

Lead, Soil, and Sawdust, 1820–1914

Chapter 8 deals with the 1800s and how people made a living using three of the state’s most important natural resources—lead, soil, and timber. In this chapter, students explore the lives of miners, farmers, and workers in the logging industry.

Activity 8.1 *The Luetscher Farm: Figuring Out a Farm Type*

Overview

In this activity students study a picture of a farm located in Sauk County, Wisconsin, and use it to determine the type of farm that it was. This gives students a chance to sharpen and demonstrate their ability to “read” visual materials at the same time that it lets them practice their descriptive writing skills.

Management

Materials

- Student Activity 8.1 (Teacher Pages 1–2; Student Pages 1–2)

Grouping

- Whole class
- Small group
- Individual, supervised or independent

Activity 8.2 *Learning from the Census*

Overview

This activity is based on a primary-source document, an 1850 census of farmers in the community of Rosendale, Wisconsin. Students’ work with this activity gives them first-hand knowledge of the people and their farms as well as practice working with charts, tables, and similar materials.

Management

Materials

- Student Activity 8.2 (Teacher Pages 1–3; Student Pages 1–3)

Grouping

- Whole class
- Small group
- Pairs
- Individual, supervised or independent

Activity 8.3 Learning from a Logger

Overview

This activity is based on a passage from *A White Pine Empire: The Life of a Lumberman*, written by lumberjack John E. Nelligan (1852–1937) and originally copyrighted and published in 1929. Nelligan was not a lumber baron or businessman. He started off as a manual laborer and then rose to the rank of foreman. Ultimately he made his living as a **cruiser**, someone who estimates the size and value of uncut forest. After growing up in New Brunswick, he had lumbering experiences in Canada, Maine, and Pennsylvania before coming to Wisconsin in 1871. Nelligan was involved first-hand in all aspects of the logging industry in northern Wisconsin, especially in the northeastern counties of Florence, Forest, Marinette, Oconto, Oneida, and Vilas, as well as adjacent portions of the Michigan Upper Peninsula.

Management

Materials

- Student Activity 8.3 (Teacher Pages 1–2; Student Pages 1–3)
- Pencils, colored pencils and crayons or felt tip pens
- Drawing paper

Grouping

- Whole class
- Small group
- Pairs
- Individual, supervised or independent

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Activity 8.1: The Luetscher Farm: Figuring Out a Farm Type

Teacher Materials

Preparation/Organization This activity involves having students interpret a full-color painting of a small family farm. In order to make sure students see the full detail of the picture, you should make at least one color copy of Student Page 1 to use as a transparency. Copies for each student or group may be in black and white if you do not have access to enough color copies, as long as you leave the transparency visible while students are working.

Procedure

1. Remind students that there were several types of farms during the period covered by Chapter 8—including wheat farms, dairy farms, and diversified farms. Have volunteers explain these terms and then have other volunteers provide examples of what was done on each type of farm, what equipment might have been needed, and how each type of farm might have been laid out.
2. Display a transparency of Student Page 1 and hand out copies of Student Pages 1 and 2. Give students time to look at the transparency.
3. Discuss the directions at the top of Student Page 2. When students understand what to do, follow your chosen classroom organization and have them complete the activity. Using their answers as a guide, then have students complete the sentence on the bottom of Student Page 1.
4. After students have completed the work, meet once again as a whole group and discuss student responses. Encourage them to share their ideas about how the farm might have looked if it were only a wheat farm or if it were only a dairy farm.

Answers

Part 1

The Luetscher farm is a diversified farm since you can see livestock (cattle to the rear of the picture), trees (in the middle), and a hay wagon (in the foreground).

Part 2

Details seen in the picture may include the following:

Crops: hay being harvested; orchard or pine tree plantation; wheat or oat fields and stacks of straw in field; corn in a corncrib.

Animals: horses that are being ridden, pulling a hay wagon, raking, and cutting hay; cattle in field near barn; pigs (or more cattle) in back field.

Buildings: Large houses, possibly of brick or stone; outhouse to the left of the main house; 3 barns; corncrib; another building, possibly a schoolhouse, with an outhouse; lots of fences.

Name _____ Date _____

Activity 8.1 The Luetscher Farm: Figuring Out a Farm Type



You have learned about several types of farms, including pioneer farms, wheat farms, dairy farms, and diversified farms. Look carefully at the picture of this farm from the 1800s. Use your observation skills to decide what kind of farm the Luetscher family had in Sauk County, Wisconsin. Write your answer on the lines below.

Part 1

The Luetscher farm is _____

Name _____ Date _____

Part 2

On the lines below, describe what you see in the picture. Use three paragraphs. In the first paragraph, tell what crops you see. In the second paragraph, tell about the animals. In the third paragraph, describe the buildings. If you need more space, continue your writing on another sheet of paper.

Crops

Animals

Buildings

Lead, Soil, and Sawdust, 1820–1914

Activity 8.2: Learning from the Census

Teacher Materials

Preparation/Organization You will need enough copies of Student Pages 1–3 for each student or group, depending upon how you choose to organize the activity. This activity lends itself to a number of different organizations: (1) whole class, (2) small groups, (3) pairs, or (4) individuals, with students supervised the entire time, supervised initially and then working independently for the remainder of the time, or working on their own for the whole activity.

Procedure

1. Point out that the census chart (Student Page 1) is handwritten and that it may be difficult to read, noting that people have done their best to figure out the names of the farmers who lived in and around Rosendale in 1850.
2. Then discuss the chart with students. Point out that the names in column 1 tell the “Name of Owner, Agent, or Manager of the Farm.” Continue, pointing out the following about the chart and its columns.
 - Columns 2 and 3 deal with the number of acres of land belonging to each farm. “Improved” land is land that has been cleared and used for crops or pastures. “Unimproved” land has had nothing done with it yet.
 - Columns 4 and 5 deal with the cash value of the farm.
 - Columns 6–12 deal with the kinds of livestock (animals) on the farms.
 - Column 13 deals with the monetary value of the livestock, in dollars.
 - Columns 14–17 deal with the various crops that were grown and the amount of each crop that was grown. Explain that a “bushel” is a measure of volume that is equivalent to about one cubic foot.
3. Then direct students to Part 1 on Student Page 2. Point out that this chart includes the names of the farmers and summaries of information from the census chart. Tell students to use the information from the chart on Student Page 1—and their math skills—to complete this second chart. A good strategy here would be to complete one or two items in collaboration with the students and then let them proceed on their own. Assist students with scripted numbers that are difficult to read.
4. After students have finished, have them exchange papers for assessment. Discuss the corrected papers with students, making sure they understand any errors they have made. Do not penalize students if they misread a scripted number.
5. Then direct students to Part 2 on Student Page 3. Discuss the questions with students and have them complete the page, either under your supervision or on their own. Collect their finished work for assessment.

Answers

Part 1**Census Chart**

From the Rosendale Agricultural Census page 403, 1850		
Farmer	Total Number of All Livestock	Total Amount of Crops Raised
1. Clinton Arochsson	22 animals	780 bushels
2. Frederch Jeroet	8 animals	280 bushels
3. Jonathan Dodd	33 animals	3,200 bushels
4. Moses Baggers	11 animals	323 bushels
5. Isac Woodruff	6 animals	250 bushels
6. Henry Hatsten	9 animals	350 bushels
7. Lenord Winnijao	8 animals	450 bushels
8. Robert Winnijao	6 animals	350 bushels
9. Henry Anderson	11 animals	250 bushels
10. Constant Sowles	6 animals	270 bushels
11. John Akeson	10 animals	190 bushels
12. George D. Curtis	62 animals	690 bushels
13. Henry W. Walsot	18 animals	850 bushels
14. Almon Benson	49 animals	750 bushels
15. John Cerofsman	43 animals	650 bushels
16. Charles Lyman	9 animals	545 bushels
17. Abel Kelly	13 animals	130 bushels
18. Oran Covil	16 animals	275 bushels
19. Charles Hammond	116 animals	265 bushels
20. David Perkins	85 animals	1,100 bushels
21. Tim Stevens	84 animals	925 bushels

Answers (continued)

Part 2

1. Clinton Arochsson.
2. Charles Hammond.
3. Isac Woodruff, Robert Winnijao, and Constant Sowles.
4. Jonathan Dodd.
5. Abel Kelly.
6. Wheat.
7. Paragraphs will vary, but students should note that some farms were devoted more to livestock than to crops and that farmers with more land were not necessarily the most successful.

Name _____ Date _____

Activity 8.2 Learning from the Census

403

SCHEDULE 4.—Productions of Agriculture in the Town of Acrondale, Dubuque in the year 1850.

enumerated by me, on the 22^d day of October 1850.

1	Name of Owner, Agent, or Manager of the Farm.	2 Acres of Land.		3	4 Cash value of Farm.	5 Value of farming Implements and Machinery.	6 Live Stock, June 1st, 1850.								7 Produce during the year.							
		Improved.	Unimproved.				8 Horses.	9 Mules and Oxen.	10 Working Oxen.	11 Other Cattle.	12 Sheep.	13 Swine.	14 Value of Live Stock.	15 Wheat, bushels of.	16 Rye, bushels of.	17 Indian Corn, bushels of.	18 Oats, bushels of.	19 Rice, lbs. of.	20 Tobacco, lbs. of.			
1	Christian Schroeder	90	390	5000	100	3	4	2	8	4	8	3	13	575	200	80						
2	Guadalupe Frost	80	130	3000	50	2	2	2	2	2	4	4	100	110	70	100						
3	Johnston DODG	100	162	2500	100	2	5	10	10	10	16	425	2000		200	1000						
4	Shaw Rogers	80	130	2800		1	4	2	4	2	4	4	200	150	73	100						
5	Isaac Goodright	16	61	500			4	2	4	2		12	150	100	100							
6	Henry Mattheis	60	100	2500	50	2	8	4	4	4	8	200	150	200	200							
7	Lentia Vinjas	100	120	3000			4	4	4	4		200	400	50	50							
8	Robert Vinjas	80		1000			4	2	4	2		190	300	50	50							
9	Henry Anderson	40	80	2000		2	8	2	4	2	4	250	200	50	50							
10	Constant Sobel	60	100	1300			1	4	1	4		150	200	70	70							
11	John Alster	23	35	600	10		8	2	3	2	13	150	150	40	40							
12	George S. Gurnea	50	190	2500	100		16	4	8	17	17	475	450	200	40							
13	Henry W. Mahot	63	179	2500	200	2	2	2	2	2	7	275	450	200	200	200						
14	John Beneson	100	250	3000	30	2	4	8	8	25	10	300	400	150	200							
15	John Grobman	110	220	3000	100	2	5	7	7	20	7	875	200	200	250							
16	Charles Lyman	40	200	2000	25		2	2	2	2	7	70	500									
17	Abel Kelly	12	88	500	85		2	2	3	4	4	140	80	50	50							
18	Oliver Good	40	120	1300	75	2	4	1	2	7	7	280	125	50	100							
19	Charles Hammond	30	130	2000	25		9	2	2	100	9	320	100	25	40							
20	David Roberts	12	148	2500	1		8	2	2	70	10	300	600	100	40							
21	Ann Leonard	40	40	2400	25		8	2	2	70	7	150	325	600	600							
22																						
23																						
24																						

John P. Leonard

Name _____ Date _____

Part 1

Census Chart

From the Rosendale Agricultural Census page 403, 1850		
Farmer	Total Number of All Livestock	Total Amount of Crops Raised
1. Clinton Arochsson		
2. Frederch Jeroet		
3. Jonathan Dodd		
4. Moses Baggers		
5. Isac Woodruff		
6. Henry Hatsten		
7. Lenord Winnijao		
8. Robert Winnijao		
9. Henry Anderson		
10. Constant Sowles		
11. John Akeson		
12. George D. Curtis		
13. Henry W. Walsot		
14. Almon Benson		
15. John Cerofsman		
16. Charles Lyman		
17. Abel Kelly		
18. Oran Covil		
19. Charles Hammond		
20. David Perkins		
21. Tim Stevens		

Name _____ Date _____

Part 2

Questions about the Census Chart

Answer the following questions about the census chart and your work with it.

1. Whose farm had the most total acreage, improved and unimproved? _____

2. Which farmer had the greatest number of livestock? _____

3. Which three farmers had the least number of livestock? _____

4. Which farmer had the most crops? _____

5. Which farmer had the fewest crops? _____

6. Judging from all of the farmers, which crop was grown the most often? _____

7. What did you learn about the farms in Rosendale in 1850? Write a short paragraph to tell about it.

Lead, Soil, and Sawdust, 1820–1914

Activity 8.3: Learning from a Logger

Teacher Materials

Preparation/Organization Students will work with their own copies of the excerpt from John E. Nelligan’s work, so be sure to prepare enough copies for each group or individual. You will also need copies for yourself to use as transparencies as well as colored pencils, crayons, or felt tip pens and drawing paper. You can use this activity with the whole class, small groups, pairs, or individuals, providing scaffolded support or letting students work on their own.

Procedure

1. Introduce the students to John E. Nelligan by telling them about his life from the late 19th and early 20th centuries, explaining that in later life he told his own story to someone who wrote it down. The work we have here is not a primary document, since it was not written by John E. Nelligan himself—but it is as close to Nelligan’s point of view as possible. As such, it is an excellent example of the Thinking Like a Historian “Through Their Eyes” concept.
2. Project a transparency of “Dramas of the Drives” and pass out the copies of the student pages. First discuss the specialized vocabulary on Student Page 1, making sure students understand that many of these words relate directly to the lumbering industry. Then have volunteers take turns reading aloud the passage on Student Pages 1 and 2.
3. Project Student Page 3 and review the document analysis questions. Allow students to work—as a whole, in groups or pairs, or individually—to answer the questions.
4. Distribute drawing paper and ask students to illustrate and caption one of the scenes that Nelligan describes.
5. Display the drawings and have students discuss the way the passage and the students’ illustrations helped them understand more about this important era in Wisconsin history.

Answers

1. He used a lot of descriptive and emotional words—such as “mighty, surging monster” and “a smother of spray and a tumult of noise”—to create colorful images. To heighten each situation’s importance, he also used dramatic phrases such as “epic drama of the drive,” “treacherous element,” and “send them relentlessly to their deaths.”
2. The men faced the dangers of falling into the water, the chill of the weather, and the possibility of being crushed by the logs.
3. They wore flannels for warmth in winter. When they drove the logs, they donned lighter clothing that would dry faster and not weigh them down in case they fell into the water. They wore rubber, waterproof boots in winter; for the drives they changed into spiked boots that would help give them a foothold on the logs.
4. Answers will vary, but students should appreciate that the passage makes the experience come to life for readers.
5. Answers will vary. Sample questions might be: (A) Did you ever fall into the river? (B) What was the scariest thing that happened to you? (C) Are things still done this way? Why or why not?

Name _____ Date _____

Activity 8.3 Learning from a Logger

Vocabulary

epic (ep ik) Heroic.

reservoir (rez ur vwar) A holding area for storing a large amount of water.

headwaters The source of a stream.

spree A period of too much eating, drinking, shopping, etc.

calked (kawkt) Having cleats on the sole of a shoe or boot to prevent slipping.

hardihood Courage and strength.

clement (klem ent) Mild, as in mild weather.

unfaltering Firm, not weakening.

vigilance (vij uh lens) Being alert, watchful.

treacherous (trech ur us) Not to be trusted; dangerous.

miscalculation (mis kal kyoo lay shun) Figuring out something incorrectly.

tumult (too mult) Loud noise and confusion.

wended Twisted; traveled.

Dramas of the Drives

From John E. Nelligan's *A White Pine Empire: The Life of a Lumberman* (1929)

In the old logging days of Wisconsin and Michigan, every spring saw the curtain roll up on a tremendous drama along the rivers of the timber country; a drama greater even than that in which the giant pines were felled . . . the **epic** drama of the drive. All winter long, preparations went forward for this brief period of . . . activity and struggle. Thousands and thousands of logs were banked along the riversides, or on the ice of the streams. There they lay . . . awaiting the day when they would be tumbled into the streams and rivers, to become . . . parts of a mighty, surging monster, the drive. The sun, in its daily journey across the heavens, worked ever northward, each day adding a few moments to the time taken by that journey, each day increasing the heat by which ice and snow were changed to water In **reservoir** dams at the **headwaters** of the rivers, the waters of the spring thaw . . . were stored up to carry the logs along the fist lap of their journey to the mills.

Name _____ Date _____

In the camps, cutting operations came to an end. Some of the men left for an early spring **spree**. Others stayed on, changing their rubbers for **calked** boots, the many spikes of which, on sole and heel, were filed to sharp points that would bite into the pine logs. The heavy flannels of winter gave way to overalls which would be lighter when wet and would dry out faster. These rivermen were the pick of the camps, lumberjacks of unusual strength . . . daring, and **hardihood**. They had to be. For days they had to go with but little sleep . . . with snacks of food snatched whenever and wherever possible. They had to suffer frequent duckings and were almost continually soaked to their skins at a time of year when the weather was still far from **clement**. The price of their safety was constant and **unfaltering vigilance**. They worked in a **treacherous** element, and the slightest misstep or **miscalculation** might send them relentlessly to their deaths. . . .

There would come a day in spring when the gates of the reservoir dam on each stream were lifted and its stored up waters turned loose. Down the riverbed they rushed, eager and irresistible, tearing up and carrying along the rotten ice which covered the stream. The rollways were broken out and, in a smother of spray and a **tumult** of noise and confusion, the logs were tumbled into the rushing waters. Out upon their heaving, surging backs scampered the rivermen, pushing, pulling, and prying with their peavies and pike poles, doing their best to keep the logs always on the move. The drive was on!

Down the river it **wended** its way, around bends, over falls, through rapids. Upon the constantly shifting carpet of logs the agile rivermen labored. . . . Every effort was made to avoid jam. . . . The first lap of the journey came to an end at the dam next below the reservoir dam. In the great pond back of this dam the logs came to a temporary rest, while a sufficient head of water was raised to carry them along the next lap.

Name _____ Date _____

Questions about “Dramas of the Drives”

1. What words did John Nelligan use to make the spring log sound exciting? _____

2. What kinds of dangers did rivermen face on the drives? _____

3. What kinds of clothing did the rivermen need to wear for protection? _____

4. How did this reading help you understand more about what life was like for loggers in Wisconsin about 100 years ago?

5. What three questions would you like to have asked John Nelligan if you could have interviewed him?

A. _____

B. _____

C. _____

Chapter 8 Assessment

Part A

1. Key Vocabulary

Write the letter of the correct definition next to each word.

- | | |
|-------------------------|---|
| ___ agriculture | a. the use of science and engineering to do practical things |
| ___ diversified farming | b. harvesting trees to be made into wood for building |
| ___ pioneer | c. a substance found in nature that is not an animal or a plant |
| ___ technology | d. another word for farming |
| ___ logging | e. one of the first people to work in a new and unknown area |
| ___ mineral | f. growing and raising a variety of crops and animals |

2. Complete the following sentences.

a. Natural resources are _____
_____.

b. Wheat farming in Wisconsin didn't last because _____
_____.

c. By studying census reports, we can learn these things about farming in the past:

_____.

Name _____ Date _____

Part B

1. Look at the three pictures of cranberry harvesting on page 141 of *Wisconsin: Our State, Our Story*. Then write three sentences that explain how cranberry harvesting in Wisconsin has changed over time.

2. How has technology changed the way people have farmed in Wisconsin?

3. How has technology changed the way people have used timber in Wisconsin?

4. How has our use of natural resources changed over time?
