

## GENERAL INFORMATION

The 57th annual Institute on Lake Superior Geology will be held on **Thursday, May 19 and Friday, May 20, 2011** at the AmericInn, Ashland, WI. This two-day technical session will be preceded and followed by great field trips.

The preregistration deadline is **April 15, 2011**.

The website for the Ashland meeting is:

<http://lakesuperiorgeology.org/Ashland2011/index.html>

## ORAL AND POSTER PRESENTATIONS

Abstracts for oral or poster presentations must be submitted by **April 15, 2011**. All topics will be considered. Digital projection hardware will be provided for oral presentations, which should be in MS PowerPoint® format and available at the meeting on a flash drive or CD. Poster spaces are 4' (vertical) by 8' (horizontal) and are Velcro-friendly. Please make any special requirements (e.g. tables) known when submitting abstracts.

## ABSTRACTS

All abstracts will be reviewed for content. Authors will be notified of acceptance and time slot by e-mail or mail. Electronic submission of abstracts and figures is strongly encouraged and a template will be made available on the Meeting website. Specifications for abstracts:

- 1) Limit of two 8 ½ x 11" pages, including illustrations and references.
- 2) Times-New Roman font, 12-pitch; top, bottom and left margins of 1 ¼"; right margins of 1".
- 3) Use GSA or GAC-MAC-SEG style for the abstract, title, author(s) name, affiliation, and cited references.
- 4) Submit digital copies in MS Word® format; maps and illustrations must be in .jpg/.tif format.

E-mail abstracts to: Tom Fitz [tfitz@northland.edu](mailto:tfitz@northland.edu)

**Abstract deadline is April 15.**

## STUDENTS

Students are especially encouraged to participate in all facets of the ILSG. Travel subsidies are available for qualified students – applications are on the ILSG website: <http://lakesuperiorgeology.org/eisenbreyaward.html>.

Applications must be submitted to Tom Fitz by **May 7, 2011** (mail or e-mail). Cash prizes will be awarded for the best student-authored presentations.

## Field Trips

*Pre-Meeting: Wednesday, May 18:*

### 1) Igneous Stratigraphy of the Layered Series at Duluth - Type Intrusion of the Duluth Complex

Leader: Jim Miller (UMD/PRC)

This trip will profile the igneous stratigraphy of the

Layered Series at Duluth, highlighting its differentiation, layering, and contact relationships.

### 2) Midcontinent Microcosm

Leaders: Marcia Bjornerud (Lawrence U.) and Bill Cannon (USGS)

This trip will examine rocks along the Marengo River in Bayfield County, WI, which record events from late Archean time through closure of the Midcontinent Rift

### 3) Geology of the Bayfield Peninsula: Keweenaw Bayfield Group and Pleistocene Deposits

Leaders: Dick Ojakangas (UMD), Drew Cramer, Tom Fitz (Northland College)

This trip first examines the sandstones of the Bayfield Group, including exposures at the Douglas Fault, and then visits Quaternary deposits of the Bayfield Peninsula.

*Post-Meeting Friday afternoon trips: May 20:*

### 4) Geology and remediation at the Ashland/Northern States Power Site

Leaders: Jamie Dunn (WI DNR)

A tour of the Ashland Lakefront Manufactured Gas Plant site and discussion of the geology, the contaminants, and plans for major remediation work.

### 5) Bad River Watershed Culvert Restoration Program

Leader: Michele Wheeler (Bad River Watershed Association), and Cassie Bodette (Northland College)  
Learn about local on-the-ground adaptive management strategies to restore fish passage and prevent sedimentation at restored road stream crossings.

### 6) Geology of Copper Falls State Park

Leaders: Allison Mills, Drew Cramer, and Tom Fitz (Northland College)  
Hike approximately 2 miles through Copper Falls Park to see Keweenaw volcanic and sedimentary rocks as well as the scenic Copper Falls gorge.

*Post-Meeting Saturday trips, May 21:*

### 7) Geology of the Montreal River Monocline

Leader: Bill Cannon (USGS)

This trip is a traverse through 25 km of crust, from the Mesoproterozoic Freda Sandstone to Archean metavolcanic rocks.

### 8) The Archean/Paleoproterozoic unconformity near Denham, Minnesota.

Leaders: Terry Boerboom (Minnesota Geol. Survey) and Dan Holm (Kent State U.)

This trip will examine evidence that deeply weathered Archean crust provided sediment to the overlying Paleoproterozoic strata of a marginal rift, and will also examine the Thomson Formation.

### 9) Granitic, gabbroic, and ultramafic rocks of the Keweenaw Mellen Intrusive Complex

Leader: Tom Fitz (Northland College)

Examine the major rock types and relationships within the Keweenaw Intrusive Mellen Complex.

## REGISTRATION FORM

*Preregistration deadline April 15, 2011*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

E-Mail: \_\_\_\_\_

**Professional** Before April 15 \$65 \$ \_\_\_\_\_

After April 15 \$75 \$ \_\_\_\_\_

**Student** \$35 \$ \_\_\_\_\_

**Annual Awards Banquet** \$25 \$ \_\_\_\_\_

(Banquet dinner, desert, drink ticket)

**Barbecue at Northland** \$10 \$ \_\_\_\_\_

(Social barbecue dinner with brew)

**Field Trip** prices include guidebook, transportation, and lunch for all-day trips.

**1. Duluth Layered Series** \$40 \$ \_\_\_\_\_

**2. Microcosm** \$30 \$ \_\_\_\_\_

**3. Bayfield Peninsula** \$40 \$ \_\_\_\_\_

**4. Ashland/NSP site** \$5 \$ \_\_\_\_\_

**5. Bad River Culverts** \$7 \$ \_\_\_\_\_

**6. Copper Falls hike** \$15 \$ \_\_\_\_\_

**7. Montreal monocline** \$35 \$ \_\_\_\_\_

**8. Archean unconformity** \$50 \$ \_\_\_\_\_

**9. Mellen complex** \$30 \$ \_\_\_\_\_

**TOTAL ENCLOSED<sup>1</sup>**

(Canadian and US dollars at par) \$ \_\_\_\_\_

## Accommodations:

A limited number of rooms have been set aside for ILSG delegates at the AmericInn, Ashland. Please mention the ILSG. Other local hotels are listed on the ILSG website.

AmericInn Ashland: 715-682-9950

<http://www.americinn.com/hotels/wi/ashland>

Mail completed registration form with check to:

2011 ILSG, c/o Tom Fitz

Northland College

1411 Ellis Avenue

Ashland, WI 54806

U.S.A.

57<sup>th</sup> ILSG Organizing Committee  
c/o Tom Fitz  
Northland College  
1411 Ellis Avenue  
Ashland, WI 54806  
U.S.A.

## Institute on Lake Superior Geology

57<sup>th</sup> Annual Meeting

May 19-20, 2011

Ashland, Wisconsin, USA

### SECOND CIRCULAR AND CALL FOR PAPERS



INSTITUTE ON LAKE  
SUPERIOR GEOLOGY

*Established 1955*

[www.lakesuperiorgeology.org](http://www.lakesuperiorgeology.org)

*2011 Meeting Hosted by Northland College*

*Tom Fitz  
Chair, 57<sup>th</sup> ILSG*

### SCHEDULED ACTIVITIES AND FIELD TRIPS

#### Wednesday, May 18, 2011

8:00 a.m. – 6:00 p.m.	Field Trips 1, 2, 3
4:00 p.m. – 10:00 p.m.	Registration
7:00 p.m. – 10:00 p.m.	Poster Session, Ice Breaker Social at AmericInn

#### Thursday, May 19, 2011

8:00 a.m. – 12:00 p.m.	Registration continues
8:30 a.m. – 11:40 p.m.	Technical Session I
1:15 p.m. – 4:20 p.m.	Technical Session II
6:00 p.m. – 7:00 p.m.	Mixer / Cash Bar
7:00 p.m. – 9:30 p.m.	Annual Banquet and Awards Presentation

#### Friday, May 20, 2011

8:30 a.m. – 11:40 a.m.	Technical Session III
1:15 p.m. – 2:20 p.m.	Technical Session IV
2:45 p.m. – 6:00 p.m.	Field trips 4, 5, 6
6:30 p.m. – 8:30 p.m.	Barbecue at Northland

#### Saturday, May 21, 2011

8:00 a.m. – 6:00 p.m.	Field Trips 7, 8, 9
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*All field trips leave from and return to the AmericInn in Ashland. Field trip participants on trips 1, 3, and 8 travelling to/from the west can meet or depart from their trips in the Duluth/Superior area. Details will be provided for trip participants.*

### TRANSPORTATION

Ashland is located on the south shore of Lake Superior 70 miles east of Duluth (a 1 3/4 hour drive on Highway 2). Delta airlines offers daily commercial flights from Minneapolis (MSP) and Detroit (DTW) to Duluth (DLH), and United airlines offers daily flights from Chicago (ORD) to Duluth. Frontier Airlines offers daily flights to Ironwood (IWD), Michigan (a 45-minute drive east of Ashland) from Milwaukee (MKE).