

MONTHLY PUBLICATION OF THE CENTRAL DAKOTA GEM & MINERAL SOCIETY
P.O. Box 2445, Bismarck, ND 58502
SERVING BISMARCK, MANDAN, AND SURROUNDING AREAS IN
NORTH DAKOTA

Gen Buresh, Editor DIGGIN'S FROM DAKOTA 44 Captain Marsh Drive Mandan, ND 58554





Published by the CENTRAL DAKOTA GEM & MINERAL SOCIETY P.O. Box 2445, Bismarck, ND 58502 Member.

Rocky Mountain Federation of Mineralogical Societies and

American Federation of Mineralogical Societies



OBJECT: 1. To further the study of mineralogy and geology;

2. To arrange field trips to collect minerals, gems, and fossils;

3. To assist its members to improve in the art of cutting, polishing, and mounting gem material;

4. To provide opportunities for the exchange, purchase, and exhibition of specimens and materials; and

5. To share knowledge about gems, minerals, and activities of the Society with the general public. --Article II, CDGMS Constitution

MEETINGS: First Sunday of each month in the Hospitality Room, Capital Electric Building on Highway 83, north of Bismarck; 7:30 p.m. from April through October and 2:30 p.m., November - March. VISITORS ARE ALWAYS WELCOME.

ANNUAL DUES: Family - \$8.00; Individual Adult - \$6.00; Individual Junior - \$3.00 OFFICERS AND COMMITTEE CHAIRMEN. 1981:

President Vice Presid Secretary	ent Will	iam A. Buresh	310 - 12th Ave. NW 44 Capt. Marsh Dr. 600 - 13th St. NW	Mandan Mandan Mandan	663-1056 663-5397 663-8621
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Treasurer			336 Shady Lane	Bismarck	255-4947
	Program Chr.	Earle Campbell	. 1134 N. 28th St.	Bismarck	255-3658
	Hospitality				
	(Lunch) Chr.	Leota Jensen	1400 - 5th Ave. NW	Mandan	663-8217
Clip)	Field Trip Chr.	Merle Lanz	600 - 13th St. NW	Mandan	663-8621
stamp)	Annual Show Chr.	Don Campbell	1119 Memorial, #17	Bismarck	258-1194
on)	OTHER APPOINTMENTS, 1981:				
reverse)	OTHER ATTOLKHAMIS, 1901.				
side)	Bulletin Editor	Gen Buresh	44 Capt. Marsh Dr.	Mandan	663-5397
-	Early Class	Harold Brady	1401 Sunny Road	Mandan	663-3904
	Federation Rep.	Bill Buresh	44 Capt. Marsh Dr.	Mandan	663-5397
	Greeter	Mel Anderson	1521 LaForest Ave.	Bismarck	223-3558
	Librarian-Hist.		1700 N. 4th St.	Bismarck	258-8417
	Parliamentarian	Al Hartl	1111 North 1st St.	Bismarck	258-0761
	Publicity	Leota Jensen	1400 - 5th Ave. NW	Mandan	663-8217
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All members are encouraged to submit articles/news for publication during the year. Advertisements from members will also be accepted for the bulletin. Material for the bulletin should reach the editor by the 10th of each month. Permission is given to reprint any article if proper credit is given.



North Dakota's Annual

Mandan Community Center

Vol. 16, No. 4

April, 1981

NEXT MEETING: May 3, 1981, 7:30 p.m. (Discussion Class, 6:30 p.m.)

PROGRAM: "Geology of Coal in Morth Dakota," by Dr. Gordon Bell

LUNCH COMMITTEE: Nettie Nelson, Henry Solberg, and Edna Mausehund

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IN MEMORIAM

Stanley R. Fairaizl, 69, 1406 Pioneer Trail, Mandan, died March 24, 1981, at the Mandan Hospital. Stanley was the owner of F&F Sales and Service in Mandan, which he operated with his son Robert.

Born December 10, 1911 in Mandan, he was raised in rural Mandan, where he attended elementary school and Mandan High School.

Stanley married May Heaton on October 12, 1940 at Glendive, Mont. He was a registered locksmith and a member of the National Locksmith Association.

A charter member and past president of Central Dakota Gem & Mineral Society, as well as secretary for ten years, Stanley will be remembered for his many years of devoted service as an officer of the Society. He participated in every Society show as either an exhibitor or dealer or both.

Survivors include his wife; one son, Robert; two grandchildren; his mother, Mary Fairaizl; and two sisters, Mrs. Mary Kroeger and Mrs. Roy Isaksen, all of Mandan.

The sincere sympathy of the members of Central Dakota Gem & Mineral Society is extended to the family.

CALENDAR OF EVENTS (*=Federation Show)

May 3 Bismarck, ND--7:30 p.m., Regular Meeting, Central Dakota Gem & Mineral Society, Capital Electric Bidg., Highway 83 North of Bismarck

May 10 Field Trip, Cannonball River site. Neet at 10:30 a.m. CDT at the Mandan Golf Course near the Heart River Bridge in south Mandan, Highway #6.

May 30-June 2 -- Field Trip, sapphire rine, Holena, MT (See March"Diggin's")

(Meeting site and campground location will be listed next month)

May 16-17 Hot Springs, SD--South Dakota State Gem & Mineral Show

*June 4-7 Salt Lake City, UT--"Gem-Borse of the Rockies" Show, American Federation and Rocky Mountain Federation of Mineralogical Societies

*June 26-28 Lexington, KY-- "Elue Grass State Canboree" Show, Eastern Federation of Mineralogical and Lapidary Societies

July 2-5 Winnipeg, Manitoba, Canada-12th International Gem and Mineral Show, Winnipeg Rock and Mineral Club

*July 23-26 South Bend, IN--Show, Midwest Federation of Mineralogical and Geological Societies

Aug. 8-9 Mitchell, SD--Gem and Mineral Show, Holiday Inn, Corn Palace Rock Club

Aug. 15-16 Rapid City, SD-Annual Show, Civic Center, Western Dakota Gem & Mineral Society

*Aug. 21-23 Midway, Wash .-- "Nature's Rainbow of Jewels" Show, Northwest Federation

Sept. 18-20 Williston, ND--Annual Show, Williston Rock and Mineral Club

Sept. 19-20 Aberdeen, SD-Annual Show, Lakota Glacier Rock Club

SEPT. 25-26 MANDAN, ND--NORTH DAKOTA'S SEVENTH ANNUAL SHOW, Handan Community Center, sponsored by CENTRAL DAKOTA GEM & MINERAL SOCIETY. Show Chairman: Don Campbell, 1119 Memorial Highway, Bismarck, ND 58501

AT THE LAST MEETING--April 5, 1981 BY Gen Buresh, Reporter

Thirty-nine adults and five juniors were reported present at the April meeting by Mel Anderson, greeter.
Three guests were also present--Fred Skillman of Stevensville, Mont., a guest of Larry Strand; and Gerald Zenker and Joe Snyder, both of Bismarck, guests of Fred Springer.

In the absence of Don Campbell, chairman of the show policy committee, Fres. Mary Beth Osborn asked Bill Buresh to present the "Policy Statement Governing the Annual Show" for a vote. The policy statement was considered by section, as printed in the March "Diggin's." All 14 sections were approved as presented, by vote.

A portable amplifying system obtained for try-out from Les Colen, local representative for Northern School Supply, was used for the meeting and was very helpful in presenting the policy statement so that all could hear. The members voted to purchase this type of amplifier, and to get a stand for the microphone. Bill Buresh, who had arranged for the trial use of the amplifier, was asked to complete the arrangenebts with Mr. Colen. Members voted to have the club treasurer pay for the amplifier, with the treasury to be reimbursed from the Certificate of Deposit funds when the C.D. is cashed on its due date in May. Disposition of the remaining funds from the C.D. will be discussed at the May meeting, as voted on in January.

Bob Randall, show treasurer, announced that the show committee still has for

FOR SALE

Pins, 1", with club logo - \$1.00
For vests, jackets, or trading
See Bob Randall - Show Treasurer
Thome: 223-1625

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sale some of the small pins with the same logo as the club patch. They are used for decorating jackets or for trading.

At the suggestion of Bill Buresh, a period of silent meditation was observed in honor of Stanley Fairaizl, a charter member and past president and secretary, who passed away on March 24.

Bill Buresh, show exhibit chairman for 1981, discussed the poster advertising the South Dakota State Show in Hot Springs, SD on May 16-17, 1981. He urged members to take advantage of this and other nearby shows and to participate by taking along exhibits for display. We hope this will encourage members of the sponsoring clubs to reciprocate by bringing exhibits to our show. He also mentioned that Hot Springs is located in the heart of South Dakota's mineral and fossil area and that field trips are scheduled for surrounding areas following the show.

"While you're visiting, be a recruiter for our show in September," he suggested.

The door prize, a Montana agate necklace donated by Evert Nelson, was won by Henry Solberg.

Emma Brady, Verna Giese, and Viola Anderson served on the lunch committee.

The program consisted of a discussion on "Antiquity Laws," by Louis N. Hefermehl, Director of Archeological and Historic Preservation at the State Historical Society of North Dakota. Nr. Hefermehl gave a most interesting review of two federal laws and one state law--the Antiquity Act of 1906; the Archeological Resources Protection Act of 1979 (for which federal regulations are still being written); and the North Dakota Law on Exploration for Archeological and Paleontological Resources (N.D.C.C. 5503).

The Antiquity Act of 1906 deals mainly with artifacts, fossils, or objects 100 years old that are found in any archeological site or any site listed in the National Register of Historic Places. This includes remains of vertebrate fossils.

The definition for artifacts includes, but is not limited to, a long list of items that humans made or used, such as any form of painting or art work, clothing, cloth,

AT THE LAST MEETING, cont.

tools, ceramic objects, pottery, vehicles, structures or their remains.

The Archeological Resources Protection Act of 1979 prohibits the damaging or defacing of archeological sites and protects "any materials of human remains" such as pottery, baskets, weapons, rock painting, pictures, or intaglios found on Federal lands.

The North Dakota law on Explorations for Archeological and Faleontological Resources requires that in Morth Dakota any archeological or paleontological finds should be left untouched and the location(s) reported to the State Wistorical Society. All finds on land owned by the state or a state agency belong to the state, including those on lands conveyed (sold) by the state. such material appar-The title to ently is retained by the state upon the sale of state property. person should obtain a permit or annual license from the Supt. of the State Historical Society to do any collecting at an archeological or a paleontological site in North Dakota.

Thile not all people agree with these laws, they are based on the premise that items found on government lands belong to all of the people not to any one individual.

It appears that the rule of courtesy applies in all cases—get permission from the land over before hunting artifacts, antiquities, or fossils, whether the owner is the federal government, the state, or a private individual.

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PARLIAMENTARY POINTERS, by Al Hartl

As pointed out last month, the parliamentarian has only the authority of competence. The presiding officer actually makes the decision. If anyone feels aggrieved he or she says, "I appeal from the decision of the chair." If the appeal is seconded, the chairman immediately states the question as follows: "Shall the decision of the chair stand as the judgement of the assembly?" The vote is then taken. In case of a tie, the chair is sustained.

There is no debate in situations such as this and the chairperson <u>must</u> make a decision.

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ND STATE FOSSIL DESCRIBED

The February 1981 issue of the Lapidary Journal includes an article on "State Stones, Fifteen Years of Progress." The author, June Culp Zeitner, states that members of the Central Dakota Gem and Mineral Society were instrumental in getting the North Dakota legislature to pass a bill in 1967, which established teredo wood as the state fossil.

She refers to it as an unusual choice, in that teredo wood actually represents the three kingdoms of the earth: animal (the teredo which bored was an animal); vegetable (the wood); and mineral (agate) which the material now is.

The author describes the stone of each state that has designated an official stone. It is very interesting reading. A chart listing the official state gems, minerals, rocks, and fossils follows the second part of the article in the March issue.

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WELCOME - to our new member, Gerald Zenker, Bismarck, a guest at our last meeting. Flease add his name and these renewals to your membership list:

51. Dallman, A.S./Ruby Fighway 200 West Zap, ND 58580 748-2237 52. Springer, Alice Fort Yates, ND 58538 854-7956 53. Springer, Fred/Sharon 1119 S. 9th St. 1307 Bismarck, ND 58501 225-4232

54. Zenker, Gerald 1113 S. 9th St., 919 Bismarck, ND 58501

EYHIBITS--1981 SHOW

"How are those displays coming along? For a good Show we need your help and your display. The dealers expect it, for the good reason that if we expect them to pay for their use of the Arena, the least we can do is put on a good Show for them that will attract the public. Even if you haven't expanded your collection this last year, get the mothballs out of the case and put in your display so that we can all see it again. Application forms for display space will be available soon, so let's work on the principle of at least one display per member!

"You well know the show costs a lot of money and hard work to pull it off, so if you are not displaying, then you are not contributing to your Club as an active member, and should ask yourself—why be a member at all?"

Yow that you have read the above item, I will tell you that it appeared in the Harch issue of "The Rock Vein," the monthly bulletin of The Winnipeg Rock and Mineral Club, but it applies just as well to our situation.

It gives one an idea how other clubs feel about exhibits at shows and the plea may be more persuasive than if I had written it solet's "get with it."

Exhibit Chairman, 1981 William A. Buresh

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SAPPHIRES

Since a field trip to the sapphire beds in lontana is scheduled for the first weekend in June, it seems appropriate to include something in this issue about sapphires.

A reprint from "The Template" in a recent issue of "The Bock Vein," Winnipeg Bock and Mineral Club, includes this background information:

"The sapphire is a member of the mineral group Corundum, and as such is a sister stone to the ruby. At one time, not very many years ago, before the devastating political upheavals in southeast Asia and the resulting instability, Burma and the border area between Thailand and Cambodia produced the majority of the world's supply of fine sapphires. To-day the world's largest supplier is Australia: Some gem dealers believe that Australia's green sapphires are the most beautiful on the market to-day. There are also some very pretty yellow stones with a green tint found there. Australian blues tend to be dark, and if not properly oriented when faceted, can be rather inky in appearance.

"Sri lanka (Ceylon) is a source for some excellent fancy sapphires - yellows, greens, violets, browns and pinks. Some blues are also found, but they are rather pale. Here also is found the rare and beautiful Padparadschah (Sinhalese for "lotus flower"), a lovely orange-pink fancy sapphire so rare that it has been given its own name."

The sapphires in Fontana are found in the gravels of terraces and sand bars of the Missouri River, its tributaries, and in other rivers, streams, and gulches in the area of Helena and Phillipsburg. These sapphires are found by digging up gravel and carefully screening it for the gems. They come in a variety of colors, including pink, lavender, yellow, blue, and green. A fee is required for collecting in some of these areas while others are free.

The Yogo Gulch area is famous for its cornflower blue sapphires, which are among North America's most glamorous gems. This area is currently professionally mined and is not open to the public.



LET'S LEARN ABOUT MINERAL SIZES

Minerals are often described by size. Over a period of time various words have come to mean very specific things. To clear up some confusion regarding the nomenclature, the following is offered:

Museum Specimen Refers to a very large specimen weighing perhaps several hundred pounds. It does not always indicate quality nor do most museums house many minerals this size.

refers to those 5 x 10 inches. This is about as large as is suitable for a private collection.

Cabinet Specimen Generally refers to specimens of sufficient size to display well in a glass cabinet. Up to hand size (another often-used term) or 4 x 5 inches. Small cabinet specimens would be about 2 x 3 inches.

Miniatures According to AFMS rules, minerals which will fit into a two inch cube.

Thumbnails Again according to AFMS rules, minerals which will fit into a one inch cube.

Micromounts Single crystals or groups of crystals requiring magnification to identify and evaluate. Must fit into a 1 x 1½ x 1 inch box. -- From The Geode via The Rock Vein, Oct. 1980

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CANNOMBALL FIELD TRIP -- May 10

Merle lanz, field trip chairman, reports that a field trip is scheduled for Sunday, May 10. All participating rockhounds will meet at 10:30 a.m. at the picnic area near the Heart River bridge in south Mandan. From there the group will car pool and travel in a caravan.

Take along water, lunch, and a tote bag or bucket. The collectables, judging from past experiences, should include a variety of "goodies," such as petrified pine cones, agatized wood, teredo wood, artifacts, etc.

ABIQUIU AGATE HUNT SITE

(This item is for the "snow birds" that go south for the winter. It was written by Linda Mowak for the "Agate Agitator," Amarillo, Texas, and passed on in the December, 1980 AFMS Newsletter.)

One of my favorite places in the whole wide world is the Santa Fe area of New Mexico. Not only is this area rich in historical color, but it is truly a rock-hound's paradise. Abiquiu, meaning timber's end, is the name of a town, a dam and a type of agate found about one hour's drive north of Santa Fe on Highway 84. The drive will take you through farms forests, apple orchards, pueblo communities, rolling hills, plains, and plateaus, as you witness the ever-changing beauty of this terrain.

You follow U.S. 84 north through Espanola, Hernandez and through the town of Abiquiu to the Abiquiu Dam and Lake turnoff. There will be a National Forest sign on the right; take the turnoff to the left, U.S. Hwy. 96, which will lead you to the dam, about 2 miles further on. Continue on over the dam for about 2 more miles and here you can start looking for agete. A little further on there is a dirt road to the left which encompasses a small hill. This red, sandy terrain and the areas on both sides of the highway are good locations for Abiquiu Agate. You may also continue on down U.S. Hwy 96 west until you are about 2 miles east of Youngsville, where you can hunt on either side of the highway and cover the area on into town. Be sure to ASK PERMISSION if you enter "Private" land.

The area you first hunt in will reward you with dark-skinned agate, with milky or translucent interiors. Further west, white agates will appear and these pieces will slab and polish better. Either dark or white has interesting red, yellow and black streaks rippling through clear interiors. Be selective; some of this agate is pitted so use your chipping hammer to check for the beautiful translucent centers. Happy Hunting:

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THIS-N-THAT

CLARA MUCCLI was hospitalized in Bismarck at meeting time in April.+++

DON CAMPBELL is back at work after a brief bout with a flu bug at the time of the last meeting. We understand he's back at his early morning sessions of working on lost wax designing.+++

IDA MAE RAMBERC is scheduled for corrective eyelid surgery later this month.

EMMA and PIUS FISCHER recently demonstrated lapidary skills to over 100 pupils at the elementary school in Wilton. Several parents also attended the session. FISCHERS also demonstrated how jewelry is made for a Boy Scout troup under the leadership of Robert Matzke.

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TO POLISH SOAPSTONE

Cut the shape desired with a hand saw. Carve to shape with a knife. Sand with 200 to 400 grit sandpaper. Smooth with 000 steel wool. Heat in strong sunlight or warm oven until warm to the touch. Bub with clear paste wax while talc is still warm.—from PEGNATITE via THE KORN KRIB NEWS

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TIPS ON RHODOWITE, by Bernie Crammer

Colour--pink to light red, often veined with brown or black. Finegrained material is very tough--coarsegrained is very weak--solook for closegrained (fine) material. Do your first grinding on 100-grit, finish on 220grit. Then go to 220 sharp paper, wet. Use plenty of water. Get all grinding marks out, then go to to 220 well-worn or finer, still using plenty of water. Work until all scratches are gone. Wash stone and hands. To polish, I use deer hide backed by rubber, and tin oxide with a little Linde A. DO MOT POLISH ON HARD FELT. You do not need much pressure or speed for the --from polishing operation. THE CONTACT ZONE via THE BOCK VEIN, Winnipeg, Nov. 1980

SAWING A ROCK WITH ONE POLISHED FACE

I was asked to saw slices off the back of a beautiful jasper rock that had a polished face without injuring the polished surface. Clamping was not possible because of rounded contours. Cementing the polished surface to a block of wood that could be held in the saw vise seemed the best way, but what kind of cement could be used that would withstand the saw oil, would hold the rock very securely, and yet would permit the rock to be removed from the wood easily from the polished surface?

Trials showed that waterglass would not hold the rock securely, and other cements were too difficult to remove from the polished surface. The method finally used was this: a thick layer of 220 epoxy was spread on the wood surface and a thin layer on the polished surface. Then the two surfaces were brought into firm contact and allowed to set undisturbed for 24 hours. A thick layer is necessary on the wood to get good contact with the wood and the rock.

After sawing off the required slices, the block of wood with the adhering polished surface was washed in detergent to remove the excess cil, and then placed in an oven, in a covered pan, and allowed to heat slowly to slightly over 250°. I allowed two hours for this. By this time the rock had reached 250° throughout and separated from the wood, leaving the polished surface clean and unharmed.

--by Howard M. Knight via OZARK EARTH SCIENCE NEWS and THE ROCK VEIN, Winnipeg, Oct. 1980.

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People are like rocks; some take a polish, some don't.

Smile--and let everyone wonder what you have been up to. +++

HAPPY EASTER TO ALL ---