EWSLETTER OF THE PIEDMONT CHAPTER OF THE VIRGINIA NATIVE PLANT SOCIETY

The Leaflet

Plant Uses with Tim Mac Welch—Karen Hendershot

AUTUMN 2020

Doug Tallamys wrote in <u>Bringing Nature Home</u>, "Nearly every creature on the planet owes its existence to plants, the only organisms capable of capturing the sun's energy and, through photosynthesis, turning that energy into food for the rest of us." On July 9, the Piedmont Chapter was introduced to Tim MacWelch, whose specialty is understanding and teaching others about the usefulness of plants in the wild. While this event deepened our understanding of the value of certain plants, VNPS does not endorse taking plants from the wild. Of course, growing natives yourself is something we do endorse.



Tim (second from right, as we continue to observe social distancing and the wearing of masks) is founder of the Advanced Survival Training school and author of seven books on survival in the wild. His school is at the southern edge of Fauquier County, near Somerville. The terrain is flat and sandy, reflecting a transition from the physiographic province of the Virginia Piedmont to the Coastal Plain.

Tim said the number one rule of foraging is having a positive identification of a plant. Be familiar with plants that are edible but, for safety's sake, it is equally important to be familiar with those that are dangerous, such as Poison Ivy (*Toxicodendron radicans*), Common Pokeweed (*Phytolacca americana*), and Stinging Nettle (*Urtica spp.*) Don't use animals as a guide to what is edible as they can often digest substances lethal to humans. Some plants can become edible to humans if they are dried or cooked. The Peterson Field Guide to Edible Wild Plants is good resource for foraging.

- Ripe acorns provide a good source of protein and vitamins but the leaves, bark, and green acorns are inedible. The nuts must be shelled and then leached to remove their high tannic acid content.
- Foraging sometimes offers only a small window of opportunity. For instance, Mayapple (*Podophyllum peltatum*) fruit can only be eaten at the height of (continued on page 2)



Plant Uses with Tim MacWelch (continued)

The Virginia Native Plant Society (VNPS), founded as the Virginia Wildflower Society in 1982, is a non-profit organization of people who share an interest in Virginia's wild plants and habitats and a concern for their protection.

page 2

The Piedmont Chapter is a sub-group of VNPS in the northern point of Virginia east of the Blue Ridge Mountains. It includes Loudoun, Fauquier, Culpeper, Rappahannock, Warren, Clarke, and Frederick counties.

The Leaflet is published by the Piedmont Chapter of VNPS. Permission is granted to reproduce material with credit to the source.

The Leaflet can be seen online in color at www.vnps.org/piedmont

The Chapter's email address is piedmontvnps@gmail.com

OFFICERS
Emily Southgate,
President,
ewbsouthgate@gmail.com
Cathy Mayes Vice Pres.
Diane Krumme, Treasurer
diane.krumme@gmail.com
Sally Anderson, Secretary
rccsca@comcast.net
DIRECTORS

Ellie Daley
pedaley@verizon.net
Phoebe Muenger
PJMuenger@gmail.com
Bryan Payne
Mary Keith Ruffner
cootehillfarm@aol.com
Jocelyn Sladen
jsladen616@gmail.com
Richard Stromberg
risy@embarqmail.com
Blanca Vandervoort
blanca@nelsoncable.com
Robin Williams

robinspony2@gmail.com

Kristin Zimet

kristinzimet@vahoo.com

ripeness. Otherwise the fruit and the rest of the plant are toxic. In general, otherwise-edible berries, such as Blackberries and Raspberries (*Rubus spp.*) or Blueberries (*Vaccinium spp.*), are full of tannic acid and have no sugars when they are green.



• A good caffeine-free tea can be made from the leaves of Blackberries like the native the Allegheny Blackberry (*R. allegheniensis*) or Pennsylvania Blackberry (*R. pensilvanicus*) found in our area. They have ridged or five-sided canes. Use green leaves and dry them in the shade. A stronger tea may be made from the roots. Blackberry tea is helpful relieving diarrhea. Be careful, however, with Raspberry teas if you are pregnant, because they effect the uterus. In our area, that would include native Black Raspberries (*R. occidentalis*), identified by their rounded, purplish, glaucus (covered with a whitish, waxy coating) canes and non-native Wineberries (*R. phoenicolasius*), which has rounded canes covered with reddish hairs. Their berries release their inner pith at picking while Blackberries keep their pith.







- Blueberries provide good caloric content, as well as decent amount of potassium and magnesium.
- Another good tea, high in Vitamin C, may be made from Pine needles, such as Virginia Pine (*Pinus virginiana*), which can be recognized by its bundles of two twisted needles, or from Eastern White Pine (*P. strobus*) with longer straight needles in bundles of five. Dry the needles in the shade and then gently steep (do not boil) for a tea. The tea may be more bitter in the summer.
- We passed a Sweetgum Tree (*Liquidambar styraciflua*), noticing its corky bark and five-pointed leaves. The Sweetgum is common in the coastal plain and outer portions of the Piedmont. Tim told us that when the bark is slashed to the cambium layer, a gum is formed that may be chewed and has anti-inflammatory properties.
- A variety of wild flowers are edible. Tim told of a "funfetti cake" made for his daughter using flowers of Common Blue Violets (*Viola sororia*), Eastern Redbud (*Cercis canadensis*), and Common Dandelion (*Taraxacum officinale*). Flowers of Black Locusts (*Robinia pseudoacacia*) and Common Milkweed (*Asclepias syriaca*) are also edible.
- Among vegetables, Tim recommended the tips of Common Greenbier (*Smilax rotundifolia*) early in the season or young pods of Common Milkweed (*Asclepias syriaca*), but be sure and cook the latter, which are otherwise toxic. Redbud also offers edible green pods. When mature and dried out, however, they become toxic. Be careful of other pods, such as those of wild legumes (family *Fabaceae*), which are not good "people food," according to Tim.

(continued on p 3)



Plant Uses with Tim MacWelch (continued)

• Stinging Nettle (*Urtica spp.*) is also tasty when young and is high in mineral content. Be sure and cook or dry the leaves to get rid of the sting. European Stinging Nettle (*U. dioica*) is commonly found in most of the seven counties of the Piedmont Chapter. It tends to be sprawling with many stinging bristles and is dioecious (having male and female flowers on separate plants). Go ahead and eat this invasive! American Stinging Nettle (*U.* gracilis) is only recorded in Clarke County. It is monoecious (male and female flowers are on the same plant). If you see it, leave it alone!

Goldenrods—Richard Stromberg

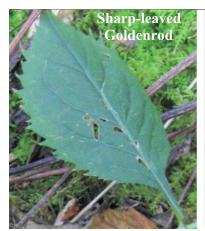
Along with Asters, Goldenrods are the dominant flowers in September. Some of them continue flowering into October, and you will see their fluffy seed heads all winter. Goldenrods have small-flowered, yellow spikes and sprays. Twenty goldenrod species frequent the Piedmont Chapter area. Note that the large leaves at the base of the plant are often key, not the smaller leaves up the stem—sometimes a problem because the basal leaves may not be there any more or may be hard to find under other vegetation.

The Goldenrods in our area are in the *Solidago* genus, except for **Grass-leaved Goldenrod**, which has been moved to the *Euthamia* genus (*E. graminifolia*). *Euthamia* differs from *Solidago* by having flattopped flower cluster and narrow leaves.

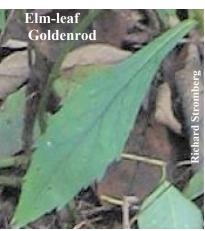
I divide Solidago into three groups based on how the flowers are clustered:

- 1. Multiple, curved clusters branching of the top of the main stem with flowers only on one side
- 2. Clusters in leaf axils
- 3. Straight clusters at the top of the plant, longer than broad with flowers all around the stem

Four of the multiple, curved cluster types have large basal leaves. If you see such a Goldenrod in August, it is likely the aptly named **Early Goldenrod** (*Solidago juncea*). Its basal leaves have sharp teeth and taper gradually to the stem. **Gray Goldenrod** (*S. nemoralis*) basal leaves are bluntly toothed, and fine hairs on the stem and leaves make them grayish. **Sharp-leaved Goldenrod** (*S. arguta*) basal leaves are egg-shaped, narrowing to a slender stem and are sharply, double-toothed. **Elm-leaf Goldenrod** (*S. ulmifolia*) leaves are also sharply toothed, but not double-toothed and it has lots of stem leaves.







Other species of the multiple, curved cluster types have leaves that are more or less uniform or gradually reduce up the stem. Late Goldenrod (S. gigantea), Tall Goldenrod (S. altissima), and Canada Goldenrod (S. canadensis) are all tall and difficult to tell apart. Their leaves are long and narrow and have three veins, one on each side of the center one. Late Goldenrod's stem is smooth, usually with a white bloom. It likes wet places. The Tall and Canada species once were merged. Their stem, at least in part, is downy. Both are very tall with a whorl of leaves all along the stem. (continued on page 4)



Goldenrods (continued)

Tall Goldenrod's leaves are barely toothed; Canada's have sharp teeth. **Sweet Goldenrod** (*S. odora*) leaves have only one main vein and have no teeth. **Rough-stemmed Goldenrod** (*S. rugosa*) leaves also have only one vein, have teeth, and are usually rough as is the plant's stem.





Vreath



Three species have flower clusters growing from the leaf axils. *S. flexicaulis* is called **Zigzag** or **Broad-leaved Goldenrod**. The stem bends or zigzags from axil to axil, though what clearly distinguishes this species are the sharply-toothed, egg-shaped leaves—the only species where the leaves are wide up the stem. The other two have long, narrow leaves that separate the flower clusters growing from the axils. Instead of standing upright, they often form an arch. **Blue-stemmed** or **Wreath Goldenrod** (*S. caesia*) supposedly has a blue stem, but I find that unreliable. However, its stem is cylindrical while **Curtis Goldenrod** (*S.*

curtisii) stems are marked with fine parallel lines or grooves.



Several species have straight clusters at the top of the plant with flowers all around the stem. **Hairy Goldenrod** (*S. hispida*) has densely hairy leaves and stems. *S. bicolor* is similar to *S. hispida* except the rays are white (disk flowers still yellow, hence *bicolor*) and is called **Silverrod**. **Stout Goldenrod** (*S. squarrosa*) is easily distinguished from the others in this group, by the spreading tips of the bracts under each



flower head. **Showy Goldenrod** (*S. speciosa*) has large, egg-shaped, finely toothed, lower leaves, gradually reducing in size up the stem. Its flower

cluster is usually large and branching, but not as wide nor curving as the first group. **Downy Goldenrod** (*S. puberula*) and **Erect Goldenrod** (*S. erecta*) are similar. Downy's stem is minutely hairy while Erect's is smooth. The bracts under Downy's flower heads are narrow; Erect's are broad and blunt.



VIRGINIA NATIVE PLANT SOCIETY PIEDMONT CHAPTER ANNUAL MEETING SATURDAY, OCTOBER 10, 2020, NOON

Lakeview Pavilion, Northern Fauquier Community Park 4155 Monroe Pkwy, Marshall, VA 20115

AGENDA

- Pot Luck Luncheon
- Business Meeting
- Informative walk

The Board of the Piedmont Chapter of the Virginia Native Plant Society presents the following candidates for election to serve 2020-2021. Board members and Officers may be elected to two consecutive 2-year terms, but then are ineligible for reelection for one full year to assure opportunity for others to participate and contribute new ideas. We hope to have a few more nominees by the time we meet in October and invite members to come forward and add their name to the list. Nominations are welcome from the floor.

Directors (terms begin and end in October): President: Emily Southgate 2020-2022 1st term Continuing: Ellie Daley 2019-21, 2nd term Vice President: Cathy Mayes 2020-2022 1st term Phoebe Muenger, 2019-2021 1st term Brvan Payne, 2020-2022 2nd term Secretary: Sally Anderson, 2019-2021 2nd term Treasurer: Diane Krumme, 2020-2022 1st term Mary Keith Ruffner, 2020-2022 2nd term Jocelyn Sladen, 2019-2021 1st term Richard Stromberg, 2019-2021 1st term Blanca Vandervoort, 2019-2021 1st term Robin Williams, 2020-2022 2nd term Kristin Zimet 2019-21, 2nd term Brenda Crawford 2020-22, 1st term Returning: Leaving: Karen Fall, Emily Sinclair 2020 Piedmont Chapter Ballot For the proposed Officers and Directors For the proposed Officers and Directors I am in favor not in favor I am in favor not in favor (second person of a family membership) Signature Signature

IF YOU CANNOT ATTEND THE CHAPTER ANNUAL MEETING ON OCTOBER 14, PLEASE COMPLETE THIS BALLOT AND MAIL BY SEPTEMBER 18 TO Piedmont Chapter Virginia Native Plant Society, P.O. Box 336, The Plains, VA 20198 or email your vote to piedmontvnps@gmail.com



The Leaflet



AUTUMN 2020

The events below are subject to cancellation or may be restricted to ten people because of Covid-19.

Sep 11-17	Flagged Walk at Sky Meadows
-----------	-----------------------------

Clarke County. Plants will be labeled along a route at Sky Meadows. Contact piedmontvnps@gmail.com to get an illustrated list.

<u>Saturday</u> Oct 10 12pm Chapter Annual Meeting
See page 5. Register at <u>piedmontvnps@gmail.com</u>.

Saturday Nov 14 1pm Walk at VOF-BRMNAP

Fauquier County. Tour the north section of the Virginia Outdoors Foundation Bull Run Mountains Natural Area Preserve, not usually open to the public. Explore the November botany of this special preserve, with fungi and native plants in seed. For more informationand to register, contact piedmontynps@gmail.com

<u>Saturday</u> <u>Dec 12</u> <u>12pm</u> <u>State Arboretum Walk</u> Learn to identify plants in winter from their fruit. Register at <u>piedmontvnps@gmail.com</u>.

Bird Hill Walk, June & August, 2020—Emily Southgate & Sally Anderson

In June, our chapter resumed walks, with careful use of social distancing and masks, and when the reports that transmission of Covid-19 out of doors was low. We visited Bird Hill, a private property near Orlean, in both June and August. This acreage is open fields with hedgerows and patches of woodland. The fields were the focus, as they have not been planted and have an interesting suite of native grassland plants.

Our leader was Bert Harris, co-director of the Clifton Institute near Warren-ton, a place with interesting grassland habitats of its own. Bert was awarded a VNPS Research Grant in 2020 to study composition and management of Piedmont grassland habitats. His wish is to use truly regional native species in meadow installation projects, often collecting seeds in similar habitats nearby the project site, to help preserve rare species that occur in open habitats.

In June and August, the palette of the fields included lots of yellow and blue, plus pink, white, and purple, though the flowers contributing the colors changed from early to late summer. (continued on page 4)



Massanutten in Autumn (continued)



In June, the main yellow flower was the bright Balsam Ragwort (*Packera paupercula*) and Maryland Golden Aster (*Chrysopsis mariana*), while blue flowers included several species of blue Skullcaps (*Scutellaria* spp.), Palespike Lobelia (*Lobelia spicata*), and Summer Bluets (*Houstonia purpurea*). The short and stout, native Pasture Thistle (*Cirsium pumilum*) provided showy purple highlights, and Green Milkweed (*Asclepias viridiflora*) was abundant, as were white Flowering Spurge (*Euphorbia corollata*) and Daisy Fleabane (*Erigeron strigosus*). A treat for both eye and nose was the delightfully fragrant, pale pink Pasture Rose (*Rosa carolina*).

In August, Goldenrods were coming into bloom and dominated the fields with their bright yellow flowers. Early Goldenrod (*Solidago juncea*) and Gray Goldenrod (*S. nemoralis*) were already in bloom, but several others were yet to flower. The tiny but bright yellow Pencilflower (*Stylosanthes biflora*) and the larger, yellow Partridge-pea (*Chamaechrista fasciculata*) dotted the meadow. There were native Bushclovers (*Lespedeza spp.*), another native thistle (*Cirsium discolor*) and a surprise, white Twisted Ladies'-tresses orchid (*Spiranthes vernalis*).

We can't go without mentioning grasses in a grassland habitat. Many of our grasses are warm season plants, blooming in the summer instead of spring as hayfield grasses usually do. Little Bluestem (*Schizachyrium scoparium*), Purpletop (*Tridens flavus*), Beaked Panic Grass (*Coleataenia anceps*) and Purple Lovegrass (*Eragrostis spectabilis*) were among those we spotted in bloom, adding to the texture and even colors of the fields. These are bunch grasses, which provide better cover than Fescue for both birds and mammals, and are also host plants for butterflies.

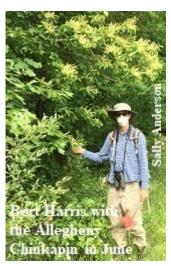
The fields were abuzz with a wide variety of insects, from butterflies to tiny sweat bees and beetles eating plants, nectar and pollen, as well as others that zipped around hunting these herbivores.

The hedgerows and wood patches offered their own show. Allegheny Chinquapin (*Castanea pumila*) was blooming along the meadow edge in





June and in fruit in August. The flowers of winged sumac (*Rhus copallinum*) were covered with clouds of small insects in August. We also found numerous ferns in these habitats. The final treat was finding several



stalks of Cranefly Orchid (Tipularia discolor) flowers in the woods.

The diversity and color of these fields is impressive, and we thank our hosts for mowing a nice path for our walks and for showing us this new place. The diversity demonstrates that in the right place, generally where there is not too much tall fescue, you can create a diverse meadow just by mowing just once a year and letting the native plants flourish. We are looking forward to the results of the studies being done on these sites, and to future visits to Piedmont grasslands.

PIEDMONT CHAPTER VIRGINIA NATIVE PLANT SOCIETY P.O. BOX 336 THE PLAINS, VA 20198



page 8 The Leaflet AUTUMN 2020



