# Babson Farm Quarry Self-Guided Tour/ Trail Map



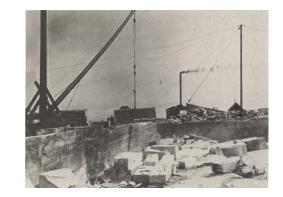


**HALIBUT POINT STATE PARK** Department of Conservation and Recreation

4 Gott Avenue, Rockport, MA 01966 978-546-2997 www.mass.gov/dcr Long before Colonial settlers arrived in the 1690s, groups of Pawtucket Indians used this part of Cape Ann as a summer home. Both the natives and the newcomers sustained themselves by a combination of fishing, hunting, and farming. It was not until the nineteenth century that Halibut Point's 450 million-year-old granite was first cut into blocks of stone. Sometime around mid-1800, local men opened a quarry here; for nearly one hundred years, Halibut Point was the site of a working quarry.

1. The Babson Farm Quarry

The quarry before you, known as the Babson Farm Quarry, was abandoned in 1929 when the local granite industry collapsed. Once stone cutting stopped here, rain, runoff, and springs on the quarry floor quickly filled the pit with water. When a quarry is being worked, keeping it dry is a constant problem. In the early days quarrymen removed the water by hand, a bucket at a time, or by harnessing a team of oxen to a winch. Some quarries installed wind-powered pumps, by the 1860s, most used steam engines, running day and night, to pump water from the quarry floor.



Babson Farm Quarry, around 1909

#### 2. Hoisting machines

Cape Ann granite weighs 168 pounds per cubic foot. Moving the stone to the surface posed a major challenge to nineteenth-century technology. Quarrymen devised an arrangement of blocks-and-tackles and pulleys, called a derrick, to hoist the stone. Each derrick had a tall vertical shaft, called a mast, and a horizontal support, called a boom. Before steam engines became available in the 1850s, derricks were powered by hand or by teams of oxen. Steam engines made it possible to hoist larger sections of granite from the quarry floor. Bolted to granite blocks like the one in front of you, steam operated hoisting machines lifted the stone. During the quarry's busiest vears, circa 1910, there were four derricks in use here. One had a ninety-six-foot mast and an eighty-foot boom and could lift forty tons. In 1912, an even bigger derrick was erected with a mast that towered 107 feet in the air.

# 3. Dog Holes

The row of holes along the top edge of the granite here were drilled in order to split the granite. (See #6.) The round hole you see on the front of this piece of stone is called a dog hole. Large blocks of granite typically had a dog hole drilled in each end to hold the giant hooks that were suspended from the derrick. The hooks were hung from heavy chains which tightened as the block of stone was lifted from the quarry floor.

Once the block reached the surface, it was moved by oxen, horse, or train to sheds, where men who specialized in cutting shaped it into paving, curbing, or building stone.

# 4. Dead Men

Large iron staples like the one embedded in this granite surface were known as dead men. It took at least six dead men to anchor the cables that held a derrick in place. The brown color of the granite across the quarry to your left is the result of water and iron oxide seeping down through seams in the stone over thousands of years. During the nineteenth century, this "seam-faced" granite was considered undesirable because of its color, but after 1900 it came into fashion as a veneer covering for buildings. After being removed from the quarry, it was taken to a cutting shed, cut into pieces two or three inches thick, and polished to a high gloss.

# 5. Working a Motion

The small body of water in front of you is called a motion, the quarrymen's term for a small quarry. A motion was generally worked by two men, who used drills and hammers to cut the rectangular blocks used for paving streets. Across the motion is the foundation of a coal-burning plant that generated steam to run the drills and hoisting equipment for the main quarry. Looming behind the foundation are the remains of a railroad embankment. In 1910, the quarry's owner, the Rockport Granite Company, purchased a train engine, christened the "Nella," to haul granite from the quarry site to the pier at nearby Folly's Cove. At the cove, the stone was loaded onto specially designed ships that carried it to markets all over the world.



"The Nella" hauling granite from Halibut Point.

## 6. Splitting the Stone

In the early days of the industry, granite was split using a flat chisel, shims, and flat wedges. The cutter made a hole in the stone with his chisel; then he placed two shims in the hole and drove a wedge down between them. Beginning around 1840, round drills replaced the chisels and half-round shims—like the ones that can still be seen in this piece of granite—replaced the flat shims.



# 7. The Grout Pile

You are standing on the grout pile, a mountain of discarded granite pieces dumped here over many years. If you climb to the top of the pile, face the ocean, and look to your right, you MIGHT be able to see the Sandy Bay Breakwater, off the coast of Rockport Harbor. In 1885, the federal government began constructing the breakwater to create an anchorage for as many as 5,000 ships. Until lack of funds that went to War efforts brought the project to a halt in 1915, much of the granite from the Halibut Point quarry went into building the breakwater.

PLEASE DO NOT CLIMB ON THE SIDES OF THE GROUT PILE; THE STONES ARE UNSTABLE AND VERY DANGEROUS.

# 8. The Steam-powered Drill

The size of the holes on this piece of granite is a sign that they were made by a steam-powered drill. When steam drills were invented in the 1880s, it was possible to cut deeper holes and thus to produce larger pieces of stone. Before steam drills came into use, even the deep holes needed for blasting were made by hand. A long drill was struck by a sledge hammer to make the holes that black powder, and later dynamite, was poured into.



Steam drills and operators.

#### 9. Granite Bollards

Cut by hand, granite posts or bollards, like this one were set in the ground and used to secure ships to docks and wharves. Many of the ships that tied their lines to a granite bollard carried other products of Cape Ann's granite industry on their decks. Granite quarried on Cape Ann went to build bridges, tunnels, government buildings, warehouses, and monuments, and to pave thousands of city streets.

#### 10. Decline of Quarrying

The quarry on Halibut Point closed in 1929. Within a year, the Rockport Granite Company went out of business. The granite industry collapsed along with the rest of the nation's economy. The growing preference for steel buildings and for concrete and asphalt road surfaces guaranteed that the industry never recovered. Nature reclaimed the rugged landscape of Halibut Point. The sound of the sea and the wind no longer compete with the sound of steam engines and train whistles. Now, people come here not to work but to spend leisure hours enjoying the beauty that the Halibut Point State Park was created to preserve.

#### Visitor's Center

Located in a renovated World War II fire-ocontrol tower, near the edge of the Babson Farm quarry, the center features exhibits related to the park's natural and cultural history. The tower itself, the only one of its kind open to the public along the New England coast, was used during the war to provide aiming information to the crews of the massive guns that protected Boston and Portsmouth from attack by sea. Today, the 60-foot tall structure offers views that extend as far north as the coast of Maine.

Water is conserved though the use of composting toilets and a graywater recycling system. In addition, a photovoltaic system generates electricity, solar/thermal panels provide hot water, and a geothermal pump augments the building's heating/cooling system. The building also serves as the park's administrative headquarters.

### **Public Programs**

Year round, staff and volunteers offer programs at Halibut Point State Park. Please check our website (www.mass.gov/locations/halibut-point-state-park), ask park staff, or call the visitor's center (978-546-2997) for the latest offerings. Programs change daily and seasonally!

#### Friends of Halibut Point State Park

The Friends of Halibut Point State Park is a non-profit group formed in 1985 to support the park and its mission. Its objectives include the improvement and protection of park facilities, enhancement of the park's natural beauty, and the collection and preservation of artifacts related to granite quarrying on Cape Ann. Through fundraising efforts, the group has provided museum quality exhibits, purchased tools for granitesplitting demonstrations, augmented the park maintenance budget, and contributed in many other ways. Friends serve as park volunteers, staffing the visitor's center, conducting tours, and providing hospitality at events.

Membership information is available at the Visitor's Center at fohpsp@gmail.com or through their website (www.halibutpointfriends.org) or Facebook Page.

#### Visitor Guidelines

- Park hours are 8AM to sunset
- Parking fee is charged May-October
- Please no
  - Quarry swimming or access anytime
  - Alcoholic beverages
  - Removal of park resources (including PLANTS, ANIMALS, SHELLS, ROCKS)
  - Off-leash pets
  - Fires, grills,
  - Bikes, scooters, hover boards [walk your wheels]
- Please follow posted signs

#### For More Information

The Massachusetts Department of Conservation and Recreation (DCR) is steward to over 450,000 acres throughout Massachusetts. Its mission is to protect, promote and enhance our common wealth of natural, cultural and recreational resources. For information on DCR, visit www.mass.gov/dcr, call 617-626-1250 or write DCR 10 Park Plaza Suite 6620, Boston, MA 02116.

#### Donations

Donations are gratefully accepted and are used to fund park enhancement projects. Please make checks payable to DCR Conservation Trust and mail to: DCR 10 Park Plaza Suite 6620, Boston, MA 02116 or call 617-626-1267 for more information.

This brochure was produced by the Department of Environmental Management, now Department of Conservation & Recreation, and the Halibut Point Association, now Friends. Edited December 6, 2023.

