



Lesson 8.1 “Evolution of Farming”

Unit 8: Changing Times on the Farm

Lesson Objectives

- Students will compare the production histories of a modern-day lunch and a colonial lunch.
- Students will discuss the difference between self-sufficient farming and specialized farming.
- Students will create a timeline of New Hampshire farming with images and information.
- Students will investigate a modern-day New Hampshire farm.

Lesson Competencies

- I can analyze and explain changes in society and how they impact people in the past and present. (Moose SS)
- I can initiate and sustain a focused discussion. (ELA 7)
- I can analyze, use, and construct timelines to explain how events are related chronologically to each other and to explain probable causes and effects of events and developments. (Moose SS)
- I can conduct short research projects to investigate different aspects of a broader topic, event, or concept. (ELA 8)

Essential Questions

How has New Hampshire come to be the way it is?

Focus Questions

How has farming changed in New Hampshire from the colonial period to industrialization?

Estimated Time

Two 40-minute class sessions

Materials & Equipment

“How Did This Lunch Get to School? Sample Responses” for educator reference
 “A Colonial New Hampshire Lunch Is Served” for projection
 “What Did New Hampshire Farms Produce?” for projection
 Group sets of “New Hampshire Farms Timeline,” “New Hampshire Farms Timeline—Labels” (cut up), “New Hampshire Farms Timeline—Image Set” (cut up)
 “New Hampshire Farms Timeline Answer Key” for educator reference
 Class set of “A New Hampshire Farm in the 21st Century”
 Access to the UNH New Hampshire Farms Product Map website



Educator Introduction & Rationale

Farming was the chief occupation of most of the people who lived in New Hampshire from the early 1600s to the early 1900s. Agriculture practices had a profound impact on the culture and society of New Hampshire and reflect changes that were occurring elsewhere in the country. Early New Hampshire farmers overcame rocky soil, thick forests, and a short growing season to create working farmsteads. Farmsteads developed through the next centuries as self-sufficient farmers thrived by diversifying their agricultural practices, from cultivating bees to maintaining orchards to growing a variety of vegetables. Industrialization changes the nature of farming as the sheep boom occurred in the state and farm families lost labor to the new mills and growing cities. As competition with the midwestern and western farmers grew in the late 1800s due to the railroad, NH farmers shifted their efforts to supplying major metropolitan areas like Boston and New York with dairy products, poultry, fruits, and vegetables. In the final decades of the 19th century, thousands of people left their farms in New Hampshire and headed either to jobs in the cities or to the western United States where they could farm more profitably. New Hampshire's population went from being predominantly rural to overwhelmingly urban in the space of a few short decades. Please see the Educator Overview for more information.

This is the first lesson in Unit 8: Changing Times on the Farm. In this lesson, students compare how a lunch today gets to their table with how a lunch got to the table in colonial times. They discuss what New Hampshire farms produced in the pre-industrial era compared with the specialization of the post-industrial era, and create a timeline with images and labels. Finally, they investigate a modern-day New Hampshire farm using UNH's "FARMS: New Hampshire Farm Products" website. Please adapt all the material in this lesson, as necessary, to meet the needs of the students in your classroom. Please note, lesson vocabulary and definitions are at the end of the document. You may wish to preview these with your students.

There is a reinforcement activity that uses the image set and timeline labels to sort them into pre- and post-industrialization categories and one that uses Donald Hall's *Ox-Cart Man*. Two extension activities further investigate the UNH FARMS map and plan a visit to a local farm.

Learning Activity

Activation

How did this lunch get to school? As a whole group, look at the lunch menu for the day or the contents of a student volunteer's lunch box. Then, work together to think backwards and make a list of steps explaining how that meal came to be served at the school. A sample list of steps for a school lunch and a home lunch is provided for reference and support if students need prompts to think in detail. Record the list of steps on chart paper or another surface that can be displayed.

Direct Instruction & Discussion

Self-sufficient to specialized. Comparing the group's list of steps for lunch to "A Colonial New Hampshire Lunch is Served" and discuss the big differences students observe between the two.

Possible outcome: Students should observe that the list of steps is much shorter for the colonial meal. Students should also observe that the food for the school lunch has to travel much farther to make it to the person who is going to eat it. They may make observations about who did the planting, harvesting, and cooking.

Explain that while the steps themselves took much longer in the colonial period (because there weren't machines to do any of the work of planting, harvesting, storing, preparing, or cooking), the food did not have to travel as far because farms were **self-sufficient**. Everyone who lived in New Hampshire had to grow or raise the food they needed.

Display or distribute "What Did New Hampshire Farms Produce?" Explain that the farm on the left shows what was produced by a typical farm in colonial New Hampshire and the farm on the right represents what a farm in New Hampshire today produces.

Use this infographic to guide a discussion about why farms needed to be self-sufficient and why farms today focus, or **specialize**, in certain products today. Be sure that students understand the following key points:

- People's basic needs for food and clothing varied throughout the year and had to be met with what could be grown and made locally.
- The economy was local: People met their needs primarily within the bounds of their farm or by trading with others who lived nearby. People used what they grew and made and often had little left over to sell.
- Transportation was initially limited to foot and horse travel, so goods could not travel far.
- Innovation focused farms: Developments in farm machinery, food storage, and transportation meant farms could start selling their products to places farther away. It started to make more sense to focus on growing a lot of one kind of product and selling that (and using the profits to buy other items to meet needs).



Independent Practice

Timeline of NH Farms. Explain to students that they will do an activity that helps them understand more about how farming—an occupation once practiced by nearly everyone who lived in New Hampshire—changed from the colonial period to industrialization. Provide students (or pairs of students) with the blank timeline, “New Hampshire Farms Timeline Images,” and “New Hampshire Farms Time Labels.” Students should read the labels, match them to the appropriate image, and then place them in chronological order along the timeline.

Discussion questions to process the timeline:

- What surprised you about the timeline?
- What observations can you make about the timeline?
- Which two entries do you think are the most important on the timeline?
- Which two entries do you think show the greatest change in how farming evolved in New Hampshire?
- During what period of New Hampshire farming would you like to spend a week working on the farm?

Teaching tip: This is a good spot to pause if you divide the lesson between two teaching periods.

Guided Practice & Reflection

New Hampshire Farms Today. Prepare students for this activity by doing a whole group exploration of “FARMS: New Hampshire Farm Products,” an interactive map available from the University of New Hampshire Extension. Select the “Find Food” tab and, as a group, explore where New Hampshire’s current agricultural products are produced within the state. Show students how to change the data shown on the map by selecting from the different product category tabs. Then, show students how to select the “Find Farms” tab, zoom in, and choose a particular farm to learn more about what it produces.

Distribute “A New Hampshire Farm in the 21st Century” and let students use the FARMS map to explore one farm and complete the chart. If possible, extend online research to an exploration of the farm’s website (if one is available) to learn how long the farm has been in operation and if the farm has changed what it produces.

Teaching tip: Consider assigning students different geographical regions so that their research reflects a variety of farms across the state. Display what they learn about farms today on a large map of New Hampshire.

Reinforcement

1. **Farming fact sort.** Provide students with the labels from the timeline activity and "Farm Fact Sort." Challenge students to sort the labels into the two categories: pre-industrialization and post-industrialization. Afterward, discuss how they knew which fact belonged in which category.
2. **Donald Hall's *Ox-Cart Man*.** This Caldecott Medal-winning depiction of early farming life through New Hampshire's seasons gently illustrates the continuous work of self-sufficient farm families. The Farmers' Museum in Cooperstown, New York has developed a variety of simple activities to accompany a shared reading of this New Hampshire classic.
www.farmersmuseum.org/files/education/Educator_Guides/Ox-CartManEducatorsGuide.pdf

Extension

1. **Pick a product.** Using the "Find Food" function on the FARMS map, students select a current New Hampshire agricultural product and investigate where it grows and how it is sold. Students can dig deeper by researching the history of that product in New Hampshire. How long have people been cultivating that product? Has its production grown or decreased?
2. **Visit a local farm.** Plan a trip to a nearby farm to learn more about how farming in New Hampshire works today. Plan ahead by learning about what the farm produces and create a list of questions for the farmers about the technology they use to do their work today.



Supporting Materials

New Hampshire Historical Society Resources

Timeline images:

1. Farmland in New Hampshire
2. New Hampshire Farm Scene, 1993
3. Spool of Thread, 1880
4. Dairy Farm Workers, 1944 – 1988
5. Grazing Sheep, 1880 – 1985
6. General Store, 1900
7. New Hampshire Grange Fair and Festival, 1886
8. New Hampshire Farms: Your Opportunity, 1920

Other Resources

- From the University of New Hampshire “FARMS: New Hampshire Farm Products” found at extension.unh.edu/resource/new-hampshire-farm-products-map
- Timeline images:
 - Flax, Wikimedia Commons
 - Three Sisters, 2018, Wikimedia Commons
 - Native Americans and English Trading, 1597, Edward E. Ayer Digital Collection, Newberry Library
 - Planting in the Colonies, 1631, Project Gutenberg
 - Lumber and Wood Products, Project Gutenberg
 - Colonial Farm, circa 1760s, Internet Archive
 - Spinning in the Colonial Kitchen, circa 1700-1850, Wikimedia Commons
 - Cotton Carding Machines, 1834, ©The Board of Trustees of the Science Museum
 - Workers at a New Hampshire Factory, 1910, Courtesy of the Goffstown Historical Society



Standards

“Moose on the Loose” Content:

- ✓ Students will understand that economic activities in New Hampshire were varied and have changed over time with improvements in transportation and technology. (3-5.T4.1)
- ✓ Students will understand that improved technology such as the steam engine and telegraph made transportation and communication faster and easier. They will understand that this led to rapid industrialization in the state and the world and the growth of various industries and manufacturing. (3-5.T5.1)
- ✓ Students will understand that industrialization in the 19th century changed patterns of settlement as well as the way people lived in New Hampshire. (3-5.T5.3)

“Moose on the Loose” Skills:

- ✓ Gathering, Interpreting, and Using Evidence (3-5.S1.1, 3-5.S1.2)
- ✓ Effective Historical Thinking (3-5.S3.1, 3-5.S3.2)
- ✓ Understanding Economics and Economic Systems (3-5.S5.2)
- ✓ Using Technology Responsibly (3-5.S7.1)

New Hampshire Social Studies Frameworks:

- ✓ Economics: Economics and the Individual (SS:EC:4:1.4)
- ✓ Economics: Basic Economic Concepts (SS:EC:4:2.3)
- ✓ Economics: Cycles in the Economy (SS:EC:4:3.1)
- ✓ Geography: Places and Regions (SS:GE:4:2.2)
- ✓ Geography: Environment and Society (SS:GE:4:5.1, SS:GE:4:5.2)
- ✓ US / NH History: Economic Systems & Technology (SS:HI:4:4.1, SS:HI:4:4.3)

NCSS Themes:

- ✓ Theme 2: Time, Continuity, and Change
- ✓ Theme 7: Production, Distribution, and Governance

C3 Frameworks:

- ✓ Exchange and Markets (D2.Eco.3.3-5, D2.Eco.4.3-5, D2.Eco.6.3-5, D2.Eco.8.3-5)
- ✓ Human Population: Spatial Patterns and Movements (D2.Geo.8.3-5)
- ✓ Change, Continuity, and Context (D2.His.1.3-5, D2.His.2.3-5)
- ✓ Causation and Argumentation (D2.His.17.3-5)
- ✓ Communicating Conclusions (D4.2.3-5)

Common Core ELA:

- ✓ Craft and Structure in Informational Text (RI.4.5)
- ✓ Integration of Knowledge and Ideas in Informational Text (RI.4.7)
- ✓ Range of Reading and Level of Text Complexity in Informational Text (RI.4.10)
- ✓ Research to Build and Present Knowledge (W.4.7)

Lesson Vocabulary

agriculture	(noun) The practice of growing specific crops during specific seasons for food
colonial	(adjective) Describing the time when the American colonies were governed by England
cooper	(noun) A person who makes barrels
cordwainer	(noun) A person who makes shoes
flax	(noun) A plant whose fibers are used to make a cloth called linen
linen	(noun) A type of cloth that comes from flax
merchant	(noun) Someone who buys and sells items to make money
mechanized	(adjective) When something is operated by machines
merino sheep	(noun) A kind of sheep originally from Portugal that has extremely soft wool
self-sufficient	(adjective) When a person, group, or thing needs no outside help in supplying what it needs to survive
silversmith	(noun) A person who makes things out of silver
specialized	(adjective) When someone or something concentrates on a small part of a subject or area
textiles	(noun) Types of cloth or fabric
tinsmith	(noun) A person who makes things out of tin