



Grand Junction Geological Society

<http://www.gjgs.org/>



This Month's Presentation

Dr. Bob Anderson

Department of Geological Sciences
Institute for Alpine and Arctic Research
University of Colorado, Boulder, CO

Will present a talk on

Climate as seen through the lens of Colorado's Glaciers

The abstract of the talk and the speaker's bio are on the following page.

Meeting Time and Location

Wednesday, January 24, 2024

7:30 p.m.

Joint meeting with the CMU Geology Students
Saccomanno Lecture Hall (Room 131 in the Wubben-Science Building at Colorado Mesa University)

Zoom Details

Andres Aslan is inviting you to a scheduled Zoom meeting.

Topic: Jan GJGS meeting

Time: Jan 24, 2024 07:00 PM Mountain Time (US and Canada)

Join Zoom Meeting

<https://coloradomesa.zoom.us/j/93116816113>

Meeting ID: 931 1681 6113

The Zoom meeting will open at approximately 7:00 to give

Important Announcements

Dues are due!! If you have not paid your dues (a mere \$15 per year), please do so now. You can pay by check or cash at the meeting, or mail a check to our P.O. Box at:

P.O. Box 4045

Grand Junction, CO 81502-4045

Or, if you prefer, you can also pay by credit card on our website: GJGS.org.

Abstract

Climate as seen through the lens of Colorado's Glaciers

Bob Anderson, CU

Over the last couple million years, Colorado's glaciers have come and gone to the pace of global climate history. Only 20 thousand years ago we had many glaciers in the state, flowing down the valleys of nearly every mountain range in the state. Yet very few features we would recognize as glaciers now exist in our mountains. I will introduce the history of climate and will discuss what has driven that history over this latest cycle of ice ages. I will then focus on our own glaciers and how we have come to know their more recent history – chiefly their demise since the last glacial maximum 20 thousand years ago. I will then focus on the hundreds of odd glaciers that now dot our mountain valleys. These “rock glaciers” are cloaked with a layer of rocks that serves as something of a parasol to protect them from the heat, and at the same time prevent them from being recognized as glaciers. We are only now coming to understand how these glaciers work.

Bio

Bob Anderson
CU Boulder
Department of Geological Sciences
Institute for Alpine and Arctic Research

Bob grew up in Colorado, hiking, photographing and climbing its mountains. After high school in Golden, Bob went to Williams College in western Massachusetts where he majored in Geology. He then took on a Masters at Stanford, where he wrote a biography of the 18th century geologist Clarence Edward Dutton.

After several years exploring non-academic paths, mostly pursued in Colorado and Wyoming, Bob moved to Seattle to the University of Washington to join a geomorphology group there, mentored by Bernard Hallet. He studied the physics of how sand and dust are blown about by wind. That was followed by a two-year postdoc at Caltech.

He has been in the teaching-research world of academia since. From 1988 to 2003 he taught at UC Santa Cruz. In that time he veered from the physics of little things like sand grains, and began to research how rivers cut into rock, how marine terraces are etched into rising landmasses (like Santa Cruz itself), and how glaciers that ornament our high country carve out valleys, polish their bedrock, and leave a record of valley occupation in moraines. He and his wife Suzanne, also a geomorphologist, moved to the University of Colorado in 2003, where they have both taught since. They have studied how rocks weather and soils move (a project that Suzanne led) and how glaciers and permafrost evolve in today's warming world.