



WILD NEWS

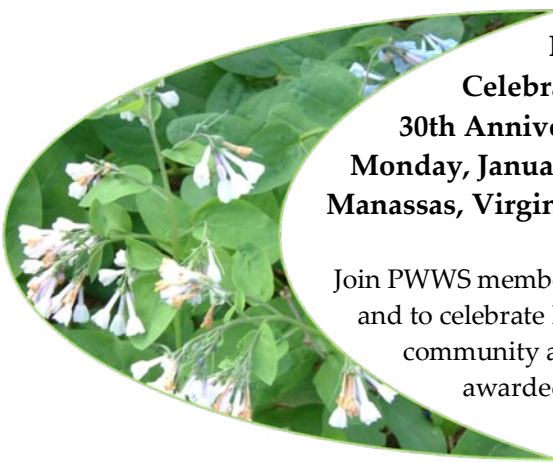
Prince William Wildflower Society

A Chapter of the Virginia Native Plant Society

Web site: www.pwws.vnps.org

Number 2013-01

January-February 2013



Prince William Wildflower Society

Celebrates 30 Years of Advocating for Native Plants: 1983-2013

30th Anniversary Celebration & Member Slideshow Program

Monday, January 21, 7:30 p.m., Bethel Evangelical Lutheran Church

Manassas, Virginia 20110

Join PWWS members and friends to view beautiful photos of interesting plants, places, and more and to celebrate Prince William Wildflower Society's 30 years of caring about native plants in our community and statewide. All are welcome. Refreshments will be served and doorprizes awarded. Our meetings are free and open to the public, so bring a friend or two!

If you are interested in participating in the program, **please contact PWWS Program Chair Helen Walter at helenwalt43@verizon.net** or PWWS President

Nancy Vehrs at nvehrs1@yahoo.net. Number of slides/time allowed will be limited depending on number of participants. Please plan to limit your photo presentation to about 15 minutes. Equipment will be provided.

January 8, 2013: Prince William County officially commends PWWS on the occasion of its 30th anniversary! See our web site home page (<http://pwws.vnps.org>) for the link to the commendation.

President's Column, January 2013

Happy New Year to all! The holidays are officially over, but I feel like I am extending the season by playing Santa Claus this month. The *Flora of Virginia* is now in hand, and PWWS is presenting copies to a number of local entities. A group of us appeared at the annual meeting of the Master Gardeners of Prince William to present copy to our local Extension Office. "We are looking forward to using the *Flora of Virginia* from the Prince William Wildflower Society!" exclaimed Extension Agent Paige Thacker on Facebook afterward. Other local recipients include our regional and community libraries, the Prince William campus of George Mason University, as well as high schools with a science or ecology focus. PWWS Botany Chair and retired NVCC professor Marion Lobstein generously donated copies to all campuses of Northern Virginia Community College.



PWWS has also achieved a milestone in celebrating its 30th anniversary. The Prince William Board of County Supervisors presented a PWWS contingent with a commemorative proclamation at an official meeting to mark this achievement. Elsewhere in this newsletter, our founder Nancy Arrington explains our origin. We will continue our celebration at our meeting on January 21 so please join us.

While our gardens sleep this winter, don't let that keep you indoors! Our natural landscape shows off its lovely bones this time of year. Look at the graceful silhouettes of our native trees and discover the wonder of a quiet forest when you hear only birds and squirrels pecking on trees or rustling in the underbrush. The frenzied activity of spring will be with us before we know it. [Photos: PWWS members with PWC Board of Supervisors, courtesy of Kim Hosen; Bluebell, courtesy of Deanna High]

~Nancy

"PWWS History: The Early Years"

By Nancy Arrington

This year we are celebrating the 30th anniversary of the organization of our chapter; this article covers the first half of those years. Prince William Wildflower Society (PWWS) became a chapter of the Virginia Wildflower Preservation Society (VWPS, the name was later changed to Virginia Native Plant Society, VNPS) on January 10, 1983, and we celebrate that as our charter date. However, we had existed as PWWS for almost a year prior to that.

A small group of wildflower enthusiasts met March 20, 1982, to explore the possibility of forming a local organization. We met in May to elect temporary officers. Simultaneously, a group in Fairfax County, led by Mary Painter, was forming the Virginia Wildflower Preservation Society, which became the state organization. The Fairfax group then named itself the Potowmack Chapter and became the first VWPS chapter. Ours was the second.

In the early '80s residential and commercial development in Northern Virginia was proceeding at an alarming pace. Concern for the destruction of natural habitats was one reason both groups became organized and plant rescue was an important activity. Elaine Haug and Marie Davis led many rescues for our chapter during the early years. Plant propagation and seed exchanges were also a focus during that time.

As I look back through issues of *Wild News* (I was editor from June 1982 until January 1998, when Nancy Vehrs



Marion Blois (Lobstein)

took over) I am awed by the creativity and enthusiasm of our group. One of our first tasks was to choose a wildflower logo. We held a contest over several months and chose Virginia bluebell as our chapter logo. In addition to our bimonthly membership meetings, we had numerous field trips and participated in local and state activities. Jean Chitren, who has since moved away, was one of our most enthusiastic early members.

He led clean-up efforts and many plant walks at Conway Robinson Memorial Forest near Gainesville. Marie Davis planted and maintained a wildflower garden at Prince William Forest Park. Marion Lobstein and Helen Walter worked to preserve the meadows at Manassas National Battlefield Park. Elaine Haug led plant surveys at Leesylvania and Locust Shade Parks and worked with Dr. Ted Bradley to collect plants for the herbarium at George Mason University and to update the *Atlas of the Virginia Flora*.

In 1983, Nicky Staunton organized our first educational display at the Prince William County Fair, a tradition that continued with other leaders through 1995. Subjects included wildflower identification, medicinal plants, hedgerows, meadows, natural lawns, conservation for wildflower gardeners, and plants to attract butterflies.

Our 1992 display, designed by Ken Bass (another active member who since has moved away), featured wetland plants and contained a small garden pond. Nicky also assembled an educational display for our chapter that was used at many events.

We had a wonderful diversity of subjects for our monthly membership meetings including presentations on wildflower photography, natural plant dyes, species iris, mushrooms, native plants used by American Indians, and wildflowers for rock gardens. A Denali

National Park naturalist, who spent winters in Northern Virginia, gave a slide show on the park's wildflowers. Notable speakers were Cole Burrell, author and



PWWS members check out Clammy Cuphea, inset

landscape designer; Larry Morse (recently deceased), staff botanist at the Nature Conservancy; Faith Campbell of the Natural Resources Defense Council; Chris Sacchi, curator of the Virginia State Arboretum; and Sharon Morris-Kincheloe, an acclaimed local wildflower artist. Marion Lobstein showed slides from her trip to Ireland at our first member slide show in January 1987. She and other members including Marie Davis, Elaine Haug, Nicky Staunton, and I developed slide shows for other groups.

We started a chapter library because there were very few wildflower-related books in the local libraries and no Borders, Barnes & Noble, and amazon.com. The library became so large that it took two people to haul it to meetings. Eventually the books were sold or given away. Another enthusiastic project was a craft sale before each November meeting in which members and friends could sell their wares. This practice lasted until 1990.

Our chapter produced several publications including three plant checklists that Marion Lobstein compiled (and Marie Davis typed). Elaine Haug compiled checklists of county plants that had been documented and ones that were yet to be discovered. I wrote brochures for woodland and butterfly gardens. Nicky Staunton's drawings illustrated all these plus the plant articles Marion and I wrote for *Wild News*. We also printed and sold a series of note cards with Nicky's wildflower drawings.

Early enthusiasm was at work during our first plant sale held in May 1983, organized by Marie Davis and Joyce Andrew, and held in conjunction with Manassas Mall's Spring Bazaar over three days. The following Saturday we continued the sale at Hillendale Firehouse in Dale City. Needless to say, we did not continue with that schedule, but we have had the sale every year and it currently is a three-hour event. Chairs have been Roxetta Wyer (still a member and living in the state of Washington), Marie Davis, Nancy Vehrs and myself. Our garden tours began on a small scale with Marie Davis's Sudley garden in 1986. However, youthful enthusiasm took over the next year, and we had a two-day tour of three gardens. We've had the tour (now a

Sunday afternoon event) every spring with the exception of one year. Marie Davis and Helen Walter chaired the tour in the early years.

Elaine Haug and I were the organizers of our chapter. I was president for the first two years and she was the second president. Subsequent presidents were Nicky Staunton, Alden Bradford, Claudia Thompson-Deahl, Nancy Vehrs, and Helen Walter, all still members of our chapter. Others who served as officers include Marie Davis, Jeanne Endrikat, Diane Flaherty, Frances Louer, Sandi Mueller (now Picarillo), Martha Slover, and Roxetta Wyer, all also still chapter members. Current members who were active during our early years include Jeanne Fowler, Nancy Herwig, Tracy Johnson, Joanne Krumviede (long-time hospitality chair), and Ed Milhous.

In the early years of our chapter, gardening and landscaping with native plants was a new concept, and spreading that word was part of our mission. In the late 1980s, emphasis was on habitat preservation, and in the early 1990s invasive exotic plants

became the hot topic. How times have changed! Now all three concepts are championed by conservation organizations, nurseries, garden writers, home gardeners, and the general public. I am grateful to have been part of that effort along with my fellow PWWS members mentioned here and other members who also contributed creativity, enthusiasm, and a lot of hard work. Thanks to all of you. *—Nancy Arrington*

[Photos of early PWWS activities courtesy of Nicky Staunton]

**Prince William Wildflower Society
Membership Meeting
Monday, November 19, 2012
Bethel Lutheran Church**

President Nancy Vehrs called the meeting to order at 7:35 p.m. and thanked Rose Breece, Nancy Arrington and Janet Wheatcraft for the refreshments.

Nancy V. introduced Jeff Overton from the Chesapeake Bay Foundation, who spoke on the CBF's ongoing work in restoring the Bay to healthy levels.



The Foundation has established a scoring system to document the health of the Bay, and Captain John Smith's pristine Bay of 1607 was given a theoretical score of 100, based on three categories—pollution, habitat, and fisheries. In the *State of the Bay* report from 2010, the Foundation gave the Chesapeake Bay a score of 31. A score of 40 would remove it from the Impaired level, and with a score of 70, it would be considered a Saved bay. In the early 1980s the lowest score was a 23, and in 2008 it was 28. So progress is being made, as Jeff pointed out. In Virginia the blue crab population increased 10 fold in the last 10 years, and underwater grasses (hiding places for crabs and other animals) in the northern part of the Bay, have increased due to less pollution in the water.



Jeff Overton speaks with attendee

But the Bay is dangerously out of balance, and as Jeff emphasized, "The Bay economy depends on clean water." Jeff encouraged us to please write to our legislators in support of a healthier Bay, which drains six states and the District of Columbia, home to 17 million people. The Environmental Protection Agency approves the plans made by the states to reduce stormwater runoff and pollution, increase underwater grasses, and increase crabs, oysters, and fish. Now plans are law, and consequences for not meeting goals can include withholding federal funds. For more information please go to www.cbef.org/getinvolved, and read "10 Things You Can Do to Save the Bay."

Nancy presented Jeff a check from PWWS for the Chesapeake Bay Foundation and thanked him for his presentation. [A January 3, 2013 article in the *Washington Post* announced that the Chesapeake Bay Foundation gave the Bay a score of 32 in the 2012 *State of the Bay* report.]

Announcements: Marion Lobstien will present workshops on the new nomenclature of plants found in the *Flora of Virginia* at Blandy Experimental Farm in the Spring.

Charles Smith reported on Dove's Landing, upstream from Lake Jackson. At a March 21, 2011 meeting of citizens at Prince William County's McCoart Government Center, there was support for opening public lands that have been closed to the public. Mike Kane, Conservation Officer, Piedmont Environmental Council spoke at the 2011 meeting and suggested that each site make a site plan, and citizen advocates and volunteer stewardship would be needed. Charles was asked to assess Dove's Landing, owned by Prince William County. He found nice pockets of land for public use, but soil disturbance from human activities has affected the overall health. It is buffered by undeveloped areas, but Charles thinks it needs a long-term deer control plan. The stream banks have recent sediment deposits, detrimental to the growth of plants in the riparian areas along the stream. Dove's Landing will need further study, but hopefully it can someday be opened for

use by the citizens of Prince William County.

Dates to Remember:

Saturday, March 16. Annual VNPS Workshop, University of Richmond, on the subject of Piedmont Plants. Chris Ludwig, a *Flora of Virginia* co-author, will be one of four presenters.

Saturday, April 7. PW Conservation Alliance Bluebell Festival-Merrimac Farm

First week of April. VNPS field trip to Great Smokey Mountains.

Early Spring. Chapter field trip to North Carolina native plant gardens is being planned.

Sunday, April 28. PWWS Garden tour. Carol Thompson and Mary Lou Chariton of Woodbridge have agreed to have their gardens on the tour. Both have had their gardens on the tour in the past. If you live in the Woodbridge area and would be willing to also have your garden on the tour, please call Nancy Vehrs (703-368-2898) or Nancy Arrington (703-368-8431).

Monday, Jan. 21. PWWS membership meeting at Bethel Lutheran Church. Please tell Program Chair Helen Walter if you would be willing to share some photos you have taken of wildflowers or scenes from local areas or from your travels.

Saturday, May 11. PWWS Plant Sale at Bethel Lutheran Church, 9 a.m. to Noon.

Doorprizes: Helen Walter-pottery soap bowl, Rose Breece, *The Well-Tended Perennial Garden*; Janet Wheatcraft, *Where the Wild Things Were*; an unrecorded guest, *Plant Propagation*.

In attendance: Jeff Overton-guest speaker, Nancy Arrington, Carol Thompson, Tamie Boone, Helen Rawls, Helen Walter, Deanna and Jack High, Joyce and Mike Wenger, Rose Breece, Janet Wheatcraft, Maggie Hart, Harry Glasgow, Diane Flaherty, Suzy Stasulis, Charles Smith, Nancy Vehrs, Brian McDougal, Jeanne Endricat, Jeanne Fowler, Bryan Butenhoff and a guest, Karen Waltman.

Respectively submitted, Karen Waltman, PWWS Secretary

UPCOMING EVENTS

January

Saturday, January 19, 10 am to 2 pm., Community Service - Merrimac Farm Work Day, Merrimac Farm, Nokesville, Va.

Please join us at the Stone House at Merrimac Farm to participate in a National Day of Service and help improve an important Prince William natural area. Depending on numbers and the weather, we'll be working on three areas: Stone House, Wildlife Garden, and French family cemetery. Bring the kids, there's plenty to do for everyone. If you have cleaning supplies, shovels, and clippers to share, we appreciate the extras. Lunch is provided. Questions? Contact us at

alliance@pwconserve.org or (703) 499-4954. Registration in advance is appreciated but not required.

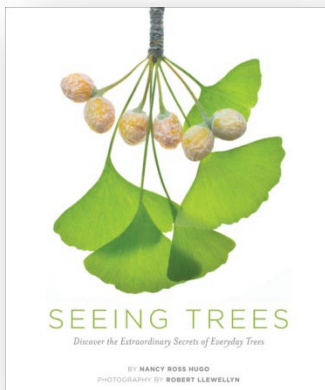
Monday, January 21, 7:30 p.m., Bethel Lutheran Church, Manassas. PWWS annual member slideshow and 30th anniversary celebration. See p. 1 above for details.

Thursday, January 24, 6:30 p.m. Join members of the PWWS board in presenting 5 copies of the *Flora of Virginia* to Prince William Public Library System at the Library Board of Trustees Meeting, Chinn Park Regional Library, Library Administrative Support Center in lower level, Woodbridge, Va.

Saturday, January 26, 6 pm (dinner); program begins at 7:30 pm. PechaKucha Nature Night, sponsored by the Prince William Conservation Alliance and Lake Ridge Parks & Recreation Association. Where: The Electric Palm, 12745 Sea Ray Lane, Woodbridge, Va. Open to the public & free of charge, buy your own food & drinks. PechaKucha Night is an informal community gathering where creative people get together and share their ideas, works, experiences and thoughts in a standardized 20x20 format. See <http://pwconserve.org> for more information on the program.

Sunday, January 27, 8:00 am (last Sunday of every month). Bird Walk at Merrimac Farm. We'll look for birds and other wildlife, covering a variety of habitats, including open fields and woodland edges. Everyone is welcome. Dress for the weather, bring binoculars and cameras. More info and RSVP (appreciated not required) to PWCA, (703) 499-4954 or alliance@pwconserve.org.

February



Sunday, February 3, 2013, 2:00 p.m., at Chinn Park Regional Library. Prince William Wildflower Society **joins the Prince William Master Gardeners** in inviting you to a presentation by Nancy Ross Hugo **on Seeing Trees**. This event is free of charge, and the general public is invited. Refreshments will be served, and Ms. Hugo will sell and sign copies of her book.

Thursday, February 21, 7:45 am to 5:30 pm, Piedmont Landscape Association Seminar, Paramount Theater, Charlottesville, Va. A day-long seminar bringing gardening enthusiasts and landscape professionals together. One of the co-sponsors is the Jefferson Chapter of VNPS. Speakers include Cole Burrell, founding VNPS member, designer, author, and

lecturer, speaking on "Native Plants and Ecological Designs." Early Bird Registration in effect now until January 18. See <http://piedmont-landscape.org/seminar.html> for registration.

March

Saturday, March 16, 9:15 a.m. to 3:15 p.m., University of Richmond Gottschalk Auditorium, VNPS Winter Workshop, "Virginia's Piedmont." Speakers are **Chris Ludwig**, chief biologist with the Virginia DCR's Division of Natural Heritage and Co-Author of the *Flora of Virginia* Project, and **Tim Spira**, professor, biological sciences, Clemson University; author of *Wildflowers and Plant Communities of the Southern Appalachian Mountains and Piedmont. A Naturalist's Guide to the Carolinas, Virginia, Tennessee, and Georgia*. Watch for your brochure in the mail or check vnps.org in late January.

Marion Lobstein to Offer Workshop on Using the Flora of Virginia, Consecutive Thursdays beginning March 21 to April 11.

The Piedmont and Prince William Wildflower Society Chapters of VNPS and the Friends of the State Arboretum (FOSA) are co-sponsoring a workshop series on using the newly published *Flora of Virginia*. The workshop will be taught by Marion Lobstein, retired professor of biology at NVCC, former adjunct professor at Blandy Experimental Farm, and life member of both VNPS and FOSA. The focus of the workshop series is to utilize experiences in the lab and in field sessions to help participants learn how to use dichotomous keys in the new *Flora of Virginia*. Participants will learn how to recognize plant families in the field in order to better understand changes in plant taxonomy reflected in the new *Flora* relative to older resources used in plant identification.

The workshop series will be conducted from 9:00 a.m. to 12:30 p.m. on consecutive **Thursdays from March 21 to April 11, 2013**. Participants are encouraged to attend all four of these sessions. (If participants need to miss a session to participate in a VNPS fieldtrip, Marion will work with them to makeup the missed information.)

Requirements for registration are: some background in basic botany and plant taxonomy (classification), an interest in plant identification, and basic knowledge of digital resources and internet communication. Some knowledge of use of dichotomous keys to identify plants and use of a dissecting microscope is preferred but not required. **Size of the class is limited to 15**, so please register early. You may contact Marion at mblobstein@earthlink.net or (703) 622-0676 if you have questions regarding the workshop series. **Registration for the workshops is \$40 for VNPS/FOSA members and \$50 for non-members.** Required text and supplies for class are the *Flora of Virginia*, a 10X ocular (magnifier), a small notebook, and colored pencils. A suggested additional resource is *Plant Identification Terminology: An Illustrated Glossary* by Harris and Harris (some copies will be available on site).

Clubmosses: An Ancient and Interesting Group of “Fern Allies”

By Marion Lobstein

In the midst of winter in northern Virginia, it is indeed a joy to see green plants. Many of our ferns and fern “allies” are evergreen, adding color to our woods in the late fall and winter months. Fern allies include the horsetails, clubmosses, spikemosses, and quillworts. In this article, we will consider the clubmosses or “lycopodiums.”

The common name “clubmoss” is based on the premise that at first glance these plants resemble mosses (mosses are bryophytes and thus, non-vascular plants), and because they often have club-like structures that produce spores. Clubmosses are



all perennial evergreen plants with numerous small leaves. Individual plants in many species are connected by horizontal stems that run above ground (runners) or below ground (rhizomes); the actual roots are rather shallow. None of the clubmosses are flowering plants, but all are vascular plants with an interesting strategy of releasing spores at a life stage that few people see—outside of a science lab.

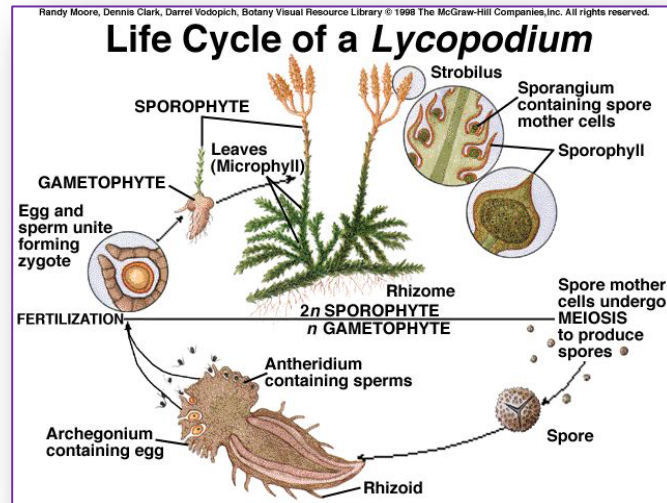
Worldwide, there are 10 to 15 genera and 350 to 400 species of clubmosses. In the northern Virginia counties extending to the Blue Ridge Mountains, there are 12 species of clubmosses or “lycopodiums.” In the past, these were classified in a single genus

Lycopodium (lyco, wolf; podium, foot) but in the new *Flora of Virginia* and other modern sources, these twelve species are now placed in six genera, as summarized in the chart below:

Species of clubmoss	Synonyms	Common names
<i>Dendrolycopodium dendroideum</i>	<i>Lycopodium obscurum</i> var. <i>dendroideum</i> ; <i>Lycopodium dendroideum</i>	Tree Ground-pine
<i>Dendrolycopodium hickeyi</i>	<i>Lycopodium obscurum</i> var. <i>hickeyi</i>	Hickey’s tree-clubmoss
<i>Dendrolycopodium obscurum</i>	<i>Lycopodium obscurum</i>	Common tree-clubmoss
<i>Diphasiastrum digitatum</i>	<i>Lycopodium digitatum</i> ; <i>Lycopodium flabelliforme</i>	Common running-cedar/pine
<i>Diphasiastrum tristachyum</i>	<i>Lycopodium tristachyum</i>	Ground-cedar, blue running-cedar
<i>Huperzia appressa</i>	<i>Lycopodium selago</i>	Appalachian fir clubmoss
<i>Huperzia lucidula</i>	<i>Lycopodium lucidulum</i>	Shining clubmoss or shining firmoss
<i>Lycopodiella alopecuroides</i>	<i>Lycopodium alopecuroides</i>	Foxtail clubmoss
<i>Lycopodiella appressa</i>	<i>Lycopodium appressa</i>	Southern bog clubmoss
<i>Lycopodiella inundata</i>	<i>Lycopodium inundatum</i>	Northern bog clubmoss
<i>Lycopodium clavatum</i>	<i>Lycopodium clavatum</i>	Running clubmoss or staghorn clubmoss
<i>Spinulum annotinum</i>	<i>Lycopodium annotinum</i>	Stiff/bristly clubmoss

Clubmosses or Lycophytes evolved some 410 million years ago as one of the earliest groups of vascular plants (plants with special tissues xylem and phloem to conduct water and food, respectively, in this group of plants). Some 300-plus million years ago, tree forms of both clubmosses and horsetails along with ferns dominated the great coal swamps of the Carboniferous geological period. Tree forms of tree clubmosses that once reached heights of 100 feet have left an excellent fossil record of the woody tissue of tree forms.

Clubmosses, along with horsetails and ferns, have a primitive reproductive strategy. In many species of club mosses, club-like projections or “candles” held above the small leaved, conifer-like stems are known as strobili (strobilus, singular form) and have structures called sporangia (sporangium). In other species, the sporangia are formed on certain leaves of the plant. Each sporangium produces numerous minute spores (lycopodium powder), which will germinate to form a small, thin leafy stage of the plant’s life cycle known as the gametophyte (the stage that produces gametes, eggs, and sperm). In many species of clubmosses, the gametophyte stage develops underground, and symbiotic fungi provide the nutrition for this stage of the plant, which may persist for up to seven years in a dormant form and take up to 15 years to complete the sexual reproductive stage. In other species, the gametophyte stage may be photosynthetic and develop above ground. This stage of the plant life cycle has both structures—antheridia, producing flagellated sperm; and archegonia, producing eggs. The sperm swim through a film of water to fertilize the eggs. Fertilized eggs develop into multicellular embryos that form the sporophyte (spore-producing stage of plant)—the stage of the plant that we usually see. Many species of clubmosses also reproduce asexually by underground horizontal stems (rhizomes or runners) or by special structures called gemmae (gemma) that are groups of cells on the tips of the stems that detach and form new plants.



Human uses of club mosses are numerous for medicinal, dyeing, pyrotechnic, and decorative purposes. Club moss spores and teas from plant leaves have been used since ancient times in both American Indian and European cultures. Medicinal uses included treating urinary tract problems, diarrhea and other digestive tract problems, relieving headaches and skin ailments, and inducing labor in pregnancy. In some cultures, the spores have been purported to be an aphrodisiac. The spores repel water and have been used as a powder on skin rashes and even on baby bottoms, and to treat wounds.

Clubmoss spores once were used by pharmacists in the coating of pills. In both the Americas and Europe, clubmoss plants were used in dyeing fabrics and other items. The plants and/or spores can be used directly or as a mordant (substance to lock in other dyes) in the dyeing process. Spores are also very flammable due to their high oil content. They were used in Indian cultures for ceremonial purposes, when medicine men tossed the spores into a fire for a flash of light. The spores ignite with a bright flash of light and were used in flash photography, in stage productions, in fireworks (up until the 1950s), and in chemistry labs. At one time, club moss plants commonly were used for Christmas decorations. Species in which individual plants are connected by rhizomes or runners were ripped from the ground and used as decorative ropes of greenery. Since clubmosses are slow growing plants, many groups (including VNPS) in the 1990s waged campaigns to discourage this practice.

As you walk in our local woods during the winter months, keep an eye out for this fascinating and attractive group of plants. If you know someone who still uses clubmoss ropes for Christmas decorations, please remind them of the delicate and fascinating life cycle and slow growth of these important plants of the forest floor. [See the web version of this article at pwww.vnps.org under “Botanizing with Marion” for additional resources on clubmosses and fern allies.]

Taxonomy of Clubmosses in Lycophyaceae

By Marion Lobstein

In both American Indian and European cultures, uses of clubmosses dates back to ancient times. Early European botanists and taxonomists, such as John Ray in the 1600s and Carlus Linnaeus in the 1700s, gave clubmosses the name of *Lycopodium*. Linnaeus used this genus in his *Species Plantarum* (1753), but still classified clubmosses with Muscus or true mosses. In the 1762 edition of *Flora Virginica*, John Clayton and Johann Gronovius continued the convention of placing *Lycopodium* species under

Musci. In 1800, Johann Jakob Bernhardt proposed another genus of *Huperzia* for clubmosses that did not have separate club-like strobili (structures bearing the sporangia that produce spores) on the leafy stems.

Lycopodiaceae, the family in which clubmosses are now placed, was proposed by Charles Francois Mirbel in 1802. As more has become known about the life cycles of clubmosses and based on more recent work with DNA, other genera have been proposed for clubmosses. The chart below reflects information on the genera included in the *Flora of Virginia*:

Genus	Origin	Common Name	Named by
Dendrolycopodium	<i>Dendro</i> , meaning tree; <i>lycopodium</i> (see below)	Tree clubmosses	A.Haines 2003
Diphasiastrum	<i>Diphasium</i> , a generic name for clubmosses; <i>-astrum</i> , incomplete resemblance	Running cedar or pine	J. Holub 1975
Huperzia	Named in honor of Johann Huperz, a noted German botanist	Fir mosses	J. Bernhardt 1800
Lycopodiella	<i>-iella</i> , meaning diminutive; <i>lycopodium</i> (see below)	Bog clubmoss	J. Holub 1964
Spinulum	<i>Spina</i> , bristly or spiny	Bristly clubmoss	A. Haines 2003
Lycopodium	<i>Lyco-</i> , meaning wolf; <i>podium</i> foot/claw	Running clubmoss	C. Linnaeus 1753

The dichotomous key to genera of clubmosses in the *Flora of Virginia* uses the vegetative and reproductive structures as well as the growth patterns to sort out these genera. The excellent illustration there will be of use in sorting out the clubmosses in our area. The Flora glossary will help you understand terms used in the keys and genera and species descriptions with which you may not be familiar. [Photo: Clubmoss in snow, Stefan Bloodworth, NPIN image #19032, accessed at www.wildflower.org; Image: Randy Moore, Dennis Clark, and Darrel Vodopich, Botany Image Resources Library, accessed at <http://period5-organisms.wikispaces.com/9.+Club+Mosses>.]



PRINCE WILLIAM WILDFLOWER SOCIETY

A Chapter of the Virginia Native Plant Society

P.O. Box 83, Manassas, Virginia, 20108-0083

Next Meeting: Celebrating 30 Years and PWWS Member Slideshow

Monday, January 21, 2013, 7:30 p.m.

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