



# Granite State Geologist

This issue published jointly by the NH Geological Society  
and the NH Council of Professional Geologists

## NHGS

### **Officers**

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

**Vice President** – John M. Regan  
NH Dept. Environmental Services  
Concord, New Hampshire

**Secretary** – David M. Wyman  
Buoy Technology, Inc.  
Concord, New Hampshire

**Treasurer** - John Noble  
Marin Environmental  
Milford, New Hampshire

### **Directors**

Richard Moore  
US Geological Survey  
Pembroke, New Hampshire

Mike Robinetter  
Gilmanton, New Hampshire

### **Membership**

Steve Shope  
Exeter Environmental Assoc.  
Exeter, New Hampshire

### **Website**

**[www.nhgs.org](http://www.nhgs.org)**

Timothy T. Allen  
Keene State College  
Keene, New Hampshire

### **Newsletter**

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

### **President's Message**

Lee Wilder, President - NH Geological Society

As Summer 2002 draws to an end, I hope you got to enjoy some of the hot hazy days at a cool vacation spot with your family. Early July found a number of NHGS (New Hampshire Geological Society) members on our annual Summer Field Trip. Tim Allen lead the trip, "Bedrock Mapping Around Lake Sunapee", where participants listened, studied and debated the complex NH geology displayed at a variety of outcrops. The weather was beautiful. We all enjoyed a delicious bag lunch picnic on the grass at Sunapee Harbor. Tim is completing the mapping of the Lake Sunapee area as part of the EdMap Program. We all can look forward to reading the completed report.

Your board of directors has been busy this summer. A NHGS/NHCPG Merger Poll was sent to all current members of the NHGS and the NHCPG. Out of the some 370 polls mailed, 75 members replied...67 were in "favor (of) the merger of the NHCPG and the NHGS" and 8 said that they "oppose the merger of the NHCPG and the NHGS".

Based on these results, a Constitution/Bylaws Committee began looking at the existing NHGS Constitution and Bylaws. Any changes to these documents are to be voted upon "... at any Annual Meeting of the NHGS by a two-thirds vote of the members voting at the Annual Meeting." Thus it is important that all interested NHGS members attend the Annual Dinner Meeting on Thursday, October 17, 2002. (See the registration form in this newsletter.) In addition to being asked to adopt the Constitution and Bylaw changes, members will be asked to vote on the slate of officers as proposed by the Nominating Committee. Of course, write-ins are also welcome.

Basically, the NHCPG proposes to dissolve and rejoin the NHGS. The NHGS is changing its name to the Geological Society of New Hampshire (GSNH). (NHGS is now the New Hampshire Geological Survey...the office of the NH State Geologist. GSNH is in line with what is used by other organizations like ours, in other states.) This requires that the existing NHGS Constitution and Bylaws be re-written to accommodate the name change and components of the NHCPG mission and organization. We will still be a 501 ( c ) 6 organization.

The current NHGS Constitution and Bylaws are on-line at:  
<http://www.nhgs.org/NHGS/bylaws.html> You will find a draft of the rewritten Constitution and Bylaws there also. It is this draft that your Board of Directors has approved and is asking you to vote on at the Annual Meeting.

## **NHCPG Officers**

**President** - Timothy Stone  
StoneHill Environmental, Inc.  
Portsmouth, New Hampshire

**Vice President** - Walter Carlson  
NH Dept. Env. Services  
Concord, New Hampshire

**Secretary** - Tania Brice Coffin  
Keene, New Hampshire

**Treasurer** - John Noble  
Marin Environmental  
Milford, New Hampshire

## **Directors**

Chip Corcetti, Ph.D.  
Sanborn, Head & Associates  
Concord, New Hampshire

Garrett Graaskamp  
American Groundwater Trust  
Concord, New Hampshire

Richard L. Kraybill  
Roy F. Weston, Inc.  
Manchester, New Hampshire

Peter McGlew  
Aries Engineering, Inc.  
Concord, New Hampshire

Kenneth W. Milender  
Atlantic Geoscience Corporation.  
Gilford, New Hampshire

Muriel Robinette  
Haley & Aldrich  
Manchester, New Hampshire

## **Board of Advisors**

Prof. Wallace Bothner  
University of New Hampshire

Eugene Boudette, Ph.D.  
NH State Geologist, Ret.

Brian Fowler  
North American Reserve

John Jemsek, Ph.D.  
Jaworski Geotech, Inc.

William Siok  
American Institute of  
Professional Geologists

Lee Wilder, President  
NH Geological Society

David Wunsch, Ph.D.  
NH State Geologist

## **President's Message, continued**

Lee Wilder, President - NH Geological Society

In addition to the name change, the new Constitution and Bylaws are being expanded to include several of the purpose and mission statements of the NHCPG. Notice that the proposed changes also better define the Standing Committees as well as making the language of the two documents more consistent. It is hoped that the NHGS membership will see that the proposed changes enhance the functions of the Society. Remember, no document is going to be perfect or please everyone...

Again this year, our Annual Fall Dinner Meeting is being held during Earth Science Week. Earth Science Week 2002 is October 13-19. We were fortunate to arrange Nelson Eby to speak on the dangers of volcanism. Started by the American Geological Institute, this is the fifth year of ESWeek and activities continue to expand. Please take some time during ESWeek, to promote an understanding of the Earth Science...even if it is just offering to help a school teacher identify some of the rocks, minerals or fossils that they may have in their classroom collections. For other ideas and what is happening during ESWeek 2002, visit AGI's ESWeek website at: <http://www.earthsciweek.org/>

---

## **President's Message**

Timothy Stone, President - NH Council of Professional Geologists  
PG-95

This past July 1<sup>st</sup>, the one year grandfather period for NH Professional Geologist license applications closed and we saw the full degree of the success of the geologist licensing effort which began more than three years ago. The NH Joint Board reports that as of September 1<sup>st</sup>, 754 applications have been received and 331 licenses have been issued. With this milestone behind us, the NHCPG Board of Directors focused in earnest on the rejoining of our organization with the NH Geological Society. As you read in Lee Wilder's Presidents Message, 67 of 75 NHCPG and NHGS members who responded, supported the rejoining of the two organizations in a poll sent to both memberships. The many comments provided by those who supported the merger focused on the benefits of having one unified geologic organization ("strength in numbers") in relatively small State and the efficiency of operating one organization. Several who opposed the merger commented on the differences in the two organizations' missions (e.g., the pure science and social focus of the NHGS, versus the professional practice and advocacy focus of NHCPG) and the concern that the social and education mission of the NHGS would suffer as a result of a merger. I support the merger and believe that together, the organizations will be even more successful in achieving their education, advocacy, social, and professional missions.

Based on the overwhelming show of support for the merger, a joint NHGS/NHCPG Constitution/Bylaws Committee revised the existing NHGS Constitution and Bylaws to include the general mission of the NHCPG and accommodate the rejoining of the two organizations. Throughout this process, great effort was put into addressing the concerns of those opposing the merger and designing an organization which maintained the identities and missions of the NHGS and the NHCPG without diluting the components which have made each organization so successful. The revised bylaws can be reviewed at [www.nhcpg.org](http://www.nhcpg.org). In order to complete the merger process, NHGS and NHCPG are holding a joint dinner/business meeting on October 17, 2002. Assuming the NHGS membership votes to approve the revised Constitution and Bylaws, the NHCPG members present will then be asked to vote to dissolve NHCPG and transfer the remaining assets to the NHGS. If you have any questions or comments on the revised bylaws or the merger, please feel free to contact me at 603-433-1935 or [tstone@stonehillenvironmental.com](mailto:tstone@stonehillenvironmental.com). Hope to see you on October 17.

## **NHGS Family Event**

Saturday Oct. 5 th and Sunday Oct. 6 th, 2002

As you remember, the NHGS Board found it necessary to change the NHGS Summer Family Picnic. You are now invited to attend the 39<sup>th</sup> Annual Gem and Mineral Show at Sunapee State Park. This very popular exhibit provides a chance to view (and buy) some of the world's finest minerals, fossils and related materials. The Gem and Mineral Show includes an onsite food pavilion, outside picnic tables, the Sunapee Mountain Chair Lift, and the nearby State Swimming Beach as well as a chance to tour the lake on the MV Mount Sunapee ...something for all at the splendid height of NH's colorful foliage season.

NHGS Members just need to register with the admission booth at the Gem and Mineral Show and the NHGS will cover the cost of your family's admission to the Gem and Mineral Show (up to a maximum of two adults and three children), other attractions, such as the boat ride, are on your own.

You can check these events out online:

+Capital Mineral Club, Sponsor of the 39<sup>th</sup> Annual Gem and Mineral Show:

[http://www.capitalmineralclub.org/newsletters/Current\\_Newsletter/page5.htm](http://www.capitalmineralclub.org/newsletters/Current_Newsletter/page5.htm)

+Sunapee State Beach:

<http://www.nhparks.state.nh.us/parkops/parks/sunapee.html>

+Mount Sunapee State Park:

<http://www.nhparks.state.nh.us/parkops/parks/mtsunapee.html>

+Mount Sunapee Resort (Chair Lift):

<http://www.mountsunapee.com/>

+Lake Sunapee Cruises (MV Mount Sunapee):

<http://www.sunapeecruises.com/>

### **Capital Gem and Mineral Club's 39<sup>th</sup> Annual Gem and Mineral Show**

**October 5, 2002, 9:00 am – 5:00 pm**

**October 6, 2002, 10:00 am – 4:00 pm**

**Location: Sunapee State Park Newbury, NH**

---

### **NHGS Annual Fall Dinner Meeting**

**Date: Thursday, October 17, 2002, 6:00 PM**

**Location: Cat'n Fiddle Restaurant, Concord, NH**

We are pleased to have Nelson Eby as our speaker. Nelson has a Ph.D. in geology from BU. He has been a faculty member of UMass Lowell since 1970. His research interests are largely in the fields of high temperature geochemistry, igneous petrology and volcanology. He has just written a textbook titled "Principles of Environmental Geochemistry". He has been involved in research projects on Lyttleton Volcano (South Island of New Zealand), Tongariro (North Island of New Zealand), the volcanoes of the Cameroon Volcanic Line and the volcanoes in the western branch of the East African Rift System (Uganda). This summer he participated in a volcanic hazards workshop at Mt. St. Helen and Mt. Rainier, which prompted the present talk.

**Nelson's topic is:** "Volcanoes - Silence Isn't Necessarily Golden".

Volcanoes have significantly impacted human health and property. Volcanic hazards range from those associated with eruptive events to those that occur without any significant volcanic activity. How can we predict these events, what preventative measures can we take and what is the responsibility of the geoscientist to the general public? Nelson's presentation will discuss hazards from such volcanoes as Mt. St. Helens, Mt. Rainier, Nevada del Ruiz, Pinatubo and Lake Nyos (Cameroon Volcanic Line).

## **USGS Report Released on Potential Ground Water Yields of Bedrock Aquifers in New Hampshire** USGS Office, Pembroke, NH

Results of a study of potential ground-water yields from bedrock aquifers in New Hampshire are described in a newly released report by the U.S. Geological Survey (USGS), in cooperation with the State of New Hampshire, Department of Environmental Services (NHDES). Currently, more than 45 percent of ground-water withdrawals in New Hampshire are from fractured bedrock aquifers. Withdrawals from these aquifers are likely to increase in the future.

The USGS used the yields of 20,308 accurately located New Hampshire bedrock wells as the basis for the study to produce statewide data on well-yield probabilities. Multiple regression analysis, with instrumental variables, was used as the primary method of analysis. The study resulted in the completion of a statistical model of well-yield probabilities that can provide information for use by communities, industry, and professional consultants to increase success rates of locating high-yield water supplies in bedrock aquifers.

The model includes numerous geologic and physiographic factors (all significant at the 95 percent confidence level). Model results are given in terms of the probability of obtaining 40 gallons per minute or more from a 400-foot deep well. Well-yield probabilities were calculated for the entire state on a 30-meter grid basis. Results indicate that well yield generally is lower on steep hill slopes and hilltops and at greater distances from surface-water bodies. Well yields tend to be greater in valleys and near some photo-linear features in certain rock types. Well yields also were related to rock types. For example, well yields were significantly higher in the metamorphic rocks of the Frontenac Formation in northern New Hampshire and in the Rye Formation in coastal New Hampshire.

As part of the study, two of New Hampshire's first 7.5-minute-scale geologic maps were produced (Pinardville and Windham, N.H. quadrangles). Detailed mapping of the bedrock lithology and ductile and brittle structures, as well as thousands of fracture measurements, was undertaken to test the utility of detailed geologic information in assessing probable well yields. Results clearly indicated that adding detailed geologic information to the model improves the identification of areas of potentially high-yielding bedrock.

This newly released report is USGS Professional Paper 1660 titled, "**Factors Related to Well Yield in the Fractured-Bedrock Aquifer of New Hampshire,**" by Richard Bridge Moore and others. Limited copies are available at the USGS office in Pembroke, N.H. through Debra Foster at (603) 226-7837 or a copy can be ordered at cost by calling 1-888-ASK-USGS (1-888-275-8747). The report will be available online through the New Hampshire/Vermont District web page <http://nh.water.usgs.gov/>

---

### **NHCPG.org Needs You!**

Julie Spencer, NHCPG Web Site Committee

Hopefully you have had a chance to visit the NHCPG website and have noticed that some long overdue updates have been made. There is more work to be done and much more anticipated if the NHCPG/NHGS merger is approved. Slowly but surely I'm working my way through it all, but I could use some help! You don't need web experience, just a willingness to volunteer. I need help with proofing and re-writing text, checking links and researching new ones when URLs change, and new ideas! If you would like to volunteer please contact me at [jspencer@ensr.com](mailto:jspencer@ensr.com). I also welcome new ideas and corrections if you've seen any errors on the website. We need feedback!

---

### **Earth Science Week 2002**

Earth Science Week 2002 is October 13-19, this year the theme is "Water is All Around Us". Started by the American Geological Institute, this is the fifth year and the activities continue to grow. Please take some time during ESWeek, to promote an understanding of the Earth Sciences. For ideas and what is happening, visit AGI's ESWeek website at: <http://www.earthsciweek.org/>

Remember that Planet Earth is a system, in which geologic processes are an integral part. Planet Earth provides us with every **THING** that we have...name something that you have that was not somehow extracted from the Earth by a plant or mankind. ESWeek is a great opportunity for you to help promote an appreciation of the Earth Sciences.

## **2002 NHGS Slate of Candidates for Board of Director's Positions**

John Regan, NHGS Vice President

In addition to discussing and voting on the proposed changes to the Constitution and Bylaws, the NHGS Annual Meeting also features the election of officers for the coming year. The slate of candidates for 2003 includes:

**For President:** Leland (Lee) A. Wilder BA Geology, 1964, University of New Hampshire. Med Administration and supervision, 1993, University of New Hampshire. Retired from teaching Earth-Space Science after 35 years in NH public schools; currently an adjunct professor in Earth-Space Science at Colby-Sawyer College and Public Outreach Coordinator for the NH Geological Survey. Member and Vice President of the Hopkinton Conservation Commission. Past President, and formerly a Director of the NH Science Teachers Association. Past Secretary and current President of NHGS.

**For Vice President:** John M. Regan BS Hydrology, 1975, University of New Hampshire. Supervisor for the State Sites Section, New Hampshire Department of Environmental Services. Current NHGS Vice President.

**For Secretary:** David Wyman BS Geology, 1974, and BA Chemistry, 1974, University of New Hampshire; President of Buoy Technology, Inc.,. Current NHGS Secretary.

**For Treasurer:** John M. Noble BS Geology, 1986, Rensselaer Polytechnic Institute. MS Hydrogeology, 1990, Syracuse University. Senior Hydrogeologist, Marin Environmental. Also member of NHCPG, NGWA, and LSPA. Current NHGS Treasurer.

**For Member-at-Large:** Michael Robinette. BA Geology, 1974, University of New Hampshire. MA Hydrogeology, 1977, University of Idaho. Eight years as a Superfund remedial project manager for the NH-DES. Currently a full time dad [no salary, long hours, great benefits, enormous personal satisfaction] and part time volunteer. Member-at-Large on the NHGS Board of Directors since 1999.

Richard Moore continues in the second year of a two year term as a Member-at-Large.

John Regan is chair of the nominating committee and may be reached at (603) 271-3744.

Write-in candidates for all positions are welcome.

---

## **Public Hearing Scheduled for Revised Contaminated Sites Rules**

NHCPG Legislative Committee

The Rule Making Notices for the adoption of Env-Wm 1600 "Reporting and Remediation of Contaminated Sites", the repeal of Env-WS 412 "Reporting and Remediation of Oil Discharges", and the re-adoption with amendment of Env-Wm 1403 "Groundwater Release Detection Permits", were recently forwarded over to the Office of Legislative Services and published in the Rulemaking Register. These rules will govern the response actions required at most contaminated sites, and as such, licensed geologists and consultants should become familiar with the proposed rules. Copies of the new Env-Wm1600 rules and the amended Env-Wm1403 rules have been posted on the NHDES web site. The public hearing for these rules is scheduled for Thursday October 17th in Concord at NHDES in Rooms 112/113 from 9 AM to 12 noon.

---

## **Reminder RE: NHGS Constitution and Bylaws Changes**

Due to the notification requirements of the current NHGS Constitution and Bylaws, the vote on proposed changes to these documents must be an up or down vote only. Amendments to the proposed changes may not be made from the floor. Our Constitution and Bylaws require a written ballot for election of Officers and other Board of Directors positions, and for changes to Constitution and Bylaws. Polls will stay open until 7:30 pm to give all NHGS members a chance to vote.

## Update from the State Geologist

David Wunch, P.G., State Geologist

It is hard to believe that it has been two years since I came to New Hampshire to serve as State Geologist. The good news is that we have made significant progress in establishing a geology program that the state deserves in this relatively short time. Some of the highlights include the statutory establishment of the New Hampshire Geological Survey (NH Survey), and merger of the NHDES Water Management Section to create a survey staff that now stands at 5 full time positions. In addition, we were able to add a part-time outreach and education coordinator, who has filled an important niche in disseminating geoscience information to the public, teachers, civic groups, and private sector interests.

The following items include more specific program updates since my last article:

- The NH Survey will be moving! In an effort to maximize efficiency at the NHDES building at Hazen Drive, the NH Survey will be relocated to the basement level in the space that currently hosts the Public Information Center (PIC). This will result in a net increase of about 200 square feet for us, which will allow us to finally store our flat files that hold the geologic map archives within our staff work area. In addition, the new space will hopefully allow for a more efficient setup for viewing maps and meeting with NH Survey staff.
- This past year, the NH Survey conducted a survey of the geoscience community to collect input regarding the direction that research, data collection, and dissemination should be focused in order to provide the most useful information to our stakeholders. The final results have been tallied and are presented below in order of decreasing priority:
  1. Surficial geological mapping at the 1:24,000 scale
  2. Digitize existing surficial geological maps and make data available over the internet in a GIS format
  3. Expand the current ground water monitoring network to include bedrock monitoring wells. Collect water samples to establish an ambient water quality database. Provide public Internet access to the water level and water quality data
  4. Bedrock geological mapping at the 1:24,000 scale
  5. Conduct research and publish scientific reports of investigations concerning environmental and resource issues pertinent to the state (e.g., arsenic in ground water, road salt contamination, etc.)
  6. Provide internet access to the NH Water Well Inventory database
  7. Provide internet access to ground and surface water withdrawal data and water use information
  8. Public outreach, to include providing earth science education information and training, conducting public presentations and workshops, and testifying for legislation
  9. Provide a semi-annual newsletter that would contain information regarding the progress of Survey projects, data availability, reports, map availability, and updates on federal initiatives. Make newsletter available on website
  10. Need for an expanded seismic monitoring network, and access to current seismic data

The results show that the top priorities are consistent with several initiatives the NH Survey is actively pursuing. Some of them are described in further detail below. Thanks to everyone who participated in the survey!

- We are currently in the development phase for creating a NH Survey web page. Upon completion, our page will have links to geoscience, education, and resource information, including data and publications that will be accessible from the web. Stay tuned for more details!
- As you know, several classic and otherwise in-demand publications are currently out of print. As a result, we are expending efforts to make these publications available once again in an electronic format. I am happy to report that the 1:250,000, "Surficial Geology of New Hampshire" map by Goldthwait and others (1950) has

## Update from the State Geologist, continued

David Wunch, P.G., State Geologist

been digitally scanned, and high-resolution copies can be obtained from the DES PIC Office as a print-on-demand product for a nominal price. In addition, our plans include making the entire report available in .pdf format, which will be downloadable from our website.

- The NH Survey is actively participating in a cooperative, regional ground water study with the NH/VT WRD Office of the USGS, and the Office of State Planning. Our segment of the project focuses mainly on collecting hydrogeological data that will be used for more comprehensive ground-water availability and water-use studies in the Seacoast region. This past summer we employed an intern that was funded by the National Science Foundation through the Association of American State Geologists. The intern's main duties were to sift through files in the DES Waste Management Division for monitoring well data, and to locate dormant monitoring wells that were installed for the completed USGS Stratified Drift Aquifer cooperative project. We plan to reclaim all of the wells that are suitable, and incorporate these wells into our active monitoring well network. We will also endeavor to make the data available in a GIS format over the web. Another facet of our efforts in this project will be to have 7 surficial geology maps digitized to create a seamless coverage for the study area. The seven quads are: Portsmouth, Hampton, Exeter, New Market, Dover East, Kingston, and Kittery. The individual maps and associated information will also be available in a print-on-demand hardcopy format as well. Ultimately, 23 quads could be digitized as a result of this project, which would be a huge milestone for the state's surficial mapping program.

On a final note, I would like to share my views related to the proposed merger of the NHGS and the NHCPG, to form the Geological Society of New Hampshire (GSNH). As State Geologist, I support this move, which I believe will ultimately prove to be an important step forward for geoscience enterprise in New Hampshire. The upsides of the merger are obvious: strength in numbers, more organization and coordination within the geoscience community, and an opportunity to further the importance and relevance of geoscience in this dynamic, ever-changing world. One of the negatives being touted as a result of the "geologic" society's merger with the "professional" society is that the innocence of the society will be tainted by involvement in public policy issues and perhaps, lobbying. Personally, I do not see the GSNH's activity in policy issues as a negative in any light. It is an accepted paradigm at both the state and national levels that the recognition of the importance of geology and earth science to society's needs will have to be nurtured by professional and scientific societies. From my personal experience in the public policy arena, I have seen point-blank that we cannot depend on keen insights of politicians, or Divine intervention (which is what it seems that geologists are expecting!) to enlighten the public regarding the importance of geology to the quality of life that we all enjoy. When we hear the term lobbying, we immediately conjure up a mental vision of a person in a slick, dark suit passing out cash for favors in the halls of congress (or state legislature). And while there is no doubt that this practice occurs, this is not the primary role of a lobbyist. From my professional experience, lobbyists are more notably persons who 1) are hired to monitor legislation for societies and trade associations, 2) try to influence legislation through methods that include grass-roots efforts, and as importantly, 3) provide pertinent, relevant information related to the society and its positions. This is the role that is consistent with the missions of most non-profit societies. For example, under Article II of the proposed GSNH bylaws, it specifically states that "increasing ...public awareness" of geoscience to society as one of the important components of our purpose and mission.

David Applegate, the Director of Government Affairs of the American Geological Institute (AGI), presented an excellent essay on this subject in the April 1997 issue of *Geotimes*. David makes the case that most non-profit societies, while limited, have the inherent ability to "lobby" so long as these activities do not constitute a "significant" amount of the organization's expenditures, and that their efforts remain "non-partisan." This article can be accessed over the web at: <http://www.agiweb.org/geotimes/scene998.html>

## **Update from the State Geologist, continued**

David Wunch, P.G., State Geologist

In addition, a memorandum from AGI to its member societies related to lobbying provides a summary of the allowances for 501(c)(3) and other sections of the IRS codes (<http://www.agiweb.org/gapac/lobymemo.html>). I would encourage you to give these items a read if you are confused, or unsure of the role and limitations of non-profit societies in regard to "lobbying", and what might be the appropriate role for the GSNH.

In closing, I would like to emphasize that I am not advocating that the GSNH expand its role in lobbying, or stray from its main purpose of being a society to promote geoscience. However, as a non-profit organization, it is perfectly within the rights of the society to perform these activities in a limited way, and perhaps we should not be afraid to do so. Each of the major geoscience milestones that have occurred in New Hampshire during the past few years (e.g., the professional licensing of NH geologists, the statutory formation of a state geological survey) came about because of an organized, grass roots effort in conjunction with the assistance of a lobbyist. And perhaps it is time to recognize that in the past, we, as geologists, have often been our own worst enemy when trying to develop the respect and notoriety that our profession deserves. We now have an outstanding opportunity to capitalize on an opportunity to truly organize, and ultimately exercise a unified voice. This is a great opportunity.

---

## **ROADSIDE GEOLOGY OF MASSACHUSETTS**

Jim Skehan, S.J. (Prof. Emeritus, Geology & Geophysics, Weston Observatory)

Jim Skehan lectured on his recent book, *ROADSIDE GEOLOGY OF MASSACHUSETTS*, and signed copies for, the Boston Mineral Club, the Newton Public Library, and the Worcester Mineral Club; and on *MODERN SCIENCE & THE BOOK OF GENESIS* for the congregation of First Church Unitarian Universalist in Leominster, MA. Accompanied by an authorized escort, Jim also led a field trip on the Mass Pike, Weston-to New York border for 25 members of the Northeast Section of the Association of Engineering Geologists (AEG). At a mountaintop lunch overlooking Brimfield, the AEG presented Jim with a framed original of the first *GEOLOGIC MAP OF MASSACHUSETTS*, 1832 by Rev. Edward Hitchcock, President & Professor of Geology, Amherst College.

---

## **Summer EdMap Activities at UNH**

Wally Bothner and Jo Laird, UNH Earth Sciences

Three UNH geology students were funded to complete two 7-1/2 minute quadrangles during the 2002 field season. Their work in the Sandown quadrangle and an equivalent area in parts of the Mt. Pawtuckaway, Northwood, and Barrington quadrangles represent natural continuations of the work completed with earlier USGS EDMAP funds in the Epping and Candia quadrangles. Jeff Schulz (BS UNH'01 and continuing MS student) and Todd Belanger (UNH Sr) are sorting out the pelitic from the calcsilicate rocks of the Berwick Formation as they extend from the northeast. Their work identifies important changes in metamorphic grade within the granofels and schists (the main topic of Jeff's MS thesis). Charlie Kerwin (BS Keene'94, MS UNH'00, and continuing Ph.D. candidate) is redefining the northern termination of the late Proterozoic Massabesic Gneiss and finding an important transition zone between those complex migmatites and late Acadian granites of the Barrington granite batholith. In addition, his identification of pelitic and quartzitic rocks as screens between sill-like masses of 2-mica granite suggest a more easterly extent of Central Maine trough rocks. Charlie is evaluating geochemical approaches to resolve problems of separating the ages and origins of the various migmatites and granites that comprise this enigmatic block. Charlie, Jeff, and Jose Escamilla-Casas (funded previously by the USGS EDMAP program to work in the Exeter and Hampton quadrangles) made fine presentations at the Mapping Workshop organized last June by our State Geologist, Dr. David Wunsch in Concord. We are very proud of our students' efforts and their products. They continue to advance the state of our State's geologic history.



## NH Geological Society Summer Field Trip

Lee Wilder

Early July found a number of NH GS (New Hampshire Geological Society) members on the annual NHGS Summer Field Trip. Tim Allen lead the trip, "Bedrock Mapping Around Lake Sunapee", where participants listened, studied and debated the interesting NH geology displayed at a variety of outcrops (Photo 1). The weather was beautiful. We all enjoyed a delicious bag lunch picnic on the grass at Sunapee Harbor. (Photo 2) Tim is completing the mapping of the Lake Sunapee area as part of the EdMap Program. We all look forward to reading the completed report.



Photo 1: At an outcrop along the east side of Lake Sunapee NHGS Summer Field Trip. Photo: Lee Wilder (2002)



Photo 2: Lunch on Lake Sunapee NHGS Summer Field Trip Photo: Lee Wilder (2002)

---

### Seen in the News:

Thank you to Tim Stone for sending these in.  
Send your geo –news clippings to [coffin@cheshire.net](mailto:coffin@cheshire.net)

August 4, 2002, Boston Globe

“Penn. Pothole State Park seeking to get its image out of the gutter” “Archbald, PA – The world’s largest pothole has fallen on hard times. Once a tourist magnet, Archbald Pothole State Park in northeastern Pennsylvania now attracts litterbugs, people looking for sex, **and the occasional geologist** [EMPHASIS ADDED] drawn by the sheer size of this naturally occurring hole in the ground.....” “The Archbald pothole ....38 feet deep and 42 feet wide.. was gouged by a glacier during the last Ice Age between 11,000 and 30,000 years ago.” The ”pothole once drew tourists by the thousands.....now it gets maybe 30 or 40 visitors a day.”

[Editor’s note: Apparently, the “occasional geologist” isn’t enough]

## Letter to the Editor:

One Geologist's Opinion.....

The New Hampshire Geological Society (NHGS) has reached a critical cross road. Should the Society merge with the New Hampshire Council of Professional Geologists (NHCPG)? A questionnaire was sent out with the last newsletter polling the membership about this merger.

I, for one, voted NO and I would like to explain why. My concern about a proposed merger is the conflict in the missions of the two organizations.

- The success of the NHGS has been the inclusive nature of the organization, which brings people interested in geology of New Hampshire together in a nonpartisan forum. Membership in this organization allows geologists working in industry, including the consulting industry; geologists working for state and federal agencies; college professors, secondary education teachers, students; and lay people trained and interested in geology to exchange ideas and experiences, provide educational opportunities, disseminate information, and promote the field of geology.
- The success of the NHCPG has been the setting of a single clearly defined goal, licensing of professional geologists, and working to successfully achieve that goal. The future mission of the NHCPG will be the continued advocacy of professional geologists through support and promotion of the practice of licensed professional geologists in New Hampshire.

Clearly, the prime role of the NHCPG as advocate of the professional geologist is lobbying. Lobbying is defined by Webster's Dictionary: "...to conduct activities aimed at influencing public officials and especially members of legislative body on legislation and other policy decisions, or to promote or secure the passage of (as legislation) by influencing public officials".

Therefore, if the NHCPG and the NHGS merge, then the role of "lobbying" for issues important to some members may be in conflict with positions and interests of other members of the NHGS. (A survey of 10 other geological societies around the country documents that they typically don't conduct lobbying as a society for this very reason.)

Rather than changing the purpose of the NHGS to meet the needs of the NHCPG, it is my opinion that there are alternatives to the proposed merger with the NHGS:

- (1) The NHCPG could align with the American Institute of Professional Geologist (AIPG). The AIPG mission includes lobbying at the state and federal levels and would be an advocacy organization more appropriately matched with the mission of the NHCPG. This solution would also allow the NHGS to continue as an independent organization without changes in its mission, constitution or bylaws.
- (2) The NHCPG could dissolve and the legislative watch function absorbed into the NHGS legislative committee. The role of this committee would be to track important legislation and disseminate the information to the Society members but would do no lobbying. If individual NHGS members find a need to lobby, then an independent group such as the NHCPG can either be formed or the impacted groups could work through their industry associations (e.g., NHBIA, AIPG, NGWA), experienced lobbying organizations.
- (3) The NHCPG could remain as an independent organization and continue the advocacy of issues important to professional geologists.

I believe, if we as a Society accept the role of lobbying and merge with the NHCPG as proposed, we run the risk of creating conflicts of interest and pitting members against each other, which will only undermine the success of the Society. I urge all members of the Society to ask questions and do their homework before voting to merge.

Tom Shevenell  
Founding Member of the New Hampshire Geological Society  
[shevenell@aol.com](mailto:shevenell@aol.com)

---

## MORE Seen in the News:

August 4, 2002, Portsmouth Herald

"Study looks at 'well'-ness of groundwater" describes efforts of the NH Geological Survey to revitalize the monitoring well network in the Seacoast Region of NH. Data obtained from the monitoring wells will ultimately be used to create a model of groundwater resources of the area from Rockingham to parts of Strafford and Carroll counties. Our State Geologist, David Wunch, is extensively quoted. [SEE David's ARTICLE]



New Hampshire Geological Society  
 New Hampshire Council of Professional Geologists  
**Joint Annual Meeting**

"Volcanoes - Silence Isn't Necessarily Golden"

Nelson Eby

Professor of Geology

University of Massachusetts, Lowell, MA

**When: Thursday, October 17, 2002**

**Where: Cat 'n Fiddle Restaurant**

Manchester Street, Concord, NH

**NHGS Annual Meeting begins at 6:00 pm, sharp!**

**Agenda includes:**

**1. Discussion of proposed changes to Constitution and Bylaws\***

**2. Election of Board of Directors from proposed slate of candidates**

**Note: NHGS members must vote by written ballot - polls will stay open until 7:30 pm**

**If necessary, NHCPG will hold a brief general membership meeting  
 after NHGS votes are counted**

\*Remember vote is up or down only. See [www.nhgs.org](http://www.nhgs.org) or [www.nhcpge.org](http://www.nhcpge.org) for proposed changes.

**NHGS/NHCPG Annual Meeting, Thursday October 17, 2002**

Dinner will be Prime Rib and Seafood Newburg Buffet

Reservations: \_\_\_\_\_ members @ \$17.00 \_\_\_\_\_ non-members @ \$19.00 (in advance)

*Half-price for students (must show student ID card)*

*Reservations will be taken until Monday afternoon, October 14, 2002*

*\*\*There will be a \$2.00 surcharge for those paying at the door without reservations\*\**

Make checks payable to: New Hampshire Geological Society

Mail to: Dave Wyman, Buoy Technologies, Inc., 31 Columbus Ave., Concord, NH 03301 phone:603-224-9031 or [davew@buoytec.com](mailto:davew@buoytec.com) for information

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone and/or Email: \_\_\_\_\_

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**

Joint Annual Meeting of NHGS and NHCPG  
Thursday, October 17, 2002  
NHGS Annual Meeting begins 6:00 pm, sharp!  
followed by social, dinner and speaker.

Location: Cat n Fiddle Restaurant, Concord, NH

NHGS Business Meeting, polls open until 7:30 pm  
If necessary, after the NHGS votes are counted, NHCPG  
will hold a brief general membership meeting

See [www.nhgs.org](http://www.nhgs.org) and [www.nhcp.org](http://www.nhcp.org)  
for proposed changes to Constitution and Bylaws

**Notice! Joint Annual Meeting of NHGS and NHCPG**

**NHGS/NHCPG**  
**PMB 133, 26 South Main Street**  
**Concord, NH 03301**

