



Flanders 2018 Botany Trail - The Van Vleck Farm and Sanctuary

Church Hill Rd., Woodbury CT

Planted by Two Adventuring Ladies

Hike time: 45 minutes -2 hours (It depends on how much time you spend observing the plants)

Introduction:

A map of the Van Vleck Farm and Nature Sanctuary and its location can be downloaded at http://flandersnaturecenter.org/wp-content/uploads/2016/10/VleckFarm_Sanctuary.pdf

The Botany Trail letterbox is not part of a series. This and several other letterboxing trails have been created in order to introduce people to the family friendly trails on Flanders Nature Center & Land Trust's properties. Since we expect families to be hiking with children, we have added a check list and included observations and information that might help everyone enjoy the hike. One of the letterboxes on each trail contains a rubber stamp with a letter. In this case the letter is B.

Flanders has created a passport to use when hiking the trails planted by The Two Adventuring Ladies. Anyone who hikes twelve of Flanders' letterboxing trails should go to the Flanders Nature Center & Land Trust office, present their passport with twelve letter stamps from twelve trails and sign their Trail Name on our poster of Successful Flanders Letterboxers. They will receive a prize. The office is open Monday – Friday from 9 until 4. The Flanders Passport and the clues for all the letterboxing trails at Flanders can be downloaded at <http://flandersnaturecenter.org/letterboxing/>

Dogs are allowed BUT MUST be on a short leash while on the Botany Trail. If they step off the trail, they will damage the plants.

Park in the Sugar House parking lot off Church Hill Rd. Enter the trail to the left of the kiosk at the far end of the parking lot.

This letterbox trail can be enjoyed in three ways:

1. Follow the directions to simply find the two letterboxes.
2. Read our notes and stop to look at the plants we mention as you look for the letterboxes.
3. Bring your books and/or use your apps in order to study the plants as you hunt for the letterboxes.

Remember, what you see will depend on the time of year.

As you walk, you will notice a series of wooden signs with numbers engraved on them. These are location markers created and installed as an Eagle Scout project. The numbers' locations are recorded with the emergency services and will help locate a hiker in need of assistance.

In the 1960's there was a great deal of development going on in the Woodbury/Southbury region. I-84 was being built. The landscape was being radically altered. The members of the Pomperaug Valley Garden Club became concerned about the native plants. They started going to excavation sites and rescuing plants. At first they took these endangered plants to their own yards. Then in 1965, they created the Botany Trail at Flanders

Nature Center & Land Trust in order to provide a home for these native plants and in order to allow the rest of us to enjoy the plants and learn about them. The Pomperaug Valley Garden Club has continued to maintain the Botany Trail.

Before you begin consider reading about the various kinds of violets and ferns that you might encounter in CT. In particular, a review of the anatomy of ferns might be interesting. You might also enjoy carrying a wildflower book or downloading an appropriate app. We found “All About Ferns – A Research Guide” from the Cornell University blog service particularly useful.

<https://cpb-us-east-1-juc1ugur1qwqqo4.stackpathdns.com/blogs.cornell.edu/dist/7/3643/files/2013/09/Fern-Guide-27sra8m.pdf>

REMEMBER, the plants on this trail are fragile. Please be careful where you walk, and please do not pick the flowers.

Many of the plants on the trail are labeled. We only describe a few. In many cases we will identify the plants by their common and their Latin name. The Latin name for a plant is recognized all over the world. The common name may change from country to country or from region to region.

Note the Botany Trail box on your right. This is not a letterbox, but you are welcome to leave a note for the members of the Pomperaug Valley Garden Club.

Walk straight ahead on the orange trail.

As you enter the trail, you will be surrounded by a groundcover called Sweet Woodruff (*Galium odoratum*) and by Sensitive Fern (*Onoclea sensibilis*). This fern was given the name sensitive because the sterile fronds turn brown and die back when the first frost comes. The erect bead like fertile frond remains through the winter and releases its spores early in the spring.

In the spring and early summer you will be surrounded by Mayapple (*Podophyllum peltatum*). Mayapple has two umbrella like leaves that are 6 to 12 inches above the ground. If you look under the leaves, you may see the flower or fruit. The small green fruit looks like an apple. It is a favorite food of the box turtle, but is poisonous for people. This plant will be brown and withered by late summer.

Watch for Jack in the Pulpit (*Arisaema atrorubens*). Beneath the leaves you will see “Jack” hiding in the pulpit. In the spring and early summer there will be tiny flowers in the base of the pulpit. In the late summer and fall there may be bright red berries.

Off to your right, near the sugarhouse, you will see the two butterfly gardens. Leave the trail and examine the gardens. The garden nearest to the parking lot is a Nectar or Pollinator Garden – designed to provide food for the butterflies and other pollinators – especially the endangered Monarch Butterfly. The second garden contains several varieties of milkweed. One of those milkweeds will look familiar – it is Common Milkweed (*Asclepias syriaca*). Monarch Butterflies are totally dependent on the milkweed family as a place to deposit their eggs and as a source of shelter and food for the larvae. Pause and look for butterflies. Learn more at: <https://monarchwatch.org/> You will find the second garden listed here as “Landers at Flanders”, a certified Monarch Watch Waystation since 2011. This garden is one of over 19,000 waystations registered with Monarch Watch.

Return to the trail. There is a Northern Highbush Blueberry (*Vaccinium corymbosum*) directly across the trail from the butterfly gardens. Later on, you will see a Lowbush Blueberry (*Vaccinium angustifolium*). Both are labeled. Turn right and continue on the trail. In a few feet, on your left, you will come to a labeled Sassafras Tree (*Sassafras albidum*). Notice the leaves. This tree has three distinct leaves. An old story states that a woman was learning to knit mittens. She created one with no thumb. Then she created one with two thumbs. Finally she

created a mitten that was just right – it had room for one thumb. From those three mittens the sassafras tree was created. Look at the leaves again. Does the story make sense?

As you proceed on the trail you will be surrounded by the Common Hay Scented Fern (*Dennstaedtia punctilobula*). It will turn yellow/brown in the late summer.

In a short while you will turn left on a long boardwalk built as an Eagle Scout project. Depending on the time of year, you may see Tall Meadow Rue (*Thalictrum polygamum*) on your left at the turn. You may see Goutweed (*Aegopodium podagraria*) on your right. Goutweed has many common names: ground elder, bishop's weed and snow-in-the-mountain. It is an invasive herb that was used to treat gout and rheumatoid disease. We would like to eliminate it because of its invasive behavior. It is on the Connecticut list of invasive plants and is considered one of the most difficult invasives to eliminate because of its extensive root structure.

After the board walk, you will see a label for Cinnamon Fern (*Osmunda cinnamomea*). This tall fern is one of several that enjoy wet areas. Cinnamon Fern is distinct because it has tufts of pale tan wool at the base of the pinnae.

Watch for Partridgeberry (*Mitchella repens*) on the right. It is a creeping evergreen groundcover. Two flowers merge to form one red berry with two seeds. Each berry will have two bright spots on the surface.

Soon you will turn right by an orange sign that says "loop". At the trail intersection, there is a Shagbark Hickory (*Carya ovata*). Its shaggy bark makes this tree easy to recognize. If any of the nuts are on the ground, they will have a thick husk that comes apart into four pieces.

Ahead you will see a former Christmas tree farm on your right. Opposite the Christmas tree farm, on the left side of the trail, you will see labels for New York Fern (*Thelypteris noveboracensis*) and Christmas Fern (*Polystichum acrostichoides*). The New York Fern is recognizable because the pinnae are shorter at both ends of the frond. The Christmas Fern is a deeper green, stays green all winter and the pinnae have a "toe" at the end near the rachis. This vaguely resembles a Christmas stocking hung on the mantle. Remember what the Two Adventuring Ladies said about reviewing the anatomy of a fern?

Continue straight on the orange trail. The trail will swing a bit to your left. Here you will see one of several marshy areas on the trail that are filled with Skunk Cabbage (*Symplocarpus foetidus*). When bruised, the skunk cabbage smells like rotting flesh. This odor attracts the insects that pollinate the skunk cabbage. It is an excellent source of food for these pollinators. Ice and snow melt around the emerging Skunk Cabbage in the spring because the cellular respiration that produces its rapid growth also produces heat. This is called thermogenesis. Bears eat the emerging skunk cabbage when the bears increase their activity in the spring.

Near the Skunk Cabbage there is a patch of Royal Fern (*Osmunda regalis*). The pinnae are opposite. The pinnules are not. Some of the blades are fertile. These have distinctive light brown pinnules at the tips.

Look all around you. You may see Wild Geranium (*Geranium maculatum*), Northern Maidenhair Fern (*Adiantum pedatum*) and Partridgeberry (*Mitchella repens*).

As you cross the next boardwalk, look for prints in the mud. Who has been here? Dogs? (We certainly hope that they were on leashes!) Deer? A bear?

You have arrived at the pond. STOP, LOOK and LISTEN.

You may see:

- Yellow pond Lily or Bullhead Lily (*Nuphar variegata*). This has floating heart shaped 3 – 15 inch leaves and showy yellow flowers.

- Fragrant Water- Lily (*Nymphaea odorata*). These have 3-5 inch white flowers.
- Tatter Pointed Pickerelweed (*Pontederia cordata*) with its large arrowhead shaped leaves.
- Cattails (*Typha latifolia*). These common plants have been used as a food source, for weaving baskets and mats and as medicine.
- There may still be an invasive iris near the end of the pond on your left. This Yellow Iris aka Yellow Flag (*Iris pseudacorus*) is an herb that may have been used for toothaches.
- Duck Weed (*Lemna minor*) - the tiny floating green leaves-are a native plant . It is the smallest known flowering plant.
- You may also see frogs, salamanders and turtles.
- We hope that you **do not** see any goldfish.

Goldfish DO NOT BELONG HERE. For many years the pond had goldfish. These fish which were large (Some were more than 10 inches) and numerous (dozens and dozens) survived by eating frog eggs, toad eggs, and salamander eggs. The goldfish were destroying the natural habitat. They probably arrived here because someone did not want their pet goldfish anymore. The person thought they were doing a good deed when they tossed the fish out into a pond. THIS IS NOT A GOOD IDEA. Goldfish do not belong in our ponds and streams.

We hope that the invasive goldfish have been removed. Look carefully. If you see any goldfish, please let us know.

After you wander around a bit, face the pond. Now take the path that goes past the end of the pond on your right. As you re-enter the woods you will see a tree labeled Tulip Tree or Yellow Poplar (*Liriodendron tulipifera*). To the left of this tree and hanging over the pond you will see Bayberry (*Myrica pensylvanica*). To the right of this tree you will see native Great Rhododendron (*Rhododendron maximum*). On the other side of the path there is a clump of Witch Hazel (*Hamamelis virginiana*). This plant is unique because its yellow flowers appear after the leaves fall in the autumn. You will be able to identify this tree because it has 12 to 15 trunks that emerge from the ground individually. Witch Hazel has long been used in medicinal ointments. In fact, E.E. Dickenson and Company began marketing Witch Hazel in Connecticut in 1846. The name "Witch Hazel" actually comes from the anglosaxon term "wych" meaning bend. Small branches from these trees were used by dowsers – people who found underground water sources by carrying a forked branch over the ground. The branch would bend toward the earth when it crossed over an underground source of water.

When you are near the top of the hill, turn off the orange trail and take the unmarked path to your left toward a bench. Sit a moment. Watch the sun play through the trees and listen to the sounds coming from the woods and the pond. You may see or hear Pileated Woodpeckers. Return to the trail and swing to the left.

As you walk, the Two Adventuring Ladies suggest that you look at the ground covers around you. You are surrounded by shade loving low lying plants. Many are visible all year. Look for Princess Pine (*Dendrolycopodium obscurum*) which is a flat branched club moss. You may also see Partridgeberry (*Mitchella repens*), Spotted Wintergreen (*Chimaphila maculata*) and Starflower (*Trientalis borealis*). You may not find them all but with your book or an app you will identify several.

The trail curves to the left and over a boardwalk. After the boardwalk, do not take the trail that goes off to your left. It will go back to the pond. Continue straight. On your left there is a tree that fell over. The roots are facing the trail. Look at the rocks, the plants and the crevices. The Two Adventuring Ladies wondered what animals might make their homes here. Over time, the root system will become a relatively smooth lump next to the hole. This is called a "pillow and cradle".

Soon you will come to another downed tree with its roots facing the trail on your left. This is just before another boardwalk. You will find a letterbox with a stamp for the letter B on it under the trunk of this tree.

After you do your stamping, continue on the orange trail and head to your left, over a small rise and down the hill.

Keep watching for different types of violets.

Look at the "grass". It is not all grass. Some of the "grass-like" plants are actually sedges. There is a rhyme that will help you remember the difference between grasses and sedges.

Sedges have edges. Rushes are round. Grasses are hollow. What have you found?

As you go down the hill look for Bracken Ferns (*Pteridium aquilinum*) on your right. It may not be labeled, but you can find it. Look for a fern that is about three feet tall. The blade is divided into three equal triangles that are parallel to the ground. It looks like a small lacy table.

Just before another boardwalk, you'll see a large rock with a plaque honoring Florence M. Schaperow. She was a member of the Pomperaug Valley Garden Club. She left funds to help maintain the Botany Trail. Go behind this rock. You will find another letterbox.

After you stamp our log and your log, return to the trail, turn to your right and cross the bridge. Just before you step on the bridge, look to your left. You may see Bloodroot (*Sanguinaria canadensis*). This member of the poppy family has a showy spring flower.

Continue until you are back at the intersection with the Shagbark Hickory. Go straight and go back over the long boardwalk. After the boardwalk, turn right and return to your car.

Botany Trail Checklist

What did you see or hear?

___ Skunk cabbage

___ A frog

___ Goldfish (we hope not, but let us know if you did)

___ A Jack in the pulpit

___ A tree with three types of leaves

___ A "Pillow and Cradle"

___ Bracken ferns

___ A woodpecker

What kind? _____

___ Different kinds of violet

How many kinds? _____