

Granite State Geologist

The Newsletter of the Geological Society of New Hampshire, Summer-Fall (September) 2009 Issue No.66 www.gsnhonline.org

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MESSAGE FROM THE PRESIDENT Submitted by Jutta Hager, GSNH 2008-2009 President

Not to take away from Lee Wilder's write-up, but as many of you know, our second attempt to reach the Isles of Shoals was successful, thanks to good planning by Lee and Ralph Wickson, excellent geologic repartee by Wally Bothner, and good weather with minimal ocean swells.

Don't forget that the fall meeting of October 15th will again take place during Earth Science Week, and also again at the Red Blazer. We have scheduled Seth Campbell of CRREL to speak, and will also have the annual election of officers. Since only current GSNH members will be eligible to vote, this may be a good time to make sure that your membership is up to date. Like our speakers last year, Seth has agreed to give us another "twofer," with a lunchtime talk at the DES prior to his evening GSNH presentation.

Congratulations to the Connecticut geologists for founding a Geological Society of Connecticut (GSC); with this group's first meeting in November, it should be a busy geological fall. Congratulations also to Dave Wunsch, who was elected President of the Association of American State Geologists (AASG) at its annual meeting in Utah this past June.

GSNH EVENT REMINDER

The GSNH tries very hard to organize, plan and execute its events. But sometimes conditions change. Membership is reminded to ALWAYS check www.gsnh.org before coming attending an event to make sure that a "last minute" change has not been posted.

GSNH 2009 SUMMER FIELD TRIP

A very special thank you to Wally Bothner, Emeritus Professor of Geology, UNH for leading our recent field trip to the Isles of Shoals/Star Island. Seventy-nine (79) attendees enjoyed a beautiful NH summer day - a magnificent boat ride to and from the island, lots of interesting geology, gorgeous ocean-island views, a sandwich buffet lunch and camaraderie with other interested individuals.



The geology of the Isles of Shoals is part of the complex geology of the New England coastal region. Star Island's rocks, "like the Rye (Formation) at New Castle and Gerrish Islands, were metamorphosed and deformed prior to the emplacement of mid-Devonian diorite and granite, deformed again during Permian shear, and intruded again (with abundant diabase dikes) during initial stages of the opening of the Atlantic Ocean (Mesozoic break-up of Pangaea)."...and a thank you to Vicky Hardy of the Isles of Shoals Corporation and everyone else who helped with this trip!



GSNH 2009 SUMMER FIELD TRIP PHOTOS – AUGUST 15, 2009 ISLES OF SHOALS/STAR ISLAND





A GOOD TIME WAS HAD BY ALL!

INTRODUCING THE GEOLOGICAL SOCIETY OF CONNECTICUT Submitted by Julie Spencer

I'm pleased to announce the formation of the newest geological organization in New England, the Geological Society of Connecticut (GSC), established this past June. The goals of the GSC include: 1) advancement of the science and profession of geology and its related branches by encouraging education, research and service through the holding of meetings, maintaining communications, and providing a common union of its members; 2) contribution to the public education of the geology of Connecticut and to promote the proper use and protection of its natural resources, and 3) advancement of professional conduct by those engaged in the collection, interpretation and use of geologic data.

The inaugural meeting will be held on the evening of November 9, 2009 at Dinosaur State Park in Rocky Hill, CT (exit 23 off I-91). The meeting will feature presentations by Anthony Philpotts, University of Connecticut Emeritus; Peter LeTourneau, Wesleyan University; and Nicholas McDonald, Westminster School, on their current research in the Connecticut Valley. Attendees can also learn more about the new society, enjoy some food and drink, and meet other GSC members. Information about the society, the membership application and notice about the November meeting is available on the GSC website at https://wesfiles.wesleyan.edu/home/pletourneau/web/GSC/GSC.html.

MORE ON THE GEOLOGICAL SOCIETY OF CONNECTICUT

The Steering Committee of the newly formed Geological Society of Connecticut (GSC) cordially invites you to be part of a new venture in our state to celebrate and enjoy our common background as geologists. Starting this summer, the GSC will be offering membership in the newly formed society and an opportunity to meet fellow geologists from across the state and take part in a variety of geologically inspired activities.

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The inaugural meeting of the GSC is scheduled for early November 2009, and as appropriate given the nature of the group, will be held at Dinosaur State Park in Rocky Hill. This initial meeting will feature a panel of prominent speakers from Connecticut on various geologic aspects of the Mesozoic Era. As is necessary for geologic events, this one will be accompanied by food, drink, and plenty of colleagues to meet for the first time or catch up with once again.

An important purpose of the GSC is sharing our common background – geology – in ways reminiscent of the fun, excitement, and camaraderie that we experienced through the mapping exercises, microscope work, and best of all the field trips to hither and yon in search of the stories that rocks and sediments have to tell. Our meetings and events will be a place to get in touch with our geologic roots-- not just another job-related group, whether that be academia, consulting, or government service. The names and e-mail addresses of the Steering Committee members are included below if you would like to contact any of them directly. We hope to spread the word as widely as possible. We hope this announcement has sparked an interest in the GSC and that we see you at our first meeting in November.

The Steering Committee of the Geological Society of Connecticut (GSC):

Janet Stone, USGS
Gail Batchelder, Loureiro Engineering Associates
Ralph Lewis, former State Geologist
Randy Steinen, University of Connecticut, Emeritus
Nick MacDonald, Westminster School
Peter LeTourneau, Wesleyan University, Lamont-Doherty
Margaret Thomas, Acting State Geologist
Jelle De Boer, Wesleyan University, Emeritus
Mark Lewis, CT DEP
Margaret Enkler, Dinosaur State Park
Christine Witkowski, Dinosaur State Park

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NHGS SUMMER GROUNDWATER LEVELS

Ground-water level measurements for June, July and August 2009 were collected by NHGS staff member Genevieve Al-Egaily.

<u>June 23-26, 2009:</u> The statewide average ground-water level for June showed a 0.01-foot decrease from May. When compared with June 2008, the statewide average ground water level increased 0.37 feet.

<u>July 27-30, 2009:</u> As a result of the continuing rainfall, the statewide average ground-water level showed a 0.26-foot increase from June. When compared with July 2008, the statewide average ground water level increased 0.72 feet. Increases were also seen in the new bedrock wells when the July ground-water level measurements were compared to those taken in June.

<u>August 24-27, 2009:</u> The statewide average ground-water level showed a 0.28-foot decrease from July. When compared with August 2008, the statewide average ground-water level increased 0.19 feet. The largest increases were seen in the Greenfield well with a 0.48 foot increase when compared to July and when compared to August 2008 the increase was 1.97 feet. These increases are probably the result of the rainy summer and the heavy rainfall, which occurred in the area several days earlier. The rainfall was heavy enough to cause the closer of part of Route 136 near the park entrance and washouts on other area roads.

For historical groundwater data, please go to http://nh.water.usgs.gov/WaterData.

DID YOU KNOW?

STATE OF NEW HAMPSHIRE, In the Year of Our Lord Two Thousand Nine AN ACT relative to criminal mischief committed against natural geological formations, which have been designated as natural landmarks. Be it Enacted by the Senate and House of Representatives in General Court convened:

193:1 Destruction of Property; Criminal Mischief. Amend RSA 634:2, VI to read as follows:

VI. Any person who is found guilty of criminal mischief under paragraph III of this section because he or she has vandalized, defaced, or destroyed any part of the "Old Man of the Mountain" or any natural geological formation, site, or rock surface located on public property that has been designated by the state or any of its political subdivisions or the federal government as a natural area or landmark shall be guilty of a class A misdemeanor and shall also make restitution to the state for any damage he or she has caused.

CALL FOR NOMINATIONS – GSNH BOARD MEMBERS WANTED

The next election of the board of directors will be coming up in October 2009. This is a great way to get more involved in GSNH! The BOD meets guarterly at the office of a different board member to discuss society business and send out the newsletters. Some of the BOD members also serve as committee chairpersons. There is a lot of camaraderie at the meetings and we always have a lot of fun! Nominations are now being accepted for all positions. Please note that due to term limits the following positions will not have a member running for re-election: Society VP, Secretary, Treasurer and one Member-at-Large position. The slate of candidates is included in this newsletter. Please vote at the upcoming fall meeting. If you would like to run Committee please contact either of the Nominating members: (prydel@sanbornhead.com) or Julie Spencer (julie.spencer@aecom.com).

STATE GEOLOGIST ELECTED PRESIDENT AASG

During the annual meeting of the Association of American State Geologists (AASG) in Park City, Utah in June 2009, New-Hampshire state geologist David Wunsch was elected President of the AAGS for the one-year term starting July 1,2 009 until June 30, 2010. Congratulations David, You'll be busy!

UPCOMING EVENTS AND DATES TO REMEMBER

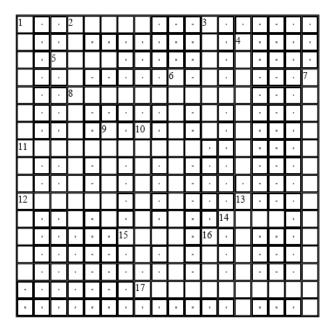
September 25 -27, 2009 - NEIGC 101st Annual Meeting, Lyndonville, Vermont.

October 11-17, 2009 – Earth Science Week.

October 15, 2009 - GSNH Fall Dinner Meeting. Red Blazer Restaurant, Concord, NH.

October 18 - 21, 2009 - GSA Annual Meeting and Exposition, Portland, Oregon.

Madison Boulder



ACROSS

- 2. Measures 37 feet
- 5. The Madison Boulder now rests on this
- **8.** 1.25 D 1.5 miles from the NW, probably Whitton ledge
- **11.** Location of the Madison Boulder Geological Site (7,4)
- 12. Measures 83 feet.
- **14.** The 17-acre site was acquired by the state of N.H. in 1946
- 15. This area was one of the first to have land grants set aside for soldiers who had survived the French and Indian War. The land covered by these grants, parts of Eaton and Albany, was incorporated in 1852 as "Madison," in honor of President James Madison, who was born 100 years earlier.

 17. Glacial ice that transported and deposited the Madison Boulder

DOWN

- **1.** Large rocks that were moved various distances during the last ice age (7,8)
- **2.** Most likely source of the Madison Boulder (7,5)
- **3.** Conway boulder sitting on Concord granite
- **4.** In 1970 Madison Boulder was designated a National Natural __ by the U.S. Department of the Interior(8,8,4)
- **6.** Whitton ledge rock type (6,7)
- 7. Possibly the largest glacial erratic in New England (7,7)
- **9.** Madison Boulders measures 23 feet **10.** 1969, Geology of the Ossipee Lake
- quadrangle, New Hampshire: Bull. No. 3, 116 p. with illus. and map. NHGS. (1,7)
- **13.** 1852 land grant, in honor of President James Madison
- 16. It weighs approximately 4662





Geological Society of New Hampshire

2009 FALL DINNER MEETING

Topic:

"Application of Ground Penetrating Radar and Geodetics to the Selection of an Ice Core Drill Site on the Kahiltna Glacier of Mount McKinley, Alaska"

Speaker:

Seth Campbell, Research Physical Scientist USACE Cold Regions Research and Engineering Laboratory, Hanover, NH

Thursday, October 15th, 2009

Red Blazer Restaurant 72 Manchester Street, Concord, NH

6:00 pm Social Hour, 7:00 pm Buffet Dinner, 7:45 pm Speakers

GSNH 2009 Fall Dinner Meeting, Thursday, October 15th, 2009 Advance Reservations: Member (Dues Paid) @ \$22.00.

- Member at the Door or Non-Member with Reservation (\$24.00).
- Non-Member without Reservation (\$26.00).
- Students \$10.00 with valid student ID card (Reservation Requested).

Note: 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.

Reservations will be taken until Monday, October 12, 2009! Checks payable to GSNH.

Mail to: Lee Wilder, 477 Putney Hill Road, Hopkinton, NH 03229. Reply via e-mail to: boslwne@tds.net Nama(c):

Name(s)	
Address:	
Phone and/or Email:	
Half the cost of the dinner may be tay-deductible as a business expense	The lecture part of the program



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