

Michigan Tech R/V *Agassiz* ~ School Reservation Form 2006

Date of Request: _____

Teacher/Group Leader: _____

School: _____

Street, City, State, Zip: _____

Email: _____

Telephone: _____

Number of Students: _____ Subject/Grade: _____

Dates (list 3 possible dates/times):

1st choice: _____

2nd choice: _____

3rd choice: _____

Desired Trip Length (circle): Full-Day (8 hours) Half-Day (4 hours)

School Start time: _____ School End Time: _____

Do you want a 2 hour lab *after* the *Agassiz* trip with MTU faculty: yes no

Do you want a 1-hour *pre-trip* introduction by MTU faculty: yes no

What is your goal for your *Agassiz* Trip:

Mark All Topics of Interest listed below (or indicate priority: 1, 2, 3, etc. as there's not time for all!):

___ Introduction to Limnology

A. Physical Limnology

___ Temperature Profiles - compare seasonal cycle of stratification: temperature v. depth

___ Light Profiles - measure light attenuation and primary productivity

___ Sediment Cores - compare depositional zones and biochemical characteristics of sediments

B. Chemical Limnology

___ Developing a Depth Profile for Dissolved Oxygen and pH

___ Phosphorus - Compare concentrations at different stations, and discuss its impact on lake productivity

___ Dissolved Color: use spectrophotometer to develop an adsorption spectrum for dissolved color; discuss why Lake Superior water is blue, when all of the tributaries contribute tannic brown water.

C. Biological Limnology

___ Food Webs and the Microbial Loop

- Collect and identify phytoplankton & zooplankton
- Role of indicator organisms
- Biomagnification

___ Diporeii & benthic macroinvertebrate sampling

___ Fish populations

D. Navigation

___ Compass & map-reading

___ Electronic equipment

Email or Fax Reservation Request to:

Joan Chadde, Education Program Coordinator, Western UP Center for Science, Mathematics & Environmental Education
105 Dillman Hall - Michigan Technological University, 1400 Townsend Dr., Houghton, MI 49931

Tel: 906-487-3341 Email: jchadde@mtu.edu Fax: 906-487-1620

Michigan Tech Scientist(s) available for Middle/High School Education Programs

Dr. Marty Auer, Dept. of Civil & Environmental Engineering

Dr. Nancy Auer, Dept. of Biological Sciences

Dr. Sarah Green, Dept. of Chemistry

Dr. Casey Huckins, Dept. of Biological Sciences

Dr. Bob Keen, Dept. of Biological Sciences

Dr. Charlie Kerfoot, Dept. of Biological Sciences

Dr. Judith Perlinger, Dept. of Civil & Environ.l Engineering

Steve Roblee, Dept. of Math Sciences

Dr. Noel Urban, Dept. of Civil & Environmental Engineering