



North Central Climate Adaptation Science Center

Volume 2 Issue 1

November/December 2020

University of Colorado Develops First Systemwide Lands Acknowledgement Statement



The University of Colorado, headquarters of the NC CASC, released its first systemwide statement acknowledging that the lands where the four campuses reside were originally home to Indigenous peoples. The statement will be posted on system and campus websites and is an important step in

strengthening the CU system and engaging with the CU community to support Indigenous knowledge and studies.

Our Climate Data 101 in Python Workshop was a Hit!

The NC CASC hosted a virtual Climate Data 101 in Python workshop for resource managers and climate scientists on Friday, October 30th, 2020 with 45 participants. The workshop covered the basics of using scientific programming with Python to analyze and visualize netcdf MACA v2



climate data. Details about workshop lessons and Earth Lab's free education portal can be found [online](#). The NC CASC plans to host more data-intensive workshops in the future.



James Rattling Leaf, Sr. featured in Panels, Presentations, and Discussions on Issues Relating to Tribes and Climate

Throughout November and December 2020, NC CASC PI and Consultant to the Great Plains Tribal Water Alliance, James Rattling Leaf, Sr. participated in a variety of panels, presentations, and discussions relating to indigenous peoples and climate. Highlights include his participation in a panel discussion about data implications for American Indians at the [Academic Data Science Alliance's Annual Meeting](#), and a panel at the [Group on Earth Observations \(GEO\) Week 2020](#), where he discussed the benefits of data sharing. The full list can be found on our website: <https://nccasc.colorado.edu/>.



NC CASC Welcomes Dr. Jilmarie Stephens and Dr. Christy Miller Hesed



Dr. Jilmarie Stephens is a bio-micro-meteorologist studying plant-atmosphere interactions in a changing climate. Her doctoral work focused on long term trends in Boreal forest ecosystems using both in-situ flux tower measurements and ecophysiological modeling techniques. At CIRES/NC CASC, her research focuses on understanding changing wildfire regimes in the American West using observations and numerical modeling approaches. She has also served as a CIRES RECCS community college student mentor. Jilmarie received her B.S. and M.S. in Atmospheric Science at UC Davis and her Ph.D. in Soil Science from the University of British Columbia. Read more about Dr. Stephens in her [Google scholar profile](#).



Dr. Christy Miller Hesed is an environmental anthropologist and conservation biologist whose work focuses on engaging diverse stakeholders in climate change adaptation planning. As Postdoctoral Associate at the NC CASC, she coordinates two working groups to assess and report on climate science and adaptation knowledge and gaps for the region. Prior to working at CIRES, Christy was the project director of Engaging Faith Communities for Coastal Resilience, an applied research project that brought together rural church communities with county and state government employees to address climate change on the Chesapeake Bay. Her doctoral research focused on rural African American communities on the Chesapeake Bay in order to understand environmental justice, vulnerability, adaptation, and resilience to sea-level rise. Christy is a former EPA STAR Fellow.

Stefan Tangen Co-Author on ATNI-led Tribal Review of the Congressional Action Plan the Climate Crisis

The Affiliated Tribes of Northwest Indians (ATNI) has released its Tribal Review of the U.S. [House Select Committee on the Climate Crisis](#)' Congressional Action Plan, co-authored by NC CASC Tribal Liaison, Stefan Tangen. The [review](#) can be found online.

NC CASC Tribal Partners Participate in Development of NIDIS' Tribal Drought Engagement Strategy for the Missouri River Basin & Midwest Drought Early Warning Systems



In order to ensure the inclusion of indigenous perspectives in the implementation of our Drought Early Warning System (DEWS), NIDIS launched a [Tribal Drought Engagement initiative](#) in January 2019 in collaboration with the Masters of the Environment Program at the University of Colorado Boulder, James Rattling Leaf, Sr. at the NC CASC, the Great Plains Tribal Water Alliance, and several others. The project aimed to strengthen relationships between with tribal resource managers across the Missouri River Basin and Midwest DEWS regions in order to effectively deliver timely and relevant drought information.

Imtiaz Rangwala Featured in KRDO Story about Colorado's Record Fire Season

Climate Science Lead, Imtiaz Rangwala, was quoted in a November KRDO story, "[How to rebuild after Colorado's devastating wildfire season](#)". In the article, he discusses La Nina, extreme drought in the West, the nearly perfect conditions for a record-breaking fire season, and the concern among climate scientists that future projections for climate conditions are too conservative.



Phil Higuera Gives Wildfire Talk at National Academies of Science Board on Agriculture and Natural Resources Public Session

On December 8th, NC CASC PI Phil Higuera gave an overview talk, "Past and Future Ecological Effects of Wildfire" in a 90-minute opening session of the National Academies of Science (NAS) Board on Agriculture and Natural Resources Public Session. The virtual talk was attended by National Academy Board Members, other NAS members, and was open to the public. A [recording](#) of the talk and a [PDF](#) of Phil's presentation are online.



CU Regents Vote to Approve In-State Tuition for Out-of-State Indigenous Peoples

On Thursday, November 12th, the University of Colorado Board of Regents voted 7-2 on a resolution to work with the Colorado General Assembly to seek approval for in-state tuition status for out-of-state Indigenous peoples whose tribal nations are historically tied to the lands that make up the state of Colorado. The board also voted to approve a resolution that "the University of Colorado system administration shall continue collaborating with Indigenous community members and leaders across the campuses on a variety of issues to further strengthen the university's relationship with Indigenous and native communities."

NC CASC Tribal Climate Adaptation Newsletters Online

Tribal Climate Adaptation Newsletters contain information relevant to tribal partners and are posted monthly on our [website](#). Links to the November and December 2020 issues can be found [here](#). Interested parties can use [this link](#) to subscribe to the Tribal Climate Adaptation Newsletter.

FY20 NC CASC-Funded Projects Go Live

PI: Davis (UM) : [Science to Inform Post-fire Conifer Regeneration and Reforestation Strategies Under Changing Climate Conditions](#)

PI: Stoner (WCS): [Promoting Climate Resilience and Soil Health in Northern Rockies Grasslands Through Bison and Cattle Grazing Management: Weaving Together Indigenous and Western Science](#)

PI: Hawbaker (USGS): [Anticipating Forest Vulnerability to Fire-Catalyzed Ecosystem Change in the Northern Rocky Mountains](#)