LESSON 2
Forests Built Our State

BIG IDEAS
- Wisconsin's forests provided basic resources (e.g., food, clothing, shelter) for Native Americans and European settlers. (Subconcept 19)
- As Europeans settled Wisconsin, forests provided jobs for a growing immigrant workforce, resources for building the nation, and dollars for a new state economy. (Subconcept 20)

OBJECTIVES
Upon completion of this lesson, students will be able to:
- Recall that European countries had depleted their natural resources by colonial time.
- List ways that forests provided for the basic needs of settlers.
- Indicate how forests were important in settling Wisconsin.

SUBJECT AREAS
Language Arts, Social Studies

LESSON/ACTIVITY TIME
- Total Lesson Time: 65 minutes
- Time Breakdown:

  Introduction.............5 minutes
  Activity ....45 minutes
  Conclusion............15 minutes

TEACHING SITE
Classroom

NUTSHELL
In this lesson, students explore the importance of forests to early settlers. They then do a mapping exercise to discover the role forests played in the settling of Wisconsin and write a poem that describes this importance.

BACKGROUND INFORMATION
As the first European **settlers** arrived in North America, many of the natural resources of Europe were in a state of **depletion**. Soils were becoming infertile, wildlife had disappeared, and forests were becoming scarce. The peasant economy was based on agriculture, with forests serving as the main source of energy. Wood was used for heating and building materials. Wood charcoal was fuel for the first iron foundries. By the 1300s, there was a fuelwood shortage in England.

When immigrants arrived in the New World, they witnessed a stark difference between the resource-poor countries they had come from and the resource-rich New World. Early journals and diaries from Wisconsin made reference to the limitless abundance of natural resources. Wisconsin was thought of as an inexhaustible landscape with its endless forests and abundant wildlife.

For the first settlers arriving in Wisconsin, forests provided building materials, fuel, and wild game. Some viewed the forest with awe, some as an opportunity, and others with greed. Most viewed the forest as a part of public domain that provided opportunities and resources. As more settlers arrived, the demand for lumber increased. Forests were cleared for lumber and farmland. Some saw forests for their profit potential, which meant cutting them down.
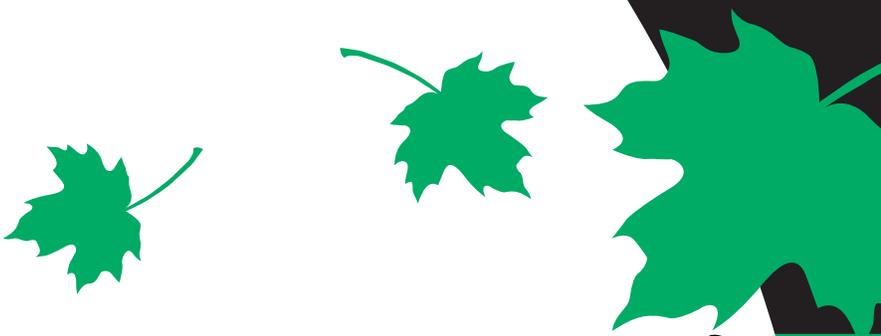
MATERIALS LIST

FOR EACH STUDENT
- Piece of paper
- Copy of Student Page ✏**1**, *Wisconsin River Map*

FOR THE TEACHER
- Overhead of Teacher Page 🍎**1**, *European Settlers*
- Overhead of Teacher Page 🍎**2**, *Wisconsin Vegetation Map Pre-1850*
- Overhead of Student Page ✏**1**, *Wisconsin River Map*
- Overhead of Teacher Page 🍎**3**, *Holt Lumber Mill Around 1910*
- Overhead of Teacher Page 🍎**4**, *Wisconsin Sawmill Map 1860-1910*
- Overhead of Teacher Page 🍎**5**, *1908 Paper Mill*
- Overhead of Teacher Page 🍎**6**, *Wisconsin Paper Mill Map 1860-1910*
- Overhead of Teacher Page 🍎**7**, *Lullaby Furniture Company*
- Overhead of Teacher Page 🍎**8**, *Wisconsin Manufacturing Map 1860-1910*
- Overhead of Teacher Page 🍎**9**, *Wisconsin Cities Map*
- Overhead projector and markers

FOR THE CLASS
- Chalk/marker board
- Overhead projector

TEACHER PREPARATION
- Make an overhead of each of the following:
  - Teacher Page 🍎**1**, *European Settlers*
  - Teacher Page 🍎**2**, *Wisconsin Vegetation Map Pre-1850*
  - Student Page ✏**1**, *Wisconsin River Map*
  - Teacher Page 🍎**3**, *Holt Lumber Mill Around 1910*
  - Teacher Page 🍎**4**, *Wisconsin Sawmill Map 1860-1910*
  - Teacher Page 🍎**5**, *1908 Paper Mill*
  - Teacher Page 🍎**6**, *Wisconsin Paper Mill Map 1860-1910*
  - Teacher Page 🍎**7**, *Lullaby Furniture Company*
  - Teacher Page 🍎**8**, *Wisconsin Manufacturing Map 1860-1910*
  - Teacher Page 🍎**9**, *Wisconsin Cities Map*
- Using overhead markers, color the circled symbols on the *Sawmill, Paper Mill, Manufacturing, and Cities Maps*.

While Wisconsin's forests were being cut down, they provided jobs for a growing immigrant workforce. Farmers supplemented their family income during the winter by working as lumberjacks. Others worked year-round in a sawmill, paper mill, or factory that used wood as a raw material. The mills and factories not only provided jobs, but also built the local **economy**. Towns sprung up to provide the goods and services required by a growing workforce.

Towns like Stevens Point, Wausau, Rhinelander, Tomahawk, Ashland, and Green Bay were built along major waterways. These waterways provided a means to transport logs and lumber to and from the mills and provided a source of power to run the mills. Other towns, such as Portage, Sheboygan, Milwaukee, Racine, Kenosha, and Beloit, were further removed from the forests of the north. These communities provided the workforce needed to turn wood into manufactured products.
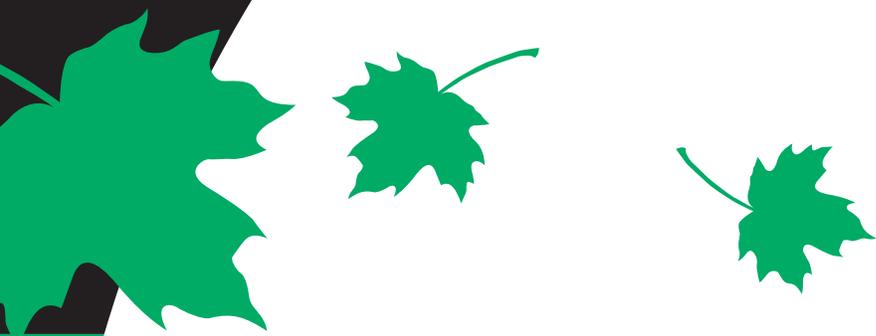
Looking back at the communities that arose in Wisconsin during the settling of the state, it is apparent that our forests played a key role in the location, economic base, and social makeup of these communities. As the **merchantable timber** (some species with little economic value at the time were left behind) was depleted, some communities, such as Shanagolden and Knox Mills, folded. Other towns, like those mentioned previously, had a broader economic base and were able to survive. Today, Wisconsin's forests still play a key role in each of these communities.

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VOCABULARY

Deplete: To exhaust the abundance of something.

Economy: The prosperity of an area based on the trading of money for products and services.

Exploit: To take advantage of something for one's own benefit.

Merchantable Timber: Trees with economic value.

Settler: A person who came from another place to make a new home.

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PROCEDURE
INTRODUCTION
Ask your students to take out a piece of paper and write down a definition for the word "settler." Give them a few minutes to ensure that each has written something. Have several of the students share their definitions. *(Make sure that they come up with something like: "A person or group of persons that settles in a new country or area.")*

Next ask them to write down the reasons why

they think settlers came to America. Again, have students share their ideas. *(Responses will vary, but may include religious freedom, jobs, oppressive governments, cheap land, wealth, and to start a new life.)*

Ask your students to think back to the end of the "Explorers Journal" from Lesson 1. Ask them to write down how the explorer compared his or her European homeland to Wisconsin. Again, have them share what they remember.

Discuss with your students how the explorer's

> *The explorer wrote: "Tonight as I sit and write in my journal, I think back to my European homeland. Our land is poor. It has provided for so many people for so long. Our fields, our game, and our forests no longer provide for our people.*
>
> *This new land is rich. These forests are endless. There are many tall pines that would make fine masts for ships. These forests may one day build a new empire."*

comment on the depletion of resources in Europe was a key reason that countries and individuals were interested in settling the new world. *(Europe's population was growing, and the natural resources had been **exploited**. Forests had been cut for fuel to cook and heat homes and for building materials. Fuelwood had been in short supply for 200 years. Big pines for ship masts were scarce. As settlers arrived in the New World, the dense forests of North America provided the resources to build a new nation.)* Tell your students that today they will be learning why Wisconsin's forests were important to early settlers.
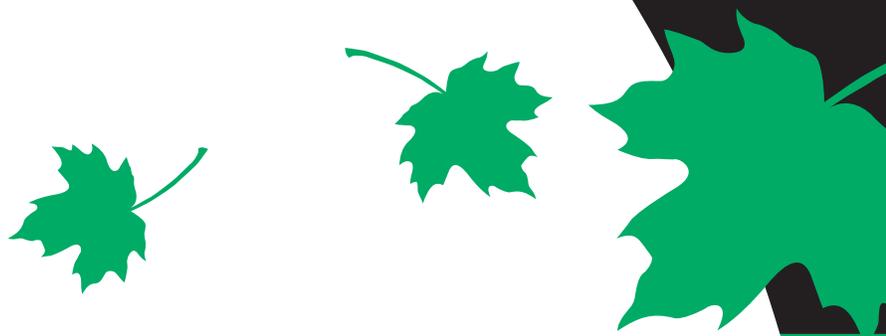
ACTIVITY

1. Review with your students how Wisconsin's forests provided for the basic needs of the Ojibwa from Lesson 1. *(The forest provided food and resources to make shelter, clothing, canoes, etc.)*

   • Place the overhead transparency of Teacher Page 🍎1, *European Settlers* on the projector. As a class, brainstorm and list on the board the ways that Wisconsin's forests helped provide for the needs of settlers. *(Most likely they will cite ways that forests provided food and materials to build shelter.)*
   • Ask them if they think settlers might need other materials to live. *(Yes.)* Using questions like "Where did they get the nails they need to build a house?" help students come to the conclusion that they had to buy some things.
   • Ask them where they would get the money to buy things they needed. *(Help them come to the conclusion that many had a job, or started a business that turned the forest into products to sell.)*
   • Tell them that Wisconsin's forests were extremely important for the jobs they provided settlers working as lumberjacks in the forest or working in a sawmill. From these jobs came the money to buy things and the beginnings of an economy in Wisconsin. Whole towns sprung up to provide workers with items and services they needed; from the general store, to the barbershop, to the doctor, to the church. Each was paid for by the sale of forest products.

2. Tell the students that next they are going to look at the impact forests had on settling Wisconsin and how this influenced where some of our cities and towns in Wisconsin are located today.

   • Ask students how much of the state they think was forested in the 1800s. *(More than half.)*
   • Put the overhead transparency of Teacher Page 🍎2, *Wisconsin Vegetation Map Pre-1850* on the projector. Point out that the shaded areas represent the parts of Wisconsin that were covered with forests in the early 1800s. Emphasize that more than half the state was forested but it was mostly in the northern and eastern parts of the state.
   • Ask students if there is anything special about the few areas in southwestern Wisconsin that are forested. *(These are areas where rivers are located.)*
   • Place the overhead transparency of Student Page ✏1, *Wisconsin Rivers Map* on the projector. Show students how, in general, the rivers line up with the forested areas.
   • Hand out Student Page ✏1, *Wisconsin Rivers Map* to each student. Explain that this is the map they will be using for the following activity.
   • Remove the *Wisconsin Vegetation Map Pre-1850* and *Wisconsin Rivers Map* from the overhead projector.
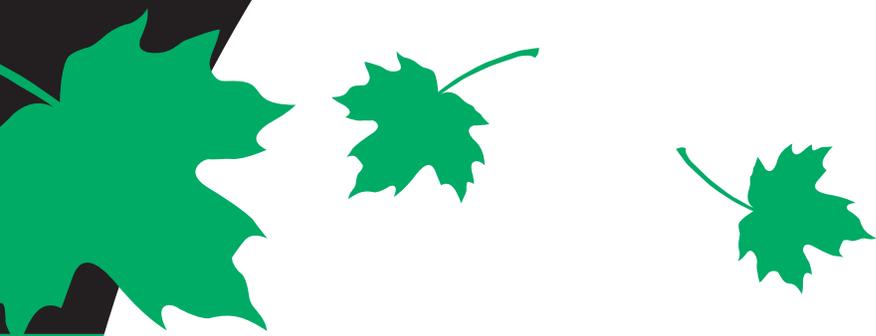
3. Briefly put the overhead transparency of Teacher Page 🍎3, *Holt Lumber Mill Around 1910* on the projector and explain to students that these are pictures of actual lumber mills. *(The first picture shows a lumberyard piled with stacks of cut lumber. The second picture shows men cutting a log on a saw.)*

- Put the overhead transparency of Teacher Page 🍎4, *Wisconsin Sawmill Map 1860 1910* on the projector.
- Explain that these are the locations of many of the sawmills in Wisconsin between 1860 and 1910.
- Have students mark the location of the circled sawmills on their maps by putting a small "s" at the location of each sawmill. In the legend area of the map, have the students make an "s" and label it as "sawmill." Using overhead markers, color the five circled sawmills so they are easier for students to locate. (Do the same for the paper mills, manufacturing, and cities maps.) Due to the large number of mills on each map, these locations were selected in the interest of time.
- Once your students have completed locating the sawmills, ask them if they notice anything about where the sawmills were located. *(They were located on rivers, and in the northern half of the state.)*
- Ask your students why they are all located primarily in the north. *(That's where the trees were.)*

- Ask why they were located on rivers. *(Transportation of logs and sawed lumber, water power for the mills.)*
- Remove the *Wisconsin Sawmill Map 1860-1910* from the overhead projector.

4. Briefly put the overhead transparency of Teacher Page 🍎5, *1908 Paper Mill* on the projector and explain to students that this is a picture of men who worked in a paper mill, and behind them are large rolls of paper on the paper machine.

- Put the overhead transparency of Teacher Page 🍎6, *Wisconsin Paper Mills Map 1860-1910* on the projector.
- Explain that these are the locations of many of the paper mills in Wisconsin between 1860 and 1910.
- Have the students locate the circled paper mills on their maps by making a small "p" at the location. In the legend area of the map, have the students make a "p" and label it as "paper mill."
- As students finish, ask if they notice anything about where the paper mills were located. *(They were located on rivers.)*
- Ask why they were located on rivers. *(Transportation of logs, water power for the mill, water for the paper making process.)*
- Remove the *Wisconsin Paper Mills Map 1860-1910* from the overhead projector.
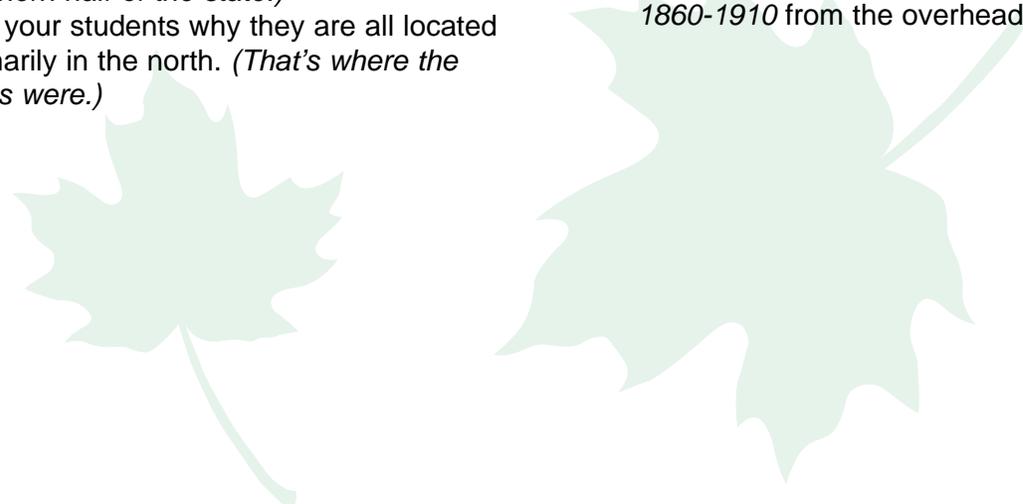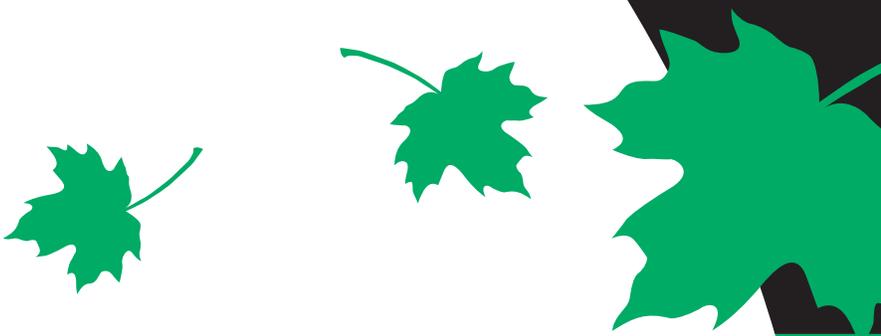
5. Briefly put the overhead transparency of Teacher Page 🍎7, *Lullaby Furniture Company* on the projector and explain to students that this is a picture of a factory that made baby cribs.

   • Put the overhead transparency of Teacher Page 🍎8, *Wisconsin Manufacturing Map 1860-1910* on the projector.
   • Explain that these are the locations of many of the factories that used wood in Wisconsin between 1860 and 1910. Show students the legend that indicates some of the items that were being manufactured during this time period.
   • Have the students locate the circled factories on their maps by making a small "f" at the location. In the legend area of the map, have the students make an "f" and label it as "factory."
   • Ask if students notice anything about where the factories were located. *(They were located either along a river or along the Great Lakes coast. Most are in the southeast corner of Wisconsin.)*
   • Ask why they were built in these locations. *(They were near water for transportation of lumber and products, water power for the factory, and the population of people was greater in southeastern Wisconsin.)*
   • Remove the *Wisconsin Manufacturing Map 1860-1910* from the overhead projector.

6. Put the overhead transparency of Teacher Page 🍎9, *Wisconsin Cities Map* on the projector.

   • Have the students label the cities with circles around them on their maps. You can also add your city or town to the map.
   • Ask students to give some reasons why these cities might be located where they are. *(They are on a river or watercourse. The location was good for forest products industry. The forest products industry provided jobs.)*
   • Ask the students if they have been to any of the cities on their map. Tell the students that if it had not been for the forest industry, many of these cities might not have ever existed. The forest industry played a key role in developing each of these cities and this influence can still be seen in these cities today.

CONCLUSION

Ask your students to write a five to10 line poem that tells why forests were important to early settlers in Wisconsin or to the development of local communities in Wisconsin. Have the students share their poems with the class.

CAREERS

The career profile in this lesson is about Dawn Szajna, Assistant Sawmill Supervisor, Hamel Forest Products. Career Profile 3B.ASMS is found on page 31. A careers lesson that uses this information begins on page 140.
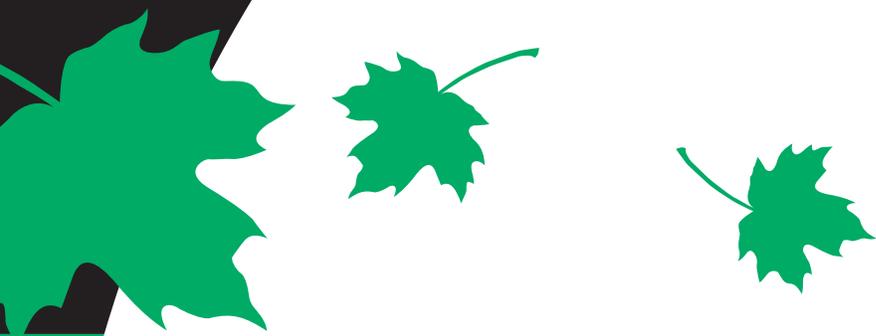
SUMMATIVE ASSESSMENT

1. Tell your students that their job is to identify the nearest location to your school to build a new mill. Have your students pick the nearest community with the things needed for a mill and explain why the community would be a good location.

2. Assign students one of the communities labeled on the map. Have them research forest industries in the community and report back to the class about how these industries are an important part of communities today.

REFERENCES

Maps Modified with Permission
- Malone, B. (1998). Learning from the Land – Wisconsin Land Use. Madison, WI: State Historical Society of Wisconsin.

- Wisconsin Cartographers Guild & Malone, B. (2000). Mapping Wisconsin History. Madison, WI: State Historical Society of Wisconsin.

Historical Photos Reprinted with Permission
- *Holt Lumber Mill Around 1910* courtesy of UWSP Vallier Collection.

- *Swendson Mill, Echo, Wisconsin, 1908 Paper Mill,* and *Lullaby Furniture Company* courtesy of Portage County Historical Society Collection.

Bogucka, M. (1978). Natural Resources in European History – A Conference Report. Washington D.C.: Resources for the Future, Inc.

Cronon, W. (1983). Changes in the Land – Indians, Colonists, and Ecology of New England. New York: Hill and Wang.

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Parry, J. H. (1965). Europe and the Wider World – 1415-1715. London: Hutchinson University Library.

Penna, A. N. (1999). Nature's Bounty – Historical and Modern Environmental Perspectives. Armonk, NY: M. E. Sharpe, Inc.

Rohe, R. E. (2002). Ghosts of the Forest – Vanished Lumber Towns of Wisconsin. Marinette, WI: Forest History Association of Wisconsin, 2002.

RECOMMENDED RESOURCES

●●● ACTIVITY GUIDE ●●●

Mapping Wisconsin History by Wisconsin Cartographers' Guild and Bobbie Malone. (Madison, WI: State Historical Society of Wisconsin, 2000) Background information, classroom activities, reproducible worksheets, blackline transparencies, and great maps give educators the opportunity to explore and integrate Wisconsin history and geography with students. Learn more under the School Services section of the Wisconsin Historical Society website: **www.wisconsinhistory.org/index.html**

●●● WEBSITE ●●●

Wisconsin's Wood Using Industry On-line Databases
www.woodindustry.forest.wisc.edu/
Search for company contact information, amount and type of raw material use, and production data for Wisconsin wood using industries on-line.

DAWN, ASSISTANT SAWMILL SUPERVISOR

**Dawn uses computers to control the saws that cut the logs.**

Meet Dawn Szajna. Dawn is the Assistant Sawmill Supervisor at Hamel Forest Products in Vesper, Wisconsin. She oversees the things that are done in the mill to produce lumber. A mill like the one Dawn works in has many different machines to cut logs into boards. Dawn can run most of the machines in the mill. That means that if someone is gone on a day, she can take over that machine and make sure that the mill runs smoothly. Dawn does other jobs at the mill as well. This includes "tallying" the lumber that the mill has produced and "grading" the softwoods. Tally means that she counts what is made and keeps track of the quality. A grader decides how good the lumber is. Higher grade lumber is sold for more money.

Dawn has learned the things she needs to know to do her job right at Hamel Forest Products. She has five years of on-the-job experience. She has also taken special classes to learn how to grade both softwoods (like pines) and hardwoods (like oaks). By learning how the lumber that the mill makes can be used and how much it can be sold for, Dawn can make better decisions when she is cutting logs into lumber.

In her spare time, Dawn works for the Town of Rome fire department. She is a firefighter and EMT (emergency medical technician). Dawn has recently been promoted to lieutenant.

Dawn says that her favorite part of her job is being able to work independently. She knows that the work she does helps the team of people who work at the mill accomplish their goals. If you want a job like Dawn's, she says that you should take advantage of the resources that are around you to learn more about the forest industry. This includes going to programs offered by the Wisconsin Department of Natural Resources.

EUROPEAN SETTLERS
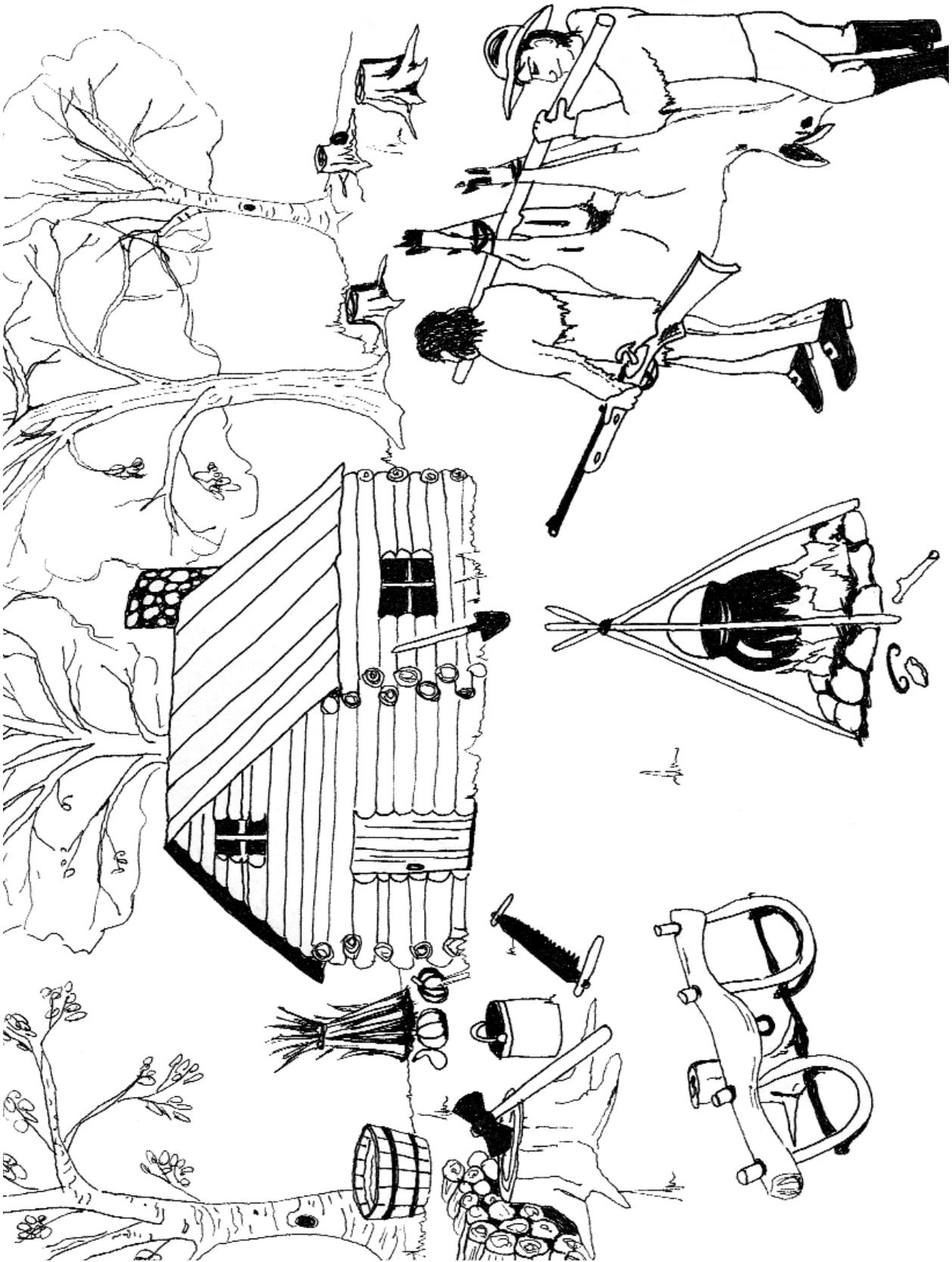
WISCONSIN VEGETATION MAP PRE-1850

☐ Represents Forests   ☐ Represents Prairie

WISCONSIN RIVER MAP

St. Croix River

Brule River

Menominee River

Chippewa River

Flambeau River

Wisconsin River

Wolf River

Chippewa River

Green Bay

Fox River

Mississippi River

Black River

Fox River

Rock River

Wisconsin River
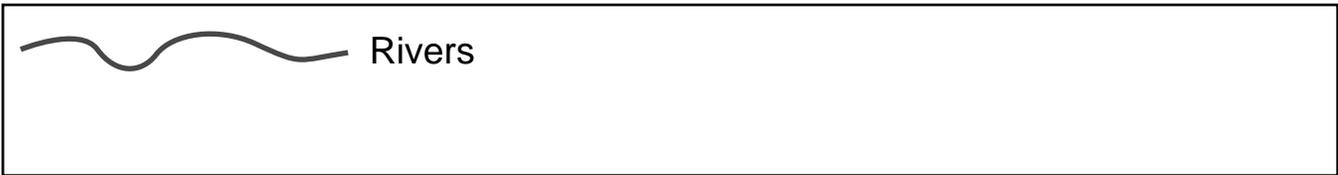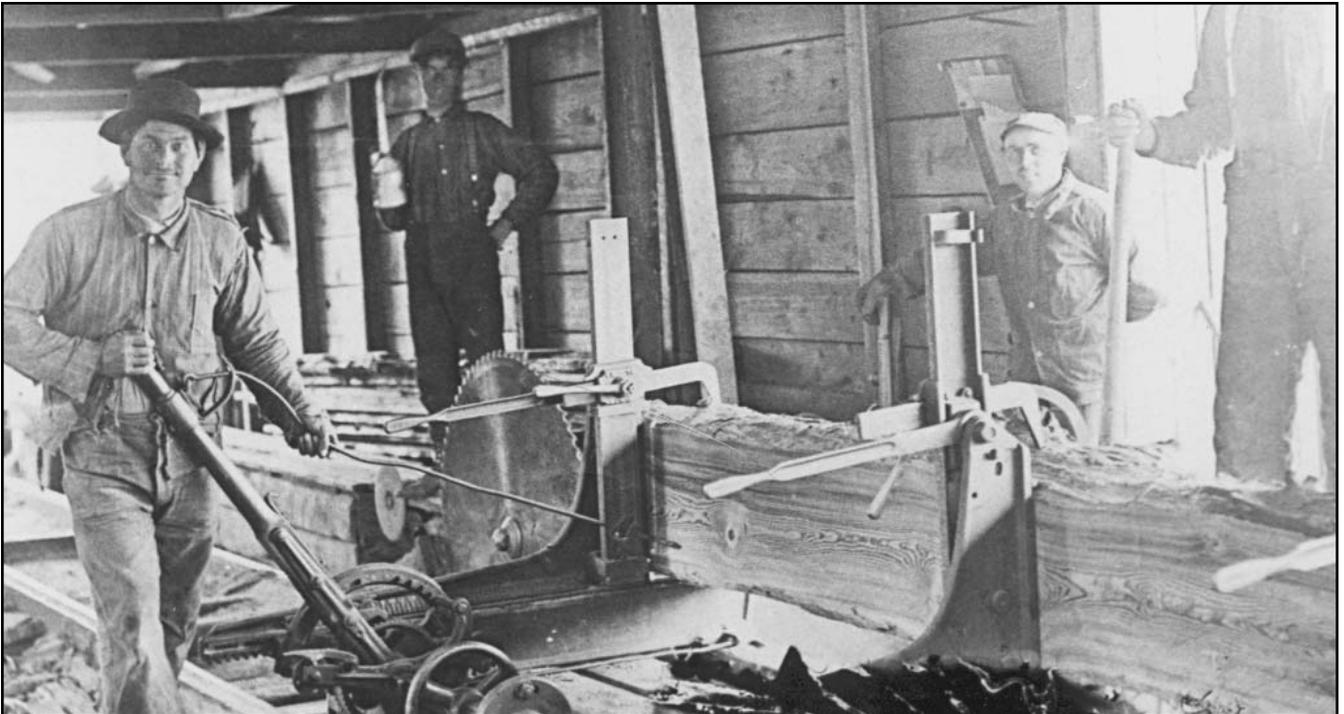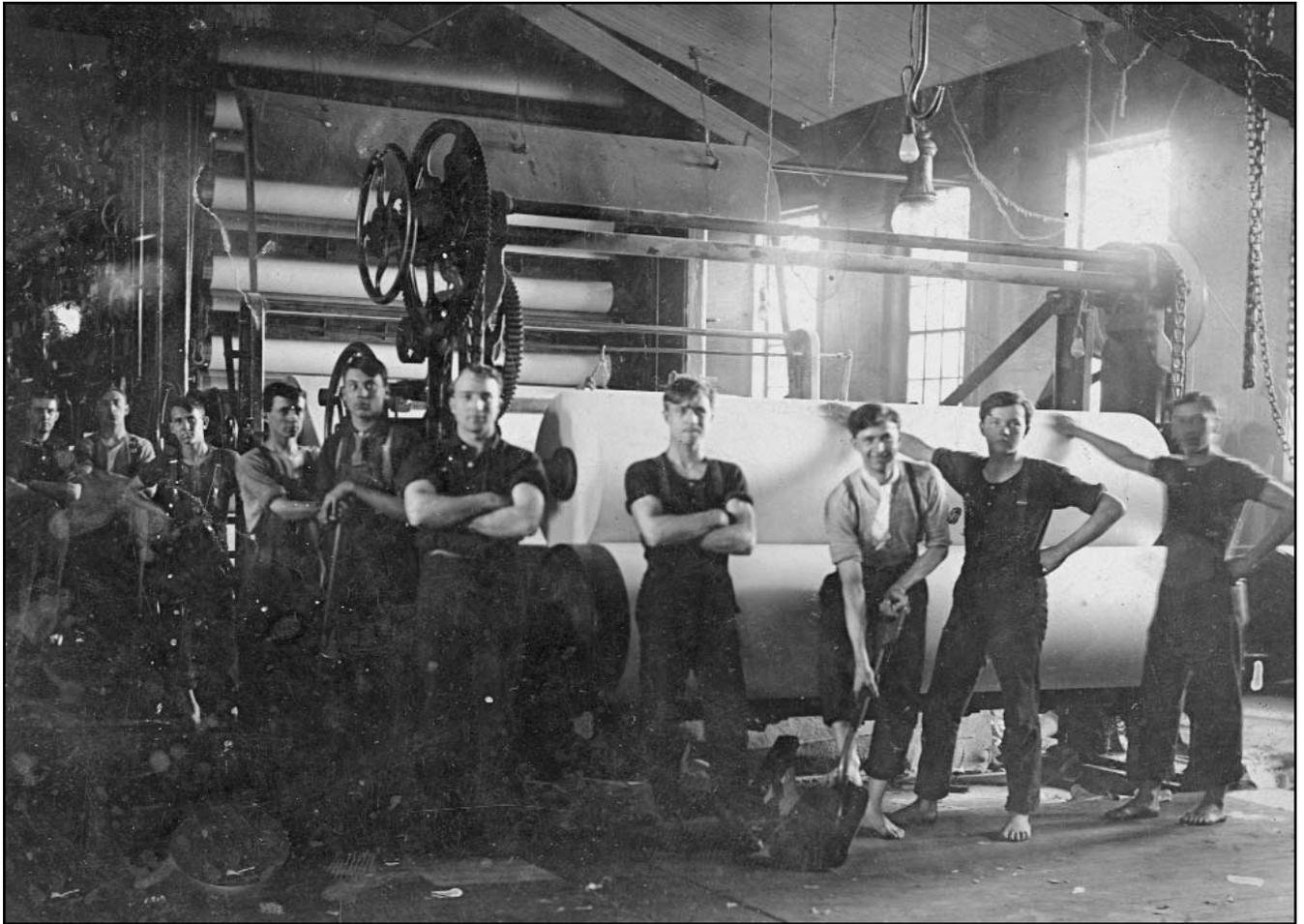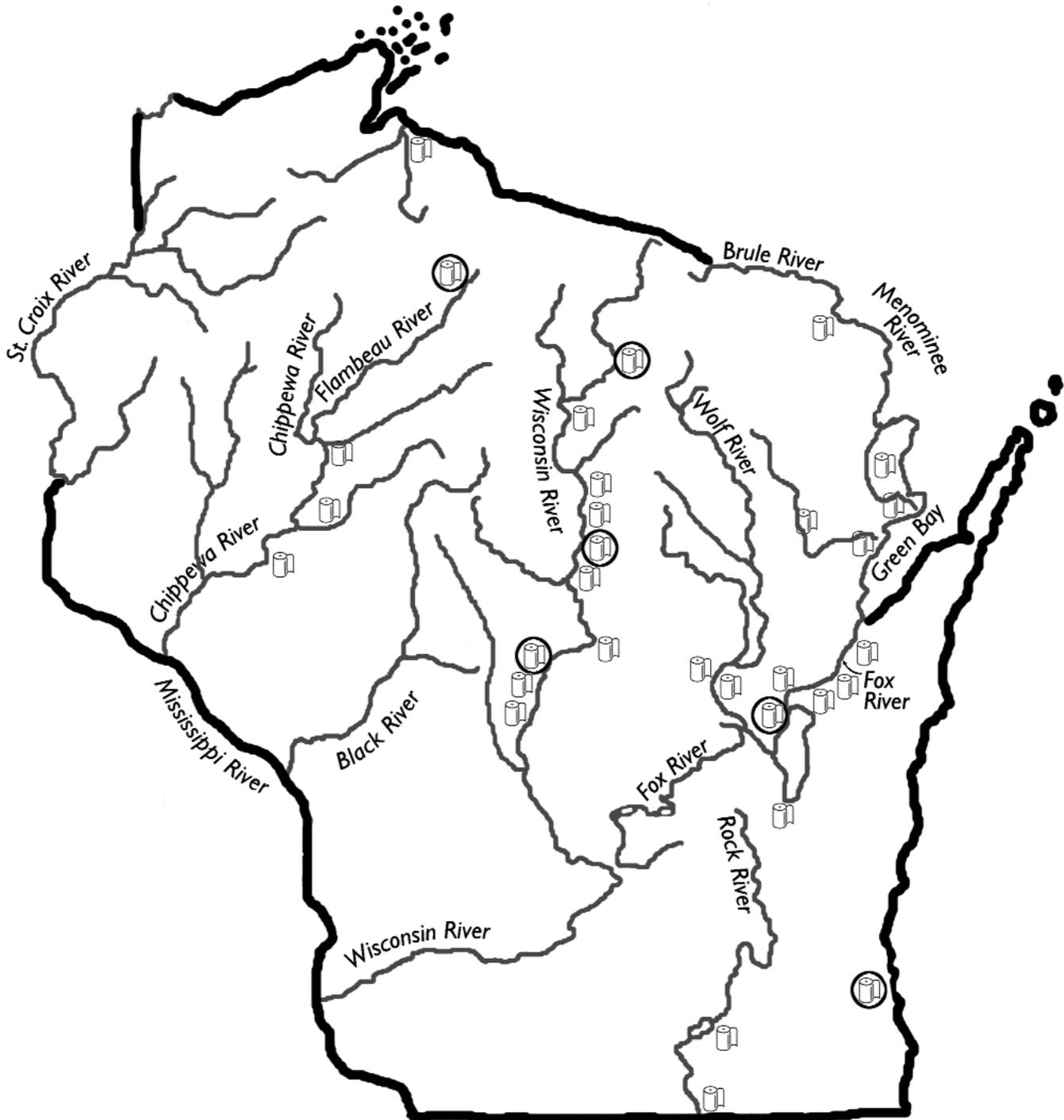
~~~~~~~ Rivers

HOLT LUMBER MILL AROUND 1910

SWENDSON MILL ECHO, WISCONSIN

WISCONSIN SAWMILL MAP
1860-1910

St. Croix River

Chippewa River

Flambeau River

Brule River

Menominee River

Wisconsin River

Wolf River

Chippewa River

Mississippi River

Black River

Green Bay

Fox River

Fox River

Rock River

Wisconsin River

1908 PAPER MILL

WISCONSIN PAPER MILL MAP 1860-1910

LULLABY FURNITURE COMPANY

WISCONSIN MANUFACTURING MAP 1860-1910

Wood Products,
1860s–1910s

🏭 **Manufacturing centers**
started as small shops
making products such as:

▯ Doors, sash, and blinds

⊛ Carriages

▭ Caskets

🛢 Barrels

🪑 Furniture

▱ Rail ties

St. Croix River

Chippewa River

Flambeau River

Brule River

Menominee River

Wisconsin River

Wolf River

Green Bay

Fox River

Chippewa River

Black River

Mississippi River

Fox River

Rock River

Wisconsin River

WISCONSIN CITIES MAP

• Superior

•Washburn
• Ashland

• Hayward

• Trego

• Park Falls

•Rhinelander

• Niagara

•Ladysmith

• Crandon

•Tomahawk

•St. Croix Falls

• Medford

• Antigo

•Hudson

• Marinette
•Peshtigo

•Chippewa Falls

• Wausau

•Sturgeon Bay

• Eau Claire

• Stevens Point

•Green Bay

Wisconsin Rapids •

•New London

• Appleton

•Two Rivers
Manitowoc

•Oshkosh

LaCrosse •

• Fond du Lac

• Portage

•Watertown

• Milwaukee

•Fort Atkinson

• Racine

• Beloit

• Kenosha