



Granite State Geologist

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April 2005 GSNH Dinner Meeting

The April 2005 Dinner Meeting, held at the Cat n' Fiddle Restaurant, was a very enjoyable evening. Our speaker was Bob Whitmore; his topic "The Mines and Minerals of Namibia". Bob described his December 2004 mineral prospecting trip to the mountains of west-central Namibia. There he got to explore local pegmatites, ore bodies, some miarolitic cavities and a skarn. In addition to showing us the fascinating geology of these sites, Bob also brought a display of several specimens which he acquired on the trip. Gorgeous! The lucky winner of the raffle for the lovely book on the Palermo Mine was Wayne Ives.

Nelson Eby brought up an important issue; the proposed amendments to the Massachusetts Comprehensive Assessment System and Standards for Competency Determination Regulations (MCAS) include Biology, Chemistry, Introductory Physics, and Technology/Engineering, but **NOT Earth and Space Sciences**. AEG New England has more on this issue at http://aegnewengland.velociraptor.net/mcas_earth_and_space_science_ini.htm. Do you know if your state has requirements for earth science education??

2005 GSNH Summer Field Trip August 26-28!

Yet again your GSNH Board of Directors has spent considerable time and effort organizing a Summer Geology Field Trip. Doug Rankin of USGS will lead the 2005 trip. This year the experience will include some spectacular exposures of: mafic Ammonoosuc Volcanics; an Oliverian pluton (Whitefield pluton); and the Clough, Fitch, and Littleton formations. Continuing Education credit is available! It is hoped that with at least two months advance notice, membership will respond with an enthusiastic turn out. Check your family calendar now, save the date, and fill out and return the GSNH Summer 2005 FT Reservation Form at the end of this newsletter. See you in August!!

FYI: UN Decade of Water for Life Official Website

The official website for the Decade of Water for Life, 2005-2015 launched by Kofi Annan is now available. The main goal set by the UN Secretary-General is to meet the internationally agreed targets for water and sanitation by 2015, and to build the foundation for further progress in the years beyond. See <http://www.un.org/waterforlifedecade/index.html> for more information.

NHGS Groundwater Level Monitoring for March through May 2005

NH Geologic Survey

Groundwater level measurements for March 2005 were collected by New Hampshire Geologic Survey (NHGS) staff member Genevieve Al-Egaily on March 28th and March 31st. The statewide average showed a 0.30 foot increase in water levels from last month. The shallow (21 ft) monitoring well in Newport showed the greatest change with an increase of 2.15 feet. The Lee well had the largest decrease with a 0.52 foot decrease when compared to last month's data. The statewide average water levels were up 0.50 feet when compared to March 2004. However, this does not include the data for the Ossipee well as no data was collected on this well in March 2004.

Groundwater level measurements for April 2005 were collected by NHGS staff member Genevieve Al-Egaily on April 27th and April 30th. The statewide average showed a 1.68 foot increase in water levels from last month. The shallow (15 ft) monitoring well in Albany showed the greatest change with an increase of 7.08 feet. Only the wells in Lee, Barnstead, and the shallow Newport well showed decreases when compared to last month. However, the Barnstead and Newport wells showed large increases last month. The statewide average water levels were up 0.71 feet when compared to April 2004. This does not include data from the Errol well because data was not collected at this well in April 2004.

Groundwater level measurements for May 2005 were collected by NHGS staff member Genevieve Al-Egaily on May 25th and May 27th. The statewide average showed a 0.55 foot decrease in groundwater levels from last month. The shallow (15 ft) monitoring well in Albany and the New London well showed the greatest changes with decreases of .74 feet and 3.22 feet respectively. The statewide average water levels were up 0.23 feet when compared to May 2004.

GSNH Outreach

GSNH has three successful outreach programs, the School Speaker's Program, the Lincoln R. Page Professional Development Fund, and the Classroom Enhancement Grant. Please help spread the word about GSNH's outreach programs by talking with the teachers in your local school district! These programs are funded with the proceeds from mineral raffles at GSNH meetings and other contributions, as well as GSNH Membership Dues. Thank you for your continued support! Our outreach programs are described below:

School Speaker's Program

Interested members of the Society can volunteer to make Earth Science presentations in schools. A list of these volunteers with a brief description of the presentation they would be willing to make, is provided to teachers across the state, who must then make the contact and arrangements with the volunteer.

Lincoln R. Page Professional Development Fund

This fund, named in honor of Lincoln R. Page, will reimburse award winners up to \$300 for expenses related to their continuing education in the earth sciences. Go to www.gsnhonline.org for more information on the fund and the application requirements and the life of Lincoln R. Page.

Classroom Enhancement Grant

Teachers across the state of New Hampshire are invited to submit proposals for a grant of funds (up to \$300) to support the purchase of earth-science related teaching materials (equipment or supplies) for use in the classroom. Go to www.gsnhonline.org for more information on the grant and the application requirements.

Earth Science Week, October 9 – 15, 2005

Celebrate Earth Science Week 2005. Give a talk or take some kids on a field trip. This year's theme is "Geoscientists Explore Our Earth", go to <http://www.earthsciweek.org/> for more ideas!

Geologists in the News....

StoneHill Environmental, Inc. Business in the Arts Award Recipient

[Ed. Congratulations to Tim and the rest at StoneHill]

The 21st annual Business in the Arts Awards banquet was held May 25th at the Center of New Hampshire in Manchester. The event, sponsored by the New Hampshire Business Committee for the Arts (www.nhbca.com) honored the thirty-three businesses who were nominated for their support of the arts including sponsorships, employee volunteerism, and donations of products and services. The New Hampshire Business Committee for the Arts was founded in 1985 to educate, motivate and recognize business support of and participation in the arts.

StoneHill Environmental, Inc was one of four award recipients, garnering the Business in the Arts Award in the small business category. StoneHill is an environmental and engineering consulting firm located in Portsmouth (www.stonehillenvironmental.com). StoneHill encourages employees to support local arts and civic organizations and allows them the flexibility in their work schedules to follow their passions. Over the past several years, StoneHill principal Tim Stone, PG, LSP, and Project Manager, John Pasquale, PG, embarked on projects in the Seacoast which are deeply rooted in supporting the arts unique ways, Portsmouth Community Radio WSCA-LP 106.1 FM (www.portsmouthcommunityradio.org) and The Stone Church Music Club in Newmarket (www.thestonechurch.com), respectively. Their dedication and commitment have resulted in the enhancement of the arts and cultural environment in the seacoast community in a significant and lasting fashion.

97th Annual New England Intercollegiate Geological Conference, Fall 2005

Tony Philpotts and Brian Skinner invite everyone to attend the 97th New England Intercollegiate Geological Conference (NEIGC). This year NEIGC will be hosted by Yale University's Department of Geology and Geophysics. The dates of the Conference are Friday September 30, Saturday and Sunday, October 1 and 2, 2005.

Information on titles of the 16 trips, trip leaders, brief descriptions of each trip, and dates of the trips are listed at the website: <http://www.geology.yale.edu/neigc>. Details of registration can also be found on the website. If you have specific questions, please address them by email to Mabel.Peterson@yale.edu. Mabel is this year's Program Coordinator.

Organized social functions will be held on the Yale campus. Yale's Department of Geology and Geophysics looks forward to hosting the traditional social gathering in the Kline Geology Laboratory from 6.00 to 9.00 p.m, on the evening of Friday, September 30. Because extensive changes have occurred in the complex made up by the Peabody Museum, Kline Geology Laboratory, and the new Environmental Science Building, there will be brief tours of the research facilities and collections at the time of the social for interested parties. The traditional NEIGC dinner gathering will be on the evening of Saturday, October 1 and will be held in the dinosaur hall of the Peabody Museum.

We look forward to seeing you at the meeting and ask that you be sure to register ahead of time so that we know how many participants there will be on each trip. The leaders can be reached as follows: Tony Philpotts, email: philpotts@charter.net, and, Brian Skinner, email: brian.skinner@yale.edu

From the AGI Government Affairs Monthly Review for April 2005

The Geosciences Advisory Committee of NSF is seeking input about current and future geoscience funding plans in advance of their October 5-7, 2005 meeting. To offer input or follow the committee's progress visit <http://www.nsf.gov/geo/advisory.jsp> .

Rock and Mineral "Talk Boxes"

Does a phone call from the local Girl Scout troop leader strike fear in your heart? Respond with equanimity; Lee Wilder (GSNH Past-President) has assembled two "Talk Boxes" containing NH rocks and minerals to make it even easier to give a geological presentation.

The Mineral Talk Box has all you need to give an interesting, hands-on presentation and includes 20 interesting common minerals. The box contains posters, activities, nice hand specimens, specimens for use with the participants, as well as background information to help the presenter feel "comfortable" with the material.

The Rock Talk Box has all you need to give an interesting, hands-on presentation on the three rock types. This box contains 20 interesting rock samples, with an emphasis on NH Bedrock samples, where appropriate. The box also contains posters, activities, nice hand specimens, specimens for use with the participants, as well as background information to help the presenter feel "comfortable" with the material.

Both of the Talk Boxes are located at the office of the NH State Geologist, at NH DES, in Concord, NH. To schedule the use of one of them, contact Lee Wilder at 603-271-1976, or geology@des.state.nh.us.

Annual Gilsum Rock Swap & Mineral Show

Sponsored by the Gilsum Recreation Committee

Celebrate local mineral collecting by buying, selling or swapping fossils and jewelry with 75 dealers and distributors. Ham and bean dinner, Saturday night followed by a special presentation on local mineral collecting. Chicken barbeque on Sunday afternoon.

***When?* Saturday, June 25, 2005, 8 a.m.- 6 p.m**

Sunday, June 26, 2005, 8 a.m.- 4 p.m

***Where?* Gilsum Elementary School Grounds, Gilsum, NH**

***More Information?* Contact Rob Mitchell**

P.O. Box 76, Gilsum, NH 03448, (603) 367-9636; or e-mail:

rmitchell60@adelphia.net

Old Man on cover of Environmental and Engineering Geoscience

Brian Fowler's article titled **Stability and Collapse; Old Man of the Mountains, Franconia Notch, New Hampshire** made the cover of the February 2005 issue of Environmental and Engineering Geoscience (E & EG). For those of you who are Association of Engineering Geologists (AEG) members, go to <http://eeg.geoscienceworld.org/> and follow the links to E & EG and read the article online. For those of you who are not members, Brian and the editors of E & EG have given us permission to reprint the article in the Granite State Geologist. Watch for it in an upcoming issue.

GSNH Summer 2005 Geology Field Trip (GFT)

Littleton, NH, and, Lafayette Campground, Franconia Notch, NH

Friday afternoon 08/26 – Sunday mid-day 08/28/05

Schedule of Events:

(Plan to attend all or some of the scheduled events.)

Friday afternoon 08/26/05:

- Arrive at Lafayette Campground, Franconia Notch. Look for GSNH signs. Make camp...or...
- Arrive at the local hotel/motel/B&B of your choosing...“Make camp.”

Friday evening 08/26/05:

- 8 PM sharp. Evening program in the theater at the FLUME Visitors Center:

“Geology of Quaternary (Archaic) New England Soapstone Artifacts”
Suzanne Walls, P.G., Andover Geologic Consulting

Saturday morning and afternoon 08/27/05: Part 1 of the GFT

* *see trip description below*

- 8:15 AM ! Meet at the south end of the Cannon Mountain Aerial Tramway parking lot. Doug Rankin, of the USGS and our GFT leader, has planned an 8:30 AM departure. Please be prepared to participate in the field trip car pool. We anticipate returning to Lafayette Campground by 4:30 PM.

Note: This trip will be a series of carpool stops and short hikes in the area south of Littleton, NH. It will be necessary to bring a bag lunch. Layers of clothing/footwear for variable weather and walking conditions are necessary. Be sure to bring a water bottle for hydration. **This part of the weekend is not designed for children or family**...but you may decide. The Franconia area has a great variety of family activities. If you are unfamiliar with the offerings, check them out in advance at: www.loonres.com/ or www.lincolnwoodstock.com/

Saturday evening 08/27/05: Famous GSNH Geology Field Trip BBQ

- 5:00 PM. Meet at Lafayette Campground, Franconia Notch, NH, social hour starts at 5:00 PM, the famous BBQ will be served at 6:00 PM.

GSNH Summer 2005 Geology Field Trip (GFT), continued

Sunday morning 08/28/05: Part 2 GFT, the field trip resumes.

- 8:15AM! Meet Doug Rankin at the south end of the Cannon Mtn. Aerial Tramway parking lot at 8:15 AM for an 8:30 AM departure. Plan to participate in the field trip car pool. This part of the GFT will return to Lafayette Campground no later than noon. Checkout time for the campground is no later than noon on the day following your last night's stay.

For those wanting **Continuing Education** hours for events attended, certificates will be available during the weekend and a possible total of 14 hours will be assigned as follows:

- "Geology of Quaternary (Archaic) New England Soapstone Artifacts" Friday evening 8PM program = 1.5 CE hours
- Part 1 GFT Saturday 8:15-4:30 PM = 8.5 CE hours
- Part 2 GFT Sunday 8:15-12 PM = 4.0 CE hours

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*GSNH Summer 2005 Geology Field Trip description

This trip will include some spectacular exposures of: mafic Ammonoosuc Volcanics; an Oliverian pluton (Whitefield pluton); and the Clough, Fitch, and Littleton formations. The stops include: an inactive quarry near the mouth of the Gale River; a road cut nearby along U.S. 302; outcrops in the Ammonoosuc River; a traverse along the Gale River for about half a mile upstream from its junction with the Ammonoosuc; and a traverse to and along a power line north of Streeter Pond - all in the southern part of the Littleton 7.5-min. quad and all southeast of the Ammonoosuc fault.

We should see: evidence that the Whitefield pluton intrudes the Ammonoosuc Volcanics (*sensu lato*); nearby photogenic outcrops of Clough and Fitch above the pluton; a magnificent section through felsic (debris flows and a dated ash) and mafic (pillows) volcanics in the lower part of the Littleton; turbidites of the Littleton with large staurolites; more than one exposure of a regolith developed on the Whitefield pluton (one of which is at the base of the Fitch); and an enigmatic series of sub-parallel zones of round alaskite 'clasts' in the Whitefield pluton near what must have been its Silurian erosionally exposed surface.

This stop will certainly generate heated discussion... Doug knows of no published descriptions of many of the things we will see on this trip (except the Gale River section, which was described by Billings). The outcrops are all relatively easy to get to and would be an excellent resource for future student trips.

Next we will visit some gravel pit exposures of the Albee Formation (elsewhere demonstrably stratigraphically beneath the Ammonoosuc Volcanics). The Albee is the oldest formation in the area. We will also visit some exposures of the Mesozoic (?) Ammonoosuc Normal Fault in the NE part of the Lisbon 7.5' quadrangle.

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**GSNH Summer 2005 Geology Field Trip
Lafayette Campground, Franconia Notch, NH Aug. 26-28**

REGISTRATION FORM

NAME: _____

MAILING ADDRESS: _____

ZIP: _____

BEST PHONE TO CONTACT YOU: _____

BEST E-MAIL ADDRESS:

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\_\_\_ I will be attending by myself.

\_\_\_ I will be attending with \_\_\_ others. How many of these are children under 12? \_\_\_

\_\_\_ I have reserved a campsite for myself/us at Lafayette Campground. See campground map/info at:

<http://www.franconianotchstatepark.com/lafayette.html>

*We have reserved 8 adjacent camp sites that allow 4 adults and 2 cars per site. Before July 1<sup>st</sup>, **YOU** will need to contact Lafayette Campground reservations at 1.603.271-3628 and ask for one of the **Geological Survey Campsites that are on reserve**. Do it now...we could only save 8. You will be on your own after July 1, 2005.*

\_\_\_ I am taking care of my own "camping" arrangements. Check out local accommodations at: <http://www.lincolnwoodstock.com/lodging.html>

*Now, we need a "BBQ count". There is no charge for the BBQ...it is part of the GSNH Summer 2005 GFT! But we do need to know "how many-want-what!"*

*(Reminder: ALL beverages are BYOB.)*

**ADULTS:** \_\_\_steak \_\_\_ chicken \_\_\_ hot dogs \_\_\_  
hamburgers

**CHILDREN UNDER 12:** \_\_\_steak \_\_\_ chicken \_\_\_ hot dogs  
\_\_\_ hamburgers

Mail this reservation form to: Dave Wyman, GSNH Summer 2005 GFT, 31  
Columbus Ave., Concord, NH 03301 email: [buoytechnology@comcast.net](mailto:buoytechnology@comcast.net)

WE **MUST** RECEIVE YOUR REGISTRATION **NO LATER THAN** FRIDAY JULY 1, 2005.

## Dates to Remember!

- Gilsum Rock Swap  
June 25 & 26, 2005
- GSNH Summer Fieldtrip  
August 26-28, 2005
- Granite State Geologist submission deadlines  
(March 1, June 1, September 1, December 1)
- GSNH Annual Meeting and Dinner  
October 13, 2005

Geological Society of NH  
PMB 133, 26 South Main Street  
Concord, NH 03301





