

Lesson 19

Farmington Canal

Why was the Farmington Canal important?
What was its path?
How long did it take to build?

GOAL To understand that the Farmington Canal is of historical significance

OBJECTIVES Students will:

- ✓ read about the Farmington Canal
- ✓ answer questions about the canal
- ✓ complete a writing assignment

MATERIALS paper, pencils, student questions, Farmington Canal Map from CD

CORE CURRICULUM CONTENT STANDARDS

- Language Arts 1(1,2,12), 2(2,3), 5(4,6)
- Science 2(1), 3(5), 7(8), 14(1,2)
- Social Studies 1(1,2,5,8), 2(4), 3(9), 4(1,5), 9(1), 10(5), 12(7,8)

VOCABULARY canal, locks

PROCEDURES

1. Begin by asking students what a *canal* is. Ask if they can name a canal, where is it located, why it was built.
2. Discuss that canals have been built since the ancient times. Refer them to a website to gather information about canals.
(<http://www.du.edu/~jcalvert/tech/canhist.htm#A>)
3. Ask students if they are aware of any canals that were built in the Farmington River Watershed. Elicit answers (*Farmington Canal*). Show map of Farmington Canal on CD.
4. Explain that the canal was built during the 1800's and its route was from New Haven to Northampton, Mass. Have students read the following excerpt from <http://www.kelseypub.com/ct-guide/historic/farmcanl.shtml>.

The Farmington Canal

In the early 1800's, Middletown and Hartford were becoming very wealthy cities because of their proximity to the Connecticut River. The goods that were produced in the interior rural areas of Connecticut could be loaded onto boats and barges and easily shipped off to places where they could be sold. The boats and barges would, of course, arrive full with goods and supplies to, in turn, supply those same rural areas. These cities were booming because of trade.

New Haven had enjoyed good trade by ship throughout the world, but they were hard pressed for trading to the northern inland communities. The roads of that day were not very good for travel and it must have been near impossible to send any amount of goods loaded into a wagon very far at all without destroying the wagon's contents. New Haven had an asset in their port and was receiving goods from the West Indies as well as other portions of the American east coast.

That old yankee ingenuity brought on the idea of a canal that would extend north and furnish the towns along the way with goods, as well as be an easy route for their manufacturing and produce to return to New Haven for sale there as well as to be shipped elsewhere. This may sound like an outrageous undertaking, that would never work, but if you consider history many canals have been built and many have been successful. Canals were in use in Italy as far back as 1500. Actually it was an outrageous undertaking. Can you imagine digging a ditch 4 feet deep, 20 feet wide stretching some 80 miles all the way to Massachusetts in the early 1800s? The tools of choice at that time were shovels and wheelbarrows. I'm sure they had a pick or two also. If that's not outrageous ... I don't know what is!

At this time the Erie Canal was being built. Perhaps this spawned the idea to build the Farmington Canal. At the time there were big plans that would connect Boston to Albany, NY by canal. Of course the Farmington would be part of that plan. They also wanted to connect it through the Erie Canal and into the Great Lakes. This was an ambitious plan that never came to be realized. Times were changing back then, as they always will, and newer and better ways of transportation were on the horizon. The locomotive was around, but it wasn't in widespread use yet.

In 1822 the 17 towns along its proposed route conducted a survey and were told that it was a promising project. Stock was sold to the public to raise enough capital for its construction. On July 4th, 1825 with much pageantry and ado the first shovelful of dirt was unearthed and the construction began. Three years later the channel from New Haven to Farmington was complete. The first canal boat to travel it was called the "*James Hillhouse*" and started its float downstream from Farmington.

It took until 1835 to finish construction to Northampton, MA and connect to the Connecticut River. There were many problems associated with the building of the canal. The type of soil that the canal ran over was not suited to holding water and the canal would run dry. The task itself of hauling the sandy loam and rock was an immense chore. The expense of building proved to be more than expected and costs were cut in constructing the banks of the canal. This proved a big mistake as the banks washed out during storms. Nature itself was quite a problem. A drought in 1843 closed the canal for four months encompassing the summer. Ice would block the canal and prevent shipping.

Some land was basically just taken from landowners who, of course, were not at all happy about that. Lawsuits were filed as well as some of these people taking more immediate action such as blocking off feeder streams and breaking down the embankments. The landowners often complained of the canal. Bridges were constructed over the canal in those places where the canal cut farms in two, but they were not constructed in such a way as to make the transport of wagons loaded with harvests to easily use them. The canal leaked in many places and turned some pastures into swamps.

There were many locks on the route. Although there were many flat stretches between New Haven and Northampton the canalboats had to be lifted and then lowered over the rises and falls in the landscape. There were 21 locks between New Haven and Southington. The locks would be flooded lifting the boats up and then as they progressed along the route they would be drained to lower the boats. Throughout the entire canal the boats had to be lifted 310 feet and lowered 213 feet.

Farmington River Watershed Education Curriculum: Middle School

The canal boats were powered by horses. The entire route had a tow path next to it. The horses were frequently changed and usually were locally owned. Boats powered by steam were common in this day, but it was considered a risk to operate them on the canal, as the wake would disrupt the embankments. Although the canal operators did try to entice steamboat traffic none ever emerged.

The canal was a very interesting entity to the public. Watching the boats go by was a favorite way to pass the time. The boats did become a means of travel and people would take the boats to town and on outings such as picnics along the banks.

In the late 1830s repairs to the canal cost more than the canal produced. The canal did better as a business in the early 1840s but problems were everywhere. The general idea of the times was that rail transport would be a better way to move goods along the route of the canal. By 1847 construction of a rail bed was underway and the end of the Farmington Canal was written upon the banks that made the canal both a success and a failure.

The Railroad operated successfully along this route for many, many years. It certainly had its ups and downs but not nearly as much as the Canal had. As time has gone by and our highways much improved trucking has taken over much of the railroads business. I can recall trains running regularly over the canal line in the 1960s. Between then and now however business failed.

Now all the tracks have been removed from the rail bed and it is being slowly converted to a park area. The path is being paved much of the way and is frequented by cyclists and hikers alike. It's a very historic route and a walk along its path will bring to mind many pictures of how life must have been in the heyday of the canal.

5. Separate students into groups and have them answer the questions collectively to discuss with the rest of the class.
 - a. What was the route of the canal?
 - b. What tools were used to build it?
 - c. When was it built? (beginning, completion)
 - d. Why was it built?
 - e. What were challenges of building the canal and using it?
 - f. Why was the railroad built at the same time?
 - g. What are locks and how are they used?
 - h. Was the canal a success and/or failure?
 - i. What evidence of the canal do we notice today?
 - j. What is it used for today?

6. After answering questions, have students choose from the following writing assignments:
 - a. Imagine you are a worker for the canal. Describe a day at work.
 - b. The canal is completed and you are watching the boats. Describe the canal and surrounding areas. What are your thoughts about it?
 - c. You are the publisher of a newspaper. Write an article demonstrating the excitement of the opening of the Farmington Canal.

EXTENSIONS

1. Have students describe what life was like during the time the canal was built.
2. Suggest that the students visit the aqueducts in Farmington that are remnants of the canal.

GLOSSARY

canal - an artificial waterway or artificially improved waterway used for travel, shipping or irrigation

locks - a section of a waterway, such as a canal, closed off with gates, in which vessels in transit are raised or lowered by raising or lowering the water level of that section