



WILD NEWS

Prince William Wildflower Society

A Chapter of the Virginia Native Plant Society

www.pwws.vnps.org

November-December 2013

Number 2013-06



Monday, November 18, 2013, 7:30 p.m.
Bethel Lutheran Church, Manassas, Va.
Prince William Wildflower Society Membership Meeting
"Ferns in the Natural Landscape"
with Carl Taylor

Dr. Carl Taylor, botanist and former program director at the National Science

Foundation, will identify and describe some great garden ferns for the Mid-Atlantic region and examine the unique structure of ferns and their fascinating life history. He will also show us how the life history of ferns reveals why ferns grow where they do and what they need from you as their gardener. Although few try it, ferns are also easy and fun to grow from spores. Ferns make great subjects for gardens. There are many kinds and lots of them are easy to grow. Some are great for shady spots in your yard, others for sunny places, still others for rock gardens, wet areas, and windowsills.

Carl Taylor was born and raised in St. Louis, Missouri. He became interested in plants as a kid and completed his undergraduate studies at the University of Missouri and a Ph.D. in botany from Southern Illinois University. For many years, Carl worked at the Milwaukee Public Museum where he assisted with

the development of exhibits, conducted research, and served as Chair of the Botany Department. Carl has taught university courses in general biology, plant taxonomy, and local flora. Recently, he served as a Program Director at the National Science Foundation. Carl is retired and now volunteers at the Smithsonian Natural History Museum. He and his wife Jerry live in Arlington, Virginia where they garden in their yard and greenhouse nearly every day.

Please plan to join us for this fascinating look at ferns; the program is free and all are welcome. Refreshments will be served and doorprizes awarded!

PRESIDENT'S CORNER

Who knew that the Prince William County Landfill could be such a fun place? Back on Saturday, October 20, it was *the* place to be when the Department of Public Works hosted "Prince William Recycles Day." Harry Glasgow, PWWS Vice-President Carol Thompson, and I took turns staffing a PWWS booth for our first time participating at this annual event. According to county staff estimates, more than 850 people participated in this event that featured free document shredding. A

huge tent housed the environmental exhibits that ranged from a Master Gardener booth to a high school art contest highlighting imaginative works made from recycled materials.



PWWS was fortunate to be located very near the face painting booth with its line forming in front of our table. A bowl of

candy served as a magnet as well. We had on display our usual pamphlets and newsletters, a vase of common wildflowers, and an assortment of native plant leaves and seeds that visitors were encouraged



to touch and examine. Adults and children both enjoyed feeling nuts and seedpods and learning that those beautiful yellow trees along the highways were hickories that produced hard shelled nuts. It was truly astonishing how little area residents know about their local flora, yet they seemed very pleased to learn more in our sheltered little setting. This was a valuable event that allowed us to make inroads with families we might not usually reach. Caring for the environment requires a personal connection to it and education can cultivate that first spark. We all can do more to make highlight and explain the wonders of nature to our friends and neighbors.

This month's program meeting will feature ferns as presented by Dr. Carl Taylor, a local expert. Some of us had the pleasure of meeting Dr. Taylor and his wife on our walk this past spring at Crow's Nest in Stafford County. He is a member of the Potowmack Chapter and happened to see our notice on a listserv. As the walk progressed, his extensive knowledge became obvious to us, and we learned that his background included a Ph.D. in botany! Ah, a chance meeting turned into an opportunity to engage a speaker for one of our meetings. Our VP for programs Carol Thompson is continually seeking speakers and welcomes your recommendations for both speakers and topics. She can be reached by email at carol8809@icloud.com. ~Nancy Vehrs

~Prince William Wildflower Society

Membership Meeting Minutes~

Monday, September 16, 2013, 7:30 p.m., Manassas, Virginia

President Nancy Vehrs opened the meeting, and guests and new members were introduced.

Business:

- Carol Thompson moved and Harry Glasgow seconded, and the minutes of the last membership meeting were approved as published in *Wild News*.
- The slate for the **Nominating Committee** was introduced: Joyce Wenger, Brian McDougal, and

Veronica Tangiri. Janet Wheatcraft moved, Suzy Stasulis seconded, and the motion passed to accept the slate of nominees. They will serve from November 1, 2013 to October 31, 2015.

Proposed Budget: Harry Glasgow moved, Marion Lobstein seconded, and the motion passed unanimously to accept the 2014 proposed budget as published in the August mail-out. Copies were available for review at the meeting also.

- Marion Lobstein reminded us of the September 28 workshop on "Introduction to Using the *Flora of Virginia*," to be held at Merrimac Farm's Stone house in Nokesville, 9 a.m. to Noon. A sign-up sheet was available.
- Nancy Vehrs has VNPS T-shirts and notecards left from the September 13-15 annual meeting, so please see her if interested.
- Our next PWWs meeting will be November 18, and Dr. Carl Taylor will speak on ferns.
- Nancy Arrington reported on the September 14 work day at Manassas Park Elementary School. Oct. 19 will be the next work day. A sign-up sheet was available.
- Let Marion Lobstein know what you would want in an app for the *Flora of Virginia*, as that app is being developed. She has written articles about the nomenclature changes in the Flora, and she asked all to read in *Wild News* or on the PWWs website of the changes and why the changes were made.

Program: Nancy V. introduced Charles Smith, who presented a program entitled "Celebrating the Natural Communities of Virginia: Plants and Their Neighbors-A Community Context." Charles is the PWWs Education and Conservation Chair, and he is manager of Fairfax County's Natural Resource Management and Protection Branch. Charles showed us beautiful pictures of Virginia's plant communities and wanted us to appreciate and understand organisms in the context in which they exist. He especially encouraged us to help protect our natural areas.

Doorprizes: Linda Johnston, pink turtlehead plant; Ellen Long, wildflower arrangement; Marion Lobstein, calendar; Glen McDonald, calendar; Jeanne Endrikat, calendar; Tamea Boone, stick-on wallflowers.

Those in Attendance: Harry Glasgow, Charles Smith, Amy Hamilton, Helen Walter, Helen Rawls, Mary Sherman, Dee Brown, Glen Macdonald, Tom Attanaro, Marion Lobstein, Jeanne and Stan Fowler, Bill and Jane Lehman, Jill Chesnut, Nancy Arrington, Jeanne Endrikat, Rima Vesilind, Tiana Camfiord, Janet Martinet, Zach Caron, Christine Sunda, Tamie Boone, Brian Shermeyer, Judith McDaniel, Barbara Deegan, Rita Romano, Rose Breece, Janet Wheatcraft, Suzy Stasulis, Theresa DeFluri, Ellen Long, Linda Johnston, Karen Waltman.

--Respectively submitted, *Karen Waltman*, PWWs Secretary

Manassas Park Elementary School Project

Several PWWS members along with a group of Manassas Park Elementary School's Go Green Club members and parents met for a workday on Saturday, October 19. We worked on the school courtyard gardens, which are planted with native trees, shrubs, perennials and ferns. One group weeded and cleaned up one courtyard that we had mulched this past spring. Another group cleaned out beds in the second courtyard and then spread a load of mulch.



PWWS members who participated include Bobbi Frye, Deanna High, Linda Stoltz, and Nancy Arrington. We plan to continue this project in the spring and will transplant some plants and add others.

On Sunday, October 20, PWWS member Charles Smith met with Carolyn O'Connor, Go Green parent coordinator, to come up with a plan to help the students and teachers understand and appreciate the school's network of drainage areas. Charles will give a presentation in November to members of the club. We plan to do a plant survey and then later help school personnel improve the areas' appearance.

--Nancy Arrington

~ PWWS MEMBER NEWS ~

Marion Lobstein donates *Flora of Virginia* to NOVA: Culmination of four-decade dream

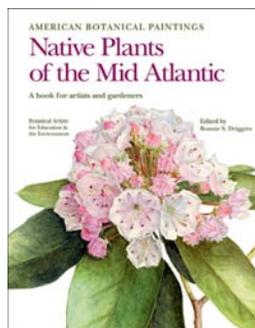
[from Northern Virginia Community College press release, November 18, 2013]

"Nature lovers at Northern Virginia Community College can now easily identify Virginia plants, thanks to Marion Lobstein, former biology professor at NOVA's Manassas Campus. Lobstein donated copies of the long-awaited *Flora of Virginia* to each of NOVA's six libraries in honor of her friend and colleague Nicky Staunton.

'Nicky and I are founding members of the Virginia Native Plant Society,' Lobstein said. 'Nicky served two terms as president of the Virginia Native Plant Society [VNPS] and the society as an active board member for the Flora of Virginia Project. In 2011, the society's chapters pledged to honor Nicky's service by donating copies of the *Flora of Virginia* to colleges and universities. Marion is delighted to

donate a copy of the book to each NOVA campus in her name.'

Lobstein taught biology at NOVA from 1974 until her retirement in 2010. In 2003, she was named a Fellow of the Virginia Academy of Science, an honor reserved for members who demonstrate outstanding scientific research, inspirational teaching, and/or significant leadership in the Academy."



From PWWS founding member Nicky Staunton comes notice of a forthcoming book and art exhibition from BAEE, Botanical Artists for Education and the Environment: *American Botanical Paintings: Native Plants of the Mid Atlantic*, reproduces **60 original works** by **40 botanical artists**. Each illustration is accompanied by a description of the plant and its value to gardeners and the environment. Thirty-eight original paintings

of butterflies, moths, and caterpillars that use or pollinate the plants are included. The book is scheduled for release February 2014. You may pre-order a copy of the book at www.starbooks.biz for \$39.95 + S&H. Shipping is free on orders received by December 31, 2013 (U.S. only). An exhibition of the paintings included in the book will run beginning February 15 through June 15, 2014 at the U.S. Botanic Garden in D.C. See www.baecorp.org for more about the project.

Got Seeds? Plants?

NEW! PWWS Seed and Plant Exchange

Some members have expressed an interest in a PWWS seed/plant exchange (natives only, please). This would include seeds and/or plants that members have and want to share with other members. Members would also be able to ask for seeds and/or plants that they are looking for.

Please send a list of your offerings and/or requests to Deanna High, deannahigh@gmail.com, or call her at (703) 606-9988 for inclusion in the newsletter. Please include your own contact information so other members can get in touch with you.



Vernonia gigantea (Tall Ironweed): Bill Holbrook has seedlings and seeds of this beautiful native ironweed to exchange or swap with other PWWS members. Bill says that it attracts many butterflies. On growing this super tall ironweed, he adds: "... they

grow in small clumps naturally. The canes completely die back in the winter and next year's canes come up from the roots. It takes 4 to 5 yrs for the canes to be self supporting, so they will need support to stay up. I pounded in a metal fence post and lassoed the clump until they were thick enough to stand (they are almost 1" thick now). They require nothing to grow: just cut the canes down in the winter so new growth is not inhibited."

You can contact Bill directly at bill.ams@verizon.net if you are interested.

Flora of Virginia and Other News

At the 2011 Annual Meeting of VNPS, it was announced that copies of the soon to be published *Flora of Virginia* would be donated by VNPS chapters to major 4-year colleges and universities in Virginia to honor Nicky Staunton. At that time, Marion Lobstein pledged to donate copies of the *Flora of Virginia* to each of the six campuses of Northern Virginia Community College (NOVA) to honor Nicky and this past year Marion donated copies of the *Flora of Virginia* to each of NOVA's campuses. On November 13, 2013 a ceremony was held at the Manassas Campus to celebrate these donations. Nicky Staunton and Marion Lobstein took part in this donation ceremony with a number of VNPS members as well as NOVA faculty and staff in attendance.



On October 10, 2013, Jocelyn Sladen, active member of the Piedmont Chapter of VNPS and active board member of

the Center for Plant Conservation, hosted a dinner to honor Dr. Peter Raven, Director Emeritus of the Missouri Botanical Garden and author of a number of botany and biology textbooks, and Dr. Kathryn Kennedy, chairman of the Center for Plant Conservation. Marion had the honor of presenting copies of the *Flora of Virginia* to Dr. Raven and to Dr. Kennedy.

This fall Marion has been conducting workshops on using the *Flora of Virginia*. On September 28 she held a workshop for PWWS members at Occoquan Bay National Wildlife Refuge with a hands-on session using the Flora in the morning and a fieldtrip that afternoon. She also taught workshops at Blandy Experimental Farm for FOSA, Banshee Reeks (outside of Leesburg) for the Potowmack Chapter of VNPS, and in Manassas for Prince William Master Gardeners. She plans to offer other workshops on using the Flora in the spring of 2014. Please share your ideas with her on times and dates for another workshop for PWWS.

The first printing of the *Flora of Virginia* is now officially sold out. The second printing— with corrections— will be available by the end of December 2013. To find out more about ordering a second-printing copy, please visit

www.floraofvirginia.org. The corrections made for the second printing



are listed on the *Flora of Virginia* Project website at www.floraofvirginia.org/flerrata.shtml. The board of directors for the Project has been reorganized and Marion Lobstein will continue to serve on the board. Future plans of the *Flora of Virginia* Project are summarized at www.floraofvirginia.org/flfuture.shtml. A digital application deriving from the *Flora* is one of the goals. Please share

your ideas of what you would like to see in an app with Marion at mblobstein@earthlink.net. —Marion Lobstein

WELCOME, NEW PWWS MEMBERS!
Beverly Houston, Montclair; Nick Drunasky, Woodbridge; Elena Meyer, Woodbridge; Ron Singleton, Fredericksburg; Celia Vuocolo, Bristow; and Jane Wyman, Haymarket.

E~V~E~N~T~S

~NOVEMBER~

Monday, November 18, 7:30 p.m., Bethel Lutheran Church, Manassas. "Ferns in the Natural Landscape," with Carl Taylor, botanist and former program director at the National Science Foundation. Dr. Taylor will identify and describe some great garden ferns for the Mid-Atlantic region, and examine the unique structure of ferns and their fascinating life history.

Saturday, November 23, 2013, from 3 to 4:30 p.m., Middleburg Library, 101 Reed Street, Middleburg, Va. "On the Road with Marion," presented by the Piedmont Chapter of VNPS. Sit back and enjoy a presentation of photographs taken by Marion Lobstein on her almost 9,000 mile RV trip this summer. Marion will take you through wild, beautiful, and unusual places and she will tell about wildflowers in all kinds of habitats. This program is free and everyone is welcome, but space is limited, so please let us know if you plan to attend. To RSVP, contact Carrie at piedmontvnps@gmail.com.

~DECEMBER~

Saturday and Sunday, December 7-8, 2013, 9:30 to Noon and 1:30 to 4:00 p.m. both days. Holiday Workshops at the State Arboretum of Virginia, Blandy Experimental Farm. Gather with friends to create a traditional evergreen wreath made from fresh local greens and adornments. Four sessions. Call (540) 837-1758 x224 to register.



Sunday, December 29, beginning at 7:00 am, Nokesville Christmas Bird Count, sponsored by the Prince William Conservation Alliance. The Nokesville annual event is centered on Merrimac Farm and covers nearly 180 square miles. For more than 100 years, citizen scientists throughout the U.S. have volunteered their time to count birds for the Christmas

Bird Count, a national event led by the Audubon Society. Their efforts provide important information about wintering bird populations, distribution, and changes over time. Volunteer birders (including beginners) join a team that covers a defined portion of the total count area. We meet midday and at dusk at Merrimac Farm to record the results. Participants can help in three ways:

- Identify and count birds in the field, beginning birders welcome;
- Identify and count birds in your backyard, if you live in the circle boundaries;
- Prepare and/or serve food to cold, hungry birders at the Merrimac Stone House beginning at 11:00 am.

Registration in advance is required. Contact (703) 499-4954 or alliance@pwconserve.org. More information about the count is available at www.pwconserve.org.

~JANUARY~

Monday, January 20, 7:30 p.m., PWWS Annual Slideshow and Membership Meeting, Bethel Lutheran Church, Manassas. Va. Please contact Program Chair Carol Thompson at Jerry.1950@comcast.net or (703) 596-6654 to arrange to show your photos! It's fun to participate and fun to just watch, too. Refreshments will be served and doorprizes awarded.

Saturday, January 25, 2014, Annual Seed Exchange, State Arboretum of Virginia, Blandy Experimental Farm. Join us for the 4th annual seed swap and information exchange in the Blandy library. For more information, see www.blandy.virginia.edu.

~FEBRUARY~

Sunday, February 16, 2014, Manassas Park Community Center Banquet Hall, 99 Adams Street, Manassas Park, Va. 20111. PWWS sponsors a presentation by Dr. Doug Tallamy. The program is free and open to the public. More details forthcoming in the January-February issue of *Wild News* and at www.pwvs.vnps.org and on our Facebook page.

Changes in Woody Plant Species Taxonomy

By Marion Lobstein, Botany Chair, Prince William Wildflower Society and Professor Emeritus, Northern Virginia Community College

Past articles in "Botanizing with Marion" have dealt with primarily herbaceous flowering plant families. This article will focus instead on taxonomic changes for families of woody species in the *Flora of Virginia* relative to taxonomy used in the mid-1900s (such as in the *Flora of West Virginia*, *Gray's Manual of Botany* 8th ed., and *Manual of the Vascular Flora of the Carolinas*.)

The general interest article for this issue of *Wild News* is about Witch Hazel (*Hamamelis virginiana*), a woody species



that remains in its traditional family of Hamamelidaceae. Other former members of Hamamelidaceae, however, have been moved to new families, such as *Liquidambar* (Sweetgum), which has now been placed in Altingiaceae (Sweetgum family). There are a number of other families or genera of woody plants that also have undergone significant changes in the *Flora of Virginia*. Most of these changes are based on DNA evidence, obtained since the 1990s, used by the Angiosperm Phylogeny Group (APG).

It is hard to believe that it has only been 60 years since the structure of DNA was revealed by James Watson and Francis Crick.

The world has not been the same since: in medicine, in genetically engineered organisms, and in a changing understanding of evolutionary, phylogenetic relationships of organisms—including plants. By the 1990s, there was such

The chart below contains some of the changes and notes:

Families with woody species that have undergone significant taxonomic changes in <i>Flora of Virginia</i>	Common Name(s) of family and examples of major woody genera	Number Woody Species	Notes on major Taxonomic changes	Additional Notes on changes
Adoxaceae Trautvetter 1853	Moschatel (Viburnums)	13	Includes <i>Sambucus</i> (Linnaeus 1753) (Elderberries) and <i>Viburnum</i> (Linnaeus 1753) (Viburnums) (formerly placed in Caprifoliaceae)	Sambucaceae (Batsch ex Borkhausen 1797) was once a family. There has been a long-standing question of <i>Sambucus</i> and <i>Viburnum</i> species belonging in Caprifoliaceae; DNA work shows these in general should be included in Adoxaceae, which was once part of Caprifoliaceae and is now elevated to family status in APG III system
Altingiaceae Lindley 1846	Sweetgum	1	Includes <i>Liquidambar</i> (Linnaeus 1753) (Sweetgum), which was formerly in Hamamelidaceae (Witch Hazel family)	Altingiaceae was once a subfamily of Hamamelidaceae but now is elevated to family level in APG III system
Cannabaceae Endlicher 1827	Hops (Hackberry)	5	<i>Celtis</i> (Hackberries) (Linnaeus 1753) moved from Ulmaceae (de Mirbel 1815) (Elm family) to Cannabaceae	<i>Celtis</i> was once in its own family Celtidaceae or in a subfamily (Celtideae) in Ulmaceae but is now included in the expanded Cannabaceae by APG III system. DNA work in early 1990s showed this family was closely related to Cannabaceae, which is a taxonomical name older than Celtidaceae and therefore took precedence.
Grossulariaceae A.P.De Candolle 1805	Current/Gooseberry (<i>Ribes</i>) (Linnaeus 1753)	5	Formerly in Saxifragaceae (Saxifrage family); includes the following genus: <i>Ribes</i> (Linnaeus 1753) (Gooseberries)	<i>Ribes</i> originally in this family; this genus is closely related to Saxifragaceae
Hamamelidaceae R. Brown 1818	Witch Hazel (Hamamelis) (Linnaeus 1753)	1	<i>Liquidambar</i> (Sweetgum) moved to Altingiaceae (Sweetgums)	Witch alder (<i>Fothergilla gardenia</i>) is still in this family and is included in the Flora of Virginia on p. 1,363 under "Unverified Taxa."
Hydrangeaceae Dumortier 1829	Hydrangea and Mock Orange (<i>Philadelphus</i>) (both Linnaeus 1753)	5	Formerly in Saxifragaceae (Climbing Hydrangea), <i>Hydrangea</i> (Hydrangeas), <i>Philadelphus</i> (Mock Oranges)	Hydrangeas placed back in their original family
Iteaceae J. Agardh 1858	Sweetspire (Linnaeus 1753)	1	Formerly in Saxifragaceae; includes the following genus: <i>Itea</i> (Sweetspire)	<i>Itea</i> placed back in its original family
Lamiaceae Lindley 1836	Mint	1	<i>Vitex</i> (Linnaeus 1753) (Chaste-tree) formerly in Verbenaceae (Vervain)	Is in its own subfamily in Lamiaceae; based on DNA
Malvaceae A.L. de Jussieu 1799	Mallow	1	Now includes Tiliaceae with <i>Tilia</i> (Linnaeus 1753) (Basswood)	Once in its own family Tiliaceae that originally included members of Malvaceae which is expanded in APG III system
Paulowniaceae Nakai 1949	Princess Tree	1	Formerly in Scrophulariaceae; includes genus <i>Paulownia</i> (Siebold & Zuccarini 1835)	<i>Paulownia</i> has often been put in its own family.
Sapindaceae A.L. de Jussieu 1799	Soapberry (Maple)	12	Includes Aceraceae (Maples) <i>Acer</i> (Linnaeus 1753) and Hippocastanaceae (Horse Chestnuts, Buckeyes) <i>Aesculus</i> (Linnaeus 1753)	Aceraceae and Sapindaceae were considered synonyms by de Jussieu in late 1800s; Aceraceae and Hippocastanaceae are closely related to Sapindaceae based on DNA and other evidence

an explosion of genetic research based on sequencing DNA of plants it became clear that plant taxonomy needed to be revised. In the mid-1990s, an international group of botanists started working together to interpret this new information. Their first revision of plant classification was published in 1998 with further revisions released in 2003 (APG II) and the latest in 2009 (APG III). The "home base" for this international group is the Missouri Botanical Garden in St. Louis, Missouri. Even though this is an "informal" group, more and more botanists are influenced by this work. Any new flora or reference articles on plant classification will reflect the work of this group. [To find out more about APG and the APG III system, visit www.mobot.org/MOBOT/research/APweb/, http://en.wikipedia.org/wiki/Angiosperm_Phylogeny_Group, and http://en.wikipedia.org/wiki/APG_III_system.]

There will continue to be changes in plant taxonomy as new DNA and other evidence becomes available. These changes will be reflected in updates to the *Flora of Virginia*. Interestingly enough, in many instances these taxonomic

Witch Hazel (*Hamamelis virginiana*)

By Marion Lobstein,
Botany Chair, Prince
William Wildflower
Society and Professor
Emeritus, Northern
Virginia Community
College



While walking through the autumn woods you may have noticed small yellow flowers borne on the ends of twigs of a small tree. Or, you may have heard a popping noise as you walked past the same trees. What you were seeing and hearing are the flowers and "exploding" fruits of witch hazel. This is the only tree (or large shrub) in our area that blooms from September through December. Also, it is the only tree that bears both flowers and fruits (from last year's flowers) at the same time!

Witch hazel is widely distributed, ranging from Nova Scotia and New Brunswick to central Georgia and southern Arkansas. It is commonly found along streams and on the banks of ponds, lakes, and swamps or in moist upland forests. It is considered an understory species in our deciduous forests.

The scientific name for witch hazel was assigned to this handsome plant by the famous Swedish taxonomist Linnaeus. *Hamamelis* is an ancient Greek plant name and *virginiana* means it was first collected in the colony of Virginia. Other common names are snapping hazel, snapping hazelnut, tobacco wood, white hazel, and winter bloom. It is not a true hazel but rather is a member of the

changes reflect scientific names proposed in the late 1700s and 1800s. In the changes in "woody" plant taxonomy, for example, there are only 11 families with major changes (and only 4 to 5 of those are "dramatic" changes), while there are 37 families with woody species that have no or minimal changes. (These families are in a chart that will be posted online along with this article at pwws.vnps.org.)

In the chart above, a number of these "new" family designations go back to late 1700s or early 1800s, or some of these "new" families were subfamilies. Some changes are surprising, such as *Celtis* (Hackberries) moving to Cannabaceae; *Tilia* (Basswoods) to Malvaceae; or *Acer* (Maples) and *Aesculus* (Horse Chestnuts) to Sapindaceae. Other changes are not so surprising, such as *Paulownia* (Princess Tree) in its own family; *Ribes* (Gooseberries) in Grossulariaceae; *Hydrangea* in Hydrangeaceae; and *Itea* (Sweetspire) in Iteaceae. —Marion Lobstein

Hamamelidaceae family. Sweetgum (*Liquidambar styraciflua*), once the only other member of this family in our area, has now been moved to the Altingiaceae (Sweetgum) family (*Flora of Virginia* 2012). The "witch" part of its common name comes from the use of its branches as divining rods supposedly to find water and even buried treasure and precious metal ores such as gold!

The small yellow flowers develop in clusters of three or four on the tips of mature branches. The four strap-like petals are attached on the margin of a cup-shaped receptacle. Eight stamens are arranged in two rows of four with the outer row usually sterile. With showy flowers, it is insect pollinated by insects still active in cooler autumn temperatures. Two shining black seeds form in a two-celled

wooden capsule that has a prominent beak. These fruits ripen over the year after flowering. The small half-inch seeds are forcibly expelled from the ripened capsule creating a popping noise.



The leaves, twigs, and bark of witch-hazel are distinctive. The alternate simple leaves are about four inches long and up to three inches wide. The leaf is ovate and variably lobed with an uneven base. Mature leaves have a waxy surface. Witch-hazel twigs have a unique zigzag

appearance. The thin smooth outer bark is light brown with purple inner bark. Individual tree can be as tall as 30 feet and can attain a diameter of 12-14 inches.

Some American Indian tribes used witch-hazel to make the wooden part of bows. Other Native American uses of witch-hazel were primarily medicinal: poultices, washes, and extracts were made from the inner bark; twigs and leaves were used to treat inflamed eyes, skin irritation, tumors, sore muscles, varicose veins, and even hemorrhoids. Extracts of bark and leaves were rubbed on the legs of Indian athletes to keep the muscles limber. Teas or washes made from the leaves and/or bark were used to treat a variety of ailments from colds, sore throats, and asthma to tuberculosis and other lung ailments, menstrual cramps, cholera, and dysentery. Extracts were also used to stop excessive menstrual flow and a variety of problems involving internal bleeding. Heated and steamed branches were used in a "sauna" to ease sore muscles, while powdered dried leaves were used to stop external bleeding. Also, twigs were chewed to freshen the mouth as well as to heal and soothe bleeding gums and other mouth or throat problems. Early colonists soon discovered the value of witch-hazel. Alcohol extracts, as well as lotions and salves made from twigs, leaves, and bark have long been used and are still used to treat sore muscles and minor skin irritations, as an astringent, or as a shaving lotion. Most witch-hazel preparations are now synthetically made, but there is at least one small company in New England that still prepares "real" witch hazel extract. The astringent and other associated properties are due to tannins in the bark and leaves.



As you walk in the late autumn woods and the wildflowers have disappeared until spring, keep your eyes and ears open for the sight and sound of the unusual witch-hazel. Look for its delicate yellow flowers and listen for its fruits exploding!

[Images and photos: Witch Hazel leaves: R.W. Smith, NPIN Image ID 32323, accessed at www.wildflower.org; Witch Hazel in flower: R.W. Smith,

NPIN Image ID 31030, accessed at www.wildflower.org; Witch Hazel fruit: Julie Makin, NPIN Image ID 30159, accessed at www.wildflower.org; botanical drawing: American Witch Hazel, origin unknown, accessed at www.botanical.com/botanical/mgmh/w/withaz27.html; *Hamamelis* with centipede by Mark Catesby (1682-1749) in *The natural history of Carolina, Florida and the Bahama Islands: containing the figures of birds, beasts, fishes, serpents, insects, and plants*, accessed at www.picturingplants.com; Woodduck photo: Prince William Conservation Alliance newsletter, accessed at pwconserve.org; Marion Lobstein workshop photos: courtesy of Nancy Vehrs; *Vernonia gigantea* (Tall Ironweed) photo: courtesy of Bill Holbrook; thumbnail of book cover of *American Botanical Paintings: Native Plants of the Mid Atlantic*, courtesy of Nicky Staunton; photo collage: MPES work day, courtesy of Deanna High; photos: Prince William Recycles, courtesy of Nancy Vehrs; *Thelypteris noveboracensis*: author unknown, use granted under the Creative Commons Attribution-ShareAlike 3.0 License, accessed at wikipedia.com.]



PRINCE WILLIAM WILDFLOWER SOCIETY
 A Chapter of the Virginia Native Plant Society
 P.O. Box 83, Manassas, Virginia, 20108-0083

Next Meeting: Monday, November 18, 2013, 7:30 p.m.

"Ferns in the Natural Landscape," with Carl Taylor

Bethel Lutheran Church, 8712 Plantation Lane, Manassas, Virginia 20110