Central Dakota Gem and Mineral Society
Mrs. Blossome 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 Bergantine	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.

MEETING DATE CHANGED FOR SEPTEMBER!

Because of the Labor Day weekend, the September meeting date has been changed from September 1 to September 8. Mark that date on your calendar!!! The time remains the same - 7:30 p.m.; and the place is the same -- the Capitol Electric Co-op Bldg., Hospitality Room.

** ** ** ** ** ** **

PICNIC A SUCCESS

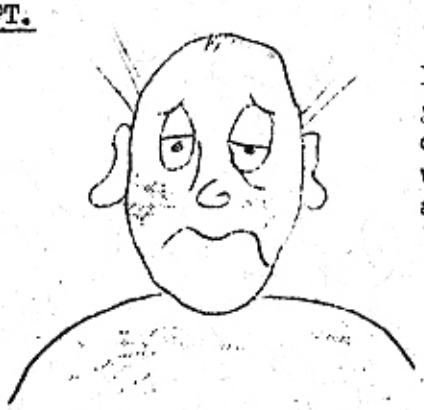
In place of our usual meeting in August, club members enjoyed a potluck picnic at Sertoma Park. The weather was nice, the food was good, the company congenial. In other words - it was a successful picnic.

The business meeting was short and informal. Plans were made for a field trip the following Sunday. Show news was discussed. Stan Fairaizl is chairman for the Mandan show. He has announced that instead of having displays crowded in the lobby as in former years, we will have plenty of space to put our display cases.

John Dosch is chairman for the Bismarck show. We will have the same area in Kirkwood Plaza as we had last year. There will also be a ceramics show the same day. Between rock and minerals and ceramics there should be a goodly crowd. If anyone would like to have a display but needs a case, see John Dosch. His phone number is 255-1924. If you don't have a display, come out and lend a hand.

** ** ** ** ** **

OOPS! DEPT.



Does this editor have a red face!!! I really goofed this time! Last month I reported the death of Mabel Stavem's brother. I am really sorry. It was Ole's brother-in-law who had passed on. Please accept my apologies.

SEPTEMBER PROGRAM???

When this bulletin was being written, Dick Bergantine, program chairman, was on vacation. So-o-o if you want to know what the program for the September meeting will be about, come to the meeting!!! I am sure Dick has a good program lined up for us as he has had in past meetings.

FIELD TRIP

Twelve cars formed a caravan to the gravel piles at Fort Yates on Sunday, August 11. The weather was co-operative, blue skies with just a slight breeze, the temperature a balmy 85. The rock piles were tantalizing. There were just enough good specimens found to make a person realize that with a lot of time and patience one could find some nice rocks.

Pat Brady found a rock with a hole in it. Inside the hole was a perfect imprint of a brachiopod - an excellent specimen for a collection. Harold Brady found a good piece of teredo; there were a few pieces of agate, some coral, and plenty of petrified wood. Ewald Muggli found one rock that looked definitely like a fossil of some kind, but as yet, it hasn't been identified.

Plans for a field trip over Labor Day weekend did not materialize. Good agate hunting grounds in Montana are closed to clubs and groups.

** ** ** ** ** ** ** **

THIS 'n THAT

Emil Hilken spent time in Bismarck Hospital with congestive heart failure. He was released just in time to join the club on the field trip to Fort Yates. You just can't keep a rockhound away from rocks!

If anyone has news for this spot for next month's bulletin, please let me know!!! I don't want to appear too nosy and keep asking you all where you've been and what you've been doing but I do need news to print.

** ** ** ** ** **

SHOW DATES

September 7 MANDAN, NORTH DAKOTA -----Central Dakota Gem & Mineral Society
September 14 BISMARCK, NORTH DAKOTA----Central Dakota Gem & Mineral Society
September 20-22 WILLISTON, NORTH DAKOTA--Williston Rock & Mineral Club

** ** ** ** ** **

A DISCIPLE ASKED CONFUCIUS, "Why, sir, does the superior man value jade much more highly than serpentine? Is it because jade is scarce and serpentine abundant?" "It is not," replied Confucius, "But it is because the superior man of olden days regarded jade as a symbol of the virtues. Its gentle, smooth, glossy appearance suggests charity of the heart; its fine, close texture and hardness suggests wisdom; it is firm and yet does not wound, suggesting duty to one's neighbor; it hangs down as though sinking, suggesting ceremony; struck, it gives a clear note, long drawn out, dying gradually away, and suggesting music; its flaws do not hide its excellence, nor do its excellence hide its flaws, suggesting loyalty; it gains our confidence, suggesting truth; its spirituality is like the bright rainbow, suggesting the heavens above; its energy is manifested in hill and stream, suggesting the earth below; as articles of regalia, it suggests the exemplification of that for which there is nothing in the world of equal value, and thereby, ---TAO itself.

via Kron Krib News via The Geode
via Rock & Minerals

SONG OF THE ROLLING ROCK

There's a Rolling Rock of Friendship
Across the border to B.C.
It shows the type of friendship
From Mount Baker to Burnaby
We all have something in common
With a pick in our hand
We roam all over the country
Gathering rocks from off the land
There are agates, jasper, jade---
Artifacts and fossils, too.
To the next Club to get the Rolling Rock
We wish "good hunting" to you!

By Burnaby Laphounds

The stellar attraction of the 8th annual gem & mineral show of the Central Dakota Gem & Mineral Club will be the International Rolling Rock. It is a symbol of goodwill and trust between the rockhounds of Canada and the United States. This Rock originated in Haney, British Columbia, and has been passed from one mineral and gem organization to another, each time crossing the Canadian-United States border. From Haney it was delivered to the Maplewood Rock and Gem Club in Edmonds, Washington; from there it was taken to the Richmond Rock & Gem Club in Richmond, British Columbia. It is never mailed from one organization to another, but delivered in person. The last Canadian club to have it was The Prairie Rock & Gem Society in Regina, Saskatchewan. From Bismarck it will probably go to the Winnepeg Rock & Mineral Club in Winnepeg. The purpose of the International Rolling Rock is to encourage and promote fellowship among Rockhounds in Canada and the United States.

The Rolling Rock is a piece of British Columbia jade mounted in a maple box. The box is resting on a blue velvet pillow which is trimmed with gold braid. Inside the maple box is a book which has the signatures of the various club members who have had the Rolling Rock.

The Rolling Rock was delivered to the Earle Campbell residence recently. We were very pleased to have it in time to show at both the Mandan and the Bismarck shows. We will also have it on display at the September meeting, at which time members will have the opportunity to sign the accompanying book.

** ** ** ** ** ** ** **

NOTE OF THANKS

Dear Club members,

I wish to sincerely thank you for the bouquet of flowers you sent to me in the hospital. It helped so much to brighten my stay there.

Sincerely,

Emil Hilken

STAN VOTRUBA

Last October, Earle and I had the pleasure of meeting Stan Votruba at the Aberdeen South Dakota show. Stan Votruba is not only a rockhound, he is also a writer and lecturer. He has a rock shop in Academy, South Dakota, belongs to four rock clubs and takes an active part in each one. He and his wife also take pebble pups on field trips. Stan has given me some of the articles he has written. I have put these in a folder and they will be placed in the club library. Here is one of Stanley's articles.

WHAT IS AN AGATE

by Stanley Votruba

Without a doubtmany have asked just that, and it is safe to say, gone unanswered. Webster's Dictionary says --"A fine grained variegated chalcedony, having its colors arranged in stripes, blended in clouds, or showing moss-like forms". If you were to look in a mineral or rock book, you would read - " a banded variety of chalcedony commonly occurs as a cavity filling. Concentric banding frequently follows the outline of the cavity filling." In the book it might tell of whitish chalcedony containing black, brown, or reddish brown branching moss-like aggregates of manganese or iron oxide. Some dendrites may form by precipitation of manganese or iron oxides diffused into a gelatinious silica before solidification. SiO_2 Silica Oxide is the formula.

HOW AGATES ARE FORMED

Rubies are red; emeralds are green, but both of these rare beauties are prized as precious gems. Agates are stippled and striped, banded and bordered with rainbow colors, and these handsome stones are treasured as semi-precious stones.

An agate is created in secrecy and total darkness. The patient process takes ages of time - perhaps a million years before full completion. Its birthplace is a small hole, an empty pocket in a porous rock. It is formed in the earth's never-ending water cycle and created from assorted chemicals in the earth's crust. Its main ingredient is silica, a chemical compound of silcon and oxygen.

Silica is the main ingredient of a variety of rocky minerals and the silicates make up more than half of the earth's crust. They form milky white pebbles of quartz, and most of the sand on the beach, a variety of glassy crystals, some clear and some tinted rainbow colors. Semi-precious onyx and chalcedony, carnelian and jasper, chrysoprase and agate, also are silicate minerals made mostly of silica.

The silicates have endured through the ages of ceaseless change and upheaval in the earth's crust. They have been melted in volcanic lava and smashed by pounding waves, dissolved in running water and lifted high and dry with rising mountains. These geological events modeled and remodeled each deposit of silicate and gave it its present form. Cracks, crevices, and caverns in the sedimentary rocks serve as centers for more mineral precipitation. In the sediments we expect veins to be filled with low-temperature minerals like quartz and calcite, and some of the low-temperature sulphides. Minerals form as magma cools. Some form first as gases, then turn to liquids as the magma continues cooling, gradually takes some kind of solid form. The rock formed in this way may consist of tiny grains that look very much alike. Or the rock may have streaks of different kinds of minerals. Minerals come in all colors of the rainbow.

Minerals are made of combinations of chemical elements. The chemical elements are made of atoms, and the atoms are made of combinations of particles so tiny that there are millions in a pinhead.

(continued)

Agates - continued

In all, there are about a hundred chemical elements, but many are quite rare. In various combinations these elements form between 1,500 and 2,000 kinds of minerals. Most minerals are combinations of just a few elements, such as quartz mentioned earlier consisting of not only silicon, but also oxygen. Calcite (making up most of the rock limestone) combines the metal calcium with carbon and oxygen.

The creation of an agate began when rains or running water began to filter into and ever so slowly, seeping through the dense material. The mineral-bearing water and gases, cold and hot, creeping through the cracks and between the rock grains, eventually seeping into the small hole or empty cavity. Intime the ground water evaporated slowly, in doing so the atoms of chemical elements raced around within it at a great speed creating the exotic, beautiful patterns, bands, colors and shades. The deposited agate became firm with the design, making atoms becoming locked in the gelatinous solution, ever to remain. Later, thousands of years later, the bedrock disintegrated, crumbled to free the pocketful of agate. Only to be deposited among the sediments. Sediments tend to get washed or blown into valleys and down onto the lowlands and sea bottoms. As time goes on, they eventually get uncovered and picked up by some one who might see the lovely coloration or the beauty that may be within. Agates may be of various patterns, designs and colors. Banded agate may be striped with blue, gray, red, black, yellow or the combination of several of these.

Agates are fine introductions to the study of natural history, and to a greater appreciation of nature, because they are tangible and often very beautiful objects that can be preserved in collections. They do not fade or lose their beauty, like flowers; making a collection of them harms no living thing.

Quartz grains in sandstone are tough. They can stand terrific pressures and heat with little apparent change. Yet the rock as a whole can be altered. Water may trickle through it, leaving minerals that cement the grains together. In a conglomerate under pressure, quartz pebbles may become lengthened and flattened.

The atoms of the quartz crystals move form locations of higher pressure to those of lower pressure and form new crystals there. The same process may occur when granite or some other rock turns into gneiss. Where different types of rocks are held against one another over a long period, a change may occur in their chemical natures. Rocks like all other substances made by the woking of atoms may look perfectly inert, but within the atoms race around within at terrific speeds. Occasionally one of the most energetic little fellas gets loose and shoots into the neighboring rock, joining the racing particles there. In time this migration, or wandering, of atoms can form new clusters of minerals. I might also add that wandering atoms, plus heat and pressure, may explain the nature of the rock we call granite.

** ** ** ** ** ** from Korn Krib News

SHOP HINT

To improve your tumble polishing, use small pieces of styrofoam plastic instead of those hard round little plastic beads. Your polishing agent will do a better and a quicker job of it. Those hundreds of polish impregnated little pieces will really put a shine on everything in the tumbler and will have disappeared from sight by the end of the tumbling cycle.

from Korn Krib News via The Geode via
Rock Ramblings via The Template