

# Ironwoods Preserve

## What to look for on the Ironwoods Preserve Trail

From the parking area proceed about 600 feet along the path parallel to the stone wall on the left and the fence on the right. At the southwest corner of the field, enter the woods and follow the blue blazes. The second-growth forest encountered throughout the hike is typical of the oak-hickory forest type. Common species are the oaks (white, red, black and chestnut), beech and sugar maple on slopes and dry ridges, and red maple, yellow and black birches in the lower, moist, cooler areas.

The trail descends and crosses through a wet, and sometimes muddy, red maple swamp. Cross the small stream and ascend a hogback. On the very top, where exposed ledges testify to the shallowness of the soil and dry conditions, slow-growing chestnut oaks abound and eastern red-cedar occur. The latter, members of the Juniper family, require abundant sunlight. Their presence here indicates that the forest canopy on the ridge top has been quite open for a long time. This fact is also revealed by the dense understory of blueberries, huckleberries and grasses.

The trail descends, gradually at first and then steeply, past exposed ledges to cross the stream that drains the watershed on the western side of the ridge.

Just beyond the stream (0.3 mile from the trailhead) the trail splits. This description is written as if you are turning right (north). Pass several probable vernal pools (in spring), and ascend to higher ground. Rock outcrops are common—their smooth rounded tops the result of glacial “grinding” which occurred over 10,000 years ago. Climb and descend several small ridges—hogbacks. Be careful to follow the blue blazes as several other trails and old logging roads intersect and cross our trail. Descend from the highest ridge (where a house is visible on the left), to a junction where the loop cuts back to the left. This can be followed back to the junction mentioned earlier—or you can proceed north to the Old Iron Works.

Following the path north, the trail crosses a stream (which soon joins the Iron Stream). There is a fine step-stone crossing here. This section of trail passes through a managed private forest that recently was harvested. Further on, the trail passes along the Iron Stream, then over two rocky outcrops before it descends to the old iron smelter works. The trail ends here, at the dam site (0.8 mile from the trailhead). A monument describing the site was placed here in 1989 by the MLCT and the Madison Historical Society.

Return along the trail to the junction and, for variation, take the fork (straight ahead to the south). Ascend and descend the ridge (by several homes), pass along a wetland to the east, and through a laurel thicket. Just before an old fence line marking private land, the trail turns sharply left (east), crosses the stream that drains the wetland, and soon rejoins the trail leading back to the trailhead.

## The North Madison Iron Works

In the late 1700s, Henry Hill, Joseph Pyncheon and Redad Stone acquired a four-acre mill site on Joshua Blatchley’s farm. After 2 to 3 years as a sawmill it was converted to an iron works, which operated successfully until about 1820, by which time readily available bog iron ore and wood for charcoal had been quite depleted.

The iron works was small, the forge hearth being about 3 feet square and 1.5 to 2 feet deep with an open top. An air pipe entered one side about half way up. Next to the 16’ x 30’ forge building was a charcoal house about 14’ x 22’. The nearby mill was probably powered by an overshot wheel about 10’ x 4’ wide. The mill contained a large bellows and a heavy trip hammer and anvil.

In operation, the charcoal-fired forge reached high temperature aided by a continuous blast of cold air from the waterwheel-powered bellows. After being washed, pieces of bog iron ore the size of ping-pong balls were fed directly into the fire. At a temperature of 2600 to 2700 degrees fahrenheit, the silicon-based impurities melted and formed a liquid slag about the irregular agglomeration of iron. The molten slag was raked or drawn off. Tons of that slag still litter the site. (Con’t)

After about 6 hours of this, the small lumps of ore became a spongy lump of malleable iron weighing about 30 to 40 pounds.

To further reduce the slag inclusions and to refine them, the hot iron was repeatedly drawn out into bar shapes under the weight of the drop hammer. Any remaining impurities ran lengthwise within the bar and provided great toughness and rust resistance.

Bog iron ore is a deposit of ferric hydroxide or limonite in the bottoms of ponds, swamps or bogs. These deposits result from the action of iron “fixing” bacteria that decay the swamp vegetation. Deposits range from the size of peas and cotton balls to solid layers, most often colored reddish or dark brown, and contained from 20 to 50% useable iron. Interestingly, the ore can regenerate in 5 to 25 years depending on the amount of decaying vegetation, the amount of iron in the water and on the condition for bacterial activity.

## Permitted Activities:

The trail areas in the MLCT properties are for **hiking only**. Dogs are allowed, but must be leashed. Please pick up all animal waste.



Photo by Emmeline Alaconis, SCRCOG

The Ironwoods Preserve Trail leads through an interesting variety of ecological settings including open meadows, dry, rocky ridges and low, wet, valley bottom lands and streams. The trail leads to the foundation of an excellent example of a bog iron works dating from the late 18th or early 19th Century.

**GPS Directions:** 227 Race Hill Rd, Madison, CT 06443

**Category:** Short walk with several moderate climbs and descents

**Start:** Trailhead on Race Hill Road, North Madison

**Distance:** Round trip, including the loop, about 1.7 miles

**Approximate time:** About 1.5 to 2 hours

**Parking:** On the west side of Race Hill Rd; parking area is not plowed in winter

**Historical Feature:** Remnants of an early bog iron works

## For more information about this walk contact:

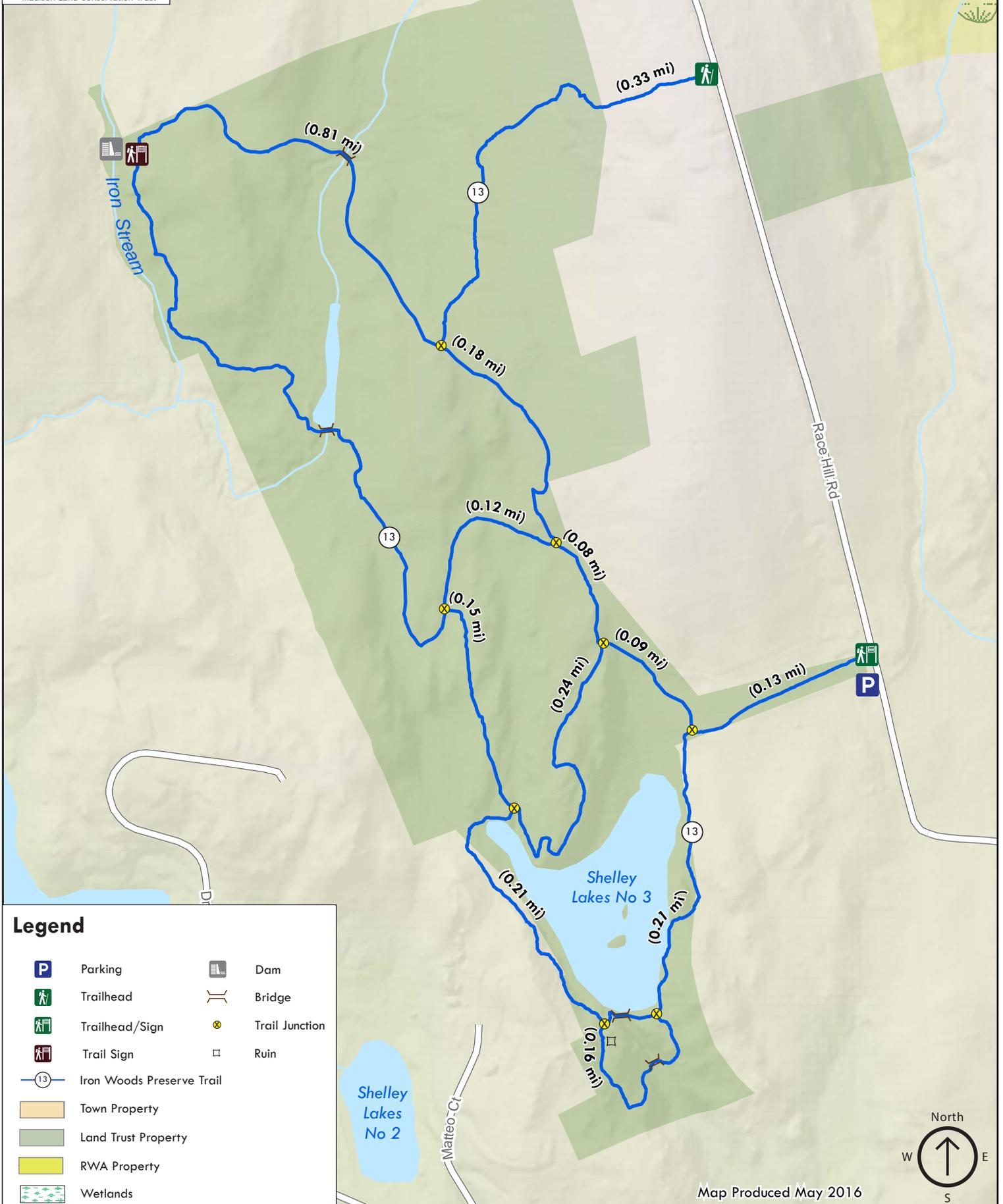
Madison Land Conservation Trust  
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MLCT  
Madison Land Conservation Trust

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## Legend

- |  |                           |  |                |
|--|---------------------------|--|----------------|
|  | Parking                   |  | Dam            |
|  | Trailhead                 |  | Bridge         |
|  | Trailhead/Sign            |  | Trail Junction |
|  | Trail Sign                |  | Ruin           |
|  | Iron Woods Preserve Trail |  |                |
|  | Town Property             |  |                |
|  | Land Trust Property       |  |                |
|  | RWA Property              |  |                |
|  | Wetlands                  |  |                |



Map Produced May 2016