

What natural wonders of the Great Lakes relate to land and water interactions?

Like the ancient world around the Mediterranean Sea with its Seven Wonders, the Great Lakes are home to many amazing places and things. Included with this activity are descriptions of Seven Natural Wonders. There is one group for each of the five lakes. While these lists were constructed after examining many books and magazines and after visiting many places around the lakes, they are nonetheless subjective. The wonders vary in size; some are clearly defined places, while others are general areas. They also vary in accessibility. The Great Lakes boast many interesting natural locations. Students will work in groups to examine some of these sites.

OBJECTIVES

Students will work in groups to:

- Become familiar with some natural places of interest in the Great Lakes.
- Consider the criteria a person or group would use in selecting a place to visit.
- Make group decisions through discussion and consensus.

PROCEDURE

1. Divide into five client groups and five expert groups, one for each of the Lakes. Each person should belong to one of each type of group.
2. Each expert group takes the role of a travel agency. The group comes to a consensus about how best to market their Lake, by learning more about a specific natural area, designing a Lake tour package, brochure, etc. and deciding how to present their ideas to the class and/or to client groups.
3. They can find additional information throughout this set of activities to describe the natural area more fully, i.e., how geologic time and glaciers helped to produce Kelleys Island Glacial Grooves and Niagara Falls. The library and tourist guides will also have additional information.
4. Students relate the natural area selected to the previous activities. How does this area relate to shoreline processes, geologic change, and ongoing interactions between land and water?
5. The expert groups decide which vacation spots they would recommend for families, for school groups, or for individuals. You may want to select one approach but mention how your recommendations would change based on the clientele.

Source

Adapted from Ohio Sea Grant Education materials.

Earth Systems Understandings

This activity focuses on ESU 1 and 2 (the formation of unique sites and features of interest) and ESU 4 and 5 (that result from natural processes acting on Earth systems over time). Sites of interest are related ESU 7 (careers and hobbies that affect the use and management of resources and to the careers of those in tourism support industries).

Materials

- Vacation guides available from AAA and other travel agencies. Also check with the local Department of Natural Resources and Divisions of Travel and Tourism.

Suggestion

Each travel agent group could have a name such as "Lake Huron Travel Agency."

Online resources: www.city.com has information that cities are using to attract industry and visitors to their areas.

*Water has no hands,
But what does it hold,
Pieces of rock
Centuries old.*

*Moving and shaking,
Mountains creating,
Earth from her nest
Explodes with unrest.*

*Water responds,
Forms lakes and ponds,
Bringing debris
Beneath the Sea.*

*Forming new places
Basins and Faces
Until things again
Are at rest in the end.*

*Then change that's new
Brings movement through
History's door
Land and Water meeting once more.*

Hint for Extension

Possible items for discussion are fences around natural features, lookout points, and boardwalks over wetlands.

Did you know that coastal resources can be recreational resources? The Great Lakes Circle tour has been promoted as an attraction for those who wish to travel the coastline and visit sites along the way.

Source of Photographs

Visualizing the Great Lakes: Images of a Region. Minnesota Sea Grant and U.S. EPA Great Lakes National Program Office.

- The travel agent groups design a skit – Why visit this specific Lake of the five Great Lakes? What could a person or group do if he/she decided to tour the perimeter of the lake for a one or two week vacation? What is a "must-see" site on the Lake?
- After each expert group has given a skit on a specific lake, individuals from the expert groups return to their client groups. Each expert presents a package, for example a brochure or flyer, to the client groups regarding the attributes of the natural area that would warrant a trip there. Members of the expert groups state their cases for each of their respective travel agencies.
- Client groups take an inventory of people's interests in the group and select a Great Lake by consensus of their members. Each client group shares its perceptions with the class.

The Great Lakes are constantly moving, changing, evolving. Have you seen beautiful scenes on your trips throughout the Great Lakes? Do they inspire artistic images in your mind, such as a picture you have seen or a song you have heard? Have you witnessed memorable scenes in the lake nearest you? Perhaps you have a favorite site in the Great Lakes region. What makes it interesting?

EXTENSIONS

- From the natural areas you have examined and the concepts of change learned in the activity set, how do you think recreation activities affect land/water interactions? Think of boating, lakeside resorts, public beaches, walking on outcroppings, etc. What would you suggest as ways of resolving interests among different recreation uses while preventing erosion along coastlines?
- What mechanisms would you suggest to permit tourism activities in some of the natural areas of this activity while minimizing negative impacts on the resources?

REFERENCES

See tourism guides, state recreation publications, AAA, and other travel organizations for resource material.

Lake Superior

Agawa Rock (Ontario): The only human-made site of the Great Lake Wonders, Agawa Rock carries a collection of pictographs. Thought to be 200-600 years old, the rock paintings were created by Ojibway warriors, who considered the site sacred.

Apostle Islands (Wisconsin): Twenty-one islands and 2,500 acres of the Bayfield Peninsula make up this unit of the National Lakeshore system. Sea caves and gigantic rookeries are but two of the pleasing characteristics of the reserve.

Isle Royale (Michigan): The largest island in Lake Superior, Isle Royale is located in the middle of the lake, closer to Minnesota and Ontario than mainland Michigan. This is true wilderness: no roads, and only about 16,000 human visitors each year. The island, and its 200 or so surrounding islets, is a National Park.

Minnesota and Wisconsin Points (Minnesota and Wisconsin): Together these two are the world's longest rivermouth sandbar; Minnesota Point is more than 8 miles long and Wisconsin Point, about 2. They also mark the westernmost extent of the Great Lakes.

Ouimet Canyon (Ontario): While in most places glaciation is a slow process, on rare occasions ice has caused sudden changes in terrain. Ouimet Canyon is one such place. A great quantity of meltwater broke through an ice dam during a glacial retreat. The force hit a rock fault with such power that it nearly instantly blasted a 2-mile long, 350-foot-deep, 500-foot-wide canyon.

Painted Rocks (Michigan): Encompassing 42-miles of lakeshore cliffs, Painted Rocks rise up to 200 feet from Superior's waters. The colors come from the action of water on the ores in the rocks. Also here is Miner's Castle, a place where a waterfall drops directly into the lake.

Witch Tree (Minnesota): Clinging precariously to life for more than 300 years on boulders at the lake's edge that are pummeled by storm waves, the Witch Tree is an excellent example of an organism's ability to adapt and survive. The Chippewa Indians consider the tree sacred.

Isle Royale

