



**Denver Gem & Mineral Guild  
Founded March 1964**

1420 S. Reed Street  
Lakewood, Colorado, 80232

AFMS Silver Medal Club 2016



**February 2021**

# TIPS & CHIPS

**HTTP://WWW.DENVERGEM.ORG OR  
HTTP://DENVERGEM.ORG  
AND NOW FACEBOOK!!!**

*President - Linda Burns*  
**303-263-0391**

*Vice President - Pete Modreski*  
**720-205-2553**

*Secretary - Pro-tem*  
**Marj Becker**

*Treasurer - Debbie Baldwin*  
**303-377-4211**

**Hospitality - OPEN**

*Editor - Beth Simmons*  
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*Grab Bags - Joe Walkowich,  
Joe Payne, Kathy Honda*  
**720-272-8806**

*Field Trips - Committee*

*Show Chairman - Beth Simmons*  
**303-902-1708**  
**Dealer Chairman**  
**Linda Burns**  
**303-263-0391**

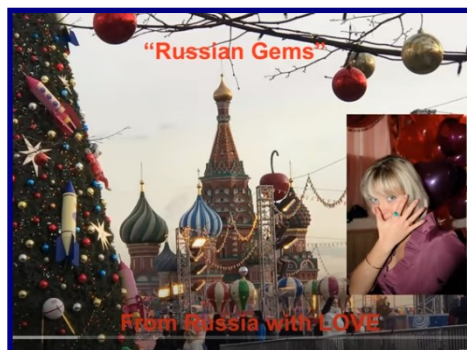
*Membership - Joe Walkowich*  
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*Ways & Means - Dave Sanchez*  
*Gideon Breithaupt, Sandra Lucero*  
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**303-726-3829**

*Historian - Kathy Honda*

*Web Master - Bob Johnson*  
**303-985-8167**

*Claims Manager - Fred Ceconi*  
**303-404-5967**



## FEBRUARY MEETING

**Friday February 12**

**"Russian Gems-  
From Russia with Love"**

**By Peter Lyckberg**

**Program notes on page 3**

**Meeting starts at 6:30 Practice time and social time**

**7:00 Meeting begins BE ON TIME!**

## IT'S AT YOUR HOUSE, AFTERALL!

Here is the link for the DGMG February Zoom Meeting

**Topic: DGMG February Meeting**  
**Time: Feb 12, 2021 07:00 PM Mountain Time (US and Canada)**

**Join Zoom Meeting**  
**[https://us02web.zoom.us/j/88494705183?](https://us02web.zoom.us/j/88494705183?pwd=dXdPQlErVUpYbng1c01VNXMxQkNGQT09)**  
**[pwd=dXdPQlErVUpYbng1c01VNXMxQkNGQT09](https://us02web.zoom.us/j/88494705183?pwd=dXdPQlErVUpYbng1c01VNXMxQkNGQT09)**

Meeting ID: 884 9470 5183

Passcode: 380465

You are encouraged to login at 6:30 to make sure everything is working AND so you can watch another 3D video (bring your 3D glasses).

At 6:45 we will have greetings/chat; the meeting will officially start at 7:00.

If you have any trouble logging in, please call Bob Johnson (*before 7 p.m.*)

Reminder will be sent out the day before and maybe even the meeting day!

Because Beth's email got hacked, the new email address for the Tips & Chips will be

**mineralguild@gmail.com.**



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## 58 years of DGMG Kudos, Celebrations, & Events

### 2021 DGMG Officers & Chairmen

**President:** Linda Burns  
**Vice President:** Pete Modreski  
**Secretary:** **OPEN PRO-TEM:** Marj Becker  
**Treasurer:** Deb Baldwin  
**Treasurer Ass't:** Beth Simmons  
**Hospitality:** **OPEN**  
**Ways & Means:**  
 Dave Sanchez, Gideon Breithaupt, Sandra Lucero  
**Membership:** Joe Walkowich **Ass't:**  
**Claims Manager:** Fred Ceconi  
**Editor:** Beth Simmons: **Ass't:** Marj Becker  
**Historian/Librarian:** Kathy Honda  
**Webmaster:** Bob Johnson; **Ass't.** Joe Walkowich  
**Show Chairman:** Beth Simmons  
**Dealer Chairman:** Linda Burns  
**Field Trips:** Committee  
**Grab Bags:** Joe Walkowich, Joe Payne, Kathy Honda  
**Merchandise:** Sandra Lucero  
**Council Rep:** Kathy Honda: **Alt.** Linda Burns  
**Denver Show Rep:** Kathy Honda  
**Sunshine:** Sandra Lucero  
**Party planning:** Deb Baldwin, Marj Becker  
**RMFMS Rep:** Kathy Honda  
**Outreach:** Susanne Peach; Bob Johnson  
**Inventory manager:** Linda Burns

An "Assistant" is the officer's backup in case of illness or other reason they can't do their job.  
 Every officer needs an "Assistant"!  
 Join up! Say YES when asked!

### Quote of the month:

The most exciting phrase to hear in science, the one that heralds new discoveries, is not "Eureka!" but "That's funny..."

Isaac Asimov

### February Birthdays:

George Daggett  
 Annalise Kish  
 Joe Payne  
 Joe Walkowich

### February Anniversaries:

The Rockwells



### February Sunshine Spotlight

CONTACT **SANDRA LUCERO** 303-726-3829  
[gardengal001\(@\)yahoo.com](mailto:gardengal001(@)yahoo.com)

TO  
 INFORM HER OF SUNSHINE REQUESTS

**HOPE EVERYONE IS WELL!**



Get better wishes to Cindy Breithaupt and Jim Cronoble who are still undergoing radiation/chemo treatments.

### THE DENVER GEM AND MINERAL GUILD—58 Years old!



Founded in 1964, the Denver Gem and Mineral Guild pursues exploration, experimentation, and education in the earth sciences; the discovery, development and preservation of minerals and mineral deposits; and the advancement, encouragement and utilization of the principles of art and craftsmanship as applied to gems and minerals.

The Guild meets on the second Friday of the month at 7:30 pm at Berthoud Hall on CSM Campus, except for June, July, August, and December. Picnics, field trips, and parties replace regular meetings those months.

Deadline for article submission for the Tips & Chips is the 20th of each month. Email photos and articles to editor Beth Simmons at [cloverknoll@comcast.net](mailto:cloverknoll@comcast.net) or [mineralguild@gmail.com](mailto:mineralguild@gmail.com). Exchange with other newsletters is invited, and reprinting of material from this newsletter with proper attribution is encouraged.

# 2021 DGMG CALENDAR OF EXCITING EVENTS

**A persistent page—watch monthly for additions! PUT THIS ON YOUR FRIDGE!!!**

## CONTINUING DGMG ENTICEMENT! FEB. 12: 6:30 PM PROGRAM NOTES

This will be a Youtube video, of a webinar lecture that Peter Lyckberg gave at the National Natural History Museum of Luxembourg on Dec. 8, 2020, on the occasion of the opening of their special exhibit about gemstones, "From Dark to Light." Peter Lyckberg is a well-known mineralogist and geologist who grew up in Sweden and has studied gem and crystal deposits around the world. The Luxembourg museum described him as *"Expert in new minerals, mineralogy of ore deposits and granitic pegmatites, genesis of deposits, and history of mining."*

The 2018 Dallas Mineral Symposium introduced him as *"well known for his studies of ore, pegmatite and gem deposits in Scandinavia, Ukraine, Russia, Afghanistan, Pakistan, Namibia, Brazil, USA. For the last 21 years Peter worked as a nuclear inspector at the European Commission in Luxembourg."*

Earlier, speaking at the 2013 Dallas Mineral Symposium, his introduction included *"In 1992 Peter was the first non Soviet scientist since the Russian revolution in 1917 to visit, photograph and study the classic Emerald-alexandrite deposits at Tokovaya-Izumrud near As best and the gem pegmatite and amethyst veins around Alabashka-Mursinka in the Urals, Russia, and he worked with the Yakutsk Diamond mines in Siberia."*

I know Peter personally, and have heard him give excellent presentations in Tucson and elsewhere. I've watched this video, and it is excellent, and I'm sure you will all watch it with fascination. He described many of the famous gem districts of Russia, most of which he has visited in person, with many personal anecdotes about what it's like to be there. The video will be 1 hour and 15 minutes long; I will introduce it and then let Peter (virtually, a recorded) show his pictures and stories!

### Some even longer mineral names!

After Pete's talk last month, I thought it appropriate to show this list of specimens that Dakota Minerals offered for sale. A+ to anyone who can pronounce the Melon, Nio, and Tuper names!

Altaite, Chambersite, Churchite, Junitoite, Melonjosephite, Milarite, Nifontovite, Niobokupletskite,

## PRESIDENTIAL MESSAGE

***Here's to a Happier New Year!***

With the rollout of the vaccinations we hope to see an improvement on the covid-19 dial so that we may return to a more normal life, Until then stay safe and healthy. When conditions improve we will try to find a location where we can start meeting again.



***Linda Burns,***

***DGMG 2021 President***



# Love

By **Marj Becker**

## WHAT IS LOVE?

Can Love be defined?

Love is a postage stamp  
That says Love.



Love is your babe gently  
Brushing your eyelashes.

Love is a puppy  
Running to greet you.



Love is children  
Jumping into a pile of  
leaves.



Love is a neighbor  
Shoveling your sidewalk.



Love is your adult child  
Bringing you flowers.  
And, it's not your birthday

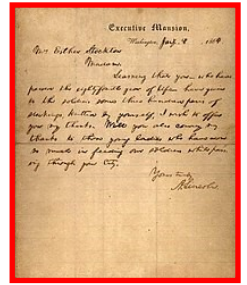


Love is a good memory  
Escaping from the depths  
Of remembering,



Love is a letter

From someone from long ago.



Love is a discount

On the car repairs.

Love is attending

A children's performance.



Love is voting in

A national election.

Or, a local election.



Love is

Mowing the lawn.

Or, cooking a meal.



Love is a kiss

From your loved one.



Love is ....



CONTINUED ON THE NEXT PAGE



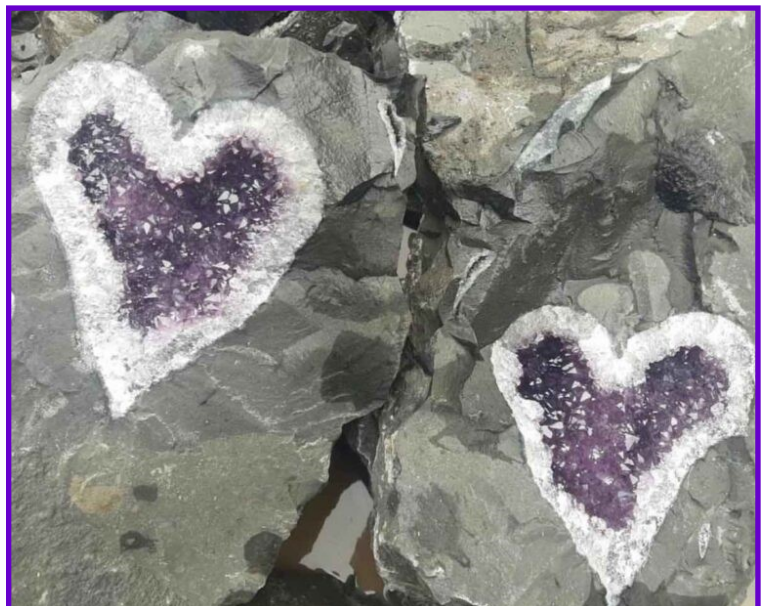
# ..... A heart in a rock!



Two miners at the Santa Rosa Mine, in the Catalan area in Artiga, Uruguay, on the border between Uruguay and Brazil, cracked open this basaltic boulder and revealed a pair of perfect hearts! Preserved in amethyst, February's birthstone!

The miners had no idea that they were about to discover this lovely geode; in fact, they were struggling to get the excavation going. "We were opening the mine to work normally," Marcos Lorenzelli of Uruguay Minerals, "but the land was difficult to work and our employees said, 'We have to find something really nice due to the hard work we are doing.'" Their patience paid off with this once-in-a-lifetime find. Lorenzelli estimates that the rock weighs over 150 pounds (80kg). He has already received a bid of \$120,000 for the matching pair of rocks.

Posted on GOOD NEWS NETWORK and My Modern Met.



♥ Happy Valentines Day ♥



## Amethyst—February's Birthstone—FROM Colorado volcanoes!

### by Beth Simmons

Did you notice that the amethyst hearts were in BASALT? Meaning the rock type, not the town in Colorado! Basalt is a basic volcanic rock. So if we have Basalt in Colorado, we must have had volcanoes here. And have amethyst, too! Here are three prize Colorado amethysts shown in the *Minerals of Colorado* big book—from Red Feather Lakes (1), Cripple Creek (2), and LaGarita (3) collected by our own founding members, **Luke** and **Cathy Westervelt**! Two of those locations—Cripple Creek, and the old Crystal Hill Mine near Saquache were ancient volcanoes. The famed Sowbelly agate (4) comes from the Creede caldera. For forty years, the Canon City Geology Club has owned the New Hope amethyst claim, listed as the Twelve-Mile park area in Fremont County in the big book, a Precambrian site formed as a volcanic dike 575 mya (6,7). So maybe the Red Feather area was a volcano, too, during the Precambrian. An old copper mining area in Precambrian rocks in Unaweep Canyon, produces amethyst; some crystals sit atop fluorite (5).

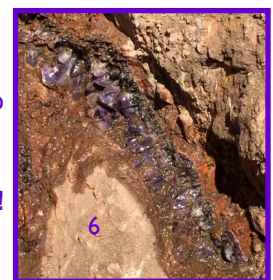
What about volcanoes causes amethyst to grow? Chemistry and temperature dictate that quartz (silicon dioxide) grows in low- to medium-temperature volcanic terranes. Amethyst forms near the earth's surface (but not as near as the zeolites on North and South Table Mountains) from water with relatively low temperatures (~200–250 °C, above boiling point) and low to moderate salinity. Volcanic geodes (such as the hearts from Uruguay) are hollow with a crystal lining. During cooling of the lava, pockets of air get trapped and leave 'bubbles' in the molten lava. The lava cools quickly, creating a porous rock. Holes also occur in volcanic breccias, rocks that are cracked and broken during an eruption. Over time, rain water seeps through the rock and into the hollows. Minerals in the water solidify into crystals that cool from outside to inner parts of the vugs or cracks. The color of the crystals depends on the minerals in the water at the time. Some scientists think the purple color in amethyst is caused by radiation during an  $O^{2-} \rightarrow Fe^{4+}$  inter-valence charge transfer. The  $Fe^{4+}$  ion, at the  $Fe^{4+}$  site (e.g.,  $FeO_4$ ) is formed from  $Fe^{3+}$  by the action of **ionizing radiation**; the alteration is important for the coloration of amethyst. Other scientists credit manganese oxide ( $MnO_2$ ) for the purple color. If the temperature is too high, the iron oxide changes form and **yellow quartz (citrine)** results, perhaps because the iron oxide was originally organic.

When did the volcanoes erupt? Creede (26 my ago) and Crystal Hill, a small volcanic neck of quartz monzonite, were small pimples in the aftermath of the huge LaGarita Caldera, the world's largest known single eruption (27.45 my ago). As the surrounding rhyolitic rock fractured, solutions rich in silica, silver, lead, gold and zinc surged upward. In the low temperatures and pressures near the surface, the solutions at the Creede caldera solidified into massive veins of chalcedony, banded agate, and amethystine quartz that alternate with bands and crystals of native silver. In August 1889, prospector Nicholas Creede discovered an outcrop of amethystine quartz and native silver. Other prospectors found linear trends of similar outcrops that indicated large, continuous vein systems. After tracing the largest vein on the surface for more than two miles, they named it the Amethyst Vein after its primary component. Today's Last Chance mine in Creede, in addition to producing "standard sowbelly agate," (4) has yielded inch-long amethyst crystals and multicolored "ametrine" purple and **yellow** crystals.

Today, Steve Veatch finds amethyst at his David Leighton mine in Cripple Creek, home of the largest open pit gold mine in the state. Rockhounds don't usually associate Cripple Creek with amethyst (2). But around the Leighton Mine, the porous ash layers from eruptions 29 to 27 my ago allowed mineral-bearing solutions to percolate and solidify into violet quartz crystals, some up to 8 cm long and 2.5 cm wide, some with scepters on the points.



1. Quartz var. amethyst, Red Feather Lakes, Larimer Co., total 8.5 cm long. Dan and Dianne Kile, specimen; C. E. Manton, photo.  
2. Quartz var. amethyst, Cripple Creek district, Teller Co., specimen 4.2 in. high. Gave Tridley, specimen; J. R. Manton, photo.  
3. Quartz var. amethyst, Crystal Hill mine, La Garita/Saguache Caldera, specimen 4.6 in. high. Luke and Catherine Westervelt, specimen; J. R. Manton, photo.



**Gotta luv those old volcanoes!**

**Sources:** Canon City Geology Club, Curtis Eckert  
Minerals of Colorado, Eckel, et. al

Steve Voynick @ Silver Mining Survivor: Creede Colorado | Rock & Gem Magazine (rockngem.com) and Colorado Rockhounding

Last Chance Gold-Lead Mine Near La Garita, Colorado | The Diggings™

Veatch, Steve, Cripple Creek Amethyst, Pick & Pack, December 1996

Volcanic Geodes | Research Blog (wordpress.com)

Photo 5 by Linda Burns and 4 by Beth Simmons

# DENVER GEM AND MINERAL GUILD

MINUTES, JANUARY 8, 2020

GENERAL MEETING; ON-LINE MEETING

Zoom



**Attendance:** If the secretary's count is accurate, sixteen people attended.

**Call to Order** at 7:00 p.m. by President **Linda Burns**

**Minutes:** **Marj Becker**

Approved as written and published.

**Treasurer's Report:** **Debbie Baldwin**

Checking account:; \$14,026.38; Time savings: \$4, 093.21; Savings deposit: \$5,900.42

**Deb** will have the auction dollars for next month's report.

**Award:** **George Daggett** was presented with an award for Service As President, Certificates for all board members have been prepared, as well.

## Possibility of holding a show for this year

The possibility of a show April 30 through May 2, 2021.

We have two possibilities.

Plaza at the Mart. Depends on whether the Mart can open for use by April 30 and May 2, 2021. There are 32,000 sq feet in this location.

Place on Wadsworth with 16,000 sq. feet., Cottonwood Plaza; used to be an antique shop there. We would still need to provide insurance.

An e-mail blast will be sent out to members to see if the time period would work for them and they will be willing to volunteer to work a show, this year.

Would tables be provided for us? Pavilion would have tables already. Cost at the Mart would be minimal.

**Beth** will send out an e-mail blast asking if people would be willing to participate those dates. The decision by members must be yes or no.

Some details need to be worked out. Such as the rates for dealers.

The resulting vote counted on January 16 was 28 no, 22 yes. So the DGMG will NOT have a show in 2021.

**Dr. Pete Modreski:** Presented the program. "Why are minerals so *darned* complicated? (have they gotten worse with age??)"

There being no further business, the meeting is adjourned at 8:45 p.m.

**Marj Becker**

Acting Secretary

**George Daggett, outgoing DGMG president, received a pretty crystal award from Linda Burns, incoming DGMG president**





## Mineral Cleaning For the Beginner by DGMG President Linda Burns

The easiest way to clean your minerals is to use a small crockpot. You will need to use a small basket inside the crock pot and raise it up off of the bottom an inch so all of the iron and other gunk doesn't build up on the bottom of your mineral. A lot of people use old berry baskets for this because they allow water and gunk to pass though the sides and bottom freely. Only use the lowest setting on the pot so it will not boil. If necessary put your pot on a timer so it is only on part of the time. You will need to constantly check the pot and add water to keep the minerals covered at all times. Iron out is available at the grocery stores or hardware stores and works well on most iron stains on minerals. When Iron out is added to the pot with water it will appear to "boil up" which is the beginning of the cleaning process. With the heat of the pot it will clean your minerals {this is important so I am saying it again}. Add Iron out and water to maintain coverage of your minerals. Iron out is a light duty acidic product but you should still wear **plastic gloves** to prevent the possibility of burning yourself if you are sensitive to cleaning products.



**ALSO BE SURE TO ONLY HAVE THIS CLEANING PROCESS WHERE CHILDREN AND ANIMALS CANNOT GET INTO IT !!!**

It will take several days for your mineral to be cleaned so patience is required. **CHECK YOUR LIQUID LEVEL OFTEN** to avoid burning up your pot. When you feel you have gotten the minerals as clean as they can be it is time to remove them from the pot. (Use tongs.) Wash your minerals completely. Clean your pot and add back your minerals and water with baking soda. Baking soda will remove the remaining iron out from your minerals. This will also take a few days.

If you are not familiar with harsher chemicals it is best to avoid using them. They require chemical resistant gloves and have very specific ways to add the product to your container. If you do not follow these directions to the letter, it can cause severe injury.

**But if, you are cleaning pyrite, follow these instructions! (from the Gem Shop 1/20/21)**

It is important to note, when cleaning your cubic pyrite NEVER clean it with water. The matrix is water-soluble and will disintegrate. Instead, dust it with something soft like a microfiber cloth or Q-Tip. Finally, it is recommended to wear gloves and not to touch the pyrite with your bare hands. Oils from your skin can permanently tarnish the pyrite over time.



### RAINDROPS & SPIC & SPAN

This old hint came from a 1958 *Gems & Minerals* magazine (From the DGMG Library!).

Sounds safe. And doable.

Just in time for you to clean specimens you plan to display at the DGMG show!

Dissolve one-quarter cup of "Raindrops" (a commercial water softener - still available from Amazon.com) in two quarts of hot water. Add and dissolve two rounded tablespoons of "Spic and Span" (still available). (Spic & Span)... Let cool until comfortable to the touch.

Immerse crystals (don't do this for water-soluble minerals!), let stand for a couple of minutes. You may find it expedient to scrub extra dirty crystals lightly with a soft toothbrush.

Otherwise, just swish about a little and rinse thoroughly under water. Let stand on paper towels to dry.







## Web Corner – Web and Computer Resources for Rockhounds

The New DGMG Website – by DGMG Webmaster **Bob Johnson**

The 10-year-old DGMG website is being redesigned. It has a new address: <https://denvergem.co.education/>. The old address will still redirect you there - for now. Many additional pages will be added to the site in the coming months.

Here are the procedures for logging into the new Members Only area.

On the top menu, click on Login.

Enter your email address as your username.

Be sure to use the same email address that is listed in the club roster – the email address used to send you the Tips & Chips.

If you have forgotten your password, or if this is your first time logging into the new site, click on “Forgot password” and the system, after asking for your email address again, will automatically send you an email with a link to create your new password.

***Please keep our members area secure for everyone by using a strong password.***

See these recommendations: <https://blog.avast.com/strong-password-ideas>.

The system will suggest a password. You can use that one, or enter your own.

The *Members Only* area currently contains the most recent members directory in both excel and PDF format, and the DGMG photo albums. There are nearly 200 different albums which contain pictures that go all the way back to 1964 – our founding year.

Clicking on an album name will open that album in Google Photos. The initial album view will show all the pictures in the album (you may need to scroll down to see them all). Clicking on any picture will open a larger view of that one picture and from that view you can scroll left or right to see the individual pictures. To save any picture to your computer, just right click on it and select “save image as”. From the Album view, you can click on the 3 dots (in the top menu) to download the whole album.

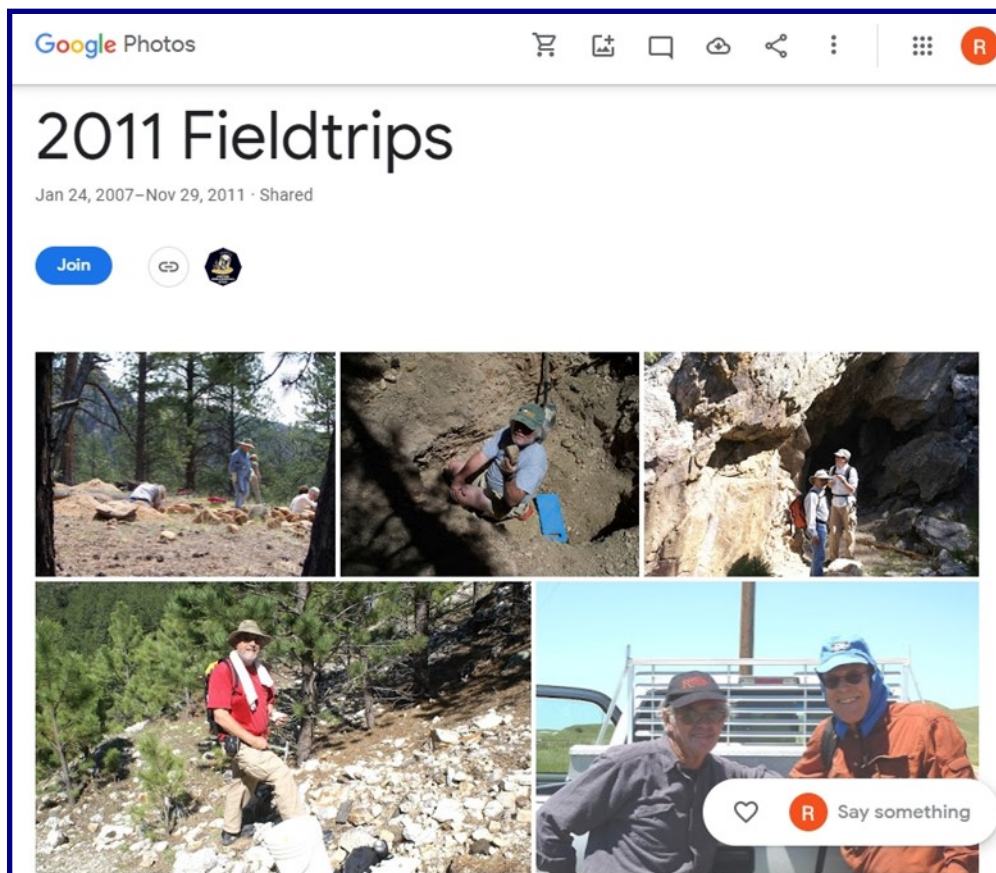
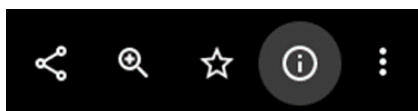
Con’t next page



## Web Corner – Web and Computer Resources for Rockhounds (con't.)

At the bottom of the screen, you will see a button that says "Say something" Click on that button to leave a comment (about the whole album - from the album view or about an individual picture - from the picture view). You are encouraged to leave your comments and share your stories about these pictures!

The menu at the top of the picture view gives you additional options. The circled "i" will display additional information about that image, and the 3 dots will allow you to order prints, download, or view the pictures as a slideshow.



For more, see *The Ultimate Guide to Google Photos* -<https://techpp.com/2015/12/23/google-photos-guide/>

***If you have additional pictures that you would like to add to our collection please contact the webmaster!***

Below the Photo Albums are the Videos. Listed there are over 100 videos produced by DGMG Historian Marjorie Payne. They are selectable by categories (All, Fieldtrips, Programs, etc.) Note you will need to hit the "Load More" button at the bottom to be sure that all the videos of any category are actually displayed.

If you have questions, comments, suggestions or any problems logging in to the new site, please contact me, the DGMG webmaster. (The most capable computer guy on the planet –ed.!) )

Contact details are at the bottom of the site.





## Largest dinosaur bones found in Argentina

Submitted by **Linda Burns**

Paleontologists have found a 98-million-year-old dinosaur skeleton in the Candeleros formation in the Neuquen River Valley, Argentina that beats all size records. The largest dinosaur to date was *Patagotitan mayoreum*, 122 feet long, housed at the Chicago Field Museum. The new sauropod is up to 20% LARGER! Beginning in 2012, researchers started cleaning off bones, but they haven't yet found the femur or humerus bones which are the measuring sticks of dinos, but certainly the tail bones and other parts found so far indicate a huge monster. Read and see more about it at:



[Largest Dinosaur Bones Ever Found? - Videos from The Weather Channel | weather.com](#)

## DMNS (Denver Museum of Nature & Science) Announces New Discovery of *Parasaurolophus* Skull in New Mexico

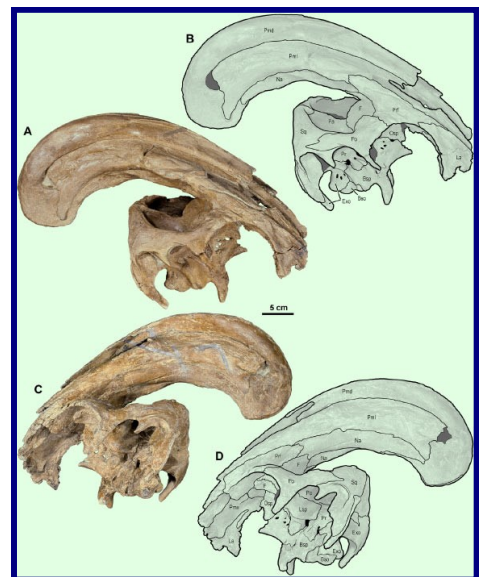
This dinosaur had a large hollow tube on its head. The discovery in northwestern New Mexico revealed what the Denver Museum of Nature and Science called an "exquisite preservation of the skull, especially the bizarre tube-shaped nasal passage" which finally revealed the structure of the crest.

Over the past 100 years, ideas for the purpose of the tube crest have ranged from snorkels to super sniffers," noted David Evans at the Royal Ontario Museum, in a statement. "But after decades of study, we now think these crests functioned primarily as sound resonators and visual displays used to communicate within their own species."

According to DMNS, the skull is about 75 million years OLD when North America was divided by a shallow sea. The area was populated with duckbilled dinosaurs, horned dinosaurs and early tyrannosaurs. The skull shows that the crest of the *Parasaurolophus* is formed much like other related duckbilled dinosaurs.

"This specimen is a wonderful example of amazing creatures evolving from a single ancestor," Sertich said. "Imagine your nose growing up your face, three feet behind your head, then turning around to attach above your eyes. *Parasaurolophus* breathed through eight feet of pipe before oxygen ever reached its head," said Terry Gates, a paleontologist from North Carolina State University.

The partial skull was discovered in 2017 in the Fossil Forest member of the Fruitland Formation in the Bisti/De-Na-Zin Wilderness of New Mexico by Smithsonian Ecology Fellow Erin Spear, Ph.D. while exploring the badlands as part of a Denver Museum of Nature and Science team. At first, only a tiny portion of the skull was visible on the steep sandstone slope but as they chiseled the specimen, it revealed the intact crest of the skull along with part of the lower jaw and a handful of ribs." The preservation of this new skull is spectacular, finally revealing in detail the bones that make up the crest of this amazing dinosaur known by nearly every dinosaur-obsessed kid," Sertich said. "This just reinforces the importance of protecting our public lands for scientific discoveries."



Go to: [Paleontologists Find Well-Preserved Skull of Tube-Crested Dinosaur | Paleontology | Sci-News.com \(sci-news.com\)](#)

T.A. Gates *et al.* 2021. Description and rediagnosis of the crested hadrosaurid (Ornithopoda) dinosaur *Parasaurolophus cyrtocristatus* on the basis of new cranial remains. *PeerJ* 9: e10669; doi: 10.7717/peerj.10669



## IT'S TIME TO PAY UP!

## DENVER GEM AND MINERAL GUILD MEMBERSHIP 2021



 Renewal

☐ New Membership

Annual Dues:

○ Individual=\$15.00

☐ Family=\$25.00 (Family is one or two adults, living at the address, and your children, under 18)

Primary member \_\_\_\_\_ Birthday \_\_\_\_\_  
Name Month Year

Phone number \_\_\_\_\_ Email address \_\_\_\_\_

Spouse/Partner \_\_\_\_\_ Birthday \_\_\_\_\_  
Name Month Year

Phone number	Email address

Anniversary Month \_\_\_\_\_

Junior Member \_\_\_\_\_ Birthday \_\_\_\_\_  
Name Month Year

Junior Member \_\_\_\_\_ Birthday \_\_\_\_\_  
 Name \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

Junior Member \_\_\_\_\_ Birthday \_\_\_\_\_  
 Name Month Year

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

☐ Check this box if you DO NOT want your name, phone number and email address included in the Members Only section of the DGMG website.

**Interests and Skills (check all that apply)**

- Fossils
- Lapidary
- Faceting
- Jewelry
- Have a collection
- Display at shows
- Attend mineral shows
- Willing to volunteer at shows
- Field trips

○ Mineral collector: (list favorites)

☐ Willing to share special skills with others:

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Return membership form, liability form for each person, and payment to Membership Chairman at a monthly meeting or mail to: DGMG

Membership Chairman  
1420 S. Reed Street  
Lakewood, CO 80232

## DENVER GEM AND MINERAL GUILD

### RELEASE OF LIABILITY

By signing below, I acknowledge that all activities sponsored or conducted by the Denver Gem and Mineral Guild (DGMG), a non-profit organization, may be hazardous and may result in loss, damage, or death.

With full knowledge of these dangers, and in consideration for my acceptance as a member of the DGMG and participant in any and all field trips **and activities** sponsored by the DGMG, and the services and amenities to be provided by the DGMG in connection therewith, I confirm that I have read the foregoing and voluntarily assume all risks of such damages and hazards occurring in connection with the **activity**. I hereby agree for myself, all of my family, and heirs to **RELEASE** the DGMG and any of its trip leaders, club officers, club members, **hosting property owners** and claim owners, instructors, guides, or representatives from liability, claims, demands, or any causes of action.

I UNDERSTAND THAT THIS IS A LEGAL DOCUMENT AND BY SIGNING IT, I AM GIVING UP MY RIGHT TO SUE OR OTHERWISE MAKE ANY CLAIM against DGMG or any of its trip leaders, club officers, club members, **hosting land owners and claim owners**, instructors, guides, or representatives which may arise during my participation in any and all activities of the DGMG **or activities I conduct as an individual on DGMG owned or leased properties**.

I intend this RELEASE OF LIABILITY to be effective whether or not any loss, damage, injury, or death RESULTS FROM NEGLIGENCE of the DGMG or any of its trip leaders, club officers, club members, hosting land owners, and claim owners, instructors, guides or representatives. I understand that negligence means failure to do an act which a reasonably careful person would do, or the doing of an act which a reasonably careful person would not do, under the same or similar circumstances to protect himself, herself, or others from injury or death.

I agree to be solely responsible for my own safety and to take every precaution to provide for my own safety and well being while participating in the activities of the DGMG. Also, I understand that on DGMG trips, there may not be rescue or medical facilities or expertise, which may be necessary to deal with potential injuries to which I may be exposed. I understand that these risks exist and notwithstanding them, I wish to participate in DGMG activities.

I HAVE READ THIS RELEASE AGREEMENT AND HAVE FULLY INFORMED MYSELF OF ITS CONTENTS BEFORE I HAVE SIGNED IT. ALSO, I PLEDGE TO UPHOLD THE CODE OF ETHICS ATTACHED TO THIS RELEASE.

Printed Name (Please print legibly): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

IF UNDER 18 YEARS OF AGE, PARENT OR GUARDIAN MUST READ AND SIGN BELOW

I am the legal guardian of the above minor and have read the above RELEASE. I hereby consent to the terms of the RELEASE on behalf of the named minor, and give my consent to the participation of the above named minor in all activities of the DGMG on the terms stated.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

