

# NEWS IN BRIEF

Compiled by Ann Fritz, Editor

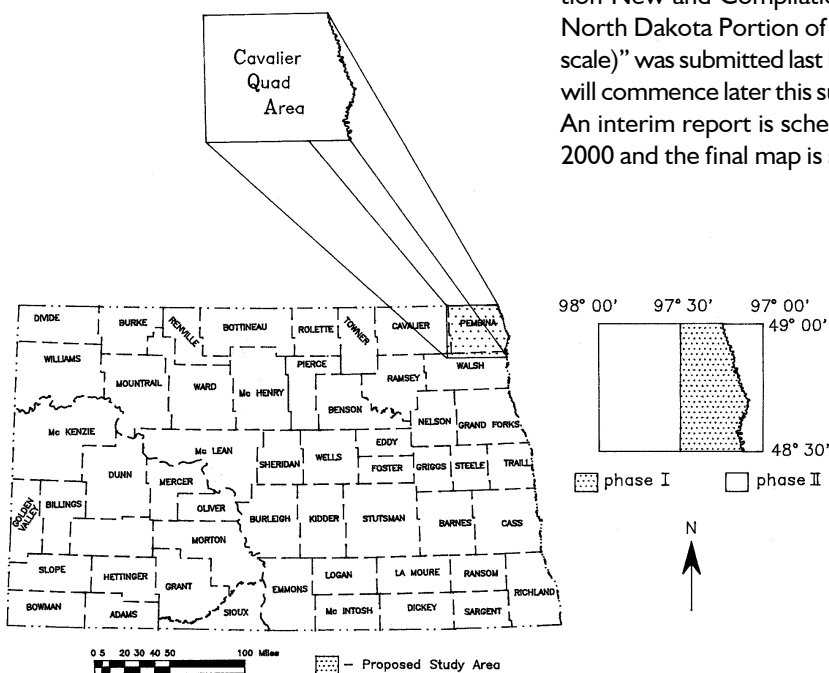


## NDGS Receives STATEMAP Grant

By Ann Fritz

The North Dakota Geological Survey received a \$25,853 federal grant from the U.S. Geological Survey as part of the National Cooperative Mapping Program to begin geologic mapping at 1:100,000-scale in the Cavalier quadrangle area. The National Cooperative Geologic Mapping Program exists between the state geological surveys and the U.S. Geological Survey to provide cost-share agreements to complete geologic mapping. The NDGS will provide an equal amount of money to bring the total project budget for fiscal year 1999 to \$51,706.

Ann Fritz and Karen Mitchell wrote the successful grant application that will provide money to continue geologic mapping in Pembina, northern Walsh, and eastern Cavalier counties (Figure 1). The proposal, entitled "Proposal for Combination New and Compilation Mapping: Surficial Geologic Map of the North Dakota Portion of the Cavalier Quadrangle Area (1:100,000-scale)" was submitted last November, 1998. Field work for the project will commence later this summer, and continue through next summer. An interim report is scheduled to be completed by the end of May, 2000 and the final map is slated to be completed by May 31, 2001.



**Figure 1.** Location of the Cavalier Quadrangle Area. Field work for phase I will begin this summer. Field work for phase II will begin June, 2000. The entire mapping project is slated to be completed by May, 2001.

NORTH DAKOTA

# 1999 Legislative Session

*By John P. Bluemle*

The fifty-sixth Session of the North Dakota Legislative Assembly ended its work on April 17, 1999, after 71 days of deliberations. In spite of a poor economy, particularly in the agriculture and energy industries, and a shortage of dollars to fund all items at the level everyone, including legislators, would have liked, the North Dakota Geological Survey fared quite well.

As I write this, only two days after the Legislature adjourned, it's not yet clear how much the Survey will have to operate on, but it appears that our budget for the 1999 - 2001 biennium will be slightly better than it has been during the current biennium, which will end on June 30, 1999. Most importantly, we will retain all of the positions we have had during the past two years. This was a real concern. As we began the budgeting process back in March of 1998, we were looking at possible cuts in both staffing and funding. Indeed, some agencies were eventually forced to make substantial cuts.

In addition to retaining our current staffing, we were granted a new full-time position, a Museum Specialist, whose time will be devoted to fossil exploration and preparation. This was a badly needed position as we have been forced, for the past eight years, to do this work by hiring temporary staff. The amount of work in this area has expanded considerably, as interest in the state's rich fossil resources has grown and the work-load for our one paleontologist has become almost unmanageable.

Our request for a half-time Data-Processing Coordinator was also approved. We will share this position with the Oil and Gas Division. Until now, we have had no one trained in this field, and we have had to rely on one of our petroleum geologists to oversee our computer maintenance, hardware, and software. In addition to keeping him from doing the kind of geologic studies that need to be done to encourage oil and gas exploration in the state, these computer duties are not what a geologist is trained to do. Having a person on our staff to oversee our increasingly complex computer operations, even if only on a half-time basis, will make these operations much more efficient.

The Legislature also approved the NDGS Information-Technology Plan with only minor changes, thus allowing us to maintain our geographic information system and expand other information-technology-related operations. The "IT plan," as it is called, insures that state agencies' computer technology is developed according to established technology standards, hopefully eliminating possible waste. We recently purchased a specialized geologic-interpretation software, Petra™, which will enable our geologists to be more efficient in constructing geologic maps, cross-sections, and other map-related tasks. Petra™ also has features that will make it useful for economic geology applications (volume, reservoir analysis, etc.).

The Legislature, although refusing our request for an entry-level geologist to accomplish some of the more basic geologic tasks, did allow us additional temporary funding to hire a part-time person to do at least some of this work. We had also hoped to use such a person, had the position been approved, to act as a field inspector for the rapidly growing number of geothermal installations in the state. As matters currently stand, it is difficult for our staff to field check all geothermal installations as they are installed.

Although approved and recommended in Governor Schafer's Executive Budget, our request for a shared geographic information system (GIS) specialist (half-time NDGS, half-time Oil & Gas Division) was denied by the legislature. We currently have one full-time GIS person who must deal with our own rapidly growing electronic mapping and other GIS needs as well as those of several other state agencies that rely on us for this service.

And finally — salaries. During its last day of operation, the fifty-sixth Legislative Assembly approved a salary-enhancement package calling for a minimum two-percent raise during each of the next two years for each state employee. Agencies may also provide an additional one percent increase on July 1, 2000, provided they can find money in their budgets to cover the necessary funding.

# Celebrate Earth Science Week at the Earth Science Fair

The North Dakota Geological Survey (NDGS) and the State Historical Society of North Dakota are pleased to be co-sponsoring an Earth Science Fair. The Earth Science Fair is in honor of Earth Science Week, which Governor Ed Schafer has proclaimed for the week of October 10-16. The Governor's proclamation states that "geology and the other earth sciences are fundamental to the well-being of our society." The Earth Science Fair is designed to showcase Earth Science activities in North Dakota and provide hands-on opportunities to learn more about the world around us. "We're very excited to be planning the second Earth Science Fair," says Ann Fritz, NDGS Geologist, "the response from teachers who attended last year's fair was so positive, we are hoping to repeat our success."

The Earth Science Fair will be held October 15-16, 1999 at the North Dakota Heritage Center in Bismarck. Friday, October 15, is reserved just for junior high school kids; information and registration packets will be mailed to teachers at the beginning of the 1999-2000 school year. Students and their teachers who attend the fair will participate in hands-on experiments about glaciers, soil, dinosaurs, the Williston Basin, and geologic maps. Each experiment will highlight a different aspect of North Dakota geology and will be presented by an NDGS geologist or a Natural Resource Conservation Service soil scientist.

The Earth Science Fair will continue on Saturday, October 16, with family-oriented events and activities. Activities begin at 1 p.m. with a lecture on prehistoric life in North Dakota, followed by a walking tour of the geology of the State Capitol grounds, and by additional lectures on North Dakota soil and landforms and petroleum resources. In addition, NDGS geologists will be available to answer questions about North Dakota's rocks, minerals, fossils, and other natural resources. All events on Saturday are free and open to the public.

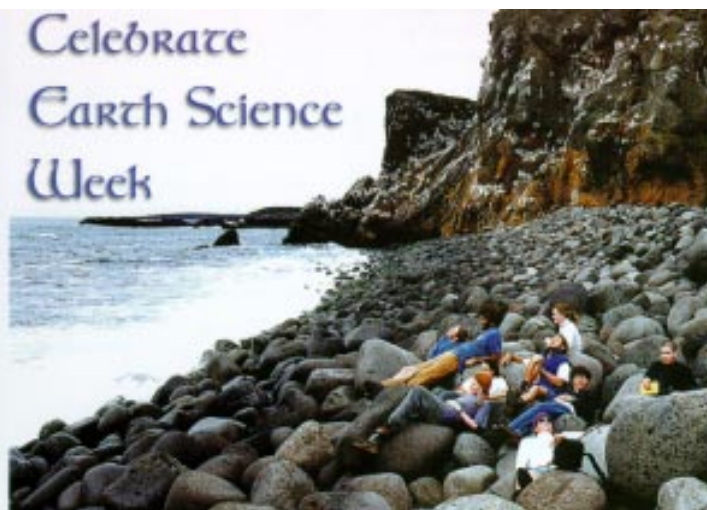
Earth Science Week began in 1997 when the Association of American State Geologists passed a resolution declaring the second week of October as "Earth Science Week." The American Geological Institute (AGI) is the national sponsor of Earth Science Week and is the lead organization coordinating national events. Last year, proclamations were issued from 39 different mayors and governors in honor of Earth Science Week. North Dakota's proclamation, signed in 1997 by Governor Ed Schafer, was among the nation's first proclamations.

The focus of Earth Science Week is on activities that will occur within individual communities. A common theme uniting each state's proclamation of Earth Science Week is the

recognition that an understanding of geology and the earth sciences can help citizens make wise decisions for land management and use. Knowledge of geology is crucial to addressing environmental and ecological issues and geology provides the basis for preparing for and recovering from natural disasters. The annual October celebration will give geoscientists and earth-science organizations repeated opportunities to:

- Give students new opportunities to discover earth sciences,
- Highlight the contributions that earth sciences make to society,
- Publicize the message that earth science is all around us,
- Encourage stewardship of the Earth, and
- Develop a mechanism for geoscientists to share their knowledge and enthusiasm about the Earth and how it works.

**\*Note:** The photo is from a postcard prepared by the American Geological Institute (Photo & design by Barbara Tewksbury). *Hamilton College geology students basking on the boulder beach near Reykjanestá, Iceland.*



# Book Review

By John P. Bluemle

*Robert W. Lewis, Editor, NDQ North Dakota Quarterly, 1998, Grand Forks, University of North Dakota, 372 pages.*

Book reviews are not a regular feature of the *NDGS Newsletter*, nor am I a person who regularly reviews articles and books. Neither, with my physical science and decidedly non-literary background, am I at all skilled at doing so. Even so, when I received the most recent copy of the *North Dakota Quarterly* (NDQ, volume 65, number 4, dated 1998) I couldn't pass on the opportunity to comment on this issue for the readers of our own newsletter.

This issue of NDQ deals with the Red River Valley. Although it includes articles, poetry, and ruminations on a variety of topics, the emphasis is definitely on the 1997 flood. Many of the contributors (and the editor, Bob Lewis) are friends, people I have known for years.

In my opinion, this issue of NDQ is especially excellent for the skillful way the contributors have, as a group, defined and personalized the Red River Valley, a "place" I love and lived in for 27 years. Things I've observed — forever it seems — purple coneflowers, buffalo rubbing stones, the wonderfully unique prairie environment, and of course, the vast, seemingly endless and flat floor of glacial Lake Agassiz and broad flood plain of the Red River of the North — these are all carefully and skillfully considered in a variety of essays by people whose knowledge of and appreciation for the area is apparent.

The first articles in this volume deal with the early history of the Red River Valley. Mary Jane Schneider writes about early settlements in the Red River Valley. John Anderton discusses the Red River prior to major American settlement. Theresa Schenck provides a perspective on the Native American role in establishing the Red River Colony. For me, these first three essays, along with Jay Meek's poem "Red River of the North," help set the stage for the rest of the volume.

The volume also includes an essay/bibliography by Glinda Crawford on the natural history of the Red River Valley ("Growing Prairie Roots"). Her contribution is particularly valuable for me as it points the way to additional sources of pertinent information. I've recently been reading about some of the earliest non-Native American excursions into the Red River area, by individuals and expeditions such as Stephen Long in 1823 and David Dale Owen in 1848. These expeditions included among their number a variety of scientists, whose geologic and other observations helped to provide a more meaningful basis for understanding the rich history of the Red River Valley. Ms. Crawford's article makes it much easier for me to define what I still need to do if I am to adequately understand what early explorers like Long and Owen did and saw.

Paul Todhunter provides "A case study of the Grand Forks Flood of 1997," another particularly pertinent article for me because of its informed perspective on another topic I've recently been involved in, the 1997 Red River flood. In still another flood-related article, James Mochoruk writes an excellent history-based account of how flooding and the settlers' perception that they would never be personally harmed by floods, affected Winnipeg and other Red River Valley communities. Mochoruk's perspective as a historian somewhat parallels my own as a geologist. He observes how unwilling people have been to accept what the river has done in the past, and will do in the future. Thus, Winnipegers have refused to accept the reality of the 1826 flood, which was probably higher than the one in 1997. I also enjoyed the photo (and literary) essay on the flood (authored by Morton Ender, Carol Hagen, Clifford Hagen, and Corina Morano-Ender).

I realize I've touched on only a few of the articles; the volume includes so much more. I definitely recommend this issue of the NDQ.

Finally, a subscription to the NDQ, a consistently excellent journal of innovative and provocative thinking and literary writing on topics relating to North Dakota and the Great Plains, is a bargain at \$25/year (USA subscriptions). If you are interested in receiving the NDQ, I'd suggest you write to Dr. Robert W. Lewis, editor, *North Dakota Quarterly*, P.O. Box 7209, University of North Dakota, Grand Forks, ND 58202-7209 (or call 701-777-3321). The NDQ has been published at UND for 90 years, providing works of fiction, non-fiction, poetry, and criticism. It stands out particularly for its unique perspective of the Northern Plains and the American Midwest. This latest issue is a masterpiece!