

L10 Meet a Naturalist: Researching, Writing, Interviewing

► SEASONS: 🍁 ❄️ 🌸

► SUBJECTS: 📄

► EXT. SUBJECT: 🧠

► PREP TIME: 🕒

► LESSON TIME: 🕒 X 3

Description

This lesson exposes students to current careers in the environmental field while helping them become skilled at conducting research and participating in interviews. A personal interaction with an environmental professional can awaken students to the natural world around them and the commitment and hard work needed to help preserve and use resources many people take for granted.

Before engaging in this lesson, decide if it will be possible to have an environmental professional come into your classroom. If not, your students can write letters to different environmental professionals and you will need to review the proper structure for writing formal letters with your students. The lesson can be broken up to stretch over three class periods: (1) researching and writing, (2) creating interview questions, and (3) conducting the interview.

Older students can conduct their own research, through telephone calls and online resources, to identify local environmental professionals and compile job descriptions. After writing up and presenting their findings, students organize and conduct an interview to deepen their understanding of this field and to become familiar with environmental issues and management in the Berkshires.

Through the extension activity, students can practice their own environmental management on the school grounds.

Objectives

- Research and identify local environmental professions.
- Present research to the class.
- Organize and conduct an interview.



MATERIALS

For each student: pencil, paper, Internet access.





Background Information

Naturalist is a very broad term often applied to any environmental professional or a person with a special expertise in an ecological area. The term naturalist can also be applied specifically to people who work in local habitats studying the environment, working to protect it, or educating the public. Naturalists are dedicated to helping keep our natural world a safe, healthy and beautiful place to be.

Many naturalists work in environmental management; they try to balance the needs of people using natural resources with preservation of local habitats. They work toward and promote the sustainable use of natural resources so they are available to us in the future. Other naturalists focus on the conservation of local plant and animal life. They wish to ensure that human interference doesn't irreparably damage an ecosystem or destroy the natural wildlife.

Examples of environmental professionals include park rangers, environmental police, and environmental educators. Park rangers manage state parks by protecting resources and regulating their use, educating the public about environmental issues through structured programs and informal connections, and enforcing park rules and regulations to protect not only the natural flora and fauna but also park visitors. Environmental educators work to help educate school groups, families, and individuals about environmental issues through structured programs, events, and everyday interaction. Environmental police enforce environmental laws regarding fishing, hunting, waste management, and other environmental issues.

For information on local organizations employing environmental professionals, see the Online Connections.

Procedure ⌚ X 3

1. With your class, discuss the different ways people can work with and for the environment. What are some careers that focus on environmental conservation/management? What local agencies might employ environmental professionals? Review the Meet a Naturalist Rubric.
2. Discuss with your students different ways they can research this subject. They may wish to focus on a specific profession or a local agency.
3. In groups or individually, students research local environmental professions by searching for information online and/or calling local

! TIPS AND TRICKS

Even if you are able to arrange a face-to face interview, writing letters to various organizations is a good way to compare the different professions in this field and to help students work on their letter-writing and interview skills.

Younger students may not be able to complete independent research but can generate interview questions as a class for a meeting with an environmental professional or dictate a letter to send.

organizations. What are some of the naturalists' job titles? What are their main responsibilities? What environmental conservation/management issue does their work concern?

4. Once students have completed their research, individually or as a group they write a short essay to summarize their work and give a presentation to the class. You may want them to create some kind of visual for their presentation (e.g., a poster with pictures).

5. Choose an environmental professional for your class to interview and as a group create a list of questions they would like to ask.

Here are some examples:

- What are some of the tools you use on your job?
- Why is your job important?
- What is the hardest thing about your job?
- How does your job relate to the environment?
- What training/schooling did you need?
- Why did you choose this profession?

6. Before the interview, students develop a method to submit the questions and conduct the interview. For example, they might want to compile the list of questions and have one student ask the questions or they might want to take turns asking one question per student.

7. Students compose a thank-you letter that reflects their understanding of the job and how it affects their own lives.



Assessment

MEET A NATURALIST RUBRIC	4	3	2	1
Discussion	Listens actively, stays on topic, considers the ideas of others, and takes turns.	Most of the time listens actively, stays on topic, considers the ideas of others, and takes turns.	At least some of the time listens actively, stays on topic, considers the ideas of others, and takes turns.	Has difficulty listening, staying on topic, considering the ideas of others, and taking turns.
Research	Completes thorough research from a variety of credible resources that is clearly summarized and presented in a clear and organized manner.	Completes research from credible resources that is summarized and presented in a clear and somewhat organized manner.	Completes research from at least one credible resource that is loosely summarized and presented in an unorganized or hard to follow manner.	Does not complete research from credible resources, information is poorly summarized and presentation is difficult to follow.
Interview	Follows agreed-on rules for interview format, asks relevant questions aimed at gaining further information.	Generally follows agreed-on rules for interview format, asks some relevant questions to gain further information.	Sometimes follows agreed-on rules for interview format, occasionally asks question that are aimed at gaining further information.	Does not follow agreed-on interview format and does not ask questions or asks questions that are not aimed at gathering further information.

Science Extension: Managing the School Grounds

To provide the class with an opportunity to assess and care for the school grounds, arrange a class meeting with the custodial staff or head custodian and discuss ways the students could help care for the school grounds. Even if the school does not have trails, most likely a playground area with some trees and grass is available. The children can play a role in managing the grounds by looking for invasive plants and removing them, learning about the trees and plants and developing identification labels, a written guide, an Internet overview, or a tour for other students and families. They can also investigate and implement systems for controlling litter on the school grounds.

SERVICE LEARNING

MEET A NATURALIST:
NATURAL JOBS
Each child can write and illustrate one page of a Career Book highlighting environmental jobs. Laminate, bind, and donate to the children's section of the local library.

Resources

Doyle, Kevin. *The Complete Guide to Environmental Careers in the 21st Century*. Washington, DC: Island Press, 1999.

Lists hundreds of careers in the environmental field and includes information about education, volunteering, case studies, and profiles on environmental professionals.

Miller, Louise. Careers for Animal Lovers & Other Zoological Types. Chicago: VGM Career Books, 2000.

Presents careers with animals that require a wide range of education and training.

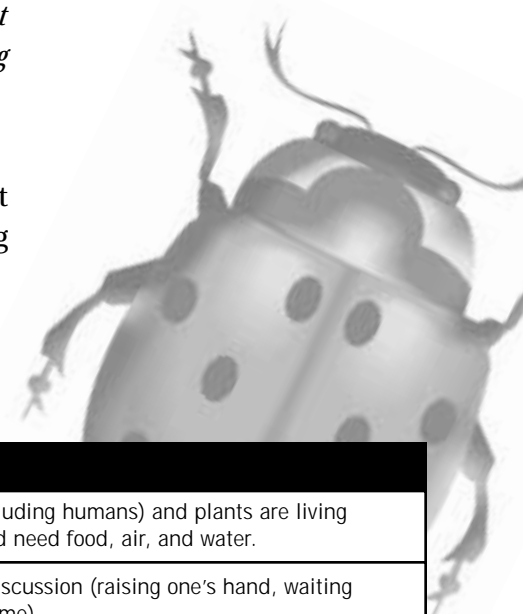
The Eco Guide to Careers That Make a Difference. Washington, DC: Island Press, 2004.

Gives an overview of current career opportunities in this field and includes insight from professionals on environmental issues and problems and how they are being addressed.

Online Connections

Visit the Berkshire Museum's Living Landscapes website at www.berkshireremuseum.org/programs/educators.html for the following online activities or resources:

- Student research materials
- Links to local organizations that employ environmental professionals
- School grounds management activities



MASSACHUSETTS FRAMEWORKS		
Science: Life Science: Characteristics of Living Things	Pre K-2 * For Extension	1. Recognize that animals (including humans) and plants are living things that grow reproduce, and need food, air, and water.
ELA: Language: Standard 1: Discussion	Pre K-4 Grades 5-6	1. Follow agreed-on rules for discussion (raising one's hand, waiting one's turn, speaking one at a time). 3. Apply understanding of agreed-on rules and individual roles in order to make decisions.
ELA: Language: Standard 2: Questioning, Listening and Contributing	Grades 3-4	2. Contribute knowledge to class discussion in order to develop ideas for a class project and generate interview questions to be used as part of the project.
	Grades 5-6	3. Gather relevant information for a research project or composition through interviews.
ELA: Composition: Standard 19: Writing	Pre K-K	4. Dictate sentences for a letter or directions and collaborate to put the sentences in order.
	Grades 1-2	8. Write or dictate research questions.
	Grades 3-4	11. Write brief summaries of information gathered through research. 13. Write an account based on personal experience that has a clear focus and sufficient supporting detail.
	Grades 5-6	16. Write brief research reports with clear focus and supporting detail. 18. Write formal letters to correspondents such as authors, newspapers, businesses, or government officials.
ELA: Composition: Standard 24: Research	Pre K-2	1. Generate questions and gather information from several sources in a classroom, school, or public library.
	Grades 3-4	2. Identify and apply steps in conducting and reporting research.
	Grades 5-6	3. Apply steps for obtaining information from a variety of sources, organizing information, documenting sources, and presenting research in individual and group projects.

The lesson also addresses the Massachusetts Science and Technology Curriculum Framework's Science Skills of Inquiry.