

A Journey Through Lake City's Calderas and Geological Marvels *RMAG Goes to the San Juan Mountains!*

Saturday September 28, 2024

Leaders: Harvey DuChene

RMAG Trip Coordinator(s): Rob Diedrich

Description:

Join long-time RMAG member Harvey DuChene for an 'On-the-Rocks' field trip to some of the most intriguing and beautiful scenery in the state as RMAG heads to Lake City, nestled in Colorado's San Juan Mountains.

The San Juan Mountains comprise a landscape born of fire and sculpted by water and ice into a labyrinth of canyons, remote peaks and fascinating geology that formed during the Paleogene, Neogene and Quaternary Periods. Covering more than 12,000 square miles, the mountains were built by multiple volcanic eruptions and extend westward from the San Luis basin to the Paradox basin and northward from Pagosa Springs to the valley of the Gunnison River. At least 18 major volcanoes nested within the remnants of dozens of lesser volcanoes have been identified by USGS geologists. The mountains were sculpted by 2.5 million years of glaciation during the Pleistocene to create the landscape of today. From the summit of any of the high peaks near Lake City, all that can be seen in all directions are mountains.

This field trip is focused on the area near Lake City where the calderas of the Uncompahgre and Lake City volcanoes are located. West of Lake City, the north rim of the Uncompahgre caldera is beautifully displayed in a spectacular panorama that can be viewed from Windy Point scenic overlook near Slumgullion Pass. Inside this caldera, which covers 150 square miles, are the Lake City caldera and its post-eruption resurgent dome. Southwest Colorado once was a focal point for super-volcanic eruptions similar in scale to the largest Yellowstone event.

Features that will be discussed include the origin of the calderas, a solfatara, the Slumgullion earthflow, glaciation, the origin and future of Lake San Cristobal, and recent landscape evolution. Other topics include emplacement of ore bodies, hard-rock mining, volcanic moat lakes, and what conditions may have existed near Lake City in the recent past.

Logistics Summary:

The tour will begin and end at the Matterhorn Motel in Lake City and will take most of one day. We will lunch at the Williams Creek Picnic area near Lake San Cristobal, and if

September holds form, the fall colors should be spectacular. Please bring your own bag lunch.

The field trip stops are along Colorado Highway 149 or Hinsdale County Road 30 and are accessible by 2WD vehicles. Most of the stops are at roadside overlooks and require very little walking. Elevations range from 8,600 to 11,000 ft, so bring a hat, sunscreen, drinking water and a jacket in case of cool weather. A folding chair is suggested for the first stop at Windy Point, where the discussion lasts about one hour. Participants are encouraged to carpool during the field trip to minimize the number of vehicles.

Hotel Block:

Lake City is about four and a half to five hours from Denver by car with limited accommodations. RMAG has arranged a Room Block with [The Matterhorn Motel](#) in Lake City for September 27-29, 2024. There are 14 rooms with various sleeping occupancy that are being held until September 3, 2024.

Attendees are responsible for paying for their room directly to the hotel, and a guaranteed reservation requires a one-night non-refundable deposit per room. The balance is due at check-in.

The cancellation period is 14 days prior to arrival date. If cancelled before the cancellation period the guest will not be responsible for the balance of the room. If cancelled in the cancellation period, guest will be responsible for the entire reservation room rental. There is no refund for an early check out.

To make a reservation attendees please call the Motel at 970-944-2210 and inform the staff that they are reserving for the Rocky Mountain Association of Geologist Group.

Costs:

Fees: \$45.00 for Members, \$55.00 for non-members

Limit: 20 participants

Refunds: Refunds for the Lake City Calderas Field Trip are available until September 3, 2024. After September 3, 2024, if you can no longer attend you can transfer your registration to another attendee or forfeit the trip costs.