

**Subject:** [EcoClimate News SW] Cultural Burning Webinar Today! Register Now

**Date:** Tuesday, May 12, 2020 at 9:39:18 AM Mountain Standard Time

**From:** SW Climate Adaptation Science Center

**To:** Leroy, Sarah Rose - (sary21)

[View this email in your browser](#)



# EcoClimate News Southwest

May 2020

**Reflections from SW CASC University Director,  
Gregg Garfin, PhD**



On behalf of the SW CASC, I am happy to report that, during the COVID-19 shutdowns in the Southwest states, the Southwest Climate Adaptation Science Center has been able to make progress. We experienced an initial disruption in staff and investigator schedules, as we adjusted to at-home work and its intersections with family and other obligations, such as home-schooling commitments for some of our team. Since then, our progress has been greatest in areas of research and operations that have easily accommodated computer-based analyses, writing, and online or remote-participation communication.

The SW CASC has continued with the launch of an Ecosystem Resilience webinar series, in collaboration with the University of Arizona's [Center for Climate Adaptation Science and Solutions](#). The May 1, 2020 webinar attracted 82 participants and strong interest in the topic of the effects of heat waves on ecosystems (you can view the recording [here](#), and register for the last webinar in the series below). This was relatively easy, because it already involved electronic communication.

Much of the SW CASC's work hinges on face-to-face interactions between researchers and natural resource managers. As one can imagine, this kind of work has been more difficult to complete, given workplace, local and state restrictions on in-person interactions, due to the COVID-19 outbreak; however, we have adapted—fitting, given the name of our organization. As the world adjusts to the normalization of video-meetings, we have had some success in keeping pace with critical interactions and even with stimulating some animated discussion on the scientific work that we are conducting. Other in-person meetings and public presentations have been delayed, due to cancellation of conferences, workshops and team-building meetings, including a forum in collaboration with the National Academies of Science, and postponement of a regional climate adaptation knowledge exchange that we'd been planning for 6 months. We will adjust to these setbacks, with the goodwill and understanding of our research and outreach partners.

With respect to the research that the SW CASC conducts, a survey of active projects

indicates that, most have been able to move forward. Some field work has been disrupted. Also, some computing-intensive work has been disrupted, due to the shift from reliable office-based connections with large computing systems to less reliable home-based wireless computing systems.

Please bear with us as we strive to regain momentum. Along with much of society, the SW CASC is making the best of a challenging situation. Most important – SW CASC team members have been healthy and we wish the best of health to everyone who reads this newsletter. We are all in this together!

---

## EcoClimate News Southwest Newsletter Update

Thank you for subscribing to EcoClimate News Southwest! This summer, we will be publishing one newsletter, in July, and will return to a regular monthly release in September. We look forward to sharing pertinent news regarding the Southwest and climate adaptation again with you in July!

---

## Upcoming Events

### **Webinar Series: Ecosystem Resilience**

Co-hosted by the SW CASC &

[The Center for Climate Adaptation Science and Solutions](#)

### **Webinar #3: Native American Cultural Burning**



The severe impacts of wildfires are becoming ever more apparent. Meanwhile, California Indian tribes have been using fire for centuries to maintain ecosystems. Ron Goode (Tribal Chairman of the North Fork Mono Tribe) and Beth Rose Middleton (University of California, Davis) will share their experiences from recent cultural burns in California, and explain how the traditional Native American practice of burning grasslands and forests improves the resilience of

ecosystems.

Date: May 12th, 2020

Time: 1-2 pm PDT

**Register Today**

View webinar #1 Extreme Heat & Ecosystem Resilience and all other past SW CASC webinar recordings [here](#).

---

### **NW CASC Webinar: Publishing Results of Co-Produced Research**



As part of a [NW CASC webinar series](#), Dr. Tamara Wall, Desert Research Institute and SW CASC principal investigator, will explore options for developing publications from other aspects of co-produced research, including the process used to engage decision-makers in the research, the resulting co-created research products and the evaluation of the work.

Date: June 1st, 2020

Time: 11 am PDT

**Register Today**

---

**SW CASC Communications Assistant Selected as AAAS**

## Mass Media Fellow



Earyn McGee, SW CASC Communications Assistant, is one of 28 young scientists, selected by the [American Association for the Advancement of Science \(AAAS\) for their 2020 Mass Media Science & Engineering Fellowship](#). This summer, the fellows will be placed in media organizations around the country, where they will contribute to their host sites' science coverage and write news stories for various media outlets, including newspapers, magazines, and radio. The fellows will hone their own writing while learning editing and interviewing skills and what it means to be a science journalist. Congratulations Earyn!

---

## Fellows' Highlight

### Hope From Strife: Working From Home with the SW CASC NRWD Fellows



*John Kemper is a PhD candidate at Colorado State University. Below are his experiences and insights as a SW CASC Natural Resources Workforce Development*



*(NRWD) Fellow.*

It's 1 PM, and I'm sitting on the couch. Again, that is – it's the only spot in the house where I can participate in a digital meeting that doesn't make it look like I'm checking in from the bottom of a cave or the surface of the sun. My laptop is open, precariously perched in a spot that doesn't give everyone else a landscape view of my living room, and my cats are cavorting around, dangerously close to that aforementioned precarious perch. And I'm on a call with the technical development team of the 2020 SW CASC NRWD Fellows, trying to discuss the validity of using a scaled-down climate model to investigate the potential for floodplain vegetation loss in the Gila River.

Sound familiar? I wouldn't be surprised. As my estimable colleague Josh Sturtevant wrote last month, we are now in times of great uncertainty. The novel coronavirus (technically SARS-CoV-2 or COVID-19) has forced the majority of working Americans – only 7% of whom had previously had the option of remote work – to set up shop in the kitchen, on the couch, or down in the basement ([Pew Research Center, 2020](#)), we SW CASC fellows among them. Of course, it would be remiss of me not to mention that most of us are lucky; we are able to work from the comfort of our homes, a luxury we recognize and do not take lightly. But it is not without challenge. Many of us have been forced to confront the realities of reduced productivity, increased distractions, or rapidly accelerated timelines. But from this strife comes hope!

*Read the full blog post by SW CASC NRWD Fellow John Kemper [here](#).*

---

## SW CASC in the News

### [Forest Structure and Climate Mediate Drought-Induced Tree Mortality in Forests of the Sierra Nevada, USA](#)

Wildfire Today recently posted an [article](#) on research partially funded by the Southwest CASC, which found that thinning forests and prescribed burns may help protect forest ecosystems from regional droughts and bark beetle infestations.

Between the years 2012 and 2016, extreme drought and subsequent increase in bark beetle populations led to the death of more than 129 million trees across the Sierra Nevada. State land managers have since aimed to reduce the densities of vulnerable forests because forests with fewer trees require less water, allowing these ecosystems to survive frequent or extreme droughts and related issues like bark beetle

epidemics. This management strategy, known as forest thinning, is accomplished through techniques such as prescribed burning and can reduce the negative impacts of climate change and increase the overall resilience of forest ecosystems. Read the full National CASC news release [here](#).

---

## Other SW Science

### Large Contribution from Anthropogenic Warming to an Emerging North American Megadrought

This study uses hydrological modeling and new 1200 year tree-ring reconstructions to demonstrate that anthropogenic temperature changes caused the 2000-2018 southwestern North America drought to become a megadrought. Anthropogenic effects pushed what should have been a moderate drought into becoming the worst drought the area has seen since 800 CE.

---

### How Traditional Tribal Perspectives Influence Ecosystem Restoration

Traditional perspectives have influenced restoration by deepening the understanding of reference conditions, expanding consideration of system dynamics, and guiding treatment based upon ethical principles and beliefs. This paper gives examples of how traditional perspectives have influenced ecosystem restoration projects through collaboration with the U.S. Forest Service in the western United States.

---

### What Makes Climate Change Adaptation Effective? A Systematic Review of the Literature

An important part of any program is evaluation. This study examines 110 adaptation programs that have been implemented and shown some degree of effectiveness. Five indicators of effectiveness are used: reducing risk and vulnerability, developing resilient social systems, improving the environment, increasing economic resources, and enhancing governance and institutions. Further, the author identifies the traits in common for successful programs and the gaps in each program.

---

## Partner Highlights

### USDA Southwest Climate Hub Bulletin

The USDA Climate Hubs were created to address risks such as fires, invasive pests, devastating floods, and crippling droughts on a regional basis. Each hub aims to translate science and research into action and extension to farmers, ranchers and forest landowners on ways to adapt and adjust their resource management. Learn more about the research and science the Southwest Climate hub is doing [here](#).

---

#### **April 2020 Southwest Podcast - The Wet & Wildflowery Winter-into-Spring Edition, plus COVID & Climate, Streamflow, Reservoirs, Wildfire, and Summer Monsoon/ENSO outlook**

In the April 2020 edition of the Climate Assessment for the Southwest (CLIMAS) Southwest Climate Podcast, Mike Crimmins and Zack Guido bring you the latest news and commentary about climate in the Southwest. They discuss potential effects of seasonal and temperature changes on the spread of COVID-19 examined in new rapid response to Government from the standing committee on emerging infectious diseases. Listen to the podcast [here](#).

### Partner Events

#### **Impact of Anthropogenic Warming on an Emerging North American Megadrought**

The National Oceanic and Atmospheric Association in conjunction with the National Integrated Drought Information System are hosting a webinar on the recently published paper [Large Contribution from Anthropogenic Warming to an Emerging North American Megadrought](#).

Date: May 13, 2020  
Time: 11 AM-12:00 PM PDT

**Register Today**

---

### Grass-Cast Virtual Stakeholders Workshop





The USDA Southwest and Northern Plains Climate Hubs, the University of Arizona, the Agricultural Research Service – Southwest Watershed Research Center, and others will host a virtual stakeholder workshop featuring a rangeland decision-support tool -- [Grass-Cast](#).

Date: May 14, 2020  
Time: 9 AM-11:30 AM PDT

Please contact Lauren Kramer ([LRKramer@fortlewis.edu](mailto:LRKramer@fortlewis.edu)) to register

---

### **Understanding Regional Linkages Between Production, Agriculture, Air Quality, and Climate**



The USDA SW Climate Hub and the Climate Assessment for the Southwest are hosting Dr. David Dubois, New Mexico State Climatologist, to highlight the intersection of production agriculture, air quality and climate.

Date: May 18, 2020  
Time: 2 PM PDT

**Register Today**

---

**California-Nevada Drought & Climate Outlook Webinar**

The California-Nevada Drought Early Warning System (CA-NV DEWS) May 2020 Drought & Climate Outlook Webinar is part of a series of regular drought and climate outlook webinars designed to provide stakeholders and other interested parties in the region with timely information on current drought status and impacts, as well as a preview of current and developing climatic events (i.e. El Niño and La Niña).

Date: May 26, 2020  
Time: 11 AM PDT

**Register Today**

## Job and Funding Opportunities

### Job Opportunities

#### [Assistant/Associate Professor of Human & Natural Rangeland Systems at New Mexico State University](#)

This 9-month, tenure-track position includes research (70%) and teaching (30%) with involvement in efforts relevant to the state of New Mexico, as well as nationally and internationally. The successful candidate will develop an extramurally funded research program and teach undergraduate and graduate level courses within an area of expertise.

*DEADLINE - May 31st, 2020*

#### [Ecologist Position at USGS Biological Science Center in Moab, UT](#)

An ecologist position is available at the USGS Southwest Biological Science Center located in Moab, UT. The successful candidate will work on a collaborative project examining how climate change and livestock grazing affect soils, plants, and nutrient cycles of the Colorado Plateau.

*DEADLINE - Position open until filled*

#### [National Park Service Research Assistant](#)

The NC CASC seeks the services of a full-time student contractor that will soon finish a Master's degree or will be within one year of completing a Master's degree upon the start date. The successful applicant will assist with National Park Service Climate Response Program scientific

and support activities. Respondents should submit a resume and cover letter describing their education and work experience to Brian Miller, NC CASC Research Ecologist at [bwmiller@usgs.gov](mailto:bwmiller@usgs.gov)

*DEADLINE - Position open until filled*

#### Program Coordinator

The American Society of Adaptation Professionals (ASAP) is seeking a program coordinator to provide administrative, communications, and logistics support for ASAP programs, member groups, and events.

*DEADLINE - Position open until filled*

#### Program Manager

The North Central Climate Adaptation Science Center (NC CASC) is seeking applications for a program manager. This position will oversee the day-to-day university operations for the NC CASC.

*DEADLINE - Position open until filled*

#### Post Doctoral Position

The USGS North Central Climate Adaptation Science Center (NC CASC) is hiring a Postdoctoral Scholar in Understanding and Managing Changing Wildfire Risk to lead an effort on generating the fire science needed for resource management decisions in the ecosystems of the North Central region.

*DEADLINE - Position open until filled*

#### Water Resource Manager

The Arizona Department of Water Resources (ADWR) is seeking a water resources manager. The successful applicant responsibilities include supervising and training staff, representing ADWR at public meetings and conferences, developing, organizing, and the dissemination of policies, procedures, and training materials.

*DEADLINE - Position open until filled*

---

### **Student Funding Opportunities**

[Expanding Representation in the Geosciences \(ERG\) Scholarships](#)

GSA's (The Geological Society of America) ERG Scholarships support students who are underrepresented in the geosciences by awarding up to six students with a \$1,500 scholarship, student membership, and full meeting registration for GSA's 2020 Annual Meeting & Exposition.

*DEADLINE - May 15th, 2020*

[On To the Future Program \(OTF\)](#)

Apply to OTF and gain friendships, mentorship, and knowledge of future opportunities in the geosciences. Awardees receive partial travel funding to the Annual Meeting, 25-28 October in Montréal, Québec, Canada; full meeting registration; and one-year membership. GSA encourages low-income, minority, first-generation, non-traditional, women, veterans, LGBTQ+, and students with disabilities to apply

*DEADLINE - May 29th, 2020*

---

**Contact us at:**

University of Arizona, ENR2 Building, 1064 E. Lowell St., Suite N441, Tucson, AZ 85721

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#).

Copyright © 2020 Southwest Climate Adaptation Science Center | All rights reserved.

**Subscribe to EcoClimate News Southwest**

