



FORESTS OF THE FIRST STEWARDS

Higher Education Discussion Guide

Forests of the First Stewards | Episode 1 | Curriculum Outline

LEARNING OBJECTIVES:

1. Analyze the historical relationship between the Menominee Nation and forest ecosystems.
2. Evaluate the role of Indigenous stewardship and traditional ecological knowledge in sustainable forest management.
3. Assess the ecological, cultural, and economic significance of maple tree tapping within the Menominee community.

LEARNING PROCEDURE:

1. Show students the first episode "The History"
2. Deliver a lecture that provides more background information.
3. Outline instructions for individual and group activities and due dates.
4. Reflection and Discussion
5. Assessment (Quiz): Can take place during the next class period or submit online.

EPISODE 1 OVERVIEW THE HISTORY:

From above, it looks like a sea of green stretching across northeastern Wisconsin - so large and healthy it can even be seen from space.

The Menominee Nation is located in northeastern Wisconsin, with its tribal government centered in the Village of Keshena. The Menominee people are Indigenous to this region and have lived in relationship with these lands for more than 10,000 years.

Their origin story begins at the mouth of the Menominee River, east of today's reservation, and is tied to the creation of their five clans: Bear, Eagle, Wolf, Moose, and Crane. Historically, the Menominee occupied a vast territory of over 10 million acres across what is now Wisconsin and Upper Michigan.





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Today, the Menominee Forest remains a powerful example of long-term forest stewardship. It is one of the few continuously managed Tribal forests in the United States and reflects a balance between cultural knowledge, ecological care, and economic sustainability. Within this forest, species such as maple, birch, hemlock, ash, basswood, red oak, and white pine thrive. Some trees are over 200 years old!

For generations, the Menominee have practiced sustainable forestry guided by values of respect, responsibility, and balance. These practices include leaving portions of the forest unharvested, protecting sacred and ecological sites, and combining Traditional Ecological Knowledge with modern forestry science. Research has shown that, over time, the forest has remained healthy and resilient even after more than a century of harvesting.

In this lesson, you will explore how history, culture, and forestry are deeply connected through the Menominee Nation's relationship with the forest - and how those connections continue today through education, forestry practices, and cultural traditions such as maple syrup harvesting.

In this lesson, we'll explore how this forest has been cared for across generations, and why it still thrives today.

SUMMARY OF ACTIVITIES:

Reflection and Discussion: 15 to 20 minutes:

- Place students in group of 2 to 4
- Give them 15 minutes to discuss the following topics and have groups present a summary of their discussion/ share their perspectives with the class.
- Potential Topics:
 - a. The philosophy of Chief Oshkosh and management practices reflects that philosophy.
 - b. Federal Indian policy impacts on indigenous forest management on reservations.
 - c. Menominee traditional and cultural uses of wood and forest products.
 - d. Significance of maple tree tapping - ecological, cultural and economic.

Visual Display (Group) Activity: Divide students into groups of 2 to 4. Have each group created an interactive visual display that tells the story of the Menominee Nation. Students must include pictures/illustrations. Each display should include:

- a. Menominee use of TEK and science in forest management
- b. Menominee belief system and land ethic
- c. Federal Indian Policy and Menominee Tribal Enterprises
- d. Significance of Maple tree to the Menominee





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Research (Individual) Activity: Each student will submit a research paper between 2 and 4 pages in length (not including the title page). See rubric on the last page. The research paper must contain the following:

- e. Title Page: Title, Student's Name, Date and Course
- f. History of the Menominee Tribe
- g. Cultural and traditional uses of forest products – ex. Maple syrup
- h. Federal Indian Policy and Menominee forest management
- i. Traditional Ecological Knowledge and practices of Menominee
- j. Menominee belief system and land ethic
- k. Cultural, Political and Economic significance of Menominee Tribal Enterprises
- l. References page (MLA format) and Citations

Assessment: Quiz

This quiz will serve as an assessment to measure students' retention of information. This quiz can be administered in class or as an online assignment. Quiz should consist of 5 to 10 questions.

Potential Quiz Questions:

1. Name at least two traditional indigenous uses of maple syrup.
2. What was the significance of the LaFollette Act of 1908?
3. Who currently manages the Menominee forests?
4. What three components make up the Menominee land ethic?
5. How did the Dawes Act (1887) of the Allotment Era conflict with the Menominee belief system?
6. What is sugarbush and what is its significance in Menominee culture?
7. What are the three components of the Menominee belief system and how is that demonstrated in how their management practices?
8. Define sustained yield.
9. What is the Continuous Forest Inventory?
10. What is the MTE?

ADVANCED VOCABULARY:

1. **Continuous Forest Inventory (CFI)** - Forest monitoring program, originated by the Menominee and designed to allow the Bureau of Indian Affairs to measure average growth on forested reservations. ([Trosper 2007](#))
2. **Federal Indian Policy** - A set of policies and laws established between the 17th and 19th century that dictated legal and political interaction between the US federal government and Native American tribes. ([Bureau of Indian Affairs](#))
3. **Forest cover type** – Classification of forests based on dominant tree species in an overstory of a specific site. ([CO State Forest Service, Colorado State University](#))
4. **Land ethic** - Term coined by Aldo Leopold referring to the moral obligation that humans have to the natural world. ([The Aldo Leopold Foundation](#))
5. **Sustained-yield** - Forest management practice where the harvesting rate is balanced with and does not exceed the growth rate of the forest. ([Washington Washington's State Trust Lands, Communities and Schools Network](#))
6. **Sugarbush** – An area within a Maple stand that is maintained to harvest maple sap to produce maple sugar. ([Milwaukee Public Museum](#))
7. **Traditional Ecological Knowledge (TEK)** - Evolving knowledge acquired over generations across indigenous communities because of direct interactions with the environment. ([US Fish and Wildlife Service](#))
8. **Wigwam** - A domed or cone-shaped structure historically used by indigenous communities in North America for housing. ([The Canadian Encyclopedia](#))



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BACKGROUND INFORMATION:

The Menominee Nation has been actively managing their forests for more than 150 years. The Menominee Forest is more than 200,000 acres consisting of thirteen **forest cover types (MTE)**. Menominee forests are home to 30 species of trees; some examples include: White pines (*Pinus strobus*), Hemlock (*Conium maculatum*), Sugar Maple (*Acer sacrum*), Oaks (*Quercus spp.*), Aspens (*Populus spp.*), and Hickories (*Juglandaceae spp.*). Some White pines (*Pinus strobus*) are more than 200 years old. The Menominee forests also support a diverse cast of wildlife such as bears, otters, cormorants, and trout throughout the more than 300 miles of streams in the forests. ([American Forests](#))

The dominating forest cover types are Northern Hardwood (32%) and White Pine (16%) (Source: <https://www.mtewood.com/SustainableForestry>) The Menominee Tribal Enterprises (MTE) manages this vast forest utilizing strategic harvesting practices, **sustained yield** management, and **traditional ecological knowledge (TEK)**. MTE has built on understanding and integrating advanced science, technology, and business within a cultural context. The MTE produces 14 million board feet of saw timber annually. Their management practices maintain one of the most diverse and vital forests in Lake States.

Throughout the 1800s and in the early 1900s, the US federal government-maintained control over reservations. This control limited the influence that indigenous tribes had on federal policy. Despite the control of the government during the **Federal Indian Policy** period, the Menominee Tribe was able to affect critical management of their forests.

FEDERAL INDIAN POLICY TIMELINE:

- ❖ **The Removal Era and Reservation System (1830 – 1891)**
 - The policies of the Indian Removal Act (1830 to 1850) forced many indigenous tribes from their lands, forcing them west of the Mississippi River
 - The “Trail of Tears” resulted in mass deaths across the Cherokee, Choctaw, Creek, Chickasaw and Seminole tribes.
 - The Reservation System (1850–1891) as the result of treaties, statutes, and executive orders, required tribes to move to territories and settle on “reserved” portions of land. Often small and confined areas.
- ❖ **The Allotment and Assimilation Era (1887 – 1934)**
 - The Dawes Act (1887) - fragmented communal reservation lands, assigning “allotments”, individual parcels of land, to tribal members.
 - These allotments were held in trust by the federal government – tribal members could not lease or sell their allotments.
 - This policy resulted in Native American land control to go from 138 million acres (1887) to 48 million acres (1934).
- ❖ **The Reorganization Policy (1934 – 1953)**
 - Indian Reorganization Act (1934) - Ended the allotment and reaffirmed the inherent power of tribal governments
 - Formalized tribal governments via written constitutions and charters for tribes that would agree to federal oversight
- ❖ **The Termination Era (1953 – 1968)**
 - Termination of federal recognition of Tribes
 - Meant to promote assimilation of Native Americans
 - Public Law 280 (18 U.S.C. § 1162) in 1953 transferred federal criminal jurisdiction and some civil jurisdiction to specific state over tribal lands that fall within their boundaries



❖ The Self-Determination Era and Self-Governance (1968 - present)

- Between late 1960s and early 1970s, the federal Indian policy shifted towards supporting Indian self-determination.
- Tribal Self-Governance Act (1994) - transferred control to tribal governments for funding and decision-making for certain federal programs, services, functions and activities - Indian Health Service or Department of Interior

THE LAFOLLETTE ACT (1908):

The Menominee Tribal leaders had managed to protect their forest from harvesting non-tribal members, but this was not without challenges. A bill was introduced by Senator Sawyer and Representative Guenther of Wisconsin that would allow private companies to harvest timber from the Menominee forest. The bill was blocked by Senator LaFollette (Wisconsin). In 1908, the LaFollette Act was passed by Congress, which supported the sustainable management practices that the Menominee championed. The LaFollette Act provided the Menominee with the legal means to resist non-sustainable management practices on their reservation by:

1. Assured timber would be cut sustainably
2. Established a tribal mill

The creation of the tribal mill conflicted with the Federal Indian Policy (Allotment era), as this period sought to “break up the tribal mass” (President Theodore Roosevelt). The mill would provide the means for the Menominee to maintain self-sufficiency and to continue managing their land together as a tribe. ([Trosper 2007](#))

TRADITIONAL ECOLOGICAL KNOWLEDGE AND THE MENOMINEE TRIBAL LAND ETHIC:

“Start with the rising sun and work toward the setting sun, but take only the mature trees, the sick trees, and the trees that have fallen. When you reach the end of the reservation, turn and cut from the setting sun to the rising sun and the trees will last forever.” -Chief Oshkosh

The Menominee employs a management approach that consists of both science and traditional ecological knowledge. This is visible in their practice of sustained yield. There are three principles that make up the Menominee belief system:

1. The Menominee creation story
2. All things have spirits and should be respected. The forest is often referred to as “he”.
3. The land belongs to the entire tribe, protecting the land is everyone’s responsibility.

Sustainability is an important component of the Menominee culture. They see themselves as stewards of the forests and regard that stewardship as a sacred responsibility. This responsibility means, to the Menominee, to never overtake natural resources and follow the natural cycles. The Menominee also have a deep regard for biodiversity, with their management practices ensuring that it is sustained, such as **Continuous Forest Inventory (CFI)**. This is evident in the Menominee **land ethic**, which contains three elements:

1. The forest must remain sustainable for future generations.
2. The forest must be carefully managed, and the needs of the people are provided for.
3. All pieces of the forest are kept maintaining diversity.



Menominee believes that the value of healthy forests extends far beyond economic metrics. Ecological, cultural, and spiritual value are just as important to them. This value system is often exemplified in management practices, such as forest managers allowing some trees to reach full maturity before they are harvested. By using this method, the Menominee has been able to harvest half a billion board feet of lumber since the 1800s.

As a result of employing science and TEK there is more standing timber in the Menominee forests than there was 150 years ago. ([American Forests](#))

THE MENOMINEE AND MAPLE SYRUP:

The Menominee say that Nokomis, the grandmother of Manabush or Wenebojo, showed him how to insert a small piece of wood into each maple tree so the sap could run down into the placed below. When Manabush tested it, it was thick and sweet. He told his grandmother it would never do to give the Indians the syrup without making them work for it. He climbed to the top of one of the maples, scattered rain over all the trees, dissolving the sugar as it flowed into the birchbark vessels. Now the Indians must cut wood, make vessels, collect the sap, and boil it for a long time. If they want the maple syrup, they have to work hard for it. ([Milkwaukee Public Museum](#))

Chief Manabush did not want his people to become lazy by only harvesting the sap that freely flowed, so he instructed them to produce syrup from the sap. This process was timely and challenging. Maple syrup and its production would become a central fixture in the lives of the Menominee people. The sugarbush was at the center of the cultural, ecological, and economic significance for the Menominee. As the Spring brought warmer weather, families would move to a specific area of the maple forest, there they would set up camp and a **wigwam**. Though harvesting maple sap and producing sugar is hard work, it is also viewed as a enjoyable and celebratory in Menominee culture. Wigwams were erected and maintained each year in the sugarbush, typically there was one dedicated to storing the birchbark equipment, the other was used to convert sap into sugar. Maple sugar/syrup





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was often at the heart of celebration and daily life for the Menominee. Syrup was used to season vegetables, fruits, grains and fish. It was often added to medicine to entice children to take it and water, creating a refreshing beverage. ([Milkwaukee Public Museum](#))

During the 1600s Native Americans would trade maple syrup with fur traders for wool and other goods. Europeans realized the value of maple syrup and were taught how to harvest it by the Menominee, Ojibwe, and other tribes. This indigenous knowledge would be the foundation of a booming industry. Though this industry declined in the 1900s due to cheaper alternatives, now the market for organic maple syrup is making a comeback. As consumers shift towards healthier lifestyles, organic maple syrup has increased in popularity. This gift from the earth is not only tasty, but it is also nutrient rich! Wisconsin currently ranks 4th in the US for maple syrup production. ([Maple Valley Cooperative](#))

FURTHERING THE MENOMINEE APPROACH:

Indigenous management ideas that were able to be implemented on the Menominee reservation are: cutting at a rate consisted with long term sustainability, maintaining a large growing stock, uneven aged management, long-term monitoring and priority of forest management goals. These management practices are based on the Menominee land ethic.

CONTINUOUS FOREST INVENTORY (CFI)

Sustainable management relies on sound estimates of growth rates. In the 1950s, the Branch of Forestry, Bureau of Indian Affairs (BIA) established the Continuous Forest Inventory (CFI). This practice originated from the Menominee tribe and enables the BIA to estimate average growth on reservations. The CFI program established permanent plots that are measured every ten years; these measurements inform the allowable cuts in forests of each reservation.

COLLEGE OF THE MENOMINEE NATION

The Sustainable Development Institute was established in 1993 by the College of the Menominee Nation with the institute mission being to provide a mechanism for the Menominee to use their relationship with their forests to guide their knowledge, experiences and expertise of sustainable management and new sectors and economies. The institute provides a 2-year degree that provides students with the foundation to pursue a bachelor's degree.

([Trosper 2007](#))





RUBRIC FOR RESEARCH PAPER:

	4	3	2	1
Title Page Title, Student Name, Date and Course	Full Title Page	3 of 4	2 of 4	1 of 4
Lenth 2 to 4pgs	2 to 4pgs	>4pgs	1.5pgs	<1.5pgs
Font 12pt Times New Roman	Correct Font	N/A	N/A	Incorrect Font
Reference Page and Citations	MLA Formatted and In-Text Citations	N/A	N/A	N/A
Mechanics	Correct capitalization, punctuation and no spelling errors	Correct capitalization and punctuation, minimal spelling errors	Correct capitalization and punctuation, spelling is fair	Incorrect capitalization and punctuation, spelling is poor
Composition Research topics	All required topics covered	4 of 6	3 of 6	2 of 6
Overall Writing	Excellent: Writing has great structure, is easy to follow, incorporates all advanced vocabulary covered in lecture, clear and concise.	Good: Writing has good structure, somewhat easy to follow, incorporates some advanced vocabulary covered in lecture, clear and concise.	Fair: Writing has some structure difficult to follow, lacks advanced vocabulary covered in lecture, and lacks clarity.	Need Improvement: Writing does not make sense, lacks structure and clarity.

Total Points Earned: _____ out of 28 _____%



REFERENCES

For additional information:

- <https://menominee-nsn.gov/CulturePages/BriefHistory>
- <https://www.menominee.edu/sustainable-development-institute>
- <https://www.mtewood.com/>
- [Trosper 2007](#)
- [\(Milkwaukee Public Museum\)](#)
- [Maple Valley Cooperative](#)
- [American Forests](#)
- [The Canadian Encyclopedia](#)
- [US Fish and Wildlife Service](#)
- [Washington Washington's State Trust Lands, Communities and Schools Network](#)
- [The Aldo Leopold Foundation](#)
- [CO State Forest Service, Colorado State University](#)
- [Bureau of Indian Affairs](#)

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](#)