HARVARD POND:
NATURAL AND CULTURAL HISTORY

Prepared by Robert A. Clark

1889
SELECTED POINTS OF INTEREST

© Map courtesy of Harvard Forest – Modified
A PLACE OF MANY NAMES:
MEADOW WATER – BROOKS POND
WEST POND – HARVARD POND

1. Ezra Pike's home. Just north is the dam and outflow from Harvard Pond, East Branch Fever Brook. Immediately north of the dam, between the pond and the road, is the site of a steam powered saw mill used to cut logs from trees downed by the 1938 hurricane.

2. A mystery farm – land use history with a red pine and European larch plantation which was cut in 2008.

3. Sawmill owned by the Southworth brothers of Hardwick in 1850. This mill cut the lumber for the new Town House (Town Hall) built in 1850. The mill was removed in 1865.

4. Mr. Gilson's home. Mr. Gilson probably sawed the lumber for the new Town House in 1850 which burned in 1957. On the north side of Tom Swamp Road was the home of William Pierce which was later the home of Deacon Levi Babbett.

5. Tom Swamp – an ancient red spruce, black spruce, tamarack quaking bog. The raised road (causeway) over the wetlands is a corduroy road and the gravel that covers the logs which were laid crosswise in a ribbed pattern (hence corduroy) was taken from the borrowers just east of the causeway.

6. Richard Thornton Fisher memorial – Richard Thornton Fisher was the first director of Harvard Forest. His memorial is located at one of his favorite spots of old growth forest overlooking the pond which was unfortunately devastated by the 1938 hurricane. It is now an area of thick hemlock and home of saw-whet owls, snowshoe hare, and fishers.

7. Remains of old growth forest.

8. Tip-ups from the hurricanes of 1815 and 1938.

9. Lincoln properties deeded by Simon Pike to Martin White in 1866. This was also the site of a steam powered saw mill used to cut logs from trees downed by the 1938 hurricane. Enos Lincoln built the house on the south side of the road by 1770. His son, Alanson Lincoln, built the house on the north side by 1820.

10. Site on East Branch Fever Brook of water powered saw mill in the 1800’s known as the Lincoln mill.

11. Site of former cemetery which was built on a raised mound.
“The west medders (Meadows)” from the Petersham Proprietors Map of 1736
The Petersham Proprietors Map of 1736 – “Nepeschogg May ye 28 -1736, David Farrar, Surveyor” – shows the “west medders” (west meadows) which is the present location of Harvard Pond. Why was this area a fresh meadow, an area of meadow grasses in 1736 and not a series of beaver ponds? Over a century before 1736, beaver pelts were traded by Native Americans and European trappers to make beaver hats that were fashionable at the time. The beavers had to have been trapped out and the dams washed out for this area as well as areas on the East Branch Swift River to become fresh meadows thus providing food for the oxen and cows the colonists brought with them. If the beaver ponds were intact in 1736, the town would not have been suitable for settlement as there would have been no food for the cattle. There were not enough fresh meadows in what was to become Petersham, so some proprietors were given tracts of forested land suitable for cutting and the planting of English hay.

The many names for this body of water, Meadow Water, Brooks Pond, West Pond, and Harvard Pond, testify to its rather interesting history. The region immediately to the north known as Tom Swamp, which is transected on the south end by the corduroy road causeway known as Tom Swamp Road or MacFarland Road, is the watershed divide between the Millers River watershed and the Swift River watershed. To the north of Tom Swamp stretches Riceville Pond in the Millers River watershed. Both ponds are man made and Tom Swamp is only slightly higher in elevation. This low region connecting two watersheds forms a conduit of unusual habitat rich in biological diversity and an important stop in bird migration.

The first Worcester County Atlas (F. W. Beers, 1870) shows the pond which is labeled ‘Reservoir.’ A second Worcester County Atlas (L. J. Richards, 1898) does not show the pond. The old name of Meadow Water is another clue to the pond’s use at that time. During the summer, it was a meadow for grazing cattle and hay, while in the winter the brook was dammed creating an ice pond which supplied ice for any number of ice houses at the homesteads in the region. Ice saws were often home made from old vertical saw blades with every other tooth removed which improved cutting through ice. The pond was later a permanent pond and was owned by Brooks before Harvard acquired it. As it lay in the western portion of the town, it was referred to as West Pond by many of us.

Bogs are very ancient and formed as the last glacier receded. They contain today many of the species found in that moist post-glacial environment. Tom Swamp is a red spruce, black spruce, tamarack quaking bog (classed as a Spruce-Fir Boreal Swamp) that is a nesting site for Golden-crowned Kinglets, Sharp-shinned Hawks, Saw-whet owls, Blackburnian Warbler, and a host of other interesting species. During winter months, the bog is visited by a number northern species including Boreal Chickadees, Red Crossbills, White-winged Crossbills, and Pine Siskins. The plant species are fascinating as well. Although there is water everywhere, it is not available in the winter months when it is frozen and the plants exhibit characteristics for water conservation such as thick leathery leaves, curling of leaves during cold to reduce the surface area and reduce evaporation, or leaves with a thick hairy surface. The soils are acid and the peat where many plants grow is nutrient poor. Thus, we find plants like sundews and pitcher plants that supplement their nutrients by feeding on insects.
Because of this ancient and stable habitat, it is home to a number of uncommon, rare, and endangered species of insects, plants and animals. There are a number of rare dragonfly species and most recently Tom Swamp became the second site in the world for the Bog Elfin Butterfly which had only been known from one site in Maine. Since the discovery, a third site has been found. The diversity of surrounding habitat is home to Wood Turtle and many of the species we associate with the region, Porcupine, Snowshoe Hare, Fisher, Bobcat, Red and Gray Fox, Moose, Deer, and Bear. Many waterfowl nest around the pond, and the pond attracts many interesting species during migration of post nesting dispersal.

The following is from the BioMap: Core Habitat Summaries for Petersham prepared by the Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries and Wildlife

Core Habitat BM553
Anchored in Harvard Forest and Petersham State Forest, this Core Habitat includes wetland and upland habitats that support a diversity of invertebrates, including several rare species of moths, butterflies, dragonflies, and damselflies. It also contains a high-quality Level Bog community. Much of this Core Habitat is on conservation land and further protection of the remaining areas is desirable to increase the amount of contiguous, protected habitat.

Natural Communities
This Core Habitat contains a high-quality, partially buffered Level Bog that is free of human disturbances. Level Bogs are dwarf shrub peatlands, generally with pronounced hummock and hollow formations. These wetland peatlands are our most acidic and nutrient-poor, because they receive little overland water input, and are not connected to the water table. Here the peatland complex consists of dwarf shrubs, Spruce, and Tamarack.

Invertebrates
This Core Habitat includes Harvard Pond, Tom Swamp, Riceville Pond, and the surrounding undeveloped and unfragmented landscape, all of which provide important habitat for rare invertebrates. Vegetation in Tom Swamp is characteristic of northern bogs, including mats of Sphagnum moss, Pitcher Plants, Leatherleaf, Highbush Blueberry, Rhodora, Black Spruce, and Tamarack, providing habitat for rare butterflies and moths such as the Bog Elfin and the Slender Clearwing Sphinx moth. Harvard Pond, Tom Swamp, and Riceville Pond also provide important habitat for rare dragonflies and damsselflies including the New England Bluet damsselfly, the Beaver Pond Clubtail dragonfly, and the Spatterdock Darner dragonfly.
**Core Habitat BM553**  
**Natural Communities**

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<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>Level Bog</td>
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<td>Vulnerable</td>
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**Invertebrates**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
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<tr>
<td>Beaver Pond Clubtail</td>
<td><em>Gomphus borealis</em></td>
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<td>Bog Elfin</td>
<td><em>Callophrys lanoraieensis</em></td>
<td>Threatened</td>
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<tr>
<td>New England Bluet</td>
<td><em>Enallagma laterale</em></td>
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<tr>
<td>Sensitive Rare Invertebrate</td>
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<tr>
<td>Slender Clearwing Sphinx Moth</td>
<td><em>Hemaris gracilis</em></td>
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</tr>
<tr>
<td>Spatterdock Darner</td>
<td><em>Aeshna mutata</em></td>
<td>Special Concern</td>
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**Core Habitat BM554**  
**Natural Communities**

This Core Habitat contains a large and mature Spruce-Fir Boreal Swamp with good species diversity, no exotic invasive plant species, and few disturbances. Spruce-Fir Boreal Swamps are forested wetlands dominated by Red Spruce and Balsam Fir. These swamps are typically found at stream headwaters or in poorly drained basins in the mountainous, northwestern part of the state. Here the swamp is well-buffered by an extensive forested landscape.

**Core Habitat LW368**

Fever Brook arises in Tom Swamp in Petersham, flows through Harvard and Brooks Ponds, and through a series of beaver ponds surrounded by a mixed hemlock and northern hardwood forests. The aquatic insects found here include ecologically sensitive mayflies and caddisflies. The streambed is made up of a mix of materials, including boulders, sand, and silts with a large amount of coarse plant materials, which together provide excellent habitat for these aquatic invertebrates. The surrounding second growth forest helps maintain the high-quality habitat by shading the water to keep it cool, by providing a natural energy source to the stream ecosystem in the form of leaves, needles, and sticks, and by controlling the runoff of sediments, excess nutrients, and water.

The following is from the *Living Waters: Core Habitat Summaries* for Petersham prepared by the *Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries and Wildlife*.
MEADOW WATER
BROOKS POND

FISHER MUSEUM DIORAMA
SHOWING OLD GROWTH FOREST
PRE-1938 HURRICANE

HARVARD POND TODAY
FOLLOWING THE 1938 HURRICANE

LOGS ON ICE AT HARVARD POND LOOKING SOUTH

THE SAME VIEW TODAY
LOOKING SOUTH TOWARD ROUTE 122 – EARLY MARCH 2005
STEAM POWERED MILL ON EAST SIDE OF HARVARD POND NEAR ROUTE 122. NOTE: FEW TREES ARE STANDING ON THE RIDGE DUE TO WIND DAMAGE.

LOGS BEING DRAWN INTO THE STEAM POWERED MILL
LOGS BEING DRAWN INTO A STEAM POWERED MILL BY A TEAM OF HORSES

A LUMBER CAMP LOCATED AT THE BUELL FARM ON OLIVER STREET
FOREST COVER IN PETERSHAM

(Forested areas are in black)

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LARGE BEAVER LODGE ON ISLAND

PITCHER PLANTS
HORNED BLADDERWORTS
GROWING ON FLOATING PEAT MATS

CLOSE-UP OF HORNED BLADDERWORTS

R. A. Clark, revised May 2012