



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:

June 2016 Edition
Meeting: June 9th at 7PM.

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 ammoniteneewsletter@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 – June 9th - 7pm

Program by: Making Spheres by: Truman Goddard

Refreshments by: Judy Gordy & Rebecca Wood

Door Prizes by:

MESSAGE FROM PRESIDENT TRUMAN GODDARD

Hi everyone.

Well it is about time for the June meeting. We will be having a Board Meeting at 6:00 PM prior to our regular meeting. Hope all board members can attend. Need to see what will need finished or started so we have everything prepared for the show. As I haven't done this before I might not be asking all the right questions, so some help in that direction might be appreciated.

We are back to having one two table spot open to rent to someone who might want to sell something. The Prospector Club will not be with us this year. Annette says one two table spot or two one table spots. If you know of someone contact Annette at 605-348-8948.

Will be bringing my sphere machine to the meeting to demonstrate how to grind a sphere. I have one other thing to bring up at the meeting about the t-shirts. Will not get into that here. Will do that at the meeting.

See you all!
Truman.

MINUTES OF May 12, 2016 MEETING

The meeting was called to order by President Truman Goddard at 7:02 PM.

Our program this evening was on wire wrapping, presented by Kim Smith of Lead, SD. She showed what tools she uses, what they are used for, and that she covers the pliers with silicone, so they don't mar the wire. She explained about the crimpies that she uses to hold the wires together. Kim had a nifty machine that enlarged her work and projected it onto a screen so that everyone could see what she was doing.

Our guests this evening were Kim Smith and her driver.

Truman Goddard explained that the newsletters that are mailed to members are not being mailed, because he can't get his computer to talk to his printer. Truman asked if anyone would be willing to take over printing and mailing the newsletter, but no one volunteered.

Ellen Tilley moved and David Ramberg seconded the motion to accept the minutes as printed in the Ammonite. The motion passed.

Kelli Wold read the Treasurer's report, which was accepted as read.

There was nothing to report about the ALA.

Sony Hemsher reported on his trip to the Rocky Mountain Federation Convention. He said it was a good time with good people.

Jan.Baumeister showed all the awards she received.

Tabitha Wood reported on the T-shirts. The shirts will be yellow and are priced at S-XL \$10.05, XXL \$14.50, XXXL \$16.60. Pocket tees are available, but the price hasn't been pinned down yet. Tabitha is taking orders for t-shirts.

Annette Rathert reported on the ad in South Dakota magazine. The ad costs \$395.00, but the magazine has a very wide distribution through out South Dakota. Sony Hemsher moved to place the ad. The motion passed.

Annette Rather reminded the club that she has resigned as Historian and that the club needs a new Historian.

A letter from Kyle Hazelwood, one of the \$4000 scholarship winners, was read. He is from West Virginia, and has a BS in Geology from James Madison University. He is working on his graduate degree at the School of Mines and hopes to have his PHD in Geology in Resource Exploration by the Spring of 2017. With out the scholarship, he would not have been able to continue his studies.

The flyers, that Kelli Wold designed for Truman Goddard and Sony Hamsher to take to the Rocky Mountain Federation Show was discussed. David Ramberg moved and Sony Hemsher seconded a motion to use this flyer as our Show flyer. The motion passed.

There was a discussion about a new place to meet. The Agape Center at 601 St Francis St. It would be the same price as we are paying now with possibly less conflicts. Truman Goddard will visit the facilities and report next month.

David Ramberg reminded everyone, who wants a showcase for the show, that he needs the signed contracts, as he will not be at the June meeting.

Sony Hemsher reported that Professor Sawyer was the speaker at the Rocky Mountain Federation Dinner. The federation has 6,000 to 9,000 members.

Sony Hemsher said that he would like to see a presentation on how to make rock spheres. There was agreement from the rest of the members. Truman said he would bring his sphere machine and demonstrate making spheres at the June meeting.

Truman Goddard announced that Lori Green had resigned as Secretary due to scheduling conflicts. He said that by the Bylaws, he could appoint someone to fill the vacancy. He then asked if anyone wanted to fill the Secretary position. Since no one volunteered he appointed Judy Gordy as Secretary.

Judy Gordy reported that she had made contact with KOTA TV's Noon News. She scheduled July 19th, which is the Tuesday before the show. Jen Blake emphasized that we needed something that would get peoples attention, because the show is generally back ground noise while people are eating lunch or doing other things. Judy suggested taking Kendra Ruppert on the show, bringing attention to the fact that kids would enjoy rock collecting and our Show. No one volunteered to go on the show, so it was decided that Judy Gordy and Kendra Ruppert would represent the club.

Truman Goddard brought up field trips. He has been contacted through the website for someone to guide people to collecting locations – 2 the end of May, 2 in June, and 1 in September. Truman asked for help in taking these people out to collect specimens. It was pointed out that if you have a Forest Service map, any area without a 'pick and shovel' is an open territory and can be collected.

It was announced that Kim had left some of her designs, and that they are for sale.

The meeting was adjourned at 758 pm.

21 members and 2 guests in attendance.

Submitted by Secretary Judy Gordy.

Announcements

We need DOOR PRIZES for the June meeting.

We need VOLUNTEERS to help cover the information table, the admission table for the Show. Contact Judy Gordy or Jan Goheen.

We need VOLUNTEERS to help with the silent auction. Contact Tabitha Wood.

BEREAVEMENT

Our deepest sympathies go out to Jan Baumeister in the loss of her husband and to Sony Hemsher in the loss of his brother.

FUTURE SSSHOW

JUNE 3-4 -- PRICE, UTAH – Annual show; Patrick Braun, Carbon County Event Center; 310 South Fairgrounds Road; Daily 10-7; Free Admission; 10th Annual Castle County Rock, Fossil and Mineral Show. Please join us for this free family event. Fossils, minerals, gemstones, beads, jewelry, pressured oar pepeted o extract to extract the venwood, lapidary equipment, demonstrations and much, much more.; contact Patrick Braun, (435)-381-5192; email: Braunlapidary@hotmail.com

JUNE 11-12 -- BUTTE, MONTANA – Annual show; Butter Mineral and Gem, Butte Civic Center Annex; 1340 Harrison Avenue; Sat. 10-5, Sun 10-5; Admission \$3, Children under 12 free; There will be fossils, minerals, gems, jecan,welry, etc, 20 + exhibits, a silent auction, and a children's games area.; contact Pete Knudsen, PO Box 4492, Butte, Mt 59702, (406)-496-4395

JUNE 11-19 -- SANDY, UTAH – Wholesale and retail show; Gem Faire Inc, South Towne Expo Center; 9575 S State St; Fri. 10-6, Sat. 10-6, Sun. 10-5; \$7 Admission, Children under 11 free; Fine jewelry, precious & semi-precious gemstones, millions of beads, crystals, gold & silver, minerals & much more at manufacturer's prices. Exhibitors from around the world will be on site. Jewelry repair & cleaning while you shop. Free hourly door prizes.; contact Yooy Nelson, 503-252-8300, email: info@gemfaire.com; Web site: <http://www.gemfaire.com>

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

MOUNT ST HELENS

KOIN NEWS Portland, Oregon reported on May 6, 2016 that Mount St Helens was swarming earthquakes again. Then on May 21, 2016 they reported that Mt Hood, just east of Portland, Oregon was also swarming earthquakes. And in the middle between these two reports was the 36th anniversary of the eruption of Mount St Helens. The news reported that per the CVO - Cascade Volcano Observatory- (The USGS are still closely monitoring Mount St Helens after 36 years.) these are two different types of swarms. St Helens is slowly refilling its magma chambers while Mt Hood is experiencing tectonic shifts,

It doesn't seem like 36 years has passed since St Helens erupted. Like any other historic event, you remember exactly where you were and what you were doing when it happened. Tabitha Wood and I were living in Portland, Oregon when it happened. I actually slept through the beginning of the eruption. Tabitha was at her Grandparents house. She went out into their yard, saw the ash plume, went back inside and got her Grandparents, so they could watch the eruption. Mount St Helens is 50 miles northeast of Portland, in Skamania County Washington. At the time, the mountain was clearly visible from both my house and my parents house. (Not anymore, the neighbors trees have grown too much.)

Mount St Helens is the only active volcano in the lower 48 states. It is referred to as a stratovolcano or composite volcano, meaning it is a steep-sided often symmetrical cone consisting of alternating layers of lava flows and ash and other volcanic debris. They tend to erupt explosively and pose considerable danger to nearby life and property.

In contrast, the gently sloping shield volcanos, as in Hawaii, typically erupt nonexplosively and produce liquid lava that can flow great distances from the active vents destroying property but rarely cause death or injury.

Before the 1980 eruption, Mount St Helens was known as the "Fujiyama of America" because of its graceful symmetry. It was also referred to as an ice cream cone shape.

It all began on March 20, 1980 with a magnitude 4.2 earthquake at 3:47 pm. There had been several smaller earthquakes, starting as early as March 16th. Earthquake activity increased to a high of 174 per day on March 25th and 26th. Then on March 27th at about 12:36 pm, the first significant eruption of molten ash. That explosive eruption opened a new 250 ft crater at the summit and an ash plume 6000 ft above the summit. There were several more ash plumes which disrupted air traffic. Only one of the ash plumes came into Portland. The Forest Service evacuated a 1.5 mile radius area that they called the red zone. Harry S. Truman, an 84 year old gentleman, who owned the Spirit Lake Lodge, refused to leave. He said his life had been there, his wife was buried there, and he was staying. By March 30th, there were tourists swarming the area, going into the red zone against police warnings. Some hiking the mountain, some chartering planes to fly over. On March 30th, there were 70 illegal fly overs in 1 day. On April 4th, the Governor called in the National Guard to help control the sightseers. Anybody entering the red zone was told it was at their own risk and there would be no rescue attempts made. By May 17th things had settled down some, so people were being allowed back into the red zone to get their personal belongings, as long as they signed a waiver that they would not sue if the mountain exploded. The news stations were giving frequent reports on any activity on the mountain. Landowners soon picked up on the fact that they could tell what the mountain was doing by watching their animals. When there was earthquake activity, the inside animals, like chickens, went outside and the outside animals, like cows, would go inside. On May 18th, people were lined up at the edge of the red zone for the 10 am opening to go in to get their property. But at 8:32 am the mountain blew. This was not an ash plume, but the north side of the mountain, where a bulge had developed. The noise of the explosion could be heard in British Columbia, Montana, Idaho, Northern California, but the sound did not reach Portland, Oregon. This was more due to differences in temperature and air motion, than due to topography. It began with a magnitude 5.1 earthquake that dropped the north face bulge into the world's largest landslide, dropping the mountain's elevation by 1,313 ft. or 14% of its elevation. The blast was 500 times more powerful than the Hiroshima explosion. It killed everything in a 230 square mile area, 11 million animals, 4 billion feet of timber was laid flat (old growth timber some of which were 100 to 150 feet tall), 540 million tons of ash, and 57 people died. I-5, the main interstate highway between Portland, Oregon and Seattle, Washington, the Union Pacific Railroad, and the Burlington Northern Railroad were blocked because the mud and debris flows in the Toutle River took out the bridges. Union Pacific Railroad between Hinkle (Hermiston, Oregon Area) and the Canadian border was shut down because the ash reduced the visibility to zero. I saw a photo of the traffic signal in the middle of Yakima, Washington, 100 miles northeast of the mountain, at 10 am that was totally a grainy black square with a faint red glow in the center. That's what visibility was down to because of the ash. Spokane, Washington, 250 miles northeast of St Helens was covered in ash. People had to wear masks (like dust

masks) to be able to breathe safely. The ash was bad enough that the City Council gave residents 10 days to clean their property without penalty.

There were only 2 people on the mountain in the red zone. That was Harry Truman (who refused to leave) and the USGS Volcanologist David Johnston, who was monitoring the mountain. Johnston was last heard from at 8:32 am saying “Vancouver Vancouver, this is it.” What they didn’t figure into the estimates was the pyroclastic flow, super-heated sulfuric gases that travel at extreme speeds (starting at 220 mph and accelerating to 670 mph. That is what caused all the timber damage, the mud flows, and glacial melting. The remainder of the people that died were outside the red zone and their deaths were due to the pyroclastic flows, the mud flows and debris avalanche. The lahars that flowed down the Toutle River valley were up to 600 feet deep. Upon reaching the Columbia River, the lahars dumped 65 million cubic yards of sediment reducing the Columbia Rivers depth by 25 feet for a 4 mile span. The shipping channel on the Columbia River was shut down and had to be redredged. Spirit Lake, which did not have a bottom that could be recorded by sonar, was covered by 295 feet of new debris and a new Spirit Lake was formed. Bottom line, this eruption killed 57 People, destroyed 200 houses, 47 bridges, 15 miles of railroads, and 185 miles of highways, and cost more that 1 billion dollars.

If you go to Mount St HELENS today there are 3 observatories, an interesting 50 mile drive, and a closer look at the crater. There is an observatory, just off the I-5 interstate. When we were there in 2007, it showed how animals and plants had survived the eruption among other interesting facts. Outside, there is a nice view of the mountain. From this observatory there is about a 50 mile drive up to the Johnstone Ridge Observatory, which is 4.5 miles straight across from the crater. This is now a National Volcanic Monument, working on becoming a National Park, so there are usage fees. When we were there in 2007, there were admission fees for the observatories but not for the hiking trails. When we were there in 2014, there are more usage fees. I didn’t walk from the parking lot to the observatory but Rebecca Woodm and Kendra Ruppert did. There are great views of the crater, Spirit Lake and the starting point for multiple hiking trails. Due to the nature and fragility of the landscape there are fines for getting off the trails and there are some strict rules for use of the trails concerning time of day and what to take with you on the hikes. This landscape, even after 34 years, is still very much of a moonscape as opposed to the lush heavy Douglas fir forest it use to be. Its still very much a black landscape with very little vegetation. In the middle of the 50 mile trip, Weyerhaeuser has built the Mount St Helens Forestry Learning Center. The majority of the forested land around the mountain belonged to Weyerhaeuser before the eruption. There is no admission charge for this observatory. It references the history of the forest industry in the area plus the eruption of the mountain. It is also an observation point for the elk herd that roams the Toutle River valley below the observatory. Weyerhaeuser has also reforested a lot of the area and they have the areas marked on the highway so you can see how long it takes for the trees to develop. They left a lot of the trees where they fell from the pyroclastic blast, so you also get a feel for the devastation. Even in 2014, you can see signs of the mud/debris flows when you look into the Toutle River valley.

The USGS has studied the eruption since it started and still keep close tract of the mountain. The study of volcanos and volcanic eruptions has been greatly advanced by being able to study this volcano.

I would say that it is worth taking this 50 mile side trip, if you are in the area. You go from sea level to about 4500 feet, from heavy Douglas fir forest to total devastation. The plants and animals returned far sooner than they thought they would. But when you get to Johnstone Ridge you can still see how much difference the eruption made.

If you go on the south side of the mountain, you can see lava flows and Ape Cave. We took this road in 2014, but only drove through it because we were looking for the north side and got confused with the help of the GPS navigation. Here again it is a starting point for hiking.

Submitted by. Judy Gordy

Further info can be found at: www.history.com (A&E Television Networks – History channel)

4 Page off from USGS “ Pre 1980 Eruptive History of Mount St Helens, Washington

My St Helens.com Information Resource Center – 3 page “History – My St Helens”

<http://interactive.koin.com/photomojo/gallery/12318/1/> -- “Mount St Helens Then and Now”

Sciencemag.org – “ Deep Magma Chambers Seen Beneath Mount St Helens” 11-5 2015

Googling Mount St Helens gives you a nice selection of information on both the eruption and tourist type info.

Googling Mount St Helens on You Tube gives you a nice selection of videos on the actual eruption and ones made for later anniversaries of the eruption. One in particular video (Dave Crockett Escaping From the 1980 St Helens Eruption) was played multiple times during the eruption. On a premonition he took a movie camera up to the mountain and got caught by the eruption, didn't know if he was going to make it out alive so he started recording as a record of what happened to him. Its rather spooky listening to him cause you can hear in his voice the problems he was having.

FOSSILIZATION

Fossils are formed when many layers of sediment form over an animal or plant. If conditions are right, as the animal or plant decomposes minerals replace the animal or plant's body turning it to rock. It may be rock but is still very fragile and needs to be handled carefully.

Submitted by Kendra Ruppert. (Age 10)

