

Careers Exploration

NUTSHELL

In this lesson, students learn about 15 professionals in Wisconsin with careers connected to the forest. Students discover the skills used in each profession. Students create a help wanted poster for the career.

ENDURING UNDERSTANDINGS

- Forest research and management involves professionals with backgrounds in many fields, including forestry, biology, wildlife, soils, water, land management, urban planning, engineering, sociology, archaeology, geography, technology, environmental education, and chemistry.

ESSENTIAL QUESTIONS

- What careers relate to forests?
- What skills are needed to be successful in a forest-related career?

OBJECTIVES

Upon completion of this lesson, students will be able to:

- Name at least 10 forestry-related careers.
- Explain the types of skills that are associated with different types of forestry-related careers.

SUBJECT AREAS

Arts, Career and Technical Education, Language Arts, Social Studies

LESSON/ACTIVITY TIME

Total Lesson Time: 55-90 minutes

- Introduction..... 10-15 minutes
- Activity 1 30-45 minutes
- Conclusion..... 15-30 minutes

STANDARDS CONNECTIONS

Standards for this lesson can be viewed online at the LEAF website (leafprogram.org).

BACKGROUND INFORMATION

There is a wide array of careers related to the forest. They range from direct care of trees, to landscape planning, to educating people about the forests, to the processing and production of lumber and products. One of the fastest growing specialty areas in forestry is in urban forestry, where people are involved in caring for trees in urban and suburban areas. In Wisconsin, the forest products industry is the second largest industry in the state (agriculture is the first). Every 10 jobs in the forest products industry supports an additional 12 jobs in the state.

Careers in forestry-related fields require different amounts of training and education. Some jobs require a technical or college level education, others provide on-the-job training. Well-developed people skills and communication skills are also important for those in forestry-related careers.

Helping students to become aware of natural resource careers, such as those in forestry, gives them options for the future. Forestry-related jobs are important to the cultural, social, economic, and environmental health of our state.

"I have been governor every now and then, but I am a forester all the time."



★ Gifford Pinchot ★

“Come forth into the light of things. Let nature be your teacher.”

★ William Wordsworth ★

MATERIALS LIST

For Each Student

- Copy of Student Page  **1, Careers Note Catcher**
- Copy of Student Page  **2, Help Wanted**
- Copy of one of the 15 career profiles from Lessons 1 through 7
- Markers or colored pencils
- Poster making app for Google, Chromebook, iPad, etc. (optional; only needed if completing this electronically)

For the Teacher

- Video from list in Recommended Resources (see page 225)
- Print copies of the 15 career profiles in advance for students (laminated copies are included in the LEAF 4th Grade Lesson Guide Kit that can be checked out from the Wisconsin Center for Environmental Education uwsp.edu/wcee/wcee/kits/leaf-4th-grade-lesson-guide-kit/)

LESSON 1

- *Ricky Kubicek*: Archeologist and State Historic Preservation Officer (page 26)
- *Bill Quackenbush*: Tribal Historic Preservation Officer, Ho-Chunk Nation of Wisconsin (page 27)

LESSON 2

- *Gus Blemke*: Sawmill Operations Manager, Kretz Lumber (page 58)
- *Jim Hoppe*: Industrial Forester, Packaging Corporation of America (page 59)

LESSON 3

- *John Lawrence*: Owner/Logger, Twin Forest Products (page 90)

LESSON 4

- *Mark Powless*: Our Ways Director, Indian Community School (page 112)
- *Richard and Kathy Wagner*: Landowners and Small Business owners (page 113)

LESSON 5

- *Paul Koll*: Tribal Forester, Stockbridge-Munsee Band of Mohican Indians (page 160)
- *Kristina Wells*: Forester, Wisconsin Department of Natural Resources (page 161)

LESSON 6

- *McKaylee Duquain*: GIS and Inventory Forester, Menominee Tribal Enterprise (page 189)
- *Sarah Gilbert*: Park Ranger, Wisconsin Department of Natural Resources (page 190)
- *Cheryl Todea*: Environmental Educator, Trees for Tomorrow (page 191)

LESSON 7

- *Brad Hutnik*: Forest Silviculturist, Wisconsin Department of Natural Resources (page 204)
- *Chad Miller*: Land Manager, Stockbridge-Munsee Band of Mohican Indians (page 205)
- *Olivia Witthun*: Urban Forester, Wisconsin Department of Natural Resources (page 206)

PROCEDURE

Introduction

Remind students that in Wisconsin there are also many people who have jobs related to forests and the forest products industry. There are many people who do not work directly with forests, but are connected in some way. For example, salespeople who sell forest products, truck drivers who haul logs and lumber, and park rangers who provide information to visitors. Ask students if

any of their family members have jobs connected to forests in some way. Tell students that in this lesson they will learn about individuals who have a variety of jobs related to forests in Wisconsin.

Show one (or more) of the Wisconsin DNR Forest Career Videos listed in the Recommended Resources section at the end of this lesson (see page 225). They are all under five minutes long. If time permits, show “Into Forestry: Heroes of the Forest” video which is about 30 minutes long.

VOCABULARY TERMS

Archeologist: A person who studies human history through the excavation of sites and analysis of artifacts and other remains.

Business Owner: A person who sells things to make a profit.

Environmental Educator: A person who teaches about forests and other environmental topics.

Forest Ranger: A person who fights fires in forests, grasslands, and marshes.

Forest Silviculturist: A person who uses science to help forests grow to meet specific values and needs.

Forester: A person who is in charge of taking care of a forest.

GIS and Inventory Forester: A person who collects and analyzes data about the forest. They help determine its health, diversity, and density and use the information to make a plan to take care of the forest.

Industrial Forest Manager: A person who works with foresters to manage and harvest forests that are used to make forest products.

Land Manager: A person who oversees the use, preservation, and development of land.

Landowner: A person who owns land.

Logger: A person who cuts down trees and sells them to make a living.

Our Ways Director: A person who is responsible for incorporating tribal culture and language into school programs.

Park Ranger: A person who works in a park to protect the park and people who use it.

Sawmill Operations Manager: A person who makes sure the process of producing wood in a mill goes well. A sawmill operations manager also takes care of the people who work in the mill.

Sawmill Operator: A person who runs the machines that are responsible for converting logs into lumber or other forest products.

State Historic Preservation Officer: A person who is responsible for preserving places that matter.

Tribal Historic Preservation Officer: A person who is responsible for researching, archiving, protecting, conserving, and perpetuating the traditional and natural resources of a tribe.

Urban Forester: A person who is in charge of taking care of trees in urban and suburban settings.

Activity 1

1. Have students select one of the career profiles that sounds interesting to them. Instruct them to read about the career and record the following information about it on Student Page **1, Careers Note Catcher**. If you would like, you can allow students to use career websites to further research the careers.
2. Once students have finished recording notes on their career, tell them they are going to make a help wanted job poster to help recruit people for the career they researched. You can have students create a poster using the template provided, or they can create them on a digital platform if one is available. The poster should include the following information:
 - Position name
 - Position description
 - Education required and skills needed
 - Why this career is right for you

Conclusion

Allow each student the opportunity to share their job poster with their peers, or for an even richer experience, set up a mock career fair where younger or older students can come visit your students to learn about the different forest-related careers. Once class wraps up, job posters can be hung around the classroom, in other classrooms, or in the hallways.

RECOMMENDED RESOURCES

Google Resources

Additional resources to support this lesson have been created in Google format. They may be accessed on the LEAF website at: uwsp.edu/wcee/wcee/leaf/leaf-curriculum/k-12-forestry-lesson-guides.

Videos

Into the Outdoors. *Into Forestry: Heroes of the Forest*. 20 March 2022. www.youtube.com/watch?v=D5DqOEbtFv8.

Wisconsin DNR. *Careers in Forestry - Field Technology Coordinator*. 31 March 2022. www.youtube.com/watch?v=ecd5XjpDFtk.

Wisconsin DNR. *Careers in Forestry - Forest Inventory Analyst*. 31 March 2022. www.youtube.com/watch?v=5ButkbcYHWQ.

Wisconsin DNR. *Careers in Forestry - Forest Management and Ecology Research Scientist*. 31 March 2022. www.youtube.com/watch?v=cpEx92U3XiQ.

Wisconsin DNR. *Careers in Forestry - Forest Products Specialist*. 31 March 2022. www.youtube.com/watch?v=XwsnOuHaoK0.

Wisconsin DNR. *Careers in Forestry - Forester*. 31 March 2022. www.youtube.com/watch?v=SAXT7LoCCil.

Wisconsin DNR. *Careers in Forestry - Forester*. 31 March 2022. www.youtube.com/watch?v=uf5UJGybNAE.

Wisconsin DNR. *Careers in Forestry - Forestry Technician*. 31 March 2022. www.youtube.com/watch?v=rv-YbznxL_w.

Wisconsin DNR. *Help Make a Difference – Become a Wisconsin Conservation Warden*. 13 February 2023. www.youtube.com/watch?v=0OgjEdNKSvM.

Wisconsin DNR. *The Future of Wisconsin's Forests*. 13 January 2023. www.youtube.com/watch?v=BAx2_y-OnkM.

Wisconsin DNR. *The Wisconsin Outdoor Beat - DNR Conservation Wardens*. 21 April 2020. www.youtube.com/watch?v=7pGV6fA1Zno.

CAREERS NOTE CATCHER

Directions: Use the information from the career profile to fill in the note catcher.

CAREER	
WHAT DOES A PERSON WHO HAS THIS CAREER DO?	
WHAT EDUCATION OR TRAINING IS NEEDED FOR THIS CAREER?	
WHAT SPECIFIC SKILLS ARE REQUIRED FOR THIS CAREER?	
WHAT IS SOMETHING INTERESTING ABOUT THIS CAREER?	
WHY SHOULD SOMEONE WANT TO DO THIS FOR A LIVING?	
SKILLS I HAVE THAT WOULD HELP ME IN THIS CAREER?	
SOMEONE I KNOW WHO WOULD BE GOOD AT THIS IS ... BECAUSE ...	

HELP WANTED

Help Wanted!

Position: _____

Position Description:

Education Required and Skills Needed:

Why this Career is Right for You:

Position will remain open until filled.