



Judy Gordy. Editor
Official Newsletter of the
Western Dakota Gem & Mineral
Society PO Box 3620,
Rapid City, SD, 57709-3620

Affiliated with RMFMS & AFMS

TO:

July 2016 Edition
Meeting: July 14th at 7PM.

<https://m.facebook.com/groups/120370894655393?view=permalink&id=1420322981326838>

It's agate hunting time again!

The purpose of our club is to promote interest and education in geology, mineralogy, paleontology, archeology and lapidary, to sponsor and promote means of coordination of the work efforts of groups and individual.



THE AMMONITE



Newsletter of the Western Dakota Gem & Mineral Society June 2016

WESTERN DAKOTA GEM AND MINERAL SOCIETY 2015-16 OFFICERS AND CHAIRMEN

- President: **Truman Goddard** -- 12009 Crook City Rd, Whitewood, SD 57793 605 269-2015
- Vice President: **John Dickinson** -- PO Box 775, Lead, SD 57784..... 605-580-5579
- Secretary: **Judy Gordy** -- 407 E Minnesota St Apt 209, Rapid City, SD 57701.....402-208-6079
- Treasurer: **Kelli Wold** -- 4511 Ridgewood, Rapid City, SD 57702 605-381-6418
- BHRMUC Rep: **Ellen Tilley** -- 21653 Piedmont Meadows Rd., Piedmont, SD 57769..... 605-787-4659
- RMFS SD Dir.: **Sony Hemsher** -- PO Box 376, Piedmont, SD 57769 605-431-2755
- RMFMS PLAC Rep: **Jan Baumeister** -- 3901 Hall St, Rapid City, SD 57702 605-342-5517
- ALAA SD Rep: **Jan Baumeister** -- 3901 Hall St, Rapid City, SD 57702 605-342-5517
- Field Trip Chairman: **Ellen Tilley** -- 21653 Piedmont Meadows Rd, Piedmont, SD 57769 605-787-4659
- Board Member: **David Ramberg** -- 1115 South 36th, Spearfish, SD 57793.....605-722-5101
- Board Member: **Ellen Tilley** -- 21653 Piedmont Meadows Rd, Piedmont, SD 57769 605-787-4659
- Board Member: **Sony Hemsher** -- P.O. Box 376, Piedmont, SD 57769 605-431-2755
- Newsletter Editor: **Judy Gordy** -- 407 E Minnesota St Apt 209, Rapid City, SD 57701 402-208-6079
- Facebook Administrator: **Tabitha Wood** -- 4063 Terry Dr, Rapid City, SD 57703.....402-706-0168
- Librarian: **Calvin Luke** -- 714 Halley Ave, Apt.2, Rapid City, SD 57701..... 605-430-1772
- Historian:
- Webmaster: **Barbara Goddard** -- 3280 Bumblebee Dr, Prescott Valley, AZ 86314..... 928-237-9261
- Calling Committee: **Jan Goheen** 605-431-6161 **Letha Wynia** 605-721-0550 **Patricia Dickinson** 605-580-5579

Club Information: Western Dakota Gem and Mineral Society, PO Box 3620, Rapid City, SD 57709-3620

CLUB WEBSITE is: www.WDGMS.org **OTHER CLUB SITES:** Facebook -Western Dakota Gem and Mineral Society/groups.

Meetings: Second Thursday of each month (except August) at 7:00 PM

At: Minneluzahan Senior Citizens Center, 315 N 4th St, Rapid City, SD 57701

ANY SUBMISSIONS FOR THE NEWSLETTER SHOULD BE IN BY THE 25TH OF EACH MONTH

If you change your home address, or your email address, or *have a problem receiving a bulletin, please contact the editor at 402-208-6079 or by email at ammonitenewsletter@gmail.com and it will get corrected.*

CLUB DUES: \$15.00 per person - \$20.00 per family with children under 18 yrs – Includes 11 newsletters by E-mail.

If you chose to receive the newsletter by mail, there is an additional \$10.00 cost to cover the mailing.

Dues cover the RMFMS insurance and the newsletter.

Send dues to the Treasurer: Kelli Wold, 4511 Ridgewood, Rapid City, SD 57702

MEETING: THURSDAY – July 14th - 7pm

Program by:

Refreshments by: Leslie Lysenko

Door Prizes by:

MESSAGE FROM PRESIDENT TRUMAN GODDARD

Hi everyone.

Well this is it. The last meeting before the Rock Show. I think we are pretty well.

MINUTES OF June 9, 2016 MEETING

The meeting was called to order by President Truman at 7:03 PM.

PROGRAM -- Truman Goddard brought his sphere making machine and demonstrated how to make a sphere. He showed how to lay out the rough rock. Marking where you think you will get the best properties of that particular rock. You then cut it into a square and then cut off the corners to start approximating the shape of the sphere. He then discussed the parts of the machine and the changes/improvements his dad had made to the machine. Truman briefly demonstrated the machine actually grinding on a rock. He also discussed the grits to grind with and polish the spheres. The length of time to grind a sphere and the quality of polish is directly dependent on the type of stone being used.

GUESTS – Sony Hemsher brought along a friend that had asked him about some pieces of rock he had gotten.

Ellen Tilley moved and John Piekkola seconded that the minutes should be accepted as printed in the Ammonite.

The Treasurer's report was accepted as read by Kelli Wold. She also reported that we have 104 members.

The picnic will be on Friday August 12th because Thursday was already taken. It will be at the shelter at Old Story Book Island.

Ellen Tilley did not have an ALA report.

It was reported that the Rock Show/Swap Meet in Scottsbluff, Nebraska had problems this year. Because of recent flooding they had to move it to the Wal-Mart packing lot.

The North West Nebraska Rock Swap and Fairburn Agate Collectors Gathering in Crawford, Nebraska is September 4-7, 2016.

The club expressed its thanks to Mimi Lancsak for arranging our field trip to Reptiles Gardens.

Truman Goddard brought up the subject of the t-shirts. He said it had been pointed out to him that there was never a motion or second on the requirement of wearing the t-shirts to the show. He had thought it would be a good idea to give the club members more exposure and possibly act as a deterrent for any unacceptable behavior. But at the present time, it is entirely up to the individual wearer whether the t-shirts are worn to the show.

The suggestion was made that a description and price be added to the back of each silent auction contract in addition to the individual bid sheets, in case the individual bid sheets get separated from the item. This has happened in the past and has made it difficult to get everything reconciled back to the appropriate people. Also Tom Wooten has a mobile microphone that we can probably use again for announcements at the silent action table. It has worked fairly well in the past to be able to advise auction closing in 5 minutes, then auction closed everybody please step back from the table, so no one is trying to bid after the time limit.

Annette Rathert announced that all vendor tables have been sold. We have 17 vendors and all the tables are paid for. She then discussed the problem of the increase in the sales tax, and that 15 of the vendors had signed their contracts and paid for their tables before the increase in the sales tax. And she did not feel it was appropriate to ask them for the additional tax money. So the club will need to cover that money which she figures will come to \$13.17. Mike Chamberlain moved and Deb Radomiski seconded a motion for the club to pay those additional charges. The motion passed.

It was announced that Tom Hardy has some strombolites for sale.

Truman Goddard again requested help with the requests coming in via our web page about rock collecting trips. Ellen Tilley said she would handle the one in September.

Truman Goddard reported that they had just recently taken a man and his daughter out. They found some shells.

It was announced that the 3rd Annual Fairburn Agate Festival is at the Fairburn, SD Community Center on July 30-31 from 7am to 6pm each day with a hog roast and ice cream social on Saturday night and a pancake feed on Sunday night following the shows.

It was announced that the Darton Geological Society is having a field trip on June 19th to the Indian Creek area. Meet at the School of Mines parking lot at 830am.

Mickey Snook discussed his activities with the schools and the kids. Mainly that with his health he needs help. Both with getting polished rocks or getting rocks polished, and with the presentations. At the presentations, each child gets a polished stone and then they get to look at and handle a collection of various types of rocks. Unfortunately unless he gets some help, he is going to have to cut back on the number of schools he can go to and will eventually have to stop altogether.

ADVERTISING FOR THE SHOW – Need to coordinate getting the flyers passed out. Especially someone to handle Rapid City. Ellen Tilley said she would handle Hot Springs, Hill City, Keystone and Custer. Deb Radomiski said she would get together with the School of Mines and the Museum. The School of Mines is coming to the Show and have 2 tables reserved.

Judy Gordy is working with Rebecca Wood to get the newsletter printed so it can be mailed to the people who don't have email addresses.

Rebecca Wood asked if we wanted to do business cards for the show again this year. Deb Radomiski moved and Mimi Lancsak seconded a motion to purchase business cards with our show date. The motion passed. During the discussion. It came up that we use to have business cards with the club's meeting information. Deb Radomiski then amended her motion to purchase 500 show business cards and 1000 club business cards. The amended motion passed.

Truman Goddard brought up the new meeting place that had been discussed at the May meeting. Truman and Paula had went and toured the building. He said it wasn't a bad place, about half the size of the room we use now, with a full kitchen attached. It is in the basement, which is about 10 steps down. But they are putting in a stairclimber, which should be operational by September. Truman suggested that we hold our September meeting there, then everyone could form their own opinion and we could determine if we wanted to change locations. It was pointed out that the September meeting was the presentation of the scholarships, so its was decided that the October meeting would be at the Agape Center or On Common Ground, 610 St Francis – 1 block south of St Patrick St. And then we could take a vote on whether to stay at the Minneluzahan Center or change to the new location, since they are both the same price.

Remember, at the September meeting we will be presenting the scholarships from the Rocky Mountain Federation to the School of Mines recipients and Dr Sawyer.

The meeting was adjourned at 8:16pm.

26 members in attendance.

Judy Gordy. Secretary

ANNOUNCEMENTS

WE NEED DOOR PRIZES FOR THE JULY MEETING.

WE NEED A PROGRAM FOR THE JULY MEETING.

WE NEED VOLUNTEERS FOR THE INFORMATION TABLE AND TAKING TICKETS ESPECIALLY SUNDAY. Contact Judy Gordy or Jan Goheen.

WE NEED VOLUNTEERS FOR THE SILENT AUCTION. Contact Tabitha Wood.

AUGUST POT LUCK PICNIC ON FRIDAY AUGUST 12TH AT THE OLD STORY BOOK ISLAND SHELTER.

FUTURE SSSHOW

July 23-24 – Rapid City, SD – 36th Annual Gem & Mineral SHOW; Western Dakota Gem & Mineral Society; Rushmore Plaza Civic Center; Sat. 9-6 Sun. 10-4; OUR SHOW – COME TAKE PART

SEPTEMBER 7-18 -- DENVER, COLORADO – Denver Gem & Mineral Showcase; 10 gem, mineral, fossil and jewelry show locations; 850 vendors -- BEAD RENAISSANCE SHOW DENVER – Denver Mart/Plaza – September 15-18 – COLORADO INDEPENDENT WAREHOUSE SHOW – The Rock Warehouse – September 7-18 – COLORADO MINERAL & FOSSIL SHOW – Ramada Plaza Hotel – September 11-18 – DENVER COLISEUM MINERAL, FOSSIL & GEM SHOW – Denver Coliseum – September 10-18 – DENVER EXPO GEM SHOW – National Western Complex/ Expo Hall – September 9-16 – DENVER FINE MINERAL SHOW – Marriott Denver West – September 14-17 – DENVER GEM & MINERAL SHOW – Denver Mart/Expo Hall – September 16-18 – INTERNATIONAL GEM & JEWELRY SHOW DENVER – Denver Mart/Pavillion Building – September 15-18 -- JG&M EXPO DENVER – Quality Inn Central – September 14-28 -- MINER'S CO-OP MINERAL SHOW – Denver COLISEUM (parking lot) -- September 10-18

OCTOBER 7-9 -- MOAB, UTAH – Annual show; MOAB Points and Pebbles Club, Old Spanish Trail Arena; 3641 S Highway 191; Fri. 10-6, Sat. 10-6, Sun. 10-4; Free Admission; Rock, gem, mineral and lapidary arts vendors. Equipment, supplies displays, demos. Spin wheel, Door Prizes. Food concession on premise.; contact Jerry Hansen, PO Box 1459, Moab, Ut 84532; email: moabrockclub@live.com

OCTOBER 21-23 – WEST JORDAN, UTAH – Annual show; Rockhounds Outreach for Community Knowledge (R.O.C.K.), Viridian Library and Event Center; 8030 South 1825 West; Fri. 10-7, Sat. 10-7, Sun. 10-5; Admission \$2, Children under 12 free; There will be fossils, minerals, gems and jewelry on display and for sale. Hands on activities for everyone. Come build your own rock collection. Door Prizes and a Silent Auction will be going on daily.; contact Angela McMahon, (801)-634-5167; email: utahninj@aol.com; Web site: <http://www.rockhoundssock.com/>

November 4-5 -- HURRICANE, UTAH – Annual show; 3rd Annual Southern Utah Rock and Gem Show, Washington County Regional Park; 5500 West 700 South; Fri. 10-7, Sat. 10-7; Free Admission; Come and enjoy this event and see what our vendors have for you. Rocks, fossils, minerals, opals, Septarian nodules, petrified wood, jewelry, slabs, equipment, demonstrations, black light room, cabs, and so much more. Something for everyone from kids on up. Silent Auction to raise money for the Children of Hope Academy.; contact Eric Funk, Ut, (435)-609-0136; email: eric_funk@yahoo.co

JACK REDDEN

Jack Redden spent fifty years mapping and interpreting the complex geology of the Black Hills. He published more than 50 papers that helped to create a better understanding of the mineral makeup of the Black Hills. He was one of the preeminent geologist of his day and taught hundreds of students at the South Dakota School Of Mines and Technology. He also helped to start the Darton Geological Society in the 1970's.

For these accomplishments, he is one of ten inductees in the South Dakota Hall of Fame Class of 2016. These ten were chosen from a pool of sixty applications by the Board of Directors of the Hall of Fame. This years inductees demonstrate a commitment to excellence and a credit to our state, per Hall of Fame CEO Greta Chapman. They will be enshrined during Honors Ceremonies in Chamberlain, South Dakota on September 9-10, 2016. The Ceremonies are open to the public and tickets are currently on sale.

From the article “LOCAL SOUTH DAKOTANS ENTER STATE HALL OF FAME” in the June 14, 2016 Rapid City Journal.

JACK HORNER

After 34 years at the Museum Of the Rockies in Bozeman, Montana, Jack Horner is retiring; not from being a paleontologist but from the Museum in Bozeman. He is famous for discovering the world’s first dinosaur embryos and that dinosaurs had nests and cared for their young.

As one of the best known dinosaur researchers in the world, Horner is also the person Michael Crichton based his Alan Grant character on in his 1990 book “Jurassic Park”. And Steven Spielberg used him as a technical advisor for all of the “Jurassic Park” movies.

Horner's problems with dyslexia caused him to flunk out of college several times and he still only reads at a third grade level. This caused him problems raising research money in the beginning because grant applications wanted advanced degree holders. One of his solutions was to seek \$10,000 from the Ranier Brewing Company, because that was the beer he and his crew drank. When Princeton, his employer at the time, found out, they threw a fit and gave him the money instead; but Ranier Brewing helped out with 100 cases of beer for the summer.

The summer of 1979 resulted in one of his most important discoveries – dinosaur nests on what was to become known as egg mountain in Montana. The site was less than a mile away from where he had discovered the fossils of young dinosaurs the summer before. “That one square mile out there is the richest dinosaur site in the world” he said.

With these finds, his career was set and funding was no longer a problem. Tired of seeing valuable specimens leave Montana. The head of the Museum of the Rockies hired Horner as their paleontologist. He has built that museum from 8 dinosaur specimens to 35,000 in the 34 years he has worked there.

Horner has led as many as nine crews in a single digging season from Montana to Mongolia. He has built one of the largest tyrannosaurus rex and triceratops collections in the world.

The Museum of the Rockies is overflowing with dinosaur fossils. They have an expansion planned that will bring there vast collections under one roof. But it doesn’t leave room for him to bring in anything new to work on.

So he is venturing elsewhere. He has plans to teach a class on imagination and creative thinking at Chapman University in California. He plans to continue his chickenosaurus or dino-chicken project and set up a laboratory in California. This project is to revive dormant dinosaur dna in chickens to give them some dinosaur traits, like long tails. He has five books in the works, including an autobiography. He's working with Microsoft in developing an app. Also the University of Washington is planning to open its new Burke Museum and he's agreed to be a part-time research associate to help fill the museum with dinosaurs.

From “'Jurassic Park' Paleontologist Retiring From Musuem He Built” June 1, 2016 Rapid City Journal

FAIRBURN AGATES

STATE GEM OF SOUTH DAKOTA

WHAT IS A GEMSTONE: A mineral or rock, that has been cut and polished, is pretty and hard enough to be worn as jewelry. Only 70 of the 3800 known minerals are considered gemstones and only 20 of those 70 are commonly found. All gemstones have one common quality, that they are beautiful. But beauty is in the eye of the beholder and varies from person to person and culture to culture. Beauty in a mineral may mean color, luster, transparency, or brilliance resulting from skillfull cutting and polishing.

Silica is a mineral that in some forms is considered a gemstone. All varieties of silica have essentially the same chemical composition and crystal structure. The differences depend on the method of formation, the grain size, and the impurities in the mineral which causes the varying colors and color patterns. Silica is a relative hard material. It is generally transparent to translucent. It has a glass-like appearance with a shiny luster, and a conchoidal fracture pattern (when broken the surface has the shape of a half clamshell). Silica is divided into two groups: coarsely crystalline varieties (often called quartz) and fine- grained cryptocrystalline varieties (which are grouped under the name chalcedony). Rose quartz is the type of silica that forms under igneous conditions while chalcedony forms under sedimentary conditions, sometimes lining geodes.

Agate consist of alternating layers of fibrous chalcedony in circular to semicircular layers, patterns, or bands , like rings of a target. These layers are composed of different thicknesses and colors. The layers are usually concentric and parallel to the walls of the rock cavity in which they were deposited. This is how fairburn agates are formed.

Fairburn agates are noted for their strikingly contrasted thin bands of natural colors. The color patterns are generally yellowish-brown with narrow opaque white bands or dark red with white bands. But may also show salmon-pink, black, yellow, grayish-blue, or milk pink bands.

Article written by Sarah Chadima, South Dakota Geological Survey, USD Vermilion 1995

AGATE DEFINITION

Is a translucent variety of microcrystalline quartz. It is used as a semiprecious stone when it is of desirable quality and color. Agate generally forms by the deposition of silica from groundwater in the cavities of igneous rocks.

WHERE ARE AGATES FOUND?

Hot pink, blue, or green colors in agates are always dyed. Agate deposits exist in Brazil, Argentina, Uruguay, Mexico, Poland, Botswana, India, Australia, and in the United States (Oregon, Arizona, Montana, Wyoming, South Dakota, and Michigan). The banding habit of agate can distinguish it from most gemstones.

From Agate in Wikipedia

Most agates occur as nodules in volcanic rocks or ancient lavas. The cavities are then filled wholly or partially with siliceous matter in regular layers. Agates have also been known to fill veins or cracks in volcanic or altered rocks. These agates when cut transversely exhibit a succession of parallel lines giving it a banded appearance. These stones are known as banded agate, ribband agate, or striped agate.

In the formation of ordinary agate, water containing silica in solution may percolate through the rock depositing layers of siliceous coatings on the interiors of the vesicles. Variations in the character of the solutions of the deposition may cause the variations in the successive layers. As an example, you may get bands of chalcedony alternating with layers of crystalline quartz. Several of these vapor-vesicles may combine together while the rocks are still viscous to form an agate of exceptional size as in the Brazilian Geode lined with amethyst and weighing 35 tons that was displayed at the Dusseldorf Exhibition of 1902.

ROSE QUARTZ

STATE MINERAL OF SOUTH DAKOTA

Rose quartz is one of the many forms of quartz used a gem material. Its pink color ranges from very light (almost white) to medium dark. Most rose quartz is found in massive forms so you don't find regular flat crystal faces. Its typically found in pegmatites, but can also be found in hydrothermal veins.

When rose quartz contains numerous small inclusions it can show a cat's eye or the common star effect.

Rose quartz is a macrocrystalline variety of the mineral quartz. Quartz is the most abundant single material on earth and makes up about 12% of the earth's crust. It occurs in a wide variety of igneous, metamorphic, and sedimentary rocks.

Rose quartz is found in Madagascar, India, Germany, and several localities in the United States. Much of the supply of rose quartz was extracted from a site near Custer, South Dakota, but now most of the world's supply of good carvable rose quartz comes from Brazil.

MINERAL: Quartz.

CHEMICAL COMPOSITION: SiO₂. (Silicon Dioxide)

COLOR: Very light pink to medium-dark pink.

REFRACTIVE INDEX: 1.544 to 1.553

SPECIFIC GRAVITY: 2.66 (+0.03/-0.02)

MOHS HARDNESS: 7

From: GIA 2002 – 2016. Gemological Institute of America

From: Rose Quartz Facts and Information. At MINERALMINERS.COM.

?

3

The Ammonite.

June 2016.

Page 7

