The Granite State Geologist

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Outgoing President's Message

Jack Jemsek

There is a mixture of good and bad news for New Hampshire geology as we head into the Fall of 2000. But I think the good news easily wins out over the bad stuff, as the bad stuff is really just old news. I choose to muse a few of the nuances of the new good news now (sorry, I was reading a book of tongue twisters last night).

Sweet victory! I cannot express how much joy and relief the passage of the bill for Licensure of Professional Geologists has brought to me personally and the geologic community as a whole. The bill received so much support from the legislature last spring, that it was inevitable that it would pass, but the fear is that effort would have to extend to the fall. Following the bill within the House, one could experience first hand the challenge of collecting 2/3 of the vote versus the simple majority. Simple turns of fate kept the New Hampshire Council of Professional Geologists (NHCPG) and other volunteers hanging until the final day of the session. The Representatives heard our message as numerous phone calls were made and geologists were making themselves heard as never before. Great job Dorothy Richter, Tim Stone, Walter Carlson and of course numerous others, including the NHCPG lobbyist.

The passage of the Professional Geologist Licensure bill redefines the landscape for us. A new state board will be established, and we expect Dorothy Richter, John Cotton, Timothy Allen and Paul Sanborn to be confirmed by the Executive Council. Congratulations to each of you, and may you usher in the inaugural year of the statute using the same energy and vision that the NHCPG and the NHGS, collectively, has advanced. The NHGS and NHCPG are currently working hard to define the needs of both professional and non-professional geologists in the state, knowing that the responsibilities for continuing education and funding legal and administrative assistance will still need to be directed.

Other good news coming into the fall is the quality of our slate of candidates for the 2001 NHGS board of

directors, the good financial status of the NHGS, the 2000 edition of Earth Science Week, and the upcoming NHGS October meeting. The October meeting will be a meeting not to be missed, honoring Dr. Gene Boudette, our retiring State Geologist, and introducing our new State Geologist, Dr. David Wunsch. The NHCPG, the Geological Resource Advisory Committee (GRAC), NHDES and USGS will be co-sponsoring this gala event. Refer to the enclosed announcement for reservations.

We also had a fruitful special meeting regarding revision of the NHGS name and the by-laws, particularly with regard to succession of the officers and elections are concerned. However, we are also trying to sort out things with the NHCPG with regard to the long-term needs and format of geologic organizations in the state, and have temporarily put any constitution changes on hold.

Participation in Earth Science week continues to be a work in progress. This year, our level of activity will not substantially increase from last year. We hope to make it easier for geologists to volunteer in schools and other interested organizations. We are looking for volunteers for our education committee to help design and purchase (or collect) materials to create a geologic demonstration field kit or "Traveling Road Show". Members will be able to checkout the kit for a week or two at a time, to assist them in giving a talk on geology to elementary schools. It has come to my attention that there are only twelve Certified Earth Science teachers in all of New Hampshire. I suspect that each school should have a certified Earth Science teacher, and perhaps Lee Wilder can continue promoting geology to science teachers to increase this level of certification. We are also discussing the use of high school or college student interns who could spend some time with various companies or organizations to observe first-hand what professional geologists do.

We fell significantly short in fighting the tide of recent apathy toward participation in our summer field trips. The field trip in the northern Connecticut River Valley,

Slate of Candidates, NHGS Officers for 2001:

The following have accepted nominations:

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. Secretary of the NHGS since 1995. Past President, and still currently a Director, of the NH Science Teachers Association.

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.

For Secretary:

David Wyman

BA Geology, 1974, and BA Chemistry, 1974, University of New Hampshire. Field Operations Manager at Normandeau Associates, Inc., 1974-1981; President of Buoy Technology, Inc., 1981-present.

For Treasurer:

John M. Noble

BS Geology, 1986, Rensselaer Polytechnic Institute. MS Hydrogeology, 1990, Syracuse University. Senior Hydrogeologist for SECOR International, Inc. Also member of NHCPG, NGWA, and LSPA.

For Member-at-Large:

Michael Robinette

BA Geology, 1974, University of New Hampshire. MA Hydrogeology, 1977, University of Idaho. Formerly a Superfund remedial project manager for the NH-DES for 8 years. 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.

Other members of the 2001 Board will include: Jack Jemsek, Past President, and Tim Allen, Member-at-Large (whose term expires 2001). Write-in votes are always entertained!

President's Message, continued from page 1

led by Bob Moench, had nine people, and fewer people attended the Family Outing at Mount Kearsarge (see article on page 7). We are missing big opportunities to better our geologic knowledge and share information with our peers when we don't participate in these events. I don't want to continue beating the same drum, but we have to renew our core of volunteers who are oriented toward education and participation in field-oriented events. Our heart and soul is at stake.

In retrospect, there isn't really any terribly bad news. Personally, I regret that I have had to move my residence to Massachusetts, which made for a summer I wish not to repeat. I will, however, maintain my position with Jaworski Geotech, Inc. in Manchester, and stay involved in New Hampshire affairs the best I can as Past President. In the meanwhile, let's celebrate and give Gene Boudette a retirement party like no other — he deserves it and, gosh darn it, geologists have a lot to celebrate in New Hampshire! I look forward to seeing you all Thursday, October 12. Cheers until then.

News From NH-DES

Update on MtBE

On May 4 the Department of Environmental Services adopted the most stringent groundwater, drinking water, and soil cleanup standards for MtBE in the nation. The new standards were incorporated into DES rules following the standard rulemaking process that began in early January. The new standards are 13 ppb for groundwater and drinking water and 0.13 ppm for soils. California followed New Hampshire with the adoption of the same groundwater and drinking water standards on May 17.

The State of New York currently has a groundwater guidance value for MtBE of 10 ppb. This value is used as the cleanup goal for MtBE contaminated sites. However, the drinking water standard for MtBE in New York is still set at 50 ppb. New York's drinking water standard is scheduled to be lowered to the 10 ppb concentration by fall of this year.

New Hampshire's new groundwater standard will require MtBE contaminated sites to remain open for longer periods of time to allow natural attenuation to reduce the MtBE concentration from the previous standard of 70 ppb to the new standard. DES will also review sites that were closed in the past three years to determine

which ones pose a public health risk. For those sites that do pose such a risk, the Department will require at least one round of groundwater sampling of existing monitoring wells to determine if the MtBE concentrations remain above the new standard. In cases where they do, the site will be reopened and the owners will likely be required to provide long-term monitoring until concentrations decline to or below the new standard. Similarly, during property transfers of formerly contaminated sites that have been closed, should groundwater sampling show MtBE concentrations are above 13 ppb, those results must be reported to DES and the site will be reopened.

The new standard also applies to drinking water supplies, both private and public. In those cases when water supplies have become contaminated by a release from a nearby petroleum storage tanks, POE treatment systems will be installed when the concentration of MtBE has been found to exceed the new standard. Confirmation of the exceedence must be obtained before installation of a POE can be authorized.

Currently, there are no municipally owned public water supplies that exceed the new standard. There are at least six non-municipal public water supplies where the concentration of MtBE now exceeds new standard and will require treatment.

DES will be taking a more aggressive stance with regard to remediating MtBE groundwater plumes. With the lower standard, DES will likely require active remediation at more sites. The Department will develop guidelines for our staff and consultants to determine when to begin active remediation to capture the contamination plume and when active remediation would give way to monitoring natural attenuation. These guidelines will be published by DES this fall.

Passage of the Geologists' Licensing Legislation

The Department was pleased with the passage of HB 1510, which established licensing of geologists in New Hampshire. Last year, Commissioner Varney had submitted a letter of testimony in favor of the bill, which at that time was SB 181. The commissioner's support was based on the fact that the bill, through licensing, would provide a significant means to help insure that the public is protected in areas related to health, safety, and welfare. The commissioner also favored the bill because of the joint effort by the geologists and engineers to develop a bill that would not conflict with the existing engineering statute and engineering profession.

Prior to the passage of this bill, literally anyone could claim to be an environmental professional, capable of preparing a site investigation. Occasionally, individuals with little or no training in geology would submit documents to the Department for review and approval. These documents required extensive staff time for their evaluation and resulted in greater costs to both site owners and the State. Problems encountered by staff when reviewing poorly prepared documents included: wrong conclusions drawn from the data collected; analytical results reported from improperly collected samples; conclusions based on sampling of wells which were incorrectly placed; or no conclusions or recommendations, leaving it to DES to "tell us what to do."

As a result of the passage of this bill, any document which involves the practice of professional geology when submitted to a public agency must be prepared and stamped by a licensed professional geologist or licensed professional engineer.

Once the Board of Professional Geologists, soon to be confirmed, establishes administrative rules, the Department plans to require that all initial site characterizations and site investigations be prepared by either a professional geologist or a professional engineer.

Drinking Water Criterion for Manganese

The New Hampshire Office of Community and Public Health, Bureau of Health Risk Assessment (BHRA) has set a health-based drinking water criterion for manganese at 0.84 mg/L (ppm). This concentration is used by Region I of the U. S. EPA as a clean-up level for manganese in drinking water at hazardous waste sites. The BHRA reviewed the methodology use to derive the Region I clean-up level and has adopted it to evaluate manganese in private drinking water supplies. Although an EPA agency-wide guideline for manganese in drinking water has been under consideration for some time, there is no indication that one will soon be forthcoming.

Manganese is an essential human nutrient with an "adequate and safe intake" estimated to be in the range of 2.5 to 5 mg/day by the National Research Council. The average dietary intake in the U. S. is estimated to range from 1 to 5 mg/day. The EPA has a Reference Dose (RfD) of 0.14 mg/kg/day for manganese. The RfD is based on an upper total safe intake for an adult of 10 mg/day. The BHRA drinking water criterion for manganese was derived taking into account both the total safe intake (10 mg/day) and the upper range of an average dietary intake (5 mg/day).

NHGS Interviews Gene Boudette, Retiring New Hampshire State Geologist

Jack Jemsek

Dr. Eugene (Gene) Boudette, who recently retired after being the New Hampshire State Geologist for 14 years, had lunch with NHGS President Jack Jemsek on March 17, 2000. Gene provided a comprehensive interview covering his background, contributions, and vision of the future of geology in New Hampshire. Below is the first of a series of articles to be published in *The Granite State Geologist*.

JPJ: Good afternoon and Happy Saint Patrick's Day, Dr. Boudette. The New Hampshire Geological Society is honored to be able to have this exclusive interview with you during what must be a hectic time for you. Let's start off by giving us an overview of your early years. From your resume, I see that you are a New Hampshire native.

GB: Yes, I was born in Claremont in 1926, and attended elementary and high school in Charlestown, New Hampshire. In 1944, after completing high school, I served in the U.S. Navy for two years and specialized in aircraft electronics. During World War II, I had duty in the Pacific theatre at Marpi Point Naval Air Station, which was located on the Mariannas Island of Saipan. I also spent some time at a naval air station in Quonset Point, Rhode Island.

JPJ: I see that you were awarded several World War II Service Medals and the Victory Medal for your efforts. My father was a WW II veteran as well, and had a deep sense of pride and community stemming from his service. I hope you feel the same. How about a synopsis of your education and work history, prior to your assignment as the New Hampshire State Geologist in 1986?

GB: After the war, I came back and entered the University of New Hampshire (UNH), and graduated with a B.S. in Geology in 1951. My first job in geology was with the U.S. Army Corps of Engineers, where I worked for two years prior to joining the Geologic Division of the U.S. Geological Survey (USGS). I joined the USGS in 1953. While working part-time with the USGS, I attended Dartmouth College from 1957 to 1959, and earned a Master's degree in Geology. Later on, I went back to earn my Ph.D at Dartmouth, still working part-time with the USGS. I finished my Ph.D. course work and orals in 1969 or 1970, and completed my thesis in 1978. I continued working with the USGS until 1985.

JPJ: So what piqued your interest in geology?

GB: I think there were several things that influenced my choice of geology as a career. I recall a day when I was 7 or 8 years old, growing up on my father's farm during the Depression, when a group of geologists came to observe a deltaic deposit exposed in a gravel pit on our property. One of the gentlemen took me aside and asked if I wanted to join them, which I did, and I think I just adsorbed a lot from that one day with that geologist. He took the time to explain the geologic origin of one of the most prominent topographic features in our backyard, Mount Ascutney. All I could comprehend was that it was a volcano. Thereafter I remember occasionally running to the window and searching for any red glow emanating from Mount Ascutney, not understanding it was extinct. I recounted this story to Karl Koteff, and he guessed that the geologist might have been J.W. Goldthwait, then a renowned Professor of Geology at Dartmouth College, who later published the Surficial Geologic Map of New Hampshire. My tour of duty in the Mariannas Islands also impressed me with natural wonders such as volcanoes, deep-sea trenches, and coral reefs. I think this only confirmed my curiosity and interest in studying geology at some point in the future.

JPJ: From your resume, it looks like you ended up doing a tremendous amount of traveling while with the USGS. But I know you found time to have a family life too.

GB: I was fortunate to meet, and eventually marry my wife Beatrice (Bea) in 1961. We had two children who are both married now, and one granddaughter. Being a geologist required lots of travel. In the ten years prior to our marriage, I had lived in seven locations ranging from Boston, Massachusetts to Spokane, Washington. That does not include a couple of field seasons in Antarctic! After we married, we lived in the Washington, D.C. area; Quechee, Vermont; Flagstaff, Arizona; as well as our present home in Gilmanton, NH. To say the least, Bea and I have enjoyed the relative stability of our home life in Gilmanton.

JPJ: What type of projects brought you to all those localities?

GB: While at the USGS, I mainly dealt with research and mineral resource field investigations in areas such as the Colorado Plateau, Washington State, New England, southeastern U.S., and the Colorado Rocky Mountains. These more traditional mapping projects were punctuated by my involvement with the U.S. Antarctic Research Program in 1959 and 1960, and participation in the

Apollo Field Geology Investigation Team for Missions 15, 16, and 17 in the early 1970's. I was also a USGS map editor for two years.

JPJ: I'd like to discuss your work with USGS in more detail. First of all, what was the emphasis of USGS Geologic Division program in the 1950's and 1960's?

GB: While I was with the Geologic Division of the USGS, commodities research drove many of the major programs. By commodities research, I am simply referring to the assessment of different mineral reserves. Today, the USGS mission seams broader, to include geologic hazards, environmental issues and water resources. The term "environmental" geology hadn't even been coined as of the 1960's.

JPJ: It sounds like you developed a niche in hard rock geology, particularly in the assessment of strategic mineral reserves. What was you first project at USGS?

GB: My first job in USGS was within the Trace Element Program Cooperative (TEPCO) in Grand Junction, Colorado. The geologic program was related to the Manhattan Project and was funded by the Atomic Energy Commission through the USGS. The objective of TEPCO was to build up our known reserves of uranium in the continental U.S. and Alaska, specifically for military purposes. This uranium resource analysis effort tailed off by the 1960's, and I was only involved with TEPCO from 1953 to 1956. So in essence, my first niche in the USGS was an outcome of the former USSR and the US competitively developing available uranium reserves.

JPJ: What other projects did you take on in the 1950's?

GB: I was involved in programs targeted toward other mineral types that were considered to have some strategic or economic value. For instance, with the advent of electronics in warfare, electrical-grade mica became valuable. This mica was required for installation within radio tubes, where it served to insulate the foundation for the filaments. Since the US was totally dependent on India for the electrical-grade mica after WW II, I ended up working to develop additional electrical-grade mica reserves within the U.S. The search for electrical-grade mica is making a small come back with regard to military purposes. I also did quite a bit of field mapping in Maine for mineral ores under the President's Mineral Policy (PMP). There I began an association with Arden Aldee, who ended up being a professor at Cal Tech.

JPJ: So you ended up staying with USGS, but going to graduate school in the late 1950's?

GB: Beginning in 1957, I decided to go to Dartmouth over Johns Hopkins and work with Professor John Lyons. John Lyons had an interest in the thermodynamics of plagioclase, and I ended doing my Master's thesis on the subject. My thesis work involved quite a bit of laboratory work, mainly x-ray diffraction, which I used to complete subsequent physiochemical computations. The lab work was a change from the field-oriented work I had completed within the USGS. During summers, I would go back and complete mapping work with the USGS.

JPJ: I went to a colloquium at Dartmouth a few years ago honoring John Lyons, one of the authors of the recent state bedrock map. You were obviously close to him.

GB: John Lyons and I had a great intellectual and social bond. We were both struggling with the concept of plate tectonics, thinking in three-dimensions, but we didn't have the benefit of plate tectonic theory to take advantage of some of our ideas. As my graduate school advisor, he was a mentor to me in the truest sense of the word, and became a long-time close friend.

He was a WW II pilot, considered to be a hero by some. Unfortunately, he chose not to speak much about his missions. John and I shared not only our WW II experiences, but also our interest in aircraft and flying. I was a naval aircraft maintenance specialist, and John was an accomplished pilot. We both loved airplanes, and would have interesting discussions because of our different backgrounds and perspectives. We also had great philosophical dialogs apart from geology. I like to say we were on the same "wavelength".

JPJ: After your Master's, the USGS assigned you to the U.S. Antarctic Research Program (USARP), part of the International Geophysical Year (IGY) program. Historically, the IGY seems to be a milestone for public awareness of geology. What was going on "behind the scenes" so to speak?

GB: IGY was the first big integrated, international research effort to focus on geologic issues. It was a way of trying to unify science amongst countries and even including, though there were delicate politics, the former USSR. As part of USARP, we were beginning to think about unknown strategic mineral reserves, in addition to traditional mineral commodities and fuel,

and the bearing these strategic mineral reserves had on geopolitics.

I was involved less with the geophysical part of IGY than the geological part of it. People within the USGS saw the desirability of the U.S. getting involved in Antarctic to conduct pure geologic research. The National Science Foundation (NSF) and the U.S. Navy largely funded USARP through Congressional appropriations. The Navy provided icebreakers and airplanes for logistical support, and NSF handled the research aspect through various agencies such as the USGS.

Nobody owned Antarctic. This led to some overlapping territorial claims by some nations. We did not include the eastern portion of Antarctic within our program, because it was pretty much recognized that east Antarctic was the former U.S.S.R.'s and west Antarctic was the U.S.'s. So even in Antarctic, the cold war tension was present, despite IGY's intent of developing goodwill among various nations.

JPJ: How often did you go down to Antarctic?

GB: I went down to Antarctic during two of our winters, which was summer in Antarctic. The first time I went down in 1959 was not only to do geology, but also to see if Antarctic geologic mapping was feasible and to see what type of research program could be planned. The next year, we set up a long-term field camp in the Trans-Antarctic Mountains to enable geologic research. As it turned out, we did very little geology because of logistical problems.

JPJ: What were some of these logistical or technological challenges?

GB: First of all, the work required a special Navy experimental air squadron called VX6, which maintained expertise to do the type of work that had to be done there. The engines within piston-driven helicopters couldn't tolerate the subzero temperatures. Once we were deployed to the continent, navigation problems became the biggest challenge. We were generally moving camp every other day, so we were relying on navigation frequently.

You've got two main problems navigating in Antarctic. In the winter, you see the stars, but it is so cold you can't run a survey with a rod and transit. And in the summer it is daylight, so you can't see the stars. All our navigation was done by solar line of position and time fixes by radio. It required a whole day just to get a fix because we had to watch the sun go round in

the circle. We used the radio station in Washington, with call letters WWV, to determine the exact time, and from there, estimated our rough location. Today, we are fortunate that we have the Global Positioning System (GPS) and other sophisticated electronics and satellites available to do the navigation work for us.

As a matter of fact, I am not sure if I went down today that I would find it anywhere near as much fun, or as much of a challenge. We were really pushing the envelope in every respect. Contingencies for being marooned away from the main operating base had to be taken into account. If something happened to your vehicle, typically a snow tractor, you have only got two choices, an icebreaker can come and get you somehow. Or you wait until a rescue can be organized. The clock was against you because it was getting dark. We all understood the dangers as only volunteers participated, so it wasn't an issue to belabor.

JPJ: Describe a typical field day in Antarctic.

GB: The collection of rocks was not of high priority compared to studying geodesy and glaciology. We had to learn things about how thick the ice was and were pretty much limited to using simple survey instruments such as theodolites. A lot of my field time was devoted to helping procure data for geodetic engineers and others.

There were only four us that were willing to trek to mountain outcrops because of the risks and uncertainties involved. The visibility in Antarctic is so perfect that you have no knowledge of the distance that is out in front you. So making a journey to a mountain involved making trips that I remember we originally estimated to be five miles, which instead turned out to be more like 35 miles. The tractors had limited fuel aboard, leading to precarious situations. However, we knew that we were building up our experience with regard to navigating and traveling these longer distances.

We would base our trips around points where a cache of gasoline barrels had been placed for us the previous year via a tractor-driven sled train from Byrd Station. Pylons were built out of empty barrels that were welded together. The purpose of the pylons was to mark this life-saving cache of fuel. They had to be built large enough to stick above the year's snowfall. Unfortunately, the pylon would often be partially covered by 25 feet or more of drifted snow and not be readily visible. We didn't know exactly where the pylons were, since their locations could only be estimated by solar line of position. Under ideal conditions, the pylons would be visible

from one mile. We could only spend one day searching for the fuel cache, or we would have to return to Byrd Station and abort the whole mission.

This began to bug me. I remember one day I started collecting things, in the night, which was actually broad daylight, and started constructing a tower of stepladders and ropes and sticks and what ever to increase our height of observation. Some of the field crew said it wasn't worth it, so naturally I was the one who said I would go up on top of this makeshift tower. So I went up with binoculars to the very top and started sweeping the horizon and saw nothing. And thought well, it is getting shaky up here but I'll go around one more time. I saw a black speck. And then we had a bearing set up. It turned out that I what I spotted was only the top few inches of the pylon.

JPJ: What did enjoy most during your Antarctic travels?

GB: I think the beauty of the mountain ranges, which you could clearly see at least 100 to 200 miles away on a good day. Also, we located a new mountain, Mount Siple, which was a volcanic center. All the other mountain ranges had their relative positions established as far back as Admiral Byrd's day. I probably would have stayed on the program for a longer time, but the Navy diagnosed me as being a good candidate for diabetes. You more or less had to have the same Navy physical examination as submariners or pilots, because they had to minimize the contingency of somebody developing a medical condition on the ice.

to be continued in the next issue...

Field Trip Reports

On what turned out to be a rather nice day, on Saturday, July 15, Bob Moench led about eight of us around in the vicinity of the Moore Dam on the NH-VT border, to look at "Problems in Bedrock Geology and Metamorphic Stratigraphy Relating to the Piermont-Frontenac Allocthon." Much hinges on interpretations of topping directions and subtle distinctions between units.

On Saturday, August 12, unfortunately a rather gray day, Charlie Balyeat, and Tim and Bennett Allen, hiked up Mount Kearsarge from Rollins State Park in Warner. Tim showed Charlie all the graded beds and isoclinal folds in the Kearsarge Member of the Littleton Formation while Ben enjoyed the view from his daddy's back. Following the hike, they enjoyed a picnic at the State Park. They really missed the rest of you...

David Wunsch Arrives as the next New Hampshire State Geologist

David R. Wunsch was recently appointed as New Hampshire State Geologist, replacing Eugene Boudette. David earned his B.A. in Geology and minor in Chemistry from the State University of New York at Oneonta in 1980, and a Master's in Geology from the University of Akron in 1982. In 1992, he obtained his Ph.D. in Hydrogeology from the University of Kentucky, with an emphasis in low-temperature geochemistry.

Prior to coming to New Hampshire, David was the program coordinator of the Coal-Field Hydrology program at the Kentucky Geological Survey, where he had been employed since 1985. David was also an adjunct professor in the Department of Geological Sciences at the University of Kentucky, where he taught classes in low-temperature geochemistry and applied hydrogeology. David's research interests include the geochemical evolution of ground water, hydrogeology and engineering geology associated with mining, and using remote sensing and GIS to locate high-yield water wells. He has authored or co-authored 36 scientific abstracts, professional papers and reports.

David was named as the 1998-99 American Geological Institute Congressional Science Fellow, where he advised the House of Representatives' Subcommittee on Energy and Mineral Resources, chaired by Rep. Barbara Cubin (R-WY). David was awarded the 1999 Outstanding Kentucky Geologist Award by the Kentucky chapter of the AIPG.

David started as New Hampshire State Geologist in August 2000. Additionally, he was recently appointed as an adjunct assistant professor at Dartmouth College. He can be reached at work by calling 271-6482 or e-mailing dwunsch@des.state.nh.us

The NHGS congratulates David on his appointment, and looks forward to working with him to promote geologic understanding and interests in the state. David will be introduced at the October 12, 2000 Gala honoring Gene Boudette, so come meet David and give him a warm welcome to the Granite State!

The 2000 New England Intercollegiate Geologic Conference (NEIGC)

will take place October 6-8, 2000, based at the University of Maine in Orono. For more information, check the web at http://neigc.org/NEIGC/2000/



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

The broad purpose of the New Hampshire Geological Society is to advance the science of geology in New Hampshire. We hope to pursue this goal by contributing to public education, strengthening the role of geology in environmental concerns, and disseminating knowledge about the geology of the Granite State. Membership in the society is open to all, including professional geologists in all areas and interested lay people.

NHGS News and Events

Come join the **NH Geological Society**, together with the NH Council of Professional Geologists, the NH Department of Environmental Services, the Geologic Resources Advisory Committee, and the US Geological Survey in a **Gala Celebration** of **Earth Science Week 2000** and the **10th Anniversary** of the NH Geological Society. We will be **honoring Gene Boudette** on the occasion of his retirement from the post of State Geologist, and welcoming David Wunsch as the new State Geologist. It is also the **NHGS 2000 Annual Meeting**, featuring the election of officers.

The event will take place **Thursday, October 12**, 2000, beginning at 6:00 p.m. at the Wayfarer Inn, Bedford ("behind" Macy's at the intersection of Routes 3 and 101). **Reservations are necessary** and will be accepted through Monday afternoon, October 9, 2000. Please use the enclosed form to pre-pay and make your dinner selection. The cost is \$18 for members and non-members alike, paid in advance. An additional \$2 surcharge will be collected from those paying at the door. For more

information, contact Charlie Balyeat at (603) 763-7402 or Gretchen Rich at (603) 679-6775.

Meetings of the Society for the Year 2001 have been set for Thursday, January 11; Thursday, April 12, and Thursday, October 11, 2001. The Board of Directors is scheduled to meet next on Tuesday, November 7.

Membership renewals are due. By now, you should have received your membership renewal invoice. Hopefully you have already sent in your renewal. If not, do it today! Questions about membership status should be directed to Steve Shope, 603–778–3988, e-mail: sshope@nh.ultranet.com.

Please contribute material for the newsletter or the NHGS web-site (which is at http://nhgs.org/NHGS/) by e-mailing tallen@keene.edu (or send regular mail to: Tim Allen, Geology, Mailstop 2001, Keene State College, Keene, NH 03435-2001). Do it today! The submission deadline for the next issue of the newsletter is Wednesday, November 22, 2000.