

AT A GLANCE

Conduct interviews of people in your community who have biodiversity-related professions.

OBJECTIVES

Describe various careers related to biodiversity. Identify, analyze and discuss biodiversity-related careers held by members of the community. Conduct a successful interview.

SUBJECTS

English language arts

SKILLS

gathering (reading comprehension, interviewing), analyzing (questioning), interpreting (summarizing), presenting (public speaking)

LINKS TO ILLINOIS BIODIVERSITY BASICS CONCEPTUAL FRAMEWORK

investigators in different fields; all sectors of society

TIME

two to three class periods

MATERIALS

copies of "Tips and Tricks of Interviewing" and "Sample Interview Questions" for each team of students

CORRELATION TO COMMON CORE STANDARDS AND NEXT GENERATION SCIENCE STANDARDS

English language arts: Research to Build and Present Knowledge, 8, 9; Range of Writing, 10

Protecting biodiversity can take many different forms. Some people, for example, focus on minimizing their own impact on the environment by shopping carefully, recycling as much as possible, avoiding the use of harsh chemicals on their gardens and in their homes, installing low-flow shower heads and other actions. Other people take more of a community-action approach, getting involved in local projects designed to protect or enhance the environment. Some people devote much of their lives to biodiversity and its protection through their choice of career.

This lesson provides a way to introduce your students to people with careers linked to biodiversity issues. Your students will find out who in the local community works in a biodiversity-related field and what kind of education is needed for particular careers. They might also discover some ways they can use their own interests and skills to get involved with biodiversity issues.

BEFORE YOU BEGIN

Make one copy of "Tips and Tricks of Interviewing" for each student. You may also want to make copies of the "Sample Interview Questions" for each team.

WHAT TO DO

1. Divide the group into pairs and introduce the activity.

Discuss with your students ways people make contributions to issues they care about (volunteering, trying to live in a way that's consistent with their values, helping others to become involved and so on). Point out that one way people contribute is by choosing a career related to an issue that's important to them. Explain that they'll be conducting interviews to learn about people whose careers are related to environmental issues, including biodiversity.



2. Explain the project.

Each pair of students will be working together to locate and interview someone in the community who has an occupation related to biodiversity or environmental stewardship/natural resources. (An alternative to having students setting up and conducting interviews is to invite a professional or a panel of professionals to the class. The class as a whole could come up with interview questions in advance, and students could take turns asking the questions.) For example, the students may find an environmental journalist who writes for a local newspaper. Have them refer to the "Career Corner" list if they need ideas for the types of careers that may be available in the community.

Explain that the students can conduct their interviews either in a phone call, by email, by Internet electronic communication options or in person. The students will use the information they've gathered to develop a creative presentation.

3. Discuss ways to locate people to interview.

Your students may know people in the community whom they can interview, or they might have ideas about where to start looking. Write their ideas where everyone can see them, then add the following suggestions:

federal, state, regional, county and municipal levels of government

- local offices of federal agencies and departments (such as the U.S. Environmental Protection Agency, the U.S. Forest Service, the U.S. Fish and Wildlife Service and the Natural Resources Conservation Service)
- state agencies (such as the Illinois Department of Natural Resources, Illinois Environmental Protection Agency, Illinois Department of Agriculture, Illinois Pollution Control Board, Illinois Department of Public Health)

- regional forms of government (Chicago Metropolitan Agency for Planning)
- county government and agencies (such as forest preserve districts, park districts, Association of Illinois Soil and Water Conservation District offices)
- municipal (such as park and recreation departments, public works offices and recycling centers)

private business, not-for-profit foundations, volunteer groups and professional organizations

- local zoos, aquariums or natural history museums
- nature centers
- local or regional environmental organizations
- professional development organizations related to a particular career
- universities and colleges
- community newspapers
- businesses with a strong environmental focus
- companies or stores that provide alternatives to environmentally harmful products
- organizations that have successfully integrated environmentally sound programs into their operations (such as office-wide recycling or natural area restoration work)

Have each team write down a list of the people or organizations they'll contact. Tell them to rank the list so that they contact their most likely resources first. You should check their lists to make sure they're on the right track and that several groups aren't planning to contact the same organization/people.



4. Review how to set up interviews.

Ask your students to describe or act out what they would say on the telephone if they called an organization to get the name of someone to interview. The following paragraph is an example of one approach they might take.

"Hello, my name is ______. I'm a student at ______, and I'm doing a class project that involves interviewing people about their careers. I'd like to interview a(n) ______. Do you know someone I might be able to interview? If not, could you transfer my call to someone who may be able to provide this information? What is your name, please? Thank you very much."

Next ask your students to describe or act out how they would ask a particular individual for an interview. Here's one approach.

"Hello, my name is ______. I got your name from _____. I'm a student at _____, and I'm doing a class project that involves interviewing people about careers related to biodiversity and the environment. Would you be willing to be interviewed? When would be a good time? Thanks very much for agreeing to talk with me."

Remind the students that they'll need to discuss a suitable time and place if the person agrees to be interviewed. They should also ask whether he or she would like to have a copy of the questions in advance. If the person does not wish to be interviewed, remind your students to thank him or her for speaking with them.

5. Develop interview questions and review "Tips and Tricks of Interviewing" (page 143).

Write on the board or hand out the "Sample Interview Questions." Have your students brainstorm a list of general questions they think would be appropriate to ask during their interviews. Write their ideas on the board, then help the class organize and edit the list. Encourage the students to develop open-ended questions rather than "yes-or-no" questions. The students can use the basic list as a guide when conducting the interviews. Each pair should also write additional questions that are specifically related to the career of the person they're interviewing.

Next hand out copies of "Tips and Tricks of Interviewing." Carefully explain each tip while the students follow along.

If you'd like to give your students practice conducting interviews, form groups of four by bringing two pairs together. Then have each pair develop five questions to ask the other pair. You might want to have one person in each pair ask the questions while the other takes notes, or you might have the two alternate so each student can practice asking questions and taking notes. You might also encourage your students to practice by interviewing their parents or neighbors.

6. Conduct the interviews.

Help your students determine the best way to conduct the interviews. In some cases, the interviewees might be able to come to the school. In other cases, they might be able to meet with the students after school at their place of work or interviews might take place over the telephone, through the Internet or by email.



7. Briefly discuss interviews and career options.

After the students have completed the interviews, give them time to discuss the process and share their experience with the group. Was the process easier or harder than they expected? Why? Which careers didn't they know about before? Which careers sounded the most interesting? Why? What information did they learn that surprised them?

Point out that many careers include aspects of environmental protection. Many corporations hire people with environmental backgrounds. For example, many ecologists work for power companies to make sure they aren't harming the environment.

8. Develop and give presentations.

Have each pair put together a brief presentation focusing on the career of the person they interviewed. Encourage the students to create visual aids or use multi-media techniques to explain and illustrate how the career they're highlighting relates to biodiversity. Make sure that both students in each pair are involved in the presentation.

WRAPPING IT UP

Assessment

- 1. Collect the students' interview notes. Compare the information gathered in the interview with the information included in the presentation.
- 2. Have the students write their notes as an interview-style article.
- 3. Let the students use the following as a journal starter: "The jobs I found most interesting are . . . because . . ."

Portfolio

Interview notes can be used in the portfolio.

Extensions

- 1. Have the students research other careers that are related to biodiversity conservation or environmental protection. See the list entitled "Career Corner" for ideas. They can use their research as a launching pad to write career profiles of people in the community, conduct more interviews, create displays or write reports.
- 2. Have students investigate the life and career of someone who was instrumental in influencing the fields of science, the environment or technology. Identify how his/her contributions influenced the lives and careers of people today.

"One of the greatest challenges of conservation is preserving the incredible diversity of life while ensuring that people's needs are respected and protected."

> —Henri Nsanjama, Vice President WWF's Africa and Madagascar Program



Resources

- Carwell, Hattie. 1977. *Blacks in science: astrophysicist to zoologist*. Exposition Press, Hicksville, New York. 95 pp.
- Chicagoland Environmental Network. 2001. Internet site. http://www.chicagoenvironment.org
- Chicago Wilderness. 2001. *An atlas of biodiversity* Internet site. http://www.chicagowilderness.org
- Hamilton, John and Stuart Kallen. 1993. *Eco-careers: a guide to jobs in the environmental field.* Abdo and Daughters, Edina, Minnesota. 32 pp.
- Illinois Department of Natural Resources. 1999.

 Biodiversity of Illinois, volume I: aquatic habitats.

 Illinois Department of Natural Resources,

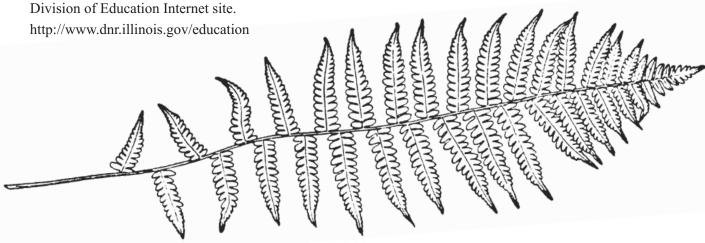
 Springfield, Illinois. CD-ROM.
- Illinois Department of Natural Resources.1999. *Natural resources careers*. Illinois Department of Natural Resources, Springfield, Illinois. Poster.
- Illinois Department of Natural Resources. 2000.

 Biodiversity of Illinois, volume II: woodland habitats.

 Illinois Department of Natural Resources, Springfield, Illinois. CD-ROM.
- Illinois Department of Natural Resources. 2001.

 Biodiversity of Illinois, volume III: prairie and edge habitats. Illinois Department of Natural Resources, Springfield, Illinois. CD-ROM.
- Illinois Department of Natural Resources. 2001.

- Illinois Department of Natural Resources. 2001. Internet site. http://www.dnr.illinois.gov
- Illinois Natural History Survey. 2001.
 Illinois Natural History Survey Internet site.
 http://www.inhs.illinois.edu
- Illinois State Water Survey. 2001.
 Illinois State Water Survey Internet site.
 http://www.isws.illinois.edu/
- Koebner, Linda, Sokolow, Jane E. S., Grifo, Francesca T. and Sharon Simpson, editors. 1998. *Scientists on biodiversity*. American Museum of Natural History, New York. 156 pp.
- Matyas, Marsha Lakes. 1997. *Women life scientists:* past, present and future. The American Physiological Society, Bethesda, Maryland. 338 pp.
- Northeastern Illinois Planning Commission. 2001. Internet site. http://www.cmap.illinois.gov/
- Solid Waste Agency of Lake County, Illinois. 2001. Internet site. http://www.swalco.org/Pages/default.aspx
- Triana, Estrella M., Abbruzzese, Anne and Marsha Lakes Matyas. 1992. *Stepping into the future: Hispanics in science and engineering*. American Association for the Advancement of Science, Washington, D. C. 40 pp.
- World Wildlife Fund. 1994. *WOW!—a biodiversity primer.* Quad/Graphics, Pewaukee, Wisconsin. 67 pp.





CAREER CORNER

Botanist Chemist

Community Activist
Conservation Biologist
Conservation Police Officer

Ecologist

Ecotourism Trip Leader Environmental Educator

Environmental Journalist

Environmental Lawyer

Entomologist

Environmental Specialist at a Foundation

Fisheries Biologist

Forester

Hydrologist

Integrated Pest Management Specialist

Land-Use Planner

Limnologist

Natural History Museum Curator

Naturalist/Interpreter in a Park or a

Wildlife Sanctuary

Nature Photographer

Natural Resource Economist

Organic Farmer

Population Expert

Park/Preserve/Refuge Manager

Recycling Coordinator

Research Biologist/Scientist

Soil Conservation Specialist

Solid Waste Manager

Stewardship Volunteer

Toxicologist

Zookeeper

Zoologist

SAMPLE INTERVIEW QUESTIONS



Here are examples of some of the kinds of questions you might want to ask during your interview.

- ✓ What's a typical day on the job like for you?
- ✓ What's your educational background?
- ✓ What skills are especially useful in your profession?
- ✓ What types of scientific skills or technology do you need to do your job?
- ✓ Does your job involve protecting biodiversity? If so, how?
- ✓ What's the most challenging aspect of your job?
- ✓ What's the most rewarding aspect of your job?
- ✓ How did you become interested in your field?
- ✓ Did you always want to be involved in a career like the one you're in?
- ✓ Who inspired you to enter this field?
- ✓ Do you have any advice for students who may be considering a career like yours?
- ✓ How does your job influence or contribute to other people's lives?
- ✓ Are there people in other countries who do work similar to your work?



TIPS AND TRICKS OF INTERVIEWING

Before the Interview

- ✓ When you call to set up an interview, introduce yourself on the phone. State your name, school, grade level and the purpose of the interview.
- ✓ Set up an appointment far enough in advance to give you and the interviewee time to prepare.
- ✓ Carefully prepare your questions in advance. Limit the number of questions to about 10 or so. (Most people don't have time for long interviews, and too many questions will make it difficult for you to process all the information.)
- ✓ Find out if the interviewee would like a list of your questions in advance. If so, send them out as soon as you can.
- ✓ If you want to make an audio recording of the interview, ask permission from the interviewee first. Make sure that the equipment works and that you know how to use it before the interview.
- ✓ If you are working in pairs, decide who will be asking the questions and who will be taking notes. (If the person taking notes thinks of additional questions during the interview, he or she can ask them. Try to make sure any new questions are brief and appropriate to the subject.)

During the Interview

- ✓ Be polite and considerate.
- √ Before you begin asking questions, explain how you will use the information.
- √ Ask your questions clearly and give the interviewee time to think and respond.
- √ Before you end the interview, thank the interviewee for taking the time to help
 you with your project.
- √ If you will be writing up the interview as an article, ask the interviewee if he or she would like a copy of it. If so, get the interviewee's address, and then be sure to follow through on getting the article to him or her as soon as you can.
- √ Ask for the interviewee's mailing address so that you can send a thank-you note
 or any other material after the interview.

After the Interview

- ✓ Send a thank-you note a few days after the interview.
- ✓ If you are working in pairs, meet with your interviewing partner soon after the interview to compare notes, impressions and information.