

DIGGIN'S FROM DAKOTA



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

FIRST CLASS

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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	Mary Beth Osborn	310 - 12th Ave. NW	Mandan	663-1056
Vice President	William A. Buresh	44 Capt. Marsh Dr.	Mandan	663-5397
Secretary	Jane Lanz	600 - 13th St. NW	Mandan	663-8621
Treasurer	Ronald P. Wandler	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 stamp on reverse side)	Field Trip Chr. Merle Lanz	600 - 13th St. NW	Mandan	663-8621
	Annual Show Chr. Don Campbell	1119 Memorial, #17	Bismarck	258-1194
	OTHER APPOINTMENTS, 1981:			
	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. Glenn Michaels	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

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 GEM AND MINERAL SHOW Mandan Community Center

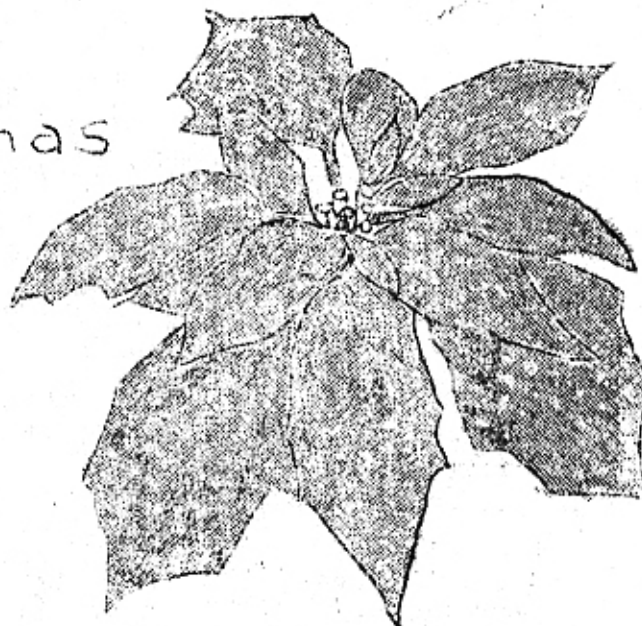
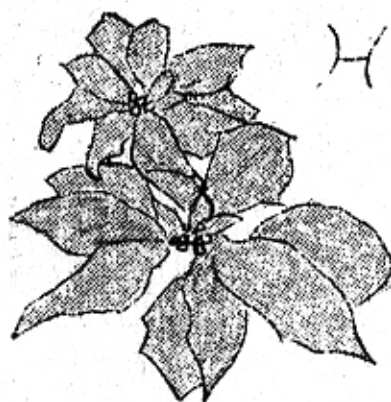
SEPT. 25 - 26, 1981

NEXT MEETING: January 3, 1982, 2:30 p.m.
(Early Class, 1:30)

PROGRAM: To Be Announced

LUNCH COMMITTEE: Rod Hickie, Ted Giese,
and Bill Buresh

Merry Christmas
and a
Happy
New
Year



CALENDAR OF EVENTS

1982

- | | |
|-------------|---|
| Jan. 3 | Bismarck, ND--2:30 p.m. Regular Meeting, Central Dakota Gem & Mineral Society, Capital Electric Bldg., Highway 83 North of Bismarck |
| Feb. 12-14 | Tucson, AZ--Tucson Gem & Mineral Society's 28th Annual Show |
| Feb. 18-20 | Scottsdale, AZ--17th Annual "Western World of Gems" Show |
| Mar. 27-28 | Lincoln, NE--Lincoln Gem & Mineral Club's 24th Annual Show |
| Apr. 24-25 | Sioux Falls, SD--Sioux Empire Gem & Mineral Society's 15th Annual Show |
| Apr. 24-25 | Fairmont, MN--Minnowa Rock & Gem Club Show |
| May 29-30 | Hot Springs, SD--Picture City Gem & Mineral Society's 20th Annual Show |
| June 24-27 | St. Paul, MN--Midwest Federation Show |
| July 8-10 | Houston, TX--South Central Federation and AFMS Show |
| Sept. 17-19 | Denver, CO--Rocky Mountain Federation Show |
| SEPT. 24-25 | MANDAN, ND--NORTH DAKOTA'S EIGHTH ANNUAL SHOW, "GEMS AND MINERALS ON PARADE," MANDAN COMMUNITY CENTER, sponsored by the Central Dakota Gem & Mineral Society. Show Chairman: Jane Lanz, 600 - 13th St. NW, Mandan, ND 58554 |

DUES ARE DUE

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ROD HICKLE ELECTED 1982 CLUB PRESIDENT

At the annual meeting on December 6, the following slate of officers presented by the Nominating Committee were elected to serve as officers for 1982:

President ----- Rod Hickle
 Vice President --- Bill Buresh
 Secretary ----- Ted Glese
 Treasurer ----- Ron Wandler

Members of the Nominating Committee were Betty Mautz, Rosa Thies, and Nettie Nelson.

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AT THE LAST MEETING, December 6

President Mary Beth Osborn called the meeting to order at 2:30 p.m. Minutes of the previous meeting were read by the secretary and approved as corrected.

Betty Mautz, Chairman of the Nominating Committee, was asked to read the names of the slate of officers presented by that committee. Election of officers followed. (The results of the election are listed in the article above.)

Jane Lanz, 1982 Show Chairman, read a list of suggestions for a show theme for 1982 and asked for any other suggestions from members, so that the club could select a theme. Chosen by majority vote, the show theme for 1982 will be, "Gems and Minerals on Parade."

Because of the unusually long and excellent list of theme suggestions this year, the Show Chairman was asked to keep on file the list of unused themes for possible future use.

Bob Randall mentioned/receiving a request for pictures of teredo wood and petrified wood or scenic pictures of the Cannonball River area for possible use in a book in preparation by June Zeitner on gem and mineral trails of the northern prairies. Any members with pictures available for this project should contact Bob Randall.

Greeter Mel Anderson reported that 20 adults and 4 juniors attended the early session, with 40 adults and 6 juniors at the regular meeting.

Al Hartl announced that the Senior Citizen Center in Bismarck will be opening a craft center soon for woodworking, leather work, and lapidary arts. He suggested that the club affirm their offer of assistance in the lapidary area.

Mel Anderson commended the officers for 1981 for their service to the club and suggested that members give them a round of applause. Members agreed.

The senior door prize, a gold sheen obsidian cab donated by Mel Anderson, was won by Carol Hickle.

A booklet titled, "Pebble Pets and Rock Hounds," was awarded to each of four juniors--Susie Mautz, Pat Osborn, Jeff Harvey, and John Campbell. The booklets were donated by Don Campbell.

The annual potluck supper followed the regular business meeting in lieu of a program. A wide variety of good and a generous quantity helped make this a festive and enjoyable occasion. (Heard during the feast: "What makes rock-hounds such good cooks?")

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NEW SHOW TREASURER APPOINTED

Jane Lanz, 1982 Show Chairman, has announced that the Show Committee has selected Glenn Michaels to serve as treasurer for the 1982 annual show. He will also take care of the publicity for the event. Glenn replaces Bob Randall, who resigned after the conclusion of the 1981 show. Bob served in that capacity for seven years.

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THIS-N-THAT

Melvin and Viola Anderson took a Senior Citizens' bus tour along the West Coast in November. They report having a very enjoyable time.

Duane Robey was reported being released from a local hospital shortly before the December meeting.

BIG IS BEAUTIFUL

One rock club does things in a big way and it is not in Texas, either. The Chugach Gem and Mineral Society of Anchorage, Alaska, has a membership of over 500. They schedule an international field trip every year. In October, 1981, they went rockhunting to Australia, Hawaii, New Zealand, and Fiji Islands. The 1982 trip will be to South Africa, and in 1983 they will travel to South America.

The transportation for even their local trips is not by auto only. They also use airplanes, boats, helicopters, horses, swamp buggies, four-wheel drive vehicles, and ATV's to reach local rockhunting sites.

The Chugach Gem & Mineral Society is sponsoring the 1984 Northwest Federation Show in Anchorage. That might be the year to plan a trip to Alaska and take in that federation show. 1984 is also the 25th anniversary of Alaska's statehood, and big things are being planned for that observance.

Chairman for the 1984 show is Jerry Baker, P.O. Box 4-2027, Anchorage, Alaska 99509.

(This information was condensed from the NW Federation Newsletter, Nov. 1981. WAB)

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NEW BOOK

In the October issue of the AFMS Newsletter, book reviewer Russell MacFall highly recommends John Sinkankas' Gemstone and Mineral Data Book, published by the Van Nostrand Reinhold Co. as a paperback at \$6.95. MacFall states the following about the book:

"For the lapidary concerned about hardness, fragility and the like of some new material he or she is working with, many of the answers appear in these 352 crowded pages. It gives weights and measures, data on chemicals and lapidary abrasives and polishing materials, hardness, specific gravity and other physical properties of gemstones, cleaning agents for

gems and minerals, and tables of uncommon names under which specimens may pass.

"An especially valuable section deals with imitation, faked and synthetic gemstone materials and how to detect them."

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A PIECE OF THE EARTH'S CORE

Cornell University scientists believe that specimens analyzed in their laboratory are pieces of the earth's core. If confirmed, the rocks would be the first pieces of the core ever sampled. The specimens are of Josephite, an iron-nickel alloy found along Josephine Creek in the Klamath Mountains of Oregon. Josephite is unique, having no resemblance in size, texture or composition to other terrestrial iron-nickel minerals. The density of the rock matches exactly that of the earth's outer core determined through seismic data.

The strongest evidence that the rocks are from the earth's core is the particular appearance of garnet in them. The garnet is aligned in strange makelike patterns outlining the crystal structure of metal in the rock. The scientists regard the configuration as proof that the garnets became exsolved from the iron-nickel alloy in the solid state. They believe this phenomena could only have occurred as a result of the relaxation of pressure as the material ascended from the inner earth. How the material reached its present location is explainable by the theory of plate slippage. The material rose to the surface by some kind of convection mechanism, as part of a plume of material from the deep mantle.

--from "Jarry Quips" via "Osage Hills Gems" 12-81

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VOLCANOES ARE HOT STUFF NOW AND ALWAYS WERE

BY Ruth B. Siefers, Golden Belt G&M

We now have first hand eye-witness account of volcanic activity. Though scientists have known much about this action for centuries, most of us haven't. That is why we are curious now.

We think of our planet, Earth, as being solid, but it is not. Beneath us is a seething, boiling, molten moving sea. Our continent and the other land bodies are sitting on plates which move. When they contact one another while moving, there is friction which causes heat in much the same way that we produce heat by rubbing two rocks together. Chemical reaction makes more heat. Any time we have heat plus fluid, we get pressure.

As this action is taking place, the pressure builds. When the material under pressure cannot be contained, the magma pushes its way into the rocks surrounding it. This action is called intrusion.

When the intrusive action does not furnish enough of an outlet, the continued pressure forces the materials along the line of least resistance. This brings up gases, dust, ashes, rock and lava to the ground level, giving us our visual volcano. This action is called extrusion. The lava, being very hot, melts some of the rocks and alters others. This is volcanization, two materials being fused by heat. When the levic path moves along and parallel in existing strata, sills are formed. If the path it takes is across the strata, dikes occur. Dikes provide a much wider variety of materials, since instead of following one stratum, it cuts across widely varied formations. As one mineral crystallizes, the magma changes, being robbed of some of its components. Other rocks are melted into the mass and still more different minerals are derived. Reheating of these dikes later adds to the list of possibilities of even more complex minerals. A change of temperature adds still more to the list.

Lava is not particular about what it transforms. It may take limestone and enhance it with jade. It may take one of its igneous rocks, olivine, change it to kimberlite, and later bring about diamonds.

Gems of the world are not the only crowning glories produced by the fierce action of a volcano. Earth's soils would not be very productive without the aid of the inner earth. Clouds traverse the heavens for years bearing loess (volcanic ash), which they deposit far from where the eruption took place.

Volcanoes happen under the oceans just as they do on the land. The Hawaiian Islands bear this out. They were formed by repeated volcanic action. Mainlands have mountain ranges which grew in the same way, layer by layer, century after century.

When we think of a volcano, it is usually the composite type that we visualize. This is made up of many strata, dikes and sills, and many tubes, both active and plugged. It has a prominent conical profile. A shield volcano is one which had some viscous lava and a less prominent profile. A fumarole has no profile at all since it emits only gases.

A related and very timely subject would be earthquakes. They, as well as volcanoes, have probably been around as long as our planet has. Since nobody seems to know just how to turn down the burner on our pressure-cooker world, both will probably be here ad infinitum.

--from "The Rockhound Scoop" via "The Hourglass News", Enid, OK, 11/12-81

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"Some people search for diamonds,
some people search for gold,
Some people only pick up rocks,
at least that's what we're told.

"The diamonds make you famous,
the gold you have to spend,
The rocks just bring you pleasure
and a host of happy friends."

--via "Rock Chippings," and "G.I. Nugget"

WALNUT SHELL JEWELRY

This jewelry is made of walnut shell and the inlay is turquoise or any agate. First, take walnut shell and clamp into vise. Cut off each side, leaving about a 3/8" center slice with cavities on both sides. Do this with a hacksaw.

Then sand to remove rough edges left by saw. Clean inside of shell and put tape on one side to keep inlay material from running through.

Crush turquoise, wash and dry. Place pieces in shell with tweezers and move them around. Make sure they are BELOW level of shell. Now you are ready to add blue inlay glue (I use "Hot Stuff"). Add one drop at a time all over surface until it is filled level with shell. It will settle a little more so after about five minutes look it over and add more drops if needed. Let set and dry about five hours. Then grind down like any other stone. Finish on 320 grit wet or dry paper, then 600 grit, and then finish on polishing wheel with cerium oxide or rapid polish.

You might find a few pin holes in the surface. If so, put a drop of glue on pin hole, let dry and refinish. Then turn it and finish other side same way. After you have finished both sides, drill small hole in top of shell, glue eyelet into hole, and put on chain, and you have a beautiful pendant.

If you want to personalize it, take a 1/8" bezel and bend an initial to glue in place before adding rock. It will stand above shell but will not make any difference when you finish it. It will all come down together when you finish it. This can also be made into a bola slide by attaching it to a bola clasp.

--"The Prospector" via "Osage Hills Gems," 12-81

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One nice thing about silence is that it can't be repeated. --"Pick and Chisel" via "Osage Hills Gems"

THE LIGHTS OF CHRISTMAS

Long ago in a far country the light of a star heralded the first Christmas. Light is one of the symbols of Christmas and of the glow it kindles within our hearts.

You can find the lights of Christmas in many places. Most of us see them shining in the eyes of children at Christmas time. They are lights of trust and joy, untouched by bitterness. They are lights of truth and purity that dispel prejudice and hate.

The more we meditate on the real meaning of Christmas, the more we mirror in our hearts the light of trust and truth that shines in the eyes of children. By making a real effort to keep this light in our hearts and lives, we can see the way more clearly toward all our worthwhile goals, including peace and good will. --from "Tulip City Conglomerate" via "The Geo-Logic" 12-81

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COLD DOPPING

Cold dopping is a must on many fragile stones. Opal is one in which damage from regular "hot dopping" may show up, not immediately, but at some future date.

Cold dopping is simple. First, squeeze a small amount of strong-hold cement on a slab of jade, agate or some slick (non-porous) stone, then on the same slab place a small amount of cornstarch in a small mound ... not in the strong-hold cement.

Gradually add the cornstarch to the cement until it is the texture of honey. It doesn't take much of either.

Now you are ready to place the stone on the dop stick. Let it stand to harden at least 24 hours before you work the stone.

To remove the stone, dip it in acetone.

Dop several stones at one time, using this method. No worries about fractures suddenly appearing at some future date. --"Pick and Shovel" via "The Rock Vein" 12-81

UNITED STATES AMBER FIND

The first major deposit of amber ever found in the United States, consisting of thousands of pieces more than 60 million years old, has been donated to the Museum of Comparative Zoology. The gift, a translucent fossil resin, was found in deposits of mixed clay, sand and lignite at the pits of the Acme Brick Company in Malvern, Arkansas, and contains specimens of plant and insect life.

This is the first time that insects have been found in Arkansas amber. By studying the pollen in the amber, geologists have arrived at an estimate of the age of the amber, and of the spiders, ants, and flies trapped within the amber. The color of the pieces varies from pale yellow to dark orange, and although scientifically valuable, not considered to be gem quality because of impurities and fractures.

The flora and fauna trapped within the amber are of enormous scientific interest. The insects are small. The small size suggests the possibility of an adverse environment, such as a cold one, although this is not supported by the plants in the amber, as represented by the pollen. --from "Kiskigem Journal" via "Lowcountry Diggings", Sept. '81

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FACTS ABOUT "BROWNITE"

by Bob Henry

Desirable and lustrous lapidary material. Manufactured by ASARCO (formerly Federated Metals, American Smelting & Refining Co.). Developed to replace Nickel Silver. 1550° F. Cast and polished like German Silver.

59% copper
20% zinc
20% manganese
1% aluminum

Corrosion resistant. Good ductility. Cheaper than Nickel Silver.

--from "The Stonelicker" via "The Rock Vein", 12-81

MAKE YOUR OWN CARVING ROCK

Want to try your hand at carving? Make your own "rock"! It's easy even for the kids, and what's more, it will look exactly as if you'd collected it. It will be almost white and have a granite-like texture.

INGREDIENTS: 1 part water, 1 part plaster of Paris, and 1½ parts vermiculite (found at a building supply store). Mix in a plastic bucket. CAUTION! DON'T pour any of the mixture down the sink. Pour mixture into a clean milk carton and let set for four to five days. To harden quicker, reverse the process by using more plaster of Paris. Clean bucket with paper towels.

Carving can be done with simple kitchen tools. Use your imagination and have fun! After drying for about a week, your sculpture can be painted or left in its natural state. --from "Sooner Rockologist" via "Mineralscoop" 12-81

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The excited voice of a co-ed came over the phone: "There are two boys trying to get into my room through the window."

"Sorry, Miss, this isn't the police department, this is the fire station."

"I know," she replied, "but you see my room is on the third floor, and they need a ladder." --"G.I. Nugget"

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SANTA'S DOWNFALL

By Evelyn Baun--Eureka News

Santa tip-toed quietly in,
Frost on his bewhiskered chin,
With beautiful rocks--all he could heave,
Planning them under the tree to leave.
But he stubbed his toe on the rocking
chair,
And lost his poise right then and there.
The crash that followed shook the house,
Awoke everybody, frightened a mouse.
He cried, as he up the chimney did bound,
"Please, Lord, not another ROCKHOUND!"

--from "The Mineralscoop", Dec. 1981