
THE GREEN MOUNTAIN GEOLOGIST



QUARTERLY NEWSLETTER OF THE VERMONT GEOLOGICAL SOCIETY

VGS Website: www.uvm.org/vtgeologicalsociety/

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*The Vermont Geological Society's
Annual Meeting & Fall Field Trip*

October 22, 2005

TABLE OF CONTENTS

PRESIDENT'S LETTER	2
INFORMATION ON THE FALL MEETING	2
STATE GEOLOGIST'S REPORT	4
ADVANCEMENT OF SCIENCE COMMITTEE	5
TREASURER'S REPORT	6
ANNOUNCEMENTS	7
ABSENTEE BALLOT	8

PRESIDENT'S LETTER

Dear Fellow VGS Members,

I hope everyone had a productive and relaxing summer although with the arrival of the fall foliage season summer almost seems like a distant memory.

I would like to thank the folks at UVM for hosting the annual spring meeting and all the students who gave presentations and attended. Once again, the talks were of the highest quality. Thanks also to the Fab Four, Jon, George, Rick, and Marjorie, for leading a combined bedrock–surficial geology trip over the summer.

The fall VGS field trip will be on October 22nd and will be lead by Adam Schoonmaker, a visiting faculty member in the Geology Department at UVM. Details of this trip can be found on the next page and I hope many of you will be able to attend.

As this is my last letter as President, I would like to thank everyone for their continued support of VGS. In particular I would like to thank Steve Howe for keeping track of the Society's finances and making sure all our "i"s are dotted and our "t"s are crossed. I would also like to thank Dave West for all his efforts in publishing the *Green Mountain Geologist*.

Enjoy Earth Science Week!

Happy Trails,
Tim Grover

FALL FIELD TRIP, ANNUAL MEETING & ELECTIONS

Saturday, October 22, 2005

FIELD TRIP:

TITLE: The Stanbridge Nappe in Vermont: A Reappraisal of its Allochthonous Nature

TIME: 9:00 am – 5:00 pm

MEETING POINT INFORMATION: We will meet at 9:00 am in the parking lot behind the UVM Geology Department at Delehanty Hall on the old Trinity College Campus adjacent to the University of Vermont. From I-89, take exit 14 (Main Street-Route 2 exit), and go west (towards the lake) to East Avenue. Turn right on East Avenue and go to the end of East Avenue and proceed straight across Colchester Avenue and into the driveway. Delehanty Hall has a slate exterior and large granite blocks in front of it. Once on the driveway, bear around to the left and the parking lot is in the rear. The first field trip stop near Highgate Center will be about an hour's drive from this location.

LEADER: Adam Schoonmaker, Department of Geology, UVM

FIELD TRIP DESCRIPTION: This trip will feature the spectacular exposure of upper Cambrian and Lower Ordovician carbonate shelf strata and overlying shales in the Highgate Falls Gorge, at Highgate Center, northwestern Vermont. Here, a continuously exposed, conformable sequence of sandy dolomitic breccias of the Gorge Formation and slaty limestones and limestone breccias of the Highgate Formation, are overlain by black slates of the Moses Line Formation. In Quebec, this sequence is inferred to contain a major tectonic boundary between allochthonous slaty limestones and slates (Highgate and Moses Line Formations) and underlying dolomites of the Laurentian shelf sequence. We shall examine the relationship of these rocks in the gorge and at selected stops to the north, near the International Border.

Also, beautifully exposed in the gorge, is the lightly studied Highgate Falls Thrust, an out-of-sequence thrust fault that is likely part of the larger Champlain Thrust system, and emplaces upper Cambrian dolomite breccias of the Gorge Formation over lower to mid-Ordovician black slates of the Moses Lines Formation. Additionally, diachronously evolved en echelon fractures sets (many showing various stages of rotation) and associated minor thrusts are well displayed throughout the slates beneath the thrust.

Walking in the gorge can be somewhat treacherous due to boulder field in the channel – may be slippery if wet. Care should be observed, and adequate footwear is advised.

FIELD TRIP ROAD LOG: (See above for information on departure location)

- 0.0 mi Parking Lot behind Delehanty Hall. Leave for main entrance at intersection of Colchester and East Ave.
- 0.1 Go straight through intersection onto East Ave.
- 0.8 Take left onto Main St.
- 1.3 Take right onto entrance ramp of I-89 North.
- 30.9 Take Exit 20 at St. Albans. Go right onto VT Route 207 North
- 37.6 Go over bridge over Mississquoi River (Highgate Gorge)
- 37.9 Take right onto VT Route 78 (also follows VT 207).
- 38.1 Take right at village green (Mill Hill St). Take unlabelled street (also Mill Hill St?) by bearing right down to gorge.
- 38.4 Park at areas next to footbridge and Highgate Falls dam.
STOP 1: Highgate Falls Gorge.

Go back up Mill Hill St(?) to intersection with VT 78.
- 38.7 Take right onto VT 78 (also VT 207).
- 38.75 Take left to stay on VT 207 (leaving VT 78).

- 40.3 Take left onto Tarte Road.
- 41.8 Pull over and park just before small bridge over Rock River.
STOP 2: Highgate Formation.
- 42.9 Take driveway on left at right-angle turn in road (Choiniere's blue house on corner).
Pass through gate in electric fence (PLEASE CLOSE GATE AFTER ENTERING AND LEAVING!). Park in cow field. Mind your step here.
STOP 3: Choiniere Farm.

ANNUAL MEETING AND ELECTION OF OFFICERS:

The VGS Annual Meeting will take place immediately following the field trip. The exact location of this meeting will be decided during the field trip. If you are unable to attend the field trip and Annual Meeting, please send in the enclosed absentee ballot by October 20, 2005. Ballots should be sent to Dave West, Dept. of Geology, Middlebury College, Middlebury, VT 05753. A list of nominees for offices, as well as returning members can be found on the included sample ballot.

STATE GEOLOGIST'S REPORT

We're Moving !

The Vermont Survey will be moving to our own building commensurate with our size. The Logue House is out front along the horseshoe shaped entrance to the Waterbury State office complex—well positioned for the public to find us. New paint and carpets wait as the building has been refurbished after a period of dormancy. We expect to move in mid-October so look for further information in the winter *Green Mountain Geologist*. Please note that our phone numbers and e-mail addresses will stay the same.

Agency of Natural Resources Reorganization Hearings and Comment Period

If you think that geology and the earth sciences are important to the State of Vermont, your voice needs to be heard. The Vermont Geological Survey is a Division within the Agency of Natural Resources. A constituency for geology, the earth sciences, and science in general can make its interest known. Those who understand the importance of geology and the sciences to natural resource planning can help reach a sensible structure for a next generation Vermont Natural Resource Agency which includes the Vermont Geological Survey (Division of Geology). Without such input, science will lose out only to concerns dominated by regulatory and political considerations. If you have good things to say about the Vermont Survey, want to see the Survey go in new directions, or have concerns this is an opportunity to be heard.

Agency Hearings

Oct. 18, 2005	7:00 - 9:00 pm	White River Jct.
Nov. 8, 2005	7:00 - 9:00 pm	Burlington

Locations will be posted: www.anr.state.vt.us/site/html/rethink/calrethink.cfm

For e-mail or letter comments, contact:

John Sayles
Director for Policy Research and Planning
Agency of Natural Resources
103 South Main St.
Waterbury, VT 05671
802-241-3957
john.sayles@state.vt.us

Respectively submitted,
Laurence R. Becker, State Geologist

ADVANCEMENT OF SCIENCE COMMITTEE REPORT

Congratulations to the students who received awards at our Spring 2005 Meeting:

1st Place and Doll Award (\$100): Joel Cubley, Middlebury College
2nd Place Award (\$75): Katharine North, Middlebury College
3rd Place Award (\$50): Daniel King, University of Vermont

The Charles G. Doll Award, given for the top undergraduate student presentation, is a plaque with the student's name and school engraved on it that is kept at the student's school until the following year's Spring Meeting.

Four applications to the Research Grant Program from students at four separate colleges and universities were received by the October 1, 2005 deadline. The Committee will review these applications during the next several weeks.

The Committee will recommend several dates in late February, 2006, for the Society's next Winter Meeting. Members are encouraged to contact me with any suggestions they may have for a meeting theme.

Respectfully submitted
Stephen S. Howe, Chair

TREASURER'S REPORT

The financial condition of the Society continues to be strong. As of September 30, 2005, the checking account balance was \$4,697.31. To my knowledge, there are no outstanding bills. A financial statement for the period 9/13/04-9/30/05 is indicated below. Expenses exceeded income during this 12-month period due to the awarding of a large number of Research Grants and to a donation to the Lake Champlain Land Trust in support of their Goodsell Ridge project that was previously approved by the Society's Executive Committee. Expenses associated with the printing and mailing of the *Green Mountain Geologist* should continue to decrease as more members opt to receive it electronically as a pdf file.

The following members have been approved for membership in the Society since the last report: Sharon Gage, Allentown, Pennsylvania; Paul E. Myers, Peru, Vermont; and Caroline Alves, Williston, Vermont.

The 2006 membership renewal and directory information form will be mailed out to all members by December 31, 2005. The deadline for renewal will be January 31, 2006.

Respectfully submitted,
Stephen S. Howe, Treasurer

Income and Expenses 9/13/04-9/30/05

INCOME

Total Dues		\$1,608.00
Member	\$1,215.00	
Family	\$280.00	
Student	\$8.00	
Institution	\$105.00	
Student Research Grant Contributions		\$585.00
<i>Vermont Geology</i> Sales		\$55.00
TOTAL INCOME		\$2,248.00

EXPENSES

<i>Green Mountain Geologist</i> Printing		\$93.75
Postage		\$178.43
Office Supplies		\$5.28
Post Office Box Rental (to 8/1/06)		\$72.00
Fall Meeting Refreshments		\$65.83
Spring Meeting Refreshments		\$72.94
Awards		\$1,405.55
Research Grants	\$1,180.55	
Spring Meeting Student Talks	\$225.00	
Donation to Lake Champlain Land Trust		\$500.00
TOTAL EXPENSES		\$2,393.78
TOTAL INCOME – TOTAL EXPENSES		(\$145.78)

ANNOUNCEMENTS

OMYA Middlebury Quarry Open House, East Middlebury, Vermont, October 15, 2005

OMYA is once again holding its annual open house at its Middlebury Quarry to commemorate Earth Science Week. This large quarry produces white, high-calcium marble that is processed into fillers and extenders for the paper, plastic, and paint industries. It has also produced some very attractive salmon-colored calcite. This will be a family event that will include quarry tours, viewing quarrying equipment close-up, earth science activities, and refreshments. The event is free and will be held from 10:00 AM to 4:00 PM, with the last tour at 3:00 PM.

The road to the quarry is off the east side of US Route 7, 2.5 miles south of the *Middlebury Inn* (traveling southbound) and 1 mile north of the turnoff to the junction of Routes 125 and 116 (traveling northbound). The quarry road is between *Standard Register* and *Foster Motors*, and the green street sign is labeled *1975 Private Road*. Continue straight on this road at the first stop sign. The second stop sign is at the quarry. Please park where instructed. For further information, call Alice Blount at (802) 770-7267 during business hours or visit the website at www.omya-na.com

Geoscientists Explore the Earth

If you haven't visited the VGS website lately you should check out the new "Geoscientists Explore the Earth" Page. This page provides examples of how several VGS members became hooked on geology. The page can be accessed via the Society's web page:

www.uvm.org/vtgeologicalsociety/geoscientists.html

To find out about other announcements, please check the VGS website's calendar page:

www.uvm.org/vtgeologicalsociety/calendar.html

Absentee Ballot 2004

Vermont Geological Society

Please enter your name and address here:

Officers

President	Rick Dunn	_____
Vice-President	George Springston	_____
Secretary	Dave West	_____
Treasurer	Steve Howe	_____

Board of Directors

Ray Coish	_____
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If you will not be attending the annual meeting, please complete the absentee ballot and return it to David West, Dept. of Geology, Middlebury College, Middlebury, VT 05753 no later than October 20, 2005.

Per Society Bylaws, Immediate Past-President Tim Grover is appointed a member of the Board of Directors for a one-year term.

Returning Permanent Committee Chairs:

Advancement of Science: Steve Howe
Education Committee: Christine Massey
Membership: Steve Wright
Public Issues: Larry Becker
Publications: Dave West

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VERMONT GEOLOGICAL SOCIETY

P.O. Box 1224

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

Executive Committee

President	Tim Grover	802-468-1289
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Secretary	David West	802-443-3476
Treasurer	Stephen Howe	518-442-5053
Board	Ray Coish	802-443-5423
of	Helen Mango	802-468-1478
Directors	Shelley Snyder	802-453-2333

Committees

Advancement of Science	Stephen Howe
Education Committee	Christine Massey
Membership	Stephen Wright
Public Issues	Laurence Becker
Publications/Newsletter	Dave West

ADDRESS CHANGE?

Please send it to the Treasurer at the above address.

—Printed on Recycled Paper—