used by the industry today. As its reputation grew so did the demand.

In 1991, Victor purchased a production facility in Los Alamos, CA. Victor’s farming background is an asset as he oversees the growing ground in Los Alamos where many of the native species are produced. This capability allowed the company to both produce large quantities for regular inventory usage as well as increase a collected seed species to any desired quantity in a controlled environment. Altogether these qualities afforded the company the opportunity to participate in very large projects including the Dominigoni Dam project, Highway 73 Toll Road and subsequent toll roads in Orange and San Diego County, and other large Cal-Trans projects for both new infrastructure as well as fire rehabilitation.

The Los Alamos production facility has been used to research and develop numerous species that have been successfully introduced to the marketplace. The facility has also been the location to host an annual education day for the company’s customers and clients, offering a firsthand look at the large-scale production as well as smaller research and development plots. These combined efforts have kept S & S Seeds the industry leader.

Sequoia: Gail Newton

Retired chief of the California Department of Water Resources’ FloodSAFE Environmental Stewardship and Statewide Resources Office, Gail Newton has had a remarkable career in state government dealing with issues related to the San Joaquin Sacramento Delta and San Francisco Bay. She has been a tireless and effective advocate in ensuring state projects focused on a broad range of concerns, particularly habitat, in the Estuary and throughout California.

Honoring Today’s Leaders, and Tomorrow’s Congratualtions to our 2019 awardees!
CA Department of Water Resources

She worked with 60+ Delta flood control agencies to avoid and mitigate unavoidable damage associated with maintenance, repair, or restoration of approximately 600 miles of levees. She recognized that small, disconnected mitigation sites were not as effective as they could be. Working with local agencies and restoration companies, Gail developed a method to streamline the process and make mitigation more biologically effective as part of an established mitigation bank. Among the ecosystem projects where Gail had an effect are Dutch Slough, McCormack Williamson Tract, Grizzly Slough, Decker Island, Winter Island, and Twitchell Island setback levee.

She was a strong leader and advocate for developing the Central Valley Flood System Conservation Strategy, a strategic plan to ensure that improvements to flood management provided multiple environmental benefits. The Strategy is an essential part of the Central Valley Flood Protection Plan and significantly improved scientific understanding of riparian and floodplain conservation needs, including the first system wide map of riparian vegetation and a strategic approach to improving fish passage. It also highlighted the role of vegetation in improving flood management, particularly as part of protecting levees from erosion. She deftly guided staff in working with flood engineers to change funding guidelines for flood management projects to include habitat restoration, design flood improvement projects to provide environmental benefits, and establish multi benefit flood/ecosystem projects.

She oversaw the Delta Levees Program, enhancing the partnership between DWR, the California Department of Fish and Wildlife, and local reclamation districts to improve habitat conditions on levees. She led the effort to establish regional advance mitigation projects, a novel approach to improve the effectiveness of mitigation projects in the Delta and Central Valley.

CA Department of Fish and Game (now Department of Fish and Wildlife)

Gail led the creation of the first and only approved statewide recovery plan for an endangered species: the 2004 Recovery Strategy for California Coho Salmon. She had a limited amount of time to create the plan and tremendous pressure to do it right. She hired the right people, created a team that excelled, and navigated the complex politics of fisheries conservation. Products were delivered on time and were of high quality.

CA Department of Conservation

As program manager for the Abandoned Mines Unit, she oversaw multiple mine remediation and reclamation projects, some of which were sources of pollutants to the Delta and Bay. She advocated for the use of native grass species at these projects. When told that there “was no source for native plants”, she initiated a directory of nursery sources for California native plants. She updated this directory multiple times between 1992 and 1999. She initiated the first statewide inventory of abandoned mines, creating a GIS layer that mapped almost 4000 new features. The inventory is used for multiple conservation and land use decisions. During her time at DOC, Gail helped organize the Society for Ecological Restoration, and in 1991, she was the founding president of SERCAL. In 1992, she was a founding board member of the California Native Grass Association. During the 1990s, she wrote many articles in the Society of Ecological Restoration newsletters and journal to educate professionals and interested nonprofessionals about habitat restoration.

Student Poster: Sofie McComb, Claire Powers, Jazmine Uy, Alyssa Winchell, and Laura Wolf

Climate Change Vulnerability Assessment of Island Oak (Quercus tomentella) see poster on page 15

Island oak (Quercus tomentella) is a rare oak species endemic to six islands in the California Island Archipelago (CAIA). Over a century of farming and grazing on the islands degraded core habitat and reduced island oak seedling recruitment. The species was listed as endangered by the IUCN in 2016. Most historical threats have been removed, though island oak regeneration is still restricted and there is concern that impending climate change poses an additional threat that may ultimately lead to extinction. Spatially-constrained, if the island oak’s range shifts or further deteriorates, alternative options are limited. We used MaxEnt, a species distribution model, to identify island oak’s bioclimatic niche on Santa Cruz, Santa Rosa, and Santa Catalina Islands and then predicted where that niche would exist through the end of the century, under four climate change scenarios. Model outputs supported three main findings: (1) Island oak’s predicted bioclimatic niche was largely driven by soil moisture availability; (2) Santa Rosa Island had the most predicted suitable habitat under each climate change scenario, while predicted suitable habitat on Santa Cruz and Santa Catalina Islands was minimal; and (3) the bioclimatic habitat occupied by island oak varies substantially between the three islands studied. Improvements in life history information, legacy grazing patterns, and more finely downscaled climate data would substantially increase model validity. Research should focus on identifying mechanisms driving the variation in habitat occupied on each island, while restoration should prioritize habitat augmentation and seedling recruitment, to increase island oak’s resiliency to climate change.
Beyond Recovery: 
Restoration for the Future

SERCAL 2019 in Santa Barbara April 10-12

the 26th Annual Conference of the California Society for Ecological Restoration

Kudos to our dedicated conference team:

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Clockwise from above: The Saddleback crew comes every other year and always play an integral role, either volunteering or presenting. Colleen Haraden and Loren Roach enjoying refreshments and conversation. CNPS Executive Director Dan Gluesenkamp gave an inspiring plenary Wednesday morning. The poster session provides students and professionals a one-on-one forum for discussing ideas and presenting new research. Everyone!! Photos courtesy Cindy Thompson
Many thanks to this amazing group of conference sponsors:

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And most of all...

A round of applause to everyone who participated and added their enthusiasm and goodwill to the mix — including our amazing volunteers who helped from start to finish.

We made a leap this year ...from our typical 200 to almost 300 attendees! ...from our typical 52 presentations to 70 ...from our typical 15 posters to 32.

Plus, we partnered with CNGA to offer a workshop (look for more partnerships in the future) and we started a new tradition of hosting a pre-conference “shindig” for our sponsors and conference leaders.

*We can't wait to see you in Monterey next April! More details soon!*
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You are crucial to the resilience of California’s native habitats

Just like our floral first responders, SERCAL members make California’s ecological systems healthy and whole again. In the almost 3 decades since SERCAL was founded, so much — almost everything — has changed. Yet one thing remains constant: The exceptional power we have when we work together. We are grateful for your membership and for all you do and want to recognize these individuals and businesses for their generous support:

$500 Sustaining Businesses
  Kevin Ghalambor  
  Burleson Consulting  
  Folsom
  Mark Girard  
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  Vista
  Danny Richards  
  Pacific Restoration Group  
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  Davis
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  Awesome Retired Dude  
  Tahoma
  Gigi Hurst  
  Habitat West  
  Escondido
  Denise Knapp  
  Santa Barbara Botanic Garden  
  Santa Barbara
  Douglas W. McKinney  
  D&D Wildlife Habitat Restoration  
  Spring Valley
  Ross N. Taylor  
  Ross Taylor & Associates  
  McKinleyville
A record 20 student presenters given scholarships for SERCAL 2019 Conference

Kudos to the Super Heroes at Cal-IPC, Ecological Concerns, Habitat West, Wildlands, and WRA for providing FULL SCHOLARSHIPS for 8 student presenters. Thank you!

In addition, proceeds of raffled items generously gifted by our sponsors and the SERCAL Board provided full scholarships to an additional 12 students! Thank you, everyone!

SERCAL-SER webinar a success!

Many thanks to organizers SERCAL’s Jamie Silva and SER’s Levi Wickwire and webinar crafters Michael Belchik and Craig Tucker for an illuminating presentation on the largest dam removal and river restoration project in U.S. history — Bring the Salmon Home: Protecting Tribal Trust resources on the Klamath. From both organizer and participant feedback, we are encouraged to continue our partnership. Stay tuned for future partnership collaborations and webinar offerings.

Board welcomes new affiliate members

SERCAL will soon be filing its updated Bylaws with the Secretary of State, thanks to the dedicated work of the Bylaws Committee (Will Spangler, Gavin Archbald, Ralph Vigil, and Carol Presley) and the legal experts at Hicks Law. Their efforts allowed the Board to restructure just a bit, developing a “SERCAL Leadership” structure that includes having Affiliates. We are so happy to have the added energies from these Affiliate members: Liz Agraz, Seongjun Kim, James Mizoguchi, Jamie Silva, Isaiah Thalmeyer, and Cindy Thompson.

It’s time to opt-in if you want a printed copy of Ecesis via snail mail

In March, we sent a questionnaire to everyone on our enews list to get a better idea of what California’s restoration community is looking for in our newsletter.

More than half of the respondents preferred receiving the newsletter digitally. You will receive an email this month in which you can opt in for the good ol’ printed version of the three remaining issues of 2019! After this issue, we will send everyone a digital file and will happily mail an issue for all of you who would still like a physical copy.
Ha ha! Our Spring issue hits the streets in July… is this climate chaos or what??

Do or do not. There is no try in restoration ecology

Integrative Ecologist Dr. Christopher Lortie (www.christopherlortie.info), a mesmerizing presenter in our Thinking Outside the Box session, wrote a paper about the conference which has just been published in Restoration Ecology (if you are a subscriber, you can find the entire paper at doi.org/10.1111/rec.12994).

Here is an excerpt from the abstract:
“Change is a fundamental component of contemporary restoration ecology. The environment, the research, and the ideas in this discipline are rapidly evolving and changing. The California Society for Ecological Restoration annual meeting was an inclusive, diverse meeting that significantly advanced new thinking in the field and provided an exemplar of the value of scientific discourse at meetings. The restoration work in this region also amplified and identified trends in the scientific community at large. A total of three future-oriented strategic issues emerged from the discourse at this meeting. (1) Restoration ecologists need to consider alternative definitions of local for interventions within a region. (2) Restoration is never complete and must always incorporate people. (3) Indirect outcomes and the process of restoration have merit despite challenges of immediate identification of benefits.”

Chris also created this unique word cloud from a pdf of the conference program so that we could share it with you.