



Lake Metigoshe State Park.jpg by Roderick Eime from Australia, CC BY 2.0, <https://creativecommons.org/licenses/by/2.0> via Wikimedia Commons. Lake Metigoshe State Park is in Bottineau County, North Dakota



The Rocky Mountain Federation News

July 2024



The official publication of the Rocky Mountain Federation of Mineralogical Societies, Inc. The RMFMS is a regional member of the American Federation of Mineralogical Societies, Inc. Email receipt of the *RMF News* is a privilege of membership in the RMFMS, and it cannot be exchanged by the editor for individual club newsletters from other regional federations. Accessible to the public on www.rmfmts.org.

What's Inside:

President's Message..... 2-5

Rockhound of the Year Honorees..... 6

Webmaster Report..... 7

Where in RMFMS is Rocky?... 7,12,18,19

Update-Editor & Website Contests..... 8

RMFMS Junior Activities..... 9

Safety Matters..... 9

2025 RMFMS/OMGS Show Teasers 10

Quick Tips for Editors-Photo Collages. .11

Profundity..... 12

Geology of Newsletter Editing..... 12

Hinsdalite & Fleeced..... 13-15

Stylemys: A Fossil Tortoise..... 16

Field Trip Teasers-RMFMS/OKC Show. .17

Speed Demons of the Sea..... 18

Upcoming Shows & Events..... 19-21

2024 Officers, Cmte Chairs..... 22-24

RMFMS Purpose & Policies..... 25

AFMS Code of Ethics..... 25

Information for the **August** issue is due to LJGRALG@aol.com by **July 15**.

President's Message

Bob Regner, RMFMS President

Well, Donna and I made it back from the trip to the AFMS convention in Ventura, and it was a really good convention. There were 55 competitive display cases with 45 additional display cases. I got the opportunity to Clerk with Ron Carman, and I learned a whole lot about judging the display cases. I also had the chance to meet with the whole Uniform Rules committee and plan a few things.



I am going to try to set up a Uniform Rules Judging Class in OKC. I would like to set it up as a true Training session and invite people from all of the Regional Federations to send students to the class. Ron has also volunteered to help teach the classes, and I am looking for other Certified Judges to be there to help out. Please just let me know.

We did get to see a whole lot of the group that we only get to see when we go to one of the American Federation events. From the RMFMS we saw Wayne and DeLane Cox. DeLane was there to perform her functions with the AFMS. Dale Bright also made an appearance at the Award Dinner. We all had some good food and conversation.

This group really does put on a great show and convention. There were two buildings right across from each other. The first building was set up with all the display cases and the local club's activities. The display area had right at 100 cases, and some were absolutely incredible. I sent a few pictures for Linda to put in the newsletter, but the pictures can't do these cases justice. I have pictures of every case if anyone would like to see them. The case that stands out to me is a diorama of a lapidary studio. To me it looked like you were peeking into someone's basement window and into their studio. There was a large area of silent auction tables, displays, hospitality booths and demonstrations. The other room was completely filled with vendors with some really nice stuff. This show brought in vendors from all over

the country and also a lot of the local vendors with some of the local stones and jewelry.

Uber Donna and I got to see just a little bit of Cali because we kept pretty busy with all of the convention stuff. We did get to go try out a couple more restaurants, and it was a mixed bag of good and bad. We tried out another seafood place, right on the beach and it was a major bummer.

We also got to try out the I&O Burger and, in grading it, they fail. The regular burger on the menu was closer to \$5 than to \$4. It tasted pretty good, but the first 3 bites had no meat. The meat to bun ratio was was equivalent to putting a dime between two quarters.

continued on page 3

Prez Report — continued from page 2

We really didn't do too much running around, and that was probably a good thing, too. I would say the average cost of gas was about \$5.29 a gallon. At the hotel, a small bag of chips was \$4.25 and a 20oz soda was \$4.50.

Enjoy the photo collage from the AFMS Show in Ventura, below. Hope to see you in OKC at the convention!



Left: Display of **miniature** lapidary studio - as if to look into the basement window. 2024 CFMS/AFMS Show in Ventura, CA. Photo by Bob Regner



Right: Mineral display with **miniature** pottery studio. 2024 CFMS/AFMS Show in Ventura, CA. Photo by Bob Regner

continued on page 4

Prez Report/Photo Collage — continued from page 3



Left: Mineral Treasures Small & Large.
2024 CFMS/AFMS Show in Ventura, CA.
Photo by Bob Regner



Right: Banded Agates
2024 CFMS/AFMS Show in Ventura, CA.
Photo by Bob Regner



Left: Cabochon display.
2024 CFMS/AFMS Show in Ventura, CA.
Photo by Bob Regner

continued on page 5

Prez Report/Photo Collage — continued from page 4

Right: Self-collected elbaite with back-lighting. 2024 CFMS/AFMS Show in Ventura, CA.
Photo by Bob Regner



Left: Educational case, How to Make Spheres. 2024 CFMS/AFMS Show in Ventura, CA.
Photo by Bob Regner

Right: Wire-wrapped trees, various stones & wire. 2024 CFMS/AFMS Show in Ventura, CA.
Photo by Bob Regner



AFMS Club Rockhound of the Year Honorees (ACROY) – *Our Unsung Heroes!*

Chris Whitney-Smith, RMFMS ACROY Chair

Quotes from Judi Allison, AFMS RoY Chair:

“Every club has at least one. Some clubs may have many. Those may be the folks who are almost always at the meetings. Perhaps they quietly help clean up the room. Or maybe they are the ones who regularly bring items for show and tell, or provide treats, or quietly help others learn about some aspect of the hobby. They are the folks who help keep our hobby going even if they are not the ones who are in the ‘limelight.’

We can honor these folks in such a simple manner. That is what I believe the **“American Rockhound of the Year Award”** is all about. **This award is not a contest.** The only requirement is that someone in your club takes the initiative to pass on the information to the right people. Some clubs have committees to choose a person, some have the Executive Committee do the choosing, or possibly, the previous recipient makes the choice. The point is that the process is not set in stone with strict guidelines. The idea is to honor someone in your club who may have gone unnoticed in what they have done for the club during the year. Please don’t overlook the quiet majority. If you haven’t taken the time to choose one of your unsung heroes to honor as your AFMS Club Rockhound of the Year, now is the time.

Remember, it is a simple process:

- choose the person
- write a few sentences why you believe the person should receive the honor
- submit the information to your Regional American Club Rockhound of the Year Chairperson.”
- Our **RMFMS ACROY Chair is Chris Whitney-Smith**, ask.chrisws@yahoo.com

[Editor’s note: We love to publish photos if you don’t mind sending!]

Your honoree will receive a certificate and a write up in the AFMS Newsletter. Let’s see those nominations come rolling in! **Send your nominee’s information to Chris Whitney-Smith.**

Appreciation and congratulations to the following honorees from RMFMS:

Joanna Raupe has worked to better the **Daisy Mountain Rock and Mineral Club** and its organization ever since she joined. Her greatest contributions have been making us take the business aspect of the Club more seriously as well as her enthusiasm for field trips and our annual Rock and Gem Show. Our Club is an open and friendly one and Joanna has embraced that and made many friends throughout the Club. She tells



the story of going on her first field trip to Brenda, Arizona and receiving a welcoming hug from the field trip leader. Her work on our governing Board has made the leadership take more seriously the need for liability insurance,

observance of the rules governing our tax exempt 501©(3) status, and our fiscal responsibility in general. Joanna inherited her love for rocks and the joy of lapidary work from her grandparents. Her grandfather was the moving force in lapidary, and her grandmother was the silversmith. She studied lapidary at the Mesa Arts Center and silversmithing at the Phoenix Center for the Arts. Her art is first rate and can be seen on Social Media. For all these reasons Joanna Raupe is our ROCK HOUND OF THE YEAR. Submitted by Club VP Bill Freese

Webmaster Report

Dale Bright, RMFMS Webmaster

Having an active social media presence can indeed be beneficial for organizations like the Rocky Mountain Federation of Mineralogical Societies (RMFMS) and the affiliated Clubs.

The benefits of social media

- *Engagement and Interaction:* Use social media platforms like Facebook to engage with members and the broader community. Encourage members to share their own experiences, photos, and tips related to rockhounding and lapidary.
- *Event Promotion:* Utilize social media to promote upcoming club events, shows, workshops, and field trips. Create Facebook events to invite members and share event details with a wider audience.
- *Visual Content:* Share visually appealing content such as photos and videos of rock specimens, lapidary work, and club activities. Visual content tends to perform well on social media and can help attract and retain followers.
- *Community Building:* Foster a sense of community by encouraging interaction among members on social media platforms. Create Facebook groups where members can ask questions, share tips and advice, and connect with fellow enthusiasts.
- *Cross-Promotion:* Cross-promote content between the website and social media platforms to ensure maximum visibility. For example, share links to blog posts, articles, and event pages on social media to drive traffic to the website.

By leveraging both their website and social media presence effectively, the RMFMS can effectively share information, engage with members, and promote their activities within the rockhounding and lapidary community.

If your Club has a Facebook and or Instagram page (most of the Clubs do), we encourage linking to the RMFMS pages if you haven't already and tagging the RMFMS in your post so we can also share and help promote.

Thank you, and I do enjoy the content posted by Clubs and will continue to share. If there is any content you want on the website or social media — Club Feature, Field Trip, trips and tricks for Lapidary, etc., send them to webmaster@rmfms.org



Where in the RMFMS is Rocky?

- Devil's Tower, WY?
- Mount Rushmore, Keystone, SD?
- Custer State Park, SD?

Photo at left by Richard Jaeger

Clipart at top by Phillip Martin.
CC BY NC ND 3.0.

Answers on page 19.



Update on Editor and Website Contests

Linda Jaeger, RMFMS BEAC Chair

Here are the latest updates to RMFMS/AFMS contests. Do consider entering some or all of these — or if your club doesn't have something that can be entered this year, go ahead and get started for next year! Dale Brite has been updating the RMFMS website with the same information. Please have a look — he continues to work on and improve this for us! RMFMS website: www.rmfmts.org .

[RMFMS Bulletin Editors Contest Update](#)

This year our RMFMS show/convention is after the AFMS show/convention. That means the **AFMS results** were made public (last month) before the RMFMS awards will be given at the breakfast in OKC during the RMFMS Convention. *Please see pages 6-7 of the **June RMF News** for the AFMS placements for our RMFMS winners.* I will present both the RMFMS and the AFMS awards at the Editor's Breakfast in Oklahoma City, October 27, 2024.

We are in a similar situation for the 2025 Bulletin Editors' contests. Here are the **important deadlines for the 2025 RMFMS Bulletin Editors Contest:**

- ✦ **Jan. 3, 2025-entries due to Linda Jaeger**
- ✦ **Jan. 31, 2025-judged RMFMS entries due to AFMS judges!**
- ✦ Because AFMS/EFMLS show is March 2025 **NOW** is a good time to start looking over your bulletins for entries in the 2025 contest!

[2024 RMFMS Regional & AFMS Website Contest](#)

The 2024 website contest guidelines, application and scoresheet have been uploaded to the new AFMS website, www.amfed.org . The forms will be available on the AFMS website and the RMFMS website, www.rmfmts.org .

Webmasters, please consider entering the 2024 RMFMS and AFMS Website Contest. This is a great opportunity to have your site evaluated by winning website judges to help improve your website. Your club Website serves several functions. Three of the major functions of the Website are to:

- Attract new members
- Provide member information
- Assist the Club in fulfilling the Club's Mission.

The Webmaster award not only honors technical expertise but also celebrates the ability to engage and educate online audiences about the fascinating world of the earth sciences.

2024 RMFMS Website Contest

- **Contest Entry Date: August 1, 2024**
- **Contest Closing Date: August 31, 2024**

Webmasters can submit their club website to your regional federation contest as a competitive or non-competitive entry. A non-competitive website entry will be scored, but the entry cannot advance to the AFMS Website Contest and cannot receive any awards.

If you submit a competitive entry and your website scores in the top two for your regional federation, it will advance to the AFMS Website Contest. If your website advances to the AFMS Website Contest and you receive the highest score, you will receive a plaque, and you cannot submit your website competitively for the 2025 contest. You will also be asked to be a judge in the 2025 contest.

Please send COMPLETED Website Contest application and Scoresheet filled out with your club information in the header portion, to: jgerring@gmail.com

For questions and more information contact:
The **RMFMS Website Contest Chair, Jennifer Gerring, jgerring@gmail.com .**

RMFMS Junior Activities

Michelle Cauley, RMFMS Junior Activities Chair

Greetings from the great city of Bottineau, North Dakota! My name is Michelle Cauley, and I'm the new Junior Activities Chair for our RMFMS. I am originally from Wisconsin and spent the last 20 years teaching in K-12 programs in Minnesota. Now that I have relocated to North Dakota, I'm excited to join the RMFMS. I'm currently the director of the Bottineau Rockhounds – a junior club for grades 3-9, and I also teach geology, natural resources, and drone science at Dakota College at Bottineau.



What I'm most passionate about is getting juniors excited about the geological world around them! I plan on writing up articles over the next few months for junior clubs and their leaders, but I would love to hear from you! I'd love to know your successes and your challenges. Please reach out and send a message my way – introduce yourself and tell me about your junior club! Find me at michelle.cauley@dakotacollege.edu . I look forward to hearing from you!

Safety Matters!

Jodi Brewster, RMFMS Safety Chair



I want to send out a big hello to all the members of the Rocky Mountain Federation. I'm Jodi Brewster, and some of you may know me from other roles like: Arizona/Nevada State Director, RMFMS Vice President, 13 years as President of the Gila County Gem & Mineral Society, and now retired. Well, here I go again! After talking with President Bob Regner about vacant chair positions, I have volunteered to be the RMFMS Safety Chair. While it's a new position for me, I hope to fill it with professionalism and proficiency and provide tips and information to help keep us all safe.

Since this is the summer season, and hopefully we all will still be collecting rocks and minerals, there are several safety measures I would like to pass on to you:

- First and foremost, **Water** – take plenty for yourself, some for others who may be rock hounding with you, and extra for Mother Nature should your rock hammer spark a fire – you can pour water on it and hopefully keep it from becoming a bigger fire.
- **Sun Protection** – sunscreen, full brim hat, multiple layers of cotton cloths or any combination is suggested.
- **Proper Clothing** – make sure to wear pants that will protect you from environmental hazards like cacti, thorny bushes, other vegetation; also wear good shoes, which will provide your ankles and feet with support, have good traction and the ability to keep you from sliding, falling or sustaining foot trauma or injury.
- **Phone or other Emergency Communication Device** – this seems like a no-brainer, but you would be surprised how many times these get left in the vehicle. Not only can you take pictures with your phone, but if you need to make an emergency call or text, they are vital.
- **Two-Way-Radio** – these can be used to keep in communication with your group and can also help if you have no phone service.

Just remember to have fun, but do it safely!

2025 RMFMS/OMGS Show Teasers

Jamilee Poor, OMGS

Oklahoma Mineral and Gem Society (OMGS) and Oklahoma City extend a warm welcome to the members of the Rocky Mountain Federation of Mineralogical Societies. Oklahoma City is named one of the best places to visit by Fommer's Travel as it offers culture, cuisine, attractions, and amenities you expect in a modern metropolis. Known as the Horse Show Capital of the World, we are rich in cowboy culture and outdoor adventures. We have plenty of hustle without the hassle of Big Cities, and the airport is very easy to fly in and out of. We invite our guests to not only attend the Conference and our annual Mineral and Gem Show, but also to extend your time here. [Oklahoma City Travel](#) provides maps and entertainment ideas such as the Oklahoma City Zoo, Botanical Gardens, the Oklahoma City National Memorial Museum, the Cowboy & the Western Heritage Museum, and the First Americans Museum to name a few. Our host hotel, the [Wyndham Grand](#), is located downtown and is within walking distance or you can take the trolley to Bricktown, Scissortail Park, the Art District and Automobile Alley. Enjoy the local foods, craft beers and wines and distilled bourbons. Attend an Oklahoma City Thunder basketball game which starts in October. There is lots to offer!



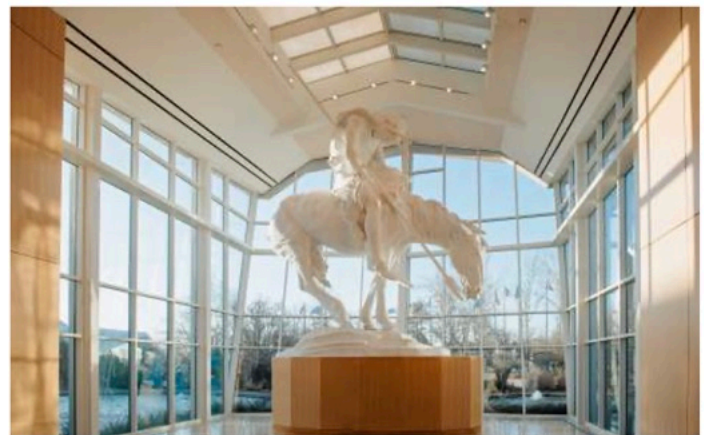
Bricktown Canal Rides



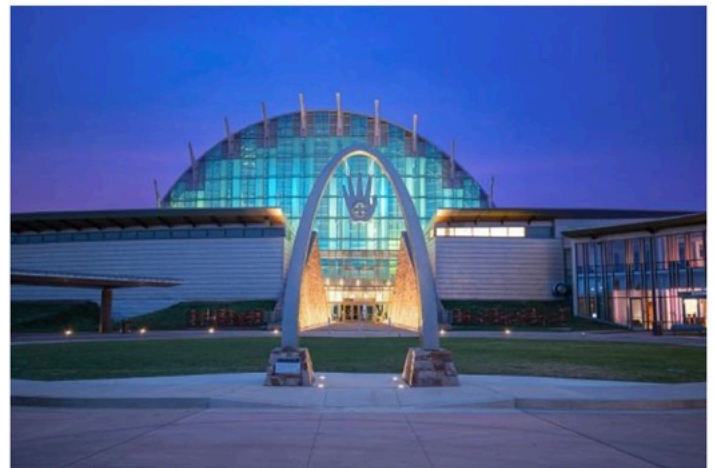
Oklahoma City National Memorial and Museum



Myriad Botanical Gardens



Cowboy Hall of Fame



First American Museum



Quick Tips for Editors – Stories in Pictures

Linda Jaeger, RMFMS BEAC

What is a photo collage?

You have undoubtedly heard the expression, “a picture is worth a thousand words.” Why would that be so? It turns out that about 80% of the population are **visual learners**, as opposed to auditory (hearing) or kinesthetic (doing) learners. If you eat out or cook for a group or are a professional chef, you know that we even “eat with our eyes” first, before tasting. A photo collage allows us to quickly and easily experience with our eyes – a very natural, intuitive way for most of us to gather information.

Years ago, the RMFMS Bulletin Editors Advisory Committee felt that providing readers with pictures to tell a story in our bulletins was worthy of being included in a Features category for the bulletin editors contest. Many bulletin editors already published groups of pictures telling stories of field trips or club activities. Why not include these photographers in our contest and reward them for this manner of communication? So RMFMS added Photo Collage to the Features. We are currently the only regional federation to have this category.

Here's the nitty-gritty on Photo Collages:

- authors can be adults or juniors
- author is a member of the club submitting the entry to the contest
- photos were taken by the artist/author
- collage visually depicts a club activity or is used as support for a written feature
- collage was created for the club bulletin from which it was entered
- collage was not previously used for a display case, show handout, or class/seminar
- collage was not previously published in a magazine or for a company

What are the judging criteria?

- only the group of photos are judged (not written work that photos accompany)

- originality
- focus
- sharpness
- contrast
- lighting
- composition
- layout

If you read this month's President's Message, you will note that Bob included photos he took at the CFMS/AFMS show in Ventura that have been arranged in a simple photo collage (pages 2-5). They tell the story of a trip through the display cases exhibited at the show. Maybe the photo collage also tells a story of things Bob likes in the world of Earth Science!

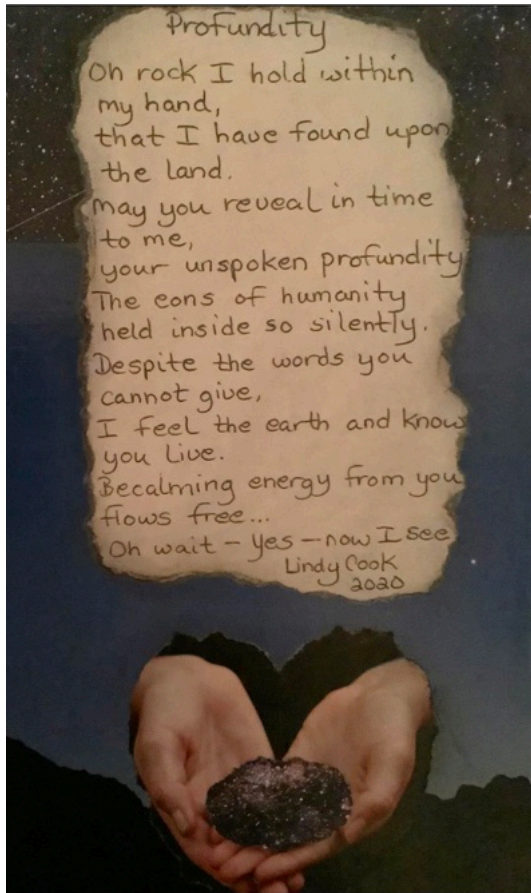
Here's a challenge: Could you start with a group of photos, arrange them, then use them to write a story that goes with the photos?

Below is a collage from NASA that I pulled off the internet. Does it pique your interest? What story would YOU write?



Profundity

Lindy Cook, Flatirons Mineral Club 2020



From Flatirons Facets,
 May-June 2024

The Geology of Newsletter Editing

Jim Stedman, Maryland Geological Society

The editor announced, "I need a poem of 15 lines precisely.
 Write me one on fossil finds, that subject always does quite nicely."

I fashioned soaring images of grayish Needmore shales –
 Stacked like stony books recording crinoid stems and rarish trilo tails.
 There's stirring meaning etched upon those brittle shaley pages,
 Reviving lush oceanic life from those far distant ages.

I crafted imagery profound in 15 lines exact.
 Then the editor informed me, in somber tones most black,
 "I regret – the pressure of all the other text I have to run
 Is squeezing out your fossil poem. I'll just condense what you have
 done."

No, Mr. Editor, not a bit should be subtracted.
 You know a poem on shale and fossils should not be compacted!

Please wait! Too late –
 Slate.

From: *The Rostrum*, 11/09
 (2nd Place — AFMS Adult Poetry)



Where in the RMFMS is Rocky?

- Devil's Tower, WY?
- Mount Rushmore, Keystone, SD?
- Custer State Park, SD?

Photo at left by Richard Jaeger

Clipart at top by Phillip Martin.
 CC BY NC ND 3.0.

Answers on page 19.



Hinsdalite & Fleeced at the Golden Fleece Mine

Mike Nelson, csrockguy@yahoo.com, Colorado Springs Mineralogical Society



Back country enthusiasts in Colorado are aware of Otto Mears and his road building (mostly toll roads) experiences in the high mountains in the southwestern part of the state, especially in the San Juans. For example, he constructed the high mountain highway connecting Silverton to Ouray over Red Mountain Pass, and the Leadville Road over Poncha Pass. He also was into building several narrow-gauge railroads to access mining districts including the Rio Grande Southern Railway from Durango to Ridgeway over Lizard Head Pass. And last (but not least), he was the mover and shaker in getting the dome of the Colorado Capitol gilded with 200 ounces of gold.

At any rate, a fellow road builder by the name of Enos Hotchkiss hooked up with Mears in ~1874 to construct a road from Saguache to Lake City. Along the way, near the current Lake San Cristobal, Hotchkiss noticed some interesting ore rocks and filed a claim, the Hotchkiss Claim. It turns out that Hotchkiss had a good eye for ore, and the Hotchkiss Mine was off and running. Unfortunately, in late 1876 poor ole Enos was badly injured as he fell several feet down a shaft. The Mine was idled for several months until new owners appeared and renamed the Hotchkiss to the Golden Fleece Mine. Gold, silver, and lead with minor copper and zinc were the major metals produced.

The Mine also stimulated the economy in Lake City as numerous other mines went into production, and a rail spur reached Lake City in 1889. The Lake City Mining District was booming. The Golden Fleece shipped one rail car containing ~\$50,000 of high-grade ore while in 1895 the Black Crook Mine sent out ~\$200,000 of "pretty decent" ore. In early December the Golden Fleece was listed on the

Colorado Springs Mining Exchange [Golden Fleece Mining and Milling Company (Iowa)] opening at \$1.10 per share and closing at \$1.30. The Company purchased the Colorado City Mine in Cripple Creek and also had an interest (owned?) producing gold mine(s) in Georgetown. But that was it, the boom was soon off, and the bust hit the entire Lake City Mining District. Evidently, "bad luck" prevented the miners from finding new veins. Although the mines in the Lake City District were exhausted all was not lost as the Golden Fleece had produced almost a million and a half dollars of gold (today's price?) and silver before shutting down, and restarting, and shutting down, etc. In 1897 the shares were going for \$.56, in 1900 \$.26 and everything ended in 1903 at \$.06. Well, sort of ended as businesses piddled around with the mine until about 1920.



Golden Fleece Mine, Hinsdale County, Colorado. 2018 Photo by Jeffrey Beall, CC BY 4.0 <<https://creativecommons.org/licenses/by/4.0>>, via Wikimedia Commons.

The Golden Fleece was not helped by the fact that during the boom years a "systematic robbery by professional thieves" had siphoned off about half of the gold output. As best I can determine the "professionals" worked in the mines and simply

continued on page 14

Hinsdalite & Fleeced — continued from page 13

high graded the ore and took it out in their “lunchboxes.” Then the Pinkerton National Detective Agency caught up with the bad guys. [Check out the newspaper articles in References Cited section].

MinDat (August, 2023) lists 46 valid minerals known from the Golden Fleece Mine including native gold and several gold-bearing tellurides, various ore minerals, several silver-bearing minerals, galena (lead), covellite (copper), bismuth (bismuthinite), sphalerite (zinc), etc. In addition, there are rare minerals such as mawsonite (copper-iron-tin sulfide) and melonite (nickel telluride and others). The Golden Fleece is the Type Locality for one mineral, hinsdalite, named after Hinsdale County, Colorado, home of the Golden Fleece. The County is one of the most remote in the lower U.S. and a mecca for mountain climbers with five fourteeners and several thirteeners. Colorado 149 from Smith Fork north to Powderhorn through Creede and Lake City is one of the most majestic highways in the country.



Green hinsdalite from the Golden Fleece Mine. Width photo FOV ~3mm. photomicrograph by Mike Nelson.

Hinsdalite $[\text{PbAl}_3(\text{PO}_4)(\text{SO}_4)(\text{OH})_6]$ is a hydroxy (OH) phosphate (PO_4) – sulfate (SO_4) and some mineralogists also stick in strontium as another cation with the lead and aluminum as the mineral contains almost 4% of this element (see Webmineral.com). Hinsdalite contains two

oxyanions, sulfate and phosphate, a rather unusual occurrence. Although some specimens show crude rhombohedral crystals or hexagonal plates, my specimen from the dump at Golden Fleece is extremely small but does have a botryoidal green crust of hinsdalite. There are other tiny areas of porcelaneous green masses, but crystals seem to be absent. The botryoids have a greasy luster, seem to be translucent, and a measured hardness of ~4.5 (Mohs). Hinsdalite is a secondary mineral in the oxidized zones of polymetallic (especially sulfides and tetrahedrite) ores. It also forms a solid solution series with, and is visually indistinguishable from, plumbogummite $[\text{PbAl}_3(\text{PO}_4)(\text{PO}_3\text{OH})(\text{OH})_6]$ except by electronic gizmos determining the phosphorous-sulfur ratio (Frost and others, 2011). MinDat does not list plumbogummite as being present at the Golden Fleece, hence the use of hinsdalite.

I note that the phosphate anion (PO_4) and the arsenate anion (AsO_4) are of similar size and chemical makeup and may substitute for each other. Hinsdalite with PO_4 is the phosphate analogue of hidalgoite $[\text{PbAl}_3(\text{AsO}_4)(\text{SO}_4)(\text{OH})_6]$. Van Wambeke (1971) believed that hinsdalite in a rock unit or erosional detritus may indicate the presence of valuable ore minerals.



Spherical encrustation of tan to orange hidalgoite composed of micro crystals; each sphere ranges from .3-.5 mm. Specimen is from Gold Hill, Utah. Photomicrograph by Mike Nelson.

continued on page 15

Hinsdalite & Fleeced — continued from page 14

References Cited:

Frost, R.L., S.J. Palmer, and Yunfei Xi, 2011, A vibrational spectroscopic study of the mineral hinsdalite (Pb,Sr)Al₃(PO₄)(SO₄)(OH): Journal of Molecular Structure, vol. 1001, Issues 1-3.

Van Wambeke, L., 1971, Hinsdalite and corkite: Indicator minerals in central Africa: Mineral Deposita vol. 6.

The Golden Fleece Robbery

The New York Times, June 16, 1895, p. 1: Fortunes in Pilfered Mine Washings; Golden Fleece Company Loser - Thousands to Spend to Punish Thieves.

San Francisco Call, June 15, 1895, p. 4: Robbery of a Rich Mine, Daring Theft of Ore at the Golden Fleece in Colorado.

The New York Times, June 17, 1895, p. 1: Colorado's Mine Thieves. Probable They Have Stolen Ore Worth Millions Of Dollars. Have Been Operating Ten Years. No Doubt They Have an Organization and Careful Methods of Robbing — Many Mine Owners Suffer.

Siringo, Charles A.: A Cowboy Detective: A true story of twenty-two years with a world-famous detective agency, Chicago : W. B. Chonkey Co., 1912; published in several other reprinted editions.

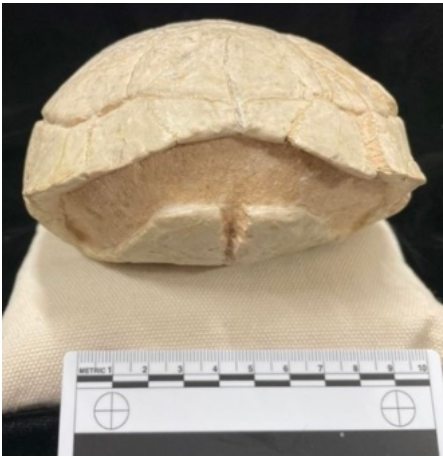
Sunday Herald (Syracuse, NY), June 23, 1895, p. 6: ROBBING A MINE. Systematic Fleecing of Ore of the Richest Gold Properties



Photo by Richard Jaeger. Design by Linda Jaeger.

Stylemys: A Fossil Tortoise from the White River Badlands

Broden William Dymond (10), Grand Traverse Area Rock & Mineral Club, Michigan



Fossilized carapace of *Stylemys nebrascensis* found in the White River area of North Dakota. Photo by B. Dymond. From the collection of S. W. Veatch.

Stylemys was a tortoise that lived about 33 million years ago, during the Oligocene. *Stylemys* lived on land, rather than land and water. Fossils of *Stylemys* have been found in rocks in North Dakota, nearby states, Asia, and Europe. *Stylemys* was first described by Joseph Leidy, a fossil expert, in 1851. He was one of the important scientists in America at the time. This tortoise fossil was found in the Brule Formation in the White River Badlands of North Dakota.

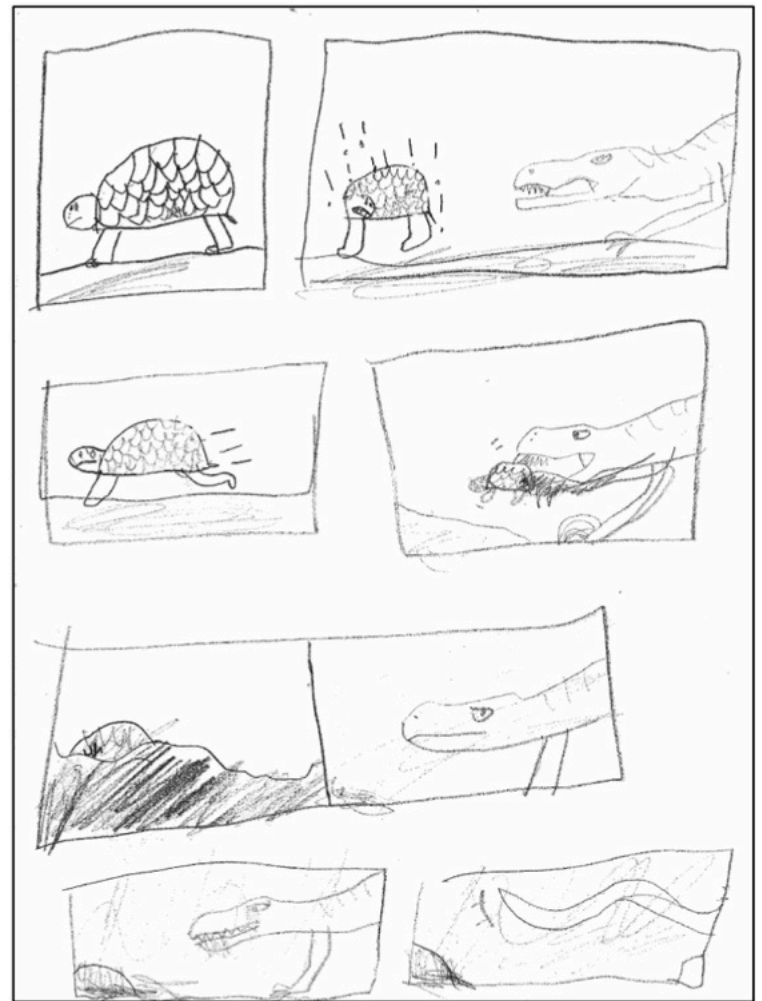
During this Oligocene, North Dakota was a treeless plain covered in shrubs, plants, and some types of grass. It rained sometimes and the temperature was mild.

Stylemys had a **domed carapace** (upper shell) and a **plastron** (lower shell) for protection. Their limbs were made for living on land. *Stylemys* was similar to gopher tortoises that are living today, and they probably ate plants. The legs of *Stylemys* were different from gopher tortoises, so they probably did not dig tunnels. Turtles and tortoises at this stage in evolution survived well and have not changed much since that time.

The fossil of this *Stylemys* is slightly crushed with scratch marks near the tail and seems to have the mark from a tooth. Here is what might have happened to this *Stylemys*:

One day, the tortoise was just walking along. He ate some grass just a little bit ago. He heard something behind him. It was a prehistoric crocodile! When the tortoise saw the crocodile, it started to run. The crocodile was faster, and it caught up to the tortoise. It bit and scratched the tortoise, but the tortoise fell into the mud. It was stuck so the predator could not get to it. The crocodile wanted the tortoise so bad, but he noticed a sandstorm coming and ran for safety.

The end.



From Crack the News, December 2023.

Field Trip Teasers for the RMFMS/OKC Show in October!

Jamilee Poor, OMGS



Oklahoma Mineral and Gem Society & Rocky Mountain Federation Conference Oklahoma Barite Rose Rock Hunt

Presently Scheduled:
October 25, 2024
9:00 am – 1:00 pm
Lake Stanly Draper
Oklahoma City, OK

Potentially a 2 mile round trip walk. Bring a rock hammer, collecting bucket, comfortable shoes and drinking water. Keep in mind that barite gets heavy the more you collect! If the lake level is low, another site near the road may be available.

Oklahoma Mineral and Gem Society & Rocky Mountain Federation Conference Sam Noble Museum in Norman, OK. Private Behind -The -Scenes -Tour of the Vertebrate Paleontology Museum.



Presently Scheduled:
October 26th, 2024
10 am to 12:00 pm

Curator Dr. Jacqueline Lungmus will lead the group through the research and storage rooms above the museum.



Oklahoma City Geological Society & Rocky Mountain Federation Conference

General Material Gravel Pit
Oklahoma City, OK
Presently Scheduled:
October 27, 2024
9:00 am to 12:00 pm



Find bison bones, Alibates Flint, aragonite, petrified wood and sometimes you will get lucky and find a mastodon tooth!



Where in the RMFMS is Rocky?

- Devil's Tower, WY?
- Mount Rushmore, Keystone, SD?
- Custer State Park, SD?

Photo by Richard Jaeger

Clipart at top by Phillip Martin. CC By NC ND 3.0.

Answers on page 19.



Speed Demons of the Sea

Judith Washburn, LOESS

Crinoids, invertebrate sea animals that are relatives of starfish and sea urchins, once achieved such abundance and diversity in the world's seas that paleontologists sometimes refer to the period 350 million years ago as the "Age of Crinoids." Today only two main forms of crinoids remain.

The stalked crinoid spent most of its time sitting and catching food with its flower-like, feathery arms that have earned it the nickname "sea lily."



NOAA Photo Library, CC BY 2.0, https://commons.wikimedia.org/wiki/File:Proisocrinus_ruberrimus.jpg



Photo by James St. John, CC BY 2.0, [https://commons.wikimedia.org/wiki/File:Seiocrinus_subangularis_\(fossil_Crinoid\).jpg](https://commons.wikimedia.org/wiki/File:Seiocrinus_subangularis_(fossil_Crinoid).jpg)

Some crinoids are attached permanently to the sea floor or some other object by means of a root system called a "holdfast." Scientists have known for decades that some crinoids move - but just barely. They had been clocked at speeds no greater than 0.6 meter per hour.

From *The Shawmish Roktok* 6/2006 via *The GEMROCK*, June 2024.

Upcoming Shows and Events

7/13-14/2024	Tulsa Rock & Mineral Society	Exchange Center at Expo Square, 4145 E. 21st St., Tulsa, OK 74114	https://trmsok.org/
7/27-28/2024	Western Dakota Gem & Mineral Society 41st Annual Show	Nerdy Nuts Expo Hall, entral States Fairgrounds, 800 San Francisco St, Rapid City, SD	westdakota.rocks@gmail.com
8/2-4/2024	Prescott Gem & Mineral Show	Findly Toyota Event Center, 3201 N Main St, Prescott Valley	www.PrescottGemMineral.org
9/13-15/2024	Southern Utah Rock Club - Cedar City Gem & Jewelry Show	Cross Hollow Event Center Diamond Z Arena, 11 N. Cross Hollow Road, Cedar City, UT	southernutahrockclub.org , www.facebook.com/groups/utahrocks
10/12-13/2024	50th Annual Huachuca Mineral, Gem, Jewelry and Fossil Show	The Mall at 2200 El Mercado Loop, Sierra Vista, AZ	Contact: Maudie Bailey, gmbailey@msn.com , 520.249.1541
10/25-27/2024	Oklahoma Mineral & Gem Society/RMFMS Convention	Modern Living Building, 608 Kiamichi Place, OKC Fairgrounds	omgs-minerals.org

If your club has show information that you would like to have listed in the Rocky Mountain Federation News, please email the information to the editor — <LJGRALG at aol.com>. As with many of the other email addresses in the newsletter, you will need to remove the chevrons, < >, and replace the spaces and the "at" with the correct symbol, @ .

Reminder:

Advertise your Show in as many Free locations as possible!

- Local newspapers
- Current events sections!
- Local TV stations
- Community Calendars
- Other local shows

Advertise in the Rock & Gem Magazine!

Send the information in early so it's published in the magazine as well as online:

www.rockngem.com/showdate-submissions/

Above from CFMS Newsletter, April 2024



Where in the RMFMS is Rocky? — Answers

We have clubs from 13 states in the RMFMS. Have you been there? Do you recognize the photos from the three states shown this month? **I would love for you to send a n awesome photo from your state with a caption and location to print!** RMFMS has amazing country and activities to fill your senses.

Linda Jaeger, Editor

Here are the answers for the photos on pages 3, 9, 18, and 30:

- page 7: Devil's Tower in Devil's Tower, **Wyoming**
- page 12: Mount Rushmore, Keystone, **South Dakota**
- page 18: Sylvan Lake in Custer State Park, **South Dakota**



Look for more beautiful locations next month from our member states: Arizona, Arkansas, Nebraska, New Mexico, Nevada, North Dakota, South Dakota, Texas, Utah, Wyoming.

Below are upcoming regional federation shows:

	California Federation	Eastern Federation	Midwest Federation	Northwest Federation	Rocky Mountain Federation	South Central Federation	Southeast Federation
2024	AFMS/CFMS Ventura, CA May 24-26	Sterling Hill Mine Ogdensburg, NJ June 8	East Peoria, IL August 24-25	Hermiston, OR May 10 - 12	Oklahoma City, OK Oct. 25 - 27		
2025		AFMS/EFMLS Hickory, NC 3/2025	Lincoln, NE April 5-6		Grand Junction, CO Sept. 19-21		
2026			St. Charles, IL May 23-24				

Tulsa Rock and Mineral Society's

ROCK, GEM, MINERAL & JEWELRY SHOW

Saturday, July 13-9 a.m.-6 p.m.
Sunday, July 14-10 a.m.-5 p.m.

EXCHANGE CENTER AT EXPO SQUARE
4145 E. 21st St. Tulsa, OK 74114

- Exhibits
- Demonstrations
- Fluorescent Display
- Free Kid's Zone
- Silent Auction
- Door Prizes

\$7 FOR ADULTS
\$10 TWO-DAY PASS

KIDS 12 AND UNDER FREE WITH PAID ADULT

SCOUTS FREE IN UNIFORM
FIRST RESPONDERS FREE WITH ID

<https://tulsarockandmineral.org>

41st Annual GEM & MINERAL SHOW

July 27-28, 2024

SATURDAY 9 AM – 5 PM • SUNDAY 9 AM – 3 PM

Admission \$4 per day • Children 12 and under FREE with a paying adult

Hosted by: WESTERN DAKOTA GEM & MINERAL SOCIETY

CENTRAL STATES FAIRGROUNDS, Rapid City, SD

NERDY NUTS EXPO HALL

- Dealers offering Rock, mineral & fossil specimens
- Free Rock and Mineral Identification
- Silent Auction
- Children's Activities
- Hourly Door Prizes
- Panning for Gold
- Exhibits/Fluorescent Display
- Grand Prize Drawing

For more information Contact: WestDakota.Rocks@gmail.com

www.WDGMS.org

PRESCOTT
GEM & MINERAL SHOW
20th Annual
SHOW & SALE
ROCKS • GEMS • JEWELRY



*Look for the
Fluorescent
Test!*

**AUGUST, 2nd
3rd & 4th**
FINDLAY TOYOTA EVENT CENTER
 3201 N Main St - Prescott Valley
 (Corner of Glassford Hill & Florentine)
FRI & SAT 9-5, SUN 9-4
 Admission is Cash Only - ATM Available

FREE PARKING!
 \$5 Adults
 \$4 Seniors 65+, Vets, Students
 Children under 12 FREE w/paid Adult
www.PrescottGemMineral.org

Southern Utah Rock Club Presents
Cedar City Gem and Jewelry Show




September 13, 14, 15, 2024
 Cross Hollow Event Center | Diamond Z Arena
 11 N. Cross Hollow Road, Cedar City, Utah

FREE ADMISSION
 FRIDAY: 10 am - 7 pm
 SATURDAY: 10 am - 7 pm
 SUNDAY: 10 am - 4 pm



southernutahrockclub.org
www.facebook.com/groups/utahrocks

SPONSORED BY

 VISIT CEDAR CITY
 BRIAN HEAD

Rocks Minerals • Fossils
 Jewelry • Beads
 Junior Club Black Light Display

2024 Annual Mineral and Gem Show
Oklahoma Mineral and Gem Society
 Hosts the
**Rocky Mountain Federation of
 Mineralogical Societies Convention**

Modern Living Building
OKC State Fair Park
608 Kiamichi Place
Oklahoma City, OK 73107

October 25th, 9-6
October 26th, 9-6
October 27th, 10-5

Daily Admission \$8
 Children under 12 free

Show Features:
 Exhibits, Gem Stones, Fossils,
 Earth Science Education,
 Tools, Rough Rock, Crystals,
 Fluorescent Room, Artisan Jewelry
 and Children's Activities



Oklahoma Mineral and
 Gem Society
omgs-minerals.org
 See us on Facebook



Barite Rose Rock
 Oklahoma State Rock



**50th ANNUAL HUACHUCA MINERAL, GEM,
 JEWELRY and FOSSIL SHOW**
12th AND 13th, OCTOBER 2024
THE MALL AT 2200 EL MERCADO LOOP, SIERRA VISTA, AZ
 For Information; Contact Maudie Bailey,
gmbailey@msn.com, 520 249-1541

2024 Executive Committee – composed of the Officers & the State Directors

Officers:

President	Bob Regner	<Rnregner at aol.com>
Vice President	Jim Gray	<jimgray at wyoming.com>
Secretary	Liz Thomas	<mygemsrock at gmail.com>
Treasurer	Gene Maggard	<gandpmaggard at gmail.com>
Historian	Cinda Kunkler	<cindakunkler at att.com>
Past President		
Past President	Richard Jaeger	<RjgrSci at aol.com>

State Directors:

AZ/NV	Steve Kaminski	<scsckimin at gmail.com>
CO	Kathy Honda	<Kathrine.honda at ucden.edu>
KS	Brad Davenport	<brad7254 at gmail.com>
ND	Steve Fasching	<steve.fasching at gmail.com>
NM/TX		
OK/AR	Roberta Wagle	<waglemom at gmail.com>
SD/NE	Lori Loomis	<sdnestatedirector at gmail.com>
UT	Tracy Jensen	<tracyjensen0515 at gmail.com>
WY	Leane Gray	<lgray at wyoming.com>

Please note: All email addresses are enclosed in chevrons, < >, and the @ symbol has been replaced by the word "at" with a space before and after the word. This is to prevent bots from picking up our email addresses. You will need to remove the chevrons and replace the word "at" and the two spaces with the @ symbol to have the correct email.

2024 Committee Chairs

ACROY (AFMS Club Rockhound of the Year)	Chris Whitney-Smith	<ask.chrisws at yahoo.com>
All American Club	Roberta Wagle	<waglemom at gmail.com>
BEAC (Bulletin Editors Advisory Committee) & Bulletin Editors Contest	Linda Jaeger	<LJGRALG at aol.com>
Boundaries	DeLane Cox	<delanec3 at earthlink.net>
Convention Advisor	Liz Thomas	<mygemsrock at gmail.com>
Credentials	Roberta Wagle	<waglemom at yahoo.com>
Directory	Liz Thomas	<mygemsrock at gmail.com>
Editor of Newsletter	Linda Jaeger	<LJGRALG at aol.com>
Finance	Wayne Cox	<WayneC3 at earthlink.net>
Fluorescent Tech	Pete Modreski	<pmodreski at aol.com>
Fossils Tech	Patrick Rowe	<rowe_patrick at gmail.com>
Gold Pan Award	Richard Jaeger	<RjgrSci at aol.com>
Insurance	Gene Maggard	<gandpmaggard at gmail.com>
International Relations	Mike Nelson	<csrockguy at yahoo.com>
Juniors Program	Michelle Cauley	<michelle.cauley at dakotacollege.edu>
Lapidary Tech	vacant	
Long Range Planning	Liz Thomas	<mygemsrock at gmail.com>
Long Range Planning	Richard Jaeger	<RjgrSci at aol.com>
Long Range Planning	Judy Beck	<Lkbeckfam at gmail.com>
Mineralogical Tech	vacant	
Name Badges	Richard Jaeger	<RjgrSci at aol.com>
New Program Contest	Gene Maggard	<gandpmaggard at gmail.com>
Nominating Committee	Bob Regner	<Rnregner at aol.com>
Nominating Committee	Liz Thomas	<mygemsrock at gmail.com>
Nominating Committee	Richard Jaeger	<RjgrSci at aol.com>

continued on next page

2024 Committee Chairs – *continued*

Parliamentarian	Gene Maggard	<gandpmaggard at gmail.com>
PLAC - AZ	Dr. Alex Schauss	<Aschauss at arizona.edu>
PLAC - CO/NE/ND	Mike Nelson	<csrockguy at yahoo.com>
PLAC - KS	Jared Kyner	
PLAC - NM/TX	vacant	
PLAC - OK/AR	Stan Nowak	<snowak48 at yahoo.com>
PLAC - SD	Brandon Nelson	<nelson.bc80 at gmail.com>
PLAC - UT/NV	Jack Johnson	<j4x4jj at comcast.net>
PLAC - WY	Richard Gerow	<rgwizzard at wyoming.com>
President's Hat	all past presidents	
Program Library	Gene & Peggy Maggard	<gandpmaggard at gmail.com>
Public Relations	Brian Crocker	<brianrocktrips at gmail.com>
Resolutions		
Ribbons	Peggy Sue Moore	<moorepeggysue at gmail.com>
Safety	Jodi Brewster	<rmfmssafety2024@gmail.com>
Scholarship Committee	Richard Jaeger	<RjgrSci at aol.com>
Stationery/Trophies	Bennie Thomas	
Supplies	Roberta Wagle	<waglemom at gmail.com>
Uniform Rules	Lee Whitebay	<lwhitebay at poncacity.net>
Uniform Rules	Leon Reeder	<leonreeder47 at yahoo.com>
Uniform Rules	Les Presmyk	<presmyk at cox.net>
Webmaster	Dale Bright	<webmaster at rmfms.org>
Website Contest	Jennifer Gerring	<jgerring at gmail.com>

Please note: All email addresses are enclosed in chevrons, < >, and the @ symbol has been replaced by the word "at" with a space before and after the word. This is to prevent bots from picking up our email addresses. You will need to remove the chevrons and replace the word "at" and the two spaces with the @ symbol to have the correct email.



RMFMS Purpose & Policies – Excerpts from 2023 Directory (Revised)

- To bring about a closer association of the Earth Science Groups in the Rocky Mountain region.
- To increase and disseminate knowledge about minerals and other geologic materials.
- To encourage mineral study, collecting, and fashioning as a HOBBY.
- To sponsor local organizations interested in similar purposes.
- To encourage all clubs to publish bulletins and newsletters.
- To continue building up and promoting the use of the Federation Library of slide programs, videos, CDs, and DVDs to each member club.
- To distribute information and suggestions on the preparation and arrangement of specimens and materials for exhibit and display.
- To provide information and assistance to clubs holding Gem and Mineral Shows.
- To encourage clubs to support the American Federation of Mineralogical Societies Scholarship Foundation Fund.

AFMS Code of Ethics

- I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.
- I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.
- I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.
- I will use no firearms or blasting material in collecting areas.
- I will cause no willful damage to property of any kind—fences, signs, buildings.
- I will leave all gates as found. I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.
- I will discard no burning material—matches, cigarettes, etc.
- I will fill all excavation holes, which may be dangerous to livestock.
- I will not contaminate wells, creeks or other water supply.
- I will cause no willful damage to collecting material and will take home only what I can reasonably use.

- To promote the concept that all members of all clubs are members of the RMFMS and the AFMS, and to encourage individual members and clubs to take responsibility for asking questions or making known that help is needed. To encourage more contacts between those working at the Federation level, between clubs, and between club members.
- To keep the members informed of problems and activities regarding the use of Public Lands.
- To continue to support Federation-sponsored programs.

The Rocky Mountain Federation is composed of a membership of approximately 9000 members in the following states: Arizona, Arkansas, Colorado, Kansas, Nebraska, New Mexico, Nevada, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming.

The work of the Federation is directed by the Executive Committee, composed of: President, Vice-President, Secretary, Treasurer, Historian, State Directors, and the two immediate Past-Presidents.

Reminder — next RMF Newsletter is the August 2024 issue. Deadline for articles is July 15, 2024.

- I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.
- I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.
- I will cooperate with field trip leaders and those in designated authority in all collecting areas.
- I will report to my club or Federation officers, Bureau of Land Management, or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources.
- I will observe the "Golden Rule," will use "Good Outdoor Manners" and will at all times conduct myself in a manner which will add to the stature and public image of rockhounds everywhere.

