



Illinois Groundwater Association Newsletter

Volume 22, No. 2

Fall 2006

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2006 Officers

Chair: Steve Van der Hoven,
Illinois State University

Vice Chair: Don Keefer,
Illinois State Geological
Survey

Director: Dan Horvath,
Resource Consulting

Director: Melissa Lenczewski,
Northern Illinois University

Secretary: Danielle Wallin,
Farnsworth Group, Inc.

Treasurer: Steve Bennett,
Western Illinois University

Editor: Erik Spande,
CH2M Hill

Student Director: Samuel Gillet,
Northern Illinois University

FROM THE CHAIR

The IGA is an all volunteer organization. I did not really realize this until former IGA Chair Colin Booth asked me to become a Director. I had been regularly attending meetings, initially attracted by the opportunity to meet others interested in Illinois groundwater. What kept me coming back were well run meetings with interesting and informative presentations. But I hadn't really thought about who put this all together.

The people who do put together the meetings and run the association are the familiar faces you see at the registration desk at meetings or introducing the next speaker. Most of these folks are members of the Executive Committee, which is made up of the Chair, Vice Chair, 2 directors, a student director, a treasurer, and a secretary. Each is elected to a 4 year term, with the directors working their way to Chair by their 4th year. The student director is elected on a yearly basis. We agree to serve because we believe in the IGA's mission of advancing groundwater knowledge, and are willing to lend our time insuring that the organization continues.

In addition to the elected Executive Committee, there are other unelected but vital members of the organization. At the last meeting, we honored Randy Locke (webmaster and past Chair) and Erik Spande (newsletter editor since 1992 and past Chair) for their longstanding commitment to the IGA, and for maintaining the public face of the organization. There are also many long time members who have served on the Executive Committee, continue to regularly attend meetings, and financially support the IGA by paying dues. It is all these folks who serve as the institutional memory for the organization, and whose guidance I have sought on a number of issues during my time as Chair.

The IGA has thrived for 23 years despite the continual rotation of the membership of the Executive Committee. All involved obviously believe in the IGA mission strongly enough to volunteer their time, our only reward the satisfaction of putting together a successful meeting or supporting student research. If you want this organization to continue on for another 23 years (and beyond), then a few of you reading this will need to take your turn on the Executive Committee. Please consider becoming a future director by approaching a current director at an upcoming meeting.

Steve Van der Hoven

Illinois Groundwater Association 2006 Chair

IGA NEWS

FALL 2006 IGA MEETING AT NIU

One of our two IGA meetings each year is held in the Chicago area and the other in mid-Illinois. We have our favorite venues such as the stunning [Starved Rock State Park and Lodge](#) (Spring 2006), and are always pleased with the facilities and warm welcome at [Fermi National Accelerator](#) (Fall 2004). Universities are gracious hosts ([Illinois State University](#) Spring 2005) that provide terrific access for students to our meetings. Last fall we found what is sure to be a new favorite at [Morton Arboretum](#).

This fall we are returning to [Northern Illinois University](#) in DeKalb, Illinois. It is hard to believe it has been over 4 years since NIU was gracious enough to host an IGA meeting, so it is high time we returned. We have the Skyroom at the Holmes Student Center [Holmes Student Center](#) reserved for our meeting with a catered continental breakfast, lunch, and afternoon snack. Our friends at the NIU [Department of Geology and Environmental Geosciences](#) are handling all the details for us, and how can we turn down an offer like that? As with our recent meeting at ISU, we hope to have as many students as possible attend some or all of the meeting (we wouldn't want them to cut classes, of course!).



There are many choices for [accommodations](#) at NIU for those who are traveling. A draft agenda is on page 12 of this newsletter and any updated agendas will be posted at the [IGA Web Site](#) and provided at the meeting.

SPRING 2006 IGA MEETING AT STARVED ROCK

One of the IGA's favorite meeting venues is the idyllic [Starved Rock State Park](#). This scenic gem boasts sculpted bedrock, waterfalls, isolated glens, vast woodlands, hiking trails, and wonderful accommodations at the 1930s-era log-and-stone [Starved Rock Lodge](#). We had a beautiful day for our April 18th meeting, and as usual the facilities at the Lodge were excellent. If you're interested in the agenda and abstracts, they are posted on the [meetings page at the IGA Web Site](#).

We also had the opportunity to have a field trip to the US Silica site in Ottawa, Illinois, which is a short 15 minute trip from Starved Rock. US Silica has been mining and processing sand from the St. Peter Sandstone for over 100 years. The uplift that created Starved Rock Dome and the



IGA NEWS

SPRING 2006 IGA MEETING AT STARVED ROCK (CONT.)

Starved Rock State Park also pushed the sandstone used by US Silica to as little as a few inches below ground surface along the Illinois River Valley. This sand is almost pure quartz with very few impurities, and US Silica mines over 2 million tons a year, or 8,000 tons a day. Our hosts at US Silica gave us a full tour of their



mining operation, which uses high pressure water to



wash the friable sandstone to collection areas. They transport, sort, blend, and then bag or batch the sand for a wide variety of clients. We even got parting gifts – a miniature castle made of genuine St. Peter Sandstone.

2006 IGA STUDENT GRANTS

A primary goal of the Illinois Groundwater Association is to foster scholarship in the science of groundwater. One way we support this effort is through our IGA Student Research Grant Program, and the IGA is pleased to devote our entire yearly surplus from dues or meeting fees (less a small amount to keep the IGA going) to student grants. Student grant applications are accepted in the spring and fall of each year. The IGA awards one to three grants (typically \$150 to \$500) to help support student research in groundwater in Illinois. For 2005 the IGA was pleased to grant Samuel Gillet/NIU \$450 and Katrina Hall/SIU \$500. Any undergraduate or graduate student registered for full- or part-time study at an accredited college or university in Illinois is eligible to apply. The application deadline for the spring grant period is generally in April or May and we encourage any eligible student to submit their applications early. Application forms and guidelines can be obtained from the [student grants section of the IGA web site](#) or from:

[Edward Mehnert](#)

IGA Grants Coordinator

Illinois State Geological Survey

615 East Peabody Drive

Champaign, IL 61820

217/244-2765 Fax 217/244-2785

IGA NEWS

2006 IGA DUES REMINDER

If you haven't already done so, please submit your dues for 2006. Complete and mail your information along with your dues to Steve Van der Hoven at the address below. Annual IGA membership dues are \$15 (or just \$5 for students). Membership renewal for each calendar year is payable at the time of the Spring and Fall Meetings and is open to anyone interested in groundwater resources in Illinois. **Please make checks payable to the Illinois Groundwater Association.**

COST

Renew Membership	\$15	Name: _____
New Membership	\$15	Position: _____
Student	\$5	Employer: _____
		Address: _____

		Phone: _____ Fax: _____
		E-mail: _____

Clip this form & mail or send via e-mail to:

[Steve Van der Hoven](#), IGA Chair
Department of Geography-Geology
Illinois State University
Campus Box 4400
Normal, IL 61790
(309) 438-3493 Fax (309) 438-5310

IGA FALL 2006 MEETING – CEUs FOR ATTENDEES

Continuing education units (CEUs) are required for many Illinois licensed professionals. The IGA has gotten approval from the Illinois Department of Public Health that the meeting agenda meets the annual three hour training requirements for local health department water program personnel as specified in the Local Health Department Grant Protection Rules, Section 615.320 (c) 2. Interested Sanitarians only need attend and have one of the IGA's officers sign their program agenda as proof of attendance.

Other professions also can use the IGA's meetings for CEUs. For instance, Illinois Professional Engineers (PEs) can get CEUs by attending the IGA's meetings. Prior approval of the program by an Illinois official is not required. An Illinois PE can get proof of their attendance of the fall IGA conference by getting their program signed by an IGA officer.

IGA OFFICER CANDIDATES FOR 2007

CANDIDATE FOR CHAIR OF IGA: **MR. DON KEEFER** is a geologist and the Head Director of the Geologic Mapping and Hydrogeology Center at the Illinois State Geological Survey. He received a M.S. in soil water quality and a B.S. in geology from the University of Illinois at Urbana. In his 20 years with the ISGS, his research interests have focused on the impact that geologic materials have on contaminant fate and transport, the importance of heterogeneities and preferential flow paths on contaminant fate and transport, and the application of geologic information to groundwater resource protection. Don's current research interests focus on methods for characterization and modeling heterogeneous geologic deposits, particularly for addressing problems of groundwater management, protection or remediation.

CANDIDATE FOR VICE-CHAIR OF IGA: **MR. DANIEL HORVATH** is the president of Resource Consulting, Inc., an environmental consulting firm located in Geneva, Illinois. His work as an environmental consultant and hydrogeologist has focused on soil and groundwater contamination issues including the characterization and remediation of petroleum and solvent releases and the regulatory issues related to them. Dan received his B.S. in Geology from the University of Wisconsin-Madison in 1989 and has continued his education at Northern Illinois University through its Environmental Geosciences Certificate and M.S. programs in its Department of Geology. Dan is also the Chairman of the Northeastern Illinois Regional Groundwater Protection Planning Committee, mandated by the Illinois Groundwater Protection Act to identify, monitor, and educate the public about groundwater protection issues in northeastern Illinois.

CANDIDATE FOR DIRECTOR OF IGA: **MR. STEVEN KROLL** is an Indiana licensed professional geologist with Patrick Engineering, Inc. in Lisle, Illinois. Steve received his B.S. in Environmental Science from Bradley University in 1999 and his M.S. in Geology from Northern Illinois University in 2004. His work as a hydrogeologist has focused on the evaluation of the hydrogeologic impact of mining operations, the characterization and remediation of soil and groundwater contamination, local and regional groundwater resources assessments, landfill siting, and groundwater modeling. Steve has been a member of the IGA since 2002 and was a recipient of an IGA Student Research Grant in 2003.

CANDIDATE FOR SECRETARY OF IGA: **MS. DANIELLE WALLIN** has a B.S. degree in geology from Eastern Illinois University (1999) and a M.S. degree in geology from Northern Arizona University (2001). She currently is employed as an environmental geologist with Farnsworth Group, Inc. in Bloomington, Illinois where she specializes in water supply and resource evaluation, well design, environmental assessments, environmental remediation, hydrology, permitting and project management.

CANDIDATE FOR TREASURER OF IGA: **DR. STEVE BENNETT** received his B.S. in geology in 1988 from University of Northern Iowa, his M.S. in geology in 1990 from Indiana University, and his Ph.D. in geology in 1994 from Indiana University. After completing his Ph.D. he became an Assistant Professor in the Department of Geology at Western Illinois University in August of 1994. Dr. Bennett teaches courses in introductory physical geology, mineralogy, oceanography, hydrogeology, and at the Western Illinois University summer geology field camp. Dr. Bennett is formerly a Director and Chair of the IGA.

CANDIDATE FOR STUDENT DIRECTOR OF IGA: **MR. CHRIS GREER** is a doctoral student in the Department of Geology and Environmental Geosciences at Northern Illinois University. His research is focusing on recharge into both the local glacial and regional bedrock aquifers in the DeKalb County area. He received his B.S. in geology from Millsaps College in 1993 and his M.S. in hydrogeology from Wright State University in 1997. His professional experience includes seven years as a hydrogeologic consultant with CH2M HILL, Inc. in Dayton, Ohio, where he conducted environmental field investigations, groundwater flow and contaminant transport modeling, and GIS analysis for both contaminant and wellhead-protection projects.

Fall 2006 Illinois Groundwater Association Newsletter

Illinois Groundwater Association

BALLOT FOR THE ELECTION OF 2007 OFFICERS

- Chair** () **Mr. Don Keefer**
 Illinois State Geological Survey
 Champaign, Illinois
 () _____
- Vice-Chair** () **Mr. Daniel Horvath**
 Resource Consulting, Inc
 Geneva, Illinois
 () _____
- Director** () **Mr. Steven Kroll**
 Patrick Engineering, Inc.
 Lisle, Illinois
 () _____
- Secretary** () **Ms. Danielle Wallin**
 Farnsworth Group, Inc
 Bloomington, Illinois
 () _____
- Treasurer** () **Dr. Steve Bennett**
 Western Illinois University
 Macomb, Illinois
 () _____
- Student** () **Mr. Chris Greer**
Director Northern Illinois University
 DeKalb, Illinois
 () _____

Instructions: Place an "x" in the box opposite to the candidate of your choice. If you prefer to vote for a candidate not listed, write the name and business affiliation of the candidate of your choice in the space provided and mark with an "x". Write-in candidates must be members of the IGA. Mail or e-mail the completed ballot to

[Steve Van der Hoven](#), IGA Chair
Department of Geography-Geology
Illinois State University
Campus Box 4400
Normal, IL 61790
(309) 438-3493 Fax (309) 438-5310

SPECIAL FEATURE

The Illinois PG – The Path Forward

Based on a memorandum by Bill Dixon

The Illinois Professional Geologist Registration Act has been reauthorized for another 10 years. The next major action that is needed is to amend our Act to provide for a Geologist-in-Training (GIT) so that a candidate for enrollment as a GIT would be able to take the [National Association of State Boards of Geology](#) (ASBOG®) Fundamentals of Geology (FG) examination close to graduation time without having to wait four years to gain the professional experience that is now required before applying for a license.

Under the present wording of the Act, candidates must wait a minimum of four years after gaining the baccalaureate degree before being able to apply for a license. After approval to take the two part exam, candidates have to prepare to take the four hour long FG exam that covers the information they studied in school a minimum of four years previously and also simultaneously prepare to take the four hour long Practice of Geology (PG) exam covering the practical application of that information. Being able to take the rigorous FG exam (which does not have a high pass rate) right out of school or in the senior year would be fairer to candidates.

A second reason for adopting this proposed amendment is that there is currently no national method to accredit geology programs. The amendment is worded so as to allow for colleges and universities to use the FG exam as an exit exam for graduating seniors. This is done in both Mississippi and Kentucky. The students must take the exam to graduate, but they are not required to pass the exam to get their degree. Some of the participating schools give partial reimbursement of fees to students taking the exam and full reimbursement to those who pass. The schools then receive information back on how their blocks of students performed on broad categories, or domains, of the exams. This gives the schools a measure of the effectiveness of their programs, and they can adjust curricula accordingly.

The planning for the amendment involves educating all the other related licensed professions (engineers, surveyors, etc.) on the benefits of our intentions so we can gain their support or at least mute their opposition. The standard position of the Department of Professional Registration is to oppose anything that will increase the work load without a supporting revenue stream. The GIT would be designed to be revenue neutral.

AGENCY UPDATE

ENVIRONMENTAL PROTECTION ACT AMENDED FOR POTENTIAL ROUTES

Governor Blagojevich has signed into law Senate Bill [SB1028](#), which amends the Environmental Protection Act Section 3.35.30 to define 'potential route' to include improperly abandoned wells, drainage and injection wells, stone, gravel and sand excavations, and closed loop heat pump wells. The new law specifically exempts closed loop heat pumps that use food grade propylene glycol.

ILLINOIS WINS TWO SEMIFINAL SITES FOR THE FUTUREGEN POWER PLANT

From the [ISGS Web Site](#)

The Illinois State Geological Survey (ISGS) provided the geological and carbon sequestration reservoir analysis, and many of the GIS map products, for the proposals that netted Illinois two of the four semifinal sites being considered for the *FutureGen* power plant project, as announced by the U.S. Department of Energy and the *FutureGen* Industrial Alliance on July 25, 2006. The sites are located near Tuscola and Mattoon, Illinois.

KANE COUNTY RECEIVES FEDERAL GRANT FOR ISGS AND ISWS WATER PROJECT

From the [ISGS Web Site](#)

At a press conference held in Sugar Grove, Illinois, on August 10, 2006, House Speaker Dennis Hastert announced a federal grant of \$938,000 to assist an ongoing water resource study. Two ISGS staff members represented the Survey at the press conference. The ISGS and Illinois State Water Survey (ISWS) are in the final year of a five-year study to evaluate the water resources of Kane County. The county is facing rapid growth. In 2000, the population of the county was approximately 404,000 and used 61 million gallons of water per day. By 2030, the population of the county is projected to be 692,000 people who are projected to need an additional 60 million to 80 million gallons per day.



AGENCY UPDATE

ISGS FIELD TRIP TO MORaine HILLS STATE PARK

From the [ISGS Web Site](#)

The spring 2007 ISGS field trip will be held on April 14 and May 5, 2007 at the Moraine Hills State Park and surrounding area near McHenry and Lake Counties. Moraine Hills State Park is located in northeastern Illinois on the eastern side of the Fox River Valley. Thick Pleistocene glacial deposits from the pre-Illinois, Illinois, and Wisconsin Episodes blanket the area and have buried the bedrock surface, except along the major rivers and streams. This field trip area is dominated by low, broad moraines formed by Wisconsin Episode glaciers nearly 14,000 years ago. This field trip will examine and discuss how these features were formed by ice, water, and wind.



Participants will tour Moraine Hills State Park and the Volo Bog Natural Area, visit a sand and gravel mining operation, and explore various exposures of Pleistocene glacial deposits. This scenic area provides a good opportunity to collect a variety of local bedrock types and igneous and metamorphic rocks that were transported into Illinois by glaciers from as far away as the Hudson Bay area of Canada.

IEPA \$1M LOAN TO SYCAMORE FOR GROUNDWATER IMPROVEMENTS

From [IEPA Web Site](#)

The Illinois Environmental Protection Agency has approved a \$1,024,417 Drinking Water Infrastructure loan, which will enable the City of Sycamore in De Kalb County to provide residents with improved drinking water and proper treatment of naturally-occurring radium in some wells. The proposed project is an upgrade to the Sycamore Public Water Supply. The work consists of constructing facilities at Well Numbers 6 and 8 to house radium treatment equipment, which will be leased by the City. The project will ensure that Sycamore residents consume safe water that meets standards for radium. The funding for the project is being provided through the Illinois EPA as part of Opportunity Returns regional economic development strategy. The loan from the Illinois EPA is part of the Agency's revolving loan program that utilizes federal and state funding to provide loans for eligible drinking water and wastewater treatment projects at half the market interest rate.

Fall 2006 IGA Meeting on October 10 at Northern Illinois University

The Fall 2006 Illinois Groundwater Association Meeting will be held in the Skyroom at the [Holmes Student Center](#) at [Northern Illinois University](#) in DeKalb, Illinois on Tuesday October 10, 2006. On-site registration with coffee and rolls begins at approximately 8:15 a.m. and the technical program will begin at 9:00 a.m.

Meeting Agenda

The agenda is on page 12 of this newsletter. We've scheduled some decent sized breaks to hopefully allow ample time for discussions with colleagues. The agenda is provisional and an updated agenda will be available at the registration table just before the meeting.

Location Information

NIU is located west of the Chicago metro area on I-88 in DeKalb, Illinois. Be sure to take the Anne Glidden Road exit near the toll plaza. There are plenty of signs to direct you to the campus. From Anne Glidden Road, turn right (east) onto Lincoln Highway, and then left (north) onto Carroll Avenue. This road ends at the (pay) parking lot that is adjacent to the Holmes Student Center. A parking garage is nearby, too. Additional directions are available at the [NIU Web Site](#).

Additional Information:

A pre-meeting continental breakfast will be provided. Lunch and an afternoon snack will be catered and is included in the cost of the conference. If you have any special dietary needs please contact the IGA at least three days in advance of the meeting. If you need to stay overnight there are many choices for [accommodations](#) in DeKalb.

Please share this announcement with your colleagues. We would love to see them, too! Send in registration information via snail mail or e-mail to:

[Steve Van der Hoven](#), IGA Chair
Department of Geography-Geology
Illinois State University
Campus Box 4400
Normal, IL 61790
(309) 438-3493 Fax (309) 438-5310

Fall 2006 Illinois Groundwater Association Newsletter

MEETING REGISTRATION

Please return a form for each person attending. Registration includes a continental breakfast, a catered lunch and afternoon refreshments. **If you aren't a member yet, become one for only \$15 and save money on meeting registration this year!** To qualify for early registration, send this information to Steve Van der Hoven by Tuesday October 3, 2006 by mail, e-mail, or fax (see information below). Make checks payable to the Illinois Groundwater Association if registering by mail, or pay at the conference if registering by email or fax. Early registration is encouraged.

<i>Early Registration</i> <i>(received by 10/3/2006)</i>	
Member:	\$45.00
Non-Member:	\$65.00
Student:	\$25.00
<i>Late Registration</i>	
Late Member	\$55.00
Late Non-Member	\$75.00
Late-Student	\$25.00

Contact Information

Name: _____

Position: _____

Employer: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

IGA MEMBERSHIP

Annual dues are \$15.00 and membership is available to anyone interested in the groundwater resources of Illinois. Dues for each calendar year are payable at the time of the spring meeting. Send this information to Steve Van der Hoven (see information below). Please make checks **payable to the Illinois Groundwater Association**.

<i>Membership Dues</i>	
Renewal or New Member:	\$15.00
Student:	\$5.00
Send registrations and memberships to: Steve Van der Hoven Illinois State University Campus Box 4400 Normal, IL 61790 (309) 438-3493 Fax (309) 438-5310	

Contact Information

(if same as above, check here)

Name: _____

Position: _____

Employer: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

Fall 2006 Illinois Groundwater Association Newsletter

Provisional Agenda

Illinois Groundwater Association

2006 Fall Meeting

October 10, 2006

Northern Illinois University, DeKalb, Illinois

8:15–9:00 Registration

9:15–9:30 Opening Remarks: **Steve Van der Hoven**, IGA Chair

Morning Session

9:30–10:00 **Walt Kelly**, *Illinois State Water Survey*, South Africa experiences

10:00–10:30 **Steve Van der Hoven and Melissa Lenczewski**, *Illinois State University and Northern Illinois University*, Environmental Geology Field Camp – Training the next generation of Illinois Hydrogeologists to Collect and Interpret Field Data

10:30–11:00 **BREAK**

10:00–11:30 **Jack Wittman**, *Wittman HydroPlanning Associates, Inc.*, Regional Groundwater Demands in the Mahomet Aquifer

11:30–12:00 **Presenter TBA**, *Illinois Association of Groundwater Professionals*, Who's Monitoring Monitoring Wells...and More

12:00–1:30 **Lunch**

Afternoon Session

1:30–2:00 **Colin Booth**, *Northern Illinois University*, Overview of Hydrogeological Studies of the Buried Troy Valley and Related Shallow Aquifer System, DeKalb County

2:00–2:30 **Samuel Gillette**, *Northern Illinois University*, Field-based Estimation and Characterization of Shallow Aquifer Recharge in the Owens Creek Watershed, DeKalb County

2:30–3:00 **Alka Singhal**, *Northern Illinois University*, Temporal and Spatial Variability of Groundwater Recharge: A GIS-based Study in the Upper South Branch Kishwaukee River Watershed, DeKalb County

3:00–3:30 To be announced

3:30–3:45 Agency report, open microphone

3:45–3:50 Closing Remarks, **Steve Van der Hoven**, IGA Chair

Post meeting IGA Executive Board meeting