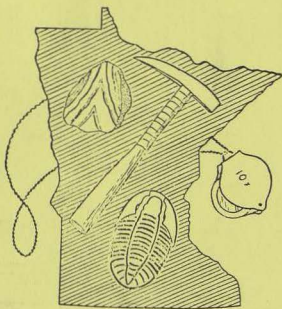


May-June
1973



NEWS



Geological Society of Minnesota

MINNEAPOLIS, MINNESOTA

FIRST CLASS



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RETURN REQUESTED

May-June, 1973

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THE MINNESOTA RIVER VALLEY

(from "Environmental Geology of the Twin Cities Metropolitan Area", Minn. Geol. Survey)

Streams carrying meltwater from the retreating glaciers also controlled the pattern and position of the Minnesota River Valley.

The most striking feature of the Minnesota River Valley, from Chaska downstream to Fort Snelling, is its anomalous channel width--200 to 300 feet--as compared to its valley width --5,000 to 20,000 feet. This disparity is a consequence of the migration of the river channel, while it was an outlet stream for Lake Agassiz, down the bedrock shoulders of a very deep bedrock valley. The present 700-foot flood plain was formed soon after Lake Agassiz uncovered a lower outlet now known as the Red River of the North. As a consequence of the lessened flow, sediments accumulated, filling most of the former river channel. Also, its relatively low gradient has caused the river to meander. As a consequence of the low gradient, the river has developed two types of lakes: (1) oxbow and (2) saucer. Oxbow lakes, the smaller of the two types, occupy meander loops that were abandoned when steeper-gradient channels were opened. The saucer lakes form during floods when sediments are deposited in the form of natural levees, which impound the flood waters. For the most part, both types of lakes now are nearly completely filled with organic and inorganic materials. Some of the "lakes" are actually quagmires that during dry periods are too shallow to

traverse with a boat but too marshy to safely walk upon.

Despite the relatively low normal flow of the Minnesota River, a nine-foot channel is maintained from Fort Snelling to a commercial facility about 3 miles downstream from the Highway 101 bridge in Shakopee. In recent years, facilities related to river transportation--barge terminals and industrial and commercial buildings--have been constructed on the river banks. The total bulk shipments to and from Minnesota River terminals is now second only to the Port of St. Paul, within the Minneapolis-St. Paul district. Also, commercial, industrial, apartments and single family structures have been built within the broad, relatively flat flood plain.

In addition to its use for industrial and commercial enterprises and housing, a part of the flood plain is being developed into a park. Fort Snelling State Park will ultimately occupy the 1- to 1½-mile wide valley from the Minnesota-Mississippi confluence, including Pike Island, to a property line approximately three miles upstream. It will be bounded both legally and topographically by valley walls held up by the resistant Plattville Formation and capped by a thin cover of glacial sands. The park will include several saucer and oxbow lakes, much marshland with developed nature trails and riding trails, wildlife sanctuaries, and several historic sites, including an abandoned sandstone quarry.

1973 FIELD TRIPS



1. Saturday, June 30 -- Twin Cities Geology led by Dr. Henry Lepp

A one-day trip by car caravan.

Meeting time and place: 8:00 A.M. at the Macalester College Geology Building (one block north of St Clair Ave., on Macalester St.)

Bring a picnic lunch.

2. Saturday and Sunday, July 14-15 -- Glacial Geology of S.W. Minnesota and E. South Dakota led by Dr. Charles L. Matsch

A two-day trip via chartered bus. Advanced registration with a \$10 deposit toward the fee is required. Mail your reservation to Bob Gunville, 1110 Gardena Ave., Mpls. 55432.

Meeting time and place: 8:00 A.M. Saturday at the Macalester College Geology Building (one block north of St. Clair Ave., on Macalester St.)

Overnight lodging has been arranged. Costs will be \$3-\$7 per person.

A preliminary meeting will be held to discuss all arrangements, and to give background material on the geology of the area. All people who have signed up will be notified about this meeting. If your name is not on the list posted at spring meetings and the banquet, contact Bob Gunville, 788-1421.

3. Saturday and Sunday, August 18-19 -- Precambrian Bedrock Geology of the Minnesota River Valley led by Dr. James A. Grant

A two-day trip by car caravan with an overnight stop at Redwood Falls. Motels and camping are available. Make your own arrangements. A suggestion is Donovan's Motel (Western), tel. 507-637-3521.

Meeting time and place: 7:00 A.M. in the Southdale Parking Lot, the southwest corner area, near France Ave. and W. 70th St.

A preliminary meeting will be held to discuss all arrangements, and to give background material on the geology of the area. All people who have signed up will be notified about this meeting. If your name is not on the list posted at spring meetings and the banquet, contact Bob Gunville (788-1421) or John Snell (771-8144).

4. Mid-September -- Glacial Geology of Eastern Minnesota led by Dr. Charles L. Matsch.

A one-day trip by car caravan from the Twin Cities to a little beyond Duluth.

The date, and meeting time and place, will be announced in the September 1st newsletter.

SPECIAL NOTE

All trips are self-supporting. Nominal fees will be charged to cover expenses, prorated among those attending.

1973 BUDGET ACCEPTED

The following budget for 1973 was accepted by the Board of Directors:

EXPENSES		
Office supplies		\$20.00
Membership		65.00
Field Trips (self supporting)		
Banquet (self supporting)		
Annual Dinner		25.00
Public Information		
Newsletters	6 @ \$40.00	240.00
Shows and Displays		35.00
Education		20.00
Public Services		10.00
Misc.		50.00
Lectures	12 @ \$30.00	360.00
Projector rental	12 @ 8.00	96.00
Programs		175.00
Bank costs		<u>4.00</u>
		\$1100.00
INCOME		
1973 Dues		\$871.00
Revolving Field Trip Fund		44.40
Social Activities		8.36
Donations for coffee		<u>63.17</u>

986.93
- \$113.07

M.W.F. CONVENTION WILL BE IN CINCINNATI

July 26-29 are the dates for the Midwest Federation's annual Convention and Gem and Mineral Show, to be held in the Convention Center, Cincinnati, Ohio. This promises to be an exciting event, with exhibitors coming from the entire midwest region. All G.S.M. members automatically are members of the Midwest Federation, and are welcome to attend. If you plan to be in the Cincinnati area, it would be worth your while to plan to stop. You can obtain a M.W.F. membership card from Mary Kimball.

"Contemplating the lace-like fabric of streams outspread over the mountains, we are reminded that everything is flowing--going somewhere, animals and so-called lifeless rocks as well as water. Thus the snow flows fast or slow in grand beauty-making glaciers and avalanches, the air in majestic floods carrying minerals, plant leaves, seeds, spores, with streams of music and fragrance; water from springs, and animals flock together and flow in currents modified by stepping, leaping, gliding, flying, swimming, etc. While the stars go streaming through space pulsed on and on forever like blood globules in Nature's warm heart."

John Muir



Never fail to consider the future significance of what you say and do.

Book

NEW BOOK IS NOW AVAILABLE

The long awaited text, "The Geology of Minnesota", published by the Minnesota Geological Survey, is now available. Intended as a centennial volume in honor of George M. Schwartz, this book will be a comprehensive review of the geology of Minnesota with 33 authors contributing papers. It is available in both paperback and hard cover versions. G.S.M. members may obtain a discount price through volume ordering. Contact Mary Kimball (644-6429) if you are interested in purchasing a copy. This is an advanced text dealing with the most up-to-date information.

LEPP BOOK IS WELL RECEIVED

The response from the G.S.M. membership to Dr. Lepp's new book, "Dynamic Earth--An Introduction to Earth Science", has been good. Those who did purchase it have found the text both interesting and helpful.

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CHECK YOUR CALENDAR

ANNUAL MEETING TO BE SEPTEMBER 24

Be sure to place on your calendar the date of the G.S.M. Annual Meeting as Monday, September 24. Again it will be held at the Viking Village, 27th Ave. S. and Lake St. This is the meeting where members elect their Board of Directors. Names of candidates to the slate of nominees are being sought now. Please call Dr. Alex Lowe (451-2822) if you have someone to suggest.

STATE FAIR WORKERS ARE NEEDED

Each year the G.S.M. maintains an information booth at the Minnesota State Fair, and a number of people are needed to staff it. Those who do volunteer their time enjoy meeting the people who stop by the booth. Please call Mary Kimball (644-6429) or Bernice Tepel (699-1793) if you can donate some time, or if you would like to know more about this activity.

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SPECIAL PROJECTS COMMITTEE HAS WORK IN PROGRESS

The Special Projects Committee, under the chairmanship of Sam Mayo, has a number of activities in progress. Work has been started for a special geological display at the Northwoods Audubon Camp near Sandstone. Examples of the various types of Minnesota bedrock need to be collected for it, and Mr. Mayo would like any samples you can contribute.

At Fort Snelling State Park an exhibit of the geological history of the area will be prepared. Also, the Committee is organizing volunteers to act as tour leaders to Park visitors.

A self-guided nature trail for the Taylor's Falls area also is being planned and written. This is being done in cooperation with the Minn. Department of Natural Resources, and will be available to visitors at Interstate Park.

In Memoriam

DR. BERT R. CARLSON

Dr. Bert R. Carlson, former President and long time Secretary of the Geological Society of Minnesota, passed away suddenly while in Santa Fe, New Mexico, on a trip April 4, 1973. We were all saddened by his passing for he was a faithful and dedicated member, who was always ready and willing to help in the formulation of policies of our organization and in promoting perpetuation of its success.

Born in Minneapolis on March 28, 1897, Dr. Carlson was educated in the Public Schools and Central High School. He attended the University of Minnesota graduating from the College of Dentistry, which became his profession. He was a member of the G.V. Black Club, a dental organization from the University of Minnesota since 1925; also a member of the Minnesota Dental Organization, Ark Lodge A.M.F.M., and an officer in World War I.

Dr. Carlson was a member of the Zion Lutheran Church, and when his children were small he taught Sunday School for 15 years. In 1940 he became a member of the American Council of the Boy Scouts of America, giving counsel, instruction and leadership in the field to the boys in his charge. Within the past few years he was training young men as leaders for future scouts. Mutual benefit and pleasure was the reward of the field trips on which Dr. Carlson led the groups, both in Scout work and Geology.

Outside of his work with the Boy Scouts, Geology was his outstanding hobby with the related studies of nature. The groups he led on Geology field trips were introduced to the wonders of earth science as new projects were discovered all over the country. It was a labor of love.

Dr. Carlson is survived by his wife, Angela, one daughter Mrs. Roger Anderson (Marilyn) of Eau Claire, Wisconsin, one son, Wollin Carlson, at Coon Rapids, and six grandchildren. Mrs. Carlson was a thoughtful helpmate and took part in the classes and trips that we all enjoyed. Dr. Carlson endeared himself to many with his genial and kind presence, and will be missed by everyone who knew him.

Marion S. Skahen