



The decline of gunpowder manufacturing began with the difficulty of obtaining saltpeter, the main ingredient of gunpowder, during the Civil War and the U.S. government's late payment pattern. Pratt sold the mill to the American Powder Company in 1864. The economic "Panic of 1873" caused many powder businesses to fail, with consolidation of those that remained. The American Powder Company passed to American Cyanamid Company in 1929, which expanded the operation to its greatest size with 125 workers. The Great Depression, followed by three explosions in 1940 ended gunpowder production for good. The millpond and dam on the Assabet River that provided power for the mill are the most obvious reminders today of the gunpowder history.



American Powder Mill Rails

At one time, horse-drawn rail carts transported raw materials and product between buildings. In spite of the many safety precautions, the notoriously dangerous business experienced frequent, but deadly, explosions, one of which was famously reported by Henry David Thoreau in his 1853 journal.



American Powder Mill Ruins

Ruins of these buildings and the roads between them can still be found in the land along Forest Ridge Road, both sides of Route 62, and in the Thoreau Club property. Remnants of a large concrete building can be seen beside the old roadbed that passes through the northeast corner of the Thoreau Club land.

In 1835, Nathan Pratt converted a sawmill owned by Abraham Sherman on the Assabet River into a gunpowder manufacturing operation. Milling, mixing, graining, and glazing were housed in separate buildings. The hilly, glacial terrain and many kettle holes formed natural barriers and provided isolation of the different stages of production, a safeguard against destruction of the entire complex should an explosion happen in one of the buildings. Buildings were constructed of heavy wooden beams pinned together with thick steel rods, the exterior walls and roofs intentionally lightweight so that, in the event of an explosion, the walls would blow out, leaving the core structure intact. At its peak, production involved forty buildings scattered throughout the 400-acre area in Acton, Concord, Maynard, and Sudbury. The mills produced 1000 lbs. (450 kg) of gunpowder per day during the American Civil War.

## Points of Interest

### Gunpowder Mill

## Powder Mill Woods

## The Conservation Land

Powder Mill Woods is comprised of rough, glacially formed topography marked by numerous kettle holes, swales, and kame terraces, with one very large kettle hole beside Forest Ridge Road in the Black Birch Community. The area has a 100-year history of gunpowder manufacture, the depressions in the landscape ideal for protecting individual buildings. Trails follow 19<sup>th</sup>-century cart paths and narrow gauge railroad beds once used to move materials among separate buildings of the production process. For more than 50 years after gunpowder production ceased, the area remained largely undisturbed. Portions of the land have been developed, and the former Starnet property is under review for development opportunities. The conservation land provides a nice link to walking trails as well as a glimpse into another chapter of Concord's history.

## Location and Access

Power Mill Woods is located near the Assabet River in southwest Concord just off Main Street (Route 62). Access with parking for three vehicles is located at the entrance to the Black Birch community at a rotary on Forest Ridge Road.

**Dog Owners:** Keep dogs under your control at all times and away from private yards and buildings. It is the duty of each person who owns, possesses, or controls a dog to remove and dispose of any waste left by his or her dog.

### FIVE DEAD IN POWDER MILL RUINS

Three Buildings of the American Powder Company's Plant Near Concord, Mass., Blown to Pieces.

ACTON, Mass., May 3.—Three of the buildings belonging to the plant of the American Powder Company, near the boundary line of Acton and Concord, were blown up shortly after 9 o'clock this forenoon. Five of the employes were killed. The names of the dead:

ESTY, ALBERT, fifty years old; leaves a wife and six children.

ESTY, CHARLES, forty years old.

MORTON, NELSON, fifty-five years old; leaves a wife and four children.

O'NEIL, JR., CHARLES; single; lived in Maynard.

WINSLOW, FRED, thirty-five years old; leaves a wife and one son.

The property destroyed consisted of two kerneling mills and one press mill. Why the first mill exploded is not known. The second mill went up immediately from the jar of the first explosion. This set fire to the grass, which ignited the third mill ten minutes later.

The fire in the grass and refuse continued to spread and a fourth mill was for a time in imminent danger. The employes, with the assistance of farmers, fought the fire with great vigor, and before noon had it under control.

The bodies of Morton and Winslow were found about five hundred feet from the mill. The others were probably blown into atoms.

The property loss by the explosion is about \$15,000. The buildings were small and cheap affairs. The company's grounds include several hundred acres. The mills were some distance apart and the houses of the employes scattered about. The strictest precautions have always been enforced in the manufacture of the explosives.

The detonations of the explosions were heard throughout the surrounding country for many miles.

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## Town of Concord

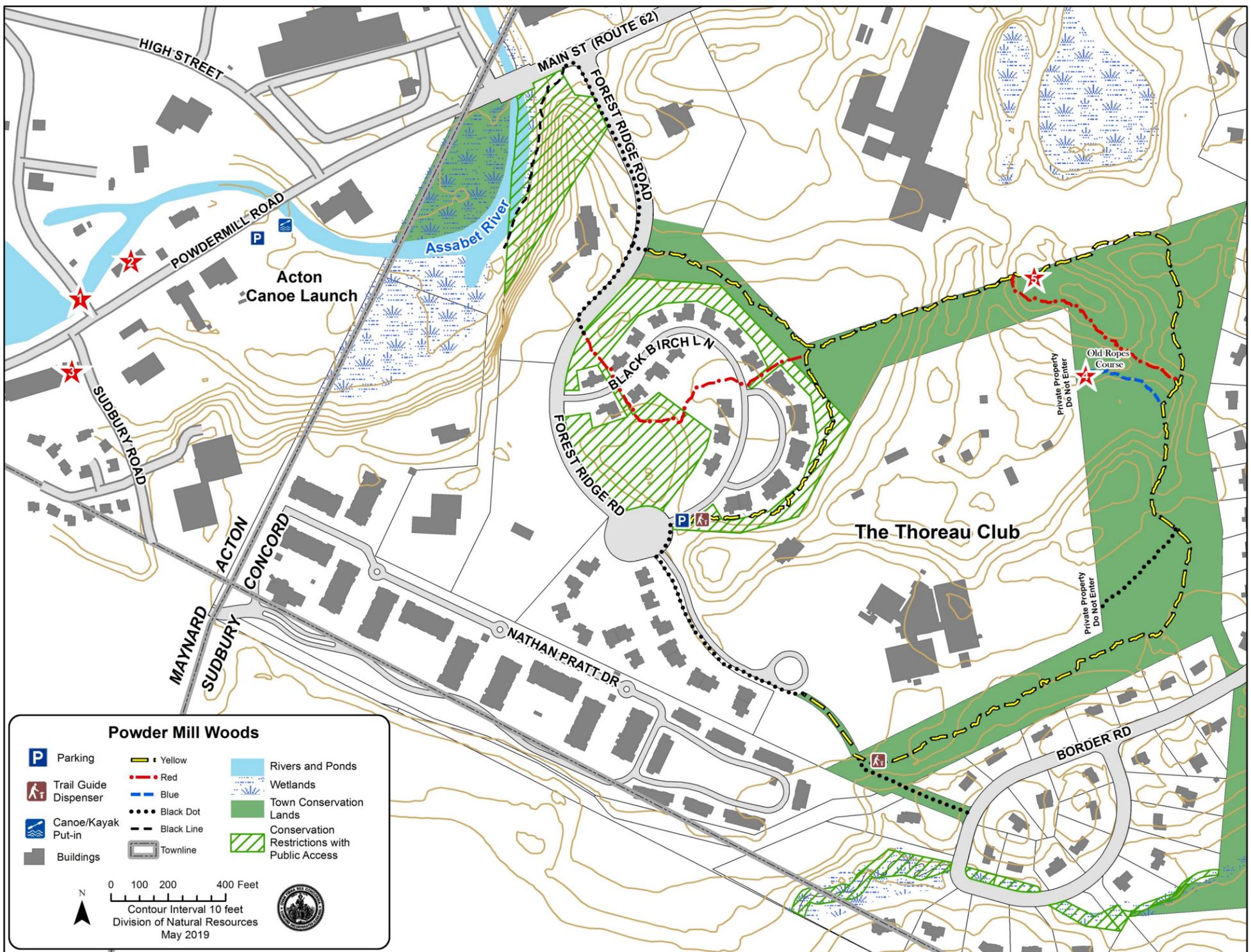
### Powder Mill Woods Trail Guide



Label used to mark gunpowder kegs. The A.O. Fay shown as President on the label was the son of A.G. Fay, previous owner, who died in an explosion in 1873.



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Two buildings, the carpentry and tin shop ★ and the office ★ remain, but have been converted into other business uses.



Former Office at the American Powder Mills  
(37 Powdermill Road, Acton)

The property was sold to Dewey and Almy Chemical Company in 1954 and retooled to produce synthetic rubber products, and the outlying gunpowder production buildings were abandoned. The property was eventually split up among many businesses, including W. R. Grace and Company.

#### Starmet Company

From the main trail leaving the Black Birch community, a large capped area can be seen through the trees. It is a Superfund site once the premises of Starmet, formerly Nuclear Metals, Inc. at 2229 Main Street. The company manufactured armor piercing depleted uranium projectiles for the U.S. Army from as early as 1958. From the early 1970s until 1985, the company dumped depleted uranium into an unlined lagoon on the property, allowing a toxic plume of radiation, heavy metals, and solvents to leach into the groundwater.

Through the persistence of a citizens group, Citizens Research and Environmental Watch (CREW), and the exhaustive efforts of the 2229 Main Street Oversight Committee and Town Meeting actions, the Environmental Protection Agency was brought in to investigate, resulting in the clean-up operation now evident. The grounds now have been substantially cleared of contamination and the surface stabilized with an impermeable cap to prevent further ground water contamination.

#### The Thoreau Club

The main trail out from the Black Birch community is routed through conservation land that is adjacent to the Thoreau Club at 275 Forest Ridge Road. The Club began in 1951 as Camp Thoreau on the south shore of White Pond, a summer camp for children. It moved to Forest Ridge Road in 1998 and developed into a year round health club for adults and children. Trees fitted with climbing and rope rigging hardware can be found along walking trails, a reminder of Camp Thoreau activities that once took place on property now in conservation.



Thoreau Club

#### Black Birch Community

Black Birch is a community of condominium homes now on property that was once part of Camp Thoreau, and previously to that,

the American Powder Mill Company. A trail circles the development and connects with the main trail around the Thoreau Club. **Please respect the privacy of the community by staying on trails at all times in this area.**



Powder Mill Woods Parking Area

### Suggested Walk

#### Powder Mill Loop

The main trail from the parking lot at the rotary is routed through conservation land adjacent to the Thoreau Club. From the parking lot, walk 20 feet to a posted map at the trailhead behind the "Black Birch" mailbox shelter. Follow the narrow, yellow-blazed footpath behind five Black Birch homes. Take a right (east) turn at the yellow-blazed junction. Follow the old cart path (yellow-blazed) over hilly terrain to a junction with a red-blazed trail on the right. Follow the red-blazed trail to its end. Turn right on the yellow-blazed trail and follow it along a cart path, then back into woods to the end of the conservation property. Turn right (north) on a dirt road to arrive at the cul-de-sac on Forest Ridge Rod by the Thoreau Club. Take the sidewalk back to the parking lot at the rotary. Estimated walking time 35 minutes.