

Ecoregional Survey

Teacher's Guide

1. Take the ecoregional survey.

Give a copy of the "Ecoregional Survey" to each student and review any unfamiliar terms, such as native and introduced species. Then give students about 10 minutes to complete the survey. Afterward ask the students how they think they did. (Don't share possible answers at this point.) Collect the completed sheets as a pretest of the students' knowledge.

2. Divide the class into teams to complete the survey.

Divide your class into teams of about four students each. Give each team a clean copy of the ecoregional survey. Tell the students that the members of each team should work together to complete the survey as accurately as possible. Explain that the students can use whatever resources they can find to answer the questions, including the resources listed on the "Resources" list, additional resources you gathered, the library, the Internet, community elders or a local naturalist. Stress that they should find the most accurate information they can and encourage them to collect drawings or pictures of the animals and plants they list.

3. Set a time limit on research.

Give the students at least two days to find answers to the questions. If you plan on doing the entire "BioBlitz" activity, this is a good place to stop and skip ahead to Part II. Research for the "Ecoregional Survey" should be done as homework on the days you spend on Part II, the "BioBlitz Survey." By the third day, Part II should be completed. You can go over the "Ecoregional Survey" results from their research as a wrap-up for this activity.

4. Go over the survey results.

Once the students have finished the survey, have them share the information they found and compare their answers to the pretest. Did students find different answers to some of the questions? (For example, how extensive was the group's list of native plants?) What sources proved to be the most helpful? Were they surprised by any of the information they found?



Funded by a grant from the National Science Foundation DUE 0603455

Using a Web-based GIS to Teach
Problem-based Science In High School and College
<http://www.foothill.edu/fac/klenkeit/nsf/>

Ecoregional Survey

How much do you know about where you live?

1. What major habitat type do you live in? (temperate forest, temperate rain forest, grassland, shrubland, taiga, tundra, desert, etc...)
2. Name three native trees that live in your area.
3. Name five native edible plants that grow in your region and list in which season(s) each is available.
4. Name one poisonous plant that lives in your area.
5. Name ten native animals that live in your region.
6. Name three native animals that you can see in your area at any time of the year.
7. Name three migratory animals that visit or live in your area, and list in which season(s) you're able to see them.
8. How much average rainfall does your community get each year?
9. When (during what season or month) does your community normally get the most precipitation?
10. How long is the growing season in your community?
11. What is the average temperature in July? In December?
12. What are some of the natural signs in your community that show that the seasons are changing?
13. What body of water - lake, pond, stream, or river - is closest to your school?
14. How has your area changed in the past 25 years? (Ask your parents or neighbors)
15. What types of plants and animals lived in your area 10,000 years ago? What was the climate like then?
16. What species in your area - if any - are threatened or endangered?
17. What natural events or processes influence the land around your community? How have they affected the land? (For example, have there ever been glaciers, earthquakes or volcanic eruptions in your area? Do frequent fires, high winds or flooding shape where and how things grow?)
18. Are there any threatened ecological areas in you community? (Are any wetlands, rivers, or forests, for example, in trouble?)
19. Name a nonnative species that has created problems in your community.

Source: Illinois Biodiversity Basics, Illinois Department of Natural Resources, Chicago Wilderness, World Wildlife Fund.



Funded by a grant from the National Science Foundation DUE 0603455

Using a Web-based GIS to Teach
Problem-based Science In High School and College
<http://www.foothill.edu/fac/klenkeit/nsf/>