



Museum of Natural History  
UNIVERSITY OF COLORADO BOULDER



UCAR CENTER FOR  
SCIENCE EDUCATION

## From Fossils to Forecasts: Unlocking Colorado's Changing Environment

June 9 & 10, 2026

### Presenters:

- Gianna Sullivan [gianna.sullivan@colorado.edu](mailto:gianna.sullivan@colorado.edu)
- Laila Cook [lcook@schoodicinstitute.org](mailto:lcook@schoodicinstitute.org)
- Jack Clark [Jack.Clark-3@colorado.edu](mailto:Jack.Clark-3@colorado.edu)
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### DAY 1: CU Museum of Natural History

- [Slides](#) - Day 1
- [CUMNH School Programs and Teacher Resources](#)
- [Earthday.org Education Resource Library](#)
- [NOAA Climate Tools and Resources](#)
- [Climate Resilience Resources for Cultural Heritage](#) - Climate Hazard Risk Assessment Map
- [Classrooms for Climate Action](#)
- CU CIRES [CEEE HEART Force](#)
- [Moth-a-palooza Event](#), June 11, 2026
- Herbarium/Specimen Databases
  - [Colorado Herbarium Database](#)
  - [Symbiota Rocky Mtn Herbarium Database](#)
  - Global Biodiversity Information Facility - [Database](#)
- McCain Lab - [Publications](#)
  - **McCain, C. M.**, King, S. R. B., and T. Szewczyk. 2021. Unusually large upward shifts in cold-adapted, montane mammals as temperature warms. *Ecology* 102: e03300. [PDF](#)
  - **McCain, C. M.**, King, S.R.B, Szewczyk, T\*, and Beck, J. 2018. Small mammal species richness is directly linked to regional productivity, but decoupled from food resources, abundance, or habitat complexity. *Journal of Biogeography* 45: 2533-2545 & Cover. [PDF](#)
- **Digital Resource Case Study Article** (open access, if link does not work email Laila)
  - Flemming, A., Phillips, M., Shea, E. K., Bolton, A., Lincoln, C., Green, K., ... Cubeta, M. A. (2020). Using Digital Natural History Collections in K-12 STEM Education. *Journal of Museum Education*, 45(4), 450-461. <https://doi.org/10.1080/10598650.2020.1833296>

**DAY 2: UCAR Center for Science Education**

- **Slides** - Day 2
  - **SciEd Teaching Resources**
    - [Tree Rings: Recorders of Climate Change](#)
    - [Tree Rings: Dendochronology interactive](#)
    - [Paleoclimates and Pollen](#)
    - [Convective storms in a warming climate activity](#)
    - [Looking Into Surface Albedo](#)
    - [Cool Playgrounds](#)
    - [Mitigation or adaptation](#)
    - [Very Simple Climate Model Activity](#)
    - [What Can a Tree Do For You](#)
  - **Climate Central**
    - [Public Schools Exposed to Heat](#)
  - **Pika Activity:**
    - [Compass Points Thinking Routine](#)
    - [STAC NSTA Sessions](#)
    - [STAC Analyzing and Interpreting Data with AI](#)
    - [DMNS Scientists in Action: Pikas](#)
    - [Colorado Pika Project](#)
  - **Pika Research**
    - Ray, C., & Vidrio, J. (2025). Long-term data suggest a severe decline in recruitment of the American pika on Niwot Ridge, Boulder County, Colorado. *Arctic, Antarctic, and Alpine Research*, 57(1).  
<https://doi.org/10.1080/15230430.2025.2570526>
    - [CU Boulder Today \(2025\)](#)
    - [CPR \(2026\)](#)
  - **Awe:**
    - [Awe: The New Science of Everyday Wonder and How It Can Transform Your Life, by Dacher Keltner](#)
    - [Oprah Podcast Interview, Dacher Keltner](#)
  - **NCAR Visualization Gallery**
    - [Global Weather Simulation](#)
    - [Changes in Water Vapor for Future Climate](#)
    - Article: [Climate Modeling](#)
  - **Climate Mental Health**
    - [Climate Emotions Wheel](#)
    - [You are a Climate Leader](#)
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### Other Learning Resources

- [Climate Central](#)
- [Project Drawdown](#)
- [Climate Initiative](#)
- [Denver Urban Heat Storymap](#)
- [Resilient Futures Teacher Workshop](#), July 28-30, Boulder, CO
- [Colorado Seal of Climate Literacy](#): The Seal of Climate Literacy recognizes students who graduate with the knowledge and skills to understand—and act on—the social, economic, and environmental impacts of climate change.
- [+1 Routine](#)
- [Project Zero Thinking Routines](#)
- [Earth Science Puzzles by Kim Kastens](#)

### Presenters/Collections Curators

- Amber Horning [Amber.Horning@Colorado.Edu](mailto:Amber.Horning@Colorado.Edu) - CU Herbarium
  - Jason Kneivel, Acting Deputy Director, Environmental Resilience Applications Program, [knievel@ucar.edu](mailto:knievel@ucar.edu)
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