



MONTHLY PUBLICATION OF THE CENTRAL DAKOTA GEM & MINERAL SOCIETY

BISMARCK-MANDAN AND SURROUNDING AREAS

NORTH DAKOTA

DIGGIN'S FROM DAKOTA  
William A. Buresh, Editor  
1527 N. 19th St.  
Bismarck, ND 58501



Published by the CENTRAL DAKOTA GEM & MINERAL SOCIETY

Member

Rocky Mountain Federation of Mineralogical Societies  
and  
American Federation of Mineralogical Societies



**AIMS:**

1. To encourage the study of mineralogy and geology.
2. To foster field trips for collection of minerals, gems and fossils.
3. To improve the skills of its members in the arts of cutting, polishing and gem mounting.
4. To provide opportunity to exchange, purchase and exhibit specimens and other material.

**MEETINGS:**

First Sunday of each month in the hospitality room of the Capital Electric Building on Highway 83, north of Bismarck; 7:30 P.M. from April through October and 2:30 P.M. the rest of the year. VISTORS ARE ALWAYS WELCOME.

**DUES:**

Dues are \$5.00 per family per year.

**OFFICERS AND COMMITTEE CHAIRPERSONS:**

President	Stanley Fairaizl	205 6th Ave. N.W.	Mandan	663-9712
Vice President	Harold Brady	1401 Sunny Road	Mandan	663-3904
Secretary	Don Larson	2400 N. 7th St.	Bismarck	223-8850
Treasurer	Robert N. Randall	928 N. 16th St.	Bismarck	223-1625
Past President	William A. Buresh	1527 N. 19th St.	Bismarck	223-0611
Parliamentarian	Genevieve L. Buresh	1527 N. 19th St.	Bismarck	223-0611
Publicity	Blossomae Campbell	1134 N. 28th St.	Bismarck	255-3658
Program	Ernest Knudson	2020 Catherine Dr.	Bismarck	255-4796
Librarian	Ted Glese		New Salem	843-7005
Field Trip	Gordon Bell and Larry Strand	515 N. 22nd St. 913 N. 19th St.	Bismarck	223-5146 258-5128
Annual Show	Earle Campbell	1134 N. 28th St.	Bismarck	255-3658
Pebble Pup Leader	Pat Brady	1401 Sunny Road	Mandan	663-3904
Historian	Emma Fischer	501 S. 13th St.	Bismarck	223-4362
Doorman & Greeter	Al White	604 10th Ave. S.W.	Mandan	663-8727
Membership Chairman & Subscription Agent	John Dosch	1425 N. 15th St.	Bismarck	255-1924
Federation Rep.	Ida Mae Hamberg	1325 N. 15th St.	Bismarck	223-6296
Refreshments	Sally O'Neill	906 1st Ave. N.W.	Mandan	663-3748

Subscription rates for non-members are \$3.00 per year.

All members are encouraged to submit articles, etc., for publication during the year. All material for the bulletin should be received by the editor by the 10th of each month. Advertizing in the bulletin by members will also be accepted.

Other editors may reprint articles from this bulletin. A credit line would be appreciated.



North Dakota's Annual  
**GEM AND MINERAL SHOW**  
Mandan Community Center  
Oct. 1 & 2, 1977

PRESIDENT'S MESSAGE

FELLOW CLUB MEMBERS: Another month and another well attended meeting is in the past.

Time has come when we must all join hands and get going on the approaching show. Show Chairman Earle Campbell has been very busy and has a real show coming up. Let's all remember that Earle, alone, cannot make it a success. All of us have to help all we can. I urge everyone to get started on the displays and exhibits. If anyone has any suggestion which will help make this a better show, I urge you to bring it to the July 10 meeting. If you need help, bring it up also on that day. Days and weeks are slipping by faster than we realize and before we are aware of it, Oct. 1 & 2 will be upon us. Let me say again, let's all get behind Earle and show him that we did not elect him to put on the show but rather to guide us in our efforts toward that end. Let's put all our efforts into his project. Ask Earle, "What can I do?", and then let's do it.

In closing I would like to say to Bill and Gen, have a nice trip, we will be waiting for a complete report.

Stanley

\* \* \* \* \*

EDITOR'S COMMENTS

As all of you must know by now, Genevieve and I are getting ready to leave for Alaska on the 15th of this month, so if this bulletin is not up to its usual form you will know why.

We will be driving up on the Alcan Highway in our "almost" completely outfitted Van. Along the way we plan to visit some friends, and do a lot of birding, and some rock-hounding. Genevieve has a sister in Anchorage so we will, I am sure, be having a "grand tour" of that state. On the way back, we plan to take the ferry from Haines, Alaska, a three-day trip to Seattle. Then on to Ogden, Utah for the National Gem and Mineral Show. We hope to see some fellow club members there. In the meantime have fun putting out the next two issues of the "Diggin's".

Bill

\* \* \* \* \*

AT THE LAST MEETING - JUNE 5

Fifty-one people were reported present at the meeting including two guests. The guests were Mr. Francis Breed, Bowbells, N.D., a friend of Ken Ness and Mrs. Jacob Heer, Pandan, ND, a friend of Marjorie Krein.

Bob Randall, publicity chairman for the show, showed what was included in the publicity packets that are being mailed out to various areas throughout the U.S.

Show Chairman Earle Campbell had on hand posters for the coming show and urged everyone to take some and leave them in areas where rockhounds and other interested people might see them. Earle also mentioned that Exhibitor Invitation forms would be attached to each mailing of the June issue of the "Diggin's" and urged everyone to fill them out completely and return them to Earle as soon as possible. If you will have more than one exhibit indicate so on the form or better yet ask for another form.

con't next page

June Meeting (con't)

Field Trip Co-Chairman Larry Strand reported on the field trip to South Dakota, and he and others who made that trip had large displays of assorted minerals that they brought back with them. There was some swapping and a lot of discussion as to what the different minerals were.

The door prize, a large cab which was finished and donated by Ken Ness, was won by Nettie Nelson. Emil Hilken again loaned his hat for the drawing in hopes of getting the prize for the third consecutive time, however Nettie broke the spell by drawing here own name, on her first draw.

Serving lunch were Rosa Theis, Bonnie Hilken and Ken Ness.

\* \* \* \* \*

NEXT MEETING - JULY 10

Since the first Sunday of the month happens to be in the 4th of July weekend, the next regular meeting was postponed until the following Sunday, July the 10th. As always the time is 7:30 p.m. at the usual place. The Pebble Pups and the beginners' group will again meet for a one-hour pre-meeting session starting at 6:30 p.m.

The program scheduled for this meeting is "Show and Tell--Fluorescent Minerals" by Bob Randall and others.

Those who will be serving at this meeting are Marjorie Krein, Vina Anderson and

*Mary Oshorn*

\* \* \* \* \*

FIELD TRIP - June 19

Field Trip Co-Chairman Larry Strand has announced the scheduling of a field trip for Sunday, June 19, to the Cannonball River area, about 30 miles south of Mandan. On the Cannonball River sandbars one may anticipate to find agate, jasper, petrified wood, Teredo Wood and also possibly petrified pine cones.

All those who wish to participate will meet in the picnic area in southwest Mandan at 9:30 a.m. central daylight saving time. The picnic area may be found by taking Hgh. #6 south over the railroad viaduct and making a right turn just before the Heart River bridge.

\* \* \* \* \*

DATES TO REMEMBER

- June - 19 Cannonball River Field Trip
- July - 10 Next Regular Meeting
- July 14 - 17 Eight International Gem & Min. Show, Winnipeg, Manitoba, Canada
- Aug. 6 - 7 Corn Palace Rock Club Show, Mitchell, South Dakota
- Aug. 18 - 21 AFMS National Show, Ogden, Utah
- Sept. 10 - 11 Lakota Glacier Rock Club Show, Aberdeen, South Dakota
- Sept. 16 - 18 Williston Gem & Coin Show, Williston, North Dakota
- Oct. 1 - 2 NORTH DAKOTA'S ANNUAL GEM & MINERAL SHOW, MANDAN, NORTH DAKOTA
- Oct. 8 - 9 South Dakota State Gem and Mineral Show, "Western Grmboree", Winner, SD

FIELD TRIP TO THE BLACK HILLS--by Larry Strand

It was a nice Memorial Day weekend and everyone had rock fever. Betty and Connie Watts stopped at Bear Butte campground and visited awhile but were not able to go with us. Some of us met the Watts on the field trip last year and they have attended our shows. Betty is the Regional Director for the Dakotas for the Rocky Mountain Federation.

Saturday morning we left from Bear Butte headed for Vanocker Canyon. There were ten vehicles in the caravan and everyone was eager to enjoy the countryside and to do some collecting. It was in Vanocker Canyon that I realized what the advantages would be of having a C.B. radio. We were following directions from a magazine article, going over a rough road, and looking for the side road where we wanted to do our collecting. After we had gone back and forth on this road a couple of times, I think the others following us began to get suspicious. I got the clue when one person put a "Don't follow me, I'm lost," sticker on my bumper.

We did stop to ask for directions and one of whom we inquired, J.C. "Pappy" Hoel, took us to the side road we were trying to find. The road led to an old lumber camp. "Pappy" Hoel gave me his business card and it was rather interesting. It read, "Retired, no business, no worries, no job, no money, no prospects, no sales. Devoting full time to my enjoyment: hunting, camping, motorcycling, and snowmobiling." He was quite an interesting person.

While we were riding around with "Pappy" Hoel, the rest of the group found a cave in the side of Deadman Mountain. The cave contained some crystals which had been partially smoked up by people using pitch torches inside over the years. We collected some crystals from outside the cave and after a quick trip inside we went to the dry creek bed that we had been looking for in Vanocker Canyon. We did some collecting there, and then three of us who were tired of walking pulled up a "soft" rock and sat down. It was there that Mrs. Campbell showed us the futility of hard work, for as we were sitting there comparing our finds and visiting, she picked up a couple of specimens, one of which was a nice big piece of coral.

We left this area and headed for Galena, our next collecting site, which was only about three miles away. We were only about two miles from Galena at one point when the mud holes in the road scared us out and we used the old adage, "You can't get there from here," and called it a day.

Sunday morning we met at Lead, where Bill Collins, our trip leader, was waiting for us. We just missed him by about 15 minutes the previous day. We must also have passed each other in Vanocker Canyon. We went to Galena from Lead on Sunday. The drive was beautiful, and it wasn't too far, either. We all had good pickings there at the mine dumps. Following our morning adventure, we had sandwiches beside a mountain stream. All in all it was a pretty nice place.

That afternoon we went just a short distance out of Deadwood and looked for garnets. Ron and Rick Garret found some nice ones as did also the Randalls.

Our third stop was at Iron Creek in Spearfish Canyon. Here we also did very well, finding fossils and a few geodes. Duane Robey found a nice geode in this area.

I would like to say a special thanks to Bill Collins for his guidance. Bill had field trip maps made out for us and did an excellent job of leading us to the different sites. Thank you, Bill.



CLUB MEMBERS BURGLARIZED

The residence of Pius and Emma Fischer was unlawfully entered while Emma was working in her garden in their back yard this past week,

Some jewelry, the products of Pius and Emma's lapidary efforts, as well as a considerable amount of money was taken.

There are suspects but no apprehensions as yet.

\*\*\*\*\*  
 \* HILKEN'S ROCK SHOP \*  
 \* Lapidary supplies, Polishes \*  
 \* Rough and Finished rocks \*  
 \* Clocks and Bola Ties, Gifts \*  
 \*  
 \* Emil G. Hilken (701) 734-6411 \*  
 \* Box 216 Wilton, N.D. 58579 \*  
 \*\*\*\*\*

\*\*\*\*\*  
 \* FOR SALE \*  
 \* OPTICAL GRADE CERIUM OXIDE \*  
 \* (A large optical house reject) \*  
 \* Does beautiful job \*  
 \* \$3.00 per lb. in 5 lb lots \*  
 \* F & F SALES AND SERVICE \*  
 \*  
 \* Mandan, N.D. 663-9183 \*  
 \*\*\*\*\*

\*\*\*\*\*  
 \* MUGGLI'S ROCK SHOP \*  
 \*  
 \* Rough and Polished Rock \*  
 \*  
 \* Findings \*  
 \*  
 \* 70 to 600 grade grit - 75¢ per lb. \*  
 \*  
 \* Ewald and Clara Muggli 348-3897 \*  
 \* 701 Oak Ave. East, Glen Ullin, N.D. \*  
 \* 58631 \*  
 \*\*\*\*\*

A ROCKHOUND'S DREAM FOR THE TUMBLER--Dorothy Hendrickson

I found out by accident that a certain product will put a mirror finish on agate in three days without using any polish at all! This is how it went.

I had unplugged my tumbler to add the polish, and didn't do it right away. I had to go out shortly after, so thought I'd leave it till my return, but accidentally forgot all about it for a week. The muck was as thick as porridge - you can imagine what it looked like. I added a bit of water to thin the slurry, then let the tumbler run for an hour or so. I then took the agate out and washed it off well, but it still had a gray film. So I decided to wash it in soap or something to clean it. I had a cleaner at home, a Shaklee product called "Basic H". It's a concentrated household cleaner, biodegradable, and contains no phosphates. I put around  $\frac{1}{4}$  cup or less into my 12-lb tumbler and let it run for about two hours. I opened the tumbler to see how clean they were coming, and, lo and behold, there was a good semi-polish on the agates which ordinarily would have taken at least three days in an oxide polish! Not quite believing it, I decided to let them continue overnight, and checked them again the next day. There was almost a mirror finish on the agates! I left them in for another day, and the polish was so good that the lettering on a light bulb could be read in the reflection on them!

I have also used this "Basic H" for cleaning oil off slabs after cutting.

from The Rock Vein

## FIELD TRIP, cont.

The following is a list of the major specimens found during this weekend trip: dogtooth calcite crystals; agates; agatized wood; orthoclase crystals (one twinned); Mississippian period Brachiopods and coral; pyrite; arsenopyrite; galena; cumingtonite; almandine garnets; geodes with both calcite and quartz crystals; small crystal deposits of covellite; chalcopyrite; sphalerite, and silderite, usually on arsenopyrite.

Participants in the field trip included Bill Collins; Larry Strand; Duane Robey; Elsie and Jim Garrett, Rick and Ron; Edna and Verl Mausehund; Vi and Mel Anderson; Ruby and A. J. Dallman; Wilma and Ed Hilgeman; Bob and Sue Randall and Bobby; Becky Lind; Ernie Knudson, his wife, son, and daughter; Blossomae and Earle Campbell; Harold Eissinger, Kansas City.

\* \* \* \* \*

ROCKHUNTING THE EASY WAY--by Blossomae Campbell

Never do things the hard way when there is an easier way to do them. Take rock hunting, for instance. First, find an ideal spot--a dry creek bed in a canyon in an out-of-the-way place down in South Dakota is a good place to start. Make sure the bed of the creek is lined with lots and lots of rocks--big ones, little ones, gray ones, smooth ones, rough ones, rocks with holes in 'em, just lots of rocks, no two alike. If you can, choose ideal weather. No wind, the sun shining overhead with a few fleecy clouds floating by, but not too hot. Stately pines stand guard while the aspens quake. It all sounds so good I wish I were back there again! Of course one needs companionship, like Larry Strand and Edna Mausehund to chat with.

After going up and down the creek bed and filling your rock bag, find a comfortable rock to sit on while discussing the merits of your recent finds. All the while you are talking, keep looking. Just relax and enjoy yourself. But study the rocks within eyesight. That little green stone that Larry picked up turned out to be copper. I kept looking and pretty soon I spotted a red stone with white polka dots. A polka dotted rock? Why not? I lazily reached out and picked it up. It turned out to be a nice piece of coral. Bill Collins can give you the scientific name for it.

After relaxing and studying the rocks in one spot, casually move further along toward the place where you are to meet the other members of your party. Pick out another comfortable rock and relax. But keep your eyes open! You won't always find a good specimen but this way you might just find something worth picking up that the other rockhounds bypassed. Good hunting!

\* \* \* \* \*

PREHNITE

It is a stone of rich, oily green to yellow-green color, translucent to almost transparent, with a hardness of 6 to 6.5. It is found mainly in rounded masses and botryoidal sheets, forming into the shape of the cavities in which it occurs. Prehnite is found in a number of localities in the U.S. In the Lake Superior region it is associated with native copper and calcite, where it is often a rich green color. The finest gem quality prehnite is found in Patterson, New Jersey.

When it is cut and polished it resembles chrysoprase in lustre and color. It cuts and grinds easily. When polishing, use Linde A on tin or leather.

from Flint Chips via The Rock Vein

POLISHING JADE CABACHONS

The first and most important step in polishing jade is to do a thorough job of sanding. Every minute spent getting a smooth sanded finish will save several minutes of polishing time. Wet grind the cab to its rough shape on a 120 grit diamond or carborundum wheel. Remove scratch marks on a 220 grit sanding cloth; either wet with water or impregnated with beeswax and backed by a thin layer of sponge rubber. Or use a wet coarse Briteboy sanding wheel.

Use 360 or 400 grit to remove the fine scratches. Use the sanding cloth wet with water or dry with beeswax. Continue this step until all areas of the stone have a velvety appearance and no scratch marks are visible. (A wet fine Brite-boy wheel may be used as an alternative). Use a 600 grit sanding cloth, first wet then dry, for the final sanding step. Only after a velvety, half polished appearance is obtained should the actual polishing be attempted.

For jade that is difficult to polish, an additional pre-polishing stage may be added. It has been my observation that many polishing agents, when suspended in oil or grease, act as extremely fine cutting or sanding agents. Thus, if Linde A is mixed with an equal quantity of vaseline and this mixture is smeared on a muslin buff, this buff may then be used following the 600 grit sanding stage to produce a very smooth, semi-finished cab. Once this stage is reached, it is usually only a matter of a few minutes to get a final glossy and brilliant polish as described below.

The most rapid method, and the one producing the highest polish for me has been the use of Linde A on the stitched surface of a muslin buff, run at half full motor speed (800-1750 R.P.M's), using fairly firm pressure on the stone. For me, the most rapid polishing has been obtained by using a thick creamy mixture of Linde A and water with a teaspoonful of Lubritine (A surgical water soluble lubricant put out by the Abbot Company and obtainable at most drugstores) added to each ounce of polishing mixture. The Lubritine contains a gum which thickens the mixture and makes it adhere to the lap better thus preventing some of the loss (spinning off) of the compound.

Polishing seems to occur most rapidly at the time when the lap is beginning to get dry. When this occurs, there is a sudden increase in the pulling or dragging sensation as the cab is pressed against the lap. Do not let the lap become dry, or the cab may become streaked with caked Linda A or be burned. Keep slightly wet at all times.

Other laps may be used successfully. Leather - wither soft, chamois, elk or goatskin, or hard sole leather. Tin or saran is particularly useful on flat surfaces. Fellen may be used, but it seems to be slower acting than muslin. Felt produces an "Orange-peel" effect. -- By Edward D. Conner, Michigan Lapidary Society via PIK - N - ROK

\* \* \* \* \*

ARE YOU A ROCK LICKER?

Be careful what you lick or taste before you know what it contains. Arsenic, mercury, selenium, some of the boron minerals and some phosphates are very poisonous. Use a plastic soap bottle and spurtwater on your rocks.

POISON IVY-SHOULD YOU GET INFECTED

Mix 1/4 cup vinegar, 2 tablespoons Epsom Salts and 1 quart warm water. Use moist packs of this on the affected area.

from The Rock Vein





# CENTRAL DAKOTA Gem & Mineral Society



NORTH DAKOTA'S THIRD ANNUAL GEM AND MINERAL SHOW

Mandan Community Center - Mandan, North Dakota  
October 1 and 2, 1977

## EXHIBITOR INVITATION

You are invited to exhibit your rocks, minerals, fossils, gems or jewelry at the North Dakota Third Annual Gem and Mineral Show.

Space and electric power for lighting will be furnished all exhibitors without charge. The exhibitor will furnish his own display case and specimens. He will also provide his own 3-wire grounded extension cord and connectors.

Show hours will be from 10:00 a.m. to 10:00 p.m. on Saturday, October 1, and from noon to 5:30 p.m. on Sunday, October 2. Space will be available for set up of displays beginning at 12:00 noon on September 30. Displays may not be dismantled before 5:30 p.m. on October 2.

The Show Committee will provide security during the entire show, including installation and dismantling. Security will also be provided in the loading areas. The Show Committee will assume no liability for safety of exhibits or exhibitors from robbery, pilferage, damage by fire, accident or any other causes.

Please fill in the following and return to Earle Campbell, Show Chairman, 1134 North 28th St., Bismarck, North Dakota 58501, as soon as possible but not later than September 9, 1977.

I will need \_\_\_\_\_ feet of table space for my exhibit.  
I will need electric power. Yes \_\_\_\_\_. No \_\_\_\_\_.  
I plan to exhibit or demonstrate - (please describe -  
minerals, fossils, cabochons, jewelry, spheres, etc.)

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
Phone \_\_\_\_\_

Signature \_\_\_\_\_