CHICAGO WILDERNESS - AN OXYMORON?

TOPIC OF LESSON Using maps to discover new information about a region.

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GRADE LEVEL 4-8

FORMAT Students compare the words they generate to describe the Chicago region with words that describe natural areas, then use maps to determine the number of natural areas in the Chicago region and in the agricultural region of Illinois.

TIME NEEDED 1 class period

MATERIALS NEEDED

- 1. Illinois road map showing state parks, national forests and listing recreational areas,
- 2. map from the Chicago Wilderness *Atlas of Biodiversity* showing natural areas in the Chicago region...OR map of Chicago and Vicinity that shows natural areas (Illinois road map does not show these even on the Chicago inset, but maps specific to Chicago do show these.),
- 3. map from Chicago Wilderness *Atlas of Biodiversity* showing rare communities and endangered species in the Chicago area,
- 4. white board and marker or chalkboard and chalk,
- 5. for assessment: Illinois landform maps.

CONNECTION TO THE GEOGRAPHY STANDARDS

National Standard 6

How culture and experience influence people's perceptions of places or regions. National Standard 16

The changes that occur in the meaning, use, distribution, and importance of resources.

National Standard 18

How to apply geography to interpret the present and plan for the future.

State Standard 17/A

Understand world geography and the effects of geography on society, with an emphasis on the United States./Locate, describe and explain places, regions and features of the earth.

GEOGRAPHY FOCUS THEMES

Regions, Human-Environment Interaction

CONNECTION TO THE CURRICULUM

Language Arts - word knowledge

Science - biodiversity

GOAL Introduce students to the Chicago Region as a place of natural areas.

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OBJECTIVES

Students will be able to...

- 1. create a descriptor word list,
- 2. compare the number of natural areas in the Chicago region with natural areas in the rest of Illinois.
- 3. identify three types of natural areas preserved in the Chicago region. PROCEDURE
- 1. Introduce the lesson title terms by asking students to tell you the words they think of when you say wilderness. Then ask students to tell you the words they think of when you say Chicago. Make a list on the board for each term. Ask if these descriptive words go together in any way. (The answer will most likely be no)
- 2. Ask students if anyone has ever heard the term oxymoron. Take answers as they are offered by students and lead them to the idea of two words that usually don't go together. Select words from the two lists on the board to use as examples. Such an example might be *wildlife* and *baseball stadium*.
- 3. Ask students if they have ever thought of the Chicago area as a wilderness area. Explain that the Chicago region actually contains a great diversity of plants and animals living in a variety of natural communities. The region contains many types of prairies, woodlands and wetlands.
- 4. Have students look for natural areas on their road map of Illinois. What color are the natural areas? Are there any symbols on the map indicate a natural area? (Look for state park symbol.) About how many natural area sites are there? Students should look both at the map itself and also look at the list of Illinois recreational areas in the map margins.
- 5. Does the Illinois road map show natural areas in the Chicago region? Ask students to pretend that they are the map makers for Illinois. Have students offer their own explanations as to why it was decided not to show natural areas within the Chicago area on the Illinois road map. What kind of map information would be most important to travelers? Do most people come to Chicago to see the natural areas there?
- 6. Distribute the map of protected land within the Chicago area. How many protected sites are shown on this map? Are these sites all in one part of the region? Only on the edge of the region? Distributed throughout the region?
- 7. Look at the bottom wording on the map of protected land within the Chicago area. Have students identify the kinds of protected land there are: city parks, state parks, federal lands, county preserves, and privately owned lands. How many acres does the map say are included in these protected areas?

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- 8. Ask students to look at their Illinois road map and predict where the most wildlife might be in Illinois. If students are not certain, ask them to list the state mammal (white tail deer), bird (cardinal), reptile (painted turtle), and amphibian (Eastern tiger salamander). Where would these animals like to live? Ask them to choose between the Chicago region, Central Illinois, and Southern Illinois. Have students explain their choice based on the map's information (Southern Illinois has more forests and is closer to two major rivers).
- 9. Distribute the map of Rare and Endangered Natural Communities in the Chicago Wilderness area/Endangered Species in Illinois. Direct students' attention to the map that shows the endangered species in Illinois. NOTE: Be certain that students understand what an endangered species is before proceeding. Species a kind of living thing: animal, plant etc. Endangered Species a species that is in danger of disappearing from the earth because its numbers are becoming fewer and fewer
 Ask students to read the key and tell you where the highest number of endangered species occurs in Illinois. Are they surprised?
- 10. Discuss the reasons for having so many endangered species in the Chicago region. Ask students to help you list the kinds of natural communities that might be in the Chicago region: lake shore or sand dune, wetland, forest, open woodland and prairie or grassland. Have students use their Illinois road maps to help them. Begin with the shoreline of Lake Michigan and list *lake shore*. Have students locate a forest preserve near Chicago and list *forest or woodland*. Have students locate Midewin National Tall Grass Prairie near Chicago and list *prairie or grassland*. Explain that there are so many kinds of plants and animals in the Chicago region because there are so many kinds of natural areas there.
- 11. Have students look at the other regions on their Illinois road map. Explain that because so much of Illinois is devoted to farming, there are not too many places set aside for natural areas. Because a small group of city planners decided about a hundred years ago to set aside many places for natural areas in the Chicago region, we are fortunate to have these special places today.

EXTENSION ACTIVITIES

Explain that some rock groups use oxymoron names (Lead Zeppelin, Iron Butterfly, Grateful Dead). Explore the origin of a rock group with an oxymoron name. Why did they select that name and what does the name mean to them?

Visit the Illinois Department of Natural Resources Web site to find out more about the official state animals. What kinds of natural areas do these animals prefer? Are they found in the Chicago region?

Explore the idea of biodiversity. Compare the pros and cons of having a single agricultural crop versus having an area with many different kinds of plants. For example: A crop provides us with food we need. More animals can live in a natural area than in an agricultural field. A single crop is more susceptible to insect pests and plant diseases than a natural area with many kinds of plants.

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Calculate the difference that would result if a farmer planted a crop to the edge of a field versus if the same farmer left a line six feet wide of natural brush vegetation between the field crop and the edge of the field in order to help provide wildlife habitat. Begin with a field of 900 square feet (300 feet on a side). How many square feet would remain for the crop if the natural brush were left to grow?

ASSESSMENT

Ask students to generate a new word list for Chicago based upon their findings during the lesson. Have them compare the first word list with the later word list and describe any differences.

Have students determine the distribution of natural areas in Illinois. Do they occur in particular areas or are they evenly distributed throughout the state? Ask students to predict some features that might provide a good site for a natural area in Illinois. Then use an Illinois landform map to check answers. Are the natural areas where the landforms have features the students predicted?

Have students design a poster or brochure that promotes Chicago as a place to visit that has natural areas as well as big-city attractions.

RESOURCES

http://www.chicagowilderness.org/pubprod/index.cfm

Chicago Wilderness *Atlas of Biodiversity* Contact Catherine Bendowitz 312/580-2137 or cbendowitz@chicagowilderness.org

Illinois Department of Natural Resources - http://dnr.state.il.us