Lesson 3: Help Wanted – Lumberjacks

NUTSHELL

In this lesson, students learn about the steps involved in the logging process during the late 1800s. They discover how a northern Wisconsin tree ended up as lumber in a house in Des Moines, Iowa, and arrange, in order, all the people who were involved in turning the tree into lumber. Students examine the impact logging had on First Nations of Wisconsin and how it forever changed Wisconsin's forests.

ENDURING UNDERSTANDINGS

- As Europeans settled Wisconsin, forests provided jobs for a growing immigrant workforce, resources for building the nation, and dollars for a new state economy.
- Early logging, the resultant cutover, attempts to change land use, and the reforestation of pre-existing forest lands were activities that contributed to the need for forestry.
- Early logging impacted the way of life for First Nation people of Wisconsin.

ESSENTIAL QUESTIONS

- How were Wisconsin's trees turned into lumber in the 1800s?
- How did logging change the forests in northern Wisconsin?
- What was the impact of logging on Indigenous tribes in Wisconsin?
- How have Wisconsin's forests helped other cities or states grow?

OBJECTIVES

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

- Describe methods that were used to log Wisconsin's forests in the 1800s.
- Summarize the impact of logging on Wisconsin's forests.
- Explain the impact of logging on First Nations of Wisconsin.
- Understand the role that Wisconsin's forests played in providing building materials for other areas in the nation.

SUBJECT AREAS

Act 31, Language Arts, Social Studies

LESSON/ACTIVITY TIME

Total Lesson Time: 145 minutes

- Introduction.....5 minutes
- Activity 1.....30 minutes
- Activity 2.....60 minutes
- Activity 3.....45 minutes
- Conclusion.....5 minutes

STANDARDS CONNECTIONS

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

BACKGROUND INFORMATION

Wisconsin's forests played a key role in the building of this country. **Lumber** was the construction material of choice for many settlers. The demand for lumber for use in Wisconsin increased as the population of European settlers rose from 3,000 in 1830, to 30,000 in 1840, and to 300,000 in 1850.

In addition, Wisconsin wood was used in many places other than Wisconsin. As settlement in the United States expanded, materials were needed to build houses, farm buildings, and towns. Many of the places being settled were not as fortunate as Wisconsin to have wood resources. Many areas in the country lacking forests got their wood from Wisconsin.

As early as 1840, Wisconsin's forests were helping meet the demands of westward migration and settlement. When the Civil War ended, the need for Wisconsin lumber increased dramatically. By 1869, the annual harvest of the state reached one billion board feet. (A **board foot** is a volume of lumber equal to 12"x12"x1" or 144 cubic inches.) This increased to a peak of 3.4 billion board feet in 1899. That year Wisconsin took over as the nation's chief lumber producer. Wisconsin lumber was used around the nation for homes, barns, sidewalks, furniture, boats, paper, gunstocks, barrels, etc.

The process of getting usable lumber out of Wisconsin's forests in the late 1800s was not an easy task. Thousands of individuals were needed to help turn standing trees into marketable lumber. Northwoods lumber camps and whole communities sprung up overnight. Coming to this area in search of "a living" were countless immigrants from Europe – all to work in the big timber or sawmill for 50 cents to one dollar per day.

The demand for Wisconsin lumber significantly impacted the lives of First Nation people living in Wisconsin. Wisconsin's **First Nations** were forced to give up a lot of land as lumber companies spread throughout northern Wisconsin. In the 1800s, both the Ojibwe and Menominee Tribes ceded millions of acres of land to the U.S. government. Most of this land was forested. It is estimated that prior to the treaties of the 1800s, the Menominee people occupied over 10 million acres of land in Wisconsin and Michigan. By 1854, the Menominee had only 276,000 densely forested acres along the Wolf and Oconto Rivers. In 1856, the Stockbridge-Munsee were given some of the Menominee Reservation land, leaving the Menominee with only 236,548 acres of land. Similarly, it was estimated by historian David Wrone that in the treaties of 1836, 1837, 1842, and 1854 the Ojibwe ceded millions of acres of land in the Great Lakes region that included approximately 170 billion board feet of timber.

In 1864, an Ojibwe delegation visiting Washington insisted that in the agreement they had sold the timber rights on the land and not the rights to the land itself; "From the usual height of cutting a tree down and upwards to the top is what I sell you, I reserve the root of the tree." The U.S. government did not agree.

White pine was the tree of choice for lumberers. It was tall and straight, and it floated easily on water. Logs were hauled by sleighs to the riverbanks during the winter. During the higher water levels of spring, logs were floated down river to the sawmills. Lumber companies often depended on the waterways to send their lumber to faraway markets. Lumber was bound together in rafts and floated to locations like Bettendorf (Iowa), St. Louis, and New Orleans. Unfortunately, once an area was cleared of white pine, lumber companies left, most of the time without cleaning up any debris and without replanting trees.

What seemed like an infinite resource was gone in a little over half a century – first the white pine, then the red, then the hemlock, and finally the hardwoods. Left behind was a landscape devoid of the great forests that once awed the first explorers and had sustained Wisconsin's First Nations for many generations. This same story was repeated in other states of the Great Lakes region, including northern Minnesota and Michigan.

> "Every farm woodland, in addition to yielding lumber, fuel and posts, should provide its owner a liberal education. This crop of wisdom never fails, but it is not always harvested."
>
> ☘ *Aldo Leopold* ☘

For Each Student

- Copy of Student Pages ***1A-B, Lumberjack Logging Story***
- Copy of Student Pages ***2A-B, There is More to the Logging Story***
- One job title or description card
- One corresponding drawing sheet label for their job
- Colored pencils, crayons or markers

For the Teacher

- Google resources to support this lesson can be found at ***uwsp.edu/wcee/wcee/leaf/leaf-curriculum/k-12-forestry-lesson-guides***
- Copy of Teacher Page ***1, Bucking Logs***
- Copy of Teacher Page ***2, Tribal Lands Map***
- Copy of Teacher Page ***3, Current Reservation and Tribal Lands Map***
- Copy of Teacher Page ***4, Where Did All the Trees Go?***
- Copy and cut apart Teacher Pages ***5A-C, Job Titles and Descriptions Cards*** (enough for one title or description per student in your class)
- Copy and cut apart two sets of Teacher Page ***6, Drawing Sheet Labels*** (enough for each student to have their own; partners will have the same label)

PROCEDURE

Introduction

Show Teacher Page ***1, Bucking Logs*** which shows 19th century loggers. Review with students why forests were important to settling Wisconsin by asking, "Why was the lumber business important to early citizens of Wisconsin?" *(It provided building materials, jobs, and contributed to the economy.)* Tell students that today they will be looking at what was involved in the **logging** process. They will be learning about jobs like those shown in the picture. Ask students what things needed to be done to a tree in the forest to turn it into boards for the lumberyard in those days. *(Cutting the tree down, delimbing it, cutting it into lengths, hauling it to the river, floating it to the mill, sawing the log at the sawmill, transporting the boards to the lumberyard.)* If your students are having trouble coming up with ideas, ask them leading questions such as, "Does lumber in a lumberyard still have bark on it?" or "How does the tree get from the forest to the lumberyard?"

Activity 1: Logging Story

1. Tell students that today they are going to be learning about how trees in the late 1800s went from standing in Wisconsin's forests to being wood in a lumberyard. Tell students that they are going to read a story, and they should try to remember the jobs that are mentioned. Make sure all students have a copy of Student Pages ***1A-B, Lumberjack Logging Story***. Have your students take turns reading the Lumberjack Logging Story to the class or read it aloud to them.

2. Discuss the story with your students. Ask them why there were so many people involved in the process. *(Many different jobs to do.)* Ask if they think this was easy or hard work. *(Answers will vary.)* Ask why logging was done during the winter. *(Made it possible to transport logs on the slippery snow.)* Ask why the trees (lumber) ended up in Iowa. *(Iowa was a prairie state and lacked many trees.)* Ask them how the lumber got to Iowa. *(By raft.)* Ask them where else they think Wisconsin lumber could have gotten shipped on a raft. *(Anywhere along the Mississippi, Missouri, or other rivers that connect to the Mississippi River.)* Ask students to think about how the forest looked before it was logged and how it looked after it was logged. *(A lot of trees, wildlife, etc. before logging; no trees other than small ones, less wildlife, a lot of brush, scraps left scattered.)*

VOCABULARY TERMS

Annuity: Yearly payments and goods.

Board Foot: A volume of lumber equal to 144 cubic inches (i.e., 12"x12"x1").

Bucker: The person whose job is to cut the tree trunk into logs.

Cede: Give up.

Crosscut Saw: A saw designed to cut across the grain of wood; what lumberjacks used in the 1800s and early 1900s to saw trees down.

Cruiser: The person who estimates the amount of wood in a forest before it is cut.

Cutover: Land that has been logged. This term is often used as "the cutover," which refers to northern Wisconsin after it was heavily logged during the period from the 1850s to the 1920s.

Feller: The person who used a crosscut saw to saw a tree down.

First Nations: Indigenous people who were the earliest inhabitants of an area.

Fitter: The person who cuts a notch on one side of the tree in preparation for cutting it down.

Hay Man on the Hill: The person who spreads hay on icy slopes to make it safe for the sleighs to travel.

Logging: The removal of trees from the forest for lumber.

Lumber: Boards sawed from logs.

Lumberjack: A term used for individuals who work in the woods during a logging process.

Marker: The person who pounds the lumber company's stamp into the end of each log.

Notch: A V-shaped gap made in a tree that is going to be cut down.

Perseverance: Ability to keep going and not give up even when things get hard.

Reservation: An area of land reserved for a tribe or tribes under treaty or agreement with the United States.

River Pig: The person who floats the logs down the river to the lumber mill.

Scaler: The person who measures each log and estimates how much wood is there.

Skidder: The person who drags the logs out of the forest and loads them onto sleighs.

Sky Bird: The person who stands on top of the logs on the sleigh and arranges them into a pile.

Sleigh: A horse-drawn vehicle with runners instead of wheels that was used to haul a pile of logs or other cargo.

Sustainable: The ability for something to be maintained for use today and in the future.

Swamper: The person who cuts the branches off the tree after it has been cut down.

Teamster: The person who brings the loaded sleighs down to the river with horses or oxen.

Treaties: Agreements between nations.

Activity 2

1. Tell students that next they are going to see how well they remember the jobs from the story they read. Have them put the story where they cannot see it. Pass out one job title or description card made from Teacher Pages ***5A-C, Job Titles and Descriptions Cards***, to each student. Explain that there are two types of cards. One type contains the name of a job from the Logging Story, and the other type contains a description of that job. Tell students that you want them to move around the room and find the student with the description that matches their job title or vice versa. Depending on how many students you have, some cards may need to be repeated, or some students may need to match more than one card. Once students have paired up with who they think should be their partner, go around the room and check to see if groups are correct.

2. Now that all of the students are correctly matched up, have them sit back down at their desks. Hand out the drawing sheet labels made from Teacher Page ***6, Drawing Sheet Labels*** to the respective students (each pair of students who matched up a particular job will draw their own picture and get their own drawing sheet label). Ask your students to draw and/or color a picture that represents someone doing their specific job. Use the information from the drawing sheet labels for ideas. Have students glue, tape, or staple their drawing sheet label to their drawing.

3. After all the students have completed their drawings, work as a class to organize the jobs in the correct order. During this process you will post the pictures on a bulletin board or wall in the order that they were done during the logging process. (This could also be done by hanging a rope or clothesline across the classroom and using clothespins or binder clips to attach drawings to the rope.) Do this by asking the students which job came first. *(Cruiser.)* Have the students with cruiser pictures bring them up and help them post them. Continue working through the jobs until all have been posted. Have the students study the order and debate if any are in the wrong order. (Correct Order: Cruiser, Fitter, Fellers, Swamper, Bucker, Skidder, Sky Bird, Hay Man on the Hill, Teamster, Scaler, Marker, River Pig.)

4. Discuss with your students what they think it would have been like to be a **lumberjack** in the late 1800s. Be sure to include the role of women. Ask what women would have done. (They weren't usually lumberjacks, but some women had the job of being the cook at the lumberjack camp.) Tell students that many women were on their own while their husbands worked in the woods. Since many lumberjacks were farmers, the women stayed home and kept the farms going over the winter while their husbands were logging in the northwoods. Ask students to think about what this would have been like for the women.

5. Ask students what they think happened to the Menominee and Ojibwe who lived in the areas that were logged during this time. *(Allow students to share their thoughts, accept all answers at this time.)*

ACTIVITY 3: There is More to the Logging Story

1. Show students Teacher Page ***2, Tribal Lands Map***. The map can also found at ***wisconsinfirstnations.org/map***. Ask students to remember which tribal lands in Wisconsin were originally covered by forests. *(Forested lands in what is now Wisconsin were mostly Menominee and Ojibwe lands.)* Tell students that like with all history, Wisconsin's history can be told from multiple perspectives and that during Activity 3 you are going to look at the

history of logging in Wisconsin from the perspective of the Menominee and Ojibwe people who had lived on the land that is now Wisconsin for many generations.

2. Make sure each student has a copy of Student Pages ***2A-B, There is More to the Logging Story***. Read the first paragraph of the story aloud. Ask students if they can imagine what one million acres of land looks like. Accept answers then explain that one million acres is the same as 1,562.50 square miles which is equal to a square that has sides of about 40 miles. Think of a location that is about 40 miles from your school that most students would be familiar with. Tell them that one million acres of land would be a square with sides that long. Ask students to keep this image in mind as they continue this activity.

3. Tell students to listen and follow along as you read about the Menominee. Discuss the following questions at the end of this section:
   - What did Chief Oshkosh do to keep the Menominee people living in what is now Wisconsin? *(When he realized the land in Crow Wing was not good for the Menominee people, he traveled to meet with President Fillmore and worked out an agreement so the Menominee could stay in Wisconsin.)*
   - How did the treaties change where and how the Menominee people lived? *(They all had to move to the reservation and could only use reservation lands for hunting, gathering, and fishing. The reservation lands were much smaller [less than one-quarter] of the land they were living on before 1854. This made it difficult for the Menominee to meet their needs. There weren't enough resources on the reservation lands for that many people.)*
   - How did the Menominee overcome their challenges? *(They came up with a way to use the forests to provide for their needs. They sustainably harvested the forests using the idea of Chief Oshkosh.)*
   - Ask students if they have any questions. Try to discuss/answer them. It is also okay to say you don't know and try to think of ways to come up with the answers.

4. Read about the Ojibwe. Discuss the following questions at the end of this section:
   - What happened at Sandy Lake and how did the Ojibwe and Chief Buffalo respond? *(The Ojibwe were forced to travel a long distance to Sandy Lake just before winter. When they arrived, there weren't enough food and supplies and their payments weren't there. They waited for several weeks. Many Ojibwe died. When they left to return home, they were hungry and ill and many more did not survive the winter trip home. After this, Chief Buffalo went to meet with President Fillmore to ask him to allow the Ojibwe to stay in Wisconsin.)*
   - How did the treaties change where the Ojibwe people lived and called home? *(It got a lot smaller – about one-tenth or one-fifteenth the size – and was made up of four different reservations spread throughout the original lands of the Ojibwe. Even though the Ojibwe could still hunt, gather, and fish on ceded territories, much of this land had been harvested and no longer provided enough resources for the Ojibwe. Many had to agree to let non-tribal lumber companies harvest their trees so they could buy food and supplies for their families.)*

5. Project/share Teacher Page ***3, Current Reservation and Tribal Lands Map***. Point out the Menominee Reservation and then point out the four Ojibwe reservations created by the Treaty of 1854: Bad River, Lac Courte Oreilles, Lac du Flambeau, and Red Cliff.

Conclusion

Project/share Teacher Page 4, ***Where Did All the Trees Go?*** Ask students to comment on the photo. Ask them where all the trees went. *(They were cut down for lumber.)* Ask the students if they know what areas were logged off first. *(Near the rivers.)* If they don't remember, give them a hint that it had something to do with how they transported the logs. Tell students that as time went on, railroads were built to take the logs out of the areas that were not near the rivers. Ask students to guess what eventually happened. *(All of Wisconsin's forests had been cut down EXCEPT forests on the Menominee Reservation.)* Refer back to the maps used in Lesson 2. Ask students what the Wisconsin vegetation map would have looked like in 1920? *(Not as much forested land and even where there were forests, they would have a lot fewer trees.)* Ask students to remember that this also impacted Wisconsin's First Nations. Tell students that in the next lesson they will learn what happened to this land following the cutover (the cutting of all trees).

CAREERS

The career profile in this lesson is about John Lawrence and can be found on page 90. A careers lesson that uses this information begins on page 222.

SUMMATIVE ASSESSMENT

After reminding the students of how Wisconsin lumber was shipped to places like Iowa in the story, ask them to write a paragraph that describes where they think Wisconsin forest products are used today. *(They are used worldwide.)* If your students need additional work in writing arguments, consider extending this task to have them research and provide evidence that a forest product made in Wisconsin is used outside of Wisconsin. You can use the same/similar rubric from Lessons 1 and 2. Consider showing students the following video that shows wood from Menominee Tribal Enterprises (Wisconsin) has been used to make basketball courts for the NCAA Final Four tournament. Menominee Tribal Enterprises has supplied lumber for Final Four basketball courts since 1985. It has also provided the flooring for the Tokyo Olympic Basketball Courts and the Milwaukee Bucks' Fiserv Forum Basketball Court.

- Final Four Flooring video: ***www.mtewood.com/Videos/2019NCAATimelapse***
- Website showing 35 Years of Basketball Flooring Experience: ***www.mtewood.com WoodSuppliers/BasketballFlooring***

Now that students have learned about the logging process of the 19th century, have them research today's process of turning trees into lumber and create a Venn diagram to compare and contrast the two processes.

SOURCES

Books and Articles

Fries, R. *Empire In Pine: The Story of Lumbering In Wisconsin 1830-1900.* Madison, WI: The State Historical Society of Wisconsin, 1951.

This lesson adapted with permission from Golden, R. et. al. *The Changing of the Land Lesson 3, The Logging Process.* Amherst Junction, WI: Central Wisconsin Environmental Station, 2002.

Loew, Patty. *Indian Nations of Wisconsin: Histories of Endurance and Renewal.* Madison, WI: Wisconsin Historical Society Press, 2013.

Ostergren, R. C. and Vale, T. R. *Wisconsin Land and Life.* Madison, WI: The University of Wisconsin Press, 1997.

Rosholt, M. *Lumbermen on the Chippewa.* Rosholt, WI: Rosholt House, 1982.

Rosholt, M. *Pioneers of the Pineries.* Amherst, WI: Palmer Publications, Inc., 1979.

Steen-Adams, M., Langston, N., and Mladenoff, D. (2010). *Logging the Great Lakes Indian Reservations: The Case of the Bad River Band of Ojibwe.* American Indian Culture and Research Journal, 34(1). 41-66. ***escholarship.org/content/qt8jv6z9gh/qt8jv6z9gh_noSplash_511012cc4ad9b6cb2261c92e29a7792b.pdf***.

Maps Used with Permission

Wisconsin First Nations: American Indian Studies in Wisconsin, 2018. Current Reservation and Tribal Lands Map [map]. ***wisconsinfirstnations.org/current-tribal-lands-map-native-nations-facts***.

Wisconsin First Nations: American Indian Studies in Wisconsin, n.d. Wisconsin First Nations Tribal Lands Map [map]. ***wisconsinfirstnations.org/map***.

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

PBS Wisconsin, n.d. "Wisconsin Biographies." *Chief Oshkosh (Leader in Troubled Times 1795-1858).* ***pbswisconsineducation.org/bio/chief-oshkosh***.

Wisconsin First Nations, Ogichidaa ("warrior") Storytellers, and the Great Lakes Indian Fish and Wildlife Commission (GLIFWC), n.d. *(Mikwenda-agoziwag) They are Remembered: Sandy Lake*. ***wisconsinfirstnations.org/mikwendaagoziwag-they-are-remembered/#:~:text=In%20the%20winter%20of%201850,and%20to%20tell%20their%20story***.

Websites

Mashkiiziibii: The Bad River Band of Lake Superior Chippewa, n.d. ***www.badriver-nsn.gov***.

Wisconsin First Nations: American Indian Studies in Wisconsin, n.d. ***wisconsinfirstnations.org***.

Wisconsin Historical Society. *Historical Essay: Logging – The Industry That Changed the State*. ***www.wisconsinhistory.org/Records/Article/CS409***.

Wisconsin Forest Tales

Pferdehirt, Julia. *Chapter 2: Roll Out or Roll Up* from *Wisconsin Forest Tales* (P. Harden, Illus.) with input from Frechette, J., Hoffman, M. and the Menominee History Committee (University of Wisconsin-Stevens Point, Stevens Point, WI: Natural Resource Foundation of Wisconsin, LEAF - Wisconsin's K-12 Forestry Education Program, and Wisconsin DNR. Black Earth: Trails Custom Publishing, 2004.

Readers follow John McDonald, a 14-year-old Irish immigrant boy, as he heads to lumberjack camp for the first time. Johnny needs to earn money to support his mom and sisters now that his father is gone. Johnny learns what it takes to make it as a lumberjack and about all the different jobs that need to be done in a lumber camp. Vocabulary related to lumber camp is defined throughout the chapter. Print copies of the book are available to check out through LEAF ***(leafprogram.org)*** and a classroom set is included in the LEAF 4th Grade Kit ***(uwsp.edu/wcee/wcee/kits)***. All Wisconsin educators can request a complimentary copy from the LEAF program as well by emailing ***leaf@uwsp.edu***. Online PDFs of Chapter 2 can be found on the DNR website ***dnr.wisconsin.gov/education/WisconsinForestTales***.

Career Profile

John Lawrence, Logger

Meet John Lawrence – co-founder and owner of Twin Forest Products, LLC in Marathon, Wisconsin. His company harvests (cuts down) trees and operates a sawmill. John buys standing trees from people who own land or from counties and other government organizations. Loggers cut down trees using machines like forwarders, harvesters, and chainsaws. Once trees are cut, the wood is hauled using company trucks to their sawmill.

John grew up in Marathon where he and his brother, Jeff, learned to use a chainsaw for cutting firewood. They also had a job on a local farm where they peeled poplar trees. Besides these experiences, John and Jeff didn't have any previous knowledge or experience in logging. After graduating from high school, John started working full-time at a sawmill. In 2001, John and his brother decided to start their own company with only two chainsaws, a tractor, and each other. During the first few years, both John and Jeff continued to work their other full-time jobs. John and Jeff, like many loggers, taught themselves while working. They soon were able to buy special machines like forwarders and harvesters to help them with their work. John explains that operating a forwarder or harvester requires a lot of experience and practice, and operators need to know how to take care of their machines. John mentioned that logging simulators can give people an idea of how equipment works, but nothing beats learning on the job.

John Lawrence

John says in addition to being skilled with logging equipment, operators need to know the tree species growing in Wisconsin. John says that many skills can be learned on the job, but that it would also be helpful to take classes in high school or technical college to learn more. John's son, who is currently a senior in high school, is in the process of learning how to operate a forwarder. He is gaining basic mechanical skills and learning how to identify different tree species. As he gains more experience, he will have the chance to grow within the company.

According to John, to be a successful logger, you need to be a hard worker and willing to work in different weather conditions like really hot or really cold weather. It is also important to be able to stay focused on a task until it is done. John said that when he worked as a logger, he enjoyed being outside and operating equipment. He also liked that you don't have to spend a lot of extra time in school to become a logger. If you enjoy working alone, John thinks logging could be a good job for you.

NOTES

NOTES

BUCKING LOGS

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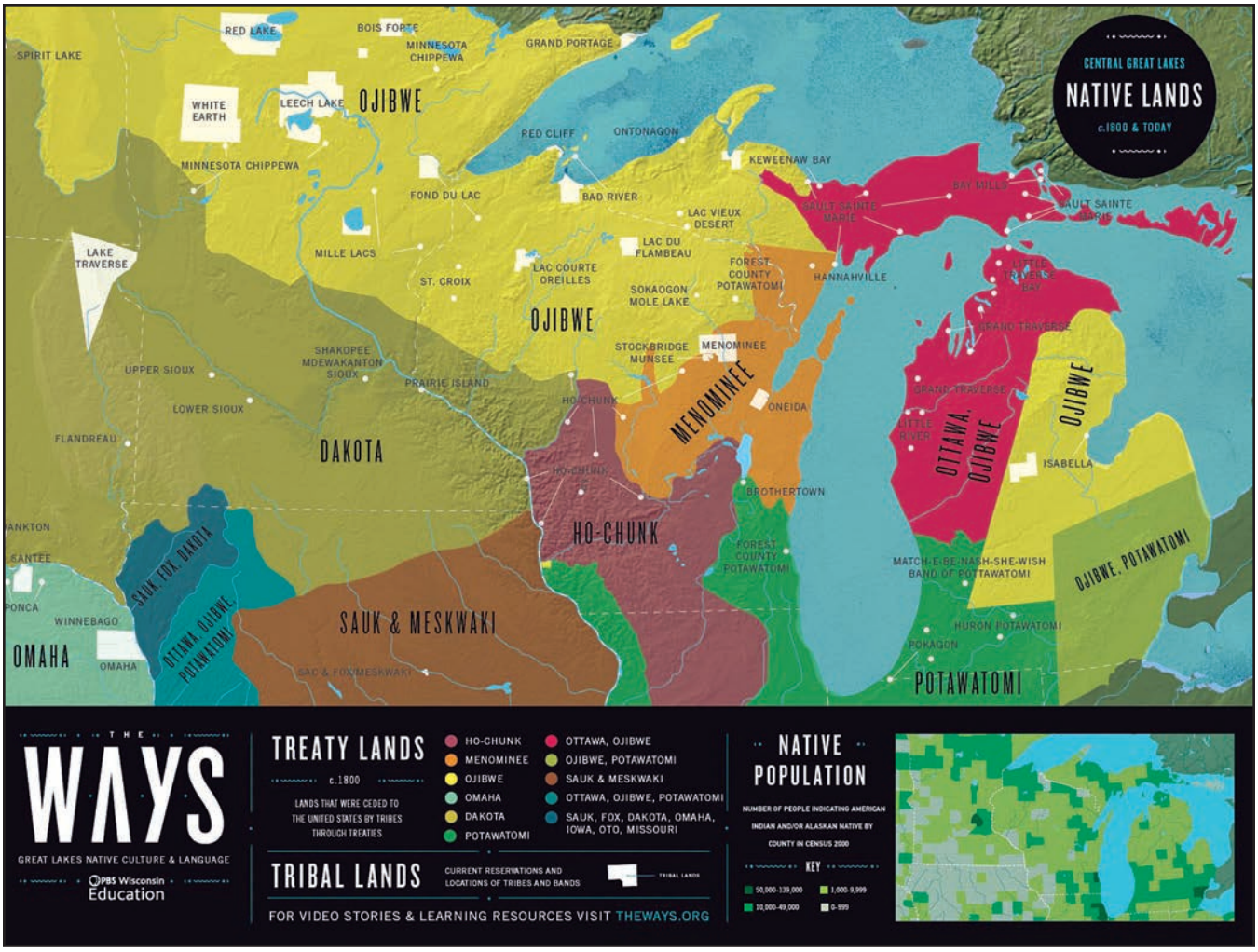
TRIBAL LANDS MAP



PBS Wisconsin Education, a service of the Wisconsin Educational Communications Board and the University of Wisconsin-Madison

The WAYS Native Nations Map shows tribal lands that were ceded to the United States government (multi-colored) and the current tribal reservations and locations of tribes and bands (white).

CURRENT RESERVATION AND TRIBAL LANDS MAP

Created in Partnership with the University of Wisconsin Cartography Lab, 2018
wisconsinfirstnations.org/current-tribal-lands-map-native-nations-facts

Wisconsin Department of Public Instruction-American Indian Studies
PBS Wisconsin Education, a Service of the Wisconsin Educational Communications Board and the University of Wisconsin-Madison School of Education.

WHERE DID ALL THE TREES GO?

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JOB TITLES AND DESCRIPTION CARDS

JOB TITLE: **Cruiser**	**JOB DESCRIPTION:** Your job is to go through the forest before any trees are cut. You estimate how much money your boss will get from cutting the trees. You'd better be right, or he will lose money and you could get fired!
JOB TITLE: **Fitter**	**JOB TITLE:** Your job is to cut a notch on one side of the tree using an axe. You are the first person to cut the trees. It is a very important job!
JOB TITLE: **Fellers**	**JOB TITLE:** You two work with the long crosscut saw. You cut on the side opposite of where a big notch has been cut. When the tree is about to fall, you yell, "Timber!" and get out of the way!
JOB TITLE: **Swamper**	**JOB TITLE:** Your job is to cut all the branches off the tree trunk. These branches and limbs are not needed for making lumber.

JOB TITLES AND DESCRIPTION CARDS

JOB TITLE: **Bucker**	**JOB DESCRIPTION:** Your job is to cut the tree into logs. Some of those white pine trunks were really long, so there could be a lot of logs from one single tree!
JOB TITLE: **Skidder**	**JOB TITLE:** Your job is to drag the logs out of the forest and leave them in the loading yard.
JOB TITLE: **Sky Bird**	**JOB TITLE:** You have a very dangerous job. You must stand on top of the logs on a sleigh and arrange them so that a lot can fit on a single sleigh. You'll be lucky if you make it through the logging season without getting hurt.
JOB TITLE: **Hay Man on the Hill**	**JOB TITLE:** The logging roads are very icy which makes moving the logs easier, but it can also be dangerous when the sleighs are going down slopes. Your job is to spread hay on the icy slopes for safety.

JOB TITLES AND DESCRIPTION CARDS

JOB TITLE: **Teamster**	**JOB DESCRIPTION:** Your job is to bring sleighs full of logs down to the river. You used to use oxen for the job, but now you use horses. You and your horses work as a team!
JOB TITLE: **Scaler**	**JOB TITLE:** Your job is to measure each log once it has made it down to the riverbank. You want to let your boss know how much wood is in each log. The amount of wood is measured in board feet.
JOB TITLE: **Marker**	**JOB TITLE:** Your job is to put the lumber company's stamp on the end of each log before it goes down the river. This way, your boss will be sure to get money for all of his logs.
JOB TITLE: **River Pig**	**JOB TITLE:** You have a dangerous job. You follow the logs down the river to the mill. Sometimes you walk along the banks of the river, but other times you stand on the floating logs. Don't slip!

DRAWING SHEET LABELS

Hi, I am a **BUCKER**. My partner and I go to work after the fellers have dropped a tree and the swampers have delimbed it. We us a crosscut saw and cut the tree into 16-foot logs.

Hi, I am a **CRUISER**. My job is to go through the forest and determine how much timber (trees that can be cut for lumber) is on the land. I use a measuring stick to determine how much lumber is in a tree and write down what I find.

Hi, I am a **FELLER**. My partner and I work together to cut down trees. Each of us works on one end of a crosscut saw. We saw toward the notch that the fitters chopped in the tree. As the tree falls, we yell “Timber!” and move to the sides.

Hi, I am a **FITTER**. I determine which way a tree should fall. Once I know this, I chop a V-shaped notch into the tree on the side that I want the tree to fall. I use an axe for all the work I do.

Hi, I am a **HAY MAN ON THE HILL**. I work to keep the sleighs full of logs from sliding too fast down hills. I shake hay on the trail to help slow them down.

Hi, I am the **MARKER**. I use a large hammer-like tool. This hammer has a star-shaped mark on the end of it. The star is the mark of our camp. When I hit the end of the log, I leave a star mark on the log.

Hi, I am a **RIVER PIG**. I help move logs downriver to the sawmill using a long pole with a hook on the end to push and pull logs. I do this to keep them from making a logjam. I sometimes ride downriver on top of logs. It is a very dangerous job.

Hi, I am a **SCALER**. I work at the landing on the river. The teamsters deliver logs to the landing. I measure them and record how much timber the camp has cut. After I am done measuring, the logs are stacked in big piles along the river.

Hi, I am a **SKIDDER**. My job is to pull the logs up to the loading yard where the logs are loaded on sleighs. I use a chain to hook the log to a team of horses. I then drive the horses to the yard.

Hi, I am a **SKY BIRD**. I direct the loading of logs on the sleigh. I stand on top of the load and help stop the logs from rolling off. It is a dangerous job. The logs are pulled up with chains by horses.

Hi, I am a **SWAMPER**. My job is to cut a trail for the skidders to drag the logs up the road. I also cut the limbs off the trees once they are on the ground. I use an axe to do my work.

Hi, I am a **TEAMSTER**. My job is to move the logs from the logging yard to the landing on the river. The logs are loaded onto a sleigh. A team of four horses pulls the sleigh. I drive the horses.

LUMBERJACK LOGGING STORY

Greetings. I am Professor Tim Burr, the inventor of the Way Back Story-telling Machine. How the Way Back works is, you place an item into the reflective chamber, shut the door, and turn the machine on. In a matter of moments, the machine prints out a story about the item. If you want more information, all you have to do is punch the red button and it will print out more information. Let me show you. I will insert this small piece of lumber into the chamber, turn the machine on, and presto!

You won't believe this story. It says here that this board came from a house in Des Moines, Iowa. The house was built in 1885, but the board didn't come from Iowa. Iowa was a prairie state and didn't have many trees. It says here the board came from a place called Wisconsin. It was floated down the Wisconsin and Mississippi Rivers in a raft of boards bundled together. The board was then hauled across land by a train to Des Moines.

Let's press the red button and see what else we can learn. Wow! Wait until you see this. This story takes us back to the beginning, when the board was part of a tree growing near Wausau, Wisconsin. This white pine sprouted in a beautiful forest around the year 1790. It grew up surrounded by many other white pine trees. As it grew taller and taller, songbirds would eat its seeds while deer would browse on its needles. It says that once a young cub even climbed 20 feet up in the tree after it was startled by some Menominee children out looking for berries in the forest. As the tree grew, it played an important role in its forest ecosystem for almost a century! That's 100 years!

One day in 1883, a man came through a patch of woods looking for white pine trees. He looked them all over very carefully. He was a **cruiser**, and his job was to figure out how much wood and money could be made by cutting the forest. He measured the wood in **board feet** (a volume of lumber equal to 144 cubic inches [i.e., 12″x12″x1″]). It wouldn't be long before many more men would arrive and cut down the trees.

The next year, men came into the forest with axes and saws and a lot of other equipment. The tree this board came from was a big tree, so it wasn't long before they decided to cut it down. The first man to work on the tree was called a **fitter**. He looked the tree over, decided which way it should fall, and used an axe to cut a notch on that side of the tree. He swung the axe over and over again until he had a big notch chopped. That must have been hard work!

It looked as though the fitter was going to cut down the tree, but he stopped when he had chopped the notch. Two men approached the tree with a **crosscut saw**. A crosscut saw is a long, flat saw. It has lots of big teeth and a handle at each end. These men were called **fellers**. They cut from the side opposite of where the big notch had been chopped out. They stood on either end of the saw. One of them would pull the saw towards himself and then his partner would pull the saw towards himself. As their saw reached the notch, the tree began to make a cracking sound. The fellers moved sideways away from the tree and yelled, "Timber!" as loud as they could. The tree cracked, swayed, and came crashing to the ground.

The tree was now lying in the snow on the forest floor. It barely hit the ground before a man called a **swamper** came and chopped off all of the limbs with an axe. The limbs were left on the forest floor while two men called **buckers** came and cut the trunk into several logs with a crosscut saw. The logs were now ready to be moved.

LUMBERJACK LOGGING STORY

Later that day a man called a **skidder** came and hooked a chain around each log and dragged it away with a team of horses. Without the snow and ice on the ground, it would have been hard to move the logs. The skidder dragged the logs up to the loading yard.

At the loading yard, the logs were pulled up on a **sleigh** by chains and horses. On top of the pile of logs on the sleigh was a man called a **sky bird**. He had quite a dangerous job. He guided each log to the top of the log pile on the sleigh. OH NO! One almost rolled on top of him! When that log was finally balanced, he loaded more logs on the sleigh.

After the logs were loaded, a man chained them together on the sleigh. The roads through the forest had water from the river sprayed on them so that there was a sheet of ice over them. This made it easier for the load of logs to be moved. There was also a man called the **hay man on the hill**, who spread hay on the ice so that the sleigh would not go too fast down the hill to the riverbank. That's a pretty important job. Without him, I bet the horses would get squashed.

It was the **teamster's** job to drive the sleigh down to the riverbank. A team of strong horses pulled the sleigh. Once the load of logs got down to the riverbank, a **scaler** measured each log to see how much wood it would provide.

Next, each log was stamped by the **marker** with a mark that looked like this: "**I**." The logs were stamped so that when they arrived at the sawmill, people could tell which logging company the logs belonged to. I guess that's kind of like signing your name.

The logs were stacked next to the frozen river and remained there until the spring thaw. When the ice on the river melted and it began to flow, the logs were pushed into the river.

Wow! This is unbelievable. It says here that men called **river pigs** worked the logs down the river. Sometimes they would travel along the riverbank; other times they would walk on the logs as they floated down the river. Sometimes river pigs drowned along the way when they slipped and fell between logs.

At one point, all of the logs got stuck in a logjam. They wouldn't move! Why, those logs backed up the river for two miles. The river pigs had to use explosives to get them unstuck.

Finally, after a long time floating down the river, the log arrived at a sawmill. There were logs with all kinds of stamps, like "ℸ," "**T**" and "Θ." All of the logs with "**I**" were grouped together.

At the lumber mill, the log was cut into boards, just like you might see in a lumberyard. Then the boards were fastened together to create a huge river raft carrying lots of other boards. That's how boards ended up in Iowa. They were floated down the Wisconsin River and into the Mississippi River. There weren't a lot of trees in Iowa in the late 1800s like there were in Wisconsin, so the people who lived there had to get lumber from other places. Boards from that same Wisconsin mill went to Illinois, Missouri, or even Wyoming. This board was used to help build a house in Iowa. It's been there for a long time, and has been part of a home for many people.

Well, that's how the Way Back Storytelling Machine works. Hard to believe you can learn so much from one simple board.

THERE IS MORE TO THE LOGGING STORY

The need for Wisconsin lumber changed the lives of Wisconsin's First Nations. In the 1800s both the Ojibwe and Menominee Tribes **ceded** (gave up) millions of acres of land to the U.S. government through different **treaties**. Most of this land was forested and almost all would be harvested over the next 100 years. While all Wisconsin tribes were impacted by the treaties of the 1800s, every tribe and tribal member had experiences that were unique to them and experiences that were similar to that of the Menominee and Ojibwe shared below.

Menominee

Almost all land ceded by the Menominee people was forested land. Before the treaties of the 1800s, the Menominee people lived, hunted, gathered and fished on over 10 million acres of land in what is now Wisconsin and Michigan. By 1848, the Menominee were forced to cede all their lands to the United States. At this time, the United States ordered the Menominee to move to Crow Wing country in Minnesota. Chief Oshkosh and other Menominee clan leaders visited Crow Wing and saw that it was not good for the Menominee people. There were often conflicts or wars between tribes in the Crow Wing area.

So, Chief Oshkosh and the other leaders traveled all the way to Washington D.C. to visit President Fillmore and convince him to let the Menominee people stay in Wisconsin. The efforts of the leaders paid off. The Treaty of 1854 created a 276,000 acre **reservation** for the Menominee Tribe. The reservation was covered by thick forests and located on the Wolf and Oconto Rivers. The **perseverance** of the Menominee leaders made sure the Menominee would always have a home in Wisconsin.

Life after the treaty was challenging for the Menominee. All Menominee people who had been living throughout the northern part of what is now Wisconsin were forced to move to the reservation. They were limited to hunting, gathering and fishing only on reservation lands. While the reservation forests were rich with resources, there were not enough to meet the needs of all the Menominee people. In 1856, the Menominee had to give up even more lands for a reservation for the Stockbridge-Munsee Mohican Indians. The Menominee had to continue to persevere and find new ways to meet their needs. Chief Oshkosh and their forests would help them do that.

The U.S. government wanted the Menominee to become farmers. The Menominee did not think this would work. They wanted to try to support the people of their tribe by harvesting their forests. But, they wanted to do it in a way that would make sure there were always forests for future generations. Chief Oshkosh had an idea. He had learned a lot about the forests from elders who passed on knowledge from generation to generation. He said the Menominee should only cut the old, sick and falling trees. He also said they should start cutting at one side of the reservation and move across the reservation until they reached the other side. He said if the Menominee did this, they could provide for their people and make their forests last forever. The plan worked. The Menominee were able to harvest their forest in a **sustainable** way so it could provide for their people then and in the future.

THERE IS MORE TO THE LOGGING STORY

Ojibwe

The Ojibwe lived, hunted, gathered, and fished on millions of acres of land in what is now Wisconsin, Minnesota, and the Upper Peninsula of Michigan. Through multiple treaties between 1825 and 1848, bands of the Great Lakes Ojibwe ceded over 22 million acres of land to the U.S. government. The land was ceded in return for yearly payments and goods. In addition, Ojibwe leaders fought to make sure the treaties kept their right to hunt, fish and gather food and other materials in the ceded lands.

Much of the ceded land was forested and had over 170 billion board feet of timber growing on it. There was a misunderstanding about the forested lands in the treaties. The Ojibwe thought they only sold the right to harvest timber from the land and not the land itself. They remembered the agreement as, “From the usual height of cutting a tree down and upwards to the top is what I sell you, I reserve the root of the tree.” The U.S. government did not agree. The U.S. said they had purchased both the timber and the land from the Ojibwe.

In 1850, President Taylor signed a removal order that said the Ojibwe people must move west of the Mississippi River. The Ojibwe did not like this and tried to fight it. They thought the treaties stated that they would not be removed from their homeland as long as they did not cause problems for settlers. That fall and winter the U.S. government tried to force the Ojibwe to leave their homes. They made the Ojibwe people travel all the way to Sandy Lake, Minnesota, to pick up their **annuities** (yearly payments and goods) instead of letting them pick them up in LaPointe. LaPointe was much closer to their homes in Wisconsin and where the Ojibwe had always picked up their annuities.

The Ojibwe arrived at Sandy Lake in late October. When they arrived there was not enough food for all of them and some of the food was even spoiled.

The U.S. government official in charge of making the payments to the Ojibwe was not even at Sandy Lake yet. He did not get to Sandy Lake until late December. By that time, over 150 Ojibwe had died from starvation and disease. When the Ojibwe were finally able to return home in January, the temperatures were cold, lakes were frozen and snow was deep. The Ojibwe were not prepared to travel home in winter conditions. 200-250 Ojibwe died on their way home due to the winter weather and because they were weak from sickness and hunger.

The loss of so many Ojibwe people made the Ojibwe more determined to stay in their homelands. In 1852, Chief Buffalo and others traveled all the way to the U.S. capital to meet President Fillmore. President Fillmore agreed to stop the removal order. The Treaty of 1854 created four Ojibwe reservations in Wisconsin: Bad River, Lac Courte Oreilles, Lac du Flambeau, and Red Cliff. The St. Croix and Sokaogon were not given a reservation. All together, the reservations included about 275,000 acres. While the Ojibwe were forced to give up so much of their homelands, the **perseverance** of Chief Buffalo and other leaders made sure the Ojibwe would always have a home in Wisconsin.

Life after the treaty was challenging for the Ojibwe. All Ojibwe people who had been living throughout the northern part of what is now Wisconsin were forced to move to reservations but some (St. Croix and Sokaogon) were not even given reservation lands. Unlike the Menominee, the Ojibwe kept the right to hunt, gather and fish on the lands they had ceded. Unfortunately, much of the ceded land was harvested for lumber. This made it more difficult to hunt and gather enough food to meet their needs. Eventually, many Ojibwe had to allow white lumber companies to harvest trees on their land so they could afford to buy food and supplies for their families. It was a difficult time for many Ojibwe people.