

# Granite State Geologist

The Newsletter of the Geological Society of New Hampshire Summer 2004 Issue No. 45

www.gsnhonline.org

GSNH\_ Officers

**President** –Mike Robinette Gilmanton, New Hampshire

Vice President-GS – Dave Wyman Buoy Technology, Inc. Concord, New Hampshire

Vice President –PG – Tim Stone StoneHill Environmental Portsmouth, New Hampshire

> **Secretary** – Chip Crocetti Sanborn, Head & Associates Concord, New Hampshire

**Treasurer** – Suzanne Wall Lawrence, Massachusetts

**Past-President** – Lee Wilder Colby-Sawyer College New London, New Hampshire

### Members-at-Large

Richard Moore US Geological Survey Pembroke, New Hampshire

Ralph Wickson NHDES Waste Management Division Concord, New Hampshire

### Membership

Steve Shope Exeter Environmental Assoc. Exeter, New Hampshire

# Website gsnhonline.com

Julie Spencer ENSR International Westford, Massachusetts ispencer@ensr.com

#### Newsletter

Tania Brice Coffin Keene, New Hampshire coffin@cheshire.net

### **GSNH Spring 2004 Dinner Meeting**

More than 55 GSNH members and guests assembled on the second Thursday in April for a delicious buffet dinner at the Cat n' Fiddle restaurant in Concord, NH. Much camaraderie and good cheer preceded a very interesting presentation by Dr. Larry Mayer, of the NOAA/UNH Joint Hydrographic Center, in Durham, NH. Larry explained the latest techniques used in coastal ocean floor mapping. All were impressed with the detailed maps of ocean floor topography, currently possible with this technology. One can only wonder what will be possible in the future.

The evening ended with the ever-popular GSNH Mineral Raffle. Greg Kirby's donated Cerussite and cut blue Sapphire specimens were won by Theresa Kleiner and Julie Spencer, respectively. Doug Rogers won Suzanne Wall's donated piece of Petrified Wood.

## GSNH/GSM Summer Fieldtrip July 24-25, 2004

Thanks to the Geological Society of Maine and President, Lisa Churchill-Dickson for organizing this year's joint fieldtrip. The trip is based in Wells, ME, for details see the schedule at the end of this newsletter!

### Gilsum Rock Swap, Gilsum, NH, June 26-27, 2004

The annual Gilsum Rock Swap & Mineral Show, sponsored by the Gilsum Recreation Committee will be held 6/26-27/2004. Celebrate local mineral collecting by buying, selling or swapping fossils and jewelry with 75 dealers and distributors. A ham and bean dinner will be held Saturday night, followed by a special presentation on local mineral collecting. A chicken barbeque is scheduled for Sunday afternoon.

Hours: Saturday, June 26, 2004, 8 a.m.- 6 p.m., and Sunday, June 27, 2003, 8 a.m.- 4 p.m. The swap is held on the Gilsum Elementary School Grounds, Gilsum, NH; for more information phone 603-357-9636.

### **Membership Reminder!**

A reminder for all members, GSNH will soon be publishing the 2005 GSNH Membership Directory. Those wishing to be in this directory need to be sure their GSNH Membership is up-to-date. If you are in doubt, check the mailing label on this newsletter or contact the membership coordinator, Steve Shope, at: <a href="mailto:sshope@rcn.com">sshope@rcn.com</a>

# NHGS Groundwater Level Monitoring for April and May 2004 Tim Wilson, NHGS

Ground water measurements for April 2004 were collected by the New Hampshire Geological Survey (NHGS) on the 26<sup>th</sup> - 28<sup>th</sup> of the month. All water levels within the 25-well network have risen from last month, with an average increase of 1.47 feet. This rise in water level also exceeded last year's average rise for April by 0.16 feet. Snow had melted away from all well locations except in Albany at the couplet wells ADW-14 (79.5 feet deep) and ADW-15 (15.0 feet deep), where small snow piles still existed at the time of measurement. Water levels in these wells showed the most significant increase from March by rising 2.67 and 3.30 feet, respectively. All but two wells registered greater than 0.50 feet increases from March. Monitoring wells in Barnstead (BAW-10) and Concord (CVW-2) registered only slight increases, 0.29 feet and 0.27 feet respectively.

The monitoring well in Ossippee (OXW-38) had been vandalized prior to observations in March and a measurement could not be obtained at that time. The well was repaired and the lock was replaced during the April 27<sup>th</sup> measurement. The water level in well OXW-38 was 0.56 feet higher than observed 2 months ago in February.

The May round of groundwater level monitoring was conducted May 26th-28th, 2004. While May had some steady precipitation, overall there was little change from April 2004, with levels decreasing on average by 0.04 feet. Vegetation had emerged in May, in contrast to last month, making transpiration a larger player in the cycle. The May 2004 measurements exceeded the May 2003 levels, exhibiting an increase of 0.59 feet. Data has not been obtained at the time of this report from CTW-73, the NHGS observation well in Colebrook, NH.

The NHGS is actively working within NHDES to have a request to expand the present monitoring network be included as part of the state's Capitol Budget request for the next biennium. Currently, the present monitoring well network only contains one bedrock well. NHGS looks forward to GSNH members' support of the networks expansion to include important bedrock data.

### Earth Science Week 2004

Don't forget that Earth Science Week 2004 will be October 10-16, 2004. It is never too early to start planning. Put the GSNH Annual Meeting on your calendar (10/14/04), get a package from the American Geological Institute (AGI) and give a talk at a local library, or just take some of your rocks, mineral specimens or fossils to a local elementary school. Young kids love rocks and fossils! But, their opportunities to learn about them are limited. You can make a difference, and, keep our discipline alive!

### **GSNH Members invited to AIPG Annual Meeting**

Saratoga Springs, New York, October 2-7, 2004

Dear GSNH Members and other NH PG's.

Please let me personally invite you to attend the 41st Annual Meeting of the American Institute of Professional Geologists (AIPG) to be held October 2-7, 2004 in beautiful and geologically interesting Saratoga Springs, New York. The Northeast Section of AIPG, of which New Hampshire is one of the eight member states, is hosting this national meeting, which will bring together geologists from all corners of the country. The theme of this year's meeting is "From Extraction to Restoration: Geological Management of Natural Resources." The venue for the meeting is the historic Gideon Putnam Hotel and Convention Center

AIPG meetings are a bit different from other geological society meetings, with a variety of technical sessions, short courses, and field trips as well as plenty of opportunity to interact with colleagues about the issues we face as practicing professional geologists. We think our meetings are a bit less dry than some. For those who are NH PG's, attending the meeting is a very pleasant way to accrue professional development/continuing education hours necessary for the renewal of your NH PG license. Some of the short courses will also accrue CEUs for LSPs and LEPs in Mass. and Conn., respectively.

AIPG is the largest association that is dedicated to promoting geology as a profession and professionalism in geology. Nationally, AIPG has over 4,700 members organized into 36 regional sections. The Northeast Section, with members in the six New England States, New York, and New Jersey, is the second largest section in the country with over 550 members. The Annual Meeting is a great way to learn more about AIPG and its efforts on behalf of our profession.

Come for a day, or come for the entire meeting. You won't regret it. Please visit our section website at <a href="www.ne-aipg.org">www.ne-aipg.org</a> and the national website at <a href="www.aipg.org">www.aipg.org</a> or contact Dan St. Germain <a href="www.aipg.org">(dst.germain@pirnie.com</a>) directly if you have any questions.

Cordially,

Dan St. Germain, CPG-07858, NH P.G. #12 President, Northeast Section AIPG

## **New England Intercollegiate Geological Conference 2004**

The next New England Intercollegiate Geological Conference (NEIGC) will be held October 8-10, 2004 and will be based in Salem Massachusetts. For more information and a description of the proposed fieldtrips go to <a href="http://www.salemstate.edu/~lhanson/NEIGC/2004NEIGC.html">http://www.salemstate.edu/~lhanson/NEIGC/2004NEIGC.html</a>, or contact Lindley Hanson (<a href="mailto:lhanson@salemstate.edu">lhanson@salemstate.edu</a>).

# First Annual OLD MAN OF THE MOUNTAIN Teacher's Workshop

On Saturday, May 1, 2004 a dozen New Hampshire Science educators attended the First Annual, OLD MAN OF THE MOUNTAIN Teacher Workshop. The anniversary of the collapse of New Hampshire's State Symbol was the theme for this handson geological education event. Held at Plymouth State University, in cooperation with the New Hampshire Geological Survey, teachers spent the morning learning NH Geology, geologic mapping, and rock and mineral identification. During an afternoon field trip, they traveled to Franconia Notch for a first hand look at the Old Man's former site, and identified boulder remnants of the Old Man. Field discussions based around the morning's geology lessons centered on the Old Man's geologic origin and mass wasting demise.

Combining a strenuous walk to the base of the talus slope with a diligent search, the trip leaders showed the workshop attendees several large remnants of Conway granite that had been part of the famous profile (Fig.1). Twisted and broken steel rods, still epoxied into drill holes were proof that the granite blocks found, were indeed authentic pieces of the Old Man (Fig. 2). A somber moment for all...

In cooperation with the Old Man Revitilization Task force, this workshop is planned to be an annual event for New Hampshire educators. The instructors included Warren Tomkeiwicz, Dan Reidy, David Wunsch and Lee Wilder.



Fig. 1 Teachers examine a large Conway granite boulder from the collapsed Old Man of the Mountain.



Fig 2. Forensic geology-the twisted and broken steel rods, epoxied into drill holes, confirm the blocks were part of the Old Man..

### **GSNH and GSM 2004 Summer Field Trip**

Surf and Turf, Location: Wells, Lebanon, and Acton, Maine

### **Trip Schedule**

Saturday, July 24th

8 to 8:30 a.m. - assemble in the auditorium (in the barn) at Laudholm Farm on the Wells National Estuarine Research Reserve in Wells, Maine. See http://www.wellreserve.org/ for directions to the Reserve.

8:30 - 11 a.m. – Maine Coastal Barrier Beaches and Dunes: Past, Present, and Future - Steve Dickson. A walking transect from Laudholm Farm across a glacial upland to a back-barrier salt marsh, coastal sand dunes, and beach will explore the geomorphology, stratigraphy, and coastal processes that have shaped and continue to change the dynamic beach environment.

11 a.m. –12 p.m. - regroup and travel to Peter Thompson's area; eat lunch in transit (pack your own). Meet at the Park-n-Ride area on the west corner of the intersection of Rte.202 and Little River Road in East Lebanon (stoplight). Ice cream bars and drinks may be purchased at the general store next to the parking lot.

12 - 4 p.m.- Overview of Geology in Lebanon and Acton, Maine - Peter Thompson. The trip will focus on exposures of the overturned bedrock stratigraphy (Rindgemere, Gully Oven, Towow, and Madrid and Littleton equivalents) at sillimanite grade, include a visit to an abandoned silver mine, and explore some Quaternary deposits: moraines, an esker, and boulder fields.

5 to 5:30 p.m. - meet back at the Wells Reserve.

6 – 7:30 p.m. - Catered Dinner\* in the auditorium at the Wells Reserve.

Saturday night Lodging – The Wells Reserve has graciously offered 20 tent sites, free of charge, for Saturday night. Reservations are on a first-come, first-serve basis. People interested in this option can contact Lisa Churchill-Dickson at <a href="mailto:paleo@gwi.net">paleo@gwi.net</a>. Otherwise, there are a variety of campgrounds and motels in the area that are also available.

### Sunday, July 25th

8:30 a.m. - Continuation of Overview of Geology in Lebanon and Acton, Maine - Peter Thompson. Trip starts at Park-n-Ride area on the west corner of the intersection of Rte.202 and Little River Road in East Lebanon (stoplight). Trip will focus on additional outcrops of Littleton in Maine, then Art's "Gonic" in North Berwick, before crossing the river into New Hampshire.

\*Catered Dinner: This will be a buffet. The cost of the meal is \$14 per person (\$7 for children under 12). Payment should be sent to Rob Peale (see below) and must be received by **July 15th**.

Menu Teriyaki Chicken Breasts Sirloin Kabobs Crab-Stuffed Mushrooms Garden Salad Potato

Fresh Vegetable Rolls and Butter Coffee Soda, juice, water

Send payment to: Rob Peale Geological Society of Maine c/o Maine Dept. Environmental Protection State House Station 17 Augusta, ME 04333-0017 Phone: 207-287-7679

Phone: 207-287-7679 Fax: 207-287-7826

Email: rob.n.peale@maine.gov

For more information, contact either Lisa Churchill-Dickson (<u>paleo@gwi.net</u>) or Tom Weddle (<u>Thomas.K.Weddle@maine.gov</u>).

Hope to see you there!

# Dates to Remember!

- Gilsum Rock Swap, June 26-27, 2004, Gilsum, NH
- GSNH/GSM Summer Fieldtrip, July 24-25, 2004 Wells, Lebanon, and Acton, ME
- Next Newsletter Deadline, Wednesday September 1, 2004
  - GSNH Board Meeting, September 9, 2004, TBA
  - Capital Mineral Club 2004 Gem and Mineral Show Go to: www.capitalmineralclub.org
- GSNH Annual Meeting, October 14, 2004, Concord, NH
  - NEIGC, October 8-10, 2004, Salem, MA
- GSA Annual Meeting, October 16-19, 2004, Salt Lake City, UT

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

