## THE MGS FIELD TRIP COMMITTEE PRESENTS Beartooth Pass Roadside Geology — Red Lodge to Beartooth Lake

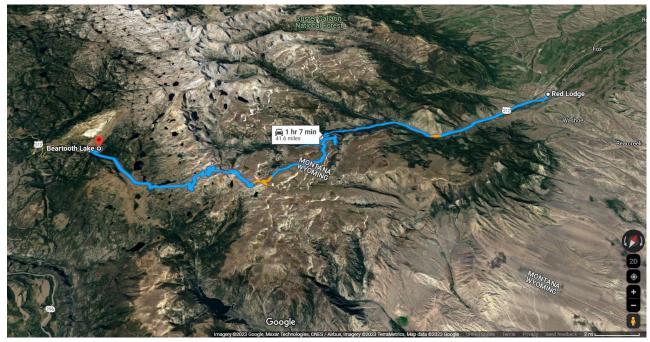
Saturday September 9<sup>th</sup>, 2023

**Trip Leaders: Ennis Geraghty (Retired)** 

Beartooth Pass Highway is unique for the rich span of geologic history exposed along the traverse from Red Lodge to Beartooth Lake, perhaps the finest span of geologic ages found in one location worldwide!

Among the features to be discussed on this field trip are:

- Amoco's 1986-1987 deep drilling testing the Beartooth front Laramide basement overthrust:
- Archean shelf-sequence rocks metamorphosed to granulite facies, including quartzites dated at 3.4 billion years old;
- Historic chrome mining;
- Outstanding alpine glacial topography and landforms;
- Archean granodiorite/tonalite magmatism, dated at 2.9 billion years old;
- Paleozoic stratigraphy at Beartooth Lake;
- Absaroka volcanism and Heart Mountain mega-landslide, dated at 49 million years ago.



Oblique view (looking to the northwest) of the Beartooth Mts plateau. The blue line marks the field trip route from Red Lodge, MT to Beartooth Lake, WY.

## **Important Details**

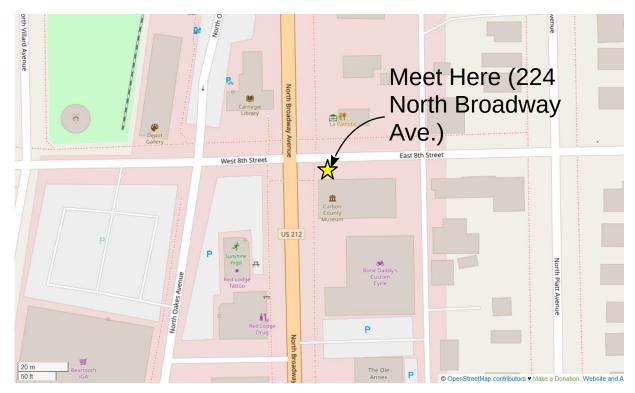
- WHAT: Beartooth Pass Highway Geology: Red Lodge to Beartooth Lake
- WHEN: Saturday, September 9<sup>th</sup>, 2023, 9:00 a.m.
- WHERE: Meet at Carbon County Museum Building (north side) in Red Lodge, 224 North Broadway Avenue.
- **NEEDS:** Personal vehicles and volunteer drivers; we will try to consolidate in car pools. Bring your own lunch &water. Trip will involve limited hiking, mostly visiting road cuts on US Highway 212.

## Cost

- Free for members and students
- \$25 for non-members. (Not a member yet? Visit the MGS website (<a href="https://mtgeo.org/join/faq/">https://mtgeo.org/join/faq/</a>), become a member, and come on the field trip for free)

**Field trip registration** closes September 7<sup>th</sup> (**RSVP to <u>montanageologicalsociety@gmail.com</u>** to register)

Refunds are only available until September 7<sup>th</sup>.



Map of the meeting location in Red Lodge, MT. We will meet at the Carbon County Museum Building (north side) in Red Lodge, 224 North Broadway Avenue (yellow star), at 9am.