



Granite State Geologist

The Newsletter of the Geological Society of New Hampshire,
Winter Edition – December 2012 – Issue No. 79

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In this issue:

- **GSNH Officer election results**
- **Old Man paver purchased**
- **2012 NEIGC pictures**
- **Winter Dinner Meeting – January 17 at Red Blazer**
- **Upcoming Events and Much More!**

MESSAGE FROM THE PRESIDENT

Julie Spencer, AECOM, GSNH 2012-2014 President

There's nothing like a little snow to put you in the holiday spirit and we were treated to some on December 1 in southern New Hampshire as I was hanging lights outside. It was one of those great snows where the flakes fall slowly and you can actually see the beautiful crystal structure of each snowflake. I hope that all of our members are able to take some time this season to enjoy some of the simple pleasures that winter in New England can bring.

Unfortunately, I was unable to attend the October Annual Meeting, but by all accounts, it was an enjoyable evening as Bob Whitmore treated the group to photos and stories about mineral collecting in Morocco. There were two raffle prizes awarded. Edna Whitmore won a sample of taconite "balls" which are made of iron plus clay. Taconite ore is ground into a powder and the iron is separated magnetically. The concentrated iron is rolled with clay to form these pellets having a ~65% Fe concentration. Much of America's steel is produced from this concentrate. Martin Kippley won a sample of calcite with a willemite seam. Willemite is a zinc silicate mineral and a minor ore of zinc. It is highly fluorescent (green) under shortwave ultraviolet light. Thank you to the UNH Department of Earth Sciences for their generous donation of both samples for the raffle.

The October meeting was also our biennial election. Two of our board members had reached their term limits so I would like to extend the thanks of the board for the years of service that Muriel Robinette and Jim Degnan gave in their positions of Secretary and Treasurer, respectively. We will miss them at the board meetings and look forward to seeing them at the dinner meetings and events. The results of the election are featured in an article in this newsletter.

I hope that you can join us for the January dinner meeting at the Red Blazer. Peter Thompson will be giving us a philosophical perspective of geology, which he has titled "Thoreau on Monadnock."

On behalf of the Board of Directors, I'd like to wish all of our members very Happy Holidays!

THE NEXT GSNH DINNER MEETING IS

JANUARY 17, 2013

AT RED BLAZER.

DON'T WAIT-- RESERVE YOUR PLACE NOW!

SOCIAL HOUR START AT 5:30, DINNER AT 6:30 –

RESERVATION FORM IN THIS NEWSLETTER.

HUNTING SEASON

Do you know where to hunt minerals? Most of the old mines and their dumps are on private land. Road cut access has a “stopping on a busy highway” safety problem (illegal on most state roads). Going with a local mineral club that has permission/access to some of the old mines, plus interested mineral collectors, who like to help other collectors, may be your best bet.

A list of NH Mineral Clubs is at

http://www.rockhounds.com/rockshop/clubs/new_hampshire.shtml

MEMBERSHIP RENEWAL

It's that time of the year, when you get to support your favorite New Hampshire geological organization!! Please renew your membership for 2013 with the [one-page membership form, conveniently available on our website](#) or near the end of this newsletter.

<http://www.gsnh.org/membership/membership.shtml>

MOUNT WASHINGTON OBSERVATORY HAS NEW SUMMIT DIRECTOR

From the Berlin Daily Sun Date Tuesday, 25 September 2012 22:37

Executive Director of the Mount Washington Observatory Scot Henley introduced Cyrena-Marie Briede as the new summit director. She most recently was an Air Quality Monitoring and Environmental Management Contractor working in Alaska, where, from 2007 to 2012, she managed a meteorological project in western Alaska in extremely remote and dangerous locations.

From 2005 to 2007 she was a meteorologist for AirDat, and before that she was with Vaisala, in the Wind Profiler Division. While a student, she worked for the NOAA National Severe Storms Laboratory as a student research assistant and for NASA's shared mobile atmospheric research and teaching radar (SMART-R), collecting dual Doppler radar data of hurricane Isabel's North Carolina landfall.

She holds a BS in Meteorology accompanied by a mathematics minor from the Metropolitan State College of Denver, CO. She enjoys being outdoors, running, skiing, sailing, hiking, and travelling, as well as rehabilitating and riding ex-racehorses. She has a thoroughbred, Red, and two dogs, Diego and Gwen.

She expects to enjoy working at the summit of Mount Washington where the winter conditions are not that different from those she experienced in Alaska and she said she has been grateful for all the help the retiring Summit Director, Ken Rancourt, has been giving her during her first month on the job.

http://www.berlindailysun.com/index.php?option=com_content&view=article&id=42910:mount-washington-observatory-has-new-summit-director&catid=103:local-news&Itemid=442

COUNCIL AGREES TO BAN MINERAL COLLECTING ON MT. JASPER EASEMENT AREA Written by Barbara Tetreault from the Berlin Daily Sun Tuesday, 09 October 2012

BERLIN – A visit from the state archaeologist Monday night convinced the city council to ban hobby mineral collecting on the Mt. Jasper easement area.

Back in 2008, the city put an easement on 27 acres around the Dead River as mitigation for the proposed Greenova wood pellet plant. The Greenova project, which was never built, would have impacted 2.5 acres of wetlands at the city's industrial park. The state Department of Resources and Economic Development agreed to hold the easement for the city.

Last month, DRED contacted the city because State Archaeologist Dr. Richard Boisvert noticed the standard easement form used by DRED allowed hobby mineral collecting on the site. Considering the archeological significance of the Mt. Jasper property, Boisvert recommended the easement document be amended to eliminate the clause allowing hobby mineral collecting. The council, however, had some concerns about enforcing the ban. They questioned whether someone picking up a rock on the property could be prosecuted. They decided not to approve any change in the easement but agreed to allow Boisvert to meet with the council to try and persuade them otherwise.

Boisvert succeed in doing that at Monday's work session. He explained that Mt. Jasper is an unusual archaeological site containing a rhyolite dike, which he described as a crack in the earth where the colorful rock is found. Native Americans used the rhyolite mined from Mt. Jasper to make tools back in the Paleo-Indian period more than 12,000 years ago. Boisvert is responsible for getting approximately 41 acres of the property, including the actual mine, listed on the National Register of Historic Places. Boisvert said the Native Americans would take the rock to a series of workshops, some on the edge of the Dead River, to actually make tools. He said eliminating the section allowing hobby mineral collection would keep the archaeological sites on the base of Mt. Jasper intact.

He stressed he is not talking about someone hiking who picks up a rock. Boisvert said his concern is people coming with shovels and sifters specifically seeking old artifacts. He said there are people or collectors who seek out such artifacts to sell or simply because collecting is prohibited.

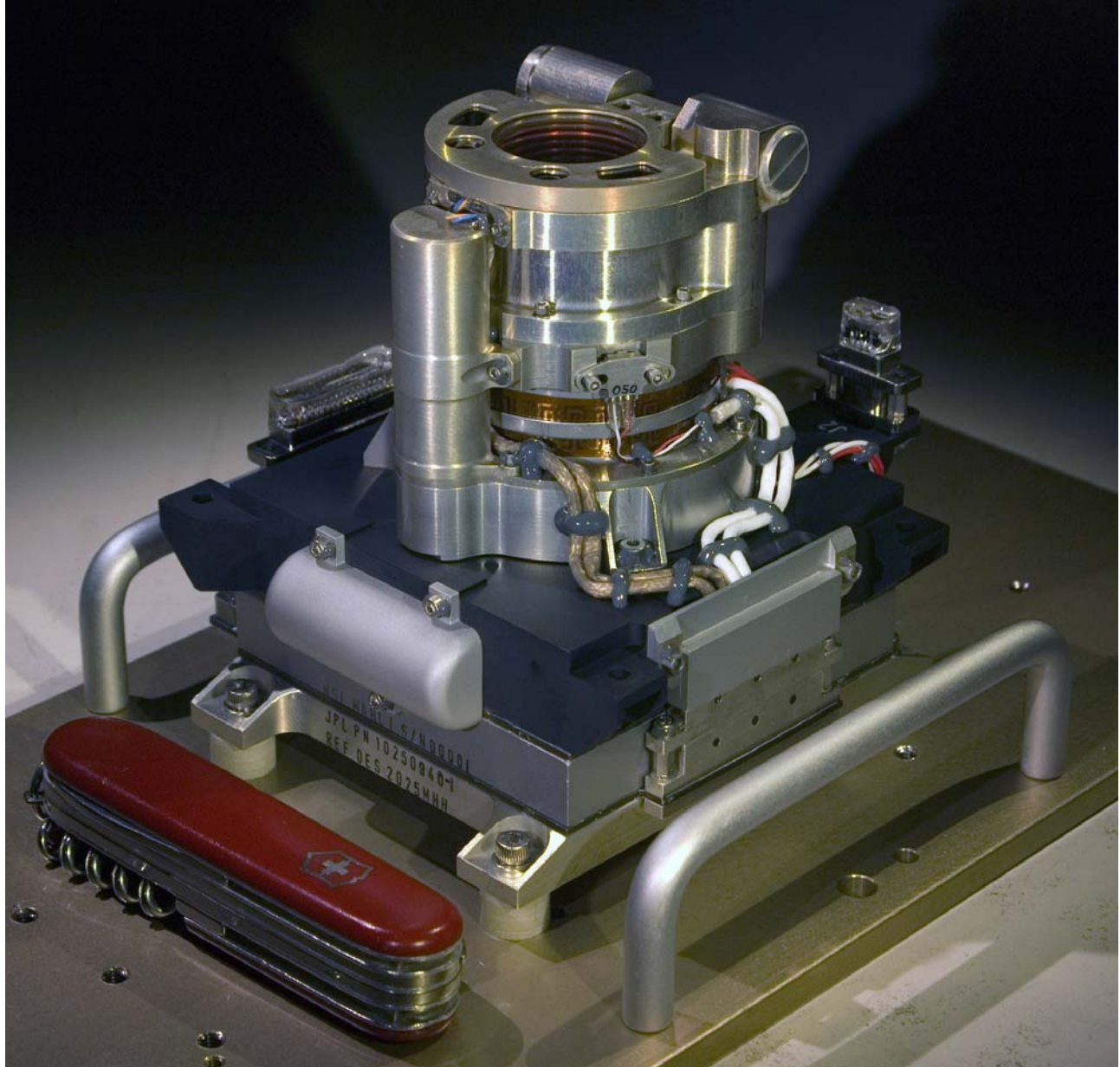
After a few questions, the council voted unanimously to accept the amended easement. A planning board subcommittee is developing a management plan for the Mt. Jasper property. The subcommittee has hired Watershed to Wildlife Inc., to do a natural resource inventory of the 203-acre city parcel.

http://www.berlindailysun.com/index.php?option=com_content&view=article&id=43087:council-agrees-to-ban-mineral-collecting-on-mt-jasper-easement-area&catid=103:local-news&Itemid=442

GSNH ROCK AND MINERAL TALK BOXES

The GSNH Mineral box and GSNH Rock box continue to be signed out by GSNH members for presentations that they generously give to local school science classes, local libraries and civic gatherings. Thanks to various generous donations, each box contains labeled display sized examples of common rocks and minerals. Each box also contains background information (helpful if the presenter needs to "brush-up" on the topic). Giving such presentations helps get the word out about the importance of the Earth Sciences in everyone's life and life-style. Interested in borrowing one or both of the boxes for a presentation? Contact Lee Wilder at the State Geologist offices in Concord, NH (geology@des.nh.gov) or the GSNH Education Committee (jt_cotton@comcast.net).

WHERE CAN I GET ONE OF THESE HAND LENSES??? MARS SCIENCE LABORATORY



The Mars Hand Lens Imager (MAHLI) from the Mars Science Laboratory (MSL) will acquire color close-up images of rocks and surface materials at the MSL landing site at a range of spatial scales with resolution as high as 13.9 micrometers per pixel. http://www.msss.com/all_projects/msl-mahli.php

FROM YOUR GSNH NOMINATING COMMITTEE

by Lea Anne Atwell

Thanks to everyone who ran in the Board of Director's election at the October dinner meeting! We had a great turnout for the election, and a couple of new faces have joined the board. Thanks to outgoing board members Muriel Robinette (Secretary) and Jim Degnan (Treasurer) for all of their hard work for GSNH.

The newly-elected Board includes:

President:	Julie Spencer
Society Vice President:	Wayne Ives
Council Vice President:	Russell Wilder
Treasurer:	Bill Abrahams-Dematte
Secretary:	Lea Anne Atwell
Members-at-Large:	Doug Allen, Erin Kirby, Thor Smith

New to the Board

Erin Kirby – Erin is a Senior Geologist for Geosyntec Consultants in Bedford, New Hampshire. Erin is a registered P.G. in New Hampshire and lives in Milford, New Hampshire. She earned her M.S. in Geophysics at Texas A&M University and her B.A. in Geology from Smith College in Northampton, Massachusetts. She has been a member of GSNH since 2004.

Thor E. Smith - Thor has worked as a hydrologist with the U.S. Geological Survey in Vermont and New Hampshire since 1994, and is a licensed Professional Geologist in NH. Before joining the USGS, Thor studied geology (Sc.B., Brown University) and hydrology (M.S., University of New Hampshire) and enjoyed a geographic variety of outdoor work, including acid precipitation research in the Adirondack Mountains, hydrologic monitoring for the Bureau of Reclamation in Colorado, and environmental consulting in California. Beyond geology, Thor has served on the Executive Committee of the Appalachian Mountain Club-NH Chapter, and remains an active AMC volunteer.



GSNH VP Doug Allen thanking Bob Whitmore for his Earth Science Week 2012 Dinner talk at Makris Lobster House October 18, 2012 on the Metal Mines of Morocco.

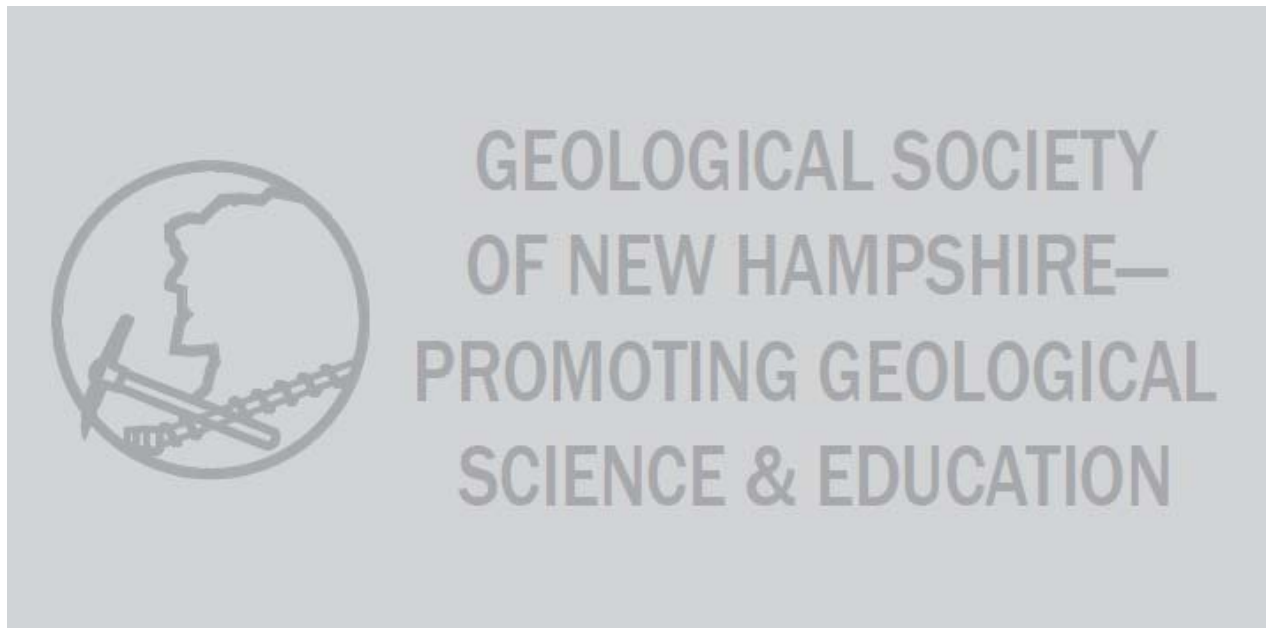
WHAT YOUR BOARD IS DOING

The GSNH Board has been working hard to get the Old Man paver for the Society designed and engraved. On November 3, a check for \$1000 was sent with the order form. Several redesigns were called for resulting in a \$75 fee, but the final design was clear and crisp, and we seem likely to get the fee back. The paver will be carved on a 12 x 24 inch granite block and look something like the image below. The paver may not be in place for the March 2013 Northeast Section GSA meetings (probably covered with snow), but is likely to be in place before the 10-year anniversary of the collapse. Have you or your company bought a paver yet? <http://www.oldmanofthemountainlegacyfund.org/>

The Board is looking forward to working with the Vermont Geological Society again to bring Douglas A. Howard from the University of Tennessee – Knoxville to the area to talk about his role in the mission to Mars. This may be a special meeting in the spring or the regular April meeting depending on scheduling.

The Board met December 6, 2012 at Sanborn Head Associates with the newly elected officers including first-timers Thor Smith and Erin Kirby. A grant request from the Montessori Children's School in Hanover was considered and \$240.65 was approved for the purchase of books and lesson materials that can be used over and over again. The Board voted via email to support K-12 Educator's Workshop (see story.) GNHS will be donating \$1,000 for sign-up costs to reduce costs for teachers registering at GSA. The Board discussed what we should do to represent the Society at the GSA meeting including handouts and a table-top display. The Society balance is currently \$16,044.57. Russ Wilder reported for the Legislative Committee that the deadline for filing placeholders for new bills was today, but these generally have too few details to determine whether they will be of interest to the Society. (Some of you may be disappointed to learn that LSR-H-2013-R, "requiring reconstruction of the Old Man of the Mountain" has been withdrawn.)

The next BOD meeting will be held March 7, 2013 and hosted by Wayne Ives at the NHDES offices in Concord, NH.



GSNH's design that will be carved on a 12x24 inch granite paver and emplaced at Profile Plaza in Franconia Notch.

GSNH LEGISLATIVE UPDATE from Russ Wilder and Tom Fargo

The Legislative Committee (Tom Fargo and Russ Wilder) will continue to track bills in the 2013 session of the legislature. As of the date of this newsletter, there were a number of Legislative Service Requests (LSRs) of interest (of the 566 submitted). The LSRs do not contain details at this time, but have the following recurring themes:

- Professional registration – review & potentially eliminate or make more restrictive:
- Reducing taxes & fees = less revenue for state & municipal programs (If programs or regulations established by law can't be eliminated, make them ineffective by cutting off agency funding)
- Protecting property rights & restricting access by "government officials"
- Reducing the power of bureaucrats & promoting politicizing agency heads
- Change the way funding flows between federal, state, and municipal agencies; with potential impact on funding engineering & construction projects
- Limit State Role in Great Bay nitrogen effluent limitation & other wastewater issues

During 2013, we will monitor how these legislative initiatives fare with the new makeup of the legislature. If members are aware of specific legislation that they would like tracked, they should send information to me at Russ.Wilder@URS.com and RussWilder@msn.com.

IS A GLACIOGRAM JUST A VERY SLOW TELEGRAM?

Actually, the **New York Glaciogram** is an annually compiled collection of informal notes concentrating on Quaternary work that relates to New York State. Besides research updates the Glaciogram announces upcoming meetings, field trips, symposia, or summer programs. Also, find postings of universities looking for PhD candidates or undergrads looking for graduate opportunities. The Glaciogram posts professional academic, government, industry, or consulting positions. This year's issue just came out December 11, 2012 and can be read at http://www2.newpaltz.edu/glaciogram/Glaciograms/NYGlaciogram_2012_44.pdf. Back issues available at <http://www2.newpaltz.edu/glaciogram/BackIssues.html> Editor John Rayburn is looking for content – next deadline is December 2013. Contact him at: John A. Rayburn, Editor at rayburnj@newpaltz.edu or Department of Geology, 1 Hawk Dr., SUNY New Paltz, New Paltz, NY 12561

DATES TO REMEMBER

March 2013 - NORTHEASTERN SECTION GSA meeting at Bretton Woods. <http://www.geosociety.org/Sections/ne/2013mtg/> or contact the General Chair, Brian Fowler at b2fmr@metrocast.net.

April 27, 2013 - VGS SPRING MEETING - student presentations - Contact Jon Kim for information - jon.kim@state.vt.us – (802)522-5401

May 26 - June 2, 2013 – INTERNATIONAL PEGMATITE CONFERENCE, Attitash-Bear Peak. Go to http://www.minsocam.org/msa/special/Pig/Peg_2013.pdf.

June 7-9, 2013 - NORTHEAST FRIENDS OF THE PLEISTOCENE
Oak Ridges Moraine, Toronto area, Ontario

September 9-12, 2013 - The **2013 HIGHWAY GEOLOGY SYMPOSIUM** is to be held in Conway, NH. <http://www.highwaygeologysymposium.org/History.asp>

OCTOBER RAFFLE WINNERS

Edna Whitmore won the "Taconite Balls" -- TACONITE "Balls" (Fe plus clay). Taconite ore is ground into a powder and the Fe is separated magnetically. The concentrated Fe is rolled with clay to form these pellets having a ~65% Fe concentration. Much of America's steel is produced from this concentrate. Donated to the GSNH Mineral Raffle by UNH Department of Earth Sciences.

Martin Kippley won the Calcite with Fluorescent Willemite seam (Zn_2SiO_4). Willemite is a zinc silicate mineral and a minor ore of zinc. It is highly fluorescent (green) under shortwave ultraviolet light. Donated to the GSNH Mineral Raffle by UNH Department of Earth Sciences.

GSNH HELPS SPONSOR K-12 EARTH AND SPACE SCIENCE EDUCATORS WORKSHOP ATTENDANCE AT GSA submitted by Lee Wilder

As you know, the Northeast Section of the Geological Society of America is holding its section meeting at the Mount Washington Hotel in Bretton Woods NH, in March 2013. Thanks to a generous donation from the GSNH, Earth and Space Science teachers will find attendance at this workshop very affordable. WS9 (K-12 Earth and Space Science Educators Section Meeting) has been designed especially for Northeast Earth and Space Science educators.

This all-day K-12 Educators session will convene Saturday morning March 16th with a welcome coffee, followed by a historic tour of the famous Bretton Woods Hotel and presentations by Peter Thompson on the Geology of the Northeast and Woody Thompson on the Glacial Geology of New England. Lunch will be followed by a forum on innovative approaches to teaching Earth-Space Science in the 21st Century. Keeping students focused is an ongoing challenge in today's teaching. Students, with often more technology skill than their teachers, need lessons, labs and field experiences that "speak to them." This afternoon Session will offer an assortment of oral and poster presentations showcasing proven techniques for engaging students using the latest technologies, including Google Maps, Google Earth, GIS, iPads, Smartboards, electronic textbooks, virtual field trips, Earth as a System, and on-line courses and activities supporting the Core Standards of the Earth-Space Science curricula. The session is intended as a forum for innovative approaches, and we encourage contributions from attendees that will address these and related themes that can be used in today's Earth-Space Science classrooms. This session will be followed by a K-12 Educators Social Hour and Banquet, with Dinner Speaker Brian Fowler's presentation on NH's Old Man of the Mountain; Geology, History and Plans for the Future.

You can help, by letting Earth and Space Science teachers at your local schools, know of this event. Most, not being members of GSA, are probably **NOT** going to hear about this important educational opportunity unless **WE** pass this information along to them. Please take a few minutes to do this. All they need to do is to go to the GSA website at:

<http://www.geosociety.org/sections/ne/2013mtg/> to start the process. Maybe your company would like to further help by sponsoring a local teacher. Don't let your local school's teachers loose out by missing this event! If you have any question, please contact Lee Wilder at geology@des.nh.gov

THE NH GEOLOGICAL SURVEY GROUND WATER LEVEL NETWORK SUMMARY

Submitted by the NHGS

September 2012 NH Groundwater level measurements were collected by the NH Geological Survey from September 24 – September 26, 2012. The statewide September 2012 average groundwater level for **wells in the overburden** (soil on top of the bedrock) showed a **decrease** of -0.17 feet from August 2012. When compared with September 2011, the statewide average groundwater level for September 2012, in these wells, **decreased** -0.83 feet. The September 2012 average groundwater level in the new **bedrock wells** showed a **decrease** of -0.14 feet when compared with August 2012. When compared with September 2011, the bedrock wells showed a **decrease** of -0.92 feet for September 2012.

October 2012 NH Groundwater level measurements were collected by the NH Geological Survey from October 25 – October 30, 2012. The statewide October 2012 average groundwater level for **wells in the overburden** (soil on top of the bedrock) showed an **increase** of 0.29 feet from September 2012. When compared with October 2011, the statewide average groundwater level for October 2012, in these wells, **decreased** -1.29 feet. The October 2012 average groundwater level in the new **bedrock wells** showed an **increase** of 1.14 feet when compared with September 2012. When compared with October 2011, the bedrock wells showed a **decrease** of -2.87 feet for October 2012.

November 2012 NH Groundwater level measurements were collected by the NH Geological Survey from November 26 – November 30, 2012. The statewide November 2012 average groundwater level for **wells in the overburden** (soil on top of the bedrock) showed an **increase** of 0.05 feet from October 2012. When compared with November 2011, the statewide average groundwater level for November 2012, in these wells, **decreased** -1.15 feet. The November 2012 average groundwater level in the new **bedrock wells** showed an **increase** of 0.78 feet when compared with October 2012. When compared with November 2011, the bedrock wells showed a **decrease** of -2.01 feet for November 2012.

The groundwater level measurements for the deeper of the two Concord bedrock wells (CVWB-1) are now available in real-time on the USGS website at:

http://waterdata.usgs.gov/nh/nwis/current/?type=gw&group_key=basin_cd. The data for all of the other wells are available from NHGS and are shared with and posted on the USGS website at: <http://groundwaterwatch.usgs.gov/StateMaps/NH.html>. The data for all of the wells are available from NHGS and are shared with and posted on the USGS website at: <http://groundwaterwatch.usgs.gov/StateMaps/NH.html>.

2012 NEIGC FIELD TRIP PICTURES



Former White River Valley Camping area at Gaysville, Stockbridge, VT that is now a long wide stretch of boulders in the foreground with, landslide and slumping of far bank Trip: Tropical Storm Irene and the White River Watershed of Vermont: Flood Magnitude and Geomorphic impacts. Leaders: George Springston, Kristen Underwood, Keith Robinson, Ned Swanberg. Photo by Tina Cotton



This is a photo from Trip B-2 from the 2012 NEIGC showing (l-r) Carol Hildreth, John Cotton, Carl Koteff, Rick Chormann (State Geologist), Dan Tinkham, and John Brooks. All are part of the USGS STATEMAP mapping team for the NH Geological Survey. The photo was taken at Stop 7, the Morrison Pit in Bridgewater, NH on Saturday, October 13, 2012. The field trip leaders were Dan Tinkham (Emery & Garrett Groundwater), John Brooks (Emery & Garrett Groundwater), Carl Koteff (retired USGS), and John Cotton (retired USGS & retired NHDES, but still fishin’.) Photo by Dorothy Richter.



Trip C4 - Acadian thrust faults in southwestern New Hampshire, Leader: Peter Thompson



Trip C4 - Acadian thrust faults in southwestern New Hampshire, Leader: Peter Thompson



Trip C4 - Acadian thrust faults in southwestern New Hampshire, Leader: Peter Thompson



Bedrock geology of the Lake Sunapee area, New Hampshire. Leader: Timothy T. Allen, Keene State College, Keene, NH



Trip B5 - Bedrock geology of the Lake Sunapee area, New Hampshire. Leader: Timothy T. Allen, Keene State College, Keene, NH



TRIP A-1 - Warren Brook, Alstead, NH impacts and recovery efforts after the 2005 flooding, Sean Sweeny and Lindley Hanson leading. Photograph shows a segment of Warren Brook that was stabilized with riprap immediately after flooding. Contrast these conditions with those shown in the next photograph.



TRIP A-1 - Restoration efforts in a 900-ft long stretch of Warren Brook immediately downstream of view in previous photograph. The stream restoration project was completed in 2010 and included removing riprap originally placed after flooding, lowering the floodplain elevation to re-connect the stream with its floodplain, placing in-stream wood structures to create habitat, and re-vegetating stream banks and floodplain with native vegetation.



Photos taken on Trips A1, B4, C3 (Monday) and C4 by Lindley Hanson.



Photos taken on Trips A1, B4, C3 (Monday) and C4 by Lindley Hanson.

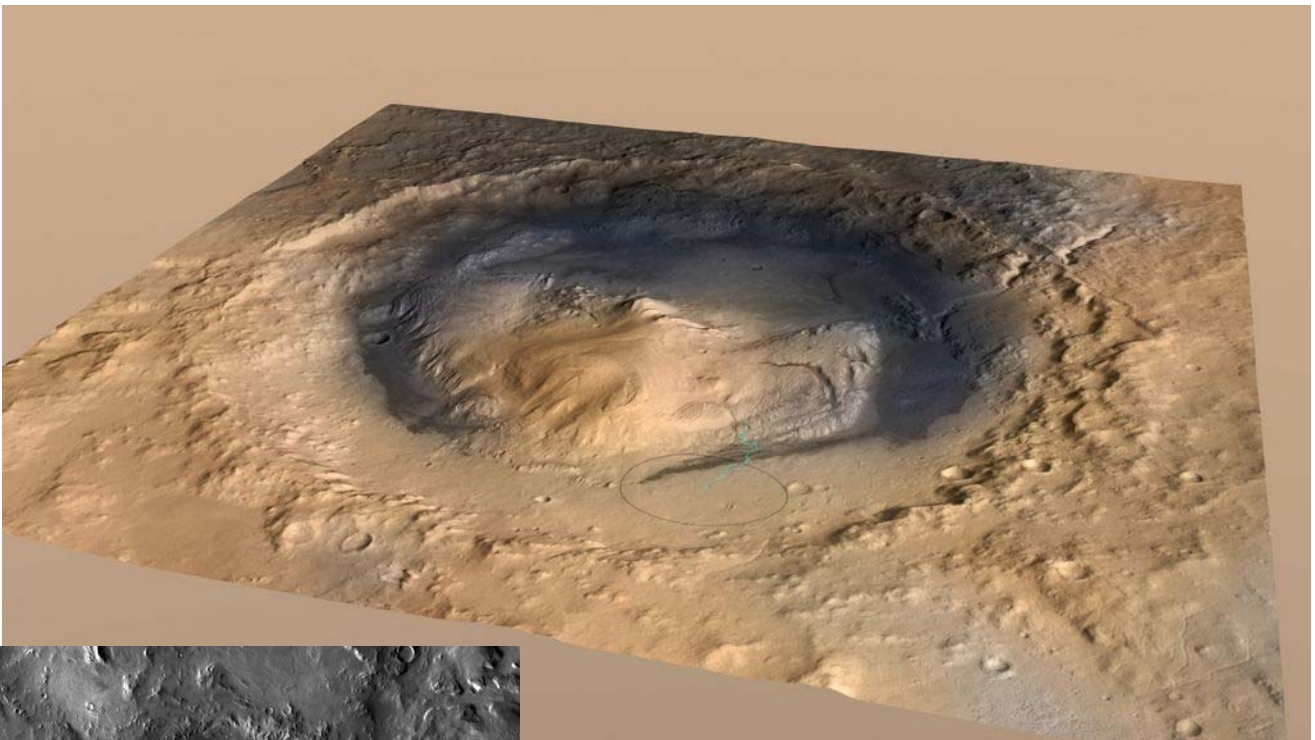
CURIOSITY'S LANDING SITE: GALE CRATER

At (1:32 a.m. EDT on Aug. 6, 2012, the Mars Science Laboratory rover, Curiosity, landed on Mars at 4.5 degrees south latitude, 137.4 degrees east longitude, at the foot of a layered mountain inside Gale Crater. The crater is named for Australian astronomer Walter F. Gale (1865-1945). Gale Crater formed when a meteor hit Mars in its early history, about 3.5 to 3.8 billion years ago.

Gale Crater spans 96 miles (154 kilometers) in diameter and holds a mountain (which is informally named "Mount Sharp" to pay tribute to geologist [Robert P. Sharp](#)) rising higher from the crater floor than Mount Rainier rises above Seattle.

Layering in the central mound (Mount Sharp) suggests it is the surviving remnant of an extensive sequence of deposits. Some scientists believe the crater filled in with sediments and, over time, the relentless Martian winds carved Mount Sharp, which today rises about 3.4 miles (5.5 kilometers) above the floor of Gale Crater. The history of water at Gale, as recorded in its rocks, will give Curiosity lots of clues to study as it pieces together whether Mars ever could have been a habitat for small life forms called microbes. Gale is special because we can see both clays and sulfate minerals, which formed in water under different conditions.

<http://mars.jpl.nasa.gov/msl/mission/timeline/prelaunch/landingsiteselection/aboutgalecrater/>



In a mission lasting one Martian year after landing, researchers will use the rover's tools to study whether the landing region has had environmental conditions favorable for supporting microbial life and for preserving clues about whether life existed.



Geological Society of New Hampshire



GSNH 2013 Winter Dinner Meeting

Topic: "Thoreau on Monadnock: A philosopher naturalist's take on geology"

**Speaker: Peter J. Thompson
UNH Professor of Geology**

Peter J. Thompson will discuss Thoreau's geological observations at Monadnock with modern interpretations of Monadnock geology. An article based on the same talk is to be published in the 2013 winter/spring issue of AMC's magazine "Appalachia."

Thursday, January 17, 2013

**Red Blazer Restaurant
72 Manchester Street, Concord, NH 03301**

5:30 pm Social Hour; 6:30 pm Buffet Dinner; 7:15 pm Speaker

**GSNH 2013 Spring Dinner Meeting, Thursday, January 17, 2013
(RSVP by 4 pm Monday, January 14, 2013 to get the reservation price)**

Advance Reservations: _____ Member (Dues Paid) \$22.00
 _____ Non-member \$25.00

_____ **Please indicate the number of vegetarian meals – leave blank for none.**

- Member at the Door (\$25.00)
- Non-Member at the Door (\$28.00)
- Students \$10.00 with valid student ID card (Reservation Requested)

GSNH will also accept dinner reservations by e-mail, which will then allow you to pay at the door. Please note that e-mail reservations constitute an agreement with the Society for which you will be responsible to pay, whether you are able to attend or not, unless you cancel your reservation by noon the day before the Dinner. Reply via e-mail to: Wayne.Ives@des.nh.gov. Mail to: Wayne Ives, GSNH Dinner Meeting, **PO Box 3483, Concord, NH 03302-3483. Checks payable to: GSNH.**

Name(s) _____

Address: _____

Your phone or e-mail: _____

Half the cost of the dinner may be tax-deductible as a business expense. **The lecture part of the program counts as 1.5 hours of CEU contact hour credit.**



Geological Society of New Hampshire

PO Box 3483, Concord, NH 03302-3483

New member

Check here if you do NOT want your information published in the directory.

Renewing member

Check here if you have updates to your information.

Name & Home Address:

Business Name & Address:

Home Telephone

Office Telephone

Home Fax:

Office Fax:

E-mail:

E-mail:

Preferred address to receive GSNH communication: ___Home or ___Business

Quarterly newsletters are distributed electronically. Check here if you prefer a paper copy: _____

New Hampshire PG # (if applicable): _____

Education: Degrees received or in progress:

<u>Year</u>	<u>Degree</u>	<u>Major</u>	<u>College or University</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I volunteer to help with one of the following committees or tasks:

- | | | |
|---|--|---|
| <input type="checkbox"/> Membership Committee | <input type="checkbox"/> Regulations Committee | <input type="checkbox"/> Communications Committee |
| <input type="checkbox"/> Legislative Committee | <input type="checkbox"/> Education Committee | (Newsletter or Website, circle preference) |
| <input type="checkbox"/> Giving a talk at a meeting | <input type="checkbox"/> Events Committee | <input type="checkbox"/> Other: |

Membership Category:

- _____ Regular Member (Annual Dues \$20.00)
- _____ Student Member (Annual Dues \$10.00)...Please complete Education section above.

Make checks payable to "**Geological Society of New Hampshire.**" Note that GSNH dues are not deductible as a charitable contribution, but may be deductible as a business expense. Please return this completed application form with any necessary corrections and a check for the appropriate dues to the GSNH at the address above.

The Society's Membership year runs from January 1 to December 31.

Signature: _____ Date: _____