VOL. 4, NO. 1 MARCH, 1987

# WILDFLOWER PILGRIMAGE APRIL 24, 25 and 26 18th Annual Science Museum Wildflower Pilgrimage

# **EXHIBITS**

Several artists have works on display at the Science Museum from March 21 through May 26.

Kathryn O'Bryan is a native of Roanoke, Virginia. Her etchings are produced by coating a sheet of polished zinc or copper with an acid resist and doing an original drawing on the metal with a needle which scratches away the resist. The plate is then immersed in a nitric acid bath, then cleaned and ink is rubbed into the incised lines. The excess ink is cleaned off the plate surface, a damp sheet of 100% cotton rag paper is cranked through the press with the plate, resulting in a single black and white print. When the print is dry, she paints each individual print with watercolors.

Michael Muncy is a full time account executive and photographic assistant for Muncy & Muncy.

Michael has earned numerous blue ribbons in state professional photography competitions. In 1985 she won the trophy for "Best Pictorial" photograph in Virginia. Michael specializes in nature photography, child portraiture and wall decor.

Susan Loy has received national recognition and awards for her calligraphy.

For her series of watercolors on spring to early summer Virginia wildflowers, she chose the circle as a predominant form. To further unite the series, she chose wild; flowers that bear the state's name.

Fred Cramer is the owner of Cramer

Graphics, Woodwings, and Shenandoah Photography Workshops.

He is a nature photographer who also teaches nature photography. Along with photography, Fred captures natural history splendor on canvas and in wood carvings.



# **PILGRIMAGE SPEAKERS**

Dr. Richard William Lighty is presently director of Mt. Cuba Center for the study of Piedmont Flora in Greenville, Delaware. He was formerly coordinator of the Longwood Graduate Program in public garden management at the University of Delaware. Dr. Lighty received his doctorate in Plant Breeding and Genetics with minors in Botany and Ornamental Horticulture.

Dr. George H. Beatty is a professor at Penn State University in State College, Pennsylvania. During the summer, Dr. Beatty works as a photographer for the Natural Park Service. He is a frequent speaker throughout the country and at the Wildflower Pilgrimage in the Smokies. Dr. Beatty's program is an excellent selection of slides taken over the years in the Smokies, and consists of two separate 30 minute presentations.

# Wildflower Pilgrimage Schedule

#### Friday, April 24

Registration from 10 AM-8PM at the Science Museum, Center in the Square. Be sure to see the art exhibit and "Meadow Flowers of Va.," a plant display by the BRC/VWPS. 8 PM - Va. Western Community College - Dr. Richard Lighty will present an illustrated lecture, "Variations of Plant Populations."

#### Saturday, April 25

A variety of walks are planned, beginning at 7 AM, lasting from 1½ hours to all day. 6 PM - A casual dinner of chili, salad, bread and beverage will be served at the Museum. Reservations are required and the cost of \$4.50 must be submitted prior to the weekend.

7:30 PM - Dr. George Beatty will present "Wildflowers of the Smokies - A Symphony," at the Museum.

#### Sunday, April 26

A bird walk is scheduled from 8-11 AM. Other walks are from 1:30-4:30 PM. A walk designed for wheelchairs or the visually handicapped is also scheduled at this time, by pre-registration only.

# **MEMBERSHIP MEETING - APRIL 27, 1987**

PROGRAM: Dr. George Beatty TIME: 7:30 at the Virginia Western Brown Library Auditorum

# TRAVELS OF CARL LINNAEUS

This will be combined with other College events so plan to come early, could be crowded. You might like to read about Linnaeus in the Sept. 1984 issue of Audubon.

# FROM THE CHAPTER PRESIDENT

Springtime is now upon us! (This is an official declaration - even if there is snow outside on the ground.) I hope all of you are as excited about the upcoming events as I am. This past weekend saw about 30 of our chapter go to the Westvaco Nature Center near Bedford. Even though the number of herbaceous plants was quite low, all had a good time getting together and just enjoying the outdoors.

Included in the newsletter is a schedule of upcoming events. Be thinking of other activities you would like to do or sponsor. We're always looking for good areas for plants!

The state legislators passed a bill for \$25,000 for the endangered plants program of Va. The Va. Highway Dept. recently sent me a collection of county maps of the Salem district and have asked if we would be a resource when they begin construction projects. The Explore - Greenway Projects in the Roanoke Valley are asking us for information as they continue to develop plans. A recent meeting in Lynchburg was devoted to setting up a Nature Center. Some of our members are involved in this project. In summary, I believe all this activity is going to open up some neat opportunities for us to be involved in a public way with wildflower preservation.

# STATE AND PRIVATE AGENCY INVOLVEMENT WITH ENDANGERED SPECIES

Virginia has a state program to prevent the extinction of its rare plant species: the Virginia Endangered Plant and Insect Species Consumer Services. This program is administered by Virginia Department of Agriculture and Consumer Services (VDACS), however, a lack of funds has kept the program from fulfilling its duties. In 1986, the General Assembly turned down a request to give the department \$40,000 for rare plant protection. VDACS is however funding some research on the Peters Mountain mallow, round-leaf birch, and the small whorled pogonia. Faith Campbell, VWPS state conservation chairman, is helping push a legislative effort to provide the department money for protection of endangered species.

Governor Baliles and the Nature Conservancy now have an agreement funding a two-year, \$260,000 effort to inventory the state's natural heritage. The inventory will consist of a dictionary-type listing of all the species in the state.

# FOR MATURE PLANT LOVERS ONLY

Legislation is currently before Congress to attach a one-time \$10 charge to the Golden Age Passport system. Currently it is a free lifetime entrance permit to those parks, monuments and recreation areas administered by the Federal Government which charge entrance fees. It is issued to citizens or permanent residents of the U.S. who are 62 or older. It also provides a 50% discount on fees such as camping, parking, etc.

Golden Age Passports must be obtained in person. You must show proof of age. The Golden Age Passport may be obtained locally at the U.S. Forest Service Office in the Poff Building, Roanoke, and on the Blue Ridge Parkway at the District Office located ¼ mile north of the Parkway's junction with Route 24, as well as all Forest Service Supervisor's Offices, Blue Ridge Parkway Visitor Centers, and all National Park system areas where entrance fees are charged.

# MARCH FIELD TRIP

by Dora Lee Ellington

Westvaco Buffalo Creek Nature Area in Bedford County on Route 42 near New London, was the location of our March field trip. Twenty three members and their guests attended. Everyone seemed anxious to be outdoors again and 'spring was popping up all over'. It was a bit early for the spring wild flowers to be blooming, though John Goodhart found a hepatica in bloom. Members found foliage of crane-fly, putty root and rattlesnake plantain orchids, polygala, toothwort, may apple, pussytoes, trout lilies, spring beauties, hen-bit, violets and bluets.

The outstanding feature of the trip was six acres of hemlock forest on the north-facing rocky slope above Buffalo Creek. This stand, considered biologically unique, is located outside its common range. The normal range is 30 miles to the west in the Blue Ridge Mountains at elevations above 800 feet.

This hemlock stand, located at an elevation of approximately 550-700 feet, is healthy considering its average age of 130 years and the steep, rocky terrain. Many of the hemlock trees now measure in excess of 20 incles in diameter and 100 feet tall.

In the understory of dense shade and acidic conditions, we found beautiful patches of evergreen wild ginger, walking fern, Christmas fern and marginal wood fern.

Our thanks to Westvaco for providing and maintaining such a nice and unique nature area for public use.

# FRINGED POLYGALA

by Dora Lee Ellington

While walking in the woods a few weeks ago, we found patches of Fringed Polygala (Polygala paucifolia) a member of the milkwort family, also called Gay Wings or Bird-on-the Wing.

This plant is a low growing, three to five inches, evergreen wildflower with prostrate stems and fibrous roots. Near the top of the stems are a few ovate evergreen leaves, dark green above and reddish purple beneath. These leaves are very thin, not leathery like most of our evergreen ground covers such as galax, trailing arbutus, pyrola, wintergreen and wild ginger.

In May and June one to three dainty magenta-pink orchid-like flowers appear which are less than one inch long. The two lateral sepals being much longer and wing shaped, thus the common names of Gay Wings or Bird-on-the Wing.

The three petals are united, forming a tube through which yellow stamens and pistils protrude, forming a fringe or beard. The fringed part of the corolla is called a keel. The plant is well adapted for pollination by bees.

We are very fortunate to have the very rare and beautiful pure white flowered form in our area. The foilage though similar to the magenta form has distinct paler green leaves with no reddish cast on the under surface.

The showy flowers of the Fringed Polygala produce few seeds but throughout the summer and fall small cleistogomous (closed, self-pollinated) flowers are produced on the subterranean branches. As the two-parted seed capsules mature they are thrust up through the soil to ripen above ground. Much like the violets, this double system of propagation ensures rapid spreading. It is also easily propogated by stem and root cuttings taken in summer.

Fringed Polygala is a choice plant for a woodland garden where sunlight filters through the trees in spring and makes a very nice ground cover.

Reference: Wildflowers of the Alleghanies, Joseph E. Harned.

# WILDFLOWER OF THE YEAR PROJECT

The North Carolina Botanical Garden and The Garden Club of North Carolina, Inc., are co-sponsoring the Wild Flower of the Year project for the sixth consecutive year. Wild columbine (Aquilegia canadensis) has been selected for 1987. For seed and cultural information, send a business-size, self-addressed, stamped envelope to Wild Flower of the Year, North Carolina Botanical Garden, Totten Center 457-A, UNC-CH, Chapel Hill, North Carolina 27514.

### OF NOTE

by Virginia Klara Nathan

Hot Off the Presses: Collecting, Processing, and Germinating Seeds of Wildland Plants by James and Cheryl Young; Timber Press, 9999 S.W. Wilshire, Portland, OR 97225.

Although I have not seen a copy of this book, Timber Press touts it as being an easily understood presentation of the practical methods of collecting and growing seeds of wild plants. The first section deals with principles, such as field surveying and marking plants; means and timing of seed collection, cleaning and storing; methods of stratification and germination testing; and seed starting. The second half of the book outlines the specifics of propagation of trees and shrubs by genus and species; herbaceous plants and grasses are covered by family.

I look forward to a review by a club member. Perhaps this is a candidate for our recommended reading list.

Tissue culture is a method of plant propagation in which a small piece of plant tissue is cultured in a sterile environment. Commercial plant producers have begun to use this propagation technique in order to rapidly produce a large number of plants, especially when only a small number of parent plants exist.

Five years ago, the Georgia Botanical Gardens in Athens, GA began using tissue culture to propagate one of its endangered species, Silene polypetula, the fringed campion. S. polypetula is difficult to grow from seed. Rooting cuttings was the primary method of reproducing this plant, but since it is found only in two counties in Georgia and one in Florida, it was a prime candidate for attempting tissue culture. S. polypetula was found to be easily multiplied by this method. Now thanks to a modern technique, an endangered native wildflower has not only been conserved but it is becoming available by several nurseries.

Members who want to try tissue culturing may be interested in the Virginia Cooperative Extension Service's publication #426-385, Plant Tissue Culture for the Homeowner. It outlines a simple general procedure utilizing a few basic supplies found in grocery stores. To obtain a free copy, contact your local Extension agent.

This May the University Press of Virginia will publish **Fall Wildflowers of the Blue Ridge and Great Smoky Mountains**, by Oscar W. Gupton and Fred C. Swope.

One hundred full-page color photographs depict the fruits of various wildflowers. Ninety-three genera and fifty families are represented. Each description includes information about the general appearance,

character of the stem, leaf, flora and fruit, habitat and propagation. Information about the methods and suitability of planting these flowers in domestic gardens is provided. The price is \$12.95 from University Press of Virginia, Box 3608 University Station, Charlottesville, Va. 22903.

Atlas of the Virginia Flora by A. M. Havrill, Douglas W. Ogle and Tom Wieboldt is now available from Virginia Botanical Associates. Intended for use by high school and college biology classes, it identifies common plants of Virginia as well as a number of rare species in southwestern Virginia. The book is available from Virginia Botanical Associates, Route 6, Box 790, Farmville, Va. 23901.

The New England Wildflower Society publishes a 61-page paperback handbook, **Garden in the Woods Cultivation Guide.** It is an annotated listing, including cultivation, of over 275 plants propagated at the Society's headquarters, Garden in the Woods. There is a chart showing plants having the same light, moisture, and pH requirements.

To order, send \$4.50 (includes postage) to New England Wildflower Society, Dept. CG, Garden in the Woods, Hemenway Road, Framingham, MA 01701.

Southern Living Magazine, February 1987 has a very nice article on Wild Ginger, well worth reading.

# SMOOTH PURPLE CONEFLOWER

The February 1, 1987 edition of the New River Roanoke Times & World News printed an article that should be of interest to members of the Virginia Wildflower Preservation Society.

The Smooth Purple Coneflower Echinacea laevigata is a rare wildflower found growing in Montgomery County. The land is Walnut Preserve, owned by Ellison and Mary Linda Smyth of Blacksburg. In January, the Smyths donated a 1½ acre section of their property to the Nature Conservancy to protect this plant.

There are only fifteen known populations of Smooth Purple Coneflower in the world and the one at Walnut Preserve is considered the largest.

The area where the coneflower is located is a successional habitat. In other words, it is a field and nature is reclaiming it as a forest. As the junipers and oaks grow taller, the shade from them will kill the coneflowers which require an open area with a lot of sunshine. The Nature Conservancy will routinely cut the trees to provide the needed light for the coneflowers.

# WELCOME SPRING

by Dora Lee Ellington

How welcome is spring especially after the wintery weather and almost record snows we have experienced. On Sunday, March 8th in a protected cove, we found dog toothed violets blooming and early saxifrage in bud. Soon the rest of our lovely, spring wildflowers will be in bloom and hopefully in more abundance.

Our wildflower plant sale is scheduled for May 16th at Paul James' home, the same place as the two previous sales. We have a nice collection of plants, some left from last year's sale and new ones added all during the summer and fall by the propagating committee. Flats of wildflower seeds were sowed the first week of March, hopefully there will be seedlings large enough for the plant sale. (Some of the seeds sowed are stiff aster, fairy wand, cotton grass, Stokes aster, green and gold, yellow star grass, bleeding heart, bishop's cap, skull cap and other surprises.)

There is always the need for more plants and more member involvement. As you clean your flower beds this spring please look for and save any seedlings and remember that perennials benefit by division every two to three years. We welcome any extra plants you may have.

Mark your calendar for May 16th, plan to come and bring some friends. This is our only fund raising event.

# **SEEDS TO BUY**

Agnew Seed Stores on the Market in Roanoke has the following wildflower seeds for sale: Purple Coneflower, Foxglove, Coreopsis, Black-eyed Susan, Morningglory, Lupines and Mixed Wildflowers.

# SCHEDULE OF EVENTS

**April 24, 25, 26 -** Science Museum Wildflower Pilgrimage. Also BRC Plant Display at the Science Museum.

**April 27 -** April general membership meeting. Dr. Beatty will be speaking on Linnaeus in Lapland. Meet at 7 PM in VWCC Brown Library. This will be open to VWCC students, so we suggest you arrive early.

May 1-3 - Great Smoky Mountain field trip. Reservations may be made at Family Inns, East, 1-800-251-9752 or 1-615-453-5573, or at a motel of your preference.

May 8-10 - Mount Rogers Naturalist Rally.

May 16 - Third annual plant sale. (Note change of date.)

# WINTER WORKSHOP

Bobby and Frieda Toler and Bruce and Judy Boteler attended the Winter Workshop in Richmond sponsored by the State VWPS. One of the topics discussed was Transplanting and Growing Plants. The following information was given by the John Clayton Chapter.

# **Transplanting**

#### I. COLLECTING

#### A. Specimens

- 1. From first sprouting through flowering.
- Works best during active growth phase of plant.
- 3. Mid size specimens are hardier than tiny seedlings.

#### **B.** Dates

- 1. From early spring through early summer.
- 2. Varies with weather (rainfalls, etc.)
- 3. Even fall bloomers will be up during this time.

# C. Time - EVENINGS only.

### II. REMOVAL

# A. Using flats

- 1. Line sturdy flat with wet paper towels.
- Collect small pockets of dirt with plant (not necessary, but helps hold plant upright).
- Pack plants together TIGHTLY and in UPRIGHT position (plant should stand up firmly, not droop.)
- B. Using buckets (generally for taller plants.)
- 1. Fill bucket with 2-4 inches water.
- Collect plants (dirt not necessary, but be sure to remove roots gently)
- Place plants upright in bucket, roots submerged.

#### III. TREATMENT

A. Place collected plants in COOL, DARK place (basement, root cellar, etc.)

# B. Thoroughly soak plants with water.

- 1. Check daily, refill as needed.
- 2. Let soak 24-48 hours (can be longer, but be careful)
- 3. NO LIGHT

#### D. Time may vary, but plants should ETIOLATE strongly and become very TURGID

#### IV. TRANSPLANTING

### A. Always transplant into APPROP-RIATE HABITAT

- Consider slope, exposure, drainage, soil type, etc. (duplicate habitat)
- Some plants will adapt to different habitats more readily.
- 3. Others appear to take, but slowly die out over several years.

# **B. Planting logistics**

- 1. Transplant in EVENING only.
- 2. Pack roots in TIGHTLY (no air spaces).
- Most seem to take better when planted in groups.
- 4. Cover ground around base of plants with properly layered leaf litter.

#### C. Survival rates

- 1. Will improve with practice.
- 2. Will vary with species.
- 3. Should average 90-95%.
- Should NOT require supplemental watering except under extreme conditions (drought, etc.).

# N. C. BOTANICAL GARDEN FIELD TRIP

On March 28, about 20 of our group made a one day trip to visit the North Carolina Botanical Garden. Bob Tuggle had made arrangements for us not only to visit the North Carolina Botanical Garden but also a private residence near the Garden. It was a trip well worth the time. However, we were a couple weeks early to see many of the plants in bloom. One of the plants we did see that was unusual was **Shortia**.

A guided tour emphasizing the flora of the piedmont was lead by one of the workers at the Garden. He discussed the environment, periodic burnings and the interaction of the numerous species found there. He pointed out that some of the piedmont areas had a greater variety of species per square yard (not miles) than any other community.

A good time was had by all with many indicating a return visit was in their plans.

# WILDFLOWERS FOR SHADE

by Frieda Toler

Spring brings to mind many things. For the members of the wildflower society, it perhaps means a refreshing hike in the woods, a field trip or one of the walks planned by the upcoming Spring Wildflower Pilgrimage.

Many of the spring wildflowers are found in the Cove Hardwood areas. These plants bloom and set seed before the canopy of the trees shade them too heavily. There are so many different flowers it is difficult, if not impossible, to choose a favorite.

Trout lily Erythronium americanum is one of the first to appear on warm sunny banks in mid-March. The nodding yellow flowers have reflexed petals and mottled leaves.

Dutchman's breeches Dicentra cucullaria with creamy white flowers resemble pants hung upside down on a line. Bleeding Heart Dicentra eximia is in the same family and has heart-shaped pink to red flowers. Bleeding Heart also thrives on the shale barrens and will bloom until frost.

Spring Beauty Claytonia virginica with pinkish white flowers and dark pink veins is one of the few wildflowers with pink stamen. Virginia Bluebells Mertensia virginica, as the name indicates, has blue bell-shaped flowers. Bloodroot Sanguinaria canadensis has pure white flowers. A red liquid extracted from the root gives it the common name.

These few are only the beginning of many wonderful surprises wildflowers have to offer. Yellows, reds, blues, pinks and pure whites. A real rainbow of colors is waiting to be seen this spring.



North Carolina Botanical Garden field trip.