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U.S. Endowment
for Forestry and Communities

FORESTS OF THE FIRST STEWARDS

3rd - 5th Grade Discussion Guide

Episode/Lesson Plan #3: End Use Products and Education

INTRODUCTION

Have you ever thought about how forests connect to the products we use, the traditions people carry forward, and the future of communities?

In this episode, we explore how the Menominee Forest supports both cultural practices and modern innovation by using its resources.

We begin by learning the art of basket weaving, where forest materials are transformed into functional and meaningful items. Through this process, we see how cultural knowledge, craftsmanship, and the forest are deeply connected, and how these traditions have been passed down across generations.

Next, we visit the College of Menominee Nation's Sustainable Development Institute (SDI), where students and educators are working to bridge cultural teachings with modern science and technology. Here, we explore how education is preparing the next generation to continue responsible forest stewardship.

Finally, we walk the Menominee Phenology Trail, where we learn how observing seasonal changes in the forest helps guide stewardship practices and reinforces the connection between people and the land.

Through these experiences, students will see how forests support not only products and economies, but also culture, education, and the future of sustainable communities.





LEARNING OBJECTIVES (GRADES 6-8)

1. Analyze how forest resources are transformed into cultural and functional products, such as baskets and other materials.
2. Interpret how observing natural patterns, such as seasonal changes (phenology), contributes to forest stewardship and environmental understanding.
3. Explain the cultural significance of forest-based practices and how knowledge is passed through generations.
4. Demonstrate understanding of key concepts from the lesson.

STANDARDS ALIGNMENT

1. **NGSS (Science)**
 - a. MS-LS2-5: Evaluate competing design solutions for maintaining biodiversity and ecosystem services.
 - b. MS-ESS3-4: Construct an argument supported by evidence for how increases in human population and resource consumption impact ecosystems.
2. **Common Core (ELA)**
 - a. RI.6-8.2: Determine central ideas in a text or media and summarize key supporting details.
 - b. W.6-8.2: Write informative texts to examine a topic and convey ideas clearly.





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LESSON TIME ESTIMATE AND SUMMARY

(lesson time estimate 60 minutes)

Learning Objective	Activity	How Students Show They Learned	Time Estimate
Evaluate how education supports sustainable forestry and future work-force development	Watch Sustainable Development Institute (SDI) segment highlighting education, technology, and cultural knowledge	Students describe how education connects to real-world forestry practices and identify one way students are being prepared for future careers	12-15 min
Interpret how observing seasonal changes (phenology) supports forest stewardship and environmental understanding	Watch Phenology Trail segment focusing on seasonal observation and environmental patterns	Students explain how observing changes in the forest helps guide stewardship decisions and supports ecosystem health	15-20 min
Explain the cultural significance of forest-based practices and how knowledge is passed through generations	Reflection: Reflect on key ideas from both segments and connect them to modern forestry and the next generation of forest stewards	Students answer 5 questions or share a presentation with take-aways from this episode	12-15 min
Demonstrate understanding of key concepts from the lesson	Assessment: Short quiz or presentation (group or solo) demonstrating what	Students answer 5 questions or share a presentation with take-aways from this episode	12-15 min

VOCABULARY

1. **Forest Resources:** Materials that come from forests, such as wood, bark, plants, and fibers, that are used to create products or support ecosystems.
2. **Cultural Craftsmanship:** The practice of creating items using traditional skills and techniques that are passed down through generations within a culture.
3. **Basket Weaving:** The process of interlacing natural materials, such as plant fibers or wood strips, to create functional or decorative items.
4. **Renewable Resource:** A natural resource that can be replenished over time, such as trees in a sustainably managed forest.
5. **Sustainable Development:** Using natural resources in a way that meets current needs while ensuring they are available for future generations.
6. **Sustainable Development Institute (SDI):** An educational program at the College of Menominee



Nation that combines cultural knowledge and modern science to support sustainable practices and community development.

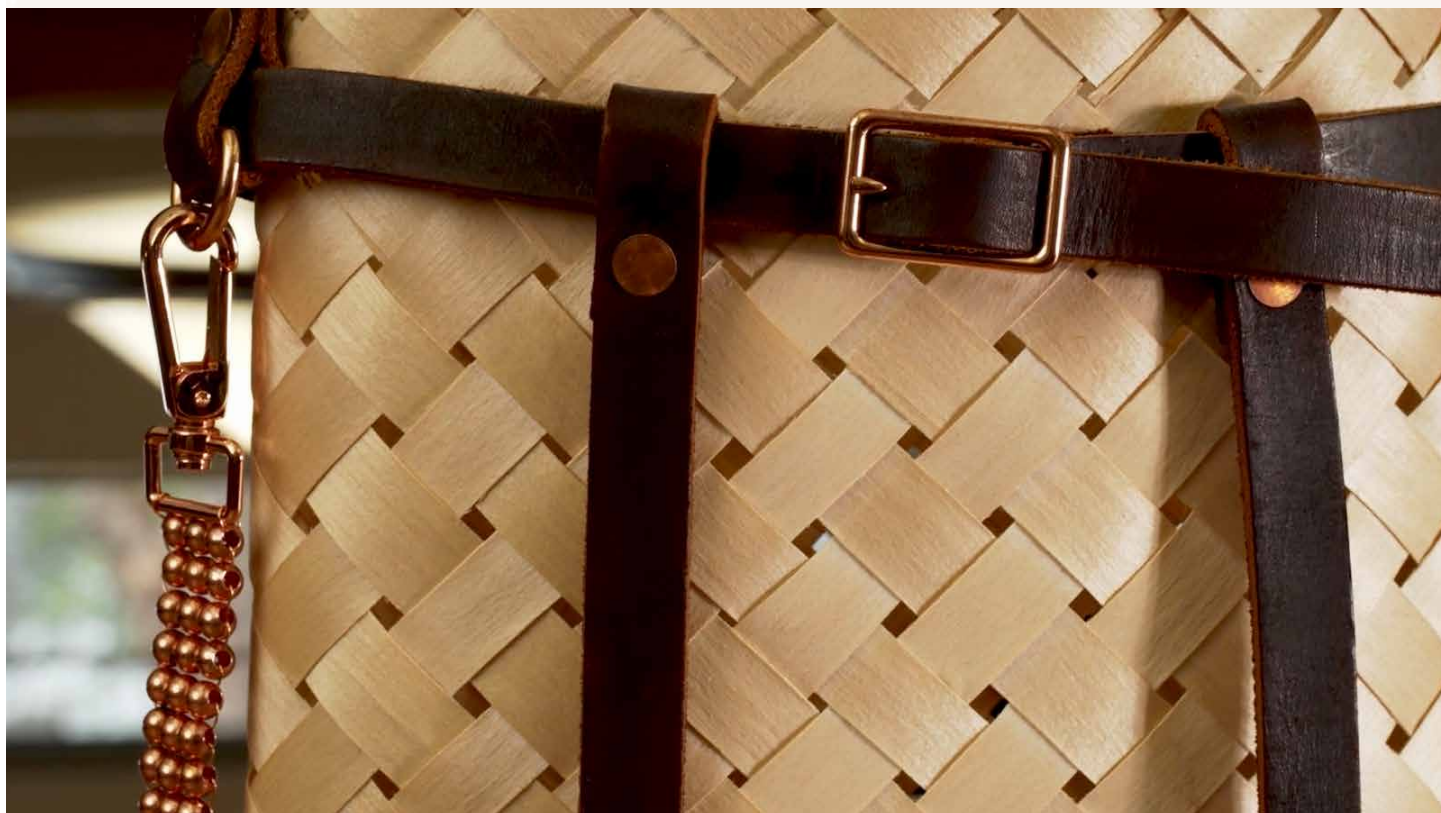
7. **Workforce Development:** Education and training that prepares individuals for jobs and careers in a specific field.
8. **Phenology:** The study of seasonal changes in plants and animals, such as leaf growth, flowering, and migration, and how these changes relate to environmental conditions.
9. **Seasonal Patterns:** Regular changes in weather and the natural environment that occur throughout the year and influence plant and animal life.
10. **Stewardship:** The responsible care and management of natural resources to ensure their long-term health and sustainability.

BACKGROUND INFORMATION

Forest Resources and Cultural Use

For generations, the Menominee people have used forest resources not only for survival, but also for cultural expression and daily life. Materials from the forest such as wood, bark, and plant fibers have been used to create tools, shelter, transportation, and art.

Basket weaving is one example of how forest resources are transformed into functional and meaningful items. This practice requires knowledge of plant materials, harvesting techniques, and weaving methods that have been passed down through generations. These items are not only useful, but also carry cultural significance and reflect a deep connection between people and the forest.





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Cultural Knowledge and Skill Transmission

Cultural knowledge within the Menominee community is often shared through hands-on learning, storytelling, and mentorship. Skills such as basket weaving are taught in community settings, where instructors guide learners through each step of the process.

This type of learning connects past and present generations, ensuring that traditions, values, and ecological knowledge continue over time. It also reinforces the idea that forests are not just resources, but are part of a living cultural system.

Education and Sustainable Development

The College of Menominee Nation's Sustainable Development Institute (SDI) plays an important role in preparing future generations to care for the forest. SDI combines Traditional Ecological Knowledge with modern science and technology to support sustainable practices.

Students at SDI learn how to apply both cultural understanding and scientific methods to real-world challenges, such as forest management, resource use, and environmental protection. This approach helps bridge traditional knowledge with contemporary careers and workforce development.

Phenology and Environmental Observation

Phenology is the study of seasonal changes in plants and animals, such as when leaves grow, flowers bloom, or animals migrate. These patterns are closely connected to environmental conditions like temperature and precipitation.

On the Menominee Phenology Trail, these changes are observed and recorded to better understand how the forest responds over time. Observing seasonal patterns helps guide decisions about forest management and supports long-term ecological health.

This practice reflects both scientific observation and traditional ways of understanding the natural world, reinforcing the connection between people and the environment.

Integration of Culture, Education, and Stewardship

The Menominee approach to forest stewardship connects cultural practices, education, and environmental observation into one system.

Forest resources are used responsibly to create products and support livelihoods. Cultural knowledge is passed down to maintain traditions and values. Education prepares future generations to continue this work using both traditional and modern approaches.

Together, these elements demonstrate how forests can support not only ecological and economic systems, but also cultural identity and long-term community well-being.



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LEARNING PROCEDURE

1. Introduction

- Show a short clip or image of a finished basket, forest materials, or students working at the Sustainable Development Institute (SDI).
- Facilitate a discussion:
 - Where do products from forests show up in your daily life?
 - How do you think people learn to create items from natural materials?
 - How might forests connect to both culture and education?
- Briefly introduce that in this episode, students will explore how forests support cultural practices, modern education, and future careers through the use of forest resources.

2. Activity 1: Education and Future Forestry Pathways

- Students explore how education connects cultural knowledge with modern science and careers.

3. Activity 2: Observing the Forest Through Phenology

- Students explore how observing seasonal changes helps guide forest stewardship.

4. Reflection/Discussion

- Students share key takeaways and learnings from this episode and lesson.

5. Assessment (Quiz or Presentation)

- Students demonstrate learning through a short quiz or a single/group presentation on the subject matters in this episode.

6. Teacher Tips

- Encourage students to support their ideas with evidence from the episode or discussion.
- Use guiding questions to deepen thinking rather than providing direct answers.
- Allow flexibility for discussion time, as middle school students benefit from processing and sharing perspectives.

ACTIVITIES

Activity 1: Connect Education to Forestry and Careers

- Objective: Evaluate how education prepares individuals for careers in sustainable forestry and resource management.
- Materials: Sustainable Development Institute (SDI) video segment, paper or graphic organizer
- Steps:
 - Watch the SDI segment. Pause to highlight how students are learning both cultural knowledge and modern science.
 - Discuss with students:
 - What are students learning, and how does it connect to real-world forest management?
 - Students identify one career or role connected to forestry or sustainability.
 - Students explain how education helps prepare someone for that role and how it supports forest stewardship.
- Tips:
 - If time allows, students can expand this into a short presentation.
 - Encourage connections to both culture and science.



Activity 2: Observe and Interpret Forest Changes (Phenology)

- Objective: Interpret how observing seasonal changes supports forest stewardship and environmental understanding.
- Materials: Phenology Trail video segment, paper or notebook
- Steps:
 - Watch the Phenology Trail segment. Pause to highlight examples of seasonal changes in the forest.
 - Discuss with students:
 - What types of seasonal changes are being observed, and why are they important?
 - Why is it important to track these changes over time?
 - How can this information help manage forests?
 - Students list examples of seasonal patterns (such as leaf growth, temperature changes, or plant cycles).
 - Students explain how observing seasonal patterns supports understanding and decision-making in forest management.
- Tips:
 - Encourage students to connect phenology to real-life observations they have made in their own environment.
 - Students should use vocabulary such as phenology and seasonal patterns in their response.





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REFLECTION AND DISCUSSION

Students reflect on how forest resources support cultural practices, education, and future stewardship.

Students may respond through written reflection, small group discussion, or whole-class sharing.

- Reflection prompts:
 - How do forest resources connect to both cultural traditions and everyday products?
 - Why is it important to pass knowledge and skills from one generation to the next?
 - How does education help prepare people to care for forests in the future?
 - What can observing seasonal changes teach us about the environment and how it should be managed?
- Discussion questions:
 - How are forest materials used to create both functional and cultural products?
 - What makes basket weaving more than just a product-making process?
 - How is knowledge shared and preserved within a community?
 - How does the Sustainable Development Institute connect culture and modern science?
 - Why is it important to prepare future generations for careers in forest management?
 - What is phenology, and how does it help people understand the forest?
 - How do observation and knowledge influence decisions about forest stewardship?
 - How do forests support both people and ecosystems over time?

ASSESSMENT (SHORT QUIZ OR GROUP PRESENTATION)

Student understanding will be evaluated through written responses, discussion participation, and application of key concepts related to forest resources, culture, and education.

Students will demonstrate their learning by:

- Explaining how forest resources are used to create products
- Describing how cultural knowledge is passed through generations
- Connecting education to careers in sustainable forestry
- Interpreting how environmental observation supports stewardship

Short Quiz

1. What is one example of how forest resources are used to create a product?
2. Why is basket weaving important beyond just making an item?
3. What is one way cultural knowledge is passed from one generation to another?
4. How does education at places like SDI help support sustainable forestry?
5. What is phenology, and why is it important for understanding forests?

OR

Group Presentation

Students work in small groups to explain how forests support culture, education, and future sustainability.



Requirements:

1. Include at least two examples from the episode
2. Explain one cultural practice (such as basket weaving)
3. Describe how education supports future forest stewardship
4. Explain how observing the environment (phenology) helps inform decisions
5. Use at least one vocabulary term from the lesson
6. Presentation format options:
 - Poster
 - Slides
 - Verbal presentation with notes

Evaluation criteria:

1. Use of evidence from the episode
2. Clarity and accuracy of explanations
3. Connections between culture, education, and environment
4. Group collaboration and participation

References

For additional information:

- <https://menominee-nsn.gov/CulturePages/BriefHistory>
- <https://www.menominee.edu/sustainable-development-institute>
- <https://www.mtewood.com/>

Additional Resources from LEAF: Wisconsin's K-12 Forestry Education Program:



LEAF-Wisconsin's K-12 Forestry Education Program
College of Natural Resources
University of Wisconsin - Stevens Point

- [Lesson 1: American Indians and the Forest](#)
- [Lesson 7: Sustaining Our Forests](#)
- [Career Profile - McKaylee Duquain](#)
- [Wisconsin Forest Tales](#)
- [K-1st Grade Field Enhancement - Sensing the Forest](#)
- [2nd-3rd Grade Field Enhancement - Observing Forest Interactions](#)
- [4th Grade Field Enhancement - Unlocking a Forest's Past](#)
- [5th-6th Grade Field Enhancement - Studying Forest Layers](#)
- [5th-6th Grade Field Enhancement - Woods Worth](#)
- [5th-6th Grade Field Enhancement - Competition in the Forest](#)