President’s Corner

“Schoolyard Habitats” is the subject of this month’s program by Matt Bright of Earth Sangha, and I am very sorry to miss it because of travel. Though I did see Matt’s presentation to the Potowmack Chapter earlier this year, it’s a subject that has garnered a lot of attention in Prince William County. We need more outdoor laboratories at our schools.

In a partnership with the Virginia Department of Game and Inland Fisheries, Prince William County Schools, the Master Gardeners of Prince William, and other volunteers from PWWS and the Audubon at Home Program, several area high schools created habitat gardens this past school year. Carol Heiser, DGIF Habitat Education Coordinator, provided training to the teachers and volunteers, funding for the volunteers’ teaching kits, and the time and funding to source and purchase the plants themselves. Woodbridge, Garfield, and Forest Park High Schools, and the Juvenile Detention Center, all participated in the creation of habitat gardens through this effort.

Harry and I had the pleasure of working with Garfield biology teacher Teresa Kitchen, who had already created a small habitat garden at the school and substantially enlarged it through this “Habitats Partners” program with DGIF. Ms. Kitchen, as the advisor for the school’s Green Club, had the students design the garden and choose the plants under her guidance and with minimum...
input from me. The school principal was initially wary of “messy wild plants,” but has begun to develop an interest in using native plants to beautify the school’s landscape. The school’s April 1st planting day attracted nearly 75 students, and more students assisted with additional planting and mulching as the spring progressed. At the school’s year end awards ceremony for teachers, Kevin Rose of DGIF presented Ms. Kitchen with a Certified Habitat Partner sign for the garden and a framed certificate for hanging inside the school. Neabsco District Supervisor John Jenkins and School Board Representative Diane Raulston attended the presentation upon my invitation. I hope that they came away with an appreciation of the importance of this project and support more habitat gardens at other schools.

Paulson who volunteered to coordinate this program after chatting with Carol Heiser at Master Gardener College at Virginia Tech last summer. Besides serving as liaison with Carol for the entire group, Leslie supervised the efforts at the Juvenile Detention Center along with Harriet and Bob Carter. Tom Attanaro worked with Woodbridge High School, and Karen O’Leary and Christine Tabbert led the effort at Forest Park High School. Stop by and visit this summer!

I hope that Matt’s program encourages more of our members to volunteer with these efforts and that local schoolteachers gain inspiration as well. There are more ways where you can get your hands dirty with native plants; help out with weeding the pollinator plantings at our Dale City car rest areas on I-95 or participate in maintaining the wildlife garden at Merrimac Farm Wildlife Management Area. You’ll be amply rewarded with the sight of beautiful flowers and butterflies!

~ Nancy

Framed Botanical Prints Raffle

PWWS is holding a raffle this spring and summer for two framed botanical prints. Chief Flora of Virginia illustrator Lara Call Gastinger completed in watercolor a number of her pen-and-ink illustrations from the Flora, to remarkable effect. Reproduced as giclées on art paper, 8 × 10, with deckle edges, these works are a lovely gift or addition to your collection. Our raffle features a Showy orchis (Galearis spectabilis) and Sweetbay Magnolia (M. virginiana). Each framed print comes with an olive green mat, acid free foam core backing, a pocket on the back to hold the artist’s Certificate of Authenticity, and wire hangers installed on the back. A ticket is $5 for the two prints, or five tickets for $20. Tickets will be available for purchase at our July and September meetings, and the drawing will be held at the September meeting. ~ Karen Waltman

HELP WANTED

PWWS is seeking a treasurer. Experience is desirable, and we need someone who excels at detail and documentation. For more information or to volunteer, contact Nancy at nvehrs1@yahoo.com
Prince William Wildflower Society
Membership Meeting Minutes
Monday, May 15, 2017    7:30 p.m.
Bethel Lutheran Church, Manassas

Pres. Nancy Vehrs opened the meeting at 7:32 p.m.

Announcements: Nancy V. reported the amount made at the May 13 Plant Sale- $3,187. She pointed out the Flora of Virginia framed prints that we are raffling. A ticket is $5 for the two prints or 5 tickets for $20. The drawing for these two beautiful prints will be at the annual meeting in September, and the money raised will go toward a sound system.

A sign-up list was passed around for those able to help weed at the pollinator garden at the I-95 Rest Area.

Marion Lobstein announced that she had the prototype of the Flora App on iPhone and on iPad to demonstrate, if interested. The goal is to have the App ready in time for presentation at the VNPS annual meeting the end of September. Marion was thanked for bringing refreshments.

Nancy V. thanked the hostesses for the April 30 Garden Tours-Nancy Arrington, Marie Davis, and the Prince William Master Gardeners at the St. Benedict Monastery’s Teaching Gardens.

Program: Nancy V. introduced Dan Schwartz, Soil Scientist at Northern Virginia Soil and Water Conservation District. Dan’s program was entitled Medicines from the Soil: The Fight Against Antibiotic Resistance. Who knew? Antibiotics come from dirt!! Dan explained that actinomycetes are in the soil and produce antibiotics. Soil scientists separated out antibiotics in petri dishes and were able to produce the medicines that now treat so many infectious diseases. Dan said with more study of the soil, even more antibodies may be found. Want to learn what is in your soil? Go to www.drugsfromdirt.org, sponsored by The Rockefeller University. Drugs from Dirt is a citizen science project, and participants whose soil samples are used in this study will receive a full analysis of the secondary metabolic profile of their soil. This is an observational study, and information collected is added to a database that will guide molecule discovery in the future.

From Dan’s last slide: It is clear there is a lot more to learn from the soil. We have already found great medicines from the 1% of soil bacteria we are able to culture. What will the other 99% hold?

Door Prizes:
Janet Wheatcraft - Wildflowers of the Appalachian Trail
Nancy Arrington - Mason bee nesting tubes
Brigitte Hartke - Decorative bird house
Jeanne Fowler - 100 Flowers and How They Got Their Names
Jeanne Endrikat - Shrubs and Woody Vines of Virginia
Dan Schwartz - Notecards
Elaine Haug - Native Plants for Central Rappahanock Virginia


Karen Waltman, Secretary

PWWS Welcomes new Publicity Chair, Valerie Kenyon Gaffney

Please give a warm welcome to Valerie, an employee of the Washington Post and now our Publicity Chair. Valerie shared this story: “When we were adolescents, my parents made my siblings and me help weed what seemed at the time like an enormous garden. I hated it, and distinctly remember stomping my feet and telling my mother, ‘When I grow up, you are going to be my gardener!’ A lifetime later, nothing brings me greater peace or pleasure than playing in the dirt. I know my mother is looking down on me from somewhere, along with my dad, and she is getting a good chuckle.”  
gaffnevk@yahoo.com
**EVENTS**

**PWWS Summer Walks**

**Thursday, August 3, 2017  Plant Identification Workshop Opportunity**

Join Marion Lobstein and Sally Anderson for a plant identification workshop on Thursday, August 3, 2017. This workshop will be held 9 a.m. until 2 p.m. at the Manassas National Battlefield Park Headquarters. This will focus on use of both *Newcomb's Wildflower Guides* and the *Flora of Virginia*. Copies of both books will be available for participants to share. A preview of the soon-to-be-released Flora App (the unveiling of the full App will be at the end of the September 2017 Annual Meeting) will also be part of this workshop. This workshop is free for VNPS members or $30 for individuals or $40 for couples (the costs of VNPS membership). Enrollment is limited, so please contact Marion Lobstein at mblobstein@earthlink.net or call or text her at 703-622-0676 to reserve a space and for additional details.

**Thursday, August 31, 2017 Field Trip Opportunity**

Join Marion Lobstein who will lead a field trip on Thursday, August 31, 2017. This field trip will be held 9-11 a.m. at Deep Cut in the Manassas National Battlefield Park. The field trip is sponsored by PWWS.

Please contact Marion Lobstein at mblobstein@earthlink.net or call or text her at 703-622-0676 to reserve a space and for additional details.

**Please note:**

For other events not scheduled at the time this issue went to press, please continue to visit the PWWS Facebook page: [vnps.org/princewilliamwildflowersociety](https://vnps.org/princewilliamwildflowersociety/)

**July**

**Thursday, July 20, 8 a.m. - noon: Weeding Party**

at the I-95 NORTHBOUND Dale City Car Rest area near Mile Marker 156. Please bring a reusable water bottle, gloves, and your favorite garden tools, and join us any time that morning!

**Saturday, July 29: Official Butterfly Count**

Butterfly enthusiasts may want to participate in an official Butterfly Count coordinated by the Prince William Conservation Alliance.

The center of the count’s circle is near Manassas Airport, and its 7.5-mile radius reaches parts of Manassas National Battlefield Park, Bull Run, mid-Prince William County, and rural Nokesville. Training will be held on Saturday, July 22, but the Alliance needs some knowledgeable people to serve as leaders.

If you’re interested, please contact Kim Hosen by email at pwconserve.org, or phone 703-499-4954.

**Sunday, July 30, 8 a.m. — Bird and Nature Walk**

at Merrimac Farm. RSVP to PW Conservation Alliance at alliance@pwconserve.org or call 703-499-4954

**August**

**Saturday, August 19, 4 - 8 p.m. - Prince William Farm to Table Dinner**

Windy Knoll Farm, 11602 Kettle Run Road, Nokesville, VA 20181. Tickets must be ordered in advance and cost $45. Proceeds benefit the Prince William Soil and Water Conservation District’s Environmental Excellence Foundation. For info, see [https://www.pwswwd.org/prince-william-environmental-excellence-foundation.html](https://www.pwswwd.org/prince-william-environmental-excellence-foundation.html), email pweef@pwswwd.org, or call 571-379-7514.

**Sunday, August 29, 8 a.m. “Bird and Nature Walk” at Merrimac Farm, Nokesville, VA**
“You’ve Got to Get Out !!”

We are drawn to go outside; to discover the wild places, and enjoy the beauty around us in nature, whether sunset or stream, meadow or marsh. These days the unrelenting sun heats up the fields and trails, and as we stare outside from air-conditioned homes, our desire for botanic adventures may flag.

Many of us have found that taking along a camera can turn a short stroll into a long hike as our focus is directed to the characteristics of native plants, and the insects they host or that come to collect their nectar. Often, the heat is forgotten as we close in on a pollinator, perhaps a swallowtail or monarch, a bee or clearwing hummingbird moth — sometimes all in one afternoon! Later we return home, hot and thirsty, to see what we captured, and to discover if a new technique or setting we’ve recently learned is going to improve the results of our nature forays. With a long lens you may photograph an elusive bird.

Through experience, I’ve learned to carry an extra battery with me. I once expected to spend many happy hours at Kenilworth Aquatic Gardens photographing the lotus and water lilies only to have my battery power fizzle. Forlorn, I promised myself it wouldn’t happen again. Though surrounded by all that beauty, I still needed ‘something to do’ while there to encourage me to spend many more hours than I otherwise would. Grab a camera and go! The wild things are out there, flitting and flying among the wildflowers. Prepare to be dazzled as you go up for a closer look, and . . . CLICK . . .

SAVE the DATES

Monday, September 18 - 7:30 p.m. Program: Helen Hamilton on “Ferns and Mosses”
September 29, 2017 — VNPS Annual Meeting, Shepherdstown, West Virginia

. . . CLICK!

Top, second from left: a red milkweed beetle on common milkweed

Others: Appalachian azure, wood nymph on tree (center), clearwing hummingbird moth, pearl crescent, bees on coneflower and mountain mint, other pollinators.

For full-color views, visit PWWS website: vnps.org/princewilliamwildflowersociety/
Bugbane or Black Cohosh is now
Actaea racemose rather than
Cimicifuga racemosa

Marion Lobstein - Botany Chair PWWS,
Professor Emeritus NVCC

Actaea racemose, formerly Cimicifuga racemosa,
commonly called bugbane or black cohosh, is a
perennial member of the Ranunculaceae or buttercup
family. This handsome plant that has a less-than-
pleasant fragrance is more common in the mountains of
Virginia, but certainly can be found in rich woods in the
Northern Virginia area. The stems and leaves of this
plant appear in the spring and may easily be confused
with blue cohosh (Caulophyllum thalictroides), a member
of the Berberidaceae or barberry family. The long (up to
12 inches), slender wand-like inflorescences of small
white flowers appear by June, and plants may bloom
into August. This species is found in rich open woods
as well as shaded woodland borders and roadsides. The
range of this species is from Massachusetts south into
Georgia, and west into Ohio and Tennessee. Actaea is
the genus to which Linnaeus assigned this
species in his 1753 Species Plantarum. The
origin of Actaea is from the first century
Roman Pliny the Elder who used the term to
describe a species of European elderberry. The former genus name of
Cimicifuga is from the Latin “cimex” for bug and “fugare” meaning to drive away — thus the name
bugbane. The species name of racemosa refers to the raceme type of inflorescence
typical of this species. Other common
names are black cohosh (cohosh refers to
the dark, rough rhizome of the plant),
black snakeroot, and squawroot (the last
two common names alluding to the Indian
use of this species to treat snakebites and female
reproductive issues, respectively).

The flowers of bugbane are small (only around 1/4 inch
or less long) with 4 to 5 sepals that are shed soon after
the flower opens — no petals but 1 to 8 white petaloid
stamens, numerous showy white stamens, and 1 to 2
carpels with short styles and broad stigmas. The
flowers lack nectar but present a good pollen reward to
its insect pollinators which are usually flies but may
also be bees and bumblebees. The pungent fragrance is
thought to attract flies but repel many other types of
insects. The fruit that develops from each fertilized
flower is a follicle that is a 1/4 to 1/3 inch long that
contains two rows of small reddish-brown seeds. The
dried fruits may remain on the plant unopened until
early winter, and the seeds may rattle within the fruit
when shaken by wind or passing animals. Other less
common names for this plant due to this characteristic
are rattletop, rattleweed, or rattle snakeroot.

Each plant has a slender stem that may be up to 6 or
more feet tall with alternate thrice-compounded leaves
with 2 to 5 coarsely toothed leaflets that are up to 6
inches long and with up to 7 subdivisions. Each mature
plant has a well-developed, dark-colored and rough-
textured rhizome with short fibrous roots. The rough
and gnarled appearance of the rhizome is due to scars
of leaf stems from previous years of growth. By the end
of the growing season, pinkish buds for next season’s
growth may be seen on the rhizome. The medicinal uses
of this plant by American Indian tribes as well as in folk
or herbal medicine are numerous. These medicinal uses
(mainly of the rhizome) ranged from treating sore
throats, bronchitis, coughs, colds, whooping cough,
malaria, yellow fever, smallpox, measles,
chorea, headaches, fatigue, hysteria,
hives, itching, kidney problems, arthritis,
rheumatism, snakebite (as a poultice),
high blood pressure, and female problems
such as menstrual cramps and the pain of
childbirth. Extracts from this plant are
thought to have anti-inflammatory
(salicylates, the active ingredient of
aspirin, are found in the plant),
antispasmodic, sedative (even slightly
narcotic), diuretic, and expectorant
properties. It was not only important in
American Indian medicine but also was
listed in the U.S. Pharmacopeia from 1820
to 1936 and in the National Formulary
from 1936 to 1950. Bugbane was also
introduced in Europe in the 1860s where
it was grown for its medicinal and
ornamental properties.

Despite the less-than-pleasant odor of this attractive
summer wildflower species, enjoy the beauty of black
cohosh in rich woods in our area. The delicate wand-
like inflorescences of this native species add interest
during the summer months.

NOTE: Black Cohosh is the VNPS “2017
Wildflower of the Year”.

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Ranunculaceae and Black Cohosh
Taxonomic Overviews

By Marion Lobstein, Botany Chair, PWWS and Professor Emeritus, NOVA

Ranunculaceae, the buttercup family, was described by A.L. de Jussieu in 1789. The family name Ranunculaceae is based on the genus Ranunculus, the buttercups or crowfoots. European species of Ranunculus were used since ancient times to create blistering to treat wounds or inflammation. European species of Aconitum (Monk’s hood) and Delphinium (larkspur) as well as other species in this family were also known in ancient times as well by herbalists in Europe such as Nickolas Culpeper. The genus Ranunculus is derived from the Latin word rana, meaning frog. One possible explanation is that many buttercups are found in wet areas where there are frogs. The Ranunculaceae name also was assigned by A.L. de Jussieu in 1789. Earlier botanists, such as John Ray recognized this family in the 1600s and Pierre Magnol in the 1700s. World-wide, Ranunculaceae includes roughly 60 genera and 2,400 species. In the Flora of Virginia there are 14 genera and 62 species. In the 1762 edition of Flora Virginica, Clayton described over 25 species of Ranunculaceae.

A number of taxonomic changes in the Flora are summarized in a chart in the Wild News article in the January-February issue focusing on Hepatica name changes. These changes include:

Anemonella thalictroides (Rue-anemone) now Thalictrum thalictroides

Cimicifuga racemosa (Common black cohosh) now Actaea racemosa

Cimicifuga rubrifolia (Appalachian black cohosh) now Actaea rubrifolia

Cimicifuga americana (Mountain black cohosh) now Actaea podocarpa

Delphinium ajacis (Larkspur) now Consolida ajacis

Heptica americana (Round-leaf Hepatica) now Anemone americana

Heptica acutiloba (Sharp-lobed Hepatica) now Anemone acutiloba

Hydrastis canadensis (Golden-seal) is now in its own family Hydrastidaceae

Isophyrum biternatum (False Rue-anemone) now Enemion biternatum

Ranunculus ficaria (Lesser Celandine) now Ficaria verna

In the Flora of Virginia and other current taxonomic treatments, the genus Actaea is a genus that now includes Common Black Cohosh formerly Cimicifuga racemosa and two other species of Black Cohosh not found in our area, Appalachian Black Cohosh Actaea rubrifolia (formerly Cimicifuga rubrifolia) and Mountain Black Cohosh Actaea podocarpa (formerly Cimicifuga americana). Linnaeus applied the binomium Actaea racemosa to Cimicifuga racemosa in his 1753 Species Plantarum. The genus name Actaea originated with Pliny the Elder in Roman times to describe a species of elder. The other Actaea species treated in the Flora of Virginia are Actaea pachypoda, White Baneberry or Dolls’ Eyes.

Cimicifuga racemosa was named by Thomas Nuttall in 1818. The primary basis for his splitting out the genus Cimicifuga from Actaea was the dry fruit of species placed in this genus versus fleshy berries of Actaea species such as Actaea pachypoda, White Baneberry or Dolls’ Eyes. There are 10-12 synonyms including Cimicifuga americana for Actaea racemosa. Cimicifuga americana is the former binomium for Actaea podocarpa. As well, Actaea rubrifolia was once considered a variety of Actaea racemosa. There has been quite a bit of back and forth on the taxonomy of the genus Cimicifuga, but DNA studies support returning Virginia’s three former species of Cimicifuga to the genus Actaea. What seems to be a change is now returning to Linnaeus’ original genus.
Next Meeting: PWWS Annual Meeting, September 18, 7:30
Helen Hamilton: “Ferms and Mosses”
Bethel Lutheran Church, Plantation Lane, Manassas, Virginia 20110

The Appalachian Azure (Celastrina neglectamajor)
Photographed above by Board Advisor Nicki Staunton on its caterpillar host plant, Actae racemose at Crescent Rocks. Here the Appalachian azure places an egg on the buds of the plant, black cohosh (bugbane), this year’s “2017 Plant of the Year”, and also the topic of this month’s botany article by PWWS Botany Chair, Marion Lobstein. The slug-like caterpillars are tended by ants for the sweet drop of “honeydew” which the caterpillar produces when the ants tickle it. The spired blooms of this beautiful plant are pictured, center.