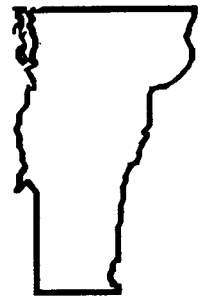
# THE GREEN MOUNTAIN GEOLOGIST



QUARTERLY NEWSLETTER OF THE VERMONT GEOLOGICAL SOCIETY

SUMMER/FALL 1998 VOLUME 25 NUMBER 3/4

## *Celebrating*

# Earth Science Week

## October 11–17, 1998

***See Inside for Calendar of Events and other Details***

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***THE GREEN MOUNTAIN GEOLOGIST***
VERMONT GEOLOGICAL SOCIETY
DEPARTMENT OF GEOLOGY
UNIVERSITY OF VERMONT
BURLINGTON, VERMONT 05405-0122

The *GREEN MOUNTAIN GEOLOGIST* is published quarterly by the Vermont Geological Society, a non-profit educational corporation.




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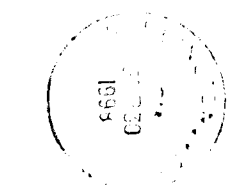

# President's Letter

September 17

Dear Members,

Greetings from my home in the beautiful Sterling Mountains. As I write this letter, the Fall semester is now well underway and the long, hot and hazy summer days are fading from my memory, although having spent a chunk of the summer in England long, hot and hazy summer days were sadly lacking. Many lamented about the weather and asked the question "Global Warming - What Global Warming?" as England suffered one of it's coldest summers in recent years. Still Fall in Vermont brings with it a unique beauty that can make up for almost anything.

The recent summer field trip by Charlotte Mehrtens on Isle La Motte was a great success with many members turning out to see this unique geological local. Despite the rain it was a really interesting field trip, wonderfully presented. With the summer field trip behind us we now turn our attention to the upcoming events surrounding Earth Science Week which is October 11-17. To help celebrate this time, the Vermont Geological Survey and other businesses are planning activities that highlight the contribution of earth sciences to Vermont's economic and natural heritage. More information about these events can be found in this issue of the GMG. The Vermont Geological Society is also doing it's part in planning activities for Earth Science Week. The society along with the Perkins Geology Museum is sponsoring a poster contest for Vermont schools with the theme of Earth Science in Vermont. We are also working with the folks at the Fairbanks Museum to publicize awareness of Earth Science particularly in the weather segments done by the museum for VPR. If anyone has any other suggestions about how we can celebrate Earth Science Week either now, or in the future let us know. I hope that many of you will support these events and make Earth Science Week a permanent part of the geologic calendar.

Best Regards
Tania Bacchus, Johnson State College
bacchust@badger.jsc.vsc.edu



# STATE OF VERMONT
# EXECUTIVE DEPARTMENT
# A PROCLAMATION

**WHEREAS,** geology and the other earth sciences are fundamental to health, safety, and welfare of Vermonters and to the economy of Vermont; and

**WHEREAS,** the earth sciences are integral to conserving, finding, and developing water, mineral, and energy resources needed for society's continued prosperity and well-being; and

**WHEREAS,** the earth sciences provide the basis for preparing for and mitigating natural hazardssuch as floods, landslides, earthquakes, drought, and shoreline erosion; and

**WHEREAS,** the earth sciences are crucial to environmental and ecological issues ranging from water and air quality to waste disposal; and

**WHEREAS,** geological factors of resources, hazards, and environment are vital to land management and land use decisions made in Vermont; and

**WHEREAS,** the earth sciences contribute critical pieces to our understanding of and respect for Vermont's heritage and natural systems;

**NOW, THEREFORE,** I, Howard Dean, Governor, do hereby proclaim October 11- 17, 1998 as

**EARTH SCIENCE WEEK**
in Vermont.

Given under my hand and the Great Seal of the State of Vermont this 2nd day of June, A.D. 1998.

# *Earth Science Week Activities*

Mark your calendars now for Earth Science Week, October 11-17, one of the American Geological Institute's 50th anniversary celebrations. Several Vermont organizations and businesses are planning activities to observe the week by highlighting the contributions of earth sciences to Vermont's economic and natural heritage.

Additional information about Earth Science Week is available from the Vermont Geological Survey, 103 South Main St., Laundry Building, Waterbury, VT 05671-0301. Local events are posted on the web site at http://www.anr.state.vt.us/geology/vgshmpg.htm. The American Geological Institute, a not-for-profit federation of 32 professional organizations in the Earth Sciences, has a list of Earth Science Week ideas and activities. They may be contacted at AGI, 4220 King Street, Alexandria, VA 22302 or by visiting their web site at www.earthsciweek.org.

***Ongoing Events:***

**Poster Contest,** Due date October 9, 1998 with winners announced October 15: The Vermont Geological Society and Perkins Geology Museum are sponsoring a poster contest for Vermont students in grades 3-5, 6-8, & 9-12. There will be a $50 cash prize for each grade group. Need More Information or Ideas for Earth Science Week?: Contact the Perkins Museum at 656-8694; Earth Science Poster Contest, Perkins Museum, Geology Department, University of Vermont, Burlington, VT 05405-0122 or Christine Massey at 656-1344. Email: cmassey@zoo.uvm.edu

**Classroom visits** by professional and adademic earth scientists, Oct. 12-16, 1998
Teachers may contact Marjie Gale at the VT Geological Survey for more information and reservations:
Marjorie Gale- marjieg@dec.anr.state.vt.us Geologist/Information & Education,Vermont Geological Survey 103 South Main St., Laundry Building
Waterbury, VT 05671-0301
tel. (802) 241-3608
fax (802) 241-3273

***Sunday October 11, 1998: Geologist-in-the-Park***

- Peter Gale will be at the summit of Owl's Head Mountain in Groton State Forest



- Marjorie Gale will be at the hut at Smugglers Notch from 12-4.

- Redstone Quarry, Hoover St., South Burlington, noon until 4 p.m.. Shelly Snyder, geologist and educator from Mt. Abraham Union High School, and Meg Petersen, elementary educator, will be at the quarry to lead tours and discuss local geology.

- Greg Walsh, a geologist with the U.S. Geological Survey, will lead a hike, "The Geology of Mt. Ascutney: A Hike Up Vermont's Most Famous Volcano." The hike will leave from the Cascade Falls Trail parking lot on the southwest side of Mount Ascutney at 9 am. Pre-registration is required for the hike as there is a limit of 15 participants on the hike. Please call 241-3608.

Special Walking Tour; "Ice, Water, and Stone on Mt. Tom: Looking into an Evolving Landscape" Host: Marsh-Billings National Historic Park Contact: Dr. Thomas Hemmings
Telephone: (802) 457-3368
Location: Marsh-Billings National Historic Park, Woodstock, VT Time: 2 p.m.- 4:30 p.m.
Information: Tour is free to the public. Meet at the Billings Farm Visitor Center at 2 p.m.

***Monday and Tuesday, October 12 & 13, 1998***

Perkins Museum Open House for Teachers, UVM Burlington Campus (off Colchester Avenue), 2-6pm

Teachers are invited to visit with Museum staff about the Earth Science exhibits in the Perkins Museum at UVM between 2:00-6:00pm. Learn about the Charlotte Whale (Vermont's State Fossil); Compare our dinosaur tracks with your own; Ask questions about Vermont's geologic history; Examine rocks and fossils from Vermont and around the world; Learn about the structure of the Earth; & More! Get ideas about local earth science field trips, pick up free brochures and hand-outs, and shop for Vermont rock and mineral collections created by the Vermont Geological Survey for Vermont students. Let us help you get better prepared for your classroom visit to the Museum.

Call the Perkins Museum at 656-8694 for details and parking information. The Perkins Museum is housed in the Geology Department of the University of Vermont and is free and open to

the public. Monday and Tuesday, October 12 & 13, 1998 -- Perkins Museum Open House for Teachers, UVM Burlington Campus (off Colchester Avenue), 2-6pm

Teachers are invited to visit with Museum staff about the Earth Science exhibits in the Perkins Museum at UVM between 2:00-6:00pm. Learn about the Charlotte Whale (Vermont's State Fossil); Compare our dinosaur tracks with your own; Ask questions about Vermont's geologic history; Examine rocks and fossils from Vermont and around the world; Learn about the structure of the Earth; & More! Get ideas about local earth science field trips, pick up free brochures and hand-outs, and shop for Vermont rock and mineral collections created by the Vermont Geological Survey for Vermont students. Let us help you get better prepared for your classroom visit to the Museum.

Call the Perkins Museum at 656-8694 for details and parking information. The Perkins Museum is housed in the Geology Department of the University of Vermont and is free and open to the public.

***Wednesday, October 14, 1998 - Earth Science Field Trip for Teachers***

- Host: Geology Department, Pluess-Staufer/Omya
  Contact: Alice Blount (ext. 267) or Ruth Gibbud (ext. 225)
  Telephone: (802) 459-3428 (extensions above)
  E-mail: alice.blount@omya.com
  Location: Middlebury Quarry
  Time: Late afternoon. Call for details. Free bus transportation from Rutland/Proctor area will be provided if sufficient interest.
  Information: Omya's Middlebury quarry is a ideal site for school classes to learn about earth science, minerals and their importance to society and to Vermont. This field trip will show teachers what is available to fit their particular class needs.

***Saturday, October 17, 1998***

A field trip in the Stowe area, led by Larry Becker and sponsored by the Green Mountain Club, will close the week on October 17. Please contact the Green Mountain Club for information at 244-7037, ext. 23

(3) Although plans are not yet finalized, Jon Kim hopes to do an activity for school children at Hubbard Park in Montpelier during the week. Christine Massey plans "to do something" at UVM. The VGS has plans to have an organizational meeting for Earth Science Week in early September.



***Saturday, October 17, 1998—Earth Science Week Family Hands-on Mineral Identification workshops***

- Host: Omya/Pluess-Staufer employees
  Contact: Ruth Gibbud (ext. 225) or Alice Blount (ext. 267)
  Telephone: (802) 459-3428 (extensions above)
  E-mail: alice.blount@omya.com
  Location: Vermont Marble Exhibit, Proctor, VT (entrance fee for adults)
  Time: 1:00, 2:00 and 3:00
  Information: This workshop is fun hands-on activity appropriate for 3rd grade on up. We will do simple mineral tests and learn about minerals we use everyday. In addition, families can discover the new geology exhibition hall which has just opened for the first time in September.

## *Earth Science Week*

The American Geological Institute is initiating a week of celebration of the Earth Sciences from October 11 through 17, 1998. the intent of the week is aligned with one of the Vermont Geological Society's goals, to bring geology to classrooms. To that end, I ask you to volunteer a small amount of time to work with your local schools. My hope is to have a list of members who are willing to participate in ways that can be used to bring geologists, teachers, and students together. This is an opportunity to share information about the importance of studying earth sciences, careers, education, and rocks. Please contact me through snail mail:

Shelley Snyder
72 Blacklantern Lane
So. Burlington, VT 05403

or e-mail:

ssnyder@mtabe.k12.vt.us

Please indicate what your level of participation will be and the location you are willing to participate in.

If any of you have an idea for contests or prizes for state-wide contests, please forward them to me as soon as possible. I will be sending information to the Vermont Science Teachers Association news letter this summer.

Governor Dean has issued an Earth Science Week proclamation in Vermont. This is a great opportunity to publicize the Vermont Geological Society.

Thank you.

Shelley F. Snyder

## *Press Release from the American Geologic Institute*

WASHINGTON, D.C ~ Earth Science Week gained Congressional recognition today when Sen. Ron Wyden (D-Ore.) entered the Earth Science Week resolution into the Congressional Record and also stated his support for the earth sciences. The resolution, issued by the Association of American State Geologists, designates the second week of October as Earth Science Week. This year is the first for this annual celebration of the earth sciences and their crucial role in society. The Congressional recognition comes after 14 state governors have proclaimed Earth Science Week.

"We are especially pleased that Sen. Wyden has taken a leadership role to bring this issue to the nation," says Donald Hull, state geologist and director of the Oregon Department of Geology and Mineral Industries. "The resolution recognizes, at the highest level of public policy formation, the importance of geologic understanding as a basis for reducing the risk of geologic hazards and for identifying needed energy, water, and other natural resources."

Hull adds that Sen. Wyden has a long history of supporting preparations to reduce the effects of geologic hazards and of supporting the state survey's efforts to map those hazards. In his statement, the senator said, "Today I want to recognize the important role played by the earth sciences in expanding our economy, supporting our national goals, and increasing our knowledge of the larger world."

Sen. Wyden's support of Earth Science Week in the Senate highlights the celebration's significance as well as the importance of the earth sciences, says David Seldin, a spokesman for Sen. Wyden's office. "More and more, issues are coming to the forefront that require a thorough understanding of how the Earth works," Seldin says. "Sen. Wyden thought it was important to highlight the contributions that geologists and other earth scientists make, through research and education, to finding solutions for some of our country's most difficult decisions."



The governors of 14 states ~ Alabama, Arizona, Colorado, Florida, Illinois, Kansas, Kentucky, Maine, Nevada, North Carolina, North Dakota, Ohio, Oregon, and Vermont ~ have already issued Earth Science Week proclamations, and more are expected. The foundation of each proclamation is that geology and the earth sciences are fundamental to society and to our quality of life. Citizens who understand geology and the earth sciences can make wise decisions for land use and management. The earth sciences are crucial for addressing environmental and ecological issues and provide the basis for preparing for and mitigating natural hazards.

Earth Science Week is one of the American Geological Institute's most ambitious 50th anniversary initiatives. Geoscience organizations and individual geoscientists have responded enthusiastically to the idea. Schools, universities, museums, state geological surveys, and AGI member societies are planning Earth Science Week events. "The goal for Earth Science Week," says AGI President Susan Landon, "is to have every geoscientist in the country do something in his or her community to promote the earth sciences." As sponsor of Earth Science Week, AGI is a clearinghouse for ideas, activities, and special events, and provides support materials that make it easy for volunteers to participate.

Information about Earth Science Week, as well as a copy of the Association of American State Geologists resolution, is available from the American Geological Institute and on the World Wide Web at http://www.earthsciweek.org. To see Sen. Wyden's statements, go to "Proclamations."

The American Geological Institute, founded in 1948, is a not-for-profit federation of 32 professional organizations in the earth sciences representing more than 100,000 geologists, geophysicists, and other earth and environmental scientists.

# *Vermont's Oldest "Reef" Rock Quarry*

Tania Bacchus, Johnson State College

After our recent field trip to Isle La Motte, Linda Fitch a local property owner has been in contact with the Society to request support from members of the geologic community. Linda Fitch owns Fisk Farm which is a property adjacent to the quarry that contains some of the oldest "reef" rocks in Vermont. This is the quarry that was highlighted in the Burlington Free Press (mainly through Charlotte Merten's efforts) a few months back. The owner of the property on which the quarry is located is actively seeking to allow the stone to be quarried. The owner has applied for an Act 250 permit from the state to allow this activity. Linda Fitch and many others are against this development. She is trying to organize support for a non profit organization to buy the land from the present owners and keep this unique geologic site undisturbed.

So how can members of the Society help? Linda has asked that members of the geologic community who agree with the position that this unique geologic site should be preserved for it's educational value and kept accessible to the geologic community can write letters of support to Linda which she would like to include in her proposal.

To find out more about this issue and how you can help contact Linda Fitch at
44 West Shore Road
Isle La Motte
VT 05463
(802) 928 3364



# *STATE GEOLOGIST'S REPORT*

Laurence R. Becker
Vermont State Geologist and Director, Vermont Geological Survey

***Geologic Maps presented in Washington D.C. and Portland, Maine***

On March 18, the State Geologist participated in a map presentation organized by the Association of American State Geologists for members of Congress and their staff in the Rayburn House Office Building. Basic bedrock geologic maps and applied examples were well received in Vermont congressional offices and at the STATEMAP display. Examples used were (1) calcium in rocks and how they might influence growth of zebra mussels; (2) geologic information as it relates to in-ground manure storage and elevated nitrate levels in a well; and (3) the Mount Mansfield quadrangle represented as a three dimensional display. (The 3D display was created with the GIS assistance of PJ Telep of the Water Supply Division.) From the visit, we learned that Senator Leahy is interested in the unique geologic aspects of Lake Champlain and Senator Jeffords office is interested in geology sites as part of historical education areas. All three of the Vermont delegation are supporters of the National Geologic Mapping Act which includes STATEMAP. The upcoming Texas Compact vote in the Senate was also discussed with congressional staff.

Meetings were held with FEMA about hazards such as seismic risk, erosion, and flooding . A meeting with EPA covered geologic information that might appear on their "Surf Your Watershed" home page and the upcoming ground water disinfection rule. The visit to D.C. also enabled a meeting with Jim Quick, chief geologist of the eastern regional mapping team at USGS, to discuss plans for finishing the new Vermont State Bedrock map.

On March 20 at the Northeastern Geologic Society of America meeting in Portland, Maine a significant step in the compilation of the new State Map was displayed. Two one degree sheets (Montpelier and Rutland) were brought together by the Vermont Survey working to the North and the USGS working to the south. Stratigraphic units and columns were agreed upon and a coloring scheme. Marjorie Gale provided superior compilation assistance which fostered a well attended joint Vermont Survey and USGS poster session with much discussion.

Jonathan Kim and George Springston, from work done under contract to the Vermont Survey, presented a paper at Portland entitled "Structure and Tectonic Stratigraphy in the Stowe-Moretown Belt of Northern, Vermont

*Status of the New Bedrock Geologic Map*

On June 30, 1998, the Vermont Survey met with the UVM Prof. Rolfe Stanley, editor of the Northern, Vermont portion of the developing State bedrock map and Dr. Nick Ratcliffe of the USGS - editor in Southern, Vermont. A schedule for necessary steps to reach the next milestone in production of the new State Geologic map was worked out. By January 1999, all Vermont one degree sheets will be drafted with accompanying description of map units. This "mock up" will be presented to digital cartographers at USGS in Reston to determine if all map units and colors can be successfully incorporated into a final product. Rolfe Stanley, Peter and Thelma Thompson, Barry Doolan, Doug Rankin, Charlotte Mehrtens, Jon Kim, and Marjorie Gale all were in the field at various times this summer to make connections and solve remaining problems in the compilation.

Nick Ratcliffe working in Southern Vermont, John Aleinikoff, and Greg Walsh coordinated with the northern mappers on selecting units to sample for age dates.

*Surficial Geologic Mapping*

On July 2, 1998, the Vermont Survey met with the two map teams conducting surficial geologic surveys in Montpelier/Barre and the St. Johnsbury areas. The purpose is to develop uniform map units with a digital database in mind. Consistency in and mutual awareness of mapping approaches will benefit the development of digital protocols for inputting map data as well as laying the ground work for consistency in future surveys.

Dr. Fred Larsen with assistance from Chuck Axell and Nate Finuccine is mapping in the Montpelier Quadrangle. Dr. Stephen Wright with the assistance from Rob Dankert is mapping the Barre West Quadrangle.

The eastern portion of the St. Johnsbury- 15 minute sheet combines the work of George Springston and Dr. George Hazelton. Scott Applegate is compiling the subsurface well log and boring data.



On July 31, 1998, a lead story with full color pictures entitled "In Search of Ancient Lake Frontage" by Stephan Hard appeared in the Times Argus. The story focused on the Larsen and Wright mapping in Central, Vermont and Fred's lake level projections and the subsequent search for evidence.

Dr. William Shilts, State Geologist of Illinois and former surficial geologist for the Canadian Geological Survey (who mapped in Vermont early in his career) led a field trip to show glacial features in Québec. He related discoveries made in Québec to Vermont. He believes that there are two major directions of ice flow that affected Québec and could well have influenced Vermont during the last glaciation—one flowing to the West-Southwest and the other to the Southeast. As the Vermont Survey is now conducting surficial geologic surveys, these overarching concepts are important to mappers interpreting the geologic conditions within specific quadrangles.

*Future Ground Water Sources*

As part of the Ground Water Coordinating Committee, the State Geologist is a member of a subcommittee that is developing a procedure for designating potential public water supply sources. As the Vermont Survey has a resource based function, it seems logical that the designation of such areas - which is the responsibility of the Secretary of Natural Resources- could come from this office. A municipality would have to request a "potential public water supply source" designation which is different from a "future class II" and does not involve any land use constraints. The current proposal is to allow the designation as resources and time allows. The use of the Drinking Water State Revolving Fund (DWSRF) priority list to predict where a community may be looking for a new supply and may want a designation is part of the proposal. Also, as the Vermont Survey is conducting surficial geologic mapping that can be interpreted for aquifer potential, it is a way of using the priority list to focus the mapping in areas where there is a need for information to apply to aquifer issues. All designations would be reviewedby the Ground Water Coordinating Committee.

*Seismograph installed in Waterbury*

The Vermont Survey now has a Seismic Data Acquisition Station (SDAS) installed in one of the Vermont Survey's store rooms in the basement of the Waterbury Complex. This is due to a cooperative relationship between the Weston Observatory of Boston College and the

Vermont Survey. The Vermont Survey provides space and Weston covers the costs of installation, operations and maintenance. Ned Johnson from Boston College and George Springston consultant to the Vermont Survey installed the SDAS. The seismometer and seismograph are linked by phone lines to the Weston Observatory. The SDAS is part of the New England Seismic Network (NESN). The seismograph will be used to record vibrations (seismic waves) that travel through the earth during an earthquake. The data are used to determine the time, location, and magnitude of an earthquake. The next step is to be able to link the output of the device to the internet so that data can be viewed from the Vermont Survey's home page.

***Burlington and Seismic Safety***

The Vermont Survey met with the Burlington City Engineer and Building Inspector and presented a seismic hazard map interpreted from summer 1997 surficial geologic mapping. The hazard map shows areas where earthquake waves could be amplified. Downtown Burlington including parts of Pine Street is one such area because of its thicker layer of unconsolidated material over bedrock. The City Engineer was quite interested in the subject as he believes that a break in an outfall in soft lake bed material may have been facilitated by a previous seismic event. There will be a follow up with some specific material on the behavior of different types of buildings in quakes.

***Rock Park***

In the earth science education field, a concept is developing by which areas would be set aside so that varieties of rock types can be displayed and explained. In this way, a rock park could be visited by the public and school children to get an understanding geology at one location. Mr. Harold Grout is developing a small park near the Senior Citizen Apartments in Springfield that he hopes will have an explanation of the variety of rocks that can be found there. At Mr. Grout's request, the Vermont Survey visited with him on April 16 to see if this concept would work at a location next to the Black River. There indeed is potential and the Vermont Survey plans to provide explanations of the rocks found there to assist Mr. Grout as he develops what he plans to name Lovejoy Mini-Park.

***Maps of State Land—Pine Mountain Wildlife Management Area***



For the biodiversity project on the Pine Mountain Wildlife Management Area, the Vermont Survey constructed overlay maps for the Geology/Soils component of the analysis. The layers constructed using Adobe Illustrator software consist of topography, bedrock, surficial geology, soils, quarries, boundaries, and the natural communities map with draft cover report. As the State Geologist is also a member of the ANR State Lands Policy Team, these maps can be used as examples of an inventory of the physical attributes of a piece of property. The Vermont Survey has received several requests for geo/soils from private landowners conducting thorough assessments of all aspects of their acreage. Jon Kim, GIS specialist, provided the expertise in Adobe Illustrator to produce the map products. At a meeting of the natural communities element team, the map presentation was very well received. Scott Darling, leader of the biodiversity effort, requested that for the final report the Vermont Survey's map base and Adobe techniques be used to display the proposed Pine Mountain biodiversity management plans. There are some funds from the biodiversity project that could be used for the map products.

***Association of American State Geologists Meeting in Portland, Maine***

As a member of the Environmental Affairs Committee of the Association of American State Geologists, the Vermont State Geologist brought the USDA and EPA Farm-A-Syst program and the USDA SEEPAGE model to the attention of the Association. Both use geological information to assess the vulnerability of ground water to contamination. The Association will plan to make contact with the USDA and EPA to learn more and discuss the value and the need for geologic information in assessing risks to ground water.

U.S. EPA, Office of Water, will go forward and provide State Geological Surveys with the opportunity to participate in "Surf Your Watershed" which is an internet service intended to get environmental information about watersheds into the hands of citizens and managers. In partnership with EPA, State Geological Survey can use Surf Your Watershed to present natural resources information about geology and groundwater that is compiled by watersheds designated by the U.S. Geological Survey eight-digit Hydrologic Unit Code.

***Stream Geomorphology***

Responses to a Request for Proposal were received on July 7 for the Phase II Technical Analysis. The methodologies in each proposal all

were with merit and different in scope. Interviews helped the technical subcommittee to better understand the nature of the proposals and the professional qualifications of the research groups. Their presentations were cogent and professional and displayed a clear analysis of the problems at hand. As always, when there is merit in the various concepts presented it is difficult to choose.

The subcommittee determined that the Center for Watershed Protection of Ellicott City, Maryland in cooperation with Aquafor Beach Limited from Ontario Canada; Lori Barg of Plainfield, Vermont; and Robert Kort of the Natural Resources Conservation Service in Winooski, Vermont best met the needs.

On August 25th, the technical subcommittee held a start-up meeting with the Center for Watershed Protection. The meeting focused on the process to pick subwatersheds and stream reaches for the rapid geomorphic field assessment to be done October 10-14. By early September, the Center will prepare an objective rationale for picking watersheds for review by the technical subcommittee. With this settled, the consultant will use existing information to discover the data rich areas that fit the rationale. At the end of September, the consultant will perform a reconnaissance on watersheds and reaches to prepare a tightly focused list with a few backups. The committee will have reviewed this list and on October 9th meet with the consultant to finalize.

***Radioactive Waste***

On Wednesday, July 29, the House of Representatives approved the Conference Report on H.R. 629, the Texas Compact Consent Act by a vote of 305 to 117. Four hours of senate debate and the vote is expected on September 1, 1998.

Laurence R. Becker, State Geologist
Vermont Geological Survey
103 South Main Street
Waterbury, Vermont 05671-0301
Phone - 802-241-3496
Fax - 802-241-3273
e-mail larryb@dec.anr.state.vt.us
http://www.state.vt.us/anr/geology/vgshmpg.htm



You can contact the State Geologist's Office by calling : (802) 241-3608, or writing to: State Geologist Agency of Natural Resources; 103 South Main Street—Center Building; Waterbury, Vermont 05671-0301

# *VERMONT GEOLOGICAL SOCIETY NEWS*

***Fall Field Trip***

Given the many field trips offered in association with this year's Earth Science Week and led by VGS members, the Vermont Geological Society will not be host a separate Fall field trip this year.

***Annual Meeting***

We hope to schedule the the Annual fall meeting during late October or early November. Members will receive notice via e-mail and postcards.

A slate of new Officers is presented on the ballot printed as the last page of this issue of the GMG. In addition to voting for new Society officers, other business coming before the Society will be discussed.

***Vermont Geological Society Student Presentation Awards: Spring 1998 Meeting***

The recipient of the Doll Award for best undergraduate presentation was Ashaki Rouff - Geology Department, Middlebury College

Runner up (undergraduate) was Stephen Monninger - Geology Department, Middlebury College

The recipient of the Best Graduate Presentation was Sarah Brown - Geology Department, University of Vermont.

# *SEMINARS, MEETINGS, AND FIELD TRIPS*

September 20–26: Vermont Archeology Week: Contact VGS members Kathleen Callum and Robert Sloma for a calendar of events and details, (802) 247-8127, geoarch@sover.net

October 5: University of Vermont Fall Seminar Series (4:30 P.M.): *"Interpreting histories of environmental change from the organic matter contents of lake sediments"*Philip Meyers, University of Michigan

October 9–11: NEIGC Field Conference, Hosted by the University of Rhode Island. Contact Daniel Murray for more information e-mail at: dpmurray@uriacc.uri.edu or the NEIGC Web Site can be accessed at: http://kilburn.keene.edu/earthscience/neigc/neigc.html

October 19: University of Vermont Fall Seminar Series (4:30 P.M.): *"Geodynamic of the San Andreas: Why Mendocino matters!"* Kevin Furlong, Pennsylvania State University.

October 21: University of Vermont Fall Seminar Series (4:30 P.M.): *"Lake-level fluctuations of the Dead Sea and Pleistocene Lake Lisan"* Yehouda Enzel, hebrew University, Jerusalem, Israel

October 25–29: Geological Society of America National Meeting, Toronto.

November 9: University of Vermont Fall Seminar Series (4:30 P.M.): *""Been there, done that, dumped that, kept that—35 years of research"* Rolfe Stanley, University of Vermont.

November 23: University of Vermont Fall Seminar Series (4:30 P.M.): *"Biogeochemistry of stagnant oceans: Permian and Ordovician catastrophes"* Lee Kump, Pennsylvania State University

December 7: University of Vermont Fall Seminar Series (4:30 P.M.): *"Syn-tectonic pluton intrusion in the Northeast Kingdom, Vermont"* Kim Hannula, Middlebury Coollege



## ABSENTEE BALLOT: 1998
### *Vermont Geological Society*

**Officers:**

| | | |
|---|---|---|
| President | Marjorie Gale | _____ |
| | _____ | _____ |
| Vice-President | Shelley Snyder | _____ |
| | _____ | _____ |
| Secretary | Jeff Pelton | _____ |
| | _____ | _____ |
| Treasurer | Allan Carpenter | _____ |
| | _____ | _____ |

**Board of Directors (Select 2):**

| | |
|---|---|
| Kent Koptiuch | _____ |
| Kristen Underwood | _____ |
| _____ | _____ |

If you will not be attending the 1998 VGS Annual Meeting, please complete this ballot and return it in an envelope marked with the word "BALLOT" in the lower left hand corner and your name and address in the upper left hand corner to:

Allan Carpenter, Treasurer VGS
Department of Geology
University of Vermont
Burlington, VT 05405

To be counted, this ballot must be received by October 31, 1998.