



A note on what is flowering elsewhere in town. This first week in June begins the week of impressive mountain laurel flowering. There aren't any on the trail at Bemis (except further along than I flagged, such as along the rail trail). But, pretty much any trail in the Pepperell Springs land off of Chestnut St (Town of Pepperell Trail Guide map #11) will have wonderful patches of mountain laurel. The Stewart Brook Trail (#9), Gulf Brook (#10), and Heald Pond (map #12) all have patches of mountain laurels. Find some and enjoy!

Summer is starting -- The deciduous trees are in full leaf and in the shady forest ground level plants are forming layers, with spring flowers already in seed or done and summer flowers getting started. Shrubs in wetlands, areas where water has been standing are (mostly) getting drier and plants are emerging and flowering especially in sunny areas. Other open sunny areas are home to flowering herbaceous plants, shrubs and scattered trees. Getting out and seeing the changes is fun! And trying to figure out which plants are which is remains a challenge. I've put white flags near and tied orange flags to particular plants (or sometimes near them) with the associated names. Because the flags are picking up on time sensitive points such as flowers or early leaves I'll leave the flags out for about 2 weeks, then remove them from any given trail. Please leave the flags there, I really will pick them up (and reuse them). The trails and plants will still be there after the flags are removed (well, some of the invasives will get clipped).

Mostly I will be noting seasonal changes of our native plants. But, I'll also note some of the invasive plants with comments on their effects on the native plant communities.

Precautions:

Please do not walk in the mud or wet areas, that creates a lot of disturbance.

Mosquitoes: They are out -- be ready to swat or spray your clothes to deter them.

Ticks: just be careful to check yourself after a walk. Spraying insecticide on your clothes can deter them, but check anyway.

Poison Ivy: The oils are present year around, don't grab the branches, roots or stems. Wash with a good soap after exposure. Some trails can be a problem to walk where poison ivy has grown onto the trail surface.

Bemis Road Conservation Land

Marked TOP Red Trail

flagging June 1 – June 14 (ish)

Bemis

as #7 Bemis Road Conservation Land in the Pepperell Trail Guide

<https://nashobatrust.org/trail-guide.html>

www.town.pepperell.ma.us/trails

Note: This walk does NOT begin at the main trail head near the end of Bemis Rd. due to flooding of that trail area. Please follow the directions below to the trail head being used for this walk:



Directions to trail head for this walk: From Pepperell Town Hall, head north on Park Street to Brookline St. Take left onto Brookline St. for 1 mile. Turn left onto Boynton St. and immediately right onto Bemis Road where there are signs for the construction at the end of the road. In .4 miles, look for green sign off to the right; the trail access is path next to a house, just past a steel gate. Street parking is permitted; there is also a parking area at the end of Bemis. The GPS coordinates for street parking near to the trail head are: Latitude 42.70205; Longitude -71.62602

The Bemis Conservation land has 2 areas of particular interest botanically that are noticeably different from other areas we've looked at this year. The old gravel pit has sand and gravel substrate that become harshly dry in full sun - challenging places for plants to grow. Plants in these places specialize in such conditions and do better there than in a forest (and forest plants don't do well in the sun). Parts of the old gravel pit area are lower and are flooded with ponds that last the year but shrink as summer progresses. At the wetter edges are some plants more usually found in bogs – cranberries, sphagnum moss, sundews, and more. These plants are adapted to wet, low nutrient conditions. There are different plants in different areas, look around as you go!

Natural history walk

Park along Bemis Road, and walk to a gate across the old road, the flagging starts about at the gate.

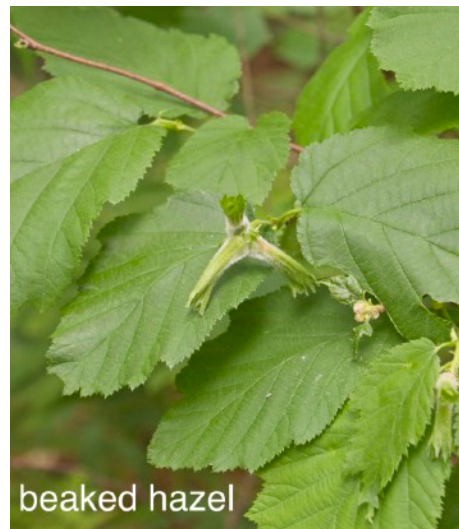
1.Beaked hazel or beaked hazelnut. At the gate are some middle-sized shrubs with odd shaped fruits (nut husks) on them. These native plants are hazelnuts, quite edible if you can get to the ripe nuts before the squirrels.

2.Hay-scented ferns. These native ferns grow in patches that can exclude other plants just by shading seedlings and making a dense patch of fern. They tend to smell more like hay in the fall as they dry. I didn't find these to be hay-scented at all.

3.Autumn Olive. A non-native, quite invasive tree with very fragrant flowers that are just finishing and the fruit starting to develop. Birds like the fruits, but they are thought to be less nutritious than the fruits of native species.

4.Bracken Fern, now fully developed. These native ferns are often abundant in the understory of oak forests growing on sand.

5.Sweet-fern is not really a fern, but a woody native low shrub, usually found on dry soils in full sun. It flowered quite unobtrusively earlier in the spring before its leaves matured. Rub the plant to smell the (pleasant to me) resinous odor. Sweet-fern has nitrogen fixing bacteria in special cells on its roots that enable it to grow well on nutrient poor soils.





At the first intersection, Take the left at the first fork, then go right (the TOP Red trail - the middle trail where orange flags are set up).

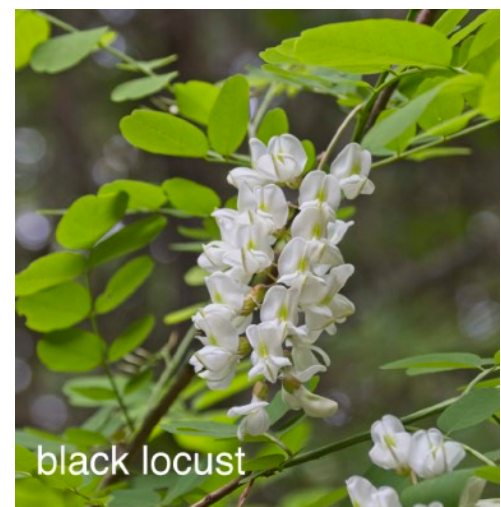
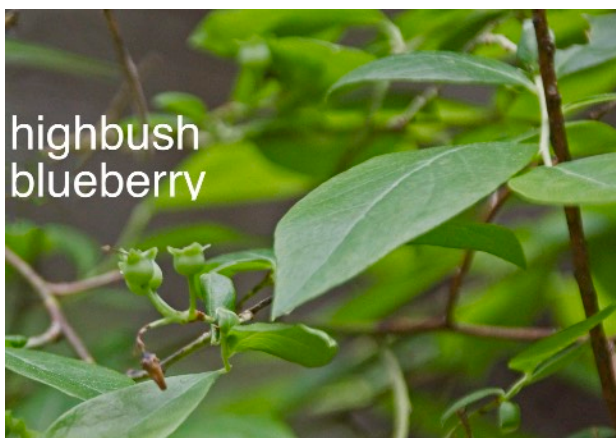
6.A Gray birch becomes a small tree, usually growing in full sun. It has distinctive triangular shaped leaves and a white trunk, although not as white as white birch. Gray birch also does not have the white birch's peeling bark.



7.This group of plants of the blueberry family includes Maleberry that has dry capsules instead of fleshy purple fruits. When it flowers, the flowers look like the white bell-shaped blueberry flowers. The brown capsules on the shrub are left from last year.

8.Highbush Blueberry is done flowering now (mostly) and has green fruits. When they ripen, they are good to eat, and the wildlife usually don't take them all.

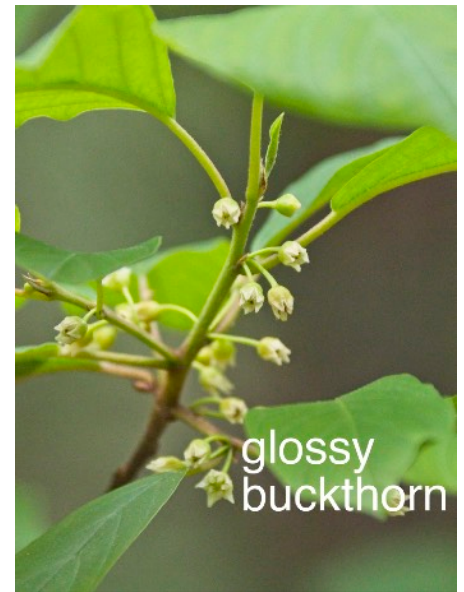
9.Black locust is flowering now with large fragrant flower clusters. The tree is in the pea family. Black locusts are not native to New England, but are native to North America, to the south and west. Like other members of the pea family with associated nitrogen fixing bacteria in its roots, it does well on poor soils.



10. Glossy buckthorn is an aggressively invasive non-native tall shrub. Like many other invasive species, it does well in this area that was very disturbed over many years.

Go straight on the path

11. There are pink lady's slippers in the woods to the left. Once you see one, look for others, there are quite a few here. Deer love the flowers, they will walk along nipping off the flowers, leaving the rest of the plant. Some years plants will put up the 2 basal (ground level) leaves but not flower, other years they don't grow above ground at all. The corm (overwintering organ) in the soil allows the plant to grow for many years if in soil with the right fungi that have co-evolved with this orchid. Moving lady's slippers usually kills them within a few years.



Go left and note a tree sized black locust.

12. Star flowers are mostly done flowering by now, many have set fruit. These must be in a cool place, still flowering.

13. Sheep laurel, these small shrubs will have purple flowers, if they flower. I don't see last year's fruits, so it may be too dark here for them to flower. They are relatives of mountain laurel, not quite as evergreen, and not as large.

14. Poison ivy, no longer with spring red leaves.

15. The white flowers on very prickly stems are blackberries (or raspberries) – we'll know for sure when the fruit are formed.



Plants of the sun, they will decrease as the forest trees grow and expand their canopy.



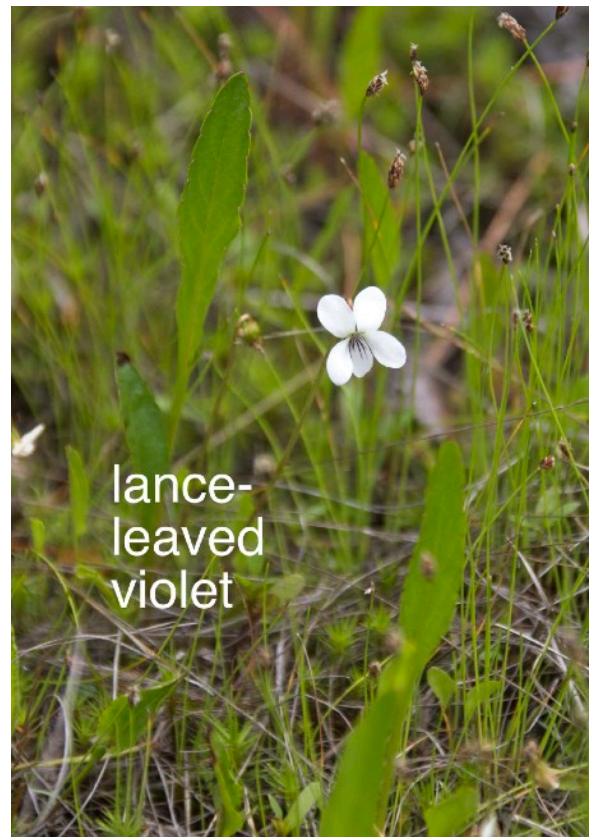
16. Morrow's honeysuckle is one of the non-native very invasive honeysuckles that have taken advantage of the past disturbance of the land. They grow densely and make it harder for native species to grow. But they do smell good.

Follow the main trail around the corner to the left then the old, now wet, gravel pit area is in front of you. You can see flags across the water that covers the trail. They were placed from the western access near the parking lot, and are identifying pretty much the same plants as are flagged on this side (the wonderful boggy plants that somehow seem to also associate with old gravel pits).

17. Lance-leaved violets are the little white violets all over the place. Such pretty little plants! I've seen them associated with sandy pond shores all over the state in the spring. One of my favorite violets since the distinct leaves make it clearly identifiable.

18. Spatulate-leaved sundew are hiding among the violets and other plants. Find one and you'll see many. These little carnivorous plants have shiny sticky hairs on the pink leaves that attach to small insects that land on them. You would have no difficulty getting a finger off the leaf, but a small insect would be stuck, and ultimately digested by the plant. They are flowering plants, and you may be able to find buds on some of them. Sundews are found in bogs – and often in old gravel pits like these.

19. Cranberries are abundant around the wet edges of the open water and above the open sand/gravel. They are not flowering yet, but there are a few fruits left from last year, mushy if touched after being frozen in the winter. Come back in September to see the ripening red fruits.





spatulate-leaved
sundew



cranberries

Look for dragonflies in the area, some are bright blue, others gray or red. They eat mosquitos and other flying insects.

Unless the water is down (or you want to wade through it), turn around, **go back on the path but stay left.**



oxalis - wood sorrel



nine-bark

20. Oxalis – wood sorrel. Yellow flowers on thin light green leaves, sour if chewed.

21. Nine-bark is a woody shrub that has shreddy bark on the older stems. It is native to our west, in New York and part of Vermont, and to the west and south.

Stay right at the ATV/dirt bike track eroded area. There are more black locust and a gray birch with little catkins, fruits not yet dropped over the world.

22. Pitch pine, 3 needles per group, as opposed to the 5 in white pine. Pitch pine does well on dry, low nutrient soils.

23. White oak has rounded leaf ends. The next shrub has bristle-tipped



pitch pine

leaf lobes, it is (probably) black (or red) oak (their leaves can look a lot alike, mature bark and or acorns help to tell them apart).

24. Blue toadflax has quite pretty flowers on these tall stems. It typically grows in open, disturbed habitats like these.

25. Look up. The Black locust trees are flowering, and bees have found them. Listen to the humming of the bees. Notice the thorns on the branches, and sometimes on the trunks. Well protected plants!

Stay straight

26. Yarrow. The white flower clusters function to attract insect pollinators by increasing their visibility and flowering all together.

27. Common cinquefoil, the yellow flowers have been in all the open areas we've walked around. There are more small black locusts, sweet ferns, and small white pines filling in the open area, returning forest to the area.

Go right at the fork (south) onto the main trail, then stay left on the main trail to return to the entrance on Bemis Road.

28. Notice the yellow flowers in the grass area. These are Rock Rose or frostweed, a grassland species.



Pat Rice identifies and flags all the points of interest. Sue Bleiweiss took the photos and is posting the descriptions on line for the Nashoba Conservation Trust. Paula Terrasi posts them for the Pepperell Conservation Commission.