LGGMC Newsletter

---Content---

---Contact Us---

Postal Address:
Lake George Gem & Mineral Club
PO Box 171
Lake George, CO 80827

Website:
LGGMC website
LGGMC on Facebook

Meeting Location:
Lake George Charter School
38874 Hwy 24
Lake George, CO 80827

Map to Lake George Community Center

Map to Lake George Charter School

Lake George Gem & Mineral Club

April 2025

About Us

The Lake George Gem and Mineral Club is a group of people interested in rocks and minerals, fossils, geology and history of the Pikes Peak/South Park area, Indian artifacts, and the great outdoors. The Club's informational programs and field trips provide opportunities to learn about Earth Science, rocks and minerals, fossils, lapidary work, jewelry making, and to share information and experiences with other members. Guests are welcome to attend, to see what we are about!

The Club is geared primarily to amateur collectors and artisans, with programs of interest both to beginners and serious amateurs.

The Club normally meets on the second Saturday of each month at the Lake George Charter School gym, located on the south side of US Highway 24 approaching the town of Lake George from Florissant. A link to a map of the meeting location is provided on the sidebar under "Contact Us". Between Oct – Mar, our meetings start at 10 AM. From Apr-Sep, our meetings start earlier, 9 AM, to allow for more time for any subsequent field trips.

Club Officers

Following are the LGGMC Officers for 2025. Please reach out if you need any help.

President	Dave Bruess	***david@bruess.me***
Vice President	Bart Zobel	***bezobel@gmail.com***
Secretary	Steve Kahler	***pipprophet@gmail.com***
Treasurer	Karen Vogl	***bigmabe@hotmail.com***
Newsletter Editor	Betty Bowles	***bbowles2@gmail.com***
Field Trip Coordinator	Corey Miller	***corythevaulter@gmail.com***
Show Coordinator	Carol Kinate	***kinatec@aol.com***

To Join Our Club – (2025 Annual Membership Applications are being extended through April)

Our organization is incorporated under Colorado law as a nonprofit educational organization, and is a member of the Colorado, Rocky Mountain, and American Federations of Mineralogical Societies. We gather monthly as a club to share information including guest speaker presentations, workshops, and rock specimen show and tell discussions. We coordinate and supervise amazing field trips for club members that cover a broad spectrum of geological, archeological, rock, and mineral interests. We also sponsor the annual Gem and Mineral Show at Lake George, where collectors and others may purchase or sell rocks, minerals, fossils, gems, or jewelry.

Annual Membership Extension!!

Due to ongoing issues with our online registration process, our current year membership application and/or renewal has been extended to **April 30, 2025**. Membership for 2025 is closed after this time. We do apologize for any confusion with the process. Please contact us if you have questions about your status. Last year's membership list will be purged on May 1. Please note that all memberships must be current in order to participate on any field trip or to use any club claim.

How to Apply

The quickest and easiest way for one to join our club is online. Visit ***OUR CLUB WEBSITE*** and follow the "Register" option. If you are already registered and want to pay your membership dues online for 2025, follow the "Login" option. If you have any difficulties with verifying your payment, please contact us.

One may also apply for membership in person at our monthly meetings or by mailing in the application and fee. The application can be dowloaded in PDF format from ***HERE***. The application will need to be filled out and submitted to the club along with the appropriate membership dues. The mailing address to submit the application is provided in the newsletter sidebar, **---Contact Us---** under **Postal Address**. Remember to get your application in before the extended date of May 1, 2025!

Annual Membership Fee

Annual membership dues are collected as follows:

LGGMC Annual Membership Dues 2025		
$15.00	Individual	Age 18 and over
$25.00	Family	Parents + kids under age 18

Look Forward to Our Next Meeting (**9 AM April 12, 2025** @ Lake George Charter School)

Last Month's Meeting

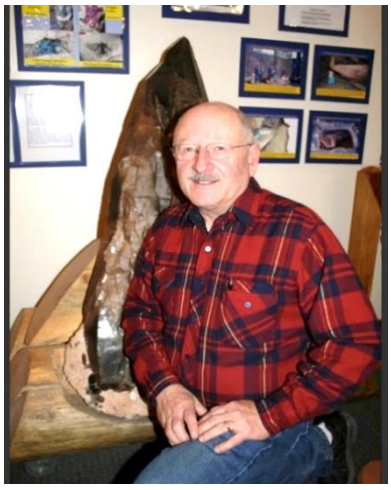
Inspired by Dave Bruess's presentation on **Photographing Minerals**, at last month's meeting, Bart Zobel photographed a specimen from his collection. It demonstrates the co-occurrence of epidote (green) and calcite (translucent white). He collected it on the club's last trip to the Calumet Iron Mine near Salida a few years ago.

What's Up for April 2025 Meeting

For our April meeting, John Rakowski will be presenting, **Pikes Peak Collecting 101**. John will have a slide presentation along with examples of rock types or minerals that are mentioned in the talk. To help serve our club and members when they are out in the field, John has provided a set of notes on field collecting.

John's **Field Collecting Notes** are presented in the newsletter section, From Our Members.

John Rakowski's Bio



John Rakowski

John has been a Lake George Gem & Mineral Club member since 2003 and has held various officer positions since 2006. He has been a mineral and fossil collector since early 1960's. He earned a degree in Geology and worked as an exploration geologist in the oil and gas industry from 1968 to 2010. He is now retired. John is also President of the Pike Peak Historical Society with its museum in Florissant.

Field Trip Sign Ups Available for 3 trips at our April meeting. Follow the links below for more information on each trip:

-Baculite Mesa Fossils (April 4/26)

-Hartsel Blue Barite (Wednesday 4/30)

-Hartsel Blue Barite (Saturday 5/3)

Three upcoming events listed on our website have been finalized and are now officially scheduled. The club practice is to initially post events/field trips at our monthly club meeting.

Members at the meeting have first dibs at signing up for those events. After the meeting, the signup for those events will be posted on our website with instructions. Field trips typically have a limited number of participants that can be accommodated, so sign up early to ensure you make the list. Remember that to participate in a field trip, your LGGMC membership must valid for 2025.

Please remember that the club is always looking for volunteers who can help lead field trips

Upcoming Events - Coming Earth Science Events, 2025, updated 3/26/2025---from Pete Modreski

Events of Friends of Mineralogy, Colorado Chapter (FMCC):

Sat., May 17, FMCC will also hold a Silent Auction (and some vocal stuff too) of minerals, rocks, fossils, books, etc. Saturday afternoon at Wheat Ridge United Methodist Church, 7530 W. 38th Ave.; approx. noon to 4 p.m., all welcome, see their website for details.

June 12-16, FMCC is also sponsoring a symposium, Specimen Mines of the United States, to be held on the Colorado School of Mines campus. For information see: https://friendsofmineralogycolorado.org/symposium/ .

Events at Colorado School of Mines Geology Museum, Golden:

Fri. Apr. 4, 6-9 p.m., Free First Friday Night at the Mines Museum; all are welcome!

The next Free Mineral ID Days will be on Saturdays, **June. 7, Aug. 2, and Nov. 15,** 1-4 p.m.Museum website: Home - Mines Museum of Earth Science . Other information also on facebook at Log in or sign up to view .

Events at Denver Museum of Nature and Science

2025 Earth Sciences Colloquium scheduled Talks are in-person-only, from 2–3 pm, usually in the 3rd Floor Community Room. The Community Room is on the 3rd floor at the entrance to the diorama hall. Museum admission not required to attend. Enter through Staff/Volunteer entrance, 50' east of main visitor entrance, and let Security know you're attending the talk, they will direct you to the location. All are welcome to attend. For the full year's schedule see: Home . The next Colloquium presentation will be:

Wed., Apr. 9, How to measure the height of a mountain range in the geologic past; Jeremy Caves Rugenstein, Colorado State University [*THIS presentation will be in Ricketson Auditorium]*

Tues., May 13, What defines a paleontologist? Using modern plant-insect interaction to connect past, present, and future; Lauren Azevedo-Schmidt, Univ. of California, Davis.

Thurs., May 15, Late Cretaceous dinosaurs from central Patagonia, Argentina; Mathhew Lamanna, Carnegie Museum of Natural History.

Thurs., June 26, Colorado is a geologist's candy store!; Peter Barkmann, Colorado School of Mines *[in Ricketson Auditorium]*

Other Events:

Thurs., Apr. 17, 6:30 p.m., Colorado Scientific Society March meeting,

"Brunton in the 21st Century"

by Lauren Heerschap, Brunton Company

Brunton transits and compasses are made in Riverton, Wyoming, where Brunton has its headquarters. See Brunton.com for more details about Brunton and their products.

Meeting begins with social time at 6:30 p.m., program at 7:00; at Golden Calvary Episcopal Church. For full info see: https://coloscisoc.org/ . All are welcome.

Fri.-Sun., Apr. 18-20, Colorado Mineral and Fossil Spring Show, at National Western Complex, 4655 Humboldt St., Denver; 10-6 Fri. & Sat., 10-4 Sun. Retail/wholesale; free admission.

Sat. May 3, Colorado Mineral Society Silent Auction, at Wheat Ridge United Methodist Church, 7530 W. 38th Ave.; approx. noon to 4 p.m., all welcome, see their website for details, www.coloradomineralsociety.org.

Fri.-Sat.-Sun., June 6-8, 61st annual Pikes Peak Gem and Mineral Show, Norris Penrose Event Center, 1045 Lower Gold Camp Road, Colorado Springs; sponsored by the Colorado Springs Mineralogical Society. 10-6 Fri. & Sat., 10-4 Sun., admission $5.

Meet Our Neighbors

Here is a list of nearby gem, mineral, fossil, and geology club meetings that you may enjoy. Go to each club's website for more information.

Cañon City Geology Club
Meets on the 2nd Monday of the month at 6PM at United Methodist Church, Cañon City.

Pueblo Rockhounds
Meets on the 3rd Thursday of each month at 6:30PM at Westminster Presb. Church, 10 University Circle, Pueblo

Columbine Gem & Mineral Society

Meets on the 2nd Thursday of each month, 6:30PM at meeting room, Mt. Shavano Manor, 525 W. 16th, Salida

Colorado Springs Mineralogical Society
Meets on the 3rd Thursday of each month at 7PM Colorado Springs Christian School, 4855 Mallow Rd, Colorado Springs.

Mineral of the Month Quiz - Bob Carnein

Monthly Mineral for April, 2025 (Carnein photos and collection)

This month's mineral is very common, especially in limestone quarries all over the world. It has a simple but somewhat variable composition and can often be identified by slow effervescence in dilute hydrochloric acid or strong vinegar, especially when powdered. Crystals are rhombohedral (like the ones in the left and center photos, above) and may be twinned (left photo above). They often exhibit slightly curved faces (right photo above). This mineral is typically colorless or exhibits pale tints unless it contains strong coloring agents, such as cobalt (which gives it a bright pink color). SG is about 2.85, hardness is 3 ½ to 4, and the luster is pearly to vitreous. There are thousands of localities world-wide, but no notable ones in Colorado. But that doesn't mean you won't find it in nearby sedimentary rocks. What is this common mineral?

Last Month's Mineral: Zircon, $Zr(SiO_4)$

This specimen of zircon came from an area on the Gold Camp Road, near the Eureka Tunnel mine, in El Paso Co. If you haven't been there, you should visit this famous locality, which is known

for very fine, simple tetragonal crystals like these. Zircon is a common “accessory” mineral in igneous and metamorphic rocks. Many of zircon’s physical and chemical properties help to make it resistant to weathering, and it often accumulates in sediments, where it can be used to date the source rocks. Small amounts of radioactive elements (mainly uranium and/or thorium) sometimes cause crystals to lose their clarity and become “metamict”, like these. However, pure zircon may be transparent, and because of its high hardness, poor cleavage, and attractive coloring by impurities, it may be a beautiful, valuable gemstone. The golden-yellow fluorescence of “pure” zircon in SWUV can be an aid for identification (for example, in the Eureka Tunnel mine).

Interesting Reads

In this section, we provide unique submissions from our club members and fun rock, mineral, and geology news and information to enjoy from several of our favorite magazines.

Transforming a Rare Pink Gemstone: Cutting & Polishing Thulite Cabochons

image: Rockhounding Life/YouTube

Known for its vibrant pink hues, Thulite is a relatively hard stone at 6.5 on the Mohs scale, making it a perfect choice for cutting and shaping into jewelry.

If you love lapidary work or are curious about Thulite, this video is a must-watch!

👉 **Watch The Video!**

TEST YOUR KNOWLEDGE

image: Dan Olsen

How Much Do You Know About...Unique Crystal Growth Formations

1. Which mineral is commonly associated with the specular crystal habit?

a) Quartz

b) Hematite

c) Calcite

d) Feldspar

ANSWER

2. Coralloid crystal formations are most commonly found in which environment?

a) Volcanic lava flows

b) Deep-sea hydrothermal vents

c) Cave systems

d) Desert sand dunes

ANSWER

3. True or False: Garnets are a great example of equant crystal formation.

ANSWER

4. The term "botryoidal" refers to a crystal habit that resembles:

a) Needles

b) Grapes

c) Sheets

d) Cubes

ANSWER

5. If a geologist finds a salt crystal with a hollowed-out, step-like pattern in a dried-up lake bed, what type of crystal growth is most likely responsible?

a) Botryoidal growth

b) Prismatic growth

c) Hopper growth

d) Foliated growth

ANSWER

WHAT'S THIS ROCK?

Think You Can Identify This Stone?

image: Stan Celestian

Identification Clues:

1. Color: This mineral is almost always deep black, sometimes with a bluish or brownish tint depending on its chemical composition.
2. Crystal Shape: It typically forms long, columnar, or prismatic crystals with distinct vertical striations running along their length.
3. Luster: It has a vitreous to slightly resinous luster, giving it a glassy or subtly metallic shine when polished.

Additional Interesting Facts:

- Most Common Variety of Its Mineral Group: This mineral is the most abundant and well-known member of its mineral family, though other varieties can appear in a range of colors.
- Breaks with Uneven Fractures: Unlike many other dark minerals, this stone does not have perfect cleavage but instead fractures unevenly, making its broken surfaces rough or irregular.

👉 **Do you know what it is? You can find out here.**

DID YOU KNOW?

Tech vs. Expertise: Can an App Really Identify Your Rocks?

Rock identification apps claim to instantly recognize minerals, but do they really work? A recent test compared several popular apps against real specimens, revealing surprising results. Some apps were impressively accurate, while others struggled with common stones. Before spending money on a rock ID app, see how they performed!

Bumblebee Jasper

With bold stripes of yellow, orange, black, and gray, Bumblebee Jasper looks like nature dipped a paintbrush in honey and lava. Whether you see a buzzing bumblebee, tiger stripes, or molten lava frozen in time, this stone is all about energy, adventure, and standing out from the crowd!

TEST YOUR KNOWLEDGE

How Much Do You Know About...Bumblebee Jasper?

1. What is the primary mineral component of Bumblebee Jasper?

a) Quartz

b) Calcite

c) Silica

d) Feldspar

ANSWER

2. True or False?: The black bands in Bumblebee Jasper are primarily due to the presence of pyrite or hematite.

ANSWER

3. Which mineral in Bumblebee Jasper is responsible for its yellow and orange coloration?

a) Pyrite

b) Hematite

c) Realgar

d) Magnetite

ANSWER

4. What is the recommended safety precaution when cutting or polishing Bumblebee Jasper?

a) No special precautions are needed.

b) Use water to suppress dust and wear protective equipment.

c) Only handle in well-ventilated areas without protection.

d) Avoid any contact due to extreme toxicity.

ANSWER

5. In which country was Bumblebee Jasper first discovered?

a) Brazil

b) Indonesia

c) Madagascar

d) Australia

ANSWER

WHAT'S THIS ROCK?

Think You Can Identify This Stone?

I've got another identification challenge for you. Below are a few identification clues along with pictures of the stone. Good luck!

Identification Clues:

Color: This stone typically has a cream, tan, or reddish-brown base color, marked with dark brown, black, or gray spots that resemble the pattern of an animal's coat.

Pattern: Its most distinctive feature is its mottled, spotted appearance, with circular or oval markings scattered across the surface, often in multiple layers.

Luster: It has a dull to waxy luster in its raw form but takes on a smooth, glossy finish when polished.

Hardness: Ranking around 6.5 to 7 on the Mohs scale, this stone is quite durable and commonly used in jewelry and decorative carvings.

Formation: It is a variety of chalcedony, formed through the slow deposition of silica-rich minerals in volcanic or sedimentary environments.

Popular in Lapidary Work: Due to its durability and striking appearance, it is widely used in cabochons, beads, and carved figurines.

A Type of Orbicular Stone: This variety belongs to a group of minerals that develop rounded, orb-like inclusions, similar to other patterned stones like Ocean Jasper.

Often Mistaken for Other Spotted Stones: It is sometimes confused with other orbicular stones, but its distinct mix of colors and more defined spots set it apart.

👉 **Do you know what it is? You can find out here.**

Choosing the right polishing compound can make or break the final look of your rock collection. Different compounds work best for different minerals—cerium oxide is great for quartz, while diamond paste is essential for ultra-hard stones like corundum. Even the method of polishing, from tumblers to flat laps, plays a role in achieving a flawless shine.

👉 **Want to know which polishing compound is best for your rocks?**

PICTURE OF THE DAY

An interesting Shape Of Chlorite Quartz Cluster From Skardu Pakistan.

Identification & Features

- **Quartz with Chlorite Inclusions:** The greenish-black color comes from chlorite, a common mineral inclusion in quartz.
- **Skeletal/Lattice Structure:** The specimen features an intricate, interwoven "jackstraw" or skeletal growth pattern, which forms when quartz grows in restricted conditions with rapid crystallization.
- **Region of Origin:** Skardu, Pakistan, is known for producing exceptional quartz specimens, often with chlorite inclusions, in various crystal habits.

image: hamza_minerals_collection

Carlsbad Caverns: Underground Majesty

Carlsbad Caverns is located in a remote southern part of New Mexico and is part of the same uplifted limestone formations as Guadalupe Mountains National Park

Read More

Caves of the National Parks

Caves of the national parks are some of the world's biggest and most interesting. Their mystique attracts everyone from explorers to scientists and tourists.

Read More

Stalactite Minerals: Uncommon & Beautiful

Stalactite mineral specimens are different than common cave formations. These are lovely, usually very delicate slender stalactites of collector minerals.

Read More

Searching Kemmerer Fossils for Fossil Fish

Fossils from the Kemmerer fish beds have been collected since the 1920s. The beds are a pay-to-dig site and are a great stop on a fossil field trip.

Read More

Placoderms: Armored Fish of the Devonian

Placoderms, the armored fish of the ancient seas, are famous for their hard dermal plates. Here's our guide to finding these fossils and what's what.

Read More

State Fossils of America

State fossils began in 1974 with the saber-toothed cat in California and took off from there. Here's a list of state fossils across America to keep on hand.

Read More

Fossil Hunting Tools: Digging Basics

Fossil hunting tools are needed for a successful fossil hunt whether you're a beginner or pro. Here's a handy list of fossil-collecting essentials for your kit.

Read More

Rowley Mine Chrysocolla: What to Cut

Chrysocolla from the Rowley Mine in Arizona has a beautiful color array of blues, greens, reds and yellows, plus a nice strata pattern. Here's how to cab it.

Read More

Connemara Marble - Meet the Irish Gemstone

Connemara marble is one of the rarest of marbles. A handful of quarries dot Ireland's landscape and harbor the 900 million-year-old carboniferous limestone.

Read More

8 Green Rocks to Collect

Green rocks vary in rarity, cost, durability and shine. The color green is often associated with good luck, money and health. Here are eight to collect.

Read More

What is Guatemalan Jade?

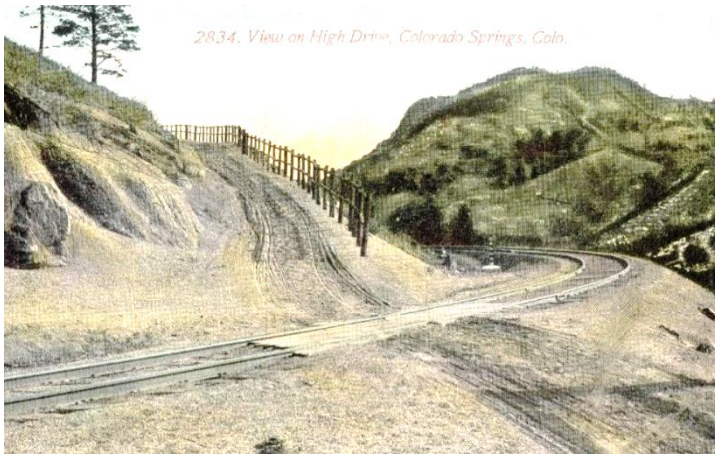
Guatemalan jade was prevalent in ancient Mesoamerica, but its sources were lost for five centuries. It was rediscovered less than 50 years ago.

Read More

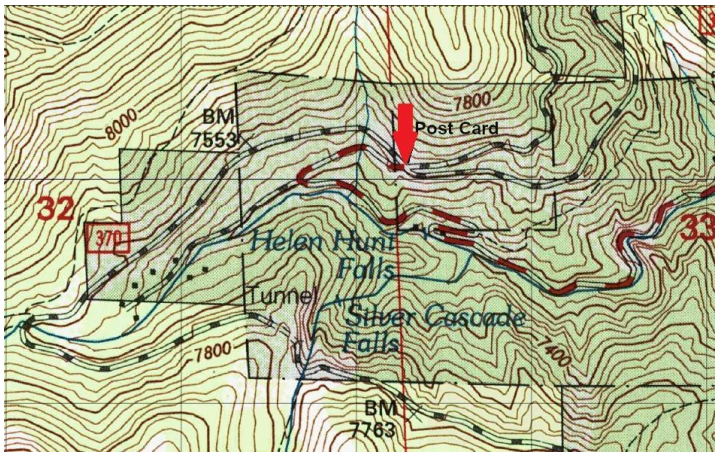
Finding Zicrons in North Cheyenne Cañon

By Steven Wade Veatch

A long-forgotten Colorado Springs rockhounding memory reawakened for me as I looked at a vintage postcard (Figure 1) that shows the crossroads of High Drive and the Colorado Springs and Cripple Creek District Railroad, also known as the Short Line Railroad. Figure 2 identifies this region on a topo map. It was just a short distance from here that I had stepped away from my motorcycle to take a deeper look at the area. On the edge of a steep slope, the shape of some crystals leaped to eye and mind.

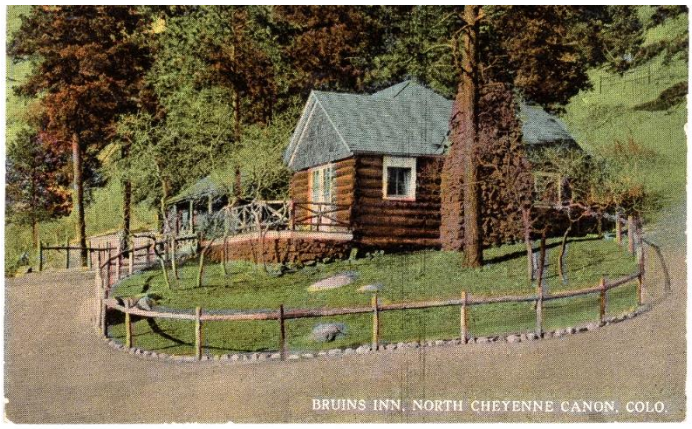


*1 SEQ Figure * ARABIC 1. Intersection of High Drive and the Short Line railroad. Note buggy tracks on High Drive. Postcard from the collection of S. W. Veatch.*



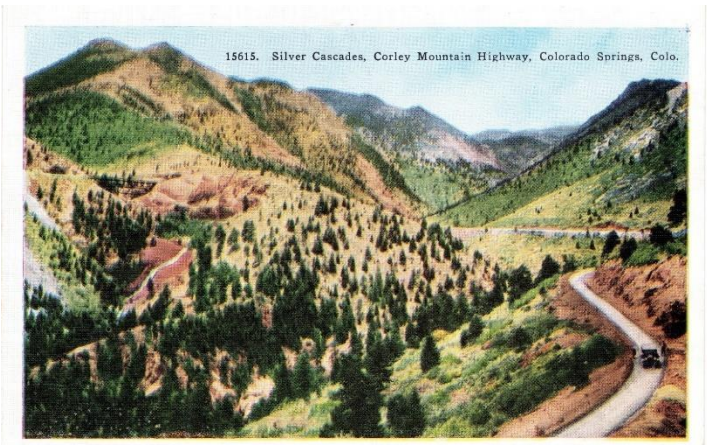
2 The red arrow on the topographic map shows the intersection shown in Figure 1. The post card photo was taken a short distance north of Helen Hunt Falls and the Bruin Inn.

I thought about the rich history of the area. Workers had completed the Short Line in 1901. Today, the Gold Camp Road follows the old route of the railroad as it winds its way up the mountain to the goldfields of Cripple Creek. Both the Short Line and High Drive were used to access the Bruin Inn (Figure 3), which was located near Helen Hunt Falls.



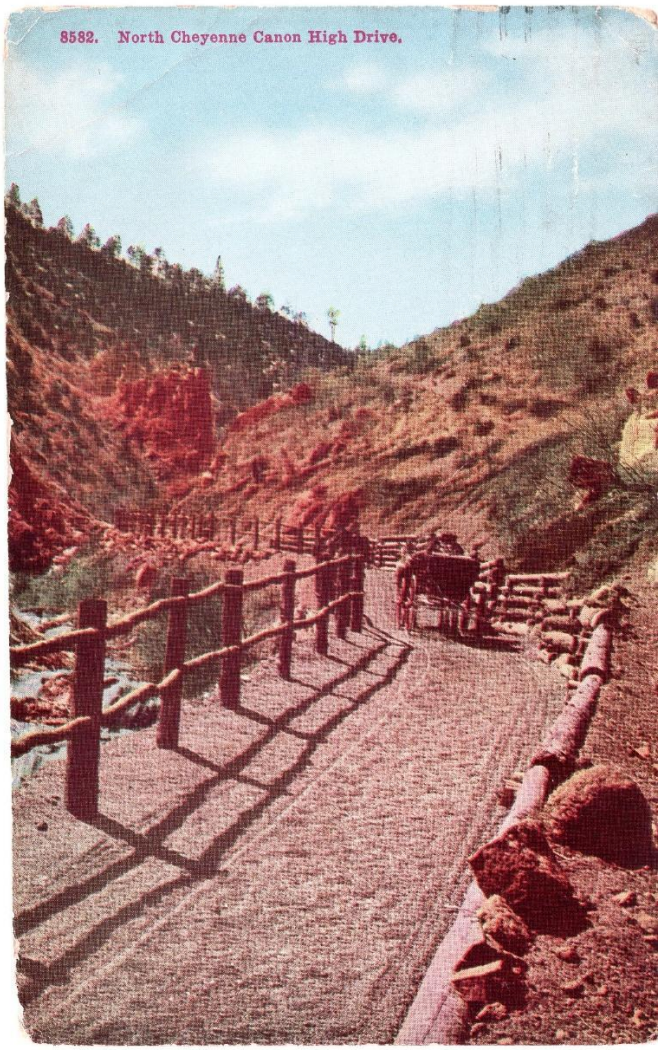
3 *Bruin Inn (circa 1910) located at the base of Helen Hunt Falls in North Cheyenne Cañon Park. Built in 1881, it was originally intended to be the home of Edward Payson Tenney, then-President of Colorado College. Over time, it became a popular tourist attraction. It burned down in 1957. Postcard froom the collection of S. W. Veatch*

General William Jackson Palmer, founder of Colorado Springs, commissioned the construction of the High Drive in 1903 as a scenic carriage route. Gold Camp Road follows the old Short Line Railroad between Colorado Springs and Cripple Creek. The railroad went bankrupt in 1919. W. D. Corley purchased the line in 1922, removed the rails, and converted the right-of-way to a toll road (known as the Corley Mountain Highway) for cars in 1926.(Figure 4)



4 View of the Corley Mountain Highway, now known as the Gold Camp Road, on the southwest side of Colorado Springs. Postcard from the S. W. Veatch collection.

In March 1982, I was riding my Yamaha all-terrain motorcycle with a rock-hunting friend, Jerry Odom, who was also on a motorcycle. I was working for 7-Eleven then, and had the day off. Jerry was an officer with the Colorado Springs Police Department. We rode past the intersection of High Drive and the Gold Camp Road, continued on the Gold Camp Road, and entered North Cheyenne Cañon, a 1,000-feet-deep cut into the billion-year-old granite (Figure 5). With its hidden geological wonders, the area has long been a treasure trove for gem and mineral hunters. We did not make it far, as the road was soon filled with snow and we had to stop. We turned our motorcycles around and then stepped off them to stretch our legs.



5 High Drive in North Cheyenne Cañon. Postcard from the S. W. Veatch collection.

We lost the sun as it sank below the canyon rim. Shadows lengthened as the afternoon moved on, and the air was cold. Some snowflakes under a pine tree swirled about on a lofting breeze. Below, a stream flowed over immensities of time and through cycles of erosion and deposition.

I looked at the ground and saw, next to the road, near the edge of the canyon, a hunk of Pikes Peak granite that had been broken loose by a road grader. I noticed that it had a long cavity running through it. I looked a little closer and found crystals that resembled two tiny Egyptian pyramids that had been glued together. I had stumbled on a pocket of zircon crystals!

The discovery of the zircon crystals' unique shapes among the granite rocks was exciting—a moment of wonder that linked me to Earth's ancient past (Figure 6). These reddish-brown crystals held a billion years of history, adding deep time to my early spring adventure. The excitement continued beyond the discovery as we rode back down the mountain and then into Colorado Springs.

6 Zircon specimen from the North Cheyenne Cañon, El Paso County, Colorado. Courtesy of the Denver Museum of Nature and Science. DMNS EGM.10328.

Collectors continue to find zircons at a half-dozen sites in the area. At the nearby Eureka mine— where prospecting is more intentional—collectors use a black light in the dark tunnel that causes zircons to fluoresce a vibrant yellow, making them easy to find.

This is an experience that I vividly remember nearly 44 years later. It is just one of many adventures for me hunting for rocks, minerals, and fossils in the Pikes Peak region. For both expert geologists and amateur rock collectors, finding a zircon crystal sparks a passion for rockhounding and searching for local mineral treasures that are part of El Paso County's rich geological heritage.

Acknowledgments:

The author thanks Eric Swab for his assistance with this manuscript. Bob Carnein improved this manuscript. Many thanks to his years and years of editing my work.

Trip to Rocky Mountain Dinosaur Resource Center

Reported by Bart Zobel (and Google Gemini AI assisted)

Twenty eager members of the Lake George Gem and Mineral Club embarked on a fascinating journey to the Rocky Mountain Dinosaur Resource Center in Woodland Park, Colorado Saturday, March 22. Our visit, lasting approximately an hour and a half, was filled with captivating insights into the prehistoric world. A knowledgeable tour guide led us through the exhibits, detailing the physical characteristics of various dinosaurs, from the towering sauropods to the fierce theropods. A special highlight, arranged exclusively for the club, was a behind-the-scenes glimpse into the reconstruction lab. Two at a time, we were ushered into the back room, where a massive dinosaur skeleton was being meticulously pieced together. This unique opportunity offered a rare look at the painstaking work involved in paleontology, leaving the club with a deeper appreciation for the ancient giants that once roamed the earth. Our guide expressed interest in presenting at one of our meetings, and many members indicated they'd like to visit the center again in the future.