



National Association of Geoscience Teachers

Central Section Newsletter

<http://nagt.outcrop.org/central/>

August 2004

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Minneapolis, MN

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Central Section States

(in rotation order for new
2nd Vice President)

2006 Michigan
2007 Indiana
2008 Wisconsin
2009 Kentucky
2010 Minnesota
2011 Iowa
2012 Ohio
2013 Illinois

President's Message

Greetings! Here is an overview of Central Section's activities for this past year and our plans for the current year.

North-Central GSA, St. Louis, MO, April 1-3, 2004

This spring, Central Section NAGT hosted a well-attended session at North-Central GSA, entitled, "Extending Geoscience Education, K-16 and Beyond," convened by our past President Kerry Keen and myself.

A full-day workshop brought 20 area teachers to the site of an active paleontological excavation at Principia College. How fortuitous for the mammoth to be found between two dorm buildings on the campus! The mammoth workshop, sponsored by our section and conducted by Janis Treworgy of Principia College, included instruction from geologists from the Illinois State Geological Survey as well as teachers from Wright State University, Ohio. The workshop was pronounced a resounding success by participants!

Fall Field Conferences

We are co-sponsoring two field trips being held this fall – the GLS-SEPM Field Conference on Devonian Black Shales of the Eastern U.S. on September 24th-26th and the Tri-State Field Conference to Lake Winnebago and the Fox River Valley, WI, on October 2nd-3rd. See fliers later in this newsletter for more information.

North-Central GSA, Minneapolis, MN, May 19-20, 2005

Looking ahead, the next big event is the North-Central GSA meeting in Minneapolis, 2005. I hope to see many of you there. Central Section of NAGT will host an oral/poster session, "Integrating Field Trips (Real and Virtual) in K-16 Geoscience

Education". Presentations in this session will include case studies and examples of successful integration of field trips and fieldwork in K-16 education. We will be announcing a call for papers shortly. For more information, contact convener Cinzia Cervato, cinzia@iastate.edu.

Other NAGT-sponsored events will include a workshop for K-16 teachers, a booth for NAGT, and a Luncheon and Business Meeting for all members. I encourage you to come and join us at all of these events.

Russanne Low, President,
Central Section

Serving Your Central Section Of NAGT

If you are interested in serving the Central Section of NAGT, we welcome your help. There are several different avenues you can serve in: (1) you can be an officer, (2) you can be a state representative, or (3) you can help host a workshop or field trip for K-16 teachers when the North-Central GSA meeting is in your area. To find out about the duties of each position, go to our website:

<http://nagt.outcrop.org/central/duties.html>

Request for Inclusion in Our On-Line Membership Directory

It was suggested at our business meeting that we have a Membership Directory on the Central Section web page that includes the names, affiliations, and email addresses of members willing to participate. The purpose is to better serve our region by making ourselves available as a resource to those looking on-line for geoscience resources. NAGT Far Western Section (<http://nagt-fws.org>) does this. If you are willing to be included in our directory, please send your name, affiliation, and email address to Janis Treworgy at jdt@prin.edu. Thank you!

Soliciting State Representatives

We have established the position of State Representative so that each state in our section has two people serving in that capacity for an indefinite term length. The duties are as follows:

- Solicit Outstanding Earth Science Teacher (OEST) nominations for their state
- Find a volunteer to serve as 2nd VP and the subsequent years of officer commitment when it is their state's turn in the rotation
- Help staff NAGT booth at NC-GSA meetings
- Provide continuity to the Central Section
 - Be familiar with past and current activities and procedures
 - Remind president of tasks to be done if there seems to be a need to do so

Here are the State Representatives we have appointed to-date; 3 states remain to be appointed:

- MN – Kate Pound
- IA – Cinzia Cervato and Sherman Lundy
- OH – Bill Slattery
- IL – David Voorhees
- MI –
- IN –
- WI – Bob Baker and Kerry Keen
- KY –

We welcome volunteers from all states except Iowa and Wisconsin. If you are from those states and are interested, let us know.

Central Section Illinois Teacher Receives NAGT Dorothy Stout Grant

Deann Foster-Fester of Calhoun Middle School, Hardin County, Illinois, is one of four 2004 recipients of a \$500 NAGT Professional Development Grant. Deann learned about the grant opportunity when she attended the NAGT Central Section's workshop "Woolly Mammoth Comes Alive for K-12 Teachers" in April. Her proposal was to develop a unit on mammoths at her school that is located an hour away from a mammoth excavation being conducted on the Principia College campus by college students in a field course. The grant will enable her to bring her 90 students on a field trip to see the excavation and the lab, a wonderful opportunity for local kids in a rural school system.

Grants in memory of Dorothy LaLonde Stout are awarded to community college teachers or students and K-12 educators. Instructions for applying for 2005 awards may be found on the NAGT website, www.nagt.org/.

Two Special Issues of the Journal of Geoscience Education

I. "Conceptions, Cognition, and Change: Student Thinking about the Earth"

Deadline: Manuscripts should be submitted by **Sept. 15, 2004**

The geoscience education community needs an opportunity to showcase the latest work in the areas of conceptual change and cognition. This issue will allow researchers from both the geology and science education communities to share newest developments. Research-focused papers on students' ideas about the Earth, teaching and effects on conceptual change, and mental models are welcome. Potential questions to address include:

- a) What ideas do students bring to the Earth Sciences classroom?
- b) What cognitive processes do students use when thinking about the Earth?
- c) How do Earth-related mental models correspond to teaching models used in the classroom and conceptual models adopted by the Earth Science community at large?
- d) How does participation in Earth Science classes affect conceptions (i.e., conceptual change) and cognitive development?

II. "Teaching in the Field"

Deadline: Manuscripts should be submitted by February 1, 2005

Submissions could address:

- a) Role that field study plays in the development of students' geologic thinking skills or in preparation for the profession
- b) Effective strategies for incorporating field work in departmental programs or K-12 curricula
- c) Role of technology in field work (including simulating field instruction)
- d) Issues surrounding field camp
- e) Effective methods for teaching field skills or other issues related to teaching in the field

For further information contact Cathy Manduca at cmanduca@carleton.edu.

Refer to <http://www.nagt.org/Instructions.htm> for submission and manuscript guidelines.

Geology and Biology of Hydrothermal Vents

From Nov. 30–Dec. 20, 2004, University of Delaware marine scientists will lead "Extreme 2004: Expedition to the Deep Frontier," a NSF expedition to hydrothermal vents in the Pacific Ocean, and middle- and high-school classrooms in the U.S. and world are invited to join them via a virtual field trip to the ocean floor!

Teacher registration for this award-winning program is open at: <http://www.ocean.udel.edu/expeditions>

Registration deadline: **August 31, 2004**

Contact Tracey Bryant, Director, UD Marine Public Education Office, tbryant@udel.edu.

NEW WEB MASTER NEEDED

Ron Schott has moved to Hays, Kansas, which is in the Midcontinent Section of NAGT. While we invited him to continue being active in our section, he is taking on the challenge of reactivating the Midcontinent Section. So we are looking for someone to take over as our Webpage Master. Please contact Janis Treworgy at jdt@prin.edu if you are interested.

NAGT-Sponsored Workshops and Sessions at 2004 GSA Annual Meeting Denver, CO November 7-10, 2004

<http://www.geosociety.org/meetings/2004/>

Topical Sessions covering Geoscience Education:
T-107 to T-142 (14 sponsored by NAGT)

Saturday, 6 November

- 9:00 a.m. – Noon NAGT Executive Committee
- 1:30 p.m. – 4:30 p.m. NAGT Council

- 5:30 p.m. – 7:00 p.m. "Geoscience Education" Reception cosponsored by NAGT, DLESE, Cutting Edge, GSA Division of Geoscience Education, and GSA Education Department
- 7:00 p.m. – 9:00 p.m. Presidential Address and Awards

Sunday, 7 November

- 7:00 a.m. – 8:30 a.m. Presidential Students' Breakfast
- 11:45 a.m. – 2:00 p.m. NAGT and GSA Geoscience Education Division Luncheon

Monday, 8 November

- 7:15 a.m. – 8:45 a.m. NAGT past Presidents' Breakfast
- 8:00 – Noon AGI Meeting
- 10:00 a.m. – 2:00 pm NAGT Executive Committee (will schedule to minimize impact with AGI session; lunch included)
- 3:30 p.m. – 5:30 p.m. NAGT/USGS Cooperative Summer Field Program

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: _____

____ 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 _____

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

Membership Rates (US funds)

Regular	\$35 _____
Outside USA	\$47 _____
Student*	\$20 _____
Student* outside USA	\$32 _____
Retired NAGT member	\$30 _____

Library Subscriptions

Regular	\$55 _____
Outside	\$67 _____

____ New ____ Renewal

Signature of NAGT member

School



GREAT LAKES SECTION SEPM ANNUAL FIELD CONFERENCE

September 24-26, 2004

Southern Indiana and Central Kentucky

DEVONIAN BLACK SHALES OF THE EASTERN U.S.

**New insights into sedimentology and stratigraphy from
the subsurface and outcrops in the Illinois and Appalachian Basins**

Leaders: Juergen Schieber and Remus Lazar, Indiana University

Black shales are organic-rich, fine-grained sedimentary rocks that, at a global scale, have been the main source of more than 90% of the recoverable oil and gas reserves. Understanding the formation of black shale successions is, however, not only of great importance for the oil industry but also for advancing our understanding of the carbon cycle and the global climate-ocean system.

In the eastern U.S., the Middle to Late Devonian period was characterized by a general rise in sea level, atmospheric decline in $p\text{CO}_2$, and major diversity change and extinction in biota. As relative sea level rose, flooded continental areas of eastern U.S. became parts of shallow seas where carbonaceous muds accumulated and came to be known today as the New Albany, Ohio, and Chattanooga Shales.

The 2004 Field Conference will focus on the examination of the New Albany Shale in the Illinois Basin (SE Indiana and NW Kentucky) and its lateral equivalents (Ohio Shale) in the Appalachian Basin (Kentucky). Correlation of major shale subdivisions that are separated by erosion surfaces and identified in complete cored intervals and spectacular outcrops from Indiana and Kentucky will provide participants with new insights into the depositional dynamics and the stratigraphic framework of these shales. The field trip stops will cover a transect that runs from the eastern Illinois Basin across the Cincinnati Arch into the Appalachian Basin. Discussions will be based on detailed outcrop studies, petrography, and geochemistry.

Cost: \$50 for professionals and \$35 for students and K-12 educators

Includes the fieldtrip guidebook, bus transportation (roundtrip) from New Albany, Indiana, to field trip locations, box lunch and dinner (Saturday).

For more information: <http://www.indiana.edu/~sepm04/>

Contact Information: Juergen Schieber, Indiana University, 812-856-4740;
jschiebe@indiana.edu



2004 Tri-State Geological Field Conference October 2-3, 2004

Join us for a geologic journey around Lake Winnebago and the Fox River Valley

- See Pleistocene localities related to Glacial Lake Oshkosh •
 - Explore the Silurian rocks of the Niagara Escarpment •
- Learn about the regional lime & building stone industry •
 - Examine groundwater issues related to urbanization •
 - Study the complexities of Ordovician geology •
 - Go caving in the Niagara Escarpment •
 - Visit the Weis Earth Science Museum •

**Sponsored by the
Weis Earth Science Museum**

**Check our website at www.fox.uwc.edu/wesm/events.html and scroll to
Tri-State for registration information and Itinerary**

Fees: The fee is \$55 for students and \$65 for all other registrants. Fee includes reception on Friday night, transportation, snacks, lunch and the banquet on Saturday, snacks only on Sunday morning, and the guidebook.

Registration: Send the completed registration form (please print) available on our website (www.fox.uwc.edu/wesm) (scroll to events) along with your payment (check or money order made payable to WESM/Tri-State) to:

Weis Earth Science Museum
UW-Fox Valley
1478 Midway Rd.
Menasha, WI 54952

Deadline for receipt of registration is September 20, 2004.

Questions? e-mail jkluesse@uwc.edu or call 920.832.0125

Lodging: Make your hotel reservations early; there is a Packer home game that weekend. Visit the Weis website at www.fox.uwc.edu/wesm for hotel information.



NATIONAL ASSOCIATION OF GEOSCIENCE TEACHERS

OUTSTANDING EARTH SCIENCE TEACHER

Nomination Form

Name of Nominee _____

Home Address (street, city, zip) _____

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

College/University Attended + Degrees _____

College Major _____ Minor _____

Number of Geoscience Classes Taught/Year _____ Grades _____

Name of School _____ Telephone _____

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. Support documentation in the form of letters, products or publication as appropriate.

1. COMMUNITY INVOLVEMENT: How is the teacher involved in community and youth activities?
2. COOPERATION: How does the teacher cooperate in the total school program and in other academic areas?
3. INITIATIVE: How are new situations handled? How are students of varying abilities accommodated? (Be specific)
4. INVENTIVENESS: What new ideas are used? What new materials are produced?
What new methods or devices are used?
5. PROFESSIONAL INVOLVEMENT: Professional activities and noteworthy accomplishments.
6. STRENGTHS: What are the principal strengths of the candidate?
7. TEACHING ABILITY: What techniques does this teacher employ?
Is the course comprehensive, yet enjoyed by the students? Teaching philosophy?

Name of Recommending Person (Nominator) _____

Address _____ Telephone _____

Nominator's Signature _____

Return all Forms (with Documentation) as soon as complete to:

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