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UPCOMING EVENTS!

- **69th Annual Tri-State Field Conference and GLS-SEPM Fall Field Trip**, Cedar Falls, Iowa, October 17-19, 2008 (John Groves and Jim Walters) Middle and Upper Devonian stratigraphy in northern Iowa with emphasis on the Lithograph City Formation. See details and registration form attached. [Register now.](#)

North-Central GSA Meeting Rockford, IL, 2009

Events sponsored by
NAGT Central Section

CALL FOR ABSTRACTS!
Deadline: January 29, 2008

Theme Sessions (details p. 2)

1. **Easy-to-Incorporate Inquiry-Based Activities for the K-16 Classroom** (Carrie Wright, convenor)
2. **K-16 Collaboration, Outreach, and Engagement** (Allen Macfarlane and Annabelle Foos, co-convenors)
3. **Issues in Geoscience Education** (Kathleen Bower, convenor)

Workshops

Climate Change: Causes, Consequences, and Adaptations
(Allen Macfarlane and Sallie Greenberg)

Field Trips

Backyard Field Trips: Inquiry-Based Activities within 100 Meters of Your Building (Mark Francek)

PRESIDENT'S MESSAGE

What are some of the techniques we might successfully use to have our students love the earth sciences as

much as we do? As instructors, we need to take advantage of what our students love outside of class. This includes food, Hollywood film, podcasts, and sports.

Students love to eat. There are numerous edible activities involving candy and weathering; pudding and mass wasting; cheese and faulting. I use, for example, the dissolving of a Snickers bar in students' mouths to distinguish physical vs. chemical weathering, conservation of matter, and Bowen's Reaction Series.

Hollywood films are popular with students and we can use this infatuation for our students to critically evaluate the misconceptions apparent to our trained eye. Are most volcanoes as schizophrenic as in Dante's Peak, where the volcano couldn't decide whether it was going to belch effusive lava flows or explosive pyroclastics?

Watch students leaving class. How many are tethered to an iPod? This handy personal listening device can also be used to address our subject matter. Educational podcasts now exist for every discipline. Now our students can in the wink of an eye transition between Kid Rock and USGS "Corecast" or AAAS Science Update podcast.

Many of my students love sports. Here too lies opportunity. Why are so many infield diamonds colored red? Advanced weathering of clays of course but mention that without prefacing a comment about Derek Jeter's batting average and we might lose some of our more sports hardened students. Does LeBron soar higher with high or low relative humidity? How about when he plays in mile high Denver or sea level New York?

Through creative use of food, Hollywood film, podcasts, and sports we can instill our love of the earth sciences in our students too.

Mark Francek, *President*

(NC-GSA from p. 1)

Theme Sessions:

1. Easy-to-Incorporate Inquiry-Based Activities for the K-16 Classroom: Teaching science by inquiry means engaging students' minds, allowing them to explore science concepts, helping them explain those concepts, elaborating on what they have learned, and assessing their understanding in appropriate ways. Inquiry-based activities promote conceptual change and critical thinking skills by helping students recognize their misconceptions and build knowledge based on personal experience. This personal experience can be in the form of a hands-on laboratory, a long-term project, relating a concept directly to students' own lives, or another memorable activity. This session features classroom-tested, inquiry-based activities that show evidence of increasing student understanding in meaningful ways. (Carrie Wright, University of Southern Indiana, clwright@usi.edu)

2. K-16 Collaboration, Outreach, and Engagement: This session will present examples of exemplary programs that incorporate collaboration between universities and community partners, public outreach activities of universities, government agencies, nonprofits and industry. (Allen Macfarlane, Kansas Geological Survey, dowser@kgs.ku.edu, and Annabelle Foos, University of Akron, afoos@uakron.edu)

3. Issues in Geoscience Education: This session will present innovative ideas that promote K-16 geoscience education, in-service teacher training and public outreach. Authors are encouraged to submit examples of inquiry based learning, demonstrations, field experiences, workshops and curriculum development. (Kathleen Bower, Eastern Illinois University, kmbower@eiu.edu)

Workshops:

Climate Change: Causes, Consequences, and Adaptations: This workshop will provide an overview of climate change as a natural phenomenon and as a result of human activities for K-12 science educators. Content and hands-on activities are designed to stimulate better understanding of climate and atmospheric science, consequences of global climate change, and potential adaptations of humans to climate change. Attendees will be provided with content presentations, activities, and data sets for use in the classroom. (Allen Macfarlane, Kansas Geological Survey, dowser@kgs.ku.edu and Sallie Greenberg, Illinois Geological Survey, greenberg@isgs.illinois.edu)

Field Trips:

Backyard Field Trips: Inquiry-Based Activities within 100 Meters of Your Building: One doesn't need to travel to the Grand Canyon or chase tornados on the plains of Oklahoma to have students experience, first hand, exciting earth

science concepts right on campus. This session highlights how to train your students to observe concepts relating to geology, meteorology, hydrology, and astronomy within a hundred meters of your building. Using the Rockford campus as our field site, we will explore geology through weathering and aspect, identify rocks and minerals, and ponder the origin of miniature fluvial, karst, and glacial landforms. We'll enliven meteorology concepts with cloud observation, discover high and low pressure cell location through Buys Ballot Law, and use sky color and contrail length to predict humidity. Hydrologic concepts will be illustrated through percolation tests, examining the extent of permeable vs. impermeable surfaces, and linking snowflake morphology to position in the snow bank. Astronomy related concepts will come alive when comparing where the sun rises and sets at different times of year. We'll use our fists to estimate varying sun height. Phases of the moon will be tracked using the DOC method (if the moon is shaped like a D-waxing, O-full, C-waning). Examples are provided for transforming a simple show and tell field trip into an inquiry based activity. (Mark Francek, Central Michigan University, mark.francek@cmich.edu)

NAGT Teaching in the Field Collection

NAGT is developing an online collection of geology field trips to help faculty to learn from one another in order to elevate the quality of educational field offerings around the country. We are soliciting submissions of field trips and field camps for this collection.

The purpose of the NAGT field trip collection is to:

1. Help distribute information about the design of various kinds of field trips.
2. Provide examples of the range of field trip pedagogy in use in geoscience education at all levels including trips for geoscience researchers, teachers, and students.
3. Provide a searchable collection of field trip materials.

Do you run a field trip or field program? NAGT would like to add your materials to the collection. This process involves filling out an online form that asks you about several aspects of your field trip, and allows you to upload materials like maps, handouts and photographs. Upon your submittal, our staff will create a web page showcasing your field trip. This page will become part of the searchable collection.

We would be most grateful if you'd be willing to share your information with us and the rest of the NAGT community. Completion of the form might take from 30 to 60 minutes, depending on the extent of your field trip and whether you already have some handy text describing your trip.

You can find the homepage for this project at:

<http://serc.carleton.edu/nagt/field/index.html> and the field trip submission form is here:

http://serc.carleton.edu/nagt/field/field_submit.html

OEST award winners for 2008

Information on the outstanding work of the OEST winners will be included in the next Newsletter.

Section Winner:

Ms. Teresa Huckleberry, Indiana

State Winners:

Ms. Teresa Huckleberry, Indiana

Mr. Chris Bolhuis, Michigan

Ms. Kelda Hutson, Illinois

State Runner-up:

Mr. Mike Bause, Michigan

(State) Honorable Mention:

Mr. Jim Rock, Minnesota

Mr. Charles Simer, Illinois

Outstanding Earth Science Teacher (OEST) Award – Call for Nominations for 2009

Nominations for the OEST award are being accepted. Please take the time to nominate a deserving teacher in your state or encourage them to nominate themselves. If you have any questions or need additional information, contact Kate Pound (kspound@stcloudstate.edu).

ANNOUNCING *Dorothy LaLonde Stout* NAGT PROFESSIONAL DEVELOPMENT GRANTS



In honor of Dottie Stout's outstanding work and lifelong dedication to Earth science Education, NAGT will award three grants in support of the following activities:

- Participation in Earth science classes or workshops
- Attendance at professional scientific or science education meetings
- Participation in Earth science field trips
- Purchase of Earth science materials for classroom use

**One grant of \$500 will be awarded to a
Community College Faculty**

**One grant of \$500 will be awarded to a
Community College Student**

**One grant of \$500 will be awarded to a K-12
Educator**

Eligibility: Community College Faculty and K-12 teachers who teach one or more Earth science courses and Community College students actively pursuing a career in the Earth sciences are encouraged to apply for these awards.

Application Process: Interested applicants are asked to submit a 1-2 page proposal describing how the grant will be used to support their professional growth in, or classroom teaching of Earth science.

Applications must be received by April 1 with awards being made by April 15th. Please include your name, address, telephone, and email along with your proposal and send all materials to:

Dottie Stout Professional Development Grants
The National Association of Geoscience Teachers
P.O. Box 5443
Bellingham, Washington 98227-5443

Agenda

Central Section of NAGT Business Meeting

North-Central GSA, Evansville, IN, April 25, 2008

<http://www.nagt.org/nagt/organization/central/index.html>

- **Welcome and introduction of attendees and officers** (Kathy Bower, President)
- **Minutes of previous meeting** (Janis Treworgy, Secretary)
- **Treasurer's Report** (Ed Hansen)
- **Elections** (*new terms take effect at the end of the meeting*)
 - New president – Mark Francek, Central Michigan University (Mark.Francek@cmich.edu)
 - New 1st Vice President – Carrie Wright, University of Southern Indiana (clwright@usi.edu)
 - New 2nd Vice President – Allen Macfarlane, Kansas Geological Survey (dowser@kgs.ku.edu)
 - Past President – Annabelle Foos, University of Akron (foos@uakron.edu)
 - Secretary/Editor completing a 2007-2010 term – Kathleen Bower, Eastern Illinois U (kmbower@eiu.edu)
 - Treasurer completing a 2006-2009 term – Michael Wolf, Augustana C. (michaelwolf@augustana.edu)
 - OESTA Chair – Kate Pound, St. Cloud State University (kspound@stcloudstate.edu)

Nominations

- 2nd VP for 2009-2010; NC-GSA will be in Branson, MO, so we will see if someone from Missouri State, Springfield, would be interested.
- **OEST – Outstanding Earth Science Teacher Awards 2007-2008**
 - Nominations still being accepted through June 30, 2008 – send to Kate Pound, OESTA Chair (kspound@stcloudstate.edu)

- **NAGT (National) Report** (Eric Riggs, President, David Steer, 1st VP, Jeff Knott, Councilor)
 - Three members of the Executive Council joined us and gave us a sense of the direction that NAGT is going. They are currently seeking a new editor of JGE and simultaneously rethinking the format and structure of the journal. They reported that the new online membership renewal process seems to be working well now. They are grateful to have Cathy Manduca as the Executive Director. There is a general sense that NAGT is becoming a more mature and professional organization. They are also grateful for the active regional sections of NAGT, which includes our Central Section. They welcome feedback from the sections.

- **Old Business**

- **Newsletter** (Janis Treworgy, Editor)
 - Solicit content from officers/members
 - Email distribution
 - 10.7% of members (37/346) did not receive a newsletter due to lack of a current email address
 - Newsletter is posted on our web page
- **Events Sponsored by Central Section NAGT 2007-2008**
 - **Tri-State Field Conference**, River Falls, Wisconsin, October 5-7, 2007 (Kerry Keen and Mike Middleton, University of Wisconsin-River Falls)
 - **GLS-SEPM Field Conference**, SE Ohio, October 5-6, 2007 (Greg Nadon and Dan Hembree of Ohio University)
 - We sponsored and subsidized each field trip by the amount of \$250 as they offered a lower registration fee for students and K-12 teachers
- **NC-GSA**, Evansville, IN, April 24-25, 2008, Central Section NAGT program
 - **Theme session:**
 - Inquiry-based, hands-on, class and lab demonstrations (Mark Francek, Central Michigan University)
 - **K-12 Workshop**
 - "Easy-setup, Easy-to-use, and Cheap Earth Science Demos" (Carrie Wright, University of Southern Indiana, and Debbie Vannatter, Evansville-Vanderburgh School Corporation)
 - **Field Trip**
 - Building Stones and Cultural Geology of Evansville (Joe Hannibal, Cleveland Museum of Natural History, hannibal@cmnh.org, Sabina Thomas, Baldwin-Wallace College)

The theme session was well attended and well received. The workshop was also successful with over 40 local K-12 teachers participating. The field trip had a small turnout of 4 participants, but went well. Joe Hannibal, Secretary of North Central GSA said that he and the Board appreciate our support of and contributions to the NC-GSA meetings.

- **New Business**

- **NAGT Central Section OEST Award Presentation** was made by Janis Treworgy to **Paul Varsho**, Menomonie Middle School, WI. Paul

said he was honored to receive the award and that he has really enjoyed the conference and found it useful.

- **Future Activities**

- Combined Tri-State and GLS-SEPM Field Conference – October 17-19, Cedar Falls, Iowa
- Proposed NAGT program, 2009 NC-GSA, Rockford, IL, April 2-3
 - Theme Sessions
 - Easy-to-Incorporate Inquiry-Based Activities for the K-16 Classroom (Carrie Wright, convener)
 - College/K-12 – Collaboration, Outreach, and Engagement (Annabelle Foos and Allen Macfarlane)
 - Issues in Geoscience Education (Kathy Bower)
 - Evolution (Penny Greer)
 - K-16 Workshop for Wednesday 4-6pm
 - Climate Change: What do our students need to know? (Sallie Greenberg and Allan Macfarlane)
 - K-16 Field Trip for Thursday 4-6pm
 - Backyard Field Trips: Inquiry-Based Activities Within 100 Meters of Your Building (Mark Francek)
- **Voted** to co-sponsor the fall field conference: \$250 contingent on special student and K-12 educator rate
- **Special thanks to:**
 - Carrie Wright for coordinating the geoscience education program at NC-GSA
 - Mark Francek for organizing our NC-GSA theme session
 - Sallie Greenberg for serving as OESTA chair for the past three years
 - Ed Hansen for serving as treasurer of Central Section NAGT for at least 10 yrs
 - Janis Treworgy for serving the Central Section in various capacities since 1999
 - Kathy Bower for serving as President of Central Section this past year and being willing to take over as Secretary/Editor
- **Other**
 - It was decided that for our protection and the treasurer's, we should perform an annual audit of the books, including an audit of the transfer of funds from Ed Hansen to Mike Wolf.
 - We voted to award the OESTA **State** winners, not only a plaque, but also free meeting registration and NAGT business luncheon at the next NC-GSA meeting.



**69th Annual TRI-STATE and
Great Lakes Section—Society for Sedimentary Geology (GLS—SEPM)
FALL FIELD CONFERENCE
17–19 October 2008
Cedar Falls, Iowa**

**Carbonate Platform Facies and Faunas of the
Middle and Upper Devonian Cedar Valley Group
and Lime Creek Formation, northern Iowa**

The combined 69th TRI-STATE field conference and 2008 GLS-SEPM fall field trip will focus on carbonate platform facies and faunas of Middle and Upper Devonian rocks in northern Iowa. On **Day 1** participants will examine biofacies and lithofacies of the upper Givetian-lower Frasnian Lithograph City Formation. Stops on **Day 2** will visit inner and middle shelf deposits of the middle Frasnian Shell Rock Formation and middle shelf deposits of the upper Frasnian Lime Creek Formation.

SCHEDULE OF EVENTS

Friday, October 17th (pre-meeting)

Field trip guidebooks will be available to pre-registered participants in the main lobby of the conference hotel from 6:00pm until 9:00pm on Friday, October 17th. On-site registration will be possible at this time.

Saturday, October 18th

Buses leave the conference hotel parking lot at 8:00am. Field stops will include four exposures of the Lithograph City Formation in a roughly northwest to southeast transect from Mitchell County to Black Hawk County. Return to conference hotel at ~5:00pm. Social hour with cash bar from 6:00pm to 7:00pm. _Banquet at 7:00pm will feature a presentation on lithography by Dr. Robert Glasgow, Professor of Print, School of Art and Art History, University of Iowa.

Sunday, October 19th

Transportation for the Sunday portion of the field conference will be by private vehicles, with carpooling to the extent possible. Vehicles will leave conference hotel parking lot at 8:00am. Field stops will examine middle Frasnian Shell Rock Formation carbonate platform facies, facies architecture and bank (patch reef) development in Worth and Floyd counties, and upper Frasnian Lime Creek Formation in its type area in Floyd and Cerro Gordo counties. _Please indicate on the registration form if you plan to attend the Sunday portion (Day 2) of the field conference. Additional cost is to cover the Sunday lunch.

Pre-registration (deadline Oct. 3) for Saturday portion of field conference. Fee covers guidebook, lunch, bus transportation to field stops and banquet.

- ☐ Student \$40.00
- ☐ K–12 educator \$40.00
- ☐ Professional (Industry, Government, Academic) \$60.00

Pre-registration (deadline Oct. 3) for Saturday and Sunday portions of field conference. Fee covers all of the above plus Sunday lunch.

- ☐ Student \$45.00
- ☐ K–12 educator \$45.00
- ☐ Professional (Industry, Government, Academic) \$65.00

Onsite Registration Friday, October 17 (student or professional) \$70.00 [Please contact conference organizers no later than Oct. 10 to ensure space / meals.]

PAYMENT: Make check or money order payable to: *UNI Department of Earth Science*. Mail registration form and payment by Friday, Oct. 3 to: Dr. Jim Walters, Department of Earth Science, University of Northern Iowa, Cedar Falls, IA 50614-0335.

FIELD CONFERENCE COORDINATORS: Please direct questions to **Dr. John Groves** (john.groves@uni.edu; 319-273-3072) or **Dr. Jim Walters** (james.walters@uni.edu; 319-273-2707), Department of Earth Science, University of Northern Iowa, Cedar Falls, IA 50614-0335.

Journal of Geoscience Education
Published by National Association of Geoscience Teachers (NAGT)

NAGT Membership Application or Renewal Form / JGE Subscription Form

Name: _____ Phone: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____ Country: _____ Postal Code: _____

Fax: _____ Email: _____
(email address is required to receive newsletters)

____ College/University Professor @ _____

____ Precollege Teacher @ _____

____ Other @ _____

Checks, MasterCard, or VISA (US funds only) are payable to:

National Association of Geoscience Teachers

Mail to: NAGT, PO Box 5443, Bellingham, WA 98227-5443

☐ Check

☐ Credit card: MC/VISA (circle one) Card #: _____

Signature: _____ Exp. Date _____

Membership Rates (US funds)

Regular \$45 _____

Outside USA \$57 _____

Student* \$20 _____

Student* outside USA \$35 _____

Retired NAGT member \$30 _____

Library Subscriptions

Regular \$135 _____

Outside \$174 _____

_____ New _____ Renewal

The membership year runs from January through December, and members receive five issues of JGE per year. Subscriptions received after June 1 will begin receiving the *Journal* in January of the following year. Back issues are available for \$15 (foreign \$18) each.

*To qualify for student rate, indicate and obtain verification from a NAGT member: ____ Undergraduate ____ Graduate

Signature of NAGT member

School



NATIONAL ASSOCIATION OF GEOSCIENCE TEACHERS

OUTSTANDING EARTH SCIENCE TEACHER

Nomination Form

Name of Nominee _____ Years Teaching _____

Home Address (street, city, zip) _____

Telephone (Home) _____ (Work) _____ E-Mail _____

College/University Attended _____

Degrees _____ College Major _____ Minor _____

Annual percentage class time devoted to teaching earth science _____ Grades _____

Name of School _____ Telephone _____

School Address _____

Name and Address of School Superintendent _____

Name and Address of Local Newspaper _____

Respond to the following, using no more than one (1) typewritten page per item. Include supporting documentation in the form of letters, products, or publications as appropriate.

1. Teaching ability: What techniques does the nominee/applicant employ? What is his/her teaching philosophy? Are his/her courses challenging and comprehensive? Do students enjoy his/her classes?
2. Inventiveness: What new ideas, materials, software, instructional strategies, or techniques has the nominee/applicant developed?
3. Initiative: How does the nominee/applicant handle new situations and accommodate students of various abilities? Be specific.
4. Cooperativeness: How does the nominee/applicant cooperate in the total school program and in other academic areas?
5. Strengths: What are the principal strengths of the nominee/applicant?
6. Community involvement: How is the nominee/applicant involved in community and/or youth activities?
7. Other activities: List other professional activities and noteworthy accomplishments.

Name of Recommending Person (Nominator) _____

Address _____ Telephone _____

Nominator's Signature _____

Send all forms, materials, and supporting documentation in one package to:

Kate Pound
St. Cloud State University
720 4th Avenue South
St. Cloud, MN 56301

Please feel free to copy this form for nomination purposes.