Spring 2013

Vol. 32, No. 2
ISSN 1085-9632

Bulletin

A publication of the VIRGINIA NATIVE PLANT SOCIETY
Conserving wild flowers and wild places
http://www.vnps.org

First Legume WOY

Redbuds and Legume subfamilies

Although legumes constitute one of the largest families of flowering plants in the world, and despite 25 years of celebrating Virginia's wildflowers, redbud (*Cercis canadensis*) is the first legume to be recognized as a VNPS Wildflower of the Year. This article addresses the relationships of *Cercis* with the rest of the legumes (family Fabaceae, or Leguminosae in older literature).

In general, legumes can be recognized by their usually compound, stipulate leaves bearing hinge-like swollen pulvini on petioles and petiolules (leaflet stalks); floral details vary from group to group (see below), but there is always a single pistil with a superior ovary that matures into a dry fruit that is usually flattened, elongate, multi-seeded, and dehiscent along both sides. The characteristic fruit is known botanically as a legume—which leads me to the nearly tautological truism, "Legumes make legumes." Traditionally, legumes (the plants) have been partitioned into three well-defined subfamilies—Mimosoideae, Caesalpinioideae, and Papillionoideae—distinguished largely by details of floral structure.

Mimosoid legumes are most diverse in the tropics and subtropics, but at least one member of this subfamily should be familiar to most readers of the VNPS Bulletin, the so-called mimosa, *Albizzia julibrissen*, native to western Asia, but now widespread in much of North America. Most mimosoid legumes are woody plants of the tropics and subtropics; relatively few occur in temperate regions. Leaves are often bipinnate with numerous small leaflets. Further, mimosoid flowers are individually small and radially symmetric (Figure A), but they are most easily recognized by their occurrence in tight head-like clusters dominated by numerous elongate styles and stamens—the overall effect resembling a powder puff. There

(See Redbud, page 4)

Pea pods? Well, sort of...You are looking at the seed pods of the VNPS 2013 Wildflower of the Year, redbud. (Photo courtesy John Hayden)

The VNPS Annual Meeting is September 13-15, see Page 3

From the president

Introduce children to the natural world

Can all of us trace our love of nature and native plants to a single moment or place in time? I know I can. When I was a small child, I remember liking dandelions and blowing on the seed heads. Later, I recall frequenting an old waste field that had chicory, Queen Anne's lace, viper's bugloss, and yarrow. Oh, how proud I was to pick a lovely bouquet for my mother. I never understood why that cornflower blue chicory always closed up and died by the time I arrived home. And if the bouquet did end up in a vase, the Queen Anne's lace always shed pollen all over the table. My mother, a tidy housekeeper in those days, didn't really appreciate my offerings. Maybe she was a purist at heart and longed for true native plants, not introduced species. They were all just wildflowers to me.

The defining moment for me involved a bit of disobedient independence. I liked to ride my bicycle, and generally I rode on the sidewalks around my block. But nearby Flat Branch and Bull Run called to me. Invariably, if I rode on the dirt path, I would get mud on my tires or, worse yet, my pants. Despite the fact that illegal motorized mini-bikes would terrorize me when they powered past on that trail, I just loved to pedal there. The grapevines and Virginia creeper in the trees transformed the area into an exotic jungle. In comparison, my overly manicured suburban lawn offered nothing to explore.

One fine spring day, I decided to go a bit farther afield. I rode alongside Bull Run and came upon carpets of blue flowers. They were absolutely enchanting. I almost thought that I was in some kind of unreal dream world. It was such a beautiful scene, but I knew that I could not exclaim about it to my mother later because I wasn't supposed to be there. How hard it was to keep this fantastic discovery to myself!

Well, I could not keep it a secret. I told my younger sister about it and promised to take her there at our next opportunity. When the time came a few weeks later, we rode our bikes out there. I kept saying, "It's just a little farther, just a little farther." But we never found those mysterious blue flowers. My sister thought that I was trying to trick her, and I was beginning to think that maybe I had dreamed it.

As most wildflower lovers realize by now, I had come upon Virginia bluebells in my youth. Those glorious spring ephemerals last barely a few weeks, and then disappear before reemerging in 10 months. They have been my favorite wildflower since my childhood.

We need to give today's children the chance to connect with the environment and share a magical moment. If you're a parent, grandparent, aunt, uncle, teacher, or friend, you can open the world of nature to children. Take them on a walk in the woods or along a creek and let them discover for themselves. If all they do is sit inside where the electrical outlets are, they won't bond with the natural world and won't have a stake in protecting it for generations to come.

Your President, Nancy Vehrs

New VNPS webmaster asking for help

Please send your web news, chapter newsletters, and items you want posted on your chapter's pages to Sue Dingwell at suzdingwell@gmail.com. Deanna High has not left our VNPS web team, but Sue Dingwell is taking over the day-to-day management of the VNPS.org site. Many thanks to Deanna for her long service in this capacity and for her patient tutoring during the ongoing transition.

One of Sue's goals this spring is to work with chapters so that they are empowered to edit their own pages on the VNPS site. Every chapter already has the ability to enter its own information, and Sue is hoping to work with individual members to make the process more understandable and easy. That way each chapter will have the control needed to make its page relevant, up-to-date, and the go-to source that it should be for chapter members.

Sue added: "While I have your attention, I'd like to ask for your help with our brand new VNPS Facebook page. This page has an open, not-for-profit status, and gives us a wonderful opportunity to promote all facets of our mission in the public arena. Posts on our page are regularly shared not only by individuals, but by Master Gardeners, landscape designers, plant nurseries, and organizations such as RIP (Remove Invasive Plants), SciencePubRVA, bed and

(See VNPS webmaster, page 8)

Mountains meet Piedmont at Annual Meeting

For the 2013 Annual Meeting, the Jefferson Chapter invites you to Charlottesville to explore an area where northern and southern floral ranges overlap and where the Mountain and Piedmont regions meet. Mark your calendars for Friday evening, September 13, through noon on Sunday September 15. We have lined up two exciting talks for Friday and Saturday evenings. Our speaker Friday night will be Lara Gastinger, principal illustrator of the *Flora of Virginia* and a member of the Jefferson Chapter. Then, for our Saturday night banquet, Dr. Nancy Adamson, a pollinator conservation specialist who works with the Xerces Society.

We are planning a wide range of field trips including a visit to Preddy Creek Park, a 450-acre park at the northern edge of Albemarle County. The park has a stunningly diverse natural meadow featuring many varieties of *Eupatorium* and *Solidago*, including masses of showy goldenrod (*Solidago speciosa*), as well as striped gentian (*Gentiana villosa*) and tall coreopsis (*Coreopsis tripteris*). Preddy Creek Park also may be the northernmost site in Virginia for naturally occurring sourwood trees (*Oxydendron arboreum*), which are scattered through the nearby woods. A separate field trip will take you to the western edge of the park to see an unusual colony of American climbing fern (*Lygodium palmatum*).

For those interested in landscaping with native plants, we will visit two award winning landscapes designed by the nationally known Nelson Byrd Wolz Landscape Architects, including both the grounds of the new Martha Jefferson Hospital, voted the most beautiful hospital in America in 2012, and the Dell at the University of Virginia. We will also offer a field trip to Kemper Park, which occupies 89 acres of land along the Thomas Jefferson Parkway leading up to Monticello. The park features a two-acre pond planted with native wetland species, as well as an arboretum of native trees and shrubs that includes several special outdoor rooms including two of interest in the fall: one that masses trees and shrubs with outstanding fall color and a second that focuses on edible fruits and nuts.

Phil Stokes' 30-acre tree farm is an inspirational example of what a private individual can do to rescue and enhance woodland property. On parts of the farm there are relatively intact plant communities ranging from an upland dominated by a mix of oak species to stream corridors containing winterberry (*Ilex verticillata*), witch-hazel (*Hamamelis virginiana*), American hazelnut (*Corylus americana*), and pinxterbloom azalea (*Rhododendron periclymenoides*). Perennials of interest include rattlesnake plantain (*Goodyera pubescens*), lady's tresses (*Spiranthes sp.*), great blue lobelia (*Lobelia siphilitica*), and skunk cabbage (*Symplocarpus foetidus*). The gently sloped trails pass by large stands of Christmas fern (*Polystichum* acrostichoides)

(See Annual Meeting, page 5)

Flora sales brisk, buyers not all Virginians

The *Flora of Virginia* is selling like hotcakes. Just since December's Flora Premieres, we're down to only 1,000 copies out of a printing of 3,500. A second printing is on the agenda. So many members of the Virginia Native Plant Society either received a complimentary copy for their level of giving or have bought a copy—or copies! But part of this blitz reflects sales from outside Virginia.

This isn't too shocking to us Virginia plant aficionados. There are only six species found solely in the commonwealth, said Chris Ludwig, a *Flora* co-author and executive director of the Flora of Virginia Project. The others range farther afield. "Because we have the newest flora on the block, other states are finding our manual useful," he said. "And it's their turn, actually," he added, only half joking.

Lacking our own flora for decades—or centuries—we've had to use manuals written for other states, the Carolinas (published in 1968) or West Virginia (1978), for example. A lot has happened taxonomically in the past 40 years, or even 30. But now that we have our own flora, it's getting play in other states.

How useful is the *Flora of Virginia* outside the Old Dominion? That's a question the Biota of North America Program recently answered (it answered a similar question for 36 other states or regions as well). They mapped — for each county in the contiguous 48 states—the percentage of that county's flora covered by our new *Flora.* On the maps, counties are color-coded to denote, in a series of ranges, percentage coverage.

In Virginia, of course, each county's plants are covered 100 percent by the new *Flora.* Some counties in West Texas and in the California deserts have no more than 5 percent of Virginia's plant species. But large chunks of West Virginia, North Carolina, and Maryland and parts of Tennessee, Ohio, and Pennsylvania share 95 to 100 percent of Virginia's plants. "A level of 95 percent or more is great," said Alan Weakley, a co-author of the *Flora of Virginia* and a professor and the curator of the herbarium at the University of North Carolina in Chapel Hill. "It means the *Flora* can be used almost as though it actually were intended to cover those areas."

Moving further out, to counties sharing 90 to 95 percent of Virginia's plants, picks up most of New Jersey, the remainder of Pennsylvania, West Virginia, and Ohio, and most of the rest of North Carolina and Tennessee. "Of course, '90 to 95 percent' means that 5 to 10 percent of the species are missing, and that requires some extra attention in using the manual," Weakley said.

One step further, to 75 to 90 percent shared species, reaches the Great Plains, north beyond the Great Lakes, and northeast into lower Maine. The percentages drop further in the Plains and along the warmer Southeast, reflecting different environmental factors and the influx of prairie, southern, and subtropical species. "To me, 75 to 90 percent still means it's a very

(See Flora, page 8)

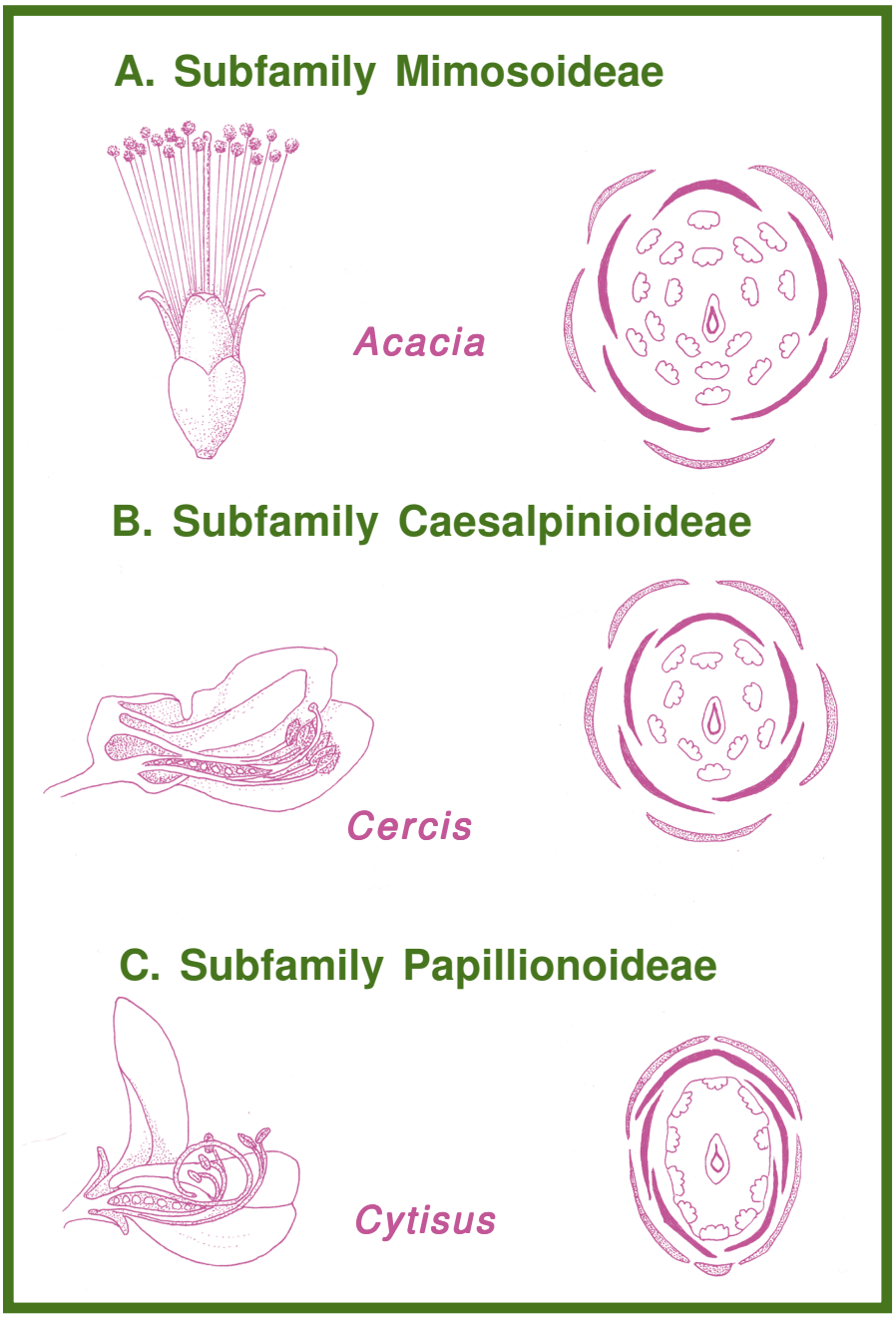
•Redbud

(Continued from page 1)

are two mimosoid legumes native to Virginia: *Aeschynomene virginica,* sensitive or Virginia jointvetch, a rare plant of freshwater tidal marshes, and *Mimosa* (*Schrankia*) *microphylla,* littleleaf sensitive-briar, a species of the Southeast that reaches its northern limit in Virginia where it, too, is considered rare.

Papillionoid legumes are cosmopolitan, well developed and diverse from the tropics to temperate regions. All growth habits are well represented among the papillionoid legumes, but herbaceous forms are especially common in temperate regions. Leaves are mostly once-pinnate or trifoliolate. Flowers are bilaterally symmetric with two keel petals that enclose 10 stamens and the pistil, two laterally divergent wing petals, and an erect standard (or banner) petal (Figure C). Further, the 10 stamens can be completely separate from each other, fused in a ring, or, most frequently, nine are fused along their filaments forming a partial tube surrounding the pistil, with the 10th stamen separate from the rest, extending parallel to the upper edge of the pistil. There are many papillionoid legumes native to Virginia. A few of the more familiar genera include *Desmodium* (beggar's ticks), *Robinia* (locusts), *Trifolium* (clovers), *Vicia* (vetches), and *Wisteria*.

The traditional definition of **caesalpinioid legumes**—to which redbuds belong—suggests some degree of intermediacy between the other two subfamilies. Like the mimosoids, most are woody and tropical or subtropical, but there are temperate zone examples, including some herbs. Floral symmetry varies from radial to extremely bilateral; in some cases, redbud being a good example, flowers appear superficially very much like papillionoid flowers. However, when possessing bilateral symmetry, caesalpinioids always differ from papillionoids in one respect: the uppermost petal (standard or banner) is covered by the two wing petals in flower buds whereas among papillionoids the uppermost petal is always outermost in the bud (Figure B). Another interesting characteristic of many caesalpinioid legumes is that roots lack the nodules containing nitrogen-fixing symbiotic bacteria that are widespread among other legumes.



Sketches and diagrams of legume flowers representing the three traditionally recognized subfamilies. Key to floral organs in the diagrams (right hand side of figure): calyx/sepals are shaded, corolla/petals are black, stamens are 4-lobed and white, pistils are the centermost element of each diagram; note that papillionoid stamens are linked indicating fusion; sepals in each subfamily may be fused at the base, a detail not depicted in these diagrams. Redrawn by Nicky Staunton from images on the Watson and Dallwitz web site (http://delta-intkey.com/angio/).

In addition to redbuds, some prominent caesalpinioid legumes to be found in Virginia include species of *Chamaecrista* (partridge pea), *Senna*, *Gleditsia* (honey locust), and *Gymnocladus*(Kentucky coffee tree). Though few in number, the Virginia caesalpinioids form a heterogeneous group: *Chamaecrista* species have

(See Redbud, page 5)

• Redbud

(Continued from page 4)

symbiotic nitrogen fixation in root nodules, while the others do not; *Chamaecrista* and *Senna* are herbaceous, but the others are woody; and flower symmetry varies from essentially radial in *Gleditsia* and *Gymnocladus* to slightly bilateral in *Chamaecrista* and *Senna* to extremely bilateral in *Cercis*.

Within Caesalpinioideae, *Cercis* is classified in tribe Cercideae (Wunderlin 2010), a group of 12 genera that, except for the redbuds, are native to tropical regions of South America, Africa, and Australia. To most Virginians, these redbud relations are obscure plants but some readers may be familiar with the large genus *Bauhinia* (so-called orchid trees), frequently seen as ornamentals in conservatory collections and tropical landscapes.

The preceding sketch of legume relationships will almost certainly undergo some revision in the not too distant future. Molecular genetic studies confirm, at least in broad outline, the composition of subfamily Mimosoideae, subfamily Papillionioideae, and tribe Cercideae. However, subfamily Caesalpinioideae, as traditionally defined, is untenable in the light of current knowledge. The problem is that caesalpinioid legumes do not form a single distinct lineage. Rather, subfamily Caesalpinioideae is composed of six (maybe more) discrete lineages, several of which (for example, tribe Cercideae) form the lowermost branches of the legume evolutionary tree, while the remaining branches are interspersed among the well-defined mimosoids and papillionoids. By the modern philosophy of systematics, this situation is a mess . . . but exactly how best to resolve it is not yet clear. One may expect proposals to define additional subfamilies that will, in effect, dismantle the traditional broad definition of Caesalpinioideae. In all likelihood, a much more narrowly defined Caesalpinioideae will emerge, and *Cercis* will be placed elsewhere. Stay tuned!

It may be disconcerting to learn that classification of eastern redbud, a plant named by Linnaeus more than two and a half centuries ago, is currently in flux. There are lessons to be learned here. The first lesson is that naming a plant and placing that plant in a classification are two different enterprises. While many of the names coined by Linnaeus are considered valid and enjoy widespread use today, the very concepts of plant family and subfamily that are such integral parts of modern plant taxonomy do not appear at all in the formal classifications of Linnaeus. Naming and classifying are not the same. The second lesson is that all classifications are hypotheses. The traditional definition of legume subfamilies arose during the 19th century, a time when gross morphology dominated how botanists perceived relationships. Nowadays much more data are available to systematists; it is now commonplace to integrate traditional gross morphology with microscopic structure, comparative chemistry, and vast amounts of gene sequence data in order to generate classifications. Not only is there much more information available, but the principles of cladistics, now firmly ascendant in systematics, alter how hypotheses about relationships are evaluated. As it turned out, the morphology used by 19th-century botanists to distinguish mimosoid and papillionoid legumes correlates well with patterns revealed via gene sequence data and the principles of cladistic classification, confirming, at least in broad overview, these two very old hypotheses of legume relationships. The problem with the caesalpinioids is not simply failure of morphological characters to define the subfamily. The problem stems from the very fine resolution of relationships revealed by gene sequence data coupled with the relatively new requirement that taxonomic groups be monophyletic (not merely descended from a common ancestor but also including *all* descendants of that ancestor) that makes the subfamily problematic. Finally, there is a third lesson to be taken from the impending failure of traditional Caesalpinioideae: we just don't know everything there is to know about biodiversity. That's true for plants in general and the legumes in particular. Yes, *Cercis*, the redbuds, are reasonably well known plants, but to place them properly in a robust classification (a hypothesis likely to withstand rigorous testing), requires that we also know all the potential redbud relatives, i.e., all the caesalpinioids, equally well. We are not there yet! So, for now, redbuds are classified in subfamily Caesalpinioideae, but that is a temporary situation, an old concept retained out of expediency for lack of a better alternative.

Wunderlin, R. P. 2010. Reorganization of the Cercideae (Fabaceae: Caesalpinioideae. Phytoneuron 2010-48: 1-5.

John Hayden, VNPS Botany Chair

• Annual Meeting

(Continued from page 3)

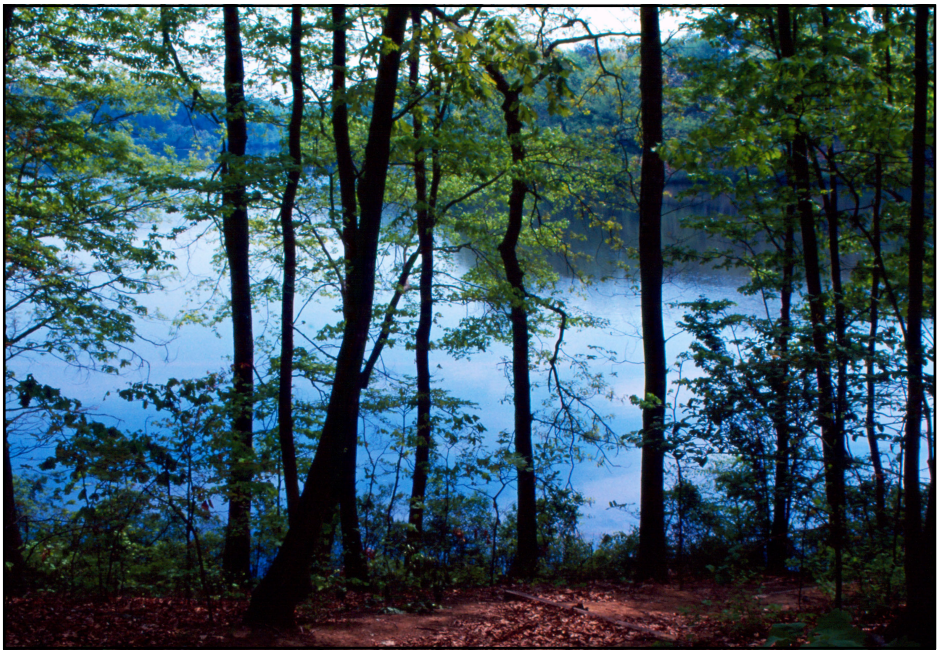
and hayscented fern (*Denstaedtia punctilobula*), as well as two species of *Lycopodium*. Also there are areas once overtaken by invasives that now thrive with natives both planted and regenerating from remnants of existing flora. A 1.4 acre pond constructed in 2003 has been landscaped with over a thousand native plantings. Pickerelweed (*Pontederia cordata*), lizard's tail (*Saururus cernuus)*, cardinal flower (*Lobelia cardinalis*), and sweet pepper bush (*Clethra alnifolia)* should be in bloom. Over the past 10 years fields have been planted with a nut orchard of about 500 trees. See side-by-side rows of black walnut, butternut, and pecan. Remains of an older home, its constructed spring, and cemetery are also interesting features of the property.

Other trips will include a mushroom and plant ecology walk, a visit to Ivy Creek Natural Area with its long shoreline on the Rivanna Reservoir, fern and wildflower hikes in the Blue Ridge, as well as visits to members' gardens. The Charlottesville area is rich in history and mid-September should be an ideal time to enjoy the abundance of late summer flowers and fruits in its gardens and parks. We hope you will join us in exploring this botanically rich region.

Mary Lee Epps, Jefferson Chapter

Solace in Suburbia: Rockwood Park in Chesterfield

Rockwood Park in Chesterfield County is a 161-acre, much used park that I have been familiar with since the late 1970s. The park includes basketball courts, baseball diamonds, public gardens, and a large body of water known as Gregory's Pond and has occasional law-enforcement problems. Much of the park is, fortunately, a natural area, with seven color-coded trails to stroll. If you're familiar with Les Blacklock's essay, "Meet My Psychiatrist," where the forest is the willing, listening problem-solver, then you'll know why I say this park is my therapist. I always approach the noble and scrappy male American holly (*Ilex opaca*), found just downhill from the visitors' center, as an old friend. Thirty years ago I became acquainted with this holly while simultaneously coaxing my mother to accompany me on healthful hikes. She gladly went despite her fear of imminent snake sightings.



The view at Rockwood Park in Chesterfield County.

American holly is just one of the more common upland understory trees. Another is American strawberry bush (*Euonymous americanus*), with strikingly shiny leaves and small but attractive pink-tinged yellow flowers. More rarely encountered is sassafras (*Sassafras albidum*), with its characteristic mitten leaves, and spicebush (*Lindera benzoin*), which William Bartram saw in north Florida and called it 'laurel' in his *Travels*. I know these smaller trees best because, unlike the giant dominant trees, these conduct their lives where I can easily discern them.

Shading much of the uplands are large white oaks (*Quercus alba*) interspersed with a remnant population of loblolly pine (*Pinus taeda*). Forest floor evidence such as acorns and leaves reveals other trees such as blackjack oak (*Q. marilandica* var. *marilandica*), scarlet oak (*Q. coccinea*) and pignut hickory (*Carya glabra*). Stepping softly over the spongy three- to sometimes five-inch layer of leaf litter, you may see many small red and white oaks, called orphans, awaiting the propitious fall of a canopy tree, but few pine seedlings. These loblolly pines are remnants from an era when the Rockwood area was an open field. An inconspicuous plant dependent on pines is epiparasitic and known as pinesap (*Hypopitys monotropa*). Pinesap parasitizes a fungus, in this case dusky-yellow and wine-splotched polypore mushrooms of the genus *Suillus* that is mycorrhizal with the pines.

Walking around trees may present a few awkward situations, particularly if you encounter a natural "barbed wire fence" of saw brier (*Smilax glauca*), with vicious prickles so dense that your clothes will be held in a tenacious grip. At least while slowly extricating yourself, you'll have time to notice saw brier's glistening and nicely variegated leaves. Thankfully other vines such as the ubiquitous Virginia creeper (*Parthenocissus quinquefolia*) and grape (*Vitis vulpina* or *V. rotundifolia*) aren't nearly so grasping.

Progressing downslope leads to ever deepening shadows beneath large tulip trees (*Liriodendron tulipifera*) that are so tall you'll need binoculars to see the flowers. In May the only evidence of flowers is yellow-green and orange petals littering the forest floor. There they gather rainfall and morning dew and then serve as carafes for thirsty ants. Other dominant trees in mesic areas are red maple (*Acer rubrum*) and, in the lower zones, black gum (*Nyssa sylvatica*).

This varied canopy creates an understory with a patchwork of variable light conditions and sunflecks that supports, in some places, short-statured thickets of black huckleberry (*Gaylussacia baccata*) and long twines of running cedar (*Diphasiastrum digitatum*) sometimes accompanied by small colonies of perfoliate bellwort (*Uvularia perfoliata*) with an occasional pale spike lobelia (*Lobelia spicata* var. *spicata*). In the more open uplands occurring beneath oak or pine can be found my favorite plant, the pink lady-slipper orchid (*Cypripedium acaule*), an intricately structured charmer unmatched by any other flower in the park. Another equally common orchid, but one far less noticeable is cranefly orchid (*Tipularia discolor*).

Descending the trail marked by a white rectangle, you approach a ridge that I think provides one of the most attractive views of Gregory's Pond. With a row of trees in the foreground and no houses visible on the far shore, it gives the feeling of idyllic Walden Pond solitude. Following a dirt path

(See Rockwood Park, page 7)

*Pink lady-slipper (*Cypripedium acaule*), left, and coastal fetter-bush (*Eubotrys racemosa*) are two of the many plant friends found at Rockwood Park. (Photos courtesy Stephen Johnson)*

•Rockwood Park

(Continued from page 6)

downward to the orange circle trail you descend to a lower ridge that is the only place where I've seen the downy false foxglove also known by the more descriptive name of downy oak leach (*Aureolaria virginiana*). With spectacular spikes of canary-yellow flowers in July or August, it is a hemiparasite of white oak.

Where the trail enters woody thickets, you might find the frilled white and deep pink flowers of pinxterbloom (*Rhododendron periclymenoides*). I was lucky enough a few years ago to catch the tree flowering. Also in these swampy lowlands is coastal fetterbush or swamp doghobble (*Eubotrys racemosa*). I must have passed by this plant for years without noticing it until I saw its raceme of tiny white bells a foot above my head. Sometimes emerging from the shoreline thicket is the herbaceous vine pigeon wings (*Clitoria mariana*), with pastel pink saucers held against the muted green backdrop.

The shoreline thickets of smooth alder (*Alnus serrulata*) are nearly impenetrable, but a close inspection may reveal juvenile water snakes draped across low hanging branches where they can bask as they hide from predatory fish and birds. Overtopping the alders in a few spots are aged American wild plum trees (*Prunus americana*) that provide perches for birds such as green herons.

Taking the blue diamond trail uphill brings you back to some bright openings and heavy shading where you may find sporadic colonies of the orchid known as downy rattlesnake plantain (*Goodyera pubescens*). Like jewel orchids worldwide, these orchids have beautiful labyrinthine-patterned white-veined leaves but rather small white flowers. Nearby one might see the diminutive spotted wintergreen (*Chimophila maculata*) that also displays boldly white-veined leaves and has flowers seemingly carved from nephrite and white chalcedony as from a creation of Peter Carl Fabergé.

Another forest plant identification conundrum that I observed after studying tallgrass prairie for several years was a single specimen of a white flowered euphorbia looking very much like flowering spurge (*Euphorbia corollata*), but this specimen had far fewer flowers and noticeably wider leaves than the typical flowering spurge of my experience and may have been false flowering spurge (*Euphorbia pubentissima*).

(See Rockwood Park, page 8)

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The ***Bulletin***

ISSN 1085-9632

is published five times a year (Feb., April, June, August, Nov.) by the

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Nancy Sorrells, Editor

The deadline for the next issue is **April 30, 2013.**

• Rockwood Park

(Continued from page 7)

With further ascent you cross and re-cross the park's creek, which is bordered by small marshes and home to a population of southern two-lined salamanders. At the drier borders of the marshy areas you may see many sapling American strawberry trees, and in the marsh muck itself, southern leopard frogs. In one marshy depression, I happened to see a small green woodland orchid (*Platanthera clavatella*). All too quickly the trail ends. I proceed toward the entrance, say farewell to my holly tree friend and imagine what I might find there tomorrow.

Stephen Johnson is a freelance plant ecologist originally from Virginia and now living in Iowa.

Chimophila maculata

• VNPS webmaster

(Continued from page 2)

breakfasts, and Audubon groups, among many others. Some of these organizations are involved in environmental issues, but some of them are learning about native plants from our page. Our page's name on Facebook is Virginia Native Plant Society."

The social media are a powerful tool. Future members are using it to guide their decisions and choices; and VNPS needs to have a recognized presence there. And Sue needs your help, especially with photos. "I need photos of native plants, in pots, in home landscapes, or in natural settings. I also need photos of smiling people doing plant things—field trips, planting, and sowing seeds. Be sure to let me know the names of the plants; the people, however, can be named or not as they wish." Sue will give photo credit, too, but please help her make the Society's page reflect the great diversity of plant life and VNPS activity in Virginia by sending photos to your new webmaster and Facebook guru at: suzdingwell@gamail.com

• Flora

(Continued from page 3)

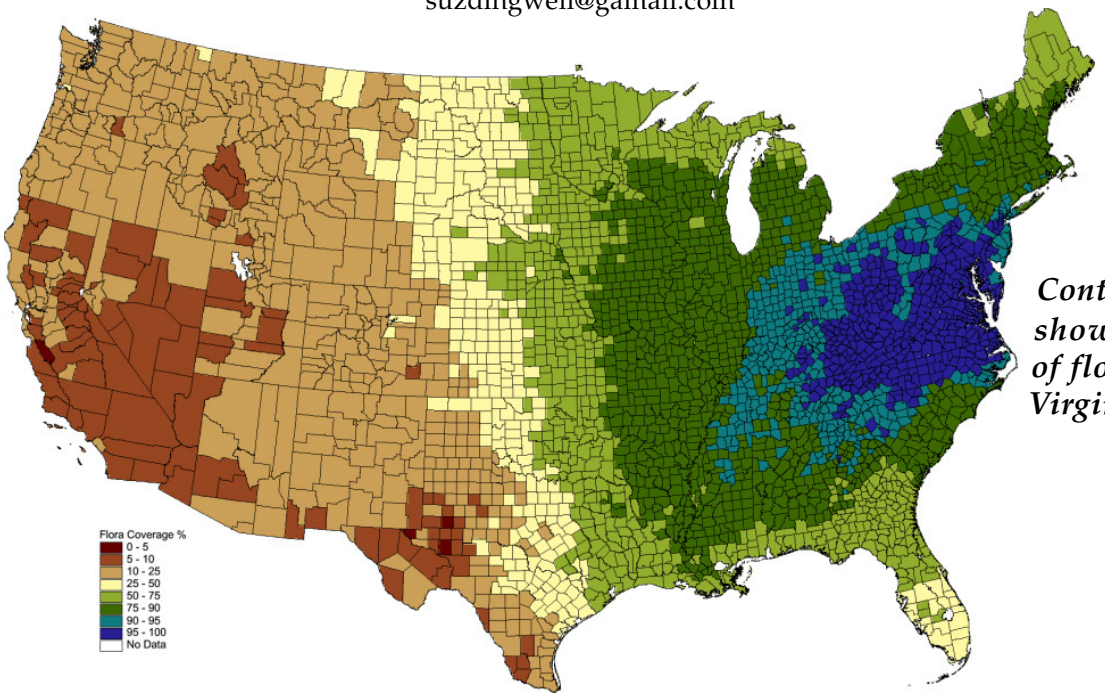
useful reference, but requiring some caution in using it to key plants," Weakley said. "Even at the 50- to 75-percent level, which extends to include the eastern half of the United States, the *Flora of Virginia* is still relevant."

"Indeed, the *Flora* is selling well beyond the Virginia border," said Barney Lipscomb, head of the BRIT Press, of Fort Worth's Botanical Research Institute of Texas, the book's publisher. "We have shipped books to North Carolina, Maryland, Tennessee, Alabama, and many other states." The Flora of Virginia Project has mailed copies to Pennsylvania, New Hampshire, West Virginia, Mississippi, New York, and Florida, Ludwig said. One copy went to a Virginian now living in New Mexico (whose flora overlaps with Virginia's only 5 to 25 percent). A copy has gone to England, and another to Sweden.

The *Flora* already has been designated the official textbook for this spring's plant taxonomy course at James Madison University, and Weakley will use it this fall in his course on the plants of North Carolina.

To order your *Flora*, visit the home page of the Flora of Virginia Project, *floraofvirginia.org,* and click the red button. It's also available on Amazon.com. The price is $79.99, plus $6.50 shipping.

Bland Crowder, associate director and editor, Flora of Virginia Project.



Continental U.S. map showing percentages of flora overlaps with Virginia.