SELF-GUIDED TOUR OF SPRING PLANTS Brushy Hills Plant List 4-8-23 Upper James River Chapter - Virginia Native Plant Society VNPS.org

For directions to Brushy Hills and a trail map, go to http://www.friendsofbrushyhills.org/brushy-hills-info.html. You'll also find a large map on the kiosk at the parking lot. We have planted flags along a loop of approximately two miles, with most flags concentrated in the first half.

PLEASE DO NOT PICK THE FLOWERS! Parents, you might explain to your kids that these flowers weren't planted here by people; their seeds came from a mother plant, they grew up here, and this is their home. Thank you!

If you have any questions about Brushy Hills itself, please contact friendsofbrushyhills@gmail.com.

Questions about plants or the Native Plant Society can be directed to Peggy at cobbking@rockbridge.net or Jan at janhuntersmith@gmail.com. Unlike other areas, you will see few non-native invasive plants here, thanks to the hard work of Friends of Brushy Hills project chair David Rosher and many volunteers.

At the parking lot, there is a small bridge over a small creek to the left of the kiosk. Look for the colored flags.

ID# 1 Note the ole puttyroot orchid flower stalk by the mayapples.

Aplectrum hyemale Putty Root Orchid (Native). Look across the path for more. This orchid develops a single basal leaf per plant during the fall, which persists through the winter. It's one of the few plants that photosynthesize in the winter (more sunlight on the forest floor!). When the basal leaf withers away in spring, a flower stalk 6-20 inches tall is produced — sometimes! A large majority of plants fail to produce flowers during any given year, either because they are too small and immature or environmental conditions are not right. There is much unknown about orchids.



Podophyllum peltatum Mayapple (Native). Umbrella-like leaves. In the Barberry Family. Not all plants in a colony will bloom in a given year, but the ones that do bloom bear two leaves; sterile plants produce just a single leaf. The white/yellow flower (one per plant) occurs at the fork between the two leaf stems and hangs down. The "apple" develops at the center of this flower. Pollinated by bees and disseminated by box turtles, who eat the apple and poop the seed out in their wanderings.



Smilax vine Greenbrier family (Native). Many species. This thornless versions may be called carrion flower. Flowers visited by bees and flies for nectar and pollen. Host plant for the Curve-lined Owlet moth (that is, the moth will lay its eggs only on Smilax vines). Birds and even bears enjoy their berries.



ID# 2

ID# 3 Lindera benzoin Spice Bush (Native). NOTE the beginnings of berries being formed on this female. Both male and female shrubs have yellow flowers in the early spring. Only the females will have small green fruits (wherever their flowers were pollinated). These will grow to about 1/2 inch long, turn red, then black, and be relished by many birds! Host plant to the Spicebush Swallowtail butterfly. Lightly scratched bark smells spicey.



ID# 4 Geum vernum Spring avens (native) Attracts small bees such as little carpenter bees, Halictid bees, cuckoo bees (Nomada spp.), and masked bees (Hylaeus spp.); Occasionally, Syrphid flies, Tachinid flies, and other flies also visit the flowers. The bristly seeds can cling to the fur of mammals, feathers of birds, and clothing spreading into into new areas.



ID# 5 Persicaria virginiana Virginia Knotweed or Jumpseed (Native). Pointy oval leaves, older ones with a dark blotch in the middle. Sometimes called Smartweed, name also used for the common non-native rampant pink weed (picture on right is non-native)



ID# 6 Asarum canadense Wild ginger (Native). Velvety heart-shaped leaves. Note the maroon flower at the base of the stems, at ground level. Maroon is the color of decomposing flesh, which attracts flies---that's how they get pollinated. The root is not great for tea. Deciduous.





ID# 8 Polystichum acrostichoides
Christmas Fern (Native) Leaves
less divided. It is one of our few
evergreen ferns. Stalk is scaly (not
smooth and shiny). Leaves often lie
flat in winter. Note toe of stocking
along stalk. Leaf (or pinna)is
stocking shaped.

NOTE: the trilliums too



ID# 9 **Botrypus virginianums** Rattlesnake Fern (Native). Will have one sporophore (fertile stalk) that will grow much taller and from the center of the lower, triangular leaves.



ID#10 *Uvularia sessilifolia* Sessile Bellwort (Native). Arching stems with long oval leaves, the base just touchs the stem. Contrast to Perfoliate Bellwort where the stem pierces the

leaf or Grandiflora Bellwort where the leaf clasps the stem. The pollen is used by the specialized bee Andrena uvulariae.



ID#11 STAR CHICKWEED WITH OLD BLOODROOT AND PERFOLIATE BELLFLOWER

Stellaria pubera Star or Greater Chickweed (Native). In the carnation or pink family. Daisy-like in appearance, each flower actually has not 10 but 5 petals, each petal deeply divided. The leaves fold up at nighttime, enfolding and protecting the tender buds of new shoots. our gardens.



ID#11 Cont. Sanguinaria canadensis Bloodroot (Native). NOTE Seed Stalk. The seed pod will turn reddish after about 2 weeks, and then it will pop and spread its seeds. Like many seeds, these have elaiosomes (fleshy appendages that are rich in fatty acids and diglycerides), which are attractive to ants. The ants gather the seeds and carry them to their nests, where the elaiosomes are eaten and the seeds discarded.





Uvularia perfoliate. Perfoliate Bellflower



ID#12 Osmorhiza claytonii Sweet Cicely (Native)—"sweet" because its foliage and root smell like licorice. A tall plant with leaves divided into threes, hairy stems, and flat clusters of small white flowers.



ID#13 *Viola pubescens* Yellow violet (Native) Stems are pubescent or "downy". Butterflies and bees like the nectar and some butterflies (particularly the Greater Fritillary) and moths use this plant as a larval host.



ID#14 Geranium maculatum Wild or Cranesbill Geranium (Native). Deeply cut, palmate 5-lobed, dark green leaves, up to 6" across. Five-petalled rose-purple, pale or violet-



purple flowers give way to distinctive, beaked seed capsules (like a crane's bill); when seeds ripen, capsules zip open, flinging seed out. Deer resistant. VA Native Plant Society 2020 Wild Flower of the Year.

ID#15

Another great example of *Aplectrum hyemale* Putty Root Orchid. Refer to #1.

ID#16 Packera aurea Golden ragwort (Native). Small yellow flowers that turn to white fluffs like dandelions. Evergreen foliage, fairly deer-resistant. Likes moist conditions, full sun to light shade. Bees and flies are pollinators. LOOK DOWN HILL FOR A BIG PATCH Spp? Can you tell us? ID#18 Clematis virginiana Virgin's Bower (Native) Showy, fragrant blooms in the autumn. It attracts a variety of pollinators, including hummingbirds and is a host for the clematis clearwing moth. Female produces abundant seeds. There is a very aggressive nonnative species – it's leaves have smooth edges ID#19 **GROVE OF MOSTLY YOUNG ASH** Fraxinus pennsylvanica Green Ash (Native) NOTE how numerous the seedlings are throughout the understory. The bark of young trees is too thin to be used by the non-native emerald ash borer beetle. Baseball bats are made from the strong pale wood. borer path under bark ID#20 Fagus grandifolia Beech (Native) Identified by leaves with strong veins and toothed edges. Produces nuts that form an important part of many animals' diets. native people regard this tree as a sign of tolerance, forgiveness, and acceptance. Brushy Hills has a high concentration of beeches probably due to its limestone soils. ID#21 Viburnum acerfolium Maple-leaved Viburnum (Native). In adulthood, a five- to eight-foot-tall shrub with fivepetalled creamy flowers. Forms thickets. Black fruit persists into winter, providing food for birds.

ID#22	Galearis spectabilis Showy Orchid (Native). These orchids are of short stature, with thick glossy leaves and flowers of white and lavender. They like rich limestone soils. NOTE: Look about 4 ft off trail near fallen tree.
ID#23	Viola palmata Wood or cleft violet (Native) Supports Fritillary butterfly larvae. Nectar from the flowers attracts butterflies and bees. The genus Viola supports many specialized bee species.
ID#24	Galium spp? Bedstraw There are 4 species locally that
	have 6 leaves in a whorl. Without the flower it is not possible to distinguish. Flowers are pollinated by small bees and some beneficial insects.
ID#25	Tipularia discolor Cranefly Orchid (Native). Note that the underside of its leaves are purple. Like Putty Root, this plant photosynthesizes in winter. The flowering stem originates from a small corm from July to September. The flower stem is 15-20 inches. Pollinated by Noctuid moths.
ID#26	Galium spp? Bedstraw There are 2 species locally that have 4 leaves in a whorl. Distinguished by size when mature. Flowers are pollinated by small bees and some beneficial insects.
ID#27	Toxicodendron radicans Poison Ivy (Native). LOOK in to large tree with hairy vine Three almond-shaped leaflets, somewhat shiny, sometimes toothed. New leaves have a purplish tone and later range from light to dark green to orange in Fall. Will grow into a vine eventually but can get quite tall as a little treelet. The berries are enjoyed by

ID#27 quite tall as a little treelet. The berries are enjoyed by birds. Many people get an itchy rash from the compound *urushiol* in leaves.







TO THE LEFT IS SMALL FLOWER AND IN FRONT A SMALL BLACKHAW

Potentilla spp? Cinguefoil (Probably Native). There are several species of natives but until further growth and flower it is hard to identify. All have five leaves and most have yellow flowers but some have white or pinkish hue.



Viburnum prunifolium Blackhaw viburnum (Native). Grows to a shrub or small tree, 12-15 feet tall. Leaves are opposite, often with a red rim. New leaves are coppercolored; white, flat-topped flowers follow. Birds adore the black fruits. Full sun to part shade. Many cultivars in the

nursery trade.

ID#28



ID#29 **Betula lenta** Sweet or Black birch (Native) birch support many lepidoptera and ranks 4th on Dr. Doug Tallamy's important tree list. It is a larval host plant for the Mourning Cloak and Dreamy Duskywing butterflies.





ID#30 Dichanthelium clandestinum Deer tongue grass

(Native) Eaten by many caterpillars such as skippers, moths, leaf beetles, and many others. Sparrows enjoy their seeds.

Betula lenta blooms



ID#31 Goodyera pubescens Rattlesnake plaintain (Native)) A

common orchid of North America with evergreen variegated leaves and a spike of small flowers, usually white with green or brown markings, that have a fragrant odor. Most of the plant, excluding and petals, are covered in small hairs. Unlike most orchids it stays green all winter.



ID#32 *Prenanthes now Naballus trifoliolatus* Gall of the Earth (Native) A perennial with unique shape and great name. Small flowers in summer.



ID#33 Boechera canadensis
Sicklepod/Rock cress (Native)
The flowers are minimal but the seed pods are a cool sickle shape.



ID#34 *Conopholis americana* Bearcorn (Native). Somewhat resembling pinecones, yellowish and turning brown, this is a perennial, non-photosynthesizing plant parasitic on the roots of Oaks and Beeches. And, yes, bears coming out of hibernation and other mammals, will eat these.



ID#35 Antennaria spp? Pussytoes (Native). Need flower to identify species. There are 5 species in Rockbridge County. The fuzzy white flower resembles—pussy toes. Tough plants; grows in fields as well as woods. Host plant for the American Lady butterfly.



ID#36 *Cynoglossum virginianum* Wild Comfrey (Native). It has rough fine hair on its leaves and stem. The plant will develop a long flower stem (looks like a Y) with progressively smaller leaves, small blue to white flowers, and burry seeds. The non-native variety is much larger.



ID#37 *Cardamine concatenata* **Toothwort** (Native) owes its name to the tooth-like projections on its underground stems (rhizomes). Member of the mustard family. The

flower provides nectar for honeybees and bumblebees.



ID#38 Smilax vine Greenbrier family (Native). Many species and hard to identify. This thorny vine may be S. glauca. Used by bees and flies for nectar and pollen. Host plant for the Curve-lined Owlet moth (that is, the moth will lay its eggs only on Smilax vines). Birds and even bears enjoy their berries.



#2 was the carrion flower which has no thorns

ID#39 Actaea racemosa Black Cohosh (Native). Named for the color of its stem. Repeated sets of three leaflets having a coarsely toothed margin. Produces tall white spires of flowers in late spring. Host plant for the Spring Azure, Holly Blue, and Appalachian Azure butterflies (Celastrina spp).



ID#40 Cypripedium pubescens Yellow Lady Slipper (Native). About 2 ½ feet behind the tree. Never dig: orchids need their unique soil mycorrhizal partners to live—they'll die without them. The showy flowers are deceptive because they induce insects to explore the flowers in the expectation of a reward, but they contain no nectar and their pollen is unavailable to insects. If a flower is successfully pollinated by insects (often this doesn't occur), it will form a seedpod. When this seedpod splits open, the ultra-fine seeds are easily carried aloft by the



THE FLAGS WILL NOW BE FURTHER SPACED AS THE TRAIL GOES UP HILL AND THEN TO THE LEFT, CROSSES THE PIPELINE ROW AND WILL THEN SOON START TO SWITCHBACK DOWN TO THE PARKING LOT. IF YOU ARE SHORT ON TIME, IT WOULD BE A GOOD TIME TO TURN AROUND.

Arisaema triphyllum Jack-in-the-Pulpit (Native). Three-parted leaves; flowers contained in a spadix that is covered by a hood. Grows from a corm (small bulb). In autumn the rest of the plant dies away, leaving only the berry-covered stalk. The fruit ripens in the form of a bunch of bright, scarlet, shining berries. This plant starts life male.



ID#41

The grass in the area is native bottle-brush grass.

ID#42 *Peziza (probably phyllogena* spp) Common brown cup mushroom (Native).

Brown cups are a large family of fairly common mushrooms. It is an important harbinger of spring, often appearing several weeks before the more famous, and tasty, yellow and black morels do.



ID#43 *Epifagus virginiana* Beechdrops (Native). Parasitic plant

that grows on the roots of American Beech. Its brown stems bear small white and purple flowers in July through October.



ID#44 Carex pensylvanica. Pennsylvania sedge. (Native). A

very attractive groundcover for gardens, sedges provide forage and habitat for butterfly larvae, birds, and small mammals. Hopefully the seed heads will still be visible when you are viewing.



ID#45 Aquilegia canadensis Wild Columbine (Native). Three leaflets with rounded lobes. Will have lovely orange and yellow bell-shaped flowers. Hummingbirds are attracted to this color combination. Its seed pods "pop," and so it

spreads well.



ID#46 LOOK UP ON TOP OF HILL TO SEE HYDRANGEA ON HILL WITH GOATSBEARD JUST BELOW

Aruncus dioicus Goatsbeard (Native). Toothed leaflets in threes. Produces plumes of feathery white or cream flowers in midsummer. Host to the Dusky Azure butterfly. Commonly available in the nursery trade but avoid cultivars which usually are less beneficial to wildlife. Great hardy shade plant for gardens.



Hydrangea arborescens Smooth Hydrangea (Native). Shrub w/ broad oval leaves with pointed tips. Likes loamy, well-drained soil. This is the plant that the common 'Annabelle' hydrangea was developed from. Unfortunately, 'Annabelle' has sterile florets so produces no nectar. Not deer resistant, so is present mostly on steep slopes.



ID#47 Onoclea sensibilis Sensitive Fern (Native) JUST EMERGING – VERY SMALL Deciduous fern that dies back with first frost. Broad, triangular overall leaf shape and deeply cut, wavy margins that are smooth (not toothed).



ID#48 Acer pennsylvanicum Striped maple, also known as moosewood, moose maple and goosefoot maple. (Native) The striped maple is a sequential hermaphrodite, meaning that it can change its sex throughout its lifetime. One of the most shade tolerant trees. Most common at elevations over 2000 ft.



ID#49 Agrimonia parviflora Small-flowered Agrimony (Native). Toothed, pointed leaves with small leaves between the larger leaves. Will get small yellow flowers followed by tiny seed burrs.



Menispermum canadense Moonseed vine (Native)
Woody vine about 8-20' long, climbing by its twining stems. The flowers are cross-pollinated by small bees and flies. The caterpillars of the Moonseed Moth)sever the leaves of this vine, feeding on them after they become dry. Woodland birds eat the drupes (fruit), dispersing the seeds to new locations in the process. These species include the Wild Turkey, Cedar Waxwing, Brown Thrasher, Hermit Thrush, Gray-cheeked Thrush, Swainson's Thrush, American Robin, and Eastern Towhee. These drupes are

toxic to humans. The clambering stems and foliage provide cover and nesting habitat for birds.





ID#51 Dioscorea villosa Wild yam vine
(Native) with heart shaped leaves in a
whorl. Last year's seeds are little
light-tan lanterns.





ID#52 *Mitchella repens* Partridge berry (Native) A small, woody, evergreen trailing vine with 6 to 12 inch, slender, trailing stems that does not climb but lays prostrate on the forest floor. "Repens" refers to its trailing or creeping habit. In late spring, a pair of white flowers (with a single calyx) appears. Both flowers must be pollinated to produce its red berries. Birds are the primary consumer of these fruits and the distributer of seeds.





ID#53 LAST FLAG IS BY EDGE OF PARKING LOT NEAR RAILROAD TIE EDGING.

Equisetum arvense Common horsetail (native) Common through Eurasia and North America.

This plant develops deciduous fertile and infertile shoots. It reproduces by spores produced on a light-brown cone at the tip of a non-photosynthetic stem in early to midspring.

