

PRINCE WILLIAM WILDFLOWER SOCIETY, A Chapter of the Virginia Native Plant Society

## Annual Meeting, Picnic & Garden Tour

11:00 A.M., Saturday, September 15, 1990

Home of Frances & Phil Louer, 15800 Palmer Ln., Haymarket

Our Annual Meeting will begin at 11:00 a.m. on Saturday, September 15 with registration for door prizes. Please bring a salad, or vegetable, or main dish for the potluck picnic at 11:30. Beverages, bread, dessert, plates, cups, and utensils will be furnished.

Included in the short business meeting will be the president's report, 1991 budget approval, and election of officers. After the business meeting we will tour the Louers' extensive gardens and natural areas. Children, guests, and prospective members are welcome.

**DIRECTIONS:** North on Rt. 234 (Sudley Rd.) to Rt. 15. Turn left on Rt. 15, then take first right on Rt. 601 (Waterfall Rd.) Pass Mill Creek Rd. on the right and then turn right on Padgett Dr. Turn right on Palmer Ln. House is on the left, No. 15800.

### Special Board Meeting

All incoming and outgoing PWWS board members are urged to attend a joint board meeting on Monday, October 15 at 7:30 p.m. at the home of the Bradfords. This important meeting will wrap up current activities under the present administration and present plans for the new administration as of November 1.

### Thank You to Volunteers

Our display at the Prince William County Fair featuring natural lawns and alternatives to chemical lawn care was designed and prepared by Jenifer Bradford and Claudia Deahl. Nancy Vehrs created a native habitat word search to accompany the display. Helen Walter set up the display, Tracy Johnson dismantled it at the end of the week, and in between, the following members were there to serve as hosts: Sandi Mueller, Nicky Staunton, Jeanne Fowler, Melva Bradford, Jane Sweeney, Susan Myers, Val Neitzey, Frances & Phil Louer, Sandra Sheriff, Jeanne Endrikat, Helen Walter, Jan Ball, Ken Bass, Helen Winn, Sharon Kirkpatrick, Marie Davis, Nancy Vehrs, Janet Vest, and Tracy Johnson.

Thanks to all the above and especially to Jeanne Endrikat who coordinated the staffing.

### Door Prizes Needed

Just a reminder that members attending our annual meeting and potluck picnic at the Louers on September 15 are asked to contribute a small door prize (wildflower related, if possible). The more contributions we receive the more fun we have and more members get to take home a memento of the day. Many of you volunteered to bring something at our last meeting.

### Thank You to Donors

On behalf of the Virginia Native Plant Society and our own chapter, Jenifer Bradford would like to thank the following donors for their generous contributions to the Gala Auction in Middleberg at the VNPS annual meeting to be held on September 22: Nancy Arrington, Alden & Jenifer Bradford, Marion Lobstein, Frances & Phil Louer, Nicky Staunton, Helen Walter, and White Oak Associates.

### NEXT MEETING

Our November meeting will be on the usual third Monday, Nov. 19th, 7:30 p.m. at Bethel Lutheran Church, Manassas. Details in next newsletter.

## Proposed 1991 Budget

Nov. 1, 1990 – Oct. 31, 1991

### RECEIPTS:

Dues	\$ 450
Plant Sale	1,250
Book Sales	50
Checklist Sales	300
Miscellaneous	100
<b>TOTAL</b>	<b>\$2,150</b>

### DISBURSEMENTS:

Postage	\$ 300
Printing	500
Programs/Meeting Exp.	300
Saleable Books	100
Plant Sale Expenses	100
Taxes	100
Education	550
Wildflower Week	50
Registry Program	50
Miscellaneous	100
<b>TOTAL</b>	<b>\$2,150</b>

### FROM THE PRESIDENT, continued

I want to especially thank my board members for their advice, help, and encouragement which has helped me through these past two years. I also thank the many chapter members who have volunteered their time and efforts in so many ways. Another thank you goes to all those who have helped produce our educational and promotional literature which contributes greatly toward spreading the "wildflower" word.

It has been a rewarding and expanding time for me and for Jenifer. We wish Claudia great success in her presidency and we hope for the same cooperation and participation that we received.

## WILD NEWS

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Editor, Nancy Arrington, 368-8431

Artist, Nicky Staunton, 368-9803

Deadline for the Nov.-Dec. issue is Nov. 1, 1990.

FROM THE 

## PRESIDENT

ALDEN B. BRADFORD

I can hardly believe that two years have passed since I assumed the presidency of the Prince William Wildflower Society from Nicky Staunton at Locust Shade Park. Nicky, as we know, has become the third president of the Virginia Native Plant Society.

As I look back over copies of *Wild News* for the last two years to gain a retrospective of our time together, I am impressed by the variety of programs we have presented, the number of interesting people I have met at meetings, and the broad range of special events I have attended.

Among my favorite programs was "Wildflowers through Art" when the Kincheloes came up from Millboro, Virginia, to demonstrate Sharon's unique style and Alan's gift for framing. And, in addition, our members brought their own artwork to show and share. It was a night to remember — complete with a violent storm.

Another member-participation program featured slides from Texas, Colorado, and throughout Virginia. Another time Phil Baker presented the Department of Transportation's Roadside Planting program in a very colorful way. The award for the "Most Live Action" program went to Jackie Freitag who brought two live owls to demonstrate wildlife rehabilitation. In our latest program, Diana Dutton explained the peculiarities of the Prince William County soils: a fascinating topic.

A very special event was our Ecumenical Earth Day service at Brentsville Presbyterian Church led by new PWWS member, Reverend Carol North. We planted a native Serviceberry on the church grounds. The tree was donated by White Oak Associates — also PWWS members. Later that day Marion Blois Lobstein guided us outdoors as we explored Balls Bluff.

The real strength of the chapter, however, lies in the membership participation in our annual events such as the Garden Tour and Plant Sale in the Spring, the County Fair exhibit in the Summer, and the annual PWWS and VNPS meetings in the Fall. It is this membership participation in these events that has made my job as president an easier one.

*Continued on left*

# A PARASITIC LIFESTYLE: BEECHDROPS & RELATIVES

MARION BLOIS LOBSTEIN  
Associate Professor, Biology, NVCC

From late spring through fall you may find some unusual flowering plants without any green color. One group of these plants are the Indian pipe and pine sap, members of the Ericaceae that are saprophytic, forming a symbiotic relationship with fungi to extract nutrients from dead plant material. These will be discussed in a future article.

The other "alternative life style" is parasitic in which nutrients are "stolen" from a living host. Dodder, orange-stemmed members of the morning-glory family, are one group of parasitic flowering plants in our area. Another group of parasitic plants, members of the Orobanchaceae (broomrape family), is discussed in this article.

One species of this family is beechdrops (*Epifagus virginiana*), a parasite on beech tree roots, that blooms from September to October. *Epifagus* means "upon beech" and *virginiana* refers to "Virginia". Its range is from New Brunswick west to Ontario and Missouri and south to the Gulf of Mexico.

Beechdrops is an annual that forms thin, yellow-brown 12-inch or taller stems with scattered scales (reduced leaves). The upper flowers are so called "chasmogamous" or showy flowers that are one-inch long and are often sterile. The calyx of these flowers is 4-5 toothed, the white and purple corolla is bell-shaped and bilaterally symmetrical with 2 lips on top and 3 on the bottom, the stamens are four in number, and the ovary is superior. The lower, smaller flowers do not open. They are self-fertile and are called secret or "cleistogamous" flowers. These flowers may even develop underground. The fruits that form are capsules that contain many small seeds. The young seedlings begin to grow into the tissue of the host roots. Special short roots called "grappers" form and structures called haustoria develop from the roots. The haustoria "suck" nutrients from the host roots.

Cancerroot or squawroot (*Conopholis americana*), a better known member of the broomrape family, is a perennial that blooms from May into June. *Conopholis* means "cone-scale" referring to the cone-like appearance of the plant and *americana* translates as "America". Its habitat is rich woodlands and it ranges from Maine to Michigan and south to Tennessee and Florida.

Cancerroot forms a 4-6" tall brown, thick stem that is covered with brown scales that are reduced leaves. This cone-shaped structure arises from a thick underground tubercle. This tubercle also forms short roots that have haustoria that invade host tissue. The roots of oak species are thought to be the most common host of cancerroot. The ½" long flowers located on the thick stem are pale yellow with a toothed calyx, a corolla with 2 lips on top and 3 lips on the lower surface, 4 stamens, and a pistil with a superior ovary. The flowers may be self-pollinated (autogamy). The fruit is a capsule with many small seeds which mature while the capsule is still sticky attracting animals to disperse the fruit and seeds.

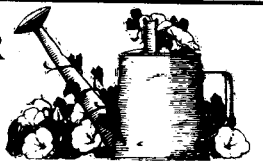
A third member of this family that may be seen in our area is the one-flowered cancerroot (*Orobanche uniflora*) which is an annual that blooms from April into June. *Orobanche* means "vetch, to strangle" referring to other members of this genus that parasitize species of vetch and *uniflora* means "one-flowered". Its habitat is rich woodlands with a range from Newfoundland into Virginia and west into Texas.

One-flowered cancerroot forms an underground 10-12" long stem that gives rise to several flower stalks each with a single flower. Reduced roots originate from the underground stem and form short haustoria called "wart" haustoria. Root systems of various woodland plants such as *Aster macrophyllus* are parasitized by this species. The 1" long bell-shaped flower has a toothed calyx, a white and violet corolla with 2 upper lips and 3 lower lips, 4 stamens, and a superior ovary. Its flowers may also be autogamous like those of cancerroot. The fruit of this species is also a capsule containing numerous small seeds.

Members of this strange family are indeed unusual flowering plants. The stems and leaves lack chlorophyll, the leaves are usually reduced to scales, the root system is much reduced with haustoria formed to invade host tissue. These species are dependent on invading the host plant for all nutrients and water. Even their seeds cannot germinate without the stimulation of fungal species associated with the root systems of the host plants. Even though the species discussed here have little current use by humans as food or medicine, they are worth finding to enjoy their eerie beauty and to contemplate their parasitic lifestyle.

## NATIVES FOR THE GARDEN

NANCY ARRINGTON  
Propagation Chairman



### White Wood Aster

*Aster divaricatus*

In an effort to fill our shade gardens with spring-blooming species we may overlook several late bloomers including white wood aster (*Aster divaricatus*) which begins blooming in late August and continues into October. In addition to providing color when little else is blooming in the woodland garden this aster is an excellent ground cover for dry shade through the growing season.

White wood aster is native to dry woods from Ohio and New England south in the mountains and piedmont to Georgia. In Virginia, according to the *Atlas of the Virginia Flora*, it grows in all counties except those in the coastal plain.

As blooming time approaches 1-3' flowering stems arise from an attractive rosette of basal foliage. A

rather rigid stem bears a few large toothed ovate leaves and near the top branches to support several leafy clusters of small daisy-like flowers. (The species name, *divaricatus*, refers to this widely branching habit.) Individual flowers, composed of 7-9 slender white rays and a yellow center, are less than an inch across. The center turns a reddish-brown as plants age. On some plants smaller flowering clusters grow in the stem's leaf axils.

In the shade garden white wood aster is a valuable ground cover for use with spring ephemerals such as Virginia bluebells and Dutchman's-breeches. Basal foliage spreads to fill in areas left by the early perennials. When in bloom a single plant doesn't make much of an impact but large clumps of several plants will provide light airy drifts of color for several weeks. It grows readily in a variety of conditions and will bloom in fairly deep shade. Good companions include ferns and blue-stemmed goldenrod (*Solidago caesia*) which blooms at the same time.

White wood aster propagates itself quite well from creeping rhizomes and self-sown seedlings. Plants can be dead-headed after blooming if seedlings are not wanted. Collected seed will need a cold moist period (stratification) for good germination. Plants can also be propagated by division in the spring.

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### BEECHDROPS

*Epifagus virginiana*

ANNUAL MEETING: SATURDAY, SEPTEMBER 15, 1990  
HOME OF FRANCES & PHIL LOUER  
15800 PALMER LN., HAYMARKET