Inspired by the success of the Erie Canal [begun in 1817] and spurred by the remarkable expansion of textile manufacturing along the Blackstone in the early 19th century, a group of Providence and Worcester merchants formed the Blackstone Canal Company in 1822. The canal would meet the considerable transportation demands of inland factories, which needed both to obtain raw materials and to ship finished products to market.

Overland travel on poor 19th-century roads was time-consuming and expensive. It could cost as much to haul a ton of freight 30 miles overland as it cost to ship it to England. The Blackstone Canal brought a savings of nearly 50 percent on goods shipped to Worcester from Providence by canal over those carried overland from Boston.

But the canal was plagued with problems from the outset. Mill owners argued over water rights. Ice closed the canal in winter. The canal was susceptible to flood and drought.

The greatest cause of the canal's demise was the Providence and Worcester Railroad, completed in 1847. The railroad was cheaper, faster, and more reliable than the canal, and the canal ceased operation a year after the railroad opened.

The trail described in this brochure takes you along the Blackstone River and one of the few remaining sections of the canal. The numbered sites tell the story of the canal, of the shift from farm to factory that it facilitated, and of the impact of the Industrial Revolution on the land and its people.

DIRECTIONS

Uxbridge is located at the junction of routes 122 and 16. From Rte 146, take Rte 16 east to Uxbridge Center and turn left onto Rte 122 north. In 1½ miles turn right at traffic light onto East Hartford Ave. In 1 mile turn right on Oak Street at the Tri-River Family Health Center. The Visitor Center is located in the large red barn at River Bend Farm.

BLACKSTONE RIVER VALLEY NATIONAL HERITAGE CORRIDOR

ALONG THE WAY

- Lookout Rock provides one of the best views in the Valley. To get there, follow the 1.5-mile trail beginning at the Heritage State Park parking lot on East Hartford Avenue. Or go to the Quaker Street parking lot and follow the trail a short distance into the woods. Refer to the map inside for directions.
- Nearby historic sites in Uxbridge include the Cornet John Farnum House (c. 1710) at 44 Mendon Street (Rte. 16), home of the Uxbridge Historical Society, and Prospect Hill Cemetery, diagonally across from the Farnum House. An Uxbridge walking tour brochure is available at the River Bend Farm Visitor Center.
- Be sure to visit Millville Lock, the best preserved lock along the canal. Follow Rte. 122 South from Uxbridge to Millville Center. Turn right at the traffic light at the intersection of Rte. 122 and Central Street. Parking lot at corner of Hope and Central Streets. Follow the old railroad bed to the lock, which is about ¾-mile away
- The Blackstone River runs wild through high rocks at Blackstone Gorge about 6 miles away. Follow Rte. 122 South through Millville into Blackstone. Turn right on County Street. Parking lot at end of street. Trails are left of Roaring Dam.
- America's Industrial Revolution began when Samuel Slater established the nation's first mechanized textile mill on the Blackstone River in 1793. Be sure to visit this historic working mill museum, just 20 miles south of Uxbridge in Pawtucket, RI. Slater Mill: 67 Roosevelt Avenue, Pawtucket, RI. Free parking. Restrooms. Admission charged. For hours and fees please call 401-725-8638 or visit www.slatermill.org/visit
- For further information about events, restaurants, and lodging in the Valley, in Massachusetts call the Blackstone River Valley Visitors Bureau, at 1-800-841-0919; in Rhode Island call the Blackstone Valley Tourism Council at 1-800-454-BVTC; or contact the Blackstone Valley Chamber of Commerce at 508-234-9090 or www.Blackstonerivervalley.com.

www.nps.gov/blac/index.htm

THE BLACKSTONE RIVER & CANAL HERITAGE STATE PARK

The Blackstone River and Canal Heritage State Park is owned and managed by the Massachusetts Department of Conservation and Recreation. The park includes restored segments of the canal and tow path, a visitor center with exhibits, canoe launch sites, maps, brochures, interpretive tours, concerts, and special events. Free parking and free admission. Open daily. 287 Oak Street, Uxbridge, Massachusetts. 508-278-7604

dcr
Massachusetts

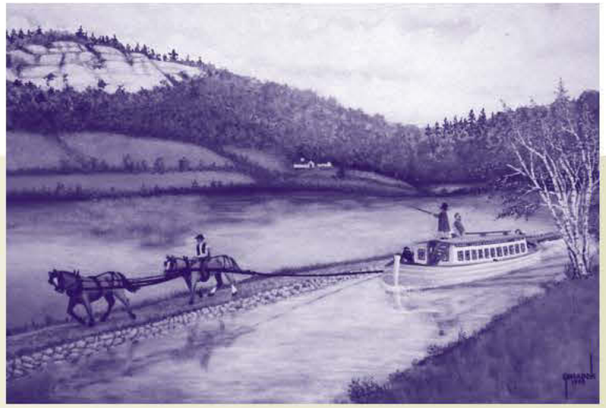
Cover photo: *Oil Painting of Lady Carrington by Rudolf Gniadek;* Inside upper right: *Illustration from engraving of the Blackstone Canal from an advertisement for the Providence & Worcester Boat Company, 1829, RIHS Collection (RHi X3 2739).*

rev2012

BLACKSTONE CANAL

NORTHBRIDGE – UXBRIDGE, MA

Towpath Walk



A self-guided walk along the historic Blackstone Canal.

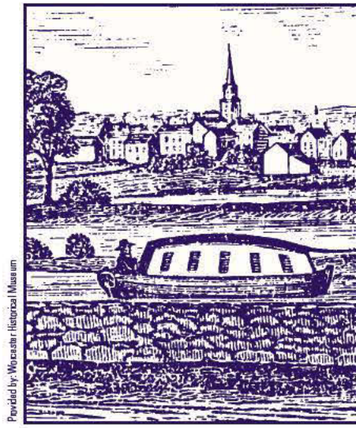
John H. Chafee
BLACKSTONE RIVER VALLEY
National Heritage Corridor

BLACKSTONE CANAL

In the early part of the 19th century, America was in the midst of a second revolution. In many ways it was a quiet revolution, one that has gone largely unsung and uncelebrated.

Yet it was a revolution that profoundly and permanently changed the way Americans live. It transformed a provincial agrarian society into an industrial giant, moved whole populations off the farm and into the factories, and altered our relationship with the land, with time, and with each other. In time, it altered the landscape and affected nearly every aspect of daily life.

The revolution we are talking about is, of course, America's Industrial Revolution. There is no better place to begin to understand its development than here on the banks of the Blackstone River, where it all began over 200 years ago.



Provided by: Worcester Historical Museum

Towing a canal boat

The Blackstone Canal was built before the advent of steam engines and other forms of self-propulsion. Horses were used to pull the boat, carrying as much as 40 tons of freight, along the shallow, slow-moving water. Two horses, one behind the other, were attached to the boat by a tow rope and led along the towpath by a teamster.

The Blackstone, once "the hardest working river in America," descends 438 feet in its 45-mile course from Worcester, Massachusetts, to Providence, Rhode Island. By the early 20th century, 409 feet of the river's fall was utilized by 34 dams providing power to adjacent mills.

For a span of 20 years, from 1828 to 1848, segments of the river were paralleled by a man-made canal on which horse-drawn boats carried freight and passengers between landlocked Worcester and the wharfs of Providence.

Local farmers, as well as manufacturers, shipped a wide range of products from Plummer's Landing.

1 PLUMMER'S LANDING

(0.0 miles, north side of Church St.)
The Blackstone Canal had been established for nearly 10 years when 27-year-old Israel Plummer constructed a general store and warehouse beside an existing canal lock in 1837. Boats entering the lock could easily tie up in the adjacent basin used to control the water level in the lock. Plummer's Landing became an important commercial center. Local farmers brought their products to be shipped to expanding markets, while coal, cotton, molasses and other goods produced outside the Valley arrived at Plummer's. When the Providence and Worcester Railroad replaced the canal in 1847, Plummer took advantage of the railroad for a new business venture, shipping high quality structural granite from a quarry just a half-mile west of here. Today we can walk through the foundation stones of Plummer's buildings and picture a time when this was a bustling stop on the canal.

2 LOCK NO. 26

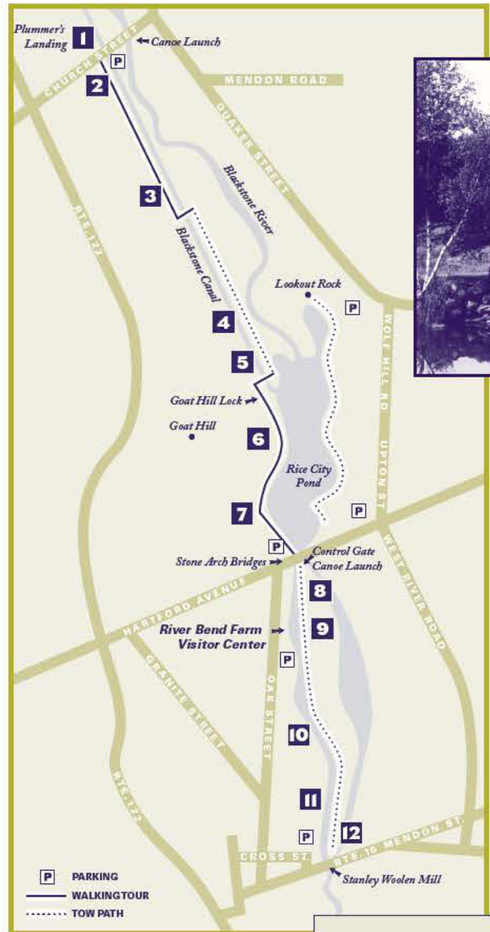
(0.05 miles, south of parking lot)
The Blackstone Canal was built with 48 stone locks and one wooden lock. When the Blackstone Canal Company went out of business in 1849, many of the locks were given to creditors to satisfy significant debts. Some locks were taken apart and the granite used to build power trenches and mill extensions. If you look under the bridge that crosses the canal at Church Street, you will see a portion of lock 26 now used as a bridge abutment. Further down this trail, at Goat Hill, you will see one of the last remaining examples of a canal lock.

3 OPEN FIELD

(.80 miles)
When the Blackstone Canal was operational, most of New England looked like this cleared land. In fact, at the time of the Civil War in 1861, 85 percent of New England had been cleared for grazing livestock and planting crops. Wood was used for construction and fuel.

4 CANAL CONSTRUCTION

(1.4 miles)
The Blackstone Canal merged with navigable portions of the river for approximately 10% of its 45 mile course. The rest was hand-dug, using ox carts, picks, axes, iron bars, shovels, and limited quantities of black powder. The canal bed was prism-shaped, 34-feet wide at the top and 18-feet at the bottom, and just 4- to 6-feet deep. It was fed by a system of reservoirs, most of which were natural ponds enlarged by damming. The tow path was about 3 feet higher than the water level and 8- to 10-feet wide. A thousand men worked in the Massachusetts section alone in 1827, earning about $26 a month working 6 days a week from dawn to dusk. The Canal was officially opened in the fall of 1828 after four construction seasons and a cost of $750,000.

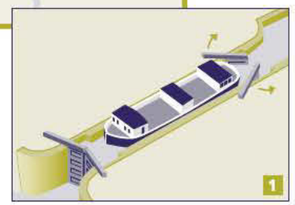


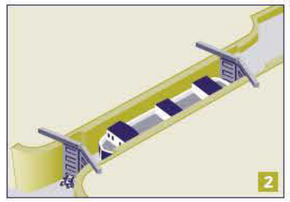
Grass/Photographie

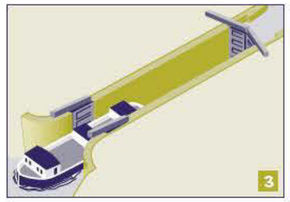
River Bend Farm, established prior to the Revolutionary War, became one of the region's largest dairy farms, operating until 1974.

5 GOAT HILL LOCK NO. 25

(1.7 miles)
A series of canal locks helped boats to ascend and descend the elevation changes between Worcester and Providence. Forty-eight were built of stone quarried close to where they were erected. Cut stone was more expensive than wood, appoximately $4,000 per lock, but required less maintenance. The locks were 10-feet wide with 82 feet between the large oak gates on either end. The average lift of a lock was 9 ½ feet. Wooden sheathing lined the lock to help protect the canal boats as they passed through. An attendant operated the locks and collected tolls, but later, to cut costs, the attendants were eliminated and tolls were billed.







How a Canal Lock Works

1 A barge traveling downstream enters a lock and the upstream gates of the lock close behind it.

2 Water from the upper level of the canal is let out of the lock through sluice gates until the water level is the same as that of the canal's lower level.

3 The downstream gates open, and the barge moves out of the lock. The process is reversed for vessels moving upstream.

6 STONE CUTTING

(2.0 miles)
Engineers used stone from this hillside to construct the Goat Hill Lock. Notice the holes in this boulder. An iron rod called a star drill was held by hand on the rock surface and hammered with an iron mallet. The drill would be turned slightly and hammered again, drilling a hole 2 ½-inches deep. Holes were drilled 3- to 4-inches apart. Next, splitting devices called feather wedges were placed in the drilled holes. The stone cutter would then drive an iron stake between the wedges, splitting the stone. The stone here appears not to have cracked where the stone cutter wanted, and his tools were caught in the uneven break of the stone, leaving them for us to see.

7 RICE CITY POND

(2.25 miles)
After the Blackstone Canal Company went out of business in 1849, owners of the Taft Central Mill (later Stanley Woolen Mill) about a mile south built a 14-ft dam along Hartford Avenue, creating a 100-acre mill storage pond. For over 90 years the pond waters stretched out to the hillsides, covering the canal towpath and lock. During the hurricane of 1955, the dam breached, exposing the remains of the Canal, towpath, lock and bridge abutments. The dam was rebuilt to 9 feet, leaving the Canal channel and towpath visible below the path around Goat Hill.

8 CANAL CHANGES

(2.5 miles, south of Hartford Ave.)
In the 1860s, owners of the Taft Central Mill constructed a dam and control gate at this site to control the flow of water from the mill pond reservoir into the Canal, which they converted into a power trench for the mill. They also built up the height of the tow path. Greater power was achieved by increasing the volume and height of the water before its descent into the mill's turbines. The rust marks along the stone-work indicate the 5-foot difference between the 1860s dam and the dam built after the hurricane of 1955.

9 CANAL IMPACT ON FARMING

(2.75 miles)
Fresh produce was a common commodity on Blackstone Canal boats. Although many New England farms would be abandoned in the 19th and early 20th century, the canal stimulated local farm production, enabling farmers to ship their products to nearby villages and towns.

10 WIDOW WILLARD BRIDGE

(3.2 miles)
Widow Willard's farm was split in half when the Blackstone Canal Company took part of her land by "eminent domain." Her barns and livestock were on one side of the canal, most of her pastures on the other side. The company was required by charter to pay her $125 or build a bridge over the canal so that farm operations would not be disrupted. Here we see the stone abutments of the wooden arch bridge that connected the farm – one of the more than 50 farm bridges the company built along the length of the canal.

11 WATER POWER

(3.65 miles)
When the Canal was transformed into a high banked power trench, the tow path was raised, the canal banks lined with rock, and the canal diverted directly into the Taft Central Mill, where water flowed to the mill's turbine, generating power to operate the mill.

12 STANLEY WOOLEN MILL

(3.8 miles)
The Stanley Woolen Mill, established by Moses Taft in 1853, is one of many large textile mills that flourished along the Blackstone River in the 19th and early part of the 20th century. Taft, formerly a co-owner of the Waucantuck Mill on Route 16, secured water rights from the defunct Blackstone Canal Company, allowing him to divert water from the canal to his mill. The mill processed raw wool, dyed the yarn, and wove it into finished fabrics. During the Civil War, the factory manufactured cloth for the Union Army. The Calumet Woolen Company, owned by the Wheelock family, later purchased the mill, subsequently supplying fabric for coats for Army personnel in WWI, WWII, and the Korean conflict.

Stanley Woolen Mill closed in 1987, a late casualty of the decline of the textile industry in New England.