

WILD NEWS

MARCH-APRIL 1985

PRINCE WILLIAM WILDFLOWER SOCIETY, A Chapter of the Virginia Wildflower Preservation Society

MARCH MEETING

WILDFLOWER PHOTOGRAPHY SLIDE PROGRAM

MONDAY, MARCH 18 7:30 PM BETHEL CHURCH PLANTATION LN. & SUDLEY RD., MANASSAS

At our March meeting, Leon Nawojchick will show us how to put the colors, shapes and beauty of wildflowers on film. Leon is a naturalist at River Bend Nature Center near Great Falls. His main interests are wildflowers, bird study, and nature photography.

It's a little early to get out and see the wildflowers first-hand, but a perfect time to get out and see them on slides. So get yourself off to a good start this spring by attending Monday's meeting at 7:30 p.m. We'll also have free seeds for those attending.



PLANT SALE

Our plant sale will be Saturday, May 11, 9:00 am till 3:00 p.m. at Bethel Church, Plantation Lane and Sudley Rd., Manassas.

Chairmen Roxetta Wyer and Nancy Arrington need your help in the form of:

1. Plastic pots - 4" up to gallon size
2. Hardy, easily-cultivated wildflowers, ferns, small native shrubs and trees, shared from your yard, not directly rescued from construction sites. These should be potted up 2-3 weeks before the sale.
3. A few hours of your time to help pot plants, post flyers in your area, work at the sale, etc.

If you can help with any of the above or if you have plants but need help getting them potted up, call Roxetta, 361-8615, or Nancy, 368-8431 (H) or 368-9711 (W).

MAY MEETING

Monday, May 20, 7:30 p.m.
Details in next newsletter

WILDFLOWER WEEKEND

Reserve the weekend of April 18-21 for the VWPS's Second Annual Wildflower Weekend. Lectures, slide programs, workshops and walks have been scheduled throughout Northern Virginia. Subjects include wildflower identification, conservation, propagation, species selection for your planting sites, and much more.

The weekend's "guest star" is Hal Bruce, Curator of Plants at Winterthur, Delaware, and author of the classic How to Grow Wildflowers and Wild Shrubs and Trees in Your Own Garden. He will lecture at 7:30 p.m., Saturday, April 20th at the American Horticulture Society's River Farm, Mount Vernon, and lead a walk at the Arboretum's Fern Valley at 10:30 a.m. on Sunday, April 21.

Chapter members will receive a special mailing containing complete details of all weekend events from the VWPS this month. Non-members can:

- a) become a member - quickly! (application in newsletter.) or
- b) write to VWPS-WW, P.O. Box 844, Annandale, Va. 22003, or call 703-573-7747, or 703-273-3324, and ask for the brochure.

Registration is now open at NVCC's Manassas Campus for Regional Flora and Field Identification of Birds. See page 6 for details.



FROM OTHER VWPS CHAPTERS

BLUE RIDGE will co-sponsor the 16th Annual Spring Wildflower Pilgrimage April 26—28, with the Roanoke Valley Science Museum.

The informative and enjoyable program is designed to deepen appreciation of the natural beauty of Southwestern Virginia's Appalachians. For more information, contact the Roanoke Valley Science Museum, Center in the Square, One Market Street, Roanoke, VA 24001, 703-342-5710.

BOOKS FOR SALE

As a service to our members we have the following high-quality paperbacks for sale:

Brooklyn Botanic Garden Handbooks @ 3.00 ea:
Gardening With Wildflowers
Handbook on Ferns

Common Wildflowers of N.Y. State, 25c
Growing Woodland Plants, Clarence & Eleanor
Birdseye, 4.50

How to Know the Wildflowers, Mrs. William Starr
Dana, 6.50

Nature Study Guild's pocket-size identification
booklets @ 1.50 ea:

Fern Finder
Flower Finder
Master Tree Finder
Winter Tree Finder

North Carolina Native Plant Propagation Hand-
book, 5.00

Books will be available at our March meeting, and
at the plant sale.

NATURE TRAIL WORKDAY

We have scheduled a workday at the Nature Trail, NVCC's Manassas Campus, to help get the trail ready for spring walks. Meet Jean Chitren in the front student parking lot at 10 a.m., Saturday, April 13. Bring hand tools, shovels, etc. Call Jean, 221-4489, for details.

SLIDE LIBRARY

Elaine Haug and Nicky Staunton are working on a slide collection for our Chapter. Their first project is a set of slides of the plants on our conservation list. If you have slides of these plants or any other native plants, natural areas, wildflower gardens, etc. that you would allow to be copied, call Elaine at 670-2347, or Nicky, 368-9803 (H), 368-3943 (W).

JOHN CLAYTON will hold it's first Plant and Craft Sale on Saturday, May 18, Heritage Square Shopping Center, Grafton, in the Williamsburg area.

The chapter newsletter, published four times a year is available to members of other chapters for \$3.00 per year. Send check to Newsletter Editor, P. O. Box 864, Gloucester, VA 23061.

POTOWMACK's Spring Plant Sale will be Mother's Day, Sunday, May 12, Green Spring Farm Park, near Annandale.

CHAPTER LIBRARY



Our library is growing nicely, thanks to generous donations by Alice Johnson, Nicky Staunton, Nancy Arrington, Elaine Haug, and Marion Blois in addition to books purchased with chapter funds.

The following books can be borrowed by members at meetings or by calling Nicky Staunton, home 368-9803, work 368-3943.

IDENTIFICATION

How to Recognize Shrubs, Grimm, 1966
How to Recognize Trees, Grimm, 1962
How to Recognize Wild Plants, Grimm, 1968
Trees — Eastern Central U.S.
Wildflowers & Weeds, Courtenay & Zimmerman, 1972
Wildflowers of the United States I North Eastern,
Vols. 1 & 2, Rickett
Wildflowers of the United States II South Eastern,
Rickett

GARDENING & PROPAGATION

Gardening With Wildflowers, Tenenbaum, 1973
Growing Wildflowers, A Gardener's Guide, Sperka, 1984
Handbook of Wildflower Cultivation, Taylor & Hamblin, 1963
Resources on Wildflower Propagation, National Council of
State Garden Clubs, Inc., 1981
Wildflowers & How to Grow Them, Steffek, 1954
Wildflowers for Your Garden, Hull, 1952

CONSERVATION

Rare & Endangered Vascular Plant Species in Virginia,
Porter, 1979
Where Have All The Wildflowers Gone?, Mohlenbrock, 1983

"PICTURE" BOOKS

Eastern Deciduous Forest Wild Plants in Flower, Korling-
Pettis, 1977
Wildflowers of Eastern America, Klimas, 1981

MISCELLANEOUS

Herb Handbook
New Pronouncing Dictionary of Plant Names, 1964

If you have books you'd like to donate to the library or suggestions for books to be added, please let Nicky know.

CALENDAR

Contact phone numbers are given for many events on the calendar, and you should check in advance to be sure the event is still planned as listed here. For items with no number, call Nancy Arrington, 368-8431.

- March 18 — Monday, 7:30 pm, PWWS Membership Meeting, Bethel Church, Sudley Rd. & Plantation Ln., Manassas
- March 25 — Monday, 1:00 pm, "Early Spring Wildflowers", U.S. National Arboretum, 3501 New York Ave., NE, 202-475-4857
- March 28 — Thursday, 7:30 pm, Potowmack Chapter Membership Meeting, Green Spring Farm Park, Annandale. Slide program on "Wildflowers of Washington"
- March 28-30 — Thurs.—Sat. Beekeepers Smart Course, Manassas. Jean Chitren 221-4489
- April 12 — Friday, 10 am, Spring Wildflower Walk, Fern Valley, U.S. National Arboretum, 3501 New York Ave., NE. 202-475-4857
- April 13 — Saturday, 10 am, Workday at NVCC's Manassas Campus Nature Trail. Jean Chitren 221-4489
- April 18 — Thursday, 10-3, Wildflower Workshop, U.S. National Arboretum, 3501 New York Ave., NE. Sponsored by the National Capital Area Federation of Garden Clubs, Inc. Mary Corley 301-340-0148
- April 18-21 — Thurs.-Sun. WILDFLOWER WEEKEND — Watch for special mailing from VWPS
- April 21 — Sunday, 1-3 pm, Spring Wildflower Walk, Potomac Overlook Regional Park, Arlington, 703-528-5406
- April 26-28 — Fri.-Sun., 16th Annual Spring Wildflower Pilgrimage, Roanoke, 703-342-5710
- April 28 — Sunday, 1-4 pm, "Looking Up and Down", a walk for bird and wildflower enthusiasts, Red Rock Wilderness Overlook Regional Park, Leesburg, 703-528-5406
- May 1 & 5 — Wed. & Sun., 1:30 pm, Wildflower Tours & Demonstrations, U. S. National Arboretum, 3501 New York Ave., NE, 202-475-4857
- May 4 — Saturday, 10 am, Wildflower Walk & Tour of PWWS's Wildflower Garden, Prince William Forest Park, Triangle, meet at the Nature Center, 221-2104
- May 7 — Tuesday, 7 pm, "Planting Wildflower Seedlings in Your Garden", Green Spring Farm Park, Annandale, 703-642-5173
- May 10-12 — Fri.-Sun., Wintergreen Spring Wildflower Symposium. 804-325-2200 x859 Paxon Collins, or Sue Ellen Lee x388
- May 11 — Saturday, 9-3, PWWS Plant Sale, Bethel Church, Sudley Rd. & Plantation Ln., Manassas
- May 12 — Sunday, Potowmack Chapter Plant Sale, Green Spring Farm Park, Annandale, Joni Melville 703-339-6109
- May 20 - Monday, 7:30 pm, PWWS Membership Meeting, Bethel Church, Sudley Rd. & Plantation Ln., Manassas
- June 2 — Sunday, 1:30 pm, Wildflower Walk, Conway Robinson Memorial Forest, Rts. 29-211, Gainesville, Jean Chitren 221-4489

Myrmecochory, continued

Portulacaceae (Portulaca)
Claytonia sp. - spring beauty
 Primulaceae (Primrose)
Primula sp. - primrose
 Runcululaceae (Buttercup)
Hepatica sp. - liver leaf
Anemone sp. - meadow rues
 Scrophulariaceae (Figwort)
Pedicularis sp. - louseworts
Veronica sp. - speedwells
 Solonaceae (Tomato)
Datura sp. - Jimsonweed

Violaceae (Violet)
Viola sp. - violets

Before I began working on this myrmecochory project in 1983, I had little appreciation for ants. I now view ants in a much more positive manner. These insects are essential for the dispersal of many of our most beautiful spring wildflowers.

If you would like a bibliography of references on myrmecochory and/or a more detailed list of myrmecochorous species, please send a stamped, self-addressed envelope to Marion C. Blois, NVCC-Manassas Campus, Manassas, Va. 22110.

MYRMECOCHORY

SEED DISPERSAL BY ANTS

MARION BLOIS
Ass't. Professor of Biology, NVCC

Myrmecochory is the phenomenon of seed dispersal by ants. It has been estimated that perhaps up to 30% of our spring blooming species of deciduous woods wildflowers have their seeds dispersed by ants. In a literature survey of 60 references on the phenomenon, approximately 90 species in 24 families are myrmecochorous. These run the gamut from bloodroot to hepatica to spring beauty to most violet species (a list follows at the end of this article).

Why would an ant be interested in dispersing a seed rather than eating the whole seed? What are the advantages to these plants in having their seeds dispersed in a seemingly unorthodox manner? The seeds that are dispersed by ants have a fleshy appendage attached on the outside of an unusually hard seed coat. This "appendage" is an elaiosome, also referred to as a caruncle in some species (such as bloodroot). The elaiosome is a fresh fat-filled body that may also contain sugar. The ants are thought to be attracted to the seeds by volatile chemicals known as pheromones which are given off by the elaiosome. The pheromone puts the ants into a frenzy of activity. Within minutes after placing seeds with elaiosomes or just the elaiosomes in an ant colony, the ants swarm to the seeds and begin carrying them away. In a laboratory situation, ants have transported seeds up to six feet. Comparable distances of dispersal have been observed in field settings.

After the seeds are moved to another site, usually to or near the ant nest, the elaiosome is chewed off by the ants and the rest of the seed is discarded. The ants obtain a rich source of fats and perhaps other nutrients from the elaiosome. Meanwhile the seed has been removed from competition with the parent plants (competition for available nutrients, water, and light is a constant problem for deciduous woods perennials). Also, ant dispersal of these seeds provides escape from predation by rodents and other seed-eating animals. Furthermore, the soil around an ant's nest is usually very rich, or perhaps the ant will drop the seed on or near a rotting log where it will take hold and grow well.

There is evidence that indicates the seeds with their elaiosomes removed may germinate sooner than those with intact elaiosomes. In my experiments with bloodroot seeds at George Mason University, we removed elaiosomes from one set of

seeds but left them on another set. We took these seeds through seasonal changes of temperature and light in an incubator. In the seeds not exposed to light changes, there was 30% germination in the seeds with the elaiosomes removed, but no germination in those seeds with intact elaiosomes. In the set exposed to daily light changes, there was 3% germination in seeds without elaiosomes and 1% in seeds with elaiosomes. These results are preliminary and the project will be expanded this spring to include work with seeds of other species of myrmecochorous plants.

This phenomenon was first reported in 1897 by Charles Robertson, and interest has continued, especially in the last 15 years. Studies have also been done in tropical and desert areas. A summary of families and genera in our area include:

Amaryllidaceae (Amaryllis)

Narcissus sp.

Galanthus sp. - snowdrops

Cyperaceae (Sedges)

Carex sp.

Iridaceae (Iris)

Iris sp.

Juncaceae (Rushes)

Luzula sp.

Lilaceae (Lily)

Erythronium sp. - troutlilies

Trillium sp.

Poaceae

Melica sp. - medic grass

Aristolochiaceae (Wild Ginger)

Asarum sp.

Asteraceae (Aster)

Centaurea sp. - knapweeds

Carduus sp. - thistles

Chrysogononum sp. - green and gold

Berberidaceae (Barberry)

Jeffersonia diphyllum - twin leaf

Caryophyllaceae (Pink)

Silene sp.

Ericaceae (Heath)

Epigaea repens - trailing arbutus

Euphorbaceae (Euphorb)

Euphorbia sp.

Fabaceae

Cytisus scoparium - scotch broom

Fumariaceae

Dicentra sp. - Dutchman's breeches, bleeding heart

Corydalis sp.

Paveraceae (Poppy)

Sanguinaria canadensis - bloodroot

Polygalaceae (Milkwort)

Polygala sp. - milkwort

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FERN VALLEY CELEBRATES



As part of Fern Valley's 25th anniversary celebration, the U.S. National Arboretum, 3501 New York Ave, NE, Washington, D.C. 20002, will sponsor tours and demonstrations on the art of growing and selecting wildflowers on Wednesday May 1 and Sunday May 5.

Elaine Haug, PWWS president, will lead a walk through Fern Valley each day. Other VWPS members will discuss growing wildflowers and ferns, and wildflower propagation.

For more information call the Arboretum at 202-475-4857, or write to the above address. You can ask to be put on the Arboretum's mailing list for announcements of monthly events.

WINTER WORKSHOP A WINNER

The Workshop, brainchild of Elaine Haug and hosted by our Chapter, was attended by representatives of John Clayton, Piedmont, Potowmack and Prince William Chapters and the soon to be established Richmond area chapter.

The workshop presented an opportunity for chapter and state representatives to share experiences and program materials relating to education, fund-raising, and general running of chapters.

Elaine Haug served as Workshop Chairman, Marion Blois was Facility Co-ordinator, and Nancy Gray served as hostess for the day. Also attending from our Chapter were Marie Davis, Nicky Staunton and Nancy Arrington.

COUNT THE BLOSSOMS

According to Marie Davis, at least 15 species will be blooming in our garden at Prince William Forest Park from April 1 through the fall.

On Saturday, May 4, we will have a walk at the Park which will begin at the Nature Center with a tour of the garden (see calendar).

Marie will need help watering the garden again this year — call her if you can help, 361-1626. Last year's watering (and Marie's initial soil preparation and gardening expertise) has really paid off — the plants have grown so well that most need to be divided. One cardinal flower, planted in the fall of 1983, has been divided into 28 plants! Marie plans to furnish 200 plants for the plant sale from the garden. Stop by to see the garden and get some ideas for plants for your own wildflower garden.

BEEKEEPER'S SMART COURSE

The Beekeepers Association of Prince William County is sponsoring a Short Course in Beekeeping on March 28 and 29, 7:30 — 9:30 p.m. each evening, and on Saturday, March 30, 9:00 a.m. — 3:00 p.m. Classes will be held at the Manassas Campus of NVCC. Tuition is \$15 per family. Contact Jean Chitren, 368-9711 (W), 221-4489 (H).

"APPROVED" NURSERIES

If you plan to order plants from mail-order wildflower nurseries, check recent issues of the VWPS Bulletin for nurseries which propagate their plants, or call Nancy Arrington for a list.

Prince William Wildflower Society
A CHAPTER OF THE
Virginia Wildflower Preservation Society

MEMBERSHIP APPLICATION

☐ New membership ☐ Renewal

Name(s) _____ Date _____

Address _____

Phone(s): Home (____) _____ Work (____) _____

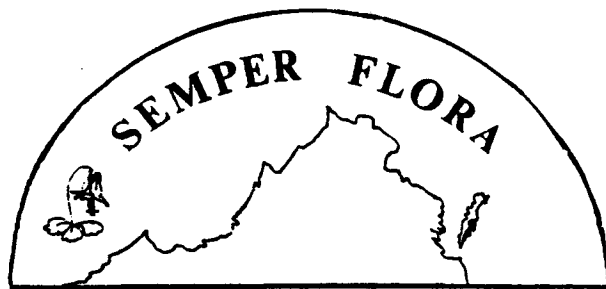
Membership and fiscal year is Nov. 1 — Oct. 31 and dues are renewable by Oct. 15 **each year**. Dues submitted during September and October will apply toward membership for the coming full membership & fiscal year.

Please check membership category:

___ Student/Senior \$5.00 ___ Individual \$10.00 ___ Family \$15.00 ___ Patron \$25.00 ___ Associate (groups) \$25.00
___ Supporting \$50.00 ___ Sustaining \$100.00 ___ Corporate Sponsor \$125.00 ___ Life \$250.00

Gift Membership. Your Name: _____

Make check payable to V.W.P.S. and mail to: Roxetta Wyer, Membership Chairman,
9125 Peabody St., Manassas, Va. 22110



VIRGINIENSIS

Virginia Wildflower Preservation Society

T-SHIRTS

Light blue with dark blue print.

Men's 50% cotton & 50% polyester in sizes S & M

Men's 100% cotton in sizes S, M, & L

Women's 50% cotton & 50% polyester in sizes
S, M, & L

\$8.50

Order from: Pr. Wm. Wildflower Society
P. O. Box 83
Manassas, Va. 22110

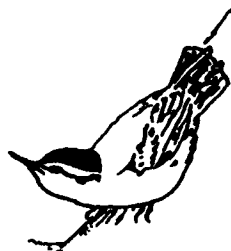
PRINCE WILLIAM WILDFLOWER SOCIETY
A CHAPTER OF THE
Virginia Wildflower Preservation Society
P.O. BOX 83, MANASSAS, VA 22110

SPRING CLASSES AT NVCC

REGIONAL FLORA

Biol. 276, 3 credits

Spring wildflower identification class includes weekly lectures (Mon. 6:30-8:30 p.m.) and weekend field trips, choice of Sat. or Sun. Trip to Roanoke Wildflower Pilgrimage optional. Classes begin April 1st at Chantilly High School. For more info, call Marion Blois, Instructor, at 368-0184, ext. 262.



FIELD I.D. OF BIRDS

Biol.198, 1 credit

Course consists of one lecture, Sat. April 6, 9-11:20 a.m., and Saturday field trips on April 13 & 27, May 11 & 18, and June 1 to local parks. Trips are 7:00 am to 12 noon. For information contact Cathy Gleason, 368-0184, ext 262M

MARCH MEETING

Monday, March 18, 7:30 p.m.

Bethel Church, Manassas