



Illinois Groundwater Association Spring 2010 Newsletter

Advancing Groundwater Knowledge Since 1983

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From The Chair

I took the opportunity to look back at what our past chairs had included in their articles for inspiration as I was preparing to write this article. Dr. Melissa Lenczewski opened her article for the Spring 2009 newsletter with the phrase “2009 is going to be a rough year”, and for many of us, it was. Personally, I have seen several co-workers lose their jobs and have seen a significant drop-off in the amount of environmental and engineering projects that are being performed. However, I believe that the



critical nature of the groundwater industry has at least partly insulated us from the worst of the recession and that there will always be a need for skilled professionals to ensure that there is a sustainable supply of clean groundwater in Illinois and the rest of the world. The Association website contains a Jobs Section that currently includes many useful links to both other job databases and consulting firms, but is also set up to post any job openings that our membership may have. Please let an Executive Committee member know if you have any current openings and we will post them on our website.

On a much brighter note, our Spring 2010 meeting is just around the corner. This year our spring meeting will be at the Morton Arboretum in Lisle. The Arboretum offers not only a convenient location (close to both I-88 and I-355), but an excellent facility for meetings and beautiful scenery. As usual we will have many interesting and informative presentations as well as numerous breaks and a long lunch for discussions, networking, or a chance to take a walk through the Arboretum. Presentation topics include contaminant transport, water well code updates, water demand in northeastern Illinois, the impacts of longwall mining on shallow groundwater, and groundwater development in Haiti with an account of the recent earthquake. We are always looking for presenters at our meetings, so feel free to contact us if you or anyone you know has a groundwater-related topic that they would like to share with the Association.

Coincidentally, the Illinois-Indiana Section of the American Institute of Professional Geologists (AIPG) will be hosting a meeting at the Arboretum in the evening following our Association’s meeting. Their speakers will be Greg Dunn from the IEPA who will be presenting some regulatory updates and Dr. Krishna Reddy who will be giving a presentation on electrochemical remediation. For more information go to <http://www.aipg.org> and look up the Illinois-Indiana Section.

From The Chair (continued)

Lastly, I would like the entire Association to be aware that the Executive Committee is working on several initiatives to boost our active membership. We are currently working on sending announcements of our meetings to all of the colleges and universities in northeastern Illinois that have geology or related programs, since our Spring meeting is held in northern

Illinois. We will be doing the same for our Fall meeting, but also targeting the schools in southern Illinois. I would ask all of you to think of someone that you know or work with who could benefit from membership in the IGA and invite them to our Spring meeting.

Steven Kroll
2010 Illinois Groundwater Association Chair

2010 Spring Meeting at Morton Arboretum

The IGA has a few favorite locations for our semi-annual meetings. We've had multiple meetings at Starved Rock State Park and Lodge (<http://dnr.state.il.us/lands/land/mgt/parks/i&m/east/starve/park.htm>) (Spring 2004, Fall 2008), which offers amazing natural beauty and the rustic charm of its lodge. Universities are gracious hosts (ISU Spring 2005; NIU 2007 and 2009) that



We had our first meeting at Morton Arboretum in fall 2005 and were immediately impressed. They have a beautiful visitor's center, and a recently renovated conference center that is well suited for business and professional meetings. Of course the grounds are majestic, and we just happen to have scheduled our meeting on April 22nd just as spring will be bursting at Morton. Imagine the coincidence? Morton's mission includes research and education in addition to a host of tram tours, formal gardens, botanical exhibits, and prime examples of prairie and woodland ecosystems. The primary

problem may be getting a little time after the IGA meeting to explore the grounds, although with 1,700 acres of woodland, prairie, ponds, and streams you'll have to be choosy.

Morton Arboretum is also in a well known in the Chicago area and boasts easy access off of I-88 and Route 53 in the western Chicago suburbs.



provide terrific access for students to our meetings and terrific facilities. But we have a new favorite – a hidden gem in the near western Chicago suburbs: the Morton Arboretum (<http://www.mortonarb.org/>).



Just let the guard know you are attending the IGA meeting and you'll get in for free – an added bonus. Our meeting agenda (see page 8 of this newsletter) is rather full, so the challenge will be peeling off some time to see some of the sights at Morton. We hope to see you there!

Fall 2009 IGA Meeting at UIS



UIS Campus

The Fall 2009 IGA meeting was held in Springfield, and the location attracted people from the downstate area. We had 45 members in attendance at the University of Illinois Springfield (UIS) campus. The program started out with Andrew

Greenhagen from Northern Illinois University. He reported on his findings regarding simulated pharmaceutical transport in groundwater systems. Andrew was awarded an IGA student grant and his research benefitted from receiving that money. The next couple of talks discussed the Mahomet Aquifer from a water supply point of view and strategic planning. The talks highlighted how different groups from state to local agencies are working together on this large scale project. After lunch Jerry Dalsin provided updates about

water issues in the Illinois Department of Public Health. We also learned more about a website developed for small water suppliers. The website provides small operators with much needed resources that are unique to them. Ed Mehnert also provided an update on the carbon sequestration project at the ISGS. Lastly we heard from Bev Herzog about various groundwater-related legislation issues. Overall it was a great meeting with discussion of many different issues related to groundwater in Illinois.

2009 IGA Student Grant Winners



The IGA is pleased to provide grants to assist students in their groundwater-related research. In fact, academic stewardship is one of the primary goals of the IGA, and providing financial support to worthy students is a key element of our outreach. As noted in the following article, we dispense up to two \$500 grants in the spring and fall of each year. Each grant request is reviewed by members of the IGA board and our long-time (and much appreciated) IGA student grants coordinator Edward Mehnert.

The IGA had a banner year for student grants in 2009, dispensing a total of \$2,000 to four deserving students. We are pleased to acknowledge those who are awarded grants along with their research titles and what the grant money will be used for at our web site: <http://www.illinoisgroundwater.org/sgrants.html>.

For 2009 our awardees were:

- Jessica Ackerman – M.S. student at ISU: Quantifying nutrient removal from groundwater seepage out of a constructed wetlands receiving wastewater effluent;
- Hridaya Bastola – M.S. student at ISU: Identification of preferential pathways for hyporheic flow using bromide tracing as a parallel study on the effect of seasonal temperature variation on the temperature profile of the streambed;
- Benjamin J. Maas - M.S. student at ISU: Short term investigation of spatial and temporal changes in water quality of the Driftless Area in Northwestern Illinois;
- Karel Waska - Ph.D. student at NIU: Remediation of heavy metals polluted soils in extremely alkaline environment (pH >12) at Lake Calumet wetlands

The IGA Board of Directors congratulates each of our 2009 grant winners. We are looking forward to their presentations at upcoming IGA meetings and wish them well in their studies.

National Ground Water Awareness Week

The US Environmental Protection Agency and its partners celebrated National Ground Water Awareness Week on March 7-13. The purpose of promoting groundwater awareness is to highlight that more than 90 percent of all public drinking water systems rely on groundwater to supply the population with drinking water. And millions of Americans rely on groundwater from aquifers to supply their private wells. Providing a basic understanding of groundwater and aquifers is also an integral part of Ground Water Awareness Week; for instance, explaining that groundwater flows slowly through underground formations called aquifers, primarily through pore spaces between sand grains, gravel, and through cracks in rocks. These aquifers supply water for domestic use, agricultural development, and provide recharge to our lakes, streams, and rivers.

The US EPA provides links that can help the public learn to protect this vital resource at this link: <http://www.epa.gov/ogwdw000/groundwaterawareness/index.html>. Key among the suggestions at this link are:

- Annual Well Testing - If your family gets drinking water from a private well, do you know if your water is safe to drink? What health risks could you and your family face? Where can you go for help or advice? This Web site will help answer these questions: <http://www.epa.gov/safewater/privatewells/index2.html>
- Groundwater Protection - The "Citizen's Guide to Ground Water Protection" encourages citizens to take an active and positive role in protecting their community's ground water supplies.

Spring 2010 IGA Student Grants

A primary goal of the Illinois Groundwater Association is to foster groundwater scholarship. One way we support this effort is through our Student Research Grant Program (<http://illinoisgroundwater.org/sgrants.html>), and the IGA has granted over \$14,000 in direct financial support to deserving students since 1987.

Student grant applications are accepted in the spring and fall of each year, and for 2010 we anticipate awarding at least four grants worth a maximum of \$500 each. The spring and fall application deadlines are April 23 and November 12, respectively.

Any undergraduate or graduate student registered for full- or part-time study at an accredited college or university in Illinois is eligible to apply. Notifications have been sent to many eligible institutions, and we encourage students to submit their applications as early as possible.

The application form and guidelines can be obtained from the student grants section of the 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
mehnert@isgs.illinois.edu

Benefits of the IGA student grants go well beyond monetary support for research. As part of the grant conditions, students present their findings at an IGA meeting - a great opportunity to improve professional presentation skills in front of a supportive and interested audience. Overall, involvement in the IGA gives students a chance to network with groundwater professionals in academia, government, and industry, learn about relevant issues, improve their resume, and hone their skills. Improving groundwater knowledge is what it's all about.



Student grants help prepare the next generation

Support IGA with Your Membership Dues

Membership in the IGA is open to anyone interested in the groundwater resources of Illinois and dues help the IGA meet its educational and charitable mission. Professional member dues are \$25, and student membership is \$5 per year. With your membership dues you support the IGA. We offer several convenient ways to pay: cash, check or now pay online (<http://illinoisgroundwater.org/join.html>) with a credit card or PayPal account.

We encourage you to pay online because it is the quickest and simplest way to help the IGA. Using this payment method also gives you the choice of selecting a recurring or single-year subscription. Never worry about forgetting to pay your dues again!

If you prefer to pay by cash or check, please complete the membership form (<http://illinoisgroundwater.org/forms/Membership%20Form.pdf>) on the web site or use the form below. **Please make checks payable to the Illinois Groundwater Association.** Cash or check memberships expire on December 31st of each year. Online memberships expire 12 months from the date of payment.

	COST	Name: _____
Renew Membership	\$25	Position: _____
New Membership	\$25	Employer: _____
Student	\$5	Address: _____

		Phone: _____ Fax: _____
		E-mail: _____

Clip this form and send with payment to:

Steve Bennett, IGA Treasurer
 Department of Geology
 Western Illinois University
 1 University Circle
 Macomb, IL 61455
SW-Bennett1@wiu.edu

Direct membership inquiries to:

Diane Lamb
dianemlamb@gmail.com

IGA Meetings – Get Your CEUs Here

Continuing education units (CEUs) are required for many Illinois professionals. The IGA Spring 2010 program has been approved by the Illinois Department of Public Health as meeting 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 can attend the meeting and have an IGA officer sign their program to show attendance.

The IGA has also has approval from the Illinois Environmental Protection Agency,

Bureau of Water, Division of Public Water Supplies/Operator Certification to provide CEUs for drinking water operators.

Other professions also can use the IGA's meetings for CEUs. For instance, Illinois Professional Engineers (PEs) can attend IGA meetings for CEUs.

Some educational programs require that our meeting agenda be preapproved. Be sure to ask an IGA officer in advance if your educational program is included. If it isn't, we'll work with you to meet your educational needs!

Groundwater Science Awards – Request for Nominations

The **Groundwater Science Award Program** is administered by the Illinois Groundwater Association to recognize outstanding science-based achievement in the management, protection, and utilization of groundwater in Illinois. Any individual or organization involved in research, education, consulting services, water well construction, or public service is eligible. An award can be presented from the following two categories:

Research/Scientific Achievement

Presented for outstanding achievements related to groundwater science. Due to the multidisciplinary nature of groundwater science, the award may recognize organizations, agencies, businesses or individuals.

Public Information/Education

Presented to persons or organizations that have advanced understanding of groundwater science through preparing or presenting public information, education materials, and programs to inform the public about groundwater issues.

The IGA awards committee reviews nominations and selects award recipients. The committee is composed of current IGA members representing state agencies, academia, the water well industry and the consulting industry. Awards are presented during the Spring or Fall IGA meeting. The program is co-sponsored by the Illinois Groundwater Protection Education Program that was developed under the Illinois Groundwater Protection Act.

The awards program was started in 1993 and the IGA has presented **Achievement Awards** to 14 individuals and presented 16 **Public Information/Education Awards** to individuals or organizations. The winners of the education and achievement Groundwater Science Awards are posted on the IGA web site: <http://www.illinoisgroundwater.org/gwawards.html#achievement>

To request nomination information contact any IGA board member. Board member contact information is available at the IGA web site: <http://www.illinoisgroundwater.org/officers/presoff.html>

Spring 2010 IGA 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 and save up to \$45 on meeting registrations this year!** Send this information to Steve Bennett (SW-Bennett1@wiu.edu) IGA Treasurer, by Thursday April 15th by mail or e-mail (see information below) to qualify for early registration. Make checks payable to the Illinois Groundwater Association if registering by mail, or pay at the conference if registering by email or fax. For faster and simpler registration, register online now at www.IllinoisGroundwater.org.

Early Registration (at or before 4/15/2010)

Member: \$65.00
 Non-Member: \$100.00
 Student: \$20.00

Late Registration (after 4/15/2010)

Late Member: \$75.00
 Late Non-Member: \$110.00
 Late-Student: \$20.00

Contact Information

Name: _____

Position: _____

Employer: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

IGA Membership

Membership in the IGA is open to anyone interested in the groundwater resources of Illinois and dues help the IGA meet its educational and charitable mission. Professional member dues are \$25, and student membership is \$5 per year. We offer several convenient ways to pay: cash, check or now online (<http://illinoisgroundwater.org/join.html>) with a credit card or PayPal account.

Membership Dues

(Re)new: \$25.00
 Student: \$5.00

Send registrations and memberships to:
 Steve Bennett, IGA Treasurer
 Department of Geology
 Western Illinois University
 1 University Circle
 Macomb, IL 61455
SW-Bennett1@wiu.edu
 309/298-1256

Contact Information

(if same as above, check here)

Name: _____

Position: _____

Employer: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

Provisional Agenda
**Illinois Groundwater Association
2010 Spring Meeting**

**April 22, 2010
Morton Arboretum, Lisle, Illinois**

- 8:30 – 9:00 Registration
- 9:00 – 9:15 Opening Remarks, Steve Kroll, IGA Chair
- 9:15 – 9:45 **Al Stone**, *CES Group of Illinois, Inc.*, Suggested Modifications to TACO Tier 2 Soil Contaminant Leaching to Groundwater to Account for Calculated Changes in Source Area Concentrations with Respect to Time
- 9:45 – 10:15 **Colin Booth**, *Northern Illinois University*, Modeling the Impacts of Longwall Mining on Shallow Groundwater Using MODFLOW with TMR
- 10:15 – 10:45 Break
- 10:45 – 11:15 **Ben Moss**, *Illinois State University*, Investigation of Spatial and Temporal Variations in Water Quality around Nora, Illinois
- 11:15 – 12:00 **James Adamson**, *V3 Companies*, Groundwater Development in Haiti and an Account of the Earthquake
- 12:00 – 1:15 Lunch & IGA Executive Committee Meeting
- 1:15 – 1:45 **Al Wehrmann**, *Illinois State Water Survey*, Opportunities and Challenges of Meeting Water Demand in Northeastern Illinois
- 1:45 – 2:30 **Jerry Dalsin**, *Illinois Department of Public Health*, Water Wells – Navigating the IDPH Internet, the Penn State Study on Water Well Contamination, and Water Well Program Updates, e.g., SB254, Some of the Major Proposed Changes to the Well Code
- 2:30 – 3:00 Break
- 3:00 – 3:30 TBD
- 3:30 – 3:45 Open for Comments / Announcements
- 3:45 – 4:00 Closing Remarks, Steve Kroll, IGA Chair

Illinois Groundwater Update

New Geologist Intern Bill



Bill Dixon

Bill Dixon, CPG-3659, Practical Environmental Consultants, Inc.

Last year's effort to set up a Geologist Intern program met with outside resistance in a joint committee between the two chambers. The final language provided that student interns could prepare geologic products under the direct supervision of an Illinois Licensed PG. Everything related to taking the Fundamentals of Geology examination was removed from the bill. Those of you with long memory may recall that it took three tries to get our present Act signed into law. The Department of Financial and Professional Regulation that will be administering the enrollment of interns now has a better understanding of the process proposed in the bill and no longer opposes it.

A new bill, HB 6001, is being introduced by Representative Naomi Jakobsson (D - Champaign County). As of this writing it is a "shell bill" that has been submitted to beat the introductory deadline. Soon it will be amended to replace the initial innocuous language with language nearly identical to that originally contained in last year's bill. The current bill can be tracked on the State of Illinois website > Government > Legislature > Bill and Resolution Search > HB 6001.

Please wait until it contains the appropriate wording before contacting your legislators for support of the bill.

Beverly Herzog Service Completed



Beverly Herzog receives her award

The IGA is proud to acknowledge the achievements of one of its own. Beverly Herzog is a past Chair of the IGA and a tireless advocate for groundwater-related issues in Illinois and nationally. She has given numerous presentations and updates to the IGA, and her long service at the Illinois State Geological Survey is well known.

Beverly Herzog has also served the National Ground Water Association (NGWA). She recently completed six years of service on the Board of the NGWA including two years as vice president. Her term ended at the Association's annual meeting in New Orleans, December 2009. Herzog also completed ten years of service on the association's divisional board, the Association of Ground Water Scientists and Engineers. Herzog was honored for these efforts with a plaque given "in appreciation for commitment and service." (Contact Beverly Herzog using her contact information at this link - www.isgs.illinois.edu/about-isgs/staff-dir/h/herzog.shtml)

Congratulations Beverly!

As reported on the ISGS web site: <http://www.isgs.illinois.edu/about-isgs/monthly-repts/dec2009/actsall.shtml#gwater>

Illinois Groundwater Update

Illinois Water 2010: Quality, Quantity and Sustainability

Paper and poster abstract submissions are now being accepted for Illinois Water 2010, which will be held on October 5-7, 2010 at the Hilton Garden Inn in Champaign, Illinois. This conference provides water researchers, professionals and students an opportunity to share their work with the larger Illinois water community. Work can be presented as a 15 minute presentation during one of the technical sessions or as a poster during an evening poster session.

A limited number of student scholarships to cover registration fees are available to students who present.

Papers or posters that support the conference theme, "Quantity, Quality, and Sustainability" are sought. Topics might include, but are not limited to:

- Water Allocation
- Stream restoration
- Pharmaceuticals
- Water Reuse/Gray water
- Monitoring
- Water Quality
- Water Supply
- Water Education
- Regulations and monitoring
- Grassroot conservation
- Climate change

Abstracts are due by **April 25**. Visit <https://illinois.edu/fb/sec/4559648> to submit an abstract. Learn more about Illinois Water 2010 and the Illinois Water Resources Center by visiting <http://web.extension.illinois.edu/iwrc/>.

