Central Dakota Gem and Mineral Society
Mrs. Blossomae Campbell, Editor
1134 North 28th Street
Bismarck, North Dakota 58501

DIGGINS FROM DAKOTA

CENTRAL DAKOTA GEM & MINERAL SOCIETY

AIM:
1. The study of Mineralogy and Geology.
2. To foster field trips to collect minerals, gems and fossils.
3. The improvement of its members in the art of cutting, polishing and mounting gem material.
4. To provide opportunity for the exchange, purchase and exhibition of specimens and material.

MEETINGS: First Sunday of each month in the Hospitality Room of Capitol Electric Building on Highway 83, north of Bismarck.

VISITORS ARE ALWAYS WELCOME!

OFFICERS:

President	Earle Campbell	1134 N. 28th St.	Bismarck	255-3658
Vice-President	William Buresh	1527 N. 19th St.	Bismarck	223-0611
Secretary	Stanley Fairaizl	205 6th Ave. N. W.	Mandan	663-9712
Treasurer	DeLane Meier	RR 1, Mr. B's Est.	Bismarck	223-8579
Past President	John Dosch	1425 N. 15th St.	Bismarck	255-1924
Parliamentarian	Mrs. William Buresh	1527 N. 19th St.	Bismarck	223-0611
Program Chairman	Dick Bergentine	703 12th Ave. NW	Mandan	663-3419
Librarian	Owen O'Neill	906 1st Ave. NW	Mandan	663-3748
Field Trip Chairman	Harold Brady	1401 Sunny Road	Mandan	663-3904
Nominations	Ole Stavem		Wilton	734-6746
Refreshments	Mrs. Bob Randall	928 N. 16th	Bismarck	223-1625
Annual Show	John Dosch	1425 N. 15th	Bismarck	255-1924
Historian	Mrs. Albert Anderson	RR # 2	Bismarck	673-4585
Doorman & Greeter	Allen Strom	212 Ave. F West	Bismarck	258-3646
Editor & Publicity	Mrs. Earle Campbell	1134 N. 28th St.	Bismarck	255-3658
Pebble Pup Leader	DeLane Meier	RR 1, Mr. B's Est.	Bismarck	223-8579

All contributions for this bulletin should be mailed to the Editor, Mrs. Earle Campbell, 1134 N. 28th Street, Bismarck, by the 10th of each month.

Other editors may reprint any article from this Bulletin. A credit line would be appreciated.

The Central Dakota Gem & Mineral Society is a member of The Rocky Mountain Federation of Mineralogical Societies and The American Federation of Mineralogical Societies.

From the President

We are looking forward to the coming year with great anticipation and enthusiasm! Much goodwill and cooperation has been evident as I appointed committee chairmen -- conducted our first 1974 meeting -- held our first Board meeting!

Good suggestions are being presented. People are calling on the telephone with ideas to present. We appreciate this very much!

This is your Society! It is up to you to take part in its operation! With the help of each one of you this will be a great year!!!!

Earle Campbell

MEETING TIME CHANGE

February and March Meetings only

Following suggestions from some of our members who drive a distance for our meetings and must return late at night, your Board voted to try a time change for February and March of 1974, to 2:30 P.M. on the first Sunday of each month, namely February 3rd and March 3rd. This really is asafety measure for these members during the extremely cold, dark time of the year. The April 7th meeting will again be held at 7:30 P.M.

We know this change might create a problem for some but will possibly relieve some discomfort for many others. Your cooperation will be appreciated, I know.

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PROGRAM CHAIRMAN ASKS FOR HELP

Dick Bergantine wants your suggestions for good programs, also resource people to call on. Keep the objectives of our Society in mind when making suggestions.

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Dick's phone number is 663-3419

JANUARY MEETING

John Dosch thanked club members for their support during his two years in office before turning the gavel over to the new president, Earle Campbell.

Dr. Gordon Bell thanked everyone for the card he received while recuperating from surgery.

Thank you notes for the flowers they had received were read from Ritch Strom and Cecelia Dosch. Ritch also had surgery while Cecelia and John Dosch welcomed a new daughter into the Dosch family.

The treasurer's report shows we had $178.81 on hand.

Members voted to send $5.00 to the Crippled Children's School at Jamestown.

Another $50.00 is to be given to Capitol Electric Co-op for new chairs in the Hospitality Room. This was to show our appreciation for the use of the excellent meeting facilities.

Frank Herr donated two door prizes which were won by Katherine Anderson and Ardell Strom. Bea Merrill won the other door prize, which was donated by Bill and Dorothy McLean, Beaverton, Oregon. The McLeans visited our organization last September and took part in our annual show.

DeLane Meier was in charge of the program which was a movie "Exploring the Old West Trail Country" with narration by Chet Huntley. It was an excellent movie showing many scenes from North Dakota, South Dakota, Nebraska, Montana and Wyoming.

FEBRUARY AND MARCH MEETING TIMES CHANGED!!!!!!
We will meet at 2:30 p.m. instead of 7:30 p.m.
DON'T FORGET!!!!!!!!!!

JANUARY BOARD MEETING

A Board meeting was held at the home of president Earle Campbell, on January 10. Other members present were Bill Buresh, vice-president; DeLane Meier, treasurer; Stan Fairaizl, secretary; Dick Bergantine, program chairman; John Dosch, past president and new annual show chairman; Blossomae Campbell, editor and publicity chairman.

The Board voted to change the time of the next two meetings (details elsewhere in this bulletin.)

A tentative schedule for the coming year was set up.

There was much discussion for future plans. It was decided to have new name badges available for members.

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NAME BADGES

At the suggestion of Al Strom, our new greeter-doorman,chairman, we have available name badges for our members. This is a very attractive badge for a very small cost to each member - only 25 cents. Everyone, including our pebble pups, should have one!

To obtain yours see Al Strom or our president. He may already have yours made. If not, he will take your order and have it for you at our next meeting.

The Board suggests that these tags be left with the doorman as you leave the meeting and pick them up as you come in --- then you will have them for use at each meeting.

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MEETING TIME FOR FEBRUARY AND MARCH MEETINGS WILL BE 2:30 P.M.!

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Hold this rectangle to your face and blow on it. If it turns green, call your physician. If it turns brown, see your dentist. If it turns purple, see your psychiatrist. If it turns red, see your banker. If it turns black, call your lawyer and make a will. If it remains the same color, you are in good health, and there is no reason why you should not pay your membership dues for 1974. Only $5.00 per family.

Mesabi Media via The Rock Vein
via Sooner Rockologist

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COMMITTEE CHAIRMAN FOR 1974

Program Chairman	Dick Bergantine
Field Trip Chairman	Harold Brady
Librarian	Owen O'Neill
Nominations	Ole Stavem
Refreshments	Sue Randall
Annual Show	John Dosch
Historian	Vina Anderson
Doorman & Greeter	Allen Strom
Editor & Publicity	Blossomae Campbell
Pebble Pup Leader	DeLane Meier
Parliamentarian	Gen Buresh
Membership Chairman	????

Three new chairmen have been added this year. Gen Buresh as Parlemantarian will see that the business meeting will run smoothly as she is an authority on Roberts Rules of Order. Your editor has served as publicity chairman for the past two years and will continue in that position. Earle is looking for a live-wire member to be Membership Chairman. That position has not been filled as yet.

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A mind stretched to new dimensions never shrinks back to its original size.

TENTATIVE 1974 CALENDAR

February 3.....Meeting 2:30 P.M. Joe & Marlys Duchene
March 3 .....Meeting 2:30 P.M. Film or Slides
April 7 .....Meeting 7:30 P.M. Silent Auction
May 7 .....Meeting 7:30 P.M.
June 2 .....Meeting 7:30 P.M.
July 7 .....Meeting 7:30 P.M.
August 4 .....Picnic - Time and place to be announced
September 1 & 2 .....Field Trip - Labor Day
September 8 .....Meeting 7:30 P.M.
September 14 .....Tentative Show Date
September 21 .....Tentative Show Date
October 6 .....Meeting 7:30 P.M.
November 3 .....Meeting 7:30 P.M. Silent Auction
December 1 .....Christmas Dinner 6:00 P.M. Election of officers

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DAYLIGHT SAVING TIME

It is alleged that daylight saving time started because people simply wanted to make the day last longer. However, some authorities believe that it was started by a wise old Indian.

And herewith hangs a tale pertinent to the origin of daylight saving time.

Once upon a rather long time past, the aforementioned Indian decided to make his blanket longer. In the fullness of his wisdom, he cut off a strip of blanket from one end and sewed the strip onto the other end.

Presto! The blanket was longer.

In similar measure have the wise Americans made the day longer!

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THIS 'n THAT

Joyce Muggli, daughter of the Ewald Mugglis, underwent eye surgery on January 5. We hope she is doing fine and will have a speedy recovery.

Dues are due! Pay your dues and be eligible for the door prize drawing!

Don't forget the time change of our next two meetings - 2:30 p.m.

From "The T Town Rockhound" May, 1973

MOLTEN ROCK DEEP IN THE EARTH HARNESSED AS A SOURCE OF POWER

The heat of molten rock deep within the earth is being harnessed to meet the emergency needs of 18 nations. This source is called geothermal energy, from Greek words meaning earth-heat power.

"I believe we are witnessing the birth of a vast new source of energy," says Joesph Barnes, United States Director of Resources and Transport.

He addressed a seminar here on the development and use of geo-thermalenergy, attended by 250 people from a dozen countries.

Barnes told newsmen the participants agreed this type of energy was making a breakthrough and was widespread, clean and cheap.

Nobody really knows what keeps the rock molten. Scientists theorize that it is friction in the broken crust of the earth and the radioactive decay of material underneath.

In most places the molten rock, or magma, is 15 to 25 miles underground. In some places where there are fissures in the earth, it pushes closer to the surface.

The magma heats other rocks and these turn underground water into hot reservoirs, six miles or less from daylight.

If the hot water can find a way, it comes out in hot springs or geysers. If not, it can be tapped by a well drilled down to where it is.

The wells bring up steam or hot water, or both. The steam can be fed straight through a turbin to run an electric generator. The hot water can be used to boil some volatile liquid, like isobutane, into vapor, and the vapor will spin the turbin that runs the generator.

by Leslie and Beatrice Swanson, News release
in the United Nations, New York
via Geode Newsletter, via Jade Journal

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REMEMBER! February and March meetings will be at 2:30 instead of 7:30!

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CLEANING COPPER

We all have heard many ways to clean copper specimens, coins, etc. Many are complicated and costly. Some processes will keep the copper specimens clean for a short period of time while others will keep the specimens clean over an extended period. Many processes are not available to most of us as we are not chemists. However, a very simple and inexpensive process has been found that is in the financial means of everyone. The results are fantastic and your specimen will remain clean for two or three years. This may sound foolish but all you need is "Toni" wave lotion from a "Toni" home permanent kit. Place the solution in a glass bowl, submerge your specimen and slosh around for about 45 seconds. Remove and rinse in water. This is all you do. Do not put the neutralizer or ammonia on the specimen as this will dull it. Do not try to clean too much copper with the same solution as it becomes weaker with use. Try this, I think you will like it.

George Fisher - RMFMS Bulletin
via Sooner Rockologist

OPAL FIRES

The mysterious cause of the brilliant blue, green, red and yellow fires of the gem opal has at last been uncovered by an Australian scientist using an electron microscope. The rainbow flashing gemstones actually are composed of orderly layers of tiny amorphous spheres, neatly stacked row upon row, according to Dr. J. V. Sanders with the Commonwealth Scientific and Industrial Organization of the University of Melbourne. Spaces or gaps occur between each of these spheres which are bound together by more silica. It is the size of the spheres and the arrangement of the spaces that determine the colors and fires of the stone.

As ordinary daylight or white light penetrates into the transparent spheres, it is scattered by the latticework of the spheres and deflected back to the surface of the opal in various colors. Radiating at angles determined by the wave length, it is the size of the spheres that determine the spaces and hence, wave lengths and colors. Uniform small spheres give off violet to blue, while larger spheres give off reds to greens.

from Jade Journal via "The Rock Vein,
"The Turritella Telegram and others

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SHOP HINT

In some displays you want to use a slab of rock to show how it looks before polishing. Water won't stay wet, grease looks greasy, some waxes turn white under heat, but if you rub the surface with liquid detergent and wipe it off, there is a shine and it will show the pattern.

AFMS Newsletter

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DUCHENES TO PRESENT FEBRUARY PROGRAM

Joe and Marlys Duchene, Fort Yates, will have a very interesting program for the February meeting. Their topic will be "Silversmithing". This is one program you will not want to miss!

Many of you will remember the demonstration Joe gave about a year ago on making arrow heads. Both he and his lovely wife, Marlys, are well versed in many facets of our hobby. They collect specimens, make arrow heads, silversmithing, and lapidary work.

Bring your "show and tell" specimens to every meeting! Share your good fortune with others! If you have an interesting looking specimen that you cannot identify, bring it and try to stump the experts. Last month Mitch Strom had an interesting geode that was white on one side and black on the other.

Cecelia Dosch and Blossomae Campbell will be hostesses for the February meeting.

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CAMPING HINT (For next summer)

To level up your camper for the night, put a full, undented can, preferably a can of beer, on the floor. If it doesn't roll in any direction, you are within ½ inch of level, wall to wall. If the can rolls in one direction you can raise the low side, lower the high side or consume the contents of the can so you won't notice the tilt.

From The Geode via The Rock Vein via
Jade Journal

VISUALIZING GEOLOGIC TIME

Our ideas of time are conditioned by the length of the human life span. The term "one million years" is so far outside our experience as to be meaningless to us. Indeed, all periods longer that the human life time or two have a tendency to fade into "a-very-long-time-ago" vagueness for us. But we can grasp the meaning of the length of a year and of its subdivisions into months, weeks, days hours, minutes, and seconds. James C. Rettle (Coronet, March 1951) rendered a service by picturing geologic time in sub-divisions of a year. He imagined a moving picture taken of earth by inhabitants of another planet, using a super-telephoto lens and a time-lapse camera. The imaginary film was taken at the rate of one picture per year for the last 757 million years. When it is run in a projector at normal speed of twenty-four pictures per second, twenty-four years of earth history flashes by every second. Since the author has the film run continuously twenty-four hours a day, about two million years of past history are shown on the screen each day. To show the entire 757 million years requires running the film continuously for one full year. Tha author starts the show at midnight of one New Year's Eve and runs it without interruption until midnight of the next New Year's Eve.

The First Eleven Months

Throughout January, February and March the movie runs on without showing any signs of life upon the earth. Single-celled organisms appear early in April, many-celled ones later in the month. Late in May come the first vertebrates. It is the middle of July before the first land plants begin to pave the way for animal life on land. Late August arrives before the first land vertebrates, the amphibians, put in an appearance. The first reptiles appear by the middle of September, through October and much of November. In the meantime, the first birds and first mammals appear. The raising of the Rocky Mountains near the end of November signals the end of the great era of reptilian domination.

Here We Come

As the movie runs on into December we see the mammals dominant; they undergo their great evolutionary developments. Christmas arrives; the movies show the Colorado River beginning to cut its Grand Canyon. The year is nearing its close, yet we have seen no signs of man. Suddenly, about noon of December 31 the movie shows us the first men. During the afternoon the glaciers push southward from the polar regions, and then retreat, four successive times. By suppertime man is still not much in evidence. By about eleven o'clock in the evening varied 'Old Stone Age' men become quite prominent in the picture, and by 11:45 men who make more refined stone implements and cultivate the soil appear. Five or six minutes before the end of the picture we see the dawn of civilization. One minute and eighteen seconds before the end of the film, the Christian era begins. Twenty-one seconds before the end Columbus discovers America. Eight seconds before the end, the Declaration of Independence is signed.

Aspects Worth Pondering

Many aspects of this imaginary movie are worth pondering. Life has existed on earth some eight months of the movie's year; man has been here for about twelve hours of that year. The dinosaurs dominated the movie for about seventy days; man has dominated it for about half on one day, so far. (If the movie continues into the future, will it show us here seventy days from now?) Man has been in existence for about twelve hours of the movie, but only for about five or six minutes has he had any civilization which we consider worthy of the term. This is sometimes a comforting thought when we become impatient with the "slow" progress made by mankind. In speaking of this progress as "slow" we are using human lifetimes as our yardstick. Any progress made since the dawn of civilization has been dazzlingly swift, measured in terms of man's total existence on earth.

(Adapted from Biology 108-109, Purdue University via Michigan Gem News via Rock Vein

For hundreds of years people have thought of the New Year as a time for "turning over a new leaf" -- a time to start over. Each year resolutions are made -- and in the course of time, are broken.

Instead of making resolution, in the mid-1800's, Horation Nelson Powers took this approach. His approach opens an undiscovered world that lies before you, "beyond tomorrow's mystic gates."

A flower unblown; a book unread;
A tree with fruit unharvested;
A path untrod; a house whose rooms
Lack yet the heart's divine perfumes;
A landscape whose wide border lies
In silent shade 'neath silent skies;
A wondrous fountain yet unsealed;
A casket with its gifts concealed--
This is the Year that for you waits
Beyond tomorrow's mystic gates.

Ahead of you waits a new year. Greet each day as though it is a "gift concealed". See what bright magical moments await you.