



North Central Climate Adaptation Science Center

Volume 3 Issue 2

January/February 2022

Climate Solutions Days

Earth Week, April 18-22, 2022



Join the [NC CASC](#) in a celebration of Earth Week 2022 as we host [Climate Solutions Days](#), an à la carte offering of presentations, workshops and trainings scheduled throughout the week where scientists and practitioners will share insights on climate change impacts from findings in the North Central region. Themes woven into panel presentations, working groups, listening sessions, trainings and tools include:

- *Climate Impacts and Adaptation in the North Central Region*
- *Science Tools & Applications*
- *Tribal Partnerships in Climate Adaptation*
- *Future of Fire*
- *Grasslands Synthesis Project*
- *Science Communication*
- *Stakeholder Needs and Outreach*

[Visit our webpage](#) for event details and registration information. Deadline for registration is **Friday, April 1**. We look forward to seeing you there!





North Central
RISCC

North Central Regional Invasive Species and Climate Change (NC RISCC) Network to Host Science Integration Workshop

Are you interested in the intersection of invasive species and climate change? Do you want to know what others are working on in this area and what we can do to manage these combined environmental challenges? The North Central Regional Invasive Species and Climate Change (NC RISCC) network is hosting our first Science Integration Workshop to connect researchers and practitioners in the North Central region (CO, WY, MT, KS, NE, SD, ND). All are welcome to attend (even if you are not in the North Central region) and participate. Come learn about ongoing management projects and new research advances!

Date: April 6th & 7th, 2022

Time: 9:00 AM - 12:00 PM Mountain Time (two half-days)

Location: Virtual (via Zoom) [Registration Form & Preliminary Agenda](#)

The NC RISCC is affiliated with the North Central Climate Adaptation Science Center (NC CASC) and the University of Colorado Boulder.

Brian Miller Presents at Center for Geospatial Analytics at North Carolina State University

Brian Miller, NC CASC Research Ecologist, gave an invited presentation to the Center for Geospatial Analytics at North Carolina State University as part of their 2021-22 Geospatial Forum series, which “brings together researchers, educators, practitioners and students of the geospatial sciences in an exciting series of presentations and discussions of cutting-edge work.” Brian’s talk, [Facilitating Climate Change Adaptation through Scenario Planning and Simulation Modeling](#) is available for viewing on [Youtube](#).



NC CASC Wildfire Scientists Field Media Requests for Comments on Marshall Fire

NC CASC wildfire scientists, Jennifer Balch, University of Colorado Boulder, and Phil Higuera, University of Montana, fielded numerous media requests for interviews in January regarding the Marshall Fire in Boulder County. [Read the full list.](#)

James Rattling Leaf Promotes Indigenous Partnerships, Traditional Ecological Knowledge, Shared Purpose

NC CASC Co-PI James Rattling Leaf participated in several recent events to promote indigenous partnerships, traditional ecological knowledge (TEK) and shared purpose:

Building Relational and Effective Partnerships with Indigenous Communities, hosted by the [Rising Voices Center for Indigenous & Earth Sciences](#), is now available for viewing on [Youtube](#).

The event focused on recommendations for working with Indigenous communities based on the knowledge that long-term relationship building with these communities is the foundation upon which educational programs, research collaborations, and other initiatives must be co-created. The goal of this presentation was to define best practices in building relationships and clarify a

process for establishing and maintaining effective collaborations with Indigenous communities that respect sovereignty and self-determination.



[*Geoinspirations Podcast Series: James Rattling Leaf - Responsibility, Reciprocity, Relevance, and Relationality*](#) Hear James' vision of bringing indigenous people and society as a whole together through science, mapping, education, and a shared purpose.

[*How Can Spiritual and Faith-Based Knowledge Systems Inform the Weather, Water, and Climate Enterprise?*](#) American Meteorological Society (AMS) webinar. Presented by the AMS Interfaith Committee, hear stories, work, ideas from panelists across various spiritual/faith-based backgrounds on environmentalism, and how the AMS and spiritual/faith communities can work together in this important space.

Developing Tribal Strategies to Deal with a Changing Climate, Second Lakota Food Summit. This event was sponsored by the [Lakota Food Sovereignty Coalition](#), a reservation-wide collaboration between food producers, processors, transporters, financial supporters, sellers, consumers and local, state and federal programs to create a sustainable food system on the Pine Ridge Reservation. The mission of the Lakota Food Sovereignty Coalition is creating a local food system by providing inspiration, educating consumers, connecting stakeholders, and encouraging the production, distribution and marketing of healthy local foods.

Recent NC CASC Webinars & Newsletters

[NC CASC Webinar Series Webinar: Developing Climate Information for US Fish and Wildlife Service Species Status Assessments Using the Climate Toolbox](#)

[NC CASC February 2022 Tribal Climate Newsletter](#)

[NC CASC January 2022 Tribal Climate Newsletter](#)

Recent NC CASC Publications

Conservation under uncertainty: Innovations in participatory climate change scenario planning from U.S. national parks • Conservation Science and Practice • B. Miller

Increasing the Uptake of Ecological Model Results in Policy Decisions to Improve Biodiversity Outcomes • Environmental Modelling & Software • B. Miller (co-author)

Filling a Critical Data Gap in Water Management for the Western United States • JAWRA Journal of the American Water Resources Association • G. Senay (co-author)

Institutional barriers to actionable science: Perspectives from decision support tool creators • Environmental Science & Policy • A. Cravens (co-author)

Tree mortality response to drought-density interactions suggests opportunities to enhance drought resistance • Journal for Applied Ecology • NC CASC funded

Are drought indices and climate data good indicators of ecologically relevant soil moisture dynamics in drylands? • Ecological Indicators • NC CASC funded

What is Traditional Ecological Knowledge and why does it matter? • Frontiers in Ecology & the Environment • J. Rattling Leaf

Developing strategies to support social-ecological resilience in flammable landscapes: A structured approach for natural resource managers and other stakeholders • USDA/Forest Service Joint Fire Science Program • P. Higuera (co-author)/USDA funded

Assessing the use of climate change information in State Wildlife Action Plans • Conservation Science and Practice • H. Yocum/NSF funded

Dominant Sonoran Desert Plant Species Have Divergent Phenological Responses to Climate Change • BioOne • S. Crausbay (co-author)/SW CASC funded

