



Mississippi Headwaters Watershed Workshop 2009

Day 1

8:00 a.m. – Pick up in Grand Rapids

9:15 a.m. – Pick up in Bemidji

10:00 – 10:30 a.m.

Exploration: Itasca State Park, Mary Gibbs Center

- Arrival, check in
- Time to look at exhibits, displays, and maps

10:30 – 11:15 a.m.

Introduction: Workshop overview at Mississippi River Headwaters

- The activities of the workshop will follow the geographic path of water through the watershed as we learn about the historical and modern relationships with the watershed
- “What is a watershed” activity
- Incredible Journey game (how water moves through the water cycle)

11:15 a.m. – 12:15 p.m.

Program 1: Formation of the Minnesota watersheds

- Glacial Geology Activity – Hands on introduction to glacial features and how they form. Interpretive hike to reveal glacial features such as eskers, moraines, erratics, and kames. This activity will illustrate how glaciers impact topography, geology, and ultimately watersheds. Another activity involves a demonstration using ice cream to show how glaciers form and move.

12:15 – 1:15 p.m.

Program 2: Early Inhabitants and Their Relationship to the Watershed

- Humans have shaped the land in the Mississippi River Headwater watershed for over 9,000 years. Why did various groups choose this site and why did they make the choices for use that they did?
 - Archeological Dig Site Activity- Learn how to create an archeological dig site for your class. Explore the tremendous potential of this learning tool to engage students in the historical and geological study of a watershed. Also learn about and experience a traditional hunting method.

1:15 – 1:45 p.m.

Travel to Lake Bemidji State Park and have lunch on bus

1:45 - 3:45 p.m.

Program 3: Watershed Web of Life

Explore the terrestrial and aquatic plant and animal species that are found in the headwaters watershed.

- Learn about indicator species such as dragonflies, macroinvertebrates, and birds.
- Also go on an outdoor walk to discuss exotic/invasive plants and animals.

3:45 - 4:15 p.m.

Wrap up with a look at materials and resources for the classroom, and build transition to day 2.

4:15 – 4:30 p.m.

Settle into dorms at Bemidji State University

Day 2

8:00 – 9:00 a.m.

Tour of flash drives in Bemidji State University computer lab

- Participants can look through the flash drives, ask questions about materials, and see how it is organized
- Introduction to online mapping resources

9:00 – 10:00 p.m.

Drive from Bemidji State University to Forest History Center

- Watch pertinent sections of Minnesota A history of the Land

10:00 – 10:30 a.m.

Check in at Forest History Center (open at 10:00 a.m.)

Look around visitor center

10:30 a.m. – 12:15 p.m.

Program 4 Recent Historic Lumbering to Current Forestry Practices in the Watershed

- Tour from visitor center to living history 1900 logging camp
- 1901 River Wanigan

12:15 – 12:45 p.m.

Lunch and free time to return to visitor center

12:45 – 1:35 p.m.

Measuring and Reading the Forest- Stand Structure and Composition Activity

- How do we measure, harvest, and use forest products today? How do foresters think about the watershed in their jobs?

1:35 – 1:45 p.m.

Travel to Rapids Energy Center / Blandin Paper Mill Conference Room

1:45 – 3:00 p.m.

Program 5 Our Current Relationship with the Watershed

- Activity and discussion on multiple current relationships with the watershed
 - Industrial, tribal, academic, public, and individual relationships

3:00 – 4:00 p.m.

Workshop Wrap Up

Conclusion and reflection on how teachers will implement in the classroom

- Written evaluation
- Verbal debrief