



A note on what is flowering elsewhere in town. Mountain laurel is still flowering - but as I write this on June 17 I see that mountain laurels are beginning to drop their flowers, but continue to look terrific. As I noted a couple of weeks ago, pretty much any trail in the Pepperell Springs land off of Chestnut St (map #11) will have wonderful patches of mountain laurel. The Trails at Stewart Brook (#9), Gulf Brook (#10), and Heald Pond (map #12) also have patches of mountain laurels. Find some and enjoy!

Summer is underway – spring flowers have mostly gone to seed, some setting fruits that will become colorful (such as Canada Mayflower and spicebush), others quietly disappearing from view (such as starflowers). Lush green summer growth fills the forests and woodlands, with sunny open areas producing summer flowers and lots of green plant material. 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 names on them. Because the flags often mark time-sensitive points such as flowers 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.

General observations:

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.

Neighbor lands: Please be careful to stay on trails or marked conservation lands. Be considerate of neighbors.



Seminatore Woods and Pollinator Meadow

Nashoba Conservation Trust Land

Marked TOP Red Trail

flagging June 15 – July 6 (ish)

off of Pond Circle (from Village Rd.)

Not in the Pepperell Trail Guide

See <https://nashobatrust.org/pollinator-meadow.html>

Directions: From Pepperell Town Hall, head 0.5 miles north on Park St. to Village Road on the right (east). You'll go past Sartelle St. on the left (west). On the right, turn onto Village Rd., (the 2nd entrance from town hall.) Then take a left onto Pond Circle. Park along the road or in the cul-de-sac, not blocking any driveways. If you take the first (southernmost) Village Road entrance, its fine, just go around the curve and Pond Circle will be a right turn. See last page of this document for a map.

From the NCT description of the project: Please note: the NCT-owned trail access from the street is a 25-foot-wide grass strip that abuts privately owned land on both sides. Please be respectful of the neighbors and stay within the entrance path. Pets should be leashed until inside the wooded area of the trail.

Red Trail Access. There is ample parking along the Pond Circle cul-de-sac where the signage is obvious. Village Rd. is nearby if needed for parking along the road.

The trail wanders approximately a quarter mile through high-canopied mixed hardwood forest and along a waist-high fern dominated lowland to reach the meadow in its back corner. It's a real beauty.

And I (Pat) add: Yes, it is ok to walk the mowed trail in the pollinator meadow and look at everything there. That is what it is for.

Another note: Plant identification. I have put up flags on plants in the woods with their names on them, and have notes on them here. BUT: I have NOT identified plants in the pollinator meadow. There are existing flags there, from someone else's research project or are part of the planning and maintenance of the meadow creation project. I don't want to confuse the flags. And I don't actually know a lot of the plants in the meadow. What is flowering at any given time changes quickly in the sunny meadow. I will include at the end some of what I noticed flowering and growing on June 15 and 17, but even between my 2 visits, flowering species changed.

The trail to the pollinator meadow goes through a young forest with old white pines, and various ages of deciduous trees, with many 2 to 4 inch diameter young trees. Some of the saplings (pole sizes, in forestry terms) will form the canopy in the future, others will not survive the competition for light, space, and nutrients. The area has odd wet areas perched on patches of shale near the surface or clay pockets in the soil. There are drier and wetter areas. The path has 2 bridges the go over some of the wetter areas. Notice that some of the wetter areas have fewer trees – and more light, so have a lot of understory growth including many species of fern.

Red Trail from the access:

The flagging starts in the woods. Note that the edges have many plants leaning into the light. The forest edges also have more invasive plants than are in the interior.

1.The tree with the TOP Trail sign is a Shagbark hickory as well as the one tagged. Shagbark hickories grow to be forest canopy trees. They are quite abundant in these woods. Shagbark hickories kindly tell us their names by having the shaggy bark. The fruits are nuts, very edible, but squirrels like them too. And the husks around the shells are thick and the shells strong. At least one person who collects a lot of them to eat uses a hammer and anvil to get to the nutmeats inside.

2.There are a lot of invasive species along the edge of the forest here. European buckthorns were brought to this continent by early settlers who



used buckthorns for hedges and for medicinal qualities of the berries as a laxative. I read recently that modern doctors think it works too well, the berries are too strong and not really a good medicine. It works on birds, they eat the berries and expel the seeds undigested to grow under trees the birds land on.



3. Oriental bittersweet is an invasive woody vine that can grow up over the tops of trees and cover the leaves. They have been known to make the tree tops so heavy they break off in storms. If no tree is around, they will grow on themselves and form dense thickets of arching vines that root at the tips and keep expanding

4. The presence of this hornbeam (also called ironwood, musclewood (look at the texture of the trunk), or blue beech) reminds us that the soil here is moist. We've seen hornbeam at almost all the sites this year, easy to note even in winter because of the bark/trunk texture.

5. Interrupted fern is another plant that is appropriately named - note the break between leaflets on the big leaves where the spore structures (the fertile structures) are located.

6. Witch hazel is a tall shrub of moist soils (usually not actually wet, though).



7. Another fern found in these moist (not wet) woods is New York Fern that we see in some large patches. The key to knowing this one is to note that the leaves have small leaflets at the top and the bottom – New Yorkers burn the candle at both ends.

8. This young sugar maple suggests that the forest will be very tall in the future. Sugar maples are abundant in these woods.



9. Across the path from the sugar maple is a patch of poison ivy. By now, you'll have realized I point it out on every walk - this is one plant you need to be able to identify in order to avoid it.

10. Notice the old, dead tree. Trees like this still provide habitat to many animals (raccoons, owls, lots of insects) and continue to be part of the forest ecosystem for years.

11. Note the stone wall running through the woods – farmers cleared the land and laboriously made the stone walls, and used the fields, maybe as pasture for decades. The first trees that came in after farming stopped were probably white pines, the largest trees now in this woods. The old dead tree looks like a white pine that grew without other trees around it, so had side branches.

12. Maple-leaved viburnum are small shrubs with opposite maple shaped leaves. In sunnier locations they have had flat bunches of white flowers, but it looks like this area is too shady for flowering this year.

13. The order of the plants here may be a bit confused, I kept finding better examples and moving the flags, but I think they're all flagged.



14. As you walk along the path, you'll see patches of low growing plants, many with single or double leaves. Canada Mayflower were among the earliest plants to emerge in the spring, then we waited for their white flowers. Now that summer is here, the fruits have appeared. By fall remaining fruits will be bright red.

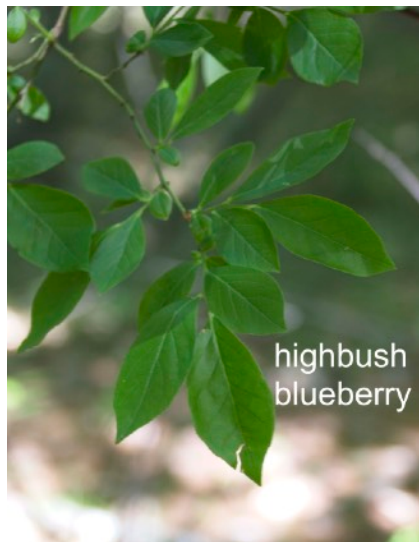
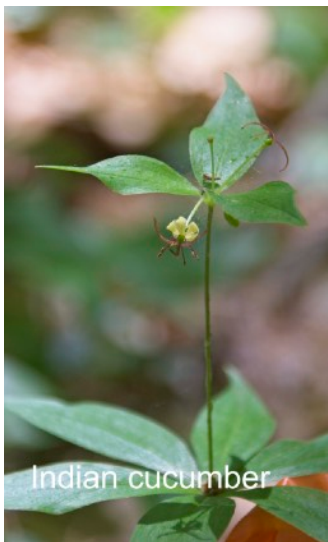
15. Star flowers are mostly done flowering by now, many have set very inconspicuous fruits.



16. Across the trail are some very nice double tiered Indian cucumber plants, now in flower (you may have to look closely to see the flowers, they bend down).

17. I flagged a highbush blueberry that isn't in fruit, I think it's too dark under for tree canopy, they flower best in sunshine. There are also a lot of scattered lowbush blueberries in the area.

18. As you walk along look off to the right. There was one tall mountain laurel in full flower on June 15, still striking on June 17, but a lot of the flowers were on the ground.



19. There are lots of black birch along the trail, from small 10 ft trees to mature canopy trees. Smooth gray bark with soft leaves that come as 2 on very short side branches. The inner bark of branches smells of wintergreen. Black birch, like all the birches, is a species of young forests. It germinates best in the sun, and although it will grow then in the shade, new generations don't start in older, shadier forests.

20. Red maple, there are many here, of many ages. Like the birches it is more likely to be in younger forests. Red maples are often species of wetlands, although they can be abundant in young drier forests as well.

21. There are large white birch in the forest now. This is another species that doesn't do well in shade, again indicating that this was less forested a tree generation ago.

22. Cross one of the wooden bridges. Notice the multiflora rose that is widespread in the area. Multiflora rose is an aggressive invasive species that does well along forest edges, including along wetlands and streams where there is more sunlight than under a closed forest canopy. Multiflora rose can form impenetrable masses that block movement of larger wildlife as well as people.



23. Elm. There have been a few large elms as well as several this size (1-2" diameter). These native trees persist in wet forests despite so many having died of imported Dutch Elm disease.

24. Another poison ivy plant, this one a hairy vine growing up a red maple tree. Look up to see the leaves.

25. Glossy buckthorn. An invasive relative of the European buckthorn tagged at the beginning of the trail. This is one doesn't have the laxative reputation of the other, but is also widespread in forests.

26. Note another elm here, feel the rough leaves of the small plant on the trail side.

27. Cinnamon fern. These can be very tall. The spore structure is on a separate stem from the encircling leaves.

28. Sensitive fern have been along the trail, but these are nice examples of them.

29. Royal fern – I was surprised to see them so far from water, I think of them as being on little islands in marshes. Some of these ferns get very large.

30. Spicebush, a nice native shrub usually of very moist areas. Rub a leaf with your hand and smell it to see why they are called spicebush. The fruits will turn bright red in the fall.





royal fern



sensitive fern



cinnamon fern

31. There are Virginia creeper vines along the edge, along with an abundance of the invasive plants that like edges.

The pollinator meadow. Lots of nice plants flowering and getting ready to flower later, and likely some that are done. You can enjoy the diversity, change across the season, and abundance of flowers without naming them. I don't know the names of many of them.

I noticed Avenas, sulphur cinquefoil, daisies (of course), small white clusters of bedstraw flowers, slightly larger clusters of grass-leaved stitchwort. Beards tongue. Bonesets and Goldenrods that won't flower for a while. Good stuff!



spicebush

