



MONTHLY PUBLICATION OF THE CENTRAL DAKOTA GEM & MINERAL SOCIETY

BISMARCK-MANDAN AND SURROUNDING AREAS

NORTH DAKOTA

DIGGIN'S FROM DAKOTA
Gen & Bill Buresh, Editors
1527 N. 19th St.
Bismarck, ND 58501

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Published by the CENTRAL DAKOTA GEM & MINERAL SOCIETY
P.O. Box 2445, Bismarck, ND 58501
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, 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. VISITORS ARE ALWAYS WELCOME.

DUES: \$5.00 per family per year.

OFFICERS AND COMMITTEE CHAIRPERSONS:

| | | | | |
|------------------|----------------------------------|--------------------------------------|----------------------|----------------------|
| President | Harold Brady | 1401 Sunny Road | Mandan | 663-3904 |
| Vice President | Mary Beth Osborn | 310 - 12th Ave. NW | Mandan | 663-1056 |
| Secretary | Ted Giese | Route 1 | New Salem | 843-7005 |
| Treasurer | Carol Hickie | | Center | 794-3342 |
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| Refreshments | Verna Giese | Route 1 | New Salem | 843-7005 |
| Federation Rep. | Ida Mae Ramberg | 1325 N. 15th St. | Bismarck | 223-6296 |

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

September 26 - 27, 1980

North Dakota's Sixth Annual **GEM AND MINERAL SHOW**



"Nature's Wonders Unveiled"
September 26 & 27, 1980

10:00 a.m. to 10:00 p.m.

at the new

MANDAN COMMUNITY CENTER

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ADMISSION: \$1.00 Adults

25¢ Children accompanied by parents

Sponsored by The Central Dakota Gem & Mineral Society

General Show Chairman: Donal E. Campbell P.O. Box 2445, Bismarck, North Dakota 58501

DIGGIN'S FROM DAKOTA

Vol. 15, No. 4

April, 1980

NEXT MEETING: May 4, 1980, 7:30 p.m. (Beginners' Class, 6:30 p.m.)

PROGRAM: Pending

LUNCH COMMITTEE: Edna Mausehund, Larry Strand, and Carol Gilliland

IN MEMORIAM

The sympathy of the members of Central Dakota Gem and Mineral Society is extended to the survivors of Emil Milken, Wilton, ND, who died on April 10, 1980 at the Bismarck Hospital. Services were held at the First Presbyterian Church in Wilton on April 15.

Emil and his wife Bonnie joined the Society shortly after it was organized and have been active members since that time.

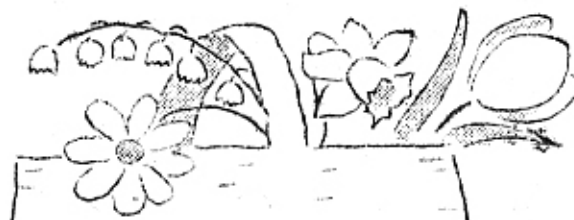
Emil was born and raised in the Wilton area, where he married Bonnie Drewer in 1936. They farmed on the family homestead near Wilton while also being involved in a number of farm-related government organizations.

Emil was also an active civic leader, having served on the Wilton City Council and as mayor.

In addition to his wife, survivors include two sons and three daughters, fifteen grandchildren, one great-grandchild, one brother, and three sisters.

CALENDAR OF EVENTS

- | | |
|-------------|--|
| April 27 | Bismarck, ND--Field Trip: Survey of geological features of the Bismarck-Mandan Area |
| April 26-27 | Fairmont, ND--Minnesota Rock & Mineral Club Show |
| May 4 | Bismarck, ND--7:30 p.m. Regular Meeting, Central Dakota Gem & Mineral Society, Capital Electric Bldg., Highway 83 North of City |
| May 17-18 | Hot Springs, SD--18th Annual Gem & Mineral Show, Picture City Gem & Mineral Society |
| June 6-8 | Topeka, KS--Rocky Mountain Federation Show |
| June 12-15 | Lincoln, NE--American Federation/Midwest Federation Show |
| SEPT. 26-27 | MANDAN, ND--NORTH DAKOTA'S SIXTH ANNUAL SHOW, sponsored at Mandan Community Center by Central Dakota Gem & Mineral Society. Show Chairman: Don Campbell, 1119 Memorial Highway, Bismarck, ND 58501 |
| May 3-4 | Helena, MT--26th Annual Show, Helena Gem & Mineral Society |
| June 21-22 | Livingston, MT--19th Annual Montana State Show |
| July 17-20 | Winnipeg, Canada--11th International Gem & Mineral Exhibition |
| Oct. 25-26 | Aberdeen, SD--Iakota Glacier Rock Club Annual Show |



PRESIDENT'S MESSAGE

Hi, Everyone,

Well, it looks like one more meeting is over and it's time for another letter. Many more members showed up on April 6 than were expected because of the Easter holiday. We also had a very good program, thanks to Earle and Larry.

I've received news of the death of one of our long-standing members, Emil Hilken. He was a personal friend of mine and a real rockhound. I am going to miss him and his hearty "Hello's."

I've also received word of another member, Mrs. Ida Mae Ramberg, who is in the hospital. I sure hope she gets well soon because we all miss her.

Once again, I want to thank all of the committees for the outstanding work they've accomplished this year.

See you all at the next meeting and don't forget to bring friends.

Sincerely,

H. A. Brady

* * * * *

AT THE LAST MEETING--APRIL 6

Twenty-five adult members were reported present at the last meeting, and twelve individuals participated in the pre-meeting discussions led by Harold Brady.

V.P. Mary Beth Osborn read the minutes of the previous meeting, in the absence of Secretary Ted Giese.

Earle and Blossomae Campbell were elected as delegates to the Rocky Mountain Federation convention which will be held in Topeka, Kansas, on June 6-8. Bob and Sue Randall were selected as alternates.

Field Trip Chairman Rodney Hickie reported that a field trip has been scheduled for Sunday, April 27 (details elsewhere) and that another is in the planning stages for Memorial Day weekend to South Dakota if enough members are interested.

Show Chairman Don Campbell reported that he had received a number of suggestions for the show theme and thanked all those submitting the suggestions.

A change of meeting place was again discussed and Earle Campbell was delegated to tentatively reserve the Bismarck Senior Center as a possible meeting site starting next September. This site has a direct walk-in entrance with no stairs, kitchen facilities, and ample off-street parking.

Gen Buresh reported that the Northbrook Mall was planning a "Back-To-Earth" day on Saturday, April 26, and were soliciting manned booths from area organizations. Bill Buresh was asked to organize a booth display for the Central Dakota Gem and Mineral Society.

The door prize, a calcite spar specimen provided by an anonymous donor, was won by Earle Campbell.

The program consisted of a Shell Oil Co. film titled "The Early American," a very interesting archeological interpretation of the early history of Western North America.

Lunch was served by Mary Beth Osborn, Gen Buresh, and Glenn Michaels.

* * * * *

FIELD TRIPS - By Rodney Hickie, Chr.

We will be having our first field trip of the season on Sunday, April 27. Dr. Gordon Bell will lead us on a geological field trip of the Bismarck-Mandan area and tell us about some of the interesting geological features of our area.

We will meet at the J.C. Penney parking lot on the southeast corner of Kirkwood Plaza at 1:00 p.m. Central Time on Sunday, April 27, 1980.

I think this will be a very informative trip for those of us who enjoy going out in the field and collecting.

We will also have our annual Black Hills Memorial Day field trip if there is enough interest.

CLUB BOOTH AT NORTHBROOK MALL

The Central Dakota Gem & Mineral Society will be a sponsor of one of the booths at the Northbrook Mall in Bismarck on Saturday, April 26, from 10:00 a.m. until closing time. This is a "Back-to-Earth Day" promotion by the shopping center.

The club display will consist of three cases--one each of fossils, minerals, and lapidary products.

Come in to see the display and volunteer to spend an hour to man the booth.

Thank you.

Bill Buresh

NATURE'S WONDERS UNVEILED

"Nature's Wonders Unveiled" is the show theme for 1980. This was decided at the last meeting when Show Chairman Don Campbell reported that he had received a number of good suggestions for the theme and that he had narrowed them down to either "Nature's Wonders Unveiled" or "Gems and Minerals of the Bible." The theme was chosen by a vote of those present.

SHOW EXHIBITS, 1980

Show exhibit season is here again. Time is rapidly flitting by--the temperature is already in the nineties and it's only five short months before show time. They will be five busy summer months, at best.

How many of you are well on your way with your exhibits for the 1980 show? I hope all of you are,

Ron Wandler, one of our newest members, has made arrangements for a case for his exhibit--his first. I hope this will serve as an incentive for everyone else.



Show Chairman Don Campbell says that all the dealers are booked and the theme has been set, so the pressure now is all on the rest of us to get the exhibits in.

With the cooperation of all of you again this year, as in the past, I am sure that we can get the job done.

If you have any questions about exhibiting, please call me at 663-5397.

Bill Buresh,
1980 Show Exhibit Chairman

THIS-N-THAT

It was noted in the April issue of "Iakota Pebbles," a publication of the Iakota Glacier Rock Club of Aberdeen, SD that Ed Hilgemann observed his birthday on March 25 and Wilma Hilgemann observed hers on April 17. Belated "Happy Birthdays" to both of them. Ed and Wilma, of Leola, SD, are also members of the Central Dakota Gem and Mineral Society and have always been active participants of our annual local shows.

Club Member Daniel Meth is home on leave from the Navy.

Stanley Fairaizl, immediate past president, is again up and around after a long siege in the hospital.

Verna Giese is in a hospital in Rochester, Minn., but no further details were available at publication time.

Ida Mae Ramberg is hospitalized at St. Alexius Hospital with a broken hip. Her 96-year-old father, Harvey Jensen, is also confined in the same hospital.

Melvin and Viola Anderson have just returned from a visit to the Gulf area. Melvin tried his luck at deep sea fishing and fared quite well. Melvin has promised to share more details later.

THIS-N-THAT, cont.

Ralph and Doris Hickle are now home after a trip to Australia. Doris had a box of Australian specimens, which she had collected herself, at the April meeting.

Nettie Nelson was overheard relating the following tidbit at the last meeting: One lady said to another, "Why is it that I always see you wearing pearls?"

The other lady responded, "Well, it's this way-you can squeeze pearls out of an oyster easier than you can squeeze diamonds out of an old crab."

MINERAL NAMED FOR MacFALL

Fewer than 3,000 mineral species are known, of which perhaps about 1,100 bear the names of persons. Minerals are usually named by the scientist who discovers them, and the name must be approved by an international commission and by publication of the data in a recognized magazine. All this introduction leads up to the fact that a mineral has recently been named for an amateur, a former editor of the American Federation Newsletter, Russell P. MacFall.

Macfallite, identified by Dr. Paul B. Moore of the University of Chicago as a new species, is one of several calcium manganese silicates found in basalt in Keweenaw County, Mich., the famous Michigan Copper Country. It is found as reddish brown needles often in the form of a radiating rosette. MacFall has been a collector of minerals in the Michigan copper mines for many years and is making a detailed study of them.

(MacFall is the author of the popular "Books" column appearing in the American Federation Newsletter. He formerly lived in Evanston, Ill., before moving recently to Coronada, California, and was an associate editor of the Chicago Tribune before his retirement.) --From AFMS Newsletter via "Rock & Hobby News," Glendive, Mont. Rock & Hobby Club Newsletter, Jan./Feb./Mar., 1980

SMITHSONIAN DISPLAYED AFMS CABS

Sixty-two of the 1,309 cabochons that were presented to the Smithsonian Institute Hall of Gems some years back by the AFMS on the occasion of its 25th anniversary were on display in the Hall of Gems last fall. The beautiful display of cabochons made from American gem materials cut by members of clubs belonging to the Federation was well arranged and attractively labeled, giving names of clubs and individuals who sent the cabs.

Paul Desautels, Curator of the Hall of Gems, told June Zeitner that the initial AFMS gift of 1,309 cabochons has inspired many others to send cabs to the Smithsonian. He feels the National Museum now has an enviable collection of native gems. Cabochons which are not on display are in the study and research area, and are arranged by species in large (and heavy) books, with each cab in an individual plastic envelope.

The cabochons on display last fall included plume agate, domeykite, Bruneau Canyon jasper, variscite, tremolite, nephrite, lazulite, dinosaur bone, gem chrysocolla, prehnite, rhodonite, turquoise, obsidian, Petoskey stone, williamsite, petrified wood, limestone, unakite, breccia, colite, shattuckite, banded agate, gold in quartz, and more.

--Adapted from AFMS NEWSLETTER, Dec.1979

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FEAR LESS -- LIVE LONGER

It's been said that the human body could live for 120 years if people were not so afraid of growing old.

What they fear is attenuated senility, more than death. The key to longevity is looking forward to growing old, despite wrinkles, which should be considered hardly life-threatening.

If people looked forward to growing old, they'd take care of themselves. They would give up smoking and they would exercise and lose weight. --ROCK & HOBBY NEWS, Jan.-Mar. 1980, Glendive, Mont. Rock & Hobby Club

MINERAL IDENTIFICATION - CRYSTALLOGRAPHY

By Lloyd Brown

The crystal form is often a sufficient enough characteristic to identify a mineral from its shape alone. When identifying micromounts it is the basic means. Crystals comprise the prize specimens in a collection. The finer the lustre, colour, size, sparkle, and trueness to textbook form, the more prized a specimen is. Certain crystal imperfections and oddities are also sought after.

Growth

Crystal growth is determined by the environment in which a crystal grows and by the molecular structure and peculiarities of the mineral in question. Crystals may form from vapours, molten solids, and from solutions crystal-forming ions are dissolved in. Heat and pressure are important. A diamond needs high temperature and immense pressure to form, otherwise the carbon would end up as graphite. Time is another important factor and influences the size, shape and quality of a specimen. The rate of growth also may alter the crystal form.

Constant Angles

Crystal faces always meet each other at constant angles no matter how large or misshapen the crystal may be. These angles are important in identifying the crystal system and class. There are six crystal systems with a total of 32 crystal classes or sub-divisions.

The molecules or cell-building units of a crystal are oriented to axes. The isometric (everything the same) system has three axes of equal length and at 90 degrees to each other. The tetragonal (four square) system has three 90-degree intersecting axes with two axes the same length. The hexagonal (six-side) system has three equal length axes intersecting at 60-degree angles and a fourth axis 90 degrees to the first three. In the orthorhombic (90-degree angle) system there are three axes of different lengths intersecting at 90 degrees. Monoclinic (one tilt) system crystals have three unequal length axes with one axis at other than 90 degrees to the first two. Triclinic (three tilt) system crystals have three unequal length axes intersecting at angles other than 90 degrees.

Twinning and Pseudomorphs

Crystals growing in close proximity to each other often have intergrowths called twinning. Some minerals tend to form distinctive twinning forms and these forms are frequently important guides to mineral identification. Sometimes a mineral may have a crystal form of another mineral. These pseudomorphs or false form crystals may be from alteration of the original mineral or by casts or crusts. Some substances have the same chemical composition but crystallize in different crystal systems as different minerals. Pyrite and marcasite, calcite and aragonite, and diamond and graphite are common examples.

Determine the Crystal Form

By determining the crystal form and by checking a few other physical characteristics, a mineral can usually be identified. Thin platy crystals of feldspar quickly identify cleavelandite, a variety of albite. Pearly, pinkish, saddle-shaped, rhombohedral crystal intergrowths suggest the hexagonal system crystals of dolomite. Understanding and recognising the various types and forms of crystals is not easy and requires study, but if you learn to identify even a few of the simpler forms it will make your identification of minerals much easier, quicker and more accurate. -- Via the April 1980 ROCK VEIN, The Winnipeg Rock and Mineral Club, from THE TRILOBITE

 * FOR SALE *
 * 1970 Ford 1/2-ton Pickup With Topper *
 * New Small V-8 Motor With *
 * Only 600 Miles---Runs Good *
 * 3 Gas Tanks For Long Field Trips *
 * LARRY STRAND 258-5128 *

A NORWEGIAN MOTHER WRITING TO HER SON

My dear son:

Ust a few lines to let yew know I am still alive. I am writing this letter slowly becoss I know you can't read fast.

You won't know the house when yew come home. Ve have moved. Ve had a lot of trouble moving...especially the bed. The man wouldn't let us take it in the taxi. It maybe vouldn't have been so bad if your father hadn't been in it at the time.

Speaking of your father, he has a fine new yob. He has 500 men under him! He cuts grass at the cemetery.

Your sister got herself engaged last week. Her boy friend gave her a beautiful ring with three stones missing.

Our neighbors are now raising pigs. Ve just got vind of it this morning.

I suppose yew didn't know I got my appendix out and a dishvasher put in. Ve found a vash machine in our new home, but it doesn't vork so good. Last week I put in four shirts, pulled the chain and ve haven't seen the shirts since.

Your sister Ingeborg had a baby yesterday but I haven't heard if it is a boy or a girl yet so I can't yet say if you are an aunt or an uncle.

Uncle Thorvold vent to Minneapolis to vork in a bloomer factory. Ve hear he is pulling down 75 a week.

Aunt Katrina got a yob in St. Paul vorking in a factory, too. I'm sending her some clean underwear as she says she has been in the same shift since she got there.

Your father didn't have too much to drink last Christmas. I put some caster oil in his walskey and it kept him going until New Year's.

I vent to the doctor on Thursday. Your pa came with me. The doctor put a glass tube in my mouth and said to keep it shut for ten minutes. Later on, pa asked to buy it from him.

It vas so vindy last veeek! On Monday it vas so vindy, one of our chickens laid the same egg four times.

I must close now. There is a big sale downtown and vomen's bloomers are half off.

Your loving mother

P.S. I vas going to send you \$10 but I already sealed the envelope.

—ROCK & HOBBY NEWS, Jan.-Mar. 1980

ADDITIONS TO THE 1980 MEMBERSHIP LIST:

69. Jensen, Dave/Ruby

70. Collins, W. E.

512 N. 300-W

Hazen, ND 58545
 Vernal, UT 84078

748-2061