

Granite State Geologist

The Newsletter of the Geological Society of New Hampshire, Winter Edition – March 2012 – Issue No. 76

Newsletter Editor: Wayne.Ives@des.nh.gov Website: http://www.gsnh.org/

2012 GSNH Officers:

President –Julie Spencer AECOM, Westford, MA julie.spencer@comcast.net

Vice President - Council - Russ Wilder URS Corporation, Salem, NH Russ.Wilder@URS.com

Vice President – Society - Doug Allen Haley & Aldrich, Manchester, NH dallen@HaleyAldrich.com

Secretary – Muriel Robinette New England EnviroStrategies, Inc., Concord, NH murielrobinette@NE2Sinc.com

Treasurer – Jim Degnan USGS, Pembroke, NH jrdegnan@usgs.gov

Past-President – Jutta Hager Hager GeoScience, Woburn, MA jhager@hagergeoscience.com

Member-at-Large - Lea Anne Atwell Sanborn, Head & Associates, Concord, NH latwell@sanbornhead.com

Member-at-Large - Wayne Ives NHDES, Concord, NH Wayne.Ives@des.nh.gov

Membership - Doug Allen Haley & Aldrich, Inc. Manchester, NH dallen@HaleyAldrich.com

Education and Outreach

Tina Cotton jt_cotton@comcast.net Lee Wilder geology@des.nh.gov

Website

Bill Abrahams-Dematte
Bill.Abrahams-Dematte@aecom.com
webmaster@gsnh.org

Newsletter Editor Wayne Ives Wayne.Ives@des.nh.gov

In this issue:

- Message from the President
- 20th Anniversary edition of the Newsletter
- Pictures of the new Old Man of the Mountains
- Pleistocene plant lives again
- Free dinner meeting offer
- Membership renewal form
- Spring Dinner Meeting Conodonts by Fred Rogers
- Lots of Upcoming Events and Much More!

MESSAGE FROM THE PRESIDENT Julie Spencer, AECOM, GSNH 2011-2012 President

In my book this winter is going down as the "winter that wasn't." I know that many of you have been very happy with the mild weather, but yours truly would have been happier with more snow. At any rate the first day of spring is right around the corner, time for new growth and cleaning out the cobwebs that may have settled in during the colder months.

Our January meeting was held on the 19th at the Red Blazer. Despite a one-week weather postponement we had a great turnout. We were treated to two speakers that evening: Ryan Murphy, head of the science department at Andover Elementary Middle School showed us just how he gets his students so engaged in earth science with a hands on exercise in "molding mountains" using clay, and Brian Fowler, P.G., geologic mapper extraordinaire, presented the surficial geology of Mount Washington and the northern Presidential Range. Thank you to both speakers for sharing their time and talent with us.

All our students should be so fortunate as to have enthusiastic science teachers like Ryan Murphy. To assist them I would like to plug some of the outreach opportunities of the GSNH: first, our Classroom Enhancement Grant program which provides reimbursement for earth-science related teaching materials for K-12 teachers in New Hampshire, second, our Lincoln R. Page Professional Development Fund for reimbursement of the cost of continuing education for teachers in the earth sciences and third, our School Speaker's Program. How can you help? Please encourage the teachers you know to take advantage of our grant programs. And please consider becoming a school speaker. We are receiving more and more requests for school speakers and speakers for scouts working on their Geology Merit Badges.

We do not have enough speakers to fill all the requests. Remember that the GSNH has rock boxes which can be borrowed by members for use during talks.

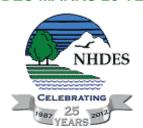
Three raffle prizes were awarded during the meeting: Judith LeClair won a copy of Brian Fowler's new map "Surficial Geology of Mount Washington and The Presidential Range, New Hampshire" donated by GSNH; Jean Taggart won a Rutile Crystal in Cordierite from the Richmond Soapstone Mine in Richmond, New Hampshire donated by Robert Whitmore; and Dorothy Richter won an Elbaite Tourmaline crystal from Mount Mica, Maine donated by Robert Whitmore. As usual, proceeds from raffle ticket sales go toward our education outreach activities. For those who were not lucky enough to win a copy of the map, Brian Fowler has copies available for sale; proceeds go towards the volunteer mapping program of the New Hampshire Geological Survey.

I look forward to seeing everyone on April 12, 2012 at the Red Blazer in Concord for our next meeting. We will enjoy a fossil-rich presentation on conodonts. Just a reminder that we now start our meetings one half hour <u>earlier</u> then in the past, so please make note of all the details in the meeting announcement at the end of this issue.

WATER AND WATERSHED CONFERENCE AT PLYMOUTH STATE UNIVERSITY – MARCH 23, 2012

The conference is designed to meet the information and networking needs of scientists; educators; consultants; students; lake, river, and watershed groups; environmental organizations; volunteer monitors; municipal board and staff members; elected officials; local and regional planners; and policy makers. The conference will include information about a variety of water-related topics. https://www.plymouth.edu/center-for-the-environment/2012-nh-water-watershed-conference/agenda/

DES MARKS 25 YEARS OF ENVIRONMENTAL PROTECTION



The New Hampshire legislature created the Department of Environmental Services effective January 2, 1987. The legislation brought several agencies under DES: the Water Supply and Pollution Control Commission; the Water Resources Board: the Air Resources Agency: and the Office of Waste Management.

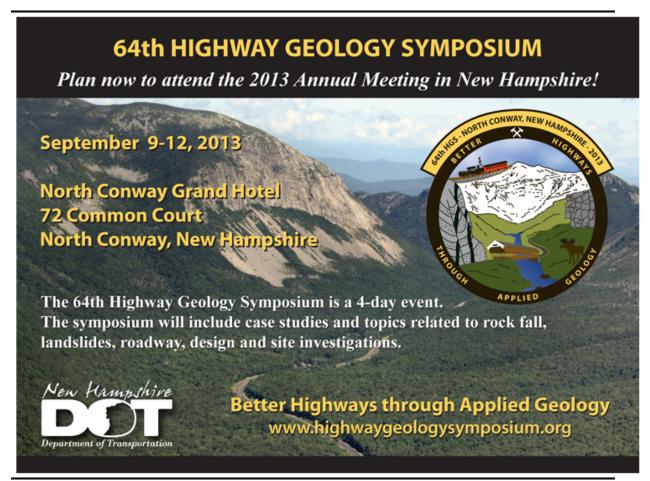
"Early in its history, DES responded to environmental challenges unthinkable to many of us today. Many of New Hampshire's wastewater plants were rudimentary in nature, sometimes resulting in

raw sewage spilling into our rivers. Municipalities across the state disposed of their trash in "open burning dumps" with little regard to the toxic smoke. DES was responding to hazardous waste sites like the Gilson Road site in Nashua, a seven-acre sand and gravel pit where over 900,000 gallons of fluids containing a variety of toxic compounds were disposed of, contaminating the soils and groundwater. And we can't forget the infamous Hunt Tire pile in Danville. It was estimated that the site contained more than 5 million used tires, of which more than a million burned in a 1989 fire at this unpermitted facility."

On August 18, 2001, the NH Geological Survey was established and housed in the NH Department of Environmental Services. See the article in http://des.nh.gov/organization/commissioner/25th-anniversary-overview.htm

LITTLE BOYS WHO PICK UP ROCKS GO TO JAIL OR BECOME GEOLOGISTS

We've had several recent requests from Boy Scouts and Webelos leaders to talk to their scouts about geology for their merit badge. However, we don't know who among you might be willing to spend and hour to help them. Please contact Lee Wilder at 271-1976 or geology@des.nh.gov to get on the list. The Society has resources to make your presentation easy, including posters, rock and mineral samples and other handouts. This is our chance to make a lasting impression. There are two scout groups waiting right now to see if we'll respond. Free dinner meeting attendance for making the effort.



Did you notice the change in the start time for meetings this year? We're moving everything up a half hour. Social hour will now start at 5:30 and everything will follow at the usual pace—just a half hour earlier.

JOHN D. JUDGE NAMED NEW APPALACHIAN MOUNTAIN CLUB PRESIDENT January 11, 2012 AMC President Berlin Reporter

BOSTON, Mass. — Nonprofit and government leader John D. Judge has been named president of the 136-year-old Appalachian Mountain Club (AMC) following a nine-month nationwide search. Laurie Gabriel, chairman of AMC's Board of Directors, announced the choice on Saturday; the appointment was made on Thursday.

Judge, 44, will become the fourth chief executive of the AMC, effective Feb. 1. He will succeed Andy Falender, who is retiring after 23 years as AMC executive director and president. Judge will oversee the nation's oldest outdoor recreation and conservation organization with more than 100,000 members in 12 chapters from Maine to Washington, D.C.

http://www.newhampshirelakesandmountains.com/Articles-Berlin-Reporter-c-2012-01-10-155415.113119-John-D-Judge-named-new-Appalachian-Mountain-Club-president.html.

20th Anniversary Edition of the GRANITE STATE GEOLOGIST

Yes, March 1992 was the first edition of the Granite State Geologist twenty years ago. The first issue contained a message from then-President Dick Lane including the following statements: "These are tough times with large cuts in state and federal budgets, with economic hardship in the private sector, and with State Geological Surveys on the chopping block. It is critical that all members make an effort to become better informed on state budget problems, on professional registration, on complex environmental issues and other matters related to geology." (Hmmm?!?! When did he write that?) And the editor was looking for contributions of interest to the Society in that issue, too. So some things don't change.

Also in that first edition was a question about what the newsletter's name should be (it stayed the *Granite State Geologist*), and Linc Page's memories of 1930s highway surveys, and articles from the newly formed finance and membership committees. So if you want to reminisce and browse through the Society's history, the back issues are on line at http://www.gsnhonline.org/publications/bestof.shtml. Happy 20th, Granite State Geologist!

48TH ANNUAL GILSUM ROCK SWAP AND MINERAL SHOW - JUNE 23-24, 2012

The town of Gilsum will once again host the Gilsum Rock Swap and Mineral Show at the Gilsum Elementary School grounds off of Route 10 from 8:00 AM to 6:00 PM Saturday and 8:00 AM to 4:00 PM Sunday.

The Gilsum Rock Swap and Mineral Show attracts thousands of rock and mineral enthusiasts from across the country. Here more than 60 dealers, swappers, distributors, wholesalers and collectors can buy, sell, or swap beryl, quartz crystals, semi-precious stones, and rocks and minerals of all sorts. The event, known for its scenic location and small-town hospitality, includes two special presentations on Saturday: at 2:00 PM James Tovey will present a soup-to-nuts overview of his Tripp Mine operation in Westmoreland, NH, from mineral extraction to the fabrication of finished jewelry. For details and photos see www.toveco.com. Steve Garza will talk about the basics of prospecting Saturday evening at 7:00 PM. Other events include a daily pancake brunch, bake sale, book sale, annual ham and bean dinner with all-you-can-eat home made pies on Saturday evening at 5 PM, a chicken barbecue, and panning for minerals for the kids.

Gilsum's many mines operated until the 1940s and yielded feldspar, mica and beryl. Most are now abandoned, although one, the Beauregard mine, is available to mineral clubs through prior arrangement. Today collectors prize other minerals such as beryl. Maps showing locations of local mines are available during the show.

Admission is free, although donations are graciously accepted. All proceeds go to youth recreation and community programs. For more information please contact Robert Mitchell at the Gilsum Recreation Committee, P.O. Box 76, Gilsum, NH, 03448; call 603.357-9636; or send e-mail to gilsumrocks@gmail.com.

NEIGC 2012 CALL FOR FIELD TRIP LEADERS - Posted by Tim Allen at http://neigcsn.ning.com/forum/topics/neigc-2012-call-for-field-trips

The 2012 NEIGC will be held in south- and central-western New Hampshire and adjacent Vermont (and maybe north-central Mass?), based out of either Hanover or Keene (or somewhere in between). This meeting is being organized in memory of Jim Thompson and John Lyons. Anyone interested in leading a field trip in this general area should e-mail me at tallen@keene.edu.

Details will be posted on the conference website at http://w3.salemstate.edu/~lhanson/NEIGC/ as they are finalized during the summer.

WHAT DO JAMAICAN ROCK STARS AND ARCTIC PETROLEUM GEOLOGY HAVE IN COMMON?

They're both titles of books on regional geology available from The Geological Society, as are books on the geology of Thailand, Scotland, Chile or Spain. If you're looking for some rock'n' chair reading take a look on http://www.geolsoc.org.uk/gsl/publications/bookshop. You can sign up to receive their Society and bookshop newsletters.

SAVE THE CORE - MWRA NEEDS YOUR HELP!

The Massachusetts Water Resources Authority (MWRA) geologic sample and core repository must be permanently moved from its current location in Building 4 at the Fore River Shipyard in Quincy, Massachusetts to allow for resale and reassignment of that space.

The collection must be moved immediately from this location and **we need your help** in finding a new home for this very important and valuable collection.

The collection consists of 70,000 linear feet of rock core, 525 thin sections, various rock samples, photographs and records collected over an 80-year period during the planning and design of public water and sewer related construction projects in Massachusetts.

The collection provides an unparalleled record of earth history in Massachusetts that has served as an important primary earth science information source for a wide variety of individual citizen, academic, private sector, and government agency inquiries and issues.

The collection has provided and will continue to provide health, safety, societal, economic, educational and scientific benefits to the public.

A core repository advisory committee has been formed to assist the MWRA in relocating the collection.

For more information on the value of the collection, and the reasons why it must be maintained, you can download the Executive Summary and the accompanying Position Paper (in PDF format) of the advisory committee. You may also contact Steve Mabee, the State Geologist, at sbmabee@geo.umass.edu, or (413) 545-4814 http://www.geo.umass.edu/stategeologist/. http://www.geo.umass.edu/stategeologist/savecore.htm.

UPCOMING EVENTS

March 23, 2012 - NH Water & Watershed Conference, Plymouth State University to the events page:

http://www.plymouth.edu/center-for-the-environment/2012-nh-water-watershed-conference/.

April 13, 2012 - Geological Society of Maine - Spring Meeting, the focus of this meeting will be student poster and oral presentations, with the Walter Anderson award given for the best Earth Science undergraduate oral and poster presentation. The keynote speaker for the meeting will be Steve Kite. University of Maine Presque Isle, Northern Maine Museum of Science, 181 Main St, Presque Isle, ME 04769 http://www.gsmmaine.org/wp-content/uploads/2010/02/GSM-V38N1-0312.pdf.

April 28, 2012 – Vermont Geological Society Spring Meeting - Meeting is dedicated to students conducting research in the geosciences. Middlebury University, Middlebury, Vermont, Room 220 of McCardell Bicentennial Hall at 8:30 am. For more information contact: Dave West at dwest@middlebury.edu.

June 1 - 3, 2012 - 75th Annual Reunion - NORTHEASTERN FRIENDS OF THE PLEISTOCENE Further information will be posted on the Friends website under News: http://www.geology.um.maine.edu/friends/.

September 2, 2012 - The very first International EarthCache Event is being held on Sunday 2 September 2012 near Portland, Maine, USA. The event will be like no other large **Geocaching** event as participants will be able to take part in learning lessons about **EarthCaches**, meet EarthCache reviewers and participate in many other activities. There will be opportunities to trade geocoins and tags, meet vendors of geocaching merchandise and meet and mingle with geocachers who are interested in EarthCaches from around the globe. http://www.earthcacheevent.org/.



November 4–7, 2012 – GSA in Charlotte, North Carolina, Geosciences: Investing in the Future. Follow at http://www.geosociety.org/meetings/2012/.

March, 2013 - Northeastern Section GSA meeting at Bretton Woods. This meeting takes place in northern NH (first time ever in the White Mountain Region) and it's also the 125th anniversary of the founding of GSA. If interested, please contact the General Chair, Brian Fowler at b2fmr@metrocast.net.

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

September 9-12, 2013 - The 2013 Highway Geology Symposium be held in Conway, NH. http://www.highwaygeologysymposium.org/History.asp

WHADDAYA KNOW? HAVE AN INTERESTING GEO-STORY OR PICTURES TO SHARE?

I'm interested in getting advance announcements of meetings or other geologic events of interest to GSNH members for the newsletter. For instance, if the BRCC (Belknap Range Conservation Coalition) or Lakes Region Conservation Trust sponsors a hike with a geology focus. Or maybe you've read a good geo-book. We are always looking for interesting material to include in each issue of The Granite State Geologist, such as:

- Advance announcements of meetings or other events
- •Short articles about New Hampshire or New England geology or earth science
- •Technical articles of interest to New Hampshire geologists
- •Short articles about the history of the practice of geology in this region
- Biographical profiles
- •Student abstracts, either from students in New Hampshire schools, or from students elsewhere but doing work in New Hampshire
- •Black and white or color artwork or geologic photographs of NH or current events
- Opinion pieces; controversial or otherwise
- •Humorous stories

Share them in this newsletter by sending to Wayne.lves@des.nh.gov.



MAYBE TED WILLIAMS WAS RIGHT? ARCTIC PLANT REVIVED FROM 30-KA FROZEN SLEEP –

From http://geology.about.com/b/2012/02/21/arctic-plant-revived-from-30-ka-frozen-sleep.htm?nl=1.

A 32,000 year old plant recovered from the permafrost of what was once a Siberian ground squirrel's den is now alive after its tissues were cultured into plants. The plant is similar to modern day species, but has distinct differences. Don't expect Jurassic Park-style recovery of species though, as Russian researchers calculated that the plant's tissue had survived more gamma radiation than any previously recorded species. The original article was published in Proceedings of the National-Academy of Sciences -

http://www.pnas.org/content/early/2012/02/17/1118386109.abstract.

.

NEW MINERAL SPECIES AS OF OCTOBER 7, 2011

Bob Whitmore reports that Falsterite, a new secondary phosphate mineral from the Palermo No. 1 pegmatite, North Groton, NH, has been deemed a "new Mineral." See:

http://www.nola.com/education/index.ssf/2011/10/minerals named after pair of u.html.

EARTH SCIENCE WEEK 2012 - AGI ANNOUNCES EARTH SCIENCE WEEK 2012 THEME

This year's theme is *Discovering Careers in the Earth Sciences*. AGI's 2012 Earth Science Week (October 12–20, 2012) encourages young people and the general public to learn how geoscientists gather & interpret data about Earth and other planets. [Learn more - http://www.earthsciweek.org/]

[YET AT THE SAME TIME...] IS EARTH SCIENCE EDUCATION AT RISK IN YOUR STATE?

Many public schools have dropped Earth science from the required curriculum in recent years. Some colleges have closed geoscience departments. Employers have said they need more qualified candidates for geoscience jobs. Does your public education system ensure that all students learn important Earth science content?

AGI allows you to track the status of Earth science education nationwide. The "Pulse of Earth Science" web site, launched in connection with Earth Science Week, offers detailed, up-to-date information on geoscience education in every state, as well as guidance for advocates. View online at http://www.agiweb.org/education/statusreports/2007/index.html.

U.S. MINERAL VALUES UP IN 2011 - from U.S. Geological Survey;

Released: 1/30/2012

The value of mineral production in the United States increased by 12 percent in 2011 from that of 2010, suggesting that the nonfuel minerals industries, particularly metals, continued to recover from the economic recession that began in December 2007 and lasted well into 2009.

The value of raw, nonfuel minerals mined in the United States was \$74 billion in 2011, up from \$66 billion in 2010, according to the U.S. Geological Survey's annual release of mineral production statistics and summary of events and trends affecting domestic and global nonfuel minerals.

"Information in the Mineral Commodity Summaries helps business leaders, policy makers, managers, and anyone else understand the critically important flow of minerals through the supply chain and how they are contributing to, and reflecting the health of, our nation's economy," said USGS director Marcia McNutt. "For example, in 2011 domestic recycled metallic and mineral materials alone contributed \$32 billion to our economy."

The metals sector was marked by higher prices for many domestically mined metals, resulting in a 23 percent increase in the value of domestic metal production. The non-metallic minerals sector increased by 3 percent, the first increase since 2007.

U.S. dependence on foreign sources for minerals increased, continuing a trend that has been evident for more than 30 years. The United States relied on foreign sources to supply more than 50 percent of domestic consumption of 43 mineral commodities in 2011. The United States was 100 percent reliant on imports for 19 mineral commodities in 2011.

Minerals are a fundamental component of the U.S. economy. Final products, such as cars and houses, produced by major U.S. industries using mineral materials made up about 15 percent (more than \$2.2 trillion) of the 2011 gross domestic product. Domestic raw materials

and domestically recycled materials were used to process and produce mineral materials worth \$633 billion, such as aluminum, brick, copper, fertilizers, and steel. These products were, in turn, used to produce cars, houses, and other products.

The report, Mineral Commodity Summaries 2012, is an annual report that includes statistics on about 90 mineral commodities and addresses events, trends, and issues in the domestic and international minerals industries. The report is used by public and private sector analysts regarding planning and decision-making for government and business.

The USGS collects, analyzes, and disseminates current data on minerals industries in the United States and about 180 other countries.

The USGS report "Mineral Commodity Summaries 2012" is available online. http://minerals.usgs.gov/minerals/pubs/mcs/.

For more information on this report and individual mineral commodities, please visit the USGS National Mineral Information Center. http://minerals.usgs.gov/minerals/

THE NH GEOLOGICAL SURVEY GROUND WATER LEVEL NETWORK SUMMARY Submitted by the NHGS

December 2011 NH Groundwater level measurements were collected from December 20 – December 30, 2011. The statewide December 2011 average groundwater level showed a increase of 0.37 feet from November 2011. When compared with December 2010, the statewide average groundwater level increased 0.99 feet. The December 2011 average groundwater level in the new bedrock wells showed a increase of 0.35 feet when compared with November 2011. When compared with December 2010, the bedrock wells with at least one year of data showed an increase of 0.64 feet.

January 2012 measurements were collected from January 24 – January 28, 2012. The statewide January 2012 average groundwater level showed a decrease of -0.43 feet from December 2011. When compared with January 2011, the statewide average groundwater level increased 0.95 feet. The January 2012 average groundwater level in the new bedrock wells showed a decrease of -.50 feet when compared with December 2011. When compared with January 2011, the bedrock wells with at least one year of data showed an increase of 1.15 feet.

February 2012 measurements were collected from February 22 – February 28, 2012. The statewide February 2012 average groundwater level showed a decrease of -0.38 feet from January 2012. When compared with February 2011, the statewide average groundwater level increased 0.82 feet. The February 2012 average groundwater level in the new bedrock wells showed a decrease of -0.53 feet when compared with January 2012. When compared with February 2011, the bedrock wells with at least one year of data showed an increase of 1.07 feet.

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.

REMINDERS - Check the GSNH website for up-to-date information about our meetings and field trips. Announcements regarding changes or cancellations will be posted on the GSNH homepage www.gsnh.org.

EARLY GEO-THINKER ROBERT STENO ON GOOGLE AND IN CSM ARTICLE

Google's January 11, 2012 geology doodle honoring Robert Steno's 374th birthday was complemented by a Christian Science Monitor article documenting his contributions to early geologic thought. See the article at:

http://www.csmonitor.com/Innovation/Horizons/2012/0111/How-Nicolas-Steno-changed-theway-we-see-the-world-literally.





NE GSA Planning Session Held 03/04/2012 at James Hall, UNH. This was the 3rd planning session. The New England GSA will be held at the Mount Washington Hotel at Bretton Woods, NH March 17- 20, 2013. See hotel accommodations at: http://www.omnihotels.com/FindAHotel/BrettonWoodsMountWashington.aspx.

REMEMBERING THE OLD MAN OF THE MOUNTAIN Submitted by Julie Spencer Last summer on my way home from our geology field trip I decided to stop at Cannon Mountain and take a look at the recently completed Phase One of the monument to remember the Old Man of the Mountain. At the end of the walkway where you would formerly look up and see the Old Man, there are a series of profilers.



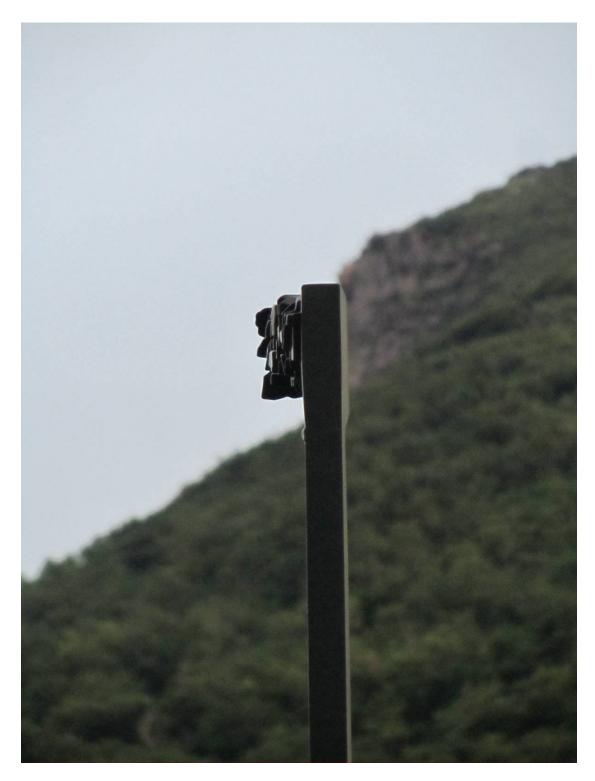
On the horizontal bar of each profiler there are raised blocks, somewhat like a Braille for geologists. Viewed from the side they are just a series of three-dimensional geometric blocks.



The granite paving stones at the base of the profilers are engraved with the names of supporters of the legacy fund. Mixed in with the donated pavers are stones bearing footprints instructing viewers of different heights to stand on the appropriate set of footprints.



When Cannon Mountain is viewed from the end of the profiler at your matching height, magically all those random blocks come together to form a familiar profile.



It was great to see the Old Man back in his usual spot on the side of the mountain, even if it was just an optical illusion. Phase Two of the project will be a gateway honoring those who worked to preserve and protect the Old Man and Phase Three is in the planning stages to somehow create a profile. If you are interested in more details about the legacy fund and the monument, visit the website: www.oldmanofthemountainlegacyfund.org.

WALLY FIELD TRIP FUND

The fund continues to grow and is more important than ever given the continued cuts UNH is absorbing. To contribute, please send a check made out to the "Wallace Bothner Earth Sciences Field Trip Fund" to:

Department of Earth Sciences James Hall 56 College Rd. Durham, NH 03824 https://foundation.unh.edu/make-gift, scroll down and click "other", and then type in the name of the fund. Feel free to call 603-862-3148or email wcclyde@gmail.com

ATTENTION ALL MUNICIPAL OFFICIALS AND ENVIRONMENTAL PROFESSIONALS – (From NHTOA Forest Fax February 16, 2012)

In an effort to provide a higher quality, more streamlined permitting process for the regulated public, most Land Resources Management Programs (<u>Alteration of Terrain Bureau</u>, <u>Subsurface Systems Bureau</u>, <u>Wetlands Bureau</u> and the <u>Shoreland Program</u>) have updated their permit application forms. If you provide permit applications to the public or submit permit applications to DES, please take a moment to discard old permit application forms and ensure you have the newest versions. All current application forms are available at their respective DES web pages and have a revision date of 01/01/2012 located within the footnote. As of April 1, 2012, the Land Resources Management Programs will no longer be accepting outdated permit application forms. Going forward, all LRMP application forms will be simultaneously updated every 6 months.

Land Resources Management, a subsection of the Water Division, coordinates communication and resources across those bureaus and programs that regulate land development projects that may impact state aquatic resources. For more information, please visit the NH DES Land Resources Management web page at: http://des.nh.gov/organization/divisions/water/lrm/index.htm.

CORPORATE SPONSORSHIPS FOR GSNH Submitted by Julie Spencer

Would you like to make your company more visible to fellow GSNH members? Don't forget that we now have a corporate sponsorship program for GSNH. The October 2012 Dinner Meeting is available for sponsorship. The deadline will be 6 weeks prior to the meeting date, so you have plenty of time to consider being a meeting sponsor!

Corporate sponsorships for dinner meetings are available for \$250. Meeting sponsorship includes:

- > The logo of the corporate sponsor on the meeting notice
- > A write-up about the sponsoring company on the website and in the newsletter
- > A link to the sponsor's website on the meeting announcement page of the GSNH website
- > Introduction at the Society meeting with an opportunity to speak before the attendees and to provide literature for the tables

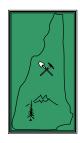
Requests for sponsorship should be directed to: Julie Spencer at julie.spencer@comcast.net. More information at http://www.gsnh.org/sponsors/sponsors.shtml. Payment for sponsored activities should be sent to: Geological Society of New Hampshire, Unit #7, PMB 133, 26 South Main Street, Concord, NH 03301

MEMBERSHIP APPLICATION/RENEWAL



Geological Society of New Hampshire 75 South Main Street, Unit #7, PMB #133, Concord, NH 03301

New member☐ Renewing member☐ Check here if you have no updates to your information				Check here if you do NOT want your information published in the directory.					
Name & Home Address:				Business Name & Address:					
Home Telephone Home Fax: E-mail:				Office Telephone Office Fax: E-mail:					
					Quarterly New Har		e distributed el f applicable):		orBusiness f you prefer a paper copy:
					<u>Year</u>	<u>Degree</u>	<u>Major</u>	College or Univers	<u>ity</u>
Membe	nteer to help ership Committee ative Committee a talk at a meetin	- - -	f the following commit Regulations Committee Education Committee Events Committee	ittees or tasks: Communications Committee (Newsletter or Website, circle preference) Other:					
	ership Catego agular Mambar (/	•	2.00)						
	Regular Member (Annual Dues \$20.00) Student Member (Annual Dues \$10.00)Please complete Education section above.								
Make ched a charitab	cks payable to " le contribution,	'Geological S but may be de	ociety of New Hampshi eductible as a business exp	re." Note that GSNH dues are not deductible as pense. Please return this completed application attended to the GSNH at the address above.					
The Soci	iety's Member	ship year rur	ns from January 1 to Dec	cember 31.					
Signature:			Dai	te:					





Geological Society of New Hampshire

GSNH 2012 Spring Dinner Meeting

Topic: "Conodonts: The "Backbone" of Paleozoic Biostratigraphy"

Speaker: Frederick Rogers

Associate Professor of Geology and Chair of Natural Sciences at

Franklin Pierce University

Thursday, April 12, 2012

Red Blazer Restaurant
72 Manchester Street, Concord, NH

Change $\rightarrow \rightarrow \rightarrow$ 5:30 pm Social Hour, 6:30 pm Buffet Dinner, 7:15 pm Speaker

GSNH 2012 Spring Dinner Meeting, Thursday, April 12, 2012

(RSVP By 4pm Mon	day, April 8, 2012 to get the reservation price)
Advance Reservation	s:Member (Dues Paid) \$22.00 Non-member \$24.00
Please in	dicate the number of vegetarian meals – leave blank for none.
• Non-M	er at the Door (\$25.00) lember at the Door (\$26.00) nts \$10.00 with valid student ID card (Reservation Requested)
door. Please note the you will be responsib reservation by noon Mail to: Wayne Ives,	ept dinner reservations by e-mail, which will then allow you to pay at the at e-mail reservations constitute an agreement with the Society for which ble to pay, whether you are able to attend or not, unless you cancel your the day before the Dinner. Reply via e-mail to: wayne.lves@des.nh.gov . GSNH Dinner Meeting, Unit #7, PMB #133, 75 South Main St., Concord, payable to: GSNH.
Name(s)	
Address:	
Your phone or e-ma	ail:
	inner may be tax-deductible as a business expense. The lecture part of the 5 hours of CEU contact hour credit.
orogram counts as 1.3	3 nours of CEU confact nour creait.