POTOWMACK NEWS

Volume 11, No. 1 Potowmack Chapter of the Virginia Native Plant Society Winter 1993

Potowmack's New Program Schedule for 1993

The chapter has adopted a new program format for 1993 which we hope will make possible more member participation in chapter activities.

Our chapter Board meets at Green Spring Horticultural Center at 7:00 p.m. every month. On alternate months, the Board meeting will be followed by a general membership meeting. Members are welcome to attend the Board meeting at 7:00 p.m. or come at 7:30 p.m. for the general meeting.

On **January 28th** Ted Scott, Conservation Chair for VNPS will talk on "Invasive Exotics". Ted npt only is active within the Society as but also is working with various components of the state government to develop a program which will both identify trouble makers such as *Lythrum salicaria*, kudzu, and Japanese honeysuckle, and make the public and the trade aware of what can be done to curb further spread of such plants. Come prepared to ask questions and learn what you can do to help control these invasives.

On **March 25th**, Marion Lobstein,

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Report on the Fall Native Plant Sale

Gerry Pratt

Although the weather caused long delays this spring, the summer was ideal for growing our plants and maintaining our potted plants in good shape for the fall plant sale. Rain was adequate so that very little time was lost in watering. As a result, we were able to spend time establishing some new plant beds and in conditioning the soil.

We had a core of faithful committee members who appeared on Wednesday and/or Saturday mornings. These members are greatly responsible for the success of our fall sale. Thanks to:

Laura Beaty
Robynne DeYoung
Margaret Shutler
Edith Bradbury
Eva Giercuszkiewicz
Margaret James
Ann Van Ryzin
Dust Pratt

In addition, other members appeared occasionally to help. Thanks to Myania Moses, Norma Sedgewick, Liz Smith, and Nancy Luria. We are very happy to have members come and work on the beds. The beds belong to all of us and offer us the opportunity to learn more about the cultivation of native plants.

Our sale on September 19th was our most successful fall sale in our history. Partially responsible for the success of the sale was the fact that the date was moved forward from the usual October date. We sold over one thousand plants. Such success required a great deal of effort from many people:

Ben FitzGerald, our trusty treasurer, who was kept very busy by an enthusiastic sales crew;

Norma Vermillion, who handled publicity and the sale of publications and garden tools;

Edith Bradbury, who packed native plant seeds with planting instructions attached;

Anne Crocker, who donated two large bulletin boards which were used to display plant photos;

Dust Pratt, who prepared sturdy display stands for the sale; and

Laura Beaty, who prepared a display on recycling for the garden

Of the twelve hundred plants potted up for the sale, four hundred were donated by members and our friends. We are very grateful to these people not only for patronizing the sale, but for adding interesting variety to what we can offer. Plants were donated by Gerry Pratt, Tiana Camfiord, Nancy Luria, Laurel Scull (posthumously), Laura Beaty, Margaret Chatham, Trish Hendershot, Margaret James, Walker Newman, Beth Smith (friend of VNPS), Maryan Smith, Anne Van Ryzin, Nancy

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Chapter Events

Invasive Exotics - January 28th
Newsletter Deadline - Febuary 15th
Board Meeting - Febuary 25th
Spring Wildflower Id - March 25th

Skunk Cabbage

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long-lived with colonies surviving for up to a thousand years.

This early portent of spring historically has had a number of medicinal and edible uses. Extracts from the rhizomes and roots have purported diuretic, emtic, narcotic, stimulant, and antispasmodic properties. Various preparations have been used by different Indian tribes and/or herbalists to treat asthma and other respiratory ailments, epilepsy, tetanus, cramps, and spasms. An ointment made from dried, powdered root has been used to treat ringworm, rheumatism, and skin irritations. Various Indian tribes used roots and leaves as a poultice to treat sores and swelling as well as to draw out thorns and stickers. The odor of crushed plant parts supposedly can be inhaled to relieve headaches. Young leaves have been parboiled with several water changes and eaten as greens; the rhizomes have been dried and eaten (this drying may take up to six to seven months). False hellebore (*Veratrum viride*), often growing in the same swampy setting, vaguely resembles skunk cabbage and, if eaten, may cause violent poisoning.

This February keep your eyes and nose open for this strange, early sign of spring. The Swamp Trail at Great Falls Park (Virginia) is an excellent site to see skunk cabbage. Take time to become acquainted with and enjoy one of the most unusual and fascinating early spring wildflowers!

Marion is an Associate Professor of Biology at NVCC - Manassas Campus.

Potowmack Chapter
Virginia Native Plant Society
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Board Officers

President	Anne Haynes	836-0925
Vice President	Nancy Luria	528-3612
Secretary	Laura Beaty	534-8746
Treasurer	Ben FitzGerald	280-4918

Committee Chairs

Botany	Marion Blois Lobstein	536-7150
Education	Liz Smith	768-1697
Hospitality	Margaret Pridgen	591-1235
Membership	Anne Crocker	437-0355
Propagation	Tiana Camfiord	830-3783
and Sales	Gerry Pratt	323-1094
Publications	Norma Vermillion	451-0572
Newsletter	Lynda Heise	301- 952-0026
Site Registry	Mary Pockman	356-7425
Tours	Edith Bradbury	971-8878

Mail articles for the newsletter to
L. Heise,
5409 Mallard Landing
Lothian, MD 20711

Plant Sale

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Arrington (member of the Prince William chapter), and Mildred Gordon.

If you see some names listed again and again, it's because they contribute to our success on many levels. We welcome all suggestions for future sales. The plant sale is our major fund-raising effort, but more than that, it offers us the opportunity to educate the public in the culture and use of native plants. The educational function is what VNPS should welcome and encourage.

Please join Tiana Camfiord and me in this useful chapter activity. We will begin work in the spring as soon as Mother Nature allows. If you're interested, call Gerry Pratt at (703) 323-1094.

Program

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well-known botanist, speaker and field trip leader, will talk on "Tips for Spring Wildflower Identification"- just in time to hone your skills for the new season.

Mark these dates on your calender. We look forward to seeing you there. Watch for further program information in the next newsletter.

Liz Smith

Fleming Courses, Tours, and Field Trips

Cris Fleming will be offering a number of classes and walks through summer 1993.

"Winter tree identificantion" - Febuaray 25 and 27, Evening lecture and filed trip at Rock Creek Park.

"Early Spring Wildflowers"- March 27 at Turkey Run Park .Contact the Audubon Naturalist Society at 301-652-5964 to register for the above classes.

"Wildflowers along the C.O canel" - April 3 from 10 to 12 and 1-3pm. Contact the Smithsonian Associates Program at 202-357-3030 for information and registion.

"Spring Flower Identification" - This is a 12 week class which includes 3 field trips and 9 lectures starting April 13. Contact the USDA Graduate School for information and registation at 202 690-4280.

SKUNK CABBAGE

by Marion Lobstein

The maroon and green hoods of skunk cabbage (*Symplocarpus foetidusf)* are one of the first signs of early spring. In swamps, on stream banks, and in bogs along the East Coast these leathery pointed cowls begin pushing through the snow or swamp nuck" as early as mid-February. If here is snow or ice present, you may notice snow or ice patches melting as the sharp-pointed hoods begin to poke through the icy cover. How this amazing plant melts snow and/or ice will be explained later in this article.

Skunk cabbage, a perennial, is a member of the *Araceae* or arum family. Its distribution is from Nova Scotia to Florida and west to Minnesota and Iowa. Jack-in-the-pulpit, green dragon, arrow arum, and golden club are other members of this predominately tropical family native to our area. The scientific name of skunk cabbage is very appropriate: *Symplocarpus,* meaning compound fruit, refers to the fruit structure and *foetidus,* meaning fetid, refers to the unpleasant smell of bruised or crushed plant parts. The smell has been described as a combination of skunk, putrid meat, and garlic odors. I personally think the smell is reminiscent of rubber tires and is not that npleasant.

The presence of crystals of calcium oxalate in the vegetative parts of skunk cabbage is typical of members of the arum family. These crystals cause a burning, peppery sensation if plant parts are eaten raw. This characteristic and the cabbage or tobacco-like leaves and showy hood have given rise to other common names such as stinking cabbage, swamp cabbage, parson-in-the-pellary, and pole-cat weed. Thoreau referred to skunk cabbage as "hermits of the bog." The actual skunk cabbage flowers are numerous, small, and inconspicuous. They are imbedded in the spadix, a brownish-yellow ovoid structure surrounded by the leathery cowl-like pointed hood, the spathe. This spathe is the most visible part of the "flower", correctly referred to as the inflorescence. The flowers on a single spadix are either male or female at any given time. Even though this family is a monocot one, the flower parts are in 4's rather than the usual 3's. Both male and female flowers lack petals but do have fused sepals forming a calyx. The male flower has four stamens. The female flower has a single ovary semi-buried in the spadix.

The spathe or hood surrounding the spadix is formed from two fused leaves. Aerobic respiration, the same process by which we breakdown our food to obtain energy and maintain our body temperature, is the source of heat from the hood. The metabolic level of this process in skunk cabbage is comparable to that of a small shrew or hummingbird. The heat and other chemical processes such as fermentation that occur in the hood result in the release of malodorous organic compounds such as amines, indoles, and skatole that mimic the smell of dung or carrion. The combination of heat and smell attracts thrips, carrion flies, and beetles that serve as the primary pollinators. The heat generated may be as high as 36-39°F above the surrounding air temperature. A constant temperature range of 70-72°F can be maintained inside the hood for two weeks or longer. The arum family of plants is the only one known to turn on an "internal furnace" to release disagreeable (to some human noses!) odors that attract pollinators. This phenomenon was recorded as early as the late 1700's by the French naturalist Lamarck.

As insects are attracted to a hooded inflorescence they fly into the heated chamber which was very slippery walls that will send them sliding to the area of the small flowers to either pick up pollen if male flowers are mature or transfer pollen if the female flowers are receptive. Insects such as bees, though not potential pollinators, have been seen entering skunk cabbage hoods--perhaps to warm up on a chilly early spring day! The buds for the inflorescences are formed in autumn and may be visible then but most appear in mid-February and continue to be visible through April. The fruit that develops after pollination and fertilization resembles a dirty tennis ball. It is visible by autumn and is a spongy mass up to five inches in diameter in which spherical seeds are imbedded. Most of these seeds will germinate near the parent plant but squirrels and other rodents may gather and store seeds thus acting as seed dispersers. The large cabbage-like leaves that will be present through late spring and summer begin to appear like fat fingers by late spring. Lasting all summer, they may reach one foot in width and are borne on 2-4 foot tall petioles. Unlike other monocots, the veins of the leaves are in a netted pattern rather than parallel.

The vast rhizome and root system needed to secure the plant in the soft swamp muck make transplanting very difficult. After the leaves disappear in late summer, the roots contract drawing the the rhizomes and shoot buds under the ground or muck. When a seed germinates, its roots pull the young plant deep underground so that it may be 5-7 years before a first inflorescence is produced above ground. Once established, however, skunk cabbage is

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UPCOMING WILDFLOWER EVENTS:

Lobstein Courses, Tours, and Field Trips

Marion Lobstein will be offering a number of plant identification classes through summer 1993. The following first two classes will be offered at the Manassas Campus of NVCC and the third one at Blandy Farm near Winchester, VA.

BIO 295-71M (1 credit) Topics in Winter Botany will give students an overview of plants in winter conditions with emphasis on identification of woody plants in winter condition. Special problems of and strategies employed by plants during winter will also be covered. Class dates and times are:
M (2/8), W (2/10), M (2/15), W (2/17) 4:15-6:00pm
SA (2/13) 9:00am - 12:45pm
SU (2/20) 9:00am - 12:45pm

BIO 295-72M (1 credit) Topics In Spring Wildflowers will give students an overview of identification of spring wildflowers. Reproductive strategies and life cycles of these wildflowers willalso be covered.
Class dates and times are:
M (4/5), W (4/7), M (4/12), W (4/14) 4:15-6:00pm
SA (4/10) 9:00am - 12:45pm
SU (4/17) 9:00am - 12:45pm

EVEC 493/793 - Field Botany (3 crds) 9:00am to 4:00pm MTWTH JUNE 28 to JULY 15. This class will cover the classification, identication and evolution of flowering plants. Lectures, laboratory plant identification, and field trips. The emphasis of this course will be on recognition of flowering plant family field characteristics and on the use of plant dichotomous keys and other aids for identification of species.

For further information regarding these courses, contact **Marion Blois Lobstein at (703)536-7150** at home or at NVCC-Manassas Campus (703) 323-3000 Manassas extension 6643. (Also Marion will be offering three to four field study one-credit courses this summer at the Manassas Campus but the schedule for these has not yet been finalized. These courses may include topics in marsh ecology, summer wildflowers, and deciduous forest ecology.)

January

28 Thu **General Meeting -Invasive Exotics**
7pm board meeting7:30pm lecture - Green Spring Gardens Park

Febuary

25 Thu **Board Meeting** - Green Spring Gardens Park, 7pm

28 Sun **Wildflower Walk** -10 am - 12:30pm at Great Fallls Park with MarionLobstein For reservations call Marion.

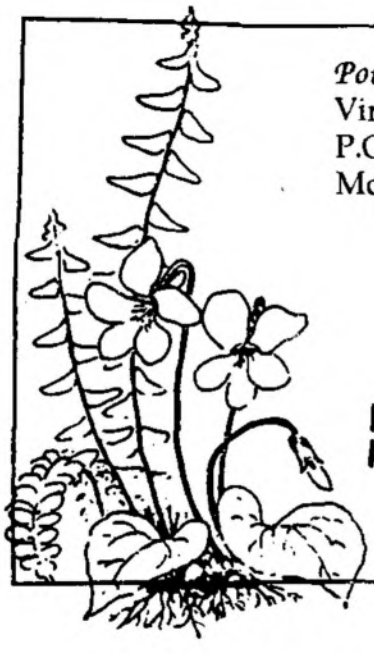
March

25 Thu **General Meeting - Spring Wildflower ID**
7pm board meeting7:30pm lecture - Green Spring Gardens Park

Other activities include **wildflower walks** at Great Falls Park, VA at 10:00am-12:30pm on the following dates during the winter and spring months: Jan. 17, Feb. 28, Mar. 21, Apr. 18, May 16. Riverbend Park on April 17 at 2:30-4:30pm and Balls Bluff on April 18 at 2:30-4:30pm. Marion's field trips are open to Potowmack Chapter members by reservation.Call Marion for reservations for any of these field trips or walks.

Smithsonian Resident Associate Program tours Marion will be doing this spring include Teddy Roosevelt Island on March 20, the National Arboretum on April 25, and Linden (Thompson Wildlife Management Area) and Blandy Farm on May 9. Marion will also be doing two tours of Linden for the Virginia Museum of Natural History on May 8. Call (202)357-3030 for information on RAP tours.

See page 2 for Cris Fleming 's classes



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DAMAGED IN
IN THE POSTA

Invasive Exotics with Ted Scott -Thursday January 28th