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Vol. 36 #4

## **DIGGIN'S FROM DAKOTA**

4th Quarter - 2024

This quarterly publication of the CDG&MS serves Bis/Man and the surrounding areas

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### *Hello everyone and Merry Christmas*

Well, we got through our annual gem & mineral show on October 25th & 26th. We had a very successful show. I would like to thank everyone who helped to set up and breakdown our show. "Hats off" to all of you.

Now we are winding down our year. On December 2nd we will have our Christmas Meeting at the Bismarck Public Library. The time is from 1:00 PM to 4:00 PM in Room A. We ask the members to bring finger foods and a door prize gift valued at between \$5.00 to \$10.00.

Next years tentative schedule will be available on the CDG&MS Website and also as a handout at our regular meetings. We also are saving 6 slots for members who would like to do a presentation of their knowledge & talents. Remember that all members can bring a show & tell to our meetings. Any suggestions on future fieldtrips are welcome.

CDG&MS President

Timothy Weiser



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### **The Officers of the CDG&MS:**

Tim Weiser .....  
President

Brenda Morgan .....  
Vice President

Skye Fasching .....  
Treasurer

Joe Martinetti/Darrel Spencer .....  
Secretary

Steve Fasching .....

Representative to the Rocky Mountain  
Federation of Mineralogical Societies.

### **Membership:**

Individual memberships \$20.00 per year.

Family memberships \$25.00 per year.

Visitors are welcome to attend.

Executive Board meetings 1:00 P.M.

Regular meetings 2:00 P.M.

We meet the first Sunday of each month at the Bismarck Public Library down stairs Room B. Dates may change due to room availability. Read the calendar dates for our CDG&MS organization.

## THE 50th ANNUAL CENTRAL DAKOTA GEM & MINERAL SHOW

The admission was **free** for anybody who wanted to see the 50th Anniversary Gem and Mineral Show sponsored by the Central Dakota Gem & Mineral Society. The Gem and Mineral Show opened Saturday & Sunday at 10 AM and closed 6:00 PM on Saturday and 5:00 PM on Sunday at the Bismarck Eagles #2237; 313 N 26th St. As soon as you walked through the front door, you would be met by two great ladies Kathleen Vetter and Virginia Wingerter that would help you sign up for some amazing door prizes including geodes, unusual mineral specimens, and necklaces with beautiful stone pendants, and also a book about rocks for children. The two grand prizes were a rock tumbler for hobbyist and also a portable rock scoop.

There were also a great selection of 181 mystery grab bags for a dollar with Apache tears, a variety of miscellaneous polished rocks including teredo wood, sea shells, etc. There were all kinds of children's activities such as making Pet Rocks or Pet Bugs, coloring pages of dinosaurs, finding examples of micro fossils. Touch & Feel fossils, Etc.

Continuing on in this wonderful world of mineral specimens, As soon as people entered the front door of the Eagles, they would take a quick right and enter a world of unbelievable specimens all reasonably priced to sell.

Their names & contact information were entered for door prizes that would take place on Saturday. The final two grand prizes of a rock polisher and a rock scoop were also awarded.



### A THANK YOU TO THE CENTRAL DAKOTA GEM & MINERAL SOCIETY

We would like to thank each of our current members and our exhibitors for their dedication. We would also like to thank the original charter members, all the previous members and their families who dedicated so much of themselves in order to establish this organization and to keep it going for all these years. It is our responsibility to ensure that we pass this organization on to the next generation. We as "good will ambassadors" will always welcome our new members.



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## DISTINGUISHED PROFESSOR, DR. ALLAN ASHWORTH, SPEAKS AT THE 50TH ANNUAL GEM AND MINERAL SHOW

by Joseph Martinetti

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This year was our 50th Annual Gem and Mineral Show, and to highlight the event we decided to bring in a special speaker. Dr. Allan Ashworth, a well-recognized, internationally known, and highly sought after geologist from NDSU came to give a talk.

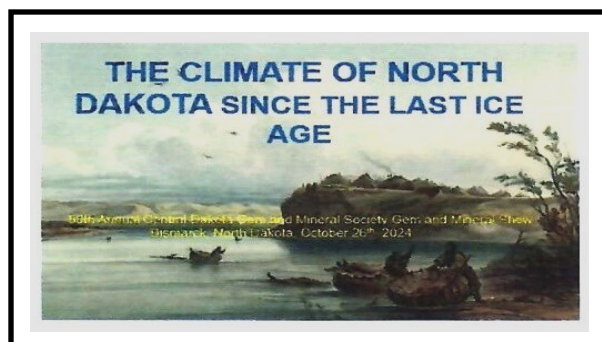
Dr. Ashworth came to NDSU in 1972 and eventually became the Geosciences Department Head. Dr. Ashworth created a high-quality program for students at NDSU

Quite honestly, NDSU, and North Dakota, have been blessed with this man. His passion for geology created, what I believe, was a fantastic science program for the state which produced many excellent students who went on to receive graduate degrees or occupations related to geology



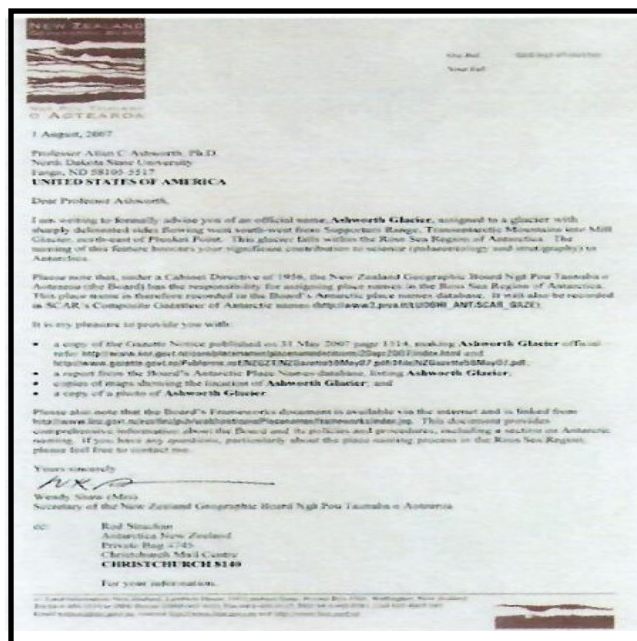
Dr. Ashworth's talk focused on the evidence for climate change in North Dakota since the last Ice Ages. Using information from the geologic record, including sedimentology and paleontology. Dr. Ashworth walked the audience around the State with the audience around the State with images taken of the rocks and fossils to explain how our climate has changed over time.

Dr Ashworth's research has been well published outside of the scientific community in multimedia such as a documentary film, "Ice People," and



"Secrets Beneath the Ice" on Nova. Fossil beetle species never seen were named after him that he collected during field studies in South and North America.

For his work in Antarctica, the Ashworth Glacier, within the Ross Sea Region of Antarctica, has been named after him.



In 2019, the Geological Society of America awarded him with a Distinguished Career Award. He also held the position of President of the International Union for Quaternary Research. Dr Ashworth has received other numerous awards and achievements. I wish Dr. Ashworth and his wife Hazel the best in their retirement years. Thank you for passing your passion of geology to me and the next generation!



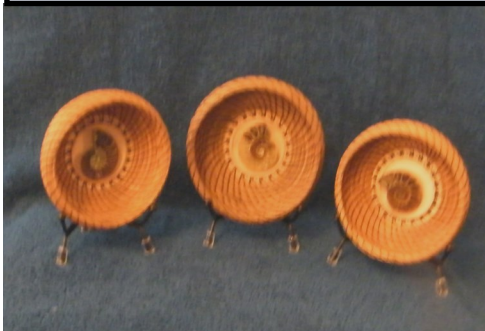


**Carrie Schneider**

**701/400/1958**

**Bismarck, North Dakota**

**pine needle baskets  
inlaid with cabochons,  
handcrafted jewelry**



**Russ Schneider**

**701/400/1958**

**Bismarck, North Dakota  
fossil & mineral specimens  
artifacts**







**Tim Weiser**  
**Worker of The Elements**  
 701/946/1823  
 Bismarck, North Dakota  
 silver smith\* jewelry



**Jasper Gypsy Gems**  
 605/490/0820  
 Sturgis, South Dakota  
 crystals \*mineral specimens



**Lin McGarvey**  
**CREATIONS BY LIN**  
 507/626/0044  
 handcrafted jewelry  
 pearls





## **Treasures of Sea & Earth**

**Brenda & Jolene Morgan**

**701/224/0103**

**Bismarck, North Dakota 58501**

**jewelry \* rocks \* crystals**



## **Montana Agate Shack**

**Eddie White**

**406/413/1136**

**agates**



## **Virginia & Victor Wingerter**

**255/3848**

**Bismarck, North Dakota**

**rock polishing/cut slabs**







**Tom Tupa**  
**701/319/6665**  
**Bismarck, North Dakota**  
**cabochons \* slabs**



**Wachinski Lapidary service**  
**Joe Wachinski**  
**701/839/1374**  
**Minot, North Dakota**  
**faceted gems**



**Chakra Realms**  
**701/471/4664**  
**Bismarck, North Dakota**  
**crystals \* rocks \* jewelry**







**Tony Goldade**  
**701/223/8359**  
**Bismarck, North Dakota**  
**fossils \* mineral specimens**



**Mark and Diane Rau**  
**Rocks and Stuff**  
**701/204/3797**  
**Bismarck, North Dakota**  
**cabochons \* mineral specimens**



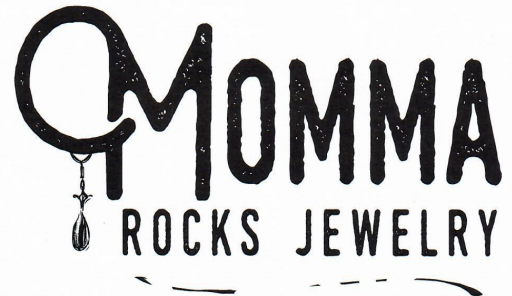
**Mike Simonson**  
**701/391/8451**  
**Bismarck, North Dakota**  
**jewelry \* gems \* cabochons**  
**mineral specimens**







**Sarah Juergens**  
**Moma Rocks Jewelry**  
 701/425/3101  
 handcrafted jewelry



**Kris Dirk**  
 406/939/1298  
 Mandan, North Dakota  
 moss agates \* cabochons

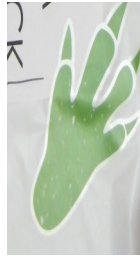


**Susan Gerenz**  
**Zazzu Jewelry**  
 701/400/7440  
 Bismarck, North Dakota  
 \* crystals \* fossils \* shells





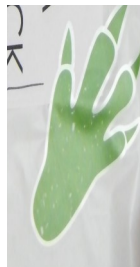
## DISCOVERING TOUCH & FEEL CHILDREN'S ACTIVITIES with Becky Barnes



Becky displayed a wonderful assortment of prehistoric fossils, rocks, and minerals. There were examples of a fossil Metasequoia pine cone, fish, prehistoric shark's teeth, an ammonite, as well as an assortment of other fossils not often seen.



## CHILDREN'S & FAMILY ACTIVITIES with Kimberly (Christianson) Reuer



Kimberly is explaining about the great activities that are available for the young at heart. Another member Lenore Kuntz on the right is also helping a youngster with activities such as making creatures with pipe cleaners, or coloring dinosaurs.



These pet rocks were placed around the Eagles building for people to find.





## EDUCATIONAL DISPLAY CASES

**Display # 1 by Susan Gerenz \* Beautiful sea shells, geodes, and rocks**

**Display # 2 by Kris Dirk \* Unique mineral and beautiful coral specimens**

**Display # 3 by Mike Simonson \* Historical Catlinite Pipes of the great plains**

**Display # 4 by Darrel Spencer \* Membership is for everybody who likes rocks**



## **Fraternal Order of The Eagles # 2237 receives Certificate of Appreciation**



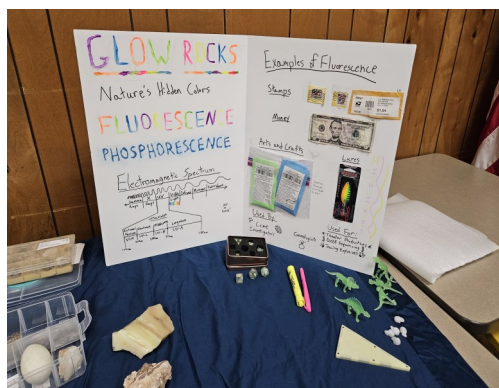
Earlier this year The Central Dakota Gem & Mineral Society as a non profit organization had applied for and received an educational grant from The Fraternal Order of The Bismarck Eagles # 2237. This grant will be used exclusively to promote the study of mineralogy and geology within our organization and also to the general public.

In the photo from left to right are Ken J. Rebel, (trusty Chair for the Bismarck eagles) and Ray Friedig. The Presentation of this certificate of appreciation was made by the President and Vice President of the Central Dakota Gem & Mineral Society Tim Weiser and Brenda Morgan.



## DEMONSTRATIONS ON USING ULTRAVIOLET LIGHT

with Skye Faching



**A dark light is a cool way to look at minerals or other materials.**

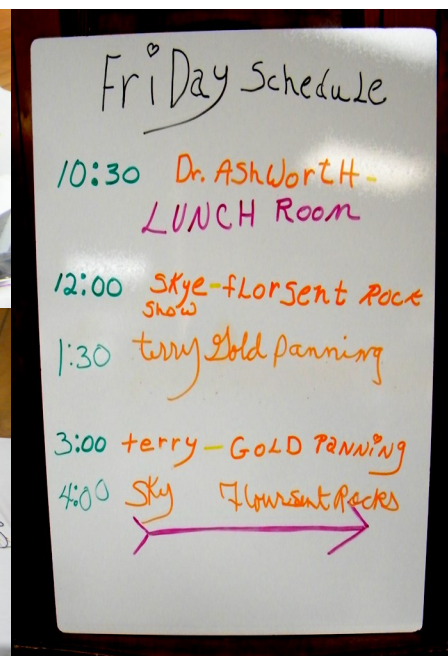
When using a ultraviolet light in a dark room to observe certain minerals, photons are emitted which causes the electrons in the mineral to temporarily become excited and jump to a higher orbital. When they return to their lower energy level, they emit another photon making the mineral glow with certain colors. The color depends upon the mineral. As soon as the ultraviolet light is shut off, the atom's electrons no longer become excited and the mineral looks as it always has during normal light.

When a phosphorescent mineral is exposed to the ultraviolet light, it absorbs the energy and re-emits it over a longer period of time.

There are quite a few minerals or materials that can be used with ultraviolet light such as calcite, fluorite, benitoite, dolomite, chalcedony, rhyolite, ruby, kunzite, opal and even diamond.

The chemistry of the above material is used in the medical field, industry, paper money, some stamps, fishing lures, plastic toys, crime investigation, highlighter pens, pipe cleaners, fashion and so much more.

## Miscellaneous Candid Shots





The general idea behind gold panning is very simple. Since Gold is very heavy. The rest of the material that is in the pan is lighter.

If you fill a round shallow pan container that has riffles with gold bearing gravel and sand, proper agitation in water should cause the gold to sink to the bottom, while washing away the lighter stuff that rises to the top. Historically the gold pan was a metal, shallow smooth pan. Modern pans have built in riffles.

The goal in panning for gold is to slosh out the lighter sand without splashing the gold back into the creek.

## GOLD PANNING DEMONSTRATIONS

with Terry Hoerer



Terry used a 3 foot sluice box developed by Keene Engineering.

The sluice box is able to process a lot more gravel than just panning for gold by hand. The sluice has a narrow channel with several rows of riffles that are obstructions. These riffles prevent the gold from getting lost and in the washing process the gold is trapped under the riffles.

The water carries the unwanted gravel through the sluice box and it washes out with the water.

A person can capture a majority of the gold with a properly set up sluice at a slight angle of 9 to 11 degrees

## CREATING AN ULTRAVIOLET ROCK DISPLAY CASE

by Joseph Martinetti

This year I suggested to the club that we convert one of our display cases into a fluorescent rock display case. The Club agreed, so we proceeded to take a display case and get to work.

The first step was to remove the standard light and switches. After that, the display case was sanded, rubbed with Teak Oil, then varnished.



Attention was then turned to the type of long-wave and short-wave lighting. For the short-wave lighting, only fluorescent bulbs were

available. Not so for the long-wave as LED lights could be had, so, believing they would be brighter than fluorescent bulbs, those were purchased.

Understanding how to wire the lights so they would turn off in ten seconds, I contacted Bryan Turnbow at the



State Historical Society. Bryan gave me a list of electrical items he used to control the UV lights on the Heritage Center's UV Rock display. Another item that was purchased was an OP3 ultraviolet blocking

plexiglass panel for the display case, this way any stray UV light could not harm people looking into the display.

Once the components were purchased, the wiring was worked on, which took a good two plus weeks to complete.

The display case was completed in time for the Annual Rock Show. I believe that the UV Rock case turned out fantastic.





## Treasure hunting for fossil Metasequoia Pine Cones

By Darrel Spencer, editor

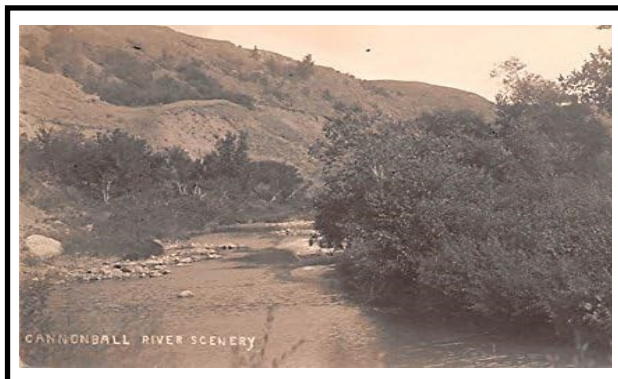
On September 15 of this year, 23 members of the CDG&MS, including 18 adults and 5 children departed from the Mandan Legion Park by 9:00 A.M. Only paid up members are allowed on this trip because of insurance liabilities.

This trip was like playing the lottery, but with much better odds in favor of each person looking for a pine cone. Club members had to in some cases look under rocks, have eyes like an eagle and above all have lots of patience.

The Cannonball River, which originally received its name for the round stones that were formed over time, is part of the Hell Creek Formation which is where these Cretaceous age pine cones are found. They have a dark orange brown coloration that blend well with the surrounding miscellaneous debris and the flowing water.

Even though some members may not have found a pine cone, there were various sized pieces of petrified wood to be found. Everybody has reported that it was an amazing trip.

These pine cones should be saved and passed on to your children as valuable artifacts and also as wonderful memories.



Here is an old photo post card, showing the Cannonball River. In the fall, the water level would normally be lower, making it easier to discover the Pine Cones or petrified wood. North Dakota Historical Society photograph.



To the left is a rare pine cone in matrix. To the right are pine cones as they were seen with other rocks on the ground. They can also be hard to spot.

These photos are courtesy of Russ Schneider

*Well, here we are at the end of another year. I would like to thank each and every member that has participated in the publication of this newsletter. The Central Dakota Gem & Mineral Society is a family. We value friendships, dedication, and your service. The editor*

*Have a Merry Christmas  
and a Happy New Year*