

# Historic and Archaeological Investigations

In 2019–2021, architectural historians documented the historic Waquoit River Herring Company mill pond, earthen dam, and fish ladder associated with the milling and fishery activities at Carriage Shop Road in the 19th to mid-20th centuries. In 2020, archaeologists studied the belowground remains of the historic mill buildings and water-power structures before the dam and fish ladder were removed and the pond drained as part of the river restoration work. (To learn more, read about the [Site History](#)).

## Mill Pond

The mill pond was created in the early 19th century by building a dam on the Childs River near Carriage Shop Road. The dam was added to provide water power for Alexander Clark's woolen mill. It later powered the Waquoit Company carriage works and blacksmith shop owned by Alexander Crocker and Josiah Burgess. In the late 19th century, the town road by the mill (originally known as Meeting House Road) was moved to the north, where it crossed the mill pond and was renamed Carriage Shop Road.



Former mill pond on the north side of Carriage Shop Road, view north from the road.

## Dam

The dam was at the south end of the mill pond near the original town road. It had a 200-foot-long east-west (primary) earthen berm that was 10 feet high at its crest. A 100-foot-long secondary (north-south or lateral) berm extended along the pond shoreline from the east end of the primary berm. The dam's outlet was a short, 3-foot-deep concrete spillway channel with 7-foot-long and 10-foot-long concrete sidewalls. Wooden boards in the channel were used to regulate the water level in the pond. A second overflow channel was created near the primary dam's western end, and a third outlet contained a fish ladder. The dam structure removed in 2020 was probably the original 19th-century mill dam that was rebuilt or changed to provide water for the 20th-century cranberry bogs.

At right, view of the top of the earthen (primary) dam, looking east.



Former mill pond on the south side of Carriage Shop Road, view west from the road.



Downstream side of the dam's concrete spillway channel, view northwest.

## Falmouth Rod & Gun Club Fish Ladder

In 1968, the Falmouth Rod & Gun Club bought the land containing the dilapidated fishway next to the former mill pond and spillway channel. About the same time, the club replaced the then 50-foot-long fish ladder built in the 19th century by the Waquoit River Herring Company. The club also removed debris from the river channel to increase the number of herring during the spring runs up the river.



The 1968 fish ladder was a concrete and cinder block structure built on the east side of the pond at the east end of the dam. The fish ladder formed a low-gradient earthen channel approximately 95 feet long with a total drop of 3 feet. The structure had a series of low concrete walls with 10 inch-wide slots creating five pools to help the fish passage. By 2004 the fish ladder was reported to be poor/nonpassable.

Below, 1968–2020 fish ladder, looking south from north end of the lateral section of the historic dam.



## Archaeological Finds

Archaeologists found the probable location of the mill's undershot waterwheel, which was covered with pond sediment since the 1940s. It appeared as a square depression in the low-lying area on the southwest side of the dam. No buried remains of the mill buildings or the historic waterwheel were found. However, hand excavations in this area recovered 19th-century window glass and machine-cut nails from the former Waquoit Company Shop buildings.

During the river restoration work, three wheel rim parts were found inside the culvert under Carriage Shop Road. The parts are most likely from the wagon or carriage wheels made at the mill in the 19th century. One of the metal rim parts has some inner wood still attached where machine-cut nails were set for the wheel's radiating spokes. The whole wheels reconstructed from these metal rim parts would have been about 39 to 44 inches across.



At right, 19th-century metal and wood rim parts from three wagon or carriage wheels.



At left, 19th-century wheel rim parts found inside the concrete portion of culvert under Carriage Shop Road, view north.

19th century wheel parts



# Site History: Housewrights, Wheelwrights, and Damming Fish

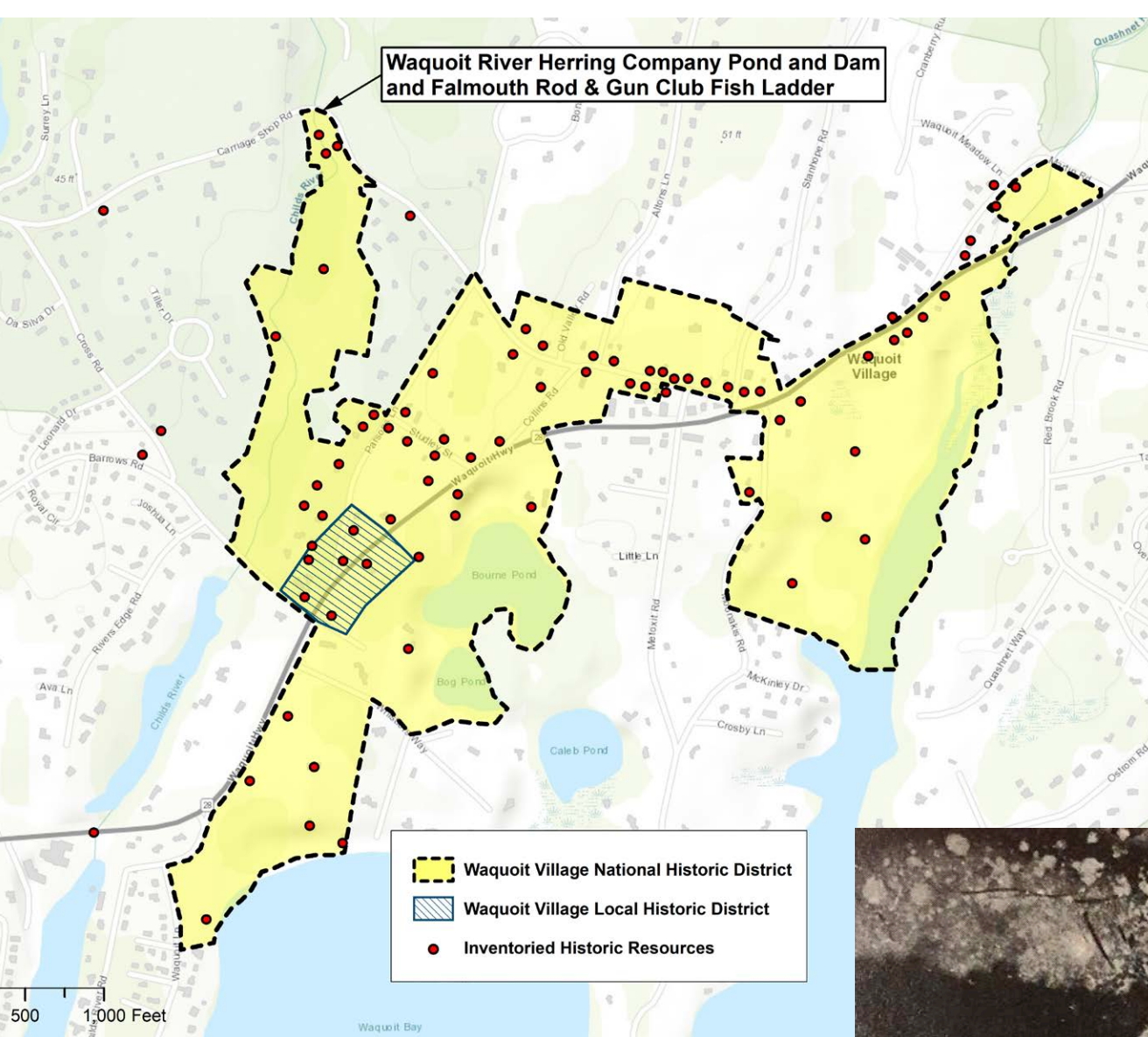
The Childs River crossing at Carriage Shop Road is the site of the former mill pond, earthen dam, and fish ladder in the northwest section of the Waquoit Village National Historic District. They were used by local manufacturers, cranberry farmers, and the herring fishery from the early 19th to mid-20th centuries. None of these resources survive but they have been inventoried and the historical documentation records are maintained by the Falmouth Historical Commission.

Ca. 2013–2014 aerial image showing the historic mill pond, dam, and fish ladder before the Childs River Restoration Project. (Credit: The Public Archaeology Laboratory, Inc. 2020)



## Waquoit Village Historic District

The Waquoit Village Historic District encompasses 170 acres on both sides of Waquoit Highway (Route 28) through the historic village center of Waquoit. The district is listed in the National Register of Historic Places. Most of the district's 66 residential buildings were constructed in the mid-19th century when the village was a thriving community. Residents worked in farming and the fisheries in two small industrial areas on the Childs and Quashnet (Moonakis) rivers.



At left: Waquoit River Historic District boundaries. (Credit: Massachusetts Historical Commission 2020)

## Milling along the Childs River

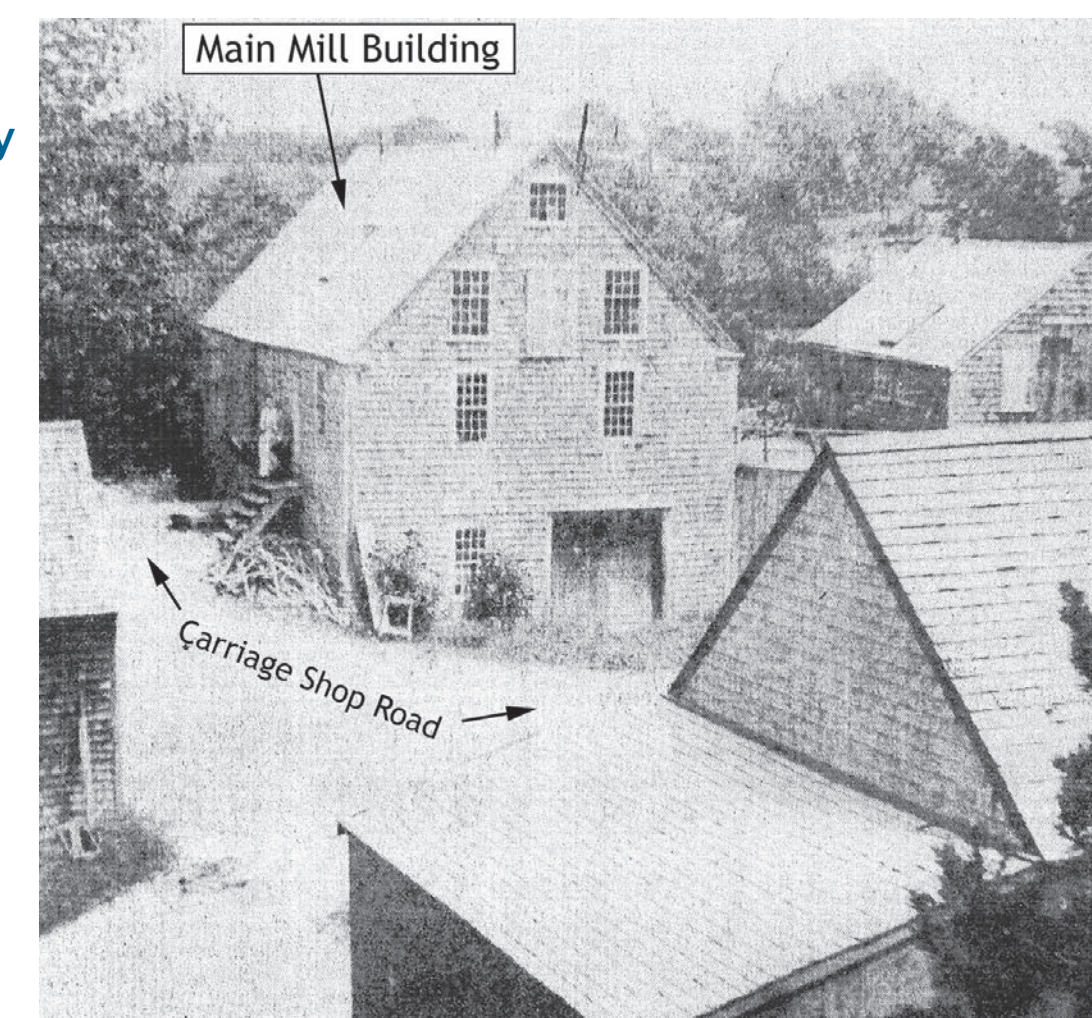
In the early 19th century, a water-powered woolen mill was built at the Childs River for Alexander Clark, a Falmouth resident. By 1831, he moved his business farther east to a mill site on the Quashnet (Moonakis) River. In the 1840s, Seth Benson, a local wheelwright (maker of wooden wheels), used Clark's former mill on the Childs River for his blacksmith shop. The 1850 federal census of manufacturers lists Benson as a carriage maker and wheelwright. That year his business used two tons of iron worth \$500; 3,000 feet of wood planks worth \$100; and 30 gallons of linseed oil worth \$30. These materials were used to make 12 carriages with a total value of \$900 (worth \$32,000 today).

In June 1855, Alexander Crocker and partners bought Benson's business. Their new Waquoit Company Shop made farm wagons, two-wheeled dump trucks, carriages, and wood framing for local buildings. As housewrights, the shop owners built and repaired wooden houses. They enlarged the old mill and built a separate blacksmith shop to prevent fire from reaching the mill. The shop's wagons were known for their blue and green colors, applied in the mill's second-floor paint shop. A wooden ramp was used to bring the painted wagons outside.

The dam at the south end of the mill pond was the site of an undershot wooden waterwheel that sat next to the former mill building. The wheel sat in a stone-lined pit that filled with water through a gate in the dam; the water rushed along the bottom of the pit to spin the wheel's paddle-like boards backwards. The spinning wheel turned vertical and horizontal shafting, gears, and pulleys connected to power the mill's machinery, which included an up-and-down saw, grindstone, and turning lathe.

From 1869 to 1900, the renamed Waquoit Manufacturing Company made mostly carriages and wagons under the direction of Alexander Crocker and Josiah Burgess. Crocker oversaw the wheelwright operations. Burgess ran the blacksmith shop that made all the metal parts except the axles. Crocker died about 1900; Burgess was in "failing health" and closed the business that same year.

At right, ca. 1880s photograph of Waquoit Manufacturing Company mill buildings. (Credit: Falmouth Historical Society)



At left: Ca. 1930s photograph of the ruins of the mill's wooden waterwheel in its stone-lined pit. A part of the gear assembly used to turn the mill's machinery is on the left. (Credit: Falmouth Historical Society)



At right: Ca. 1860 tintype showing the two-story mill with a ramp from the second story and the separate blacksmith shop to the right. (Credit: Falmouth Historical Society)



At right: 1920 photo of the mill pond showing the general location of the original fish ladder at the southeast side of the dam. (Credit: Falmouth Historical Society)

## Waquoit River Herring Company

The Waquoit River Herring Company was formed in the mid-19th century to harvest river herring during their spring run up the Childs River from Waquoit Bay. The company constructed a fishway around the southeast side of the mill's dam. It also dug a canal northward to the herring's natural spawning ground at Johns Pond in Mashpee. The herring company caught an average of 80 to 100 barrels of herring each year, with the biggest catch of 180 barrels in 1872. The company still operated the fish ladder as late as 1919.

## Cranberry Cultivation and Bogs

By the early-20th century, cranberry growing had replaced the carriage shop and fisheries as the main businesses along the Childs River. By 1920, there were nine cranberry bogs from Johns Pond south to where the river joined Waquoit Bay. Eight of the bogs were equipped with wooden chutes to allow for fish passage. The former mill pond and dam at Carriage Shop Road were modified with dikes and drainage channels to provide water for the bogs to the south. The river north of the dam became "little more than an artificial ditch lined with cranberry bogs."

