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State of Nebraska Board of Geologists

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Message from the Board Chair

By Professor John (Jack) Shroder

Another year has rolled by and the Board of Geologists has had another productive year including a successful move to a new office building with a few more amenities than the State Office Building. Most importantly, we had excellent success with the unicameral legislature passing LB 664, correcting some language and filling in some loopholes (more on this later). Providing good geological service to the people of Nebraska is important to us. If anyone desires more information or help with a particular geologic problem, please do not hesitate to send us your questions.

We continue to license new people to practice the profession of geology in our fair state. We also continue to receive inquiries from people who would like that privilege, but who may have opted to study a bit less rigorously at their university. Strikingly, some of these applicants still hope to squeak their way past our credential-review process and the ASBOG® tests to become real GEOLOGISTS! All I can say to the population at large is that those who are interested in getting a salary to do geology need to take the right mix of courses, do the physics, chemistry and mathematics that will enable understanding of

geology courses and buckle down to understanding the rocks, sediments, and geoprocesses. Anything less may get you a college diploma, but perhaps not the job that you want. As a long-time professor of geology (and physical geography too), I have watched many, many geology students come through the ranks and go on to prosper at their chosen profession. We can only hope standards will be maintained and degrees awarded to high-quality people. There is pressure from the Board of Regents and especially the State Coordinating Commission to graduate more students or degree programs will be cancelled. This numbers game, while presumably well meant by people elected or appointed to watch the bottom tax line, has the nasty tendency to make deans and department chairs want to reduce standards to increase student numbers (although rarely stated this way). The practice of good geological science in the State of Nebraska depends upon continued production of reasonably rigorous degrees. Pressures to do otherwise must be avoided and students who want to remain in Nebraska and major in geology must be advised to undertake a real geology degree.

One recent trend, or perhaps a fad being discussed lately in the halls of academe, is the formulation of on-line geology courses. Such courses would help people who live out-state or have full-time jobs and cannot come to the universities for major or remedial course work. The problem with such courses is that they are expensive to develop and are difficult to implement. How does one work on a microscope, do thin sections, view rock hand specimens, and so forth? Furthermore, how does one take a test on such materials over the internet and have it be a genuine test of new knowledge gained, rather than just material found by the student on the internet and delivered back to the teacher without the student really understanding it? When such courses show up that have been delivered by rather weak educational entities which may be

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after the money but not the quality, the Nebraska Board of Geologists has to make hard decisions that are not always popular. Professors at the campuses of the University of Nebraska are doing their best to develop such courses that will pass muster, but it takes time to produce quality.

You may recall from the Chair's report last year that the Nebraska Board of Geologists introduced a new legislative bill to remove an exemption full of loopholes (LB 1209) that was added to the original Geologists Regulation Act in 1998. Among other problems, geological work for which State approval or permitting was required did not require a licensed geologist. Last year, DeMaris Johnson was hired as our legislative assistant because state agencies are not allowed to hire lobbyists. Ms. Johnson went to work talking about our new bill to the many new junior legislators elected as a result of term limitations. She followed the bill carefully through all the twists and turns of the bill-making process. As the butcher said, "Lawmaking is like the process of making sausages; you may not like to watch the process to enjoy the result." Some groups who commented on the bill had us concerned as they indicated they were afraid of the unknown, but ultimately their fear of unknowns were put to rest and they did not oppose the new bill. So in spite of the worries of many members of your Board of Geologists, Legislative Bill 664 was introduced by Senator Hudkins this year on the 19th of January. Our bill did not start off as a priority, and could have gone awry until Speaker Mike Flood put it on the Speaker Priority Bills and it also made it onto the Consent Calendar. The bill passed on May 10th and was signed into law by the Governor on May 16th. It went into effect on September 1, 2007.

The revised Neb. Rev. Stat. § 81-3541, as with the original act, does not prohibit a number of geologic activities from being done by unlicensed geologists that do not threaten the health and welfare of the citizens of Nebraska. Teaching geology, doing research, well drilling, resource exploration, natural resource conservation, engineering, construction excavation, and a number of other activities are still exempt from oversight by professional geologists. Geology work done for the State of Nebraska is now included, as it should be. In the course of changing the old provisions, we optimistically estimated a possible 10% increase in the number of new licensures beyond the approximately 280 licensees in Nebraska. We have yet to see how it will play out, but we remain optimistic. We can only hope this year will continue to be as productive as the last, and we wish all you geofolks out there the best.

*"Theory is the language
by means of which lessons
of experience can be
clearly expressed."*

Karl Terzaghi

Meet Our Newest Board Member



Thomas G. Correll was appointed to the Board of Geologists on April 13, 2007. Tom brings to the Board a broad background in geology, offering experience in geotechnical engineering, environmental geology, hazardous waste remediation, water resources and the energy industry. He has held a Professional Geologist's license in Nebraska since 2000.

Currently, Tom is employed by Northern Natural Gas Company in Omaha and is responsible for implementing compliance programs as well as ensuring they meet pipeline safety regulations administered by the US Department of Transportation-Pipeline, Hazardous Material Safety Administration and respective state agents.

In 1984, Tom received a Bachelor of Science in Geology from Iowa State University and a Masters in Business Administration from the University of Nebraska Omaha in 1992. Tom holds certification as a Hazardous Materials Manager (CHMM) from the Academy of Certified Hazardous Material Managers and as a Groundwater Professional (IDNR) in the State of Iowa. Affiliations include the Association of Engineering and Environmental Geologists, International Erosion Control Association (IECA), American Association of Petroleum Geologists and the Omaha Northwest Rotary.

Tom has three children from kindergarten to college. They are 6, 17 and 19. In his spare time, his hobbies include hunting, fishing, golfing and skiing.

Welcome to the Board, Tom!



**Chimney Rock National Historic Site
Morrill County Nebraska**

By Dick Ehrman, Former Board Member

New Legislation Brings Questions

By Steve Kemp

Legislative Bill 664 was signed by the Governor on May 16, 2007, and became effective September 1, 2007. The bill eliminates a provision of the Geologists Registration Act (The Act) found in Neb. Rev. Stat. § 81-3541. Prior to the passage of LB 664, individuals submitting work for which state approval or permitting was required were exempt from licensure if such activity was *"in accordance with other requirements of law, rules, or regulations pertaining to the use of a geologist."* With the passage of LB 664, individuals submitting work for which state approval or permitting is required must be licensed. The Board thanks Dr. Jeff Johnson and Ms. DeMaris Johnson for their effort in coordinating with stakeholders to assure passage of the bill.

Through the tireless efforts of Mr. Dick Ehrman, former member and Chairperson of the Board, the Rules and Regulations were completed. Title 171 of the Nebraska Administrative Code, Chapters 1 through 6, was approved by the Governor and became effective on July 29, 2007. The regulations define a code of practice by which licensed geologists can govern their professional conduct as well as procedures for licensure and operation of the Board.

Over the last few weeks, the Board has received several questions pertaining to the regulations and statutes. For example, Title 171, Chapter 3, 004 requires all organizations in Nebraska practicing or offering to practice geology (except those exempted in Neb. Rev. Stat. § 81-3541) to apply for a Certificate of Authorization. A memo designed to help an organization determine if a certificate is required, was mailed out in October 2007 to all Nebraska licensed geologists. The Certificate of Authorization must be signed by the Chief Executive Officer of the organization and a Nebraska licensed Professional Geologist employed full time by the organization.

One geologist asked if signing the Certificate of Authorization meant that a Professional Geologist would be responsible for all geology work conducted by the organization, including work not signed by the "Geologist in Charge." The Board responded that signing the Certificate of Authorization does not in itself make the Professional Geologist responsible for all work conducted by the organization. The Board determined that a Professional Geologist is responsible only for work on which the Professional Geologist's seal is placed and signed in accordance with the provisions of Title 171. Although the Professional Geologist who signs the Certificate of Authorization is not necessarily responsible for all work conducted by the organization, each organization is responsible for complying with the provisions of Title 171 that require a Professional Geologist's seal and signature. In the case

of organizations employing multiple Professional Geologists, the geologist that signs and seals a work product may be different than the "Geologist in Charge" that signed the Certificate of Authorization.

The Board was recently asked how we define the phrase, *"generally accepted scope of engineering practice."* The issue pertains to the fact that work conducted by an engineer that is within the accepted scope of engineering practice is exempt from regulation under the Geologists Regulation Act. As one part of our response, the Board is deferring the specific issue of the scope of engineering practice to the Nebraska Board of Engineers and Architects. The second part of the Board's response is to provide clarification regarding the intent of the Act and the intent of the Board in enforcing the Act.

The Act is intended to regulate the practice of geology and to assure that individuals practicing geology are qualified to do so. The Act is not intended to prevent individuals in other professions, such as engineers, biologists, or chemists, from practicing their profession. Some of the confusion regarding the intent of the Act arises because many specialized fields, such as the environmental field, are interdisciplinary in nature. For example, the design and installation of a groundwater-monitoring system can reasonably be interpreted to fall within the scope of practice for both civil engineers and geologists. Similarly, geologists, chemists or biologists can reasonably be expected to work on enhanced bioremediation of contaminated groundwater, or phytoremediation projects. As a general principle, the Board acknowledges the interdisciplinary nature of many specialized fields. The type of overlapping duties described here will not typically be cause for disciplinary action by the Board.

Obversely, the Board does not typically expect to see a biologist, chemist, or electrical engineer, in responsible charge of designing a groundwater-monitoring system unless the individual in question has specialized training or experience that qualifies them for this task. When the Board is made aware of incidents where an individual may be practicing geology without a license or if the Board is asked to determine whether an individual is practicing outside the generally accepted scope of their profession, each incident will be evaluated on a case-by-case basis. If necessary, the Board will coordinate with the Engineers and Architects Board or other appropriate entity to determine an appropriate course of action.

A separate but closely related issue is whether an individual is qualified to perform a specific task. Not all Professional Engineers or Professional Geologists are qualified to practice in all areas of their profession. Continuing from the previous example, not all

geologists or engineers are qualified to design a groundwater-monitoring system. It is the responsibility of all professionals to assure that they are practicing within their area of expertise. A Professional Geologist whom the Board determines is practicing outside their area of expertise is in violation of the provisions in Chapter 4 of Title 171.

When addressing issues related to professionals working in interdisciplinary fields or the professional conduct of a Professional Geologist, the Board's intention is to allow appropriate latitude while fulfilling our assigned mission to safeguard life, health, and property and assure that individuals practicing geology are qualified to do so.

Anyone with questions regarding a specific situation is encouraged to contact the Nebraska Board of Geologists.

Certificate of Authorization Required for Companies Practicing Geology

(Title 171 NAC, Chapter 3, Sections 004.01 to 004.02)

The Nebraska Board of Geologists is now requiring organizations practicing geology in Nebraska to submit an application for Board review. A Certificate of Authorization will be issued if the minimum requirements are satisfied. The certificate covers a term of two years. It may only be used by the organization to indicate it has satisfied the minimum requirements of the Board to practice or offer to practice the profession of geology in the State of Nebraska. Sole proprietorships or organizations exempted by Neb. Rev. Stat. § 81-3541 are not required to obtain a certificate. To help determine if your organization needs to submit an application, complete the memo found on our website at www.geology.state.ne.us/pdf/certauthapp.pdf.

The minimum requirement for an organization to offer to practice geology in Nebraska is to have one professional geologist, licensed to practice in Nebraska for the duration of the certificate. The professional geologist must also be a full-time employee of the organization and may or may not have ownership interest in the organization. The signature of a professional geologist licensed in the State of Nebraska must appear on the application. Should any licensed professional who has signed the application leave the organization, become deceased or lose their signatory authority, the organization shall notify the Board within thirty days and file an amendment to its application identifying the new licensed individual with signatory authority. The "Changes to Original Application" application form may be found at www.geology.state.ne.us/pdf/certauthchg.pdf.

Dave Becker Honored for Years of Service to the Board



Dave Becker, former Board member of the Nebraska Board of Geologists, was recognized for his years of service to the Board and the profession of geology on July 26, 2007, at their quarterly Board meeting. Vice-Chairperson, Dennis Anderson, presented a plaque to Dave on behalf of the Board in appreciation of his significant contributions.

Dave had the honor of receiving the first Professional Geologist License in Nebraska after the Board was established in 1999. Appointed to the Board on October 20, 1999, to replace a vacancy left by Joni Rhiner, Dave served as Chairperson from April 2001 to April 2002 and served as Secretary of the Board from April 2004 until his departure in March of 2006. Making a decision not to seek reappointment was difficult, but Dave admitted leaving was made easier knowing the troublesome exemption had been removed from the Act and the Rules and Regulations had been approved by the Governor. He offered his continued support to the Board.

A geologist with the US Army Corps of Engineers (USACE) Hazardous, Toxic and Radioactive Waste Center of Expertise in Omaha, he has provided quality assurance review of geologic reports, and training and consultation regarding hazardous waste sites for USACE districts around the country since 1991. He has concentrated his efforts on in-situ environmental remedies and site characterization.

Thank you, Dave, for all your years of hard work and passion for geology. Your expertise and knowledge will be greatly missed by the Board!

Why Require Examinations for Licensure?

Many people will claim that the use of an examination as a requirement for registration is unnecessary and that it is only used to limit membership. This claim is supported by the fact that a geologist must have a 4-year college degree and be sponsored by their peers and superiors for registration. History, however, shows that a 4-year college degree and recommendations by peers and superiors does not prove that a candidate has the academic preparation or understanding of geology necessary to practice geology that affects the public or the environment.

Prepared by: The Committee on Professional Licensure of the Association of Engineering Geologists as a Public Education Service

*The universe as
we know it is a joint product
of the observer and the observed.*

*Teilhard de Chardin
1881-1955*



Late Snow, Towhee

*I'm thirsty for ravines,
declivities, and swales where snow
lingers late, for places*

*where ridges split the sun into light,
shadow, and lines of scree, smoothed
by distance and weather,
sweep down a hill.*

*Just geomorphology. Funny
how you can feel at home anywhere
life and gravity exist --*

*the way rocks tumble and slide
and come to rest; the way
lichen moves in;*

*the way you're certain to find
the droppings of a small mammal
on top of any high rock;*

*the way the rufus-sided towhee,
perched on a bitterbrush snag,
sings you up hill.*

Geomorphology

*is a word for grace
and everything is perfect
just the way it is.*

- Ann Macquarie -



Geology Jobs – Early Warning Signs

By Professor John (Jack) Shroder, Chair

Here we may be going again! The buzz at the recent Geological Society of America meetings in Denver was about the 90-thousand-dollar jobs being offered from the oil companies for freshly minted geology degrees. Oil hovering around \$100 a barrel has a marvelous way of warning us to get ready for another big employment push – again. At the GSA's Division Chairs meeting (Divisions of GSA are partly sub disciplinary – Hydrogeology, Structure, etc.) that I attended as Chair of Quaternary Geology and Geomorphology, the consensus was to produce a document to get university geology programs geared up and ready for another hiring onslaught. The cyclic hiring and firing that geology goes through every decade or two is a reflection of the way that the industry unfortunately seems to work. It has been going on since at least the gold rushes in the 19th century. I myself am a geochild of the uranium boom in the 1950s. Our geology degree at the University of Nebraska at Omaha is a direct result of the last big peak in employment a quarter century ago when we had sixty majors and only two faculty members.

The discussion at the Division Chair's meeting was focused on the fact that not only were hydrocarbon supplies in short supply and prices increasing dramatically, but so was uranium for power generation. Furthermore as the climate changes and droughts pop up in multiple places, the pressing needs for ever more water will continue to increase student interest in underground and surface waters as well. Thus, the early warning signs show that we are probably heading into another one of those highly aggravating boom cycles in geology employment when universities have to play catch-up in order to meet demand. The American Geological Institute in Washington, DC, has been tracking these cycles for a long while and reports, "by the time the next hiring frenzy occurs, there may not be enough students in the pipeline to meet employment demands." Enrollments and employment opportunities are usually out-of-phase, because enrollments generally track two to three or more years behind shifts in workforce patterns. Furthermore to add to the timing problem, it takes university deans and provosts even longer to be convinced to hire new faculty to meet demands. And most bothersome, as a result of these factors, by the time geology programs ramp up to the new educational reality and students finally achieve even threshold credentials for employment, hiring patterns have often shifted once again so that students feel betrayed and leave the field. This is not a good state of affairs.

So the upshots are manifold: high standards need to be maintained in geology education, with delivery of quantitative, robust science. Pressure by administrators to increase enrollments by watering down programs needs to be resisted; and students, as a kind of job security before the next bust cycle arrives, should refrain from being drawn into lucrative early job offers before they have achieved a high level of training. Degrees in environmental science without the requisite math, physics, chemistry, and geology core courses do not enable the proper practice of geology after graduation. The National Association of State Boards of Geology (ASBOG[®]) now recommends that their Fundamentals of Geology (FG) be used as an "Exit" examination for geology majors. By requiring seniors to take and pass the FG exam they are further afforded the opportunity to become Geologists-in-Training or Geologist-Interns as soon as they graduate, which adds to their employability.

All too often in these recurrent cycles, the students who left school early for a hot job before their education was finished, are laid off prematurely as better trained people come on stream. If we really are in another one of these bipolar swings in education and employment as the early signs so definitely suggest, it would certainly be nice if we could weather this one a bit better than the last few times. I am not optimistic, though, as the nature of the beast seems to be fairly immune to good sense. Nonetheless, I hope I am wrong and this early warning will at least get to a few people to take appropriate action as needed.

Nebraska Geological Society Summary of Activities – 2006 to 2007

By David M. Svingen, President (dmsvingen@terracon.com)

The Nebraska Geological Society generally holds two regular meetings per year in Omaha and two regular meetings per year in Lincoln. Presentations over the past year have been far ranging – several talks focused on Midwestern geology, one focused on Arctic geology, and the remaining presentation included information about Antarctic geology.

Programs at regular meetings since our last report to the Board of Geologists included:

- Dr. Harmon D. Maher Jr., University of Nebraska at Omaha, "Storm Beds and Iron Ooids in the Cretaceous of Spitsbergen"
- Dr. Steven A. Fischbein, Nebraska Department of Environmental Quality, "Lithostratigraphic and Sequence Stratigraphic Interpretation of the Indian Cave Sandstone, Southeastern Nebraska and Environs"
- Mike Riggle, Terracon Consultants, Inc., (Yatkola-Edwards Grant recipient), "Vein Growth and Deformation of Toadstool Geologic Park (NE) and Big Badlands National Park (SD)"
- Dr. David Harwood, University of Nebraska-Lincoln, "Drilling Back into the Future with the ANDRILL Program"
- James W. (Jim) Goeke, Professor, School of Natural Resources, University of Nebraska-Lincoln, "Nebraska's Water Resources: Past, Present, and Future"

In addition to meetings, the Society sponsored the spring 2007 field trip. The field trip was organized by Jon Gross and guided by Marvin Carlson, Robert Joeckel, and Robert Gjere. Highlights included a stop at the Core and Chip Sample Data Library of the Conservation and Survey Division where subsurface samples collected over the last 100 years have been studied, and a stop to the Fort Calhoun Stone Quarry, near Fort Calhoun, Nebraska to view limestone and shale from the Upper Pennsylvanian, Missouri Series – Kansas City Group. Field trip attendees with Nebraska Well Driller and Pump Installation licenses or certificates were awarded continuing education hours.

The Society also sponsors the annual Yatkola-Edwards award competition. Three UNL graduate students were each awarded a \$350 grant by the Society in 2007. These grants were matched by the Midcontinent Section of the AAPG.

Nebraska Professional Geologists are always welcome at Society meetings. Contact Dave Svingen, President (402.330.2202) or Kris Levier, Secretary (402.894.2678) for details. Meeting dates for the next several meetings are:

- Thursday, February 21, 2008
- Thursday, April 17, 2008
- Thursday, September 18, 2008
- Thursday, November 20, 2008

The Society will celebrate its 40th Anniversary at our February 2008 meeting. The program will include a retrospective of the Society's first forty years. We hope that many of the Society's Charter Members will attend and take part in the meeting.

Information about the Society including officer's contact information, membership applications, and our bylaws can be found at our website <http://maps.unomaha.edu/ngs/>



Windmill on a Nebraska Hill

By Dr. Nan Lindsley-Griffin

Nebraska Board of Geologists Calendar

(Meeting Dates May be Subject to Change)

January 15, 2008 - Quarterly Board Meeting, 1:00 p.m.

January 22, 2008 - ASBOG[®] March Exam Order Deadline

March 7, 2008 - ASBOG[®] FG & PG Exam Administration

April 4-5, 2008 - ASBOG[®] Exam Workshop, Cody, WY

April 10, 2008 - Quarterly Board Meeting, 1:00 p.m.

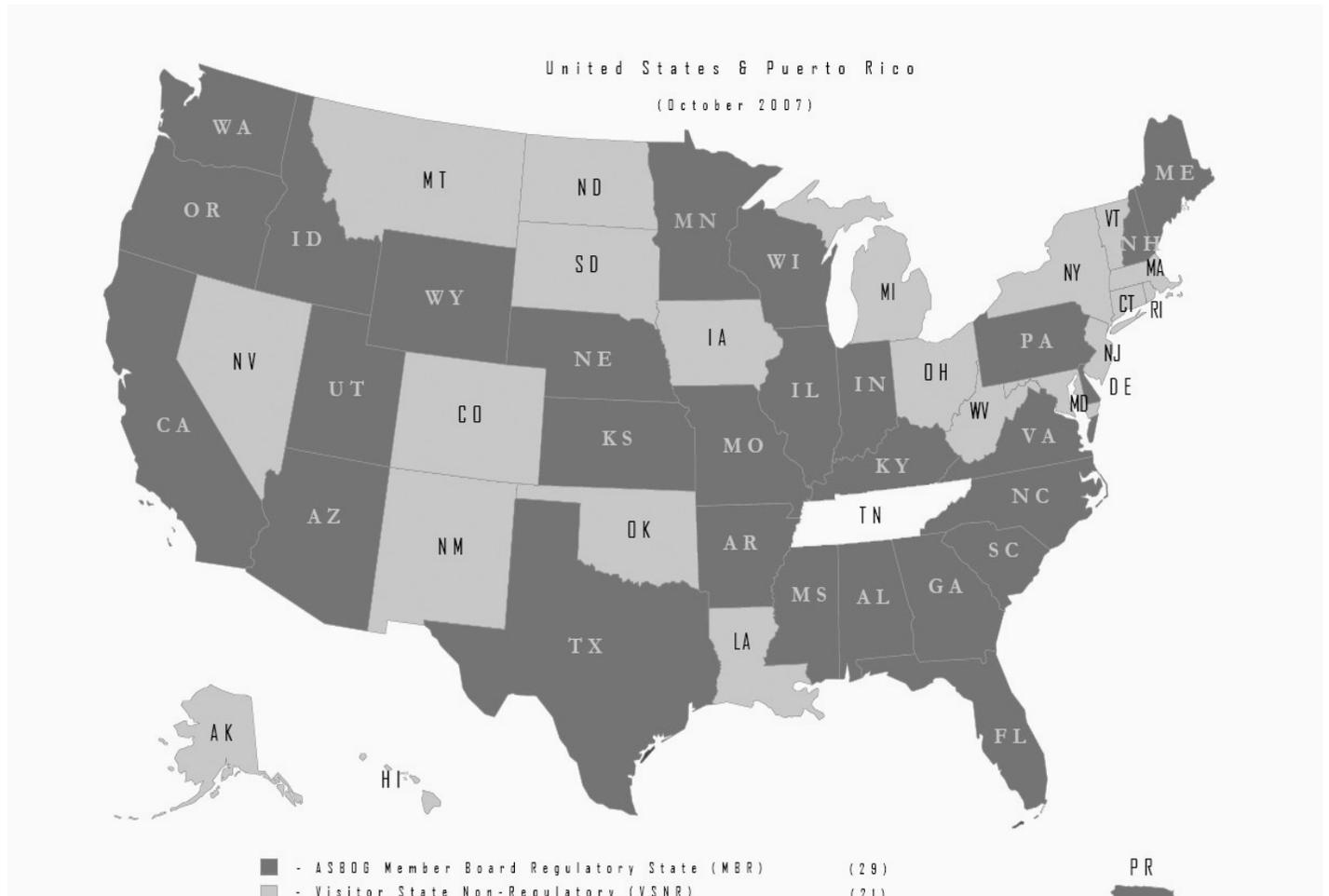
July 31, 2008 - Quarterly Board Meeting, 1:00 p.m.

August 19, 2008 - ASBOG[®] October Exam Order Deadline

October 3, 2008 - ASBOG[®] FG & PG Exam Administration

November 6-7, 2008 - ASBOG[®] Annual Meeting and COE Workshop, Chicago, IL

November 6, 2008 - Quarterly Board Meeting, 1:00 p.m.



ASBOG® member states listed in the darkest shade on the map include:

Alabama, Arizona, Arkansas, California, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Maine, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, North Carolina, Oregon, Pennsylvania, Puerto Rico (a US territory), South Carolina, Texas, Utah, Virginia (optional registration), Washington, Wisconsin, and Wyoming.

THE ASBOG® Examinations

By Dr. Nan Lindsley-Griffin
(Approved for publication by ASBOG®)

The ASBOG® (National Association of State Boards of Geology) examinations have become the national standard for evaluating professional competence for licensing or certification. Given twice annually (September or October and in March) on the same date and time in all ASBOG® member states, the exams consist of two parts: the Fundamentals of Geology (FG) and the Practice of Geology (PG). The FG exam is designed to assess knowledge attained during the completion of the baccalaureate degree in geology, and the PG exam is designed to evaluate skills and knowledge developed during the first five years of professional geological experience. Most states require applicants to have completed the baccalaureate degree or to be within a semester of completion before attempting the FG exam. In many states the PG exam is not open to applicants until they have completed five years of experience. Some states also require an additional state-specific exam.

How are ASBOG® exams put together?

Any professor will tell you that there's no such thing as a perfect exam. Although ASBOG® has a test bank of questions that have accumulated over the past decade, the test bank is continually being reevaluated and improved, and the questions on individual exams are carefully critiqued. This is done by the professional psychometricians in conjunction with the Council of Examiners (COEs), composed of a representative from each state board, plus Subject Matter Experts (SMEs). All of these volunteers are registered professional geologists. COEs and SMEs meet at workshops held twice a year, about a month after each national exam. Typically, some 15-20 experts will focus on each of the two exams, keeping in mind that the FG exam is testing the knowledge that a properly trained geologist with a baccalaureate degree would have, and the PG exam is testing the skills needed by the working professional after five years of experience.

The SMEs begin by taking the most recent exam in their focus area (FG or PG). After an hour or two to read and answer the questions, they go down the list and item-by-item give their answer. If all the SMEs agree on the correct answer, that's a good sign – the item is well written and clear. If the SMEs disagree on the correct answer, both the item and its key are subjected to intense scrutiny. Comments written by examinees on specific items are read to the group at this time and their concerns are addressed. If an item has two possible answers the group may decide to double-key it, or even to discard it from the exam. This is rare – but in such cases the exams are re-scored. No item that has performed poorly is ever returned to the test bank. If the SMEs feel that any item is vague, out of date, or inappropriate in the light of current professional practice, it will be revised or even discarded and replaced with one or more new items appropriate for that task. The SMEs also review items selected for the next upcoming examinations. Items are selected randomly from each of the test bank categories by the psychometricians, in percentages based on the exam blueprints developed from the task analysis study. The SMEs read each item on their focus group's draft exam critically for clarity, applicability, and correctness. Questionable items are revised or replaced before the new exam is finalized. SMEs are encouraged to bring new items to the workshop as well as to write additional items for future use. This can be a very humbling experience, because every new item (as well as every revision) must be approved by three other SMEs, each of whom is free to "improve" your original item. By the time your original write-up works its way around the table back to you, it may be unrecognizable – but it probably will be much better than you thought it was!

ASBOG® and the Council of Examiners have strict guidelines concerning confidentiality, so please don't ask your Nebraska COEs and SMEs for specifics about the exams. For examples of questions you might see on the exams, as well as other information, log on to the ASBOG® web site at <http://www.asbog.org>.

Trends in Academia

Generalized trends in the undergraduate academic experience include: 1) general increase in the time spent earning an undergraduate degree, 2) grade inflation, and 3) decline in the number of hours that the typical student spends in studying and preparing for classes (Engle, 2004 a,b). The latter two items seem to present an interesting paradox. One might deduce either that students are becoming more skilled or that less is being required of students during their academic experiences.

There is no known comprehensive review that shows trends in degree requirements of undergraduate geological curriculum in the United States colleges and universities. Limited evidence much of which is uncataloged and anecdotal, suggests that many geology (geoscience) departments are extremely concerned about the decline in majors and are exploring ways of making the major more attractive to students. In part, this concern is motivated by a desire to insure departmental survival. In 2003, the University of Connecticut moved to eliminate the long-standing geology and geophysics department for a number of reasons including the decline in number of majors.

On the ASBOG® website as Published in the Journal of Geoscience Education Publication; written by John W. Williams, Dept of Geology, San Jose State University, Jack L. Warner, TEST, Inc. and Steve P. Warner, TEST, Inc.

Renewal Information

In October of 2007, renewal notices were sent to all licensees for the 2008 renewal period. Renewal licenses are valid for one year. The renewal fee is due on or before December 31, 2007. Those who have not received a renewal notice or have an address change please notify the office by email at board@geology.ne.gov. Those who become licensed prior to December 31 of each year will be sent a renewal notice.

How to Renew a License

- Complete and make any changes to the renewal form on or before December 31 and return with the \$75 fee made payable to the "Nebraska Board of Geologists."
- A renewal card with your expiration date and a receipt will be sent after payment is received.
- All renewal notices are sent out on an annual basis in October of each year.

Penalty Information

After 12/31/07, add \$7.50 for any month or any part of a month, up to \$75. After 12/31/2008, a new application will be required to obtain licensure.

Any person who attempts to practice or offers to practice under an expired license may be found guilty of a Class II misdemeanor for the first offense and a Class I misdemeanor for the second or subsequent offense (Neb. Rev. Stat. § 81-3535).

Nebraska Board of Geologists ASBOG® Examination Information

Plans are in progress for the March 7, 2008, Nebraska ASBOG® Examination. An application must be submitted and approved before registering for the exams. Please remember all fees are non-refundable and not transferable.

Arrangements can be made to take the Nebraska exam at another state Board's examination site (e.g. Wyoming), provided they are also an ASBOG® member. If you require this option or would like more information please contact us by email at board@geology.ne.gov.

2008/2009 ASBOG® Schedule

Friday, March 7, 2008	Friday, March 6, 2009
Friday, October 3, 2008	Friday, October 2, 2009

ASBOG® Examination Fees for March 2008 Exam

Fundamentals (FG)	\$150
Practice (PG)	\$150
Both FG & PG	\$300

ASBOG® Examination Fees for October 2008 Exam

Fundamentals (FG)	\$150
Practice (PG)	\$200
Both FG & PG	\$350

Nebraska Board Exam Reservation Fee

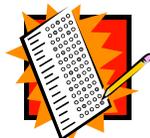
*For one or both exams \$ 35

* The reservation fee covers the proctor and other administering costs of the exam(s).

Applicants are required to mail examination fees directly to ASBOG®. The Nebraska Board will mail the "Candidate Request Form" to approved applicants for submittal to ASBOG® with the appropriate examination fee(s). A copy of the form and a check for the reservation fee of \$35 must be sent to the Nebraska Board.

The Nebraska examination site is located on the 5th Floor of the Lincoln Community Foundation Building at 215 Centennial Mall South, Lincoln, Nebraska. Information for the examination can be downloaded from www.geology.state.ne.us/exams.html.

Applications need to be submitted by December 31, 2007, to ensure they will be reviewed at the January Board meeting. The Board only meets quarterly to approve applications and ASBOG® will require the March 2008 examination fees to be paid by January 22, 2008.



Fee Schedule

<i>Licensing Fees</i>	
Application Fee	\$50.00
Licensing Fee (Payable upon approval of application)	\$240.00
<i>Other Fees</i>	
Annual Renewal Fee – Lic. Expiring 12/31/07	\$75.00
Expired Registration Penalty <small><u>Licenses Expiring 12/31/07</u> \$7.50 per month, not to exceed \$75</small>	
Temporary Permit License Fee*	\$175.00
Emeritus Fee (Lifetime fee)	\$25.00
Certificate of Authorization for Organization (2 year period)	\$100.00
Reservation Fee (For one or both tests) <small>FG and PG Examination Fee(s) are payable to ASBOG®. The reservation fee is payable to the "Nebraska Board of Geologists."</small>	\$35.00
Duplicate Wall Certificate Fee	\$15.00
Licensee Listing	\$25.00

*A Temporary license is good for one project only and for a period of one year. If an active PG license is not held in another state, a Nebraska licensure application will be required. A Temporary Permit is for an individual only and cannot be obtained for practice by an organization.

Links of Interest

Employment Opportunities in Nebraska

www.lincolnjobs.com/nepersonnel2.html

www.lcoc.com/relocation/employment.htm

www.thingamajob.com/L-Us-Nebraska-0.aspx

www.unl.edu/ucomm/business/

<http://hr.unl.edu/>

www.unomaha.edu/humanresources/employment.php

Reciprocity and Comity Defined

The Board spent a great deal of time discussing the issues of reciprocity and comity before coming up with our current policy [see below]. According to Webster's New World Dictionary, *reciprocity* refers to equivalent or interchangeable things; *comity* (in law) is the principle by which courts in one jurisdiction may accept decisions made under the laws and decisions of another jurisdiction. Although the concepts are similar, they are not quite the same, and even ASBOG® states have not been able to agree on a uniform application of reciprocity/comity. The main reason for the difficulty is that each state's law (or province, territory) is slightly different than the others.

The Geologists Registration Act (Nebraska Statutes 81-3501 to 81-3541) lists four requirements for professional registration: 1) character; 2) B.S. degree in Geology; 3) 5 years of post-baccalaureate experience working in geology; and 4) passing scores on examinations covering the Fundamentals of Geology and the Practice of Geology. Although the Act does not specifically define either reciprocity or comity, it does state that the first three criteria...

"may be considered by the board to be fulfilled if the applicant maintains a current certificate of licensure to practice geology issued pursuant to the authority of any state or possession of the United States or the District of Columbia based on requirements that do not conflict with the Geologists Regulation Act and were of a standard not lower than that specified in the applicable licensure in effect in this state at the time the certification was issued."

In other words, we are authorized to offer reciprocity (but not comity) provided the applicant has been licensed elsewhere on the same basis as Nebraska registrants, AND HAS TAKEN THE ASBOG® EXAMS OR THEIR EQUIVALENT.

Reciprocity Policy

The Board may grant licensure by reciprocity if the applicant meets the following requirements listed below:

To Apply for a PG License:

1. Must have a current geologist registration or license in good standing in another state. (Contact your local state board of registration and ask them to send a verification of your registration and good standing to the address below).
2. Must have submitted an application form with the \$50.00 application fee to the Nebraska Board of Geologists. (Letters of reference are not required at this time if in good standing).
3. Must have passed the ASBOG® examinations Fundamentals of Geology and Practice of Geology or their equivalent. (The Board may waive the requirement for passing the ASBOG® examinations or equivalent, if the applicant has held

a geologist registration or licensure in good standing since December 31, 1991. Such applicants may be asked to submit additional material, including letters of reference.)

4. Meet the Nebraska statutory education requirement: Have "...a minimum of thirty semester hours or forty-five quarter hours of course work in geology and have received a baccalaureate or advanced degree in geology or a geologic specialty...." An official or certified transcript of course work, grades, and degrees must be sent directly to the Board from the educational institution.
5. Meet the Nebraska statutory requirements for experience: "...a documented record of a minimum of five years of progressive experience, obtained subsequent to completion of the education requirements, in geologic work of a grade and character which indicates to the board that the applicant is qualified to assume responsible charge of such work upon licensure as a geologist."

An application packet and verification form may be downloaded from our website at www.geology.state.ne.us/forms.html.

Complaints

By Jim Cannia, Former Board Member

The Nebraska State Board of Geologists exists to protect the public health and safety of the people of Nebraska. This citation from the law outlines the responsibility of the board:

81-3502. Geology; regulation; prohibited acts. In order to safeguard life, health, and property and to promote the public welfare, the profession of geology is declared to be subject to regulation in the public interest. It is unlawful for any person to (1) practice or offer to practice geology in this state, (2) use in connection with his or her name or otherwise assume the title professional geologist, or (3) advertise any title or description tending to convey the impression that he or she is a licensed geologist; unless the person is duly licensed or exempt from licensure under the Geologists Regulation Act. The practice of geology and use of the title geologist is a privilege granted by the state.

In the few years we have been active as a Board, several complaints have been investigated. Mainly, these complaints involve unlicensed individuals allegedly practicing without a license or advertising themselves as a geologist. All cases brought before the board are investigated as quickly as time permits. As of this date, only a few investigations have resulted in a warning letter to the offending party.

Please take note that the board will act quickly to investigate all complaints presented. As professional geologists, we all have a duty to be aware that people practicing outside the law are subject to having a complaint filed against them and possible action taken by the Board. The Board is your vehicle to protect your profession. Allowing people to violate the law weakens us all.

A complaint form can be found on our website at www.geology.state.ne.us/board/complaint.pdf.

LICENSURE UPDATES

December 7, 2006, through December 6, 2007

Timothy W. Berger, Fair Oaks, CA; **4/26/2007**

Michael D. Beshore, Fort Collins, CO; **1/16/2007**

Dana P. Divine, Lincoln, NE; **8/21/2007**

Nan Elizabeth Glenn, Morrison CO; **5/7/2007**

Richard L. Hahler, Wahoo, NE; **1/9/2007**

Theresa Jehn-Dellaport, Denver, CO; **11/5/2007**

Julie M. Oriano, Coralville, IA; **8/8/2007**

James A. Roberts, McCook, NE; **8/6/2007**



**Congratulations to those that passed the
March 2007 & October 2007 ASBOG® Exams!**

Fundamentals of Geology Examination

Clayton D. Erickson

Nan Elizabeth Glenn

Douglas R. Hallum

Practice of Geology Examination

Nan Elizabeth Glenn

Jesse T. Korus



Nebraska Geologist-Intern Enrollment

Clayton Erickson, Loomis, NE; **4/30/2007**

Douglas R. Hallum, Seward, NE; **11/15/2007**



Check out our Updated Website!

The Board updated their website in June 2007. It has a new and improved look as well as offering easier navigation. The website address has been shortened to www.geology.state.ne.us.

WHO SHOULD BE REGISTERED IN THE STATE OF NEBRASKA?

THE GEOLOGISTS REGULATION ACT

Neb. Rev. Stat. §§ 81-3501 - 81-3541

Purpose: to safeguard life, health, and property and to promote the public welfare through the regulation of the profession of geology.

Board of Geologists: established to oversee the registration and licensing of professional geologists for the state of Nebraska, and to enforce the Geologist Regulation Act. In general, if you are a geologist whose work is in areas affecting public health and safety, you should be registered. Examples include, but are not limited to, geologists working in environmental geology, engineering geology, and hydrogeology.

A Geologist is a person who is qualified to practice geology by reason of special knowledge and use of the earth sciences and the principles of geology and geologic data collection and analysis acquired by geologic education and geologic experience.

Geology means the science which includes treatment of the earth and its origin and history, in general: investigation of the earth's constituent rocks, soils, minerals, solids, fluids including underground waters, gases, and other materials; the study of the natural agents, forces, and processes which cause changes in the earth or on its surface; and the application of this knowledge of the earth.

The Practice of Geology means "any service or creative work if the adequate performance of the service or work requires geologic education, training, and experience to include such services or creative work as geological consultation, investigation, planning, surveying, mapping, and inspection of geological work, and the responsible supervision thereof, the performance of which is related to public welfare or the safeguarding of life, health, property, and the environment and teaching, including research and service, of advanced geological subjects." [81-3515]

Nebraska Licenses Not Renewed for 2007

Paul F. Anderson, WA ■ William Mark Bailey, GA

Linda J. Barnes, WY ■ Vincent H. Dreeszen, NE

Brett A. Fishwild, OH ■ Kevin B. Hopkins, KS ■ James J. Luepke IA

Madeline M. Woods, TX ■ Timothy T. Quigley, KS

Nebraska Licenses Lapsed on 1/1/2007

James Borovich, NE



**NEBRASKA BOARD OF GEOLOGISTS
PO BOX 94844
LINCOLN NE 68509**

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