



TENNESSEE NATIVE PLANT SOCIETY NEWSLETTER

Volume 17, Number 1

March 1994

TASK FORCE ON EXOTICS

Ambitious Plans Developed in Nashville

A new volunteer task force has been formed in Nashville with the expressed purpose of combating the problem of invasive exotic plants.

The group is creating an ambitious program, involving the collection of information followed by a broad effort in public awareness, education, and legislation. To carry out these plans the group is exploring the possibility of forming a State Exotic Pest Plant Council, modelled after councils in Florida and California.

The work stems from an exploratory meeting held last November and organized primarily by Brian Bowen, the naturalist at Warner Park in Nashville.

Out of that meeting came an outline of priorities and plans for a symposium and training session March 11-12 at Cheekwood Botanical Gardens in Nashville. The organizers are Bowen and Darlene Panvini of Vanderbilt University.

Several members of TNPS are involved, including two speakers at the March symposium—Ed Clebsch, professor of botany at the University of Tennessee, and Milo Pyne, state naturalist with the Department of Environment and Conservation.

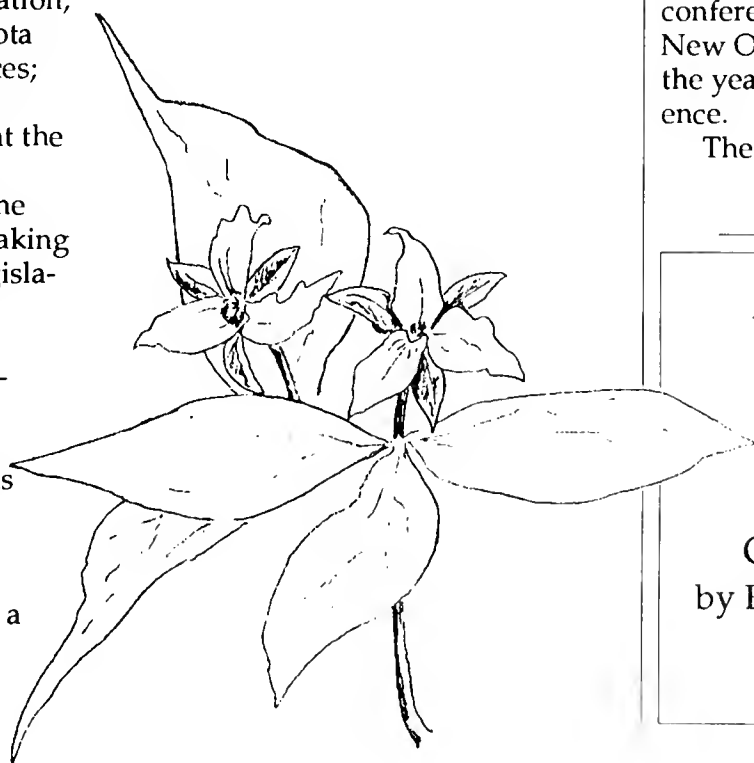
Among the speakers from outside of Tennessee are Randy Nyboer, Bill McClain, and Bill Glass, all with the Illinois Department of Conservation; Luke Skinner, with the Minnesota Department of Natural Resources; and the keynote speaker, Peter White, Department of Biology at the University of North Carolina.

The goals and strategies of the task force include prevention, taking the form of both supporting legislation to stop the introduction of exotic plants and seeking the cooperation of organizations involved.

The task force also hopes to identify the sources and patterns involved in the introduction of exotic plants.

To properly meet the challenge, the task force has also set a priority on developing a guide-

Continued Page 2



TNPS BOARD MEETS IN NASHVILLE

The TNPS Board of Directors met February 26 in Nashville to discuss plan for the Tennessee Flora 2001 wildflower book, a schedule of field trips, and other society business.

On hand for the meeting were Mary Schaffner, TNPS president; Dennis Horn, vice president; Andrea Shea, corresponding secretary; Nita Heilman, recording secretary; Karen Yarbrow, treasurer; Larry Wilson; Jack Carman; George Horal; Hal DeSelm; Bertha Chrietzburg; Dorothy Carman; and Landon McKenny, president of the Kentucky Native Plant Society.

Among other society business, board members voted to co-sponsor the Memphis Native Plant Conference. The conference has been held two previous years under local sponsorship, but the organizers have joined with organizers of similar conferences in Birmingham and New Orleans and will begin rotating the years each city holds a conference.

These conferences have been

Continued Page 3

ALSO IN THIS ISSUE

Photography
by David Duhl
Page 3

Gardening Books
by Ed & Meredith Clebsch
Page 4

TENNESSEE NATIVE PLANT SOCIETY NEWSLETTER

March 1994
Volume 17, Number 1

This Newsletter is a publication of the Tennessee Native Plant Society and is published six times a year, generally in February, April, June, August, October, and December.

The Tennessee Native Plant Society (TNPS) was founded in 1978. Its purposes are to assist in the exchange of information and encourage fellowship among Tennessee's botanists, both amateur and professional; to promote education of the public about Tennessee flora, and wild plants in general; to provide, through publication of a newsletter or journal, a formal means of documenting information on Tennessee flora and of informing the public about wild plants; and to promote the protection and enhancement of Tennessee's wild plant communities.

Dues are \$15 for the calendar year (\$10 for students and senior citizens, \$20 for institutions, and \$150 for life memberships). Membership privileges include a subscription to the TNPS Newsletter. Dues may be sent to the Tennessee Native Plant Society, Department of Botany, the University of Tennessee, Knoxville, TN 37996-1100.

TNPS OFFICERS

Mary Martin Schaffner of Nashville,
President
Dennis Horn of Tullahoma,
Vice-President
Andrea Shea of Nashville,
Corresponding Secretary
Nita Heilman of Clarksville,
Recording Secretary
Karen Yarbro of Knoxville,
Treasurer

DIRECTORS

John Churchill of Johnson City
H.R. DeSelm of Knoxville
Shirley Nicholson of Knoxville
Bertha Chrietzburg of Nashville
Kay Jones of Columbia
Harold Scott of Columbia
Larry Wilson of Memphis
Sally Mirick of Knoxville

Latham Davis, Editor

Letters to the editor or correspondence about the Newsletter should be addressed to: TNPS Newsletter, P.O. Box 856, Sewanee, TN 37375.

EXOTICS TASK FORCE—Continued

lines manual that will identify and rank the worst exotic pest plants, compile data on eradication programs, and compile other literature on the subject. The manual could be made available to both public officials and private organizations.

The task force also will develop workshops and training programs on the eradication of exotic pest plants.

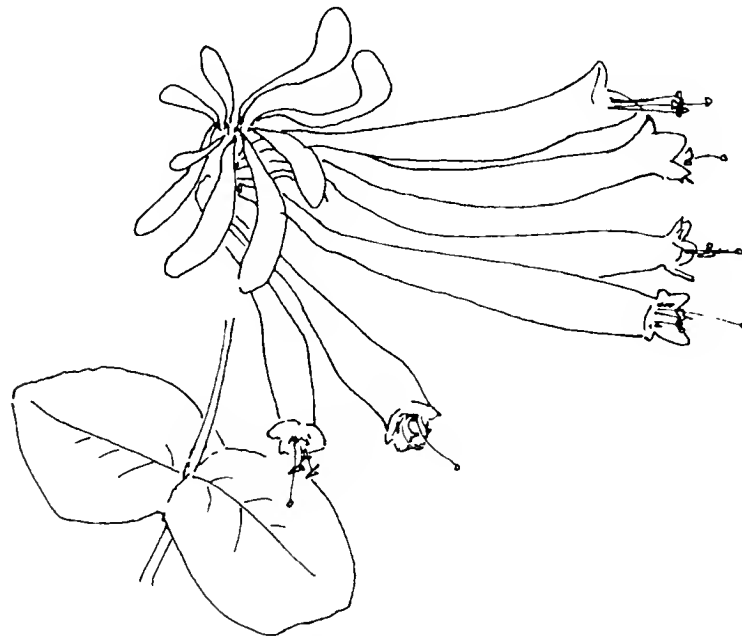
Another priority is the formation of volunteer groups to accept eradication projects throughout the state and to help raise funds for control and eradication projects.

Since many plants have been introduced for special purposes, such as landscaping and erosion control, the task force plans to compile information on alternative native plants suitable for those purposes. It plans to encourage the propagation and retail sales of natives, focusing educational efforts on garden clubs, neighborhood associations, and other private groups.

A basic information package about exotic pest plants will be developed for presentation to groups ranging from nursery retailers and landscapers to park managers and teachers.

The task force also sees the need to spread the word of its work through the media and to reward individuals for outstanding efforts in the use of natives and the eradication of exotics. The creation of publications, including a newsletter, are also among the priorities of the group.

Other volunteers who are participating include Bob Parrish, Leon Bates, John Mott, John Froescheur, Daniel Moss, and Andrea Shea.



SENATE HEARINGS ON EXOTICS

The impact of exotic species on the continental United States is the subject of hearings currently being conducted by the Senate Committee on Governmental Affairs.

The committee is gathering information from a variety of experts on the problem in the U.S., and members will also be questioning government agencies on their efforts to respond to the threats.

The hearings follow the release last September of a 400-page report by the Office of Technology Assessment, a research arm of the Congress. The report is titled *Harmful Non-Indigenous Species of the United States*.

A letter about the hearings from Faith Campbell of the Natural Resources Defense Council points out that "educating members of the Congress is key to building a set of comprehensive programs aimed at excluding additional invasive exotic organisms, researching control strategies for those already here, and putting such strategies into effect."

How to Look at Photographs

It's winter; the wildflowers are at once a memory of the past and a dream of the future. . . . What's a wildflower photographer to do? Well, it's a great time to rejuvenate the photographic spirit and plan ahead for the first of the springtime flowers.

The bookstores are loaded with beautiful images of wildflowers this time of year. Found in calendars and coffee-table books, wildflowers may be the most popular photographic subjects for both publisher and consumer. Looking at wildflower photographs is a great way to make it through the winter. Read on for a few things you may wish to consider.

Forget— For some reason, many captions in calendars and books tell you the aperture and shutter speed used by the photographer. That kind of information is useful to you only if the lighting conditions are exactly the same as the ones you experience in the field. I'd like to suggest that you forget the numbers. I sometimes wish the caption would simply say "used a big hole for a short time" instead of $f/4$, $1/250$ sec. The information would be much more useful and it would point me in the right direction.

Compare— Ask yourself how the wildflower photographs you see compare to the ones you've already made of the very same subject. Whose do you prefer, and, more importantly, why? A simple comparison of the styles, lighting, and focus will give you important clues in how to make your wildflower photographs better. Sometimes, it may be helpful to finish this thought: "I like the way this flower was photographed because. . ." It's a good way to help you identify the way the photographer got you to relate to the subject, and it should help you do the same with your own photographs.

Look— After your initial response to the photograph, it's time to look at how the photographer appealed to your aesthetic values. Do you like the photograph of the single flower or do you favor the field of daisies? Do you prefer only the nearest flower in focus or all of them in focus? Most importantly, how can you accomplish this technique with your wildflower subjects this spring? Clearly, you don't want to copy someone else's style. Perhaps you can think of it more as learning what compositional techniques are currently in use and applying one of them to your own wildflower photographic efforts. Or, even better, perhaps you can do it differently or better.

Surprise— Sometimes you'll see examples of the ways to photograph wildflowers that you've never dreamed of. Some of them you will like, and some you won't. There are great opportunities here but only if you keep an open mind. You may find photographers who photograph flowers with wide angle lenses or as extreme close-ups. It's important to be aware of your reaction to each style and analyze carefully what you like or don't like about it. Always ask yourself questions. Why did the photographer choose to make the photograph in that way? How did he or she accomplish it? How can I do the same?

After your trip to the bookstore, let it all incubate. You've fed your mind, now see what grows. This spring, you'll see the artist within you make some great wildflower photographs. I bet you can't wait!

—David Duhl
Nashville

(David Duhl is a nature photographer living in Nashville and may be contacted at 817 Kent Road, Nashville, Tennessee 37214.)

modelled after the native plant conference held each year at Western Carolina University in Cullowhee, North Carolina

The board also voted a special thanks to Helen Warren of Oak Ridge for her hard work and devotion to the sale of TNPS note cards. Helen recently resigned that duty, which has now been taken by Nita Heilman. Nita also is in charge of the sales of caps, decals, and T-shirts.

In other business, the board voted to provide a \$125 scholarship to a student wishing to attend the native plant conference in Cullowhee. See details elsewhere in this issue. □

PHOTOGRAPHY NEEDED FOR FLORA BOOK

Although a large number of photographs has been submitted for the Tennessee Flora 2001 wildflower book, more photographs are needed to fill in gaps.

Jack Carman, chairman of the photography selection committee, said more than 4,800 slides were received by the committee from fifty-six persons. About 750 species were represented in those 4,800 slides.

While those numbers and the quality are excellent, about 150 species on the original want-list remain unrepresented. Therefore, Jack is preparing a new want-list and will contact photographers again in time for spring photography.

In the meantime, the committee has been narrowing its choice of slides to about 1,200, a number that includes more than one for some species. These plants best represented were the cardinal flower and jack-in-a-pulpit, for which almost 50 slides each were submitted.

Dennis Horn has mailed requests for plant description to 55 people. He has received an answer from only half of those. Obviously, more help is needed. Anyone wishing to help with the plant description should write to Dennis Horn, 222 Crestwood Drive, Tullahoma, TN 37388. □

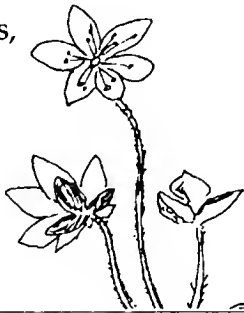
TNPS PROVIDES NATIVE PLANT CONFERENCE SCHOLARSHIP

TNPS will award a \$125 scholarship to a student wishing to attend the Cullowhee Native Plant Conference at Western Carolina University in July.

The scholarship will be available to any students (graduate or undergraduate) enrolled in a bona fide higher education institution or who is an intern at a botanical garden or similar institution and who is a resident of Tennessee. The scholarship will cover registration, room, and board for the conference.

Applicants will be judged on their letter of application and their letter of recommendation from a faculty sponsor. A completed application must be submitted by mid-May. Winner will be notified in early June.

Persons wanting additional information and an application may write to Cullowhee Scholarship, Lichterman Nature Center, 5992 Quince Road, Memphis, TN 38119.



CHEEKWOOD CONFERENCE

A perennials conference at Cheekwood Botanical Gardens in Nashville will hold a perennials conference Saturday, March 26. The program will involve a full day of speakers on design, garden features, and plant materials. The cost will be \$35, with lunch optional. The event is being sponsored by the Perennial Plant Society of Middle Tennessee. Further information may be obtained from Jacqueline Broughton at 615/353-2146. □

RAINY DAY GARDENING

Select a Book to Meet Your Needs

Drippy, pewter grey skies. Cold.
And here I slowly rock.
Warm coffee cup in

hand, cat firmly in lap,
beside the wood stove,
staring out and unconsciously dreaming, planning, a few more steps toward creating my ideal habitat. Will a Fothergilla or two be happy

over there? I'm determined to plant a sweetbay someplace, but where would it be happiest? I need something low and drought tolerant near that white pine. Time to grab some books and decide what to do.

Following is a list of gardening references that I use and have been happy with. I have organized it roughly by level of gardening expertise, starting with beginners. No one book will have all the answers, and I suggest choosing carefully based on your own purpose and experience. "Coffeetable" books abound on this subject, largely full of fluff without much to really help you make progress. No doubt I've overlooked some other useful choices, but I think you'll find these to be dependable references for many years.

Botanical manuals are also essential to the serious wild flower enthusiast, though I have not included them here. Good mail-order catalogues also provide helpful advice on less common plants.

Let's see. . . what does it say about pH for that Fothergilla, and just when does it bloom? . . . Do I want the tall kind or the shorter one? . . . Gosh, is it OK to put it in that low spot? . . . Sorry, gotta go.

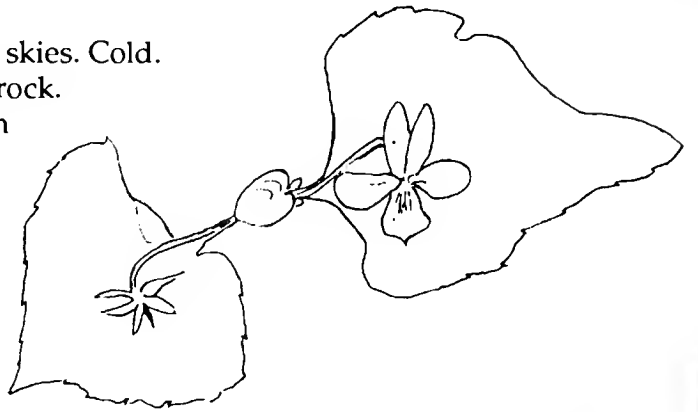
✿ *Growing and Propagating Wild Flowers* (1985, Harry Phillips, UNC Press, Chapel Hill, NC). Without hesitation, my first choice for any level of wild flower gardener. Our most used book. Thorough discussions of each plant including how seed heads look when ripe, what to do with seed, specifics on best methods of propagating including commercial recommendations, cultivation, garden uses and related species. Basic wild flower gardening is discussed in detail and special sections on carnivorous plants and ferns are included. Appendix includes a calendar of bloom dates, production timetables and much more. The principles taught here will take you a long way down the road of wild flower gardening and enjoyment.

✿ *Nursery Sources of Native Plants of the Southeastern United States* (1993, Jan Midgley, Available from: Wildflower, 2292 Dunster Lane, Rockville, MD 20854). A brand new source of sources for nursery propagated wild plants. Lots of plants and useful for individuals or professionals.

✿ *Wyman's Gardening Encyclopedia* (1986, Donald Wyman, Mcmillan Publishing Company, New York, NY). One of the best sources of general horticultural help available. Packed from cover to cover with facts and guidance on just about anything you can think of that has to do with plants and gardening. You'll become an instant expert. Not cheap, but worth it.

✿ *Reader's Digest Illustrated Guide to Gardening* (1978, Carroll Calkins, editor, The Reader's Digest Association, Inc., Pleasantville, NY). One of a number of complete gardening guides available. It just happens to be the one I chose years ago and still find it very useful. It provides as much detail as you will find on most of the basics of gardening. A more up to date edition than mine will, I hope, offer a more holistic approach to pest control, but other than that, I think beginners will find many answers in this hefty source.

✿ *Handbook of Wildflower Cultivation* (1963, Taylor and Hamblin, Macmil-



lan Publishing Company, Inc.). One of the best of the older guides to gardening and simple propagation of wild flowers. Many species are covered, including numerous line drawings. An appendix of useful groupings and a glossary are quite handy as quick references.

✦ *Growing Wildflowers: A Gardener's Guide* (1974, Marie Sperka, Charles Scribner's Sons, New York, NY). Highly recommended, especially for woodland species. A very detailed and practical guide to the culture of these plants including helpful sketches.

✦ *Garden in the Woods Cultivation Guide* (1986, Brumback and Longland, New England Wildflower Society, Inc., Framingham, MA). Another good nuts-and-bolts reference to the basic cultural requirements of many woodland wild flowers. Good guide for soil pH.

✦ *Taylor's Guide to Natural Gardening* (1993, Roger Holmes, editor, Houghton Mifflin Company, New York, NY). A good general reference to native plants and the many aspects of their use and propagation in gardens throughout the United States. Informative essays, a large plant encyclopedia, excellent photographs and a helpful guide to resources make this a good choice for beginning and intermediate gardeners. (Look for new guide on Specialty Nurseries!)

✦ *Growing and Propagating Showy Native Woody Plants* (1992, Richard E. Bir, UNC Press, Chapel Hill, NC). A much needed source of current information on the culture and propagation of our native eastern woody flora. Dick Bir knows his stuff and has included many pearls of wisdom to aid the novice and professional alike. A must if you're at all interested in caring for or propagating these choice plants. Many beautiful color photos.

✦ *Perennials: How to Select, Grow & Enjoy* (1985, Pamela Harper and Fredrick McGourty, HP Books, Tucson, AZ). An excellent basic guide to perennial gardening including many natives and near-natives. Lots of color photos.

✦ *Herbaceous Perennial Plants: A Treatise on their Identification, Culture and Garden Attributes*. 1989. Allan M. Armitage. Varsity Press, Inc., Athens, GA. I highly recommend this for the perennial gardener's library. Plants are thoroughly covered, including more information than usual on their propagation. The information is current and especially useful for our region. He is clearly sympathetic to natives which are generously discussed.

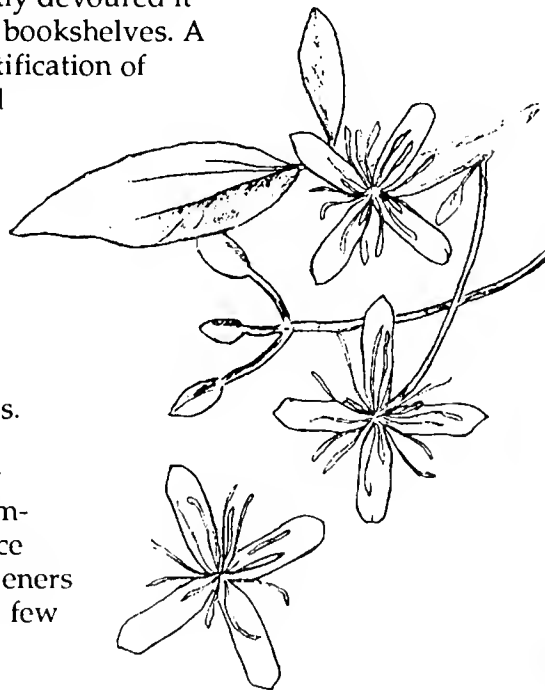
✦ *Perennials for American Gardens*. 1989. Clausen and Ekstrom. Random House, Inc., New York, NY. One of the more recent and complete guides to standard perennials. Natives are treated rather lightly, but overall it is one of the better sources for cultural advice on dependable perennials and includes many helpful color photos.

✦ *Pioneering with Wildflowers* (1935, George D. Aiken, The Countryman Press, Taftsville, VT). My first wild flower book. I bought it for my mother (yeah, right!) in '79, though I promptly devoured it and somehow it has migrated to my bookshelves. A superb guide to gardening and identification of most of our common woodland wild flowers including many fine color photos.

✦ *Propagation of Wildflowers* (1986, Curtis, Brumback, New England Wild Flower Society, Inc. Framingham, MA). A great little nuts and bolts pamphlet that is a quick how-to guide to help you increase your woodland wild flowers. Very handy.

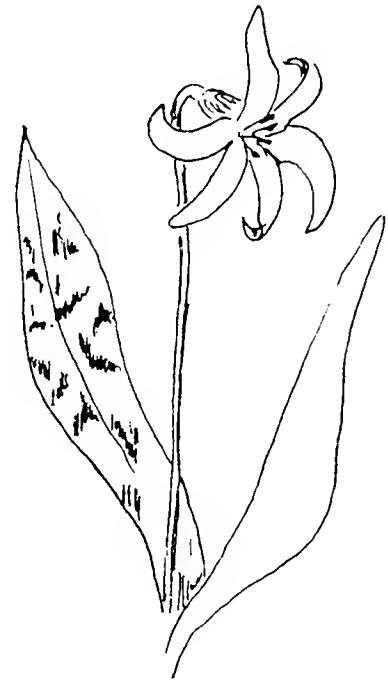
✦ *The New Seed Starters Handbook* (1988, Nancy Bubel, Rodale Press, Emmaus, PA). A very thorough reference for beginning and intermediate gardeners of all sorts. If you just want to start a few

Continued Page 6



NATIVE PLANT SALE IN CHATTANOOGA

Reflection Riding, an arboretum and botanical garden in Chattanooga, will hold a spring native plant sale April 9 and 10 in conjunction with the Wildflower Festival at the Chattanooga Nature Center. A variety of native wildflowers, shrubs, and trees will be offered. Anyone wishing to obtain a pre-order form may call 615/821-9582.



LICHTERMAN CENTER HEADQUARTERS DESTROYED BY FIRE

At the TNPS board meeting February 26, Larry Wilson, a board member from Memphis and the naturalist at the Lichterman Nature Center, announced that the main building at the Lichterman Center was totally destroyed by a fire the day before.

The Lichterman house, a large log and masonry building, lay at the center of a large estate donated to the City of Memphis and housed exhibits and offices of the nature center. The grounds contain hiking trails and gardens, including many native plant areas, preserved and developed by Larry Wilson and his volunteers. □

KICKOFF THE 1994 SEASON WITH FIELD TRIP TO CUMBERLAND RIVER BLUFFS

Margret Rhinehard will lead the first field trip of the season to the Cumberland River Bluffs near Gainesboro on April 9.

This is an area rich in spring flora. The group will be looking especially for *Isopyrum*, *Trillium recurvatum*, *Dicentra*, and *Jeffersonia*.

Everyone is asked to meet at 1 p.m. (Central) at a convenience store on the bluff of the Cumberland River. Anyone traveling I-40 should exit north on Highway 56 toward Gainesboro. Before crossing the river, stop at the convenience store on the hill.

For more information and to alert Margret you are coming, call her at 946-2381.

FRANKLIN FOREST TRIP APRIL 16

Margret Rhinehart will once again be the leader for a trip to the Franklin Forest near Sewanee.

Everyone is asked to meet at 1 p.m. (Central) at the Sewanee Inn. Sewanee is about five miles from Monteagle off I-24 between Nashville and Chattanooga. □

SHORT SPRINGS HIKE APRIL 17

Short Springs near Tullahoma is in the process of being designated a Class I Natural Area by the State Legislature. And the dedication hike is scheduled for April 17.

Join Dennis Horn and Milo Pyne for hikes through this 420-acre area rich in spring flora. Hiker can meet at the water tower at the edge of Short Springs, but if you don't know the way, meet at the Tullahoma Dairy Queen at 9:30 a.m. (Central) or 1 p.m. to catch one of the two hikes.

The Dairy Queen is on the left of Highway 55 as it enters Tullahoma from the north and I-24 at Manchester. □

RAINY DAY GARDENING— CONTINUED

vegetables or grow giant trees, you will find it here. Geared toward the home gardener, it includes many easy ways to grow just a few plants or how to manage a small greenhouse. A plant encyclopedia discusses techniques for starting and growing many specific annuals, perennials and woody plants.

✻ *Park's Success with Seeds* (1978, Ann Reilly, published by George W. Park Seed, Co., Greenwood, SC). A good, basic course in starting all sorts of plants from seed. Good color photographs, too.

✻ *Native Gardening in the South* (1992, William R. Fontenot, A Prairie Basse Publication, Rt. 2, Box 491F, Carencro, LA 70520). Though written by a true Cajun, the information is cross-cultural. This spiral bound, in-house production is chock full of wit and wisdom of a biologist-naturalist-gardener on all sorts of fringe subjects along with good solid native gardening and stewardship advice. Not your run of the mill, fluffy gardening guide. Available directly from the above address. Especially useful for warmer west Tennessee.

✻ *The Wildflower Meadow Book* (1986, Laura C. Martin, Fast & McMillan Publishers, Inc., Charlotte, NC). To date, I think this is the only complete reference on the subject of naturalized meadows. The information is still very useful, though much has been learned in the meantime. You may yet have to feel your way on this subject, but this will give you a good start.

✻ *Common Sense Pest Control: Least toxic solutions for your home, garden, pets and community* (1991, Olkowski, Daar, Olkowski, Taunton Press, Newtown, CT). An excellent, up to date resource for all gardeners. In depth information on alternatives to highly toxic solutions to many pest problems. No fluff here! Again, not cheap, but truly a lifetime investment in peace of mind.

✻ *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses* (1983, Michael Dirr, Stipes Publishing Company, Champaign, IL). A standard for professionals, but written for anyone curious about growing or caring for most of the woody plants used in landscaping. I highly recommend this book (or latest edition) for anyone seriously interested in propagating or using a variety of woody plants. The scary part is that Michael Dirr really does *know* all of these plants and, in most cases, his facts are based on personal experience. Many, many natives are covered, and he clearly has a fondness for them. Cold hard facts laced with wry wit and distilled personal opinion make this one of the well worn treasures of my library.

✻ *Native Shrubs and Woody Vines of the Southeast: Landscaping Uses and Identification* (1989, Foote and Jones, Timber Press, Portland, OR). A very good resource including botanical descriptions and suggestions for landscape use. Good lists of plants by form, habit, cultural requirements, etc. and very nice color photos.

✻ *Native Trees, Shrubs and Vines for Urban and Rural America. A Planting Design Manual for Environmental Designers* (1988, Gary L. Hightshoe, Van Nostrand Reinhold, New York, NY). Intended more for professional designers, but, if you can afford it, it is very useful for finding quick answers to such things as plant characteristics, shade and moisture tolerances, disease susceptibility, urban tolerance, and similar and associated species. Good black-and-white photos and sketches of form, bark, flower, and fruit. Lots of charts and tables for comparison of various characteristics.

—Ed and Meredith Clebsch
Greenback



1994 TNPS FIELD TRIP SCHEDULE

Date	Location	Description	Leader	Place/Time
April 9	Cumberland River Bluffs, Gainesboro	Rich spring flora: <i>Isopyrum</i> , <i>Trillium recurvatum</i> , <i>Dicentra</i> , <i>Jeffersonia</i>	Margret Rhinehart 615/946-2381	Hwy 56 market before river 1 p.m.
April 16	Franklin Forest, Sewanee	<i>Trillium catesbaei</i> and pockets of northern-like flora	Margret Rhinehart 615/946-2381	Sewanee Inn 1 p.m. (CT)
April 17	Short Springs, Tullahoma	Dedication hikes in new State Natural Area; area rich in flora	Dennis Horn 615/454-5742 Milo Pyne	Dairy Queen 9:30 and 1 p.m (CT)
April 23	Frozen Head/Panther Creek Trail	Rich spring flora; <i>Disporum maculatum</i> , etc.	Dennis Horn 455-5742 Larry Pounds	Visitors Cntr 10:30 (ET)
April 28-30	Wildflower Pilgrimage, Gatlinburg	Annual series of Smokies wild-flower hikes along with exhibits		
May 1	Post Pilgrimage Hike, Smokies	TNPS hike to be announced at Sugarlands Visitors Center		Sugarlands 9:30 (ET)
May 7	Sunnybell Glade, Rutherford Co.	Sunnybell Glade and other glades in Rutherford. See <i>Schoenolirion croceum</i> and other species	Bertha Chrietzburg 615/896-1146	I-24 Stuckeys at Almadille exit 10 a.m. (CT)
May 21	Tennessee River Gorge, Marion Co.	Find <i>Scutellaria montana</i> , <i>S. pseudoserrata</i> , <i>S. ovata</i> , <i>Waldsteinia parviflora</i>	Margret Rhinehart 615/946-2381	Check later issues
June 11	Pickett State Park, Pickett Co.	<i>Silene rotundifolia</i> , <i>Passiflora lutea</i> , etc.	Milo Pyne 615/532-0440	Check later issues
July 9	Goose Pond, Pelham in Grundy Co.	See oft-damaged pond where <i>Nelumbo lutea</i> and other species survive	Milo Pyne 615/532-0440	Check later issues
Aug. 6	South Cumberland Rec. Area, Grundy Co.	Wide variety of meadow and stream-side flora	Bertha Chrietzburg 615/896-1146	Check later issues
Aug. 13	Oak Ridge Barrens	See tall larkspur and other species	Maureen Cunningham 615/481-8727	Check later issues
Sept. 10-11	Clinch River Canoe Trip, Oak Ridge —Second-day shoreline exploration continued	See rare spreading false foxglove, <i>Aureolaria patula</i> and other species. Second day: Earleaved foxglove (<i>Tomenthera auriculata</i>)	Maureen Cunningham 615/481-8727 Milo Pyne 615/532-0440	Check later issues
Sept. 23-25	Annual Meeting, AEDC, Manchester/Tullahoma	Many unusual meadow or prairie species to be seen on hikes	Kay Jones, Coordinator 615/285-2777	Check later issues

TNPS 1994 FIELD TRIP SCHEDULE —SEE PAGE 7—

The TNPS Board of Directors has approved a 1994 schedule of field trips.

Most of these planned hikes will be to new areas for most members, while others are variations of some excellent field trips held in the past.

Additional information about these trips will be published in the future. But you may want to clip out or copy this schedule and post it as a reminder of what is to come.

Make plans now to attend the TNPS Annual Meeting set for AEDC, September 23-25.



Vol. 17, No. 1; March 1994

TIME TO RENEW YOUR MEMBERSHIP

For your convenience, a membership form is included here, although you may want to save the field trip schedule on the opposite side of the page. If you are saving the field trip schedule, you may either make a copy of the membership form or simply send you name and address and check for dues to the TNPS address in Knoxville.

If you are in doubt about whether you are paid for the current calendar year, simply look at the date on the mailing label of this newsletter.

Name _____

Address _____

City/State/Zip _____

Membership Categories: Regular \$15, Student and Senior \$10,
Institutional \$20, Life Memberships \$150

Mail To: Tennessee Native Plant Society, Department of Botany,
University of Tennessee, Knoxville, TN 37996-1100

Printed on recycled paper

Tennessee Native Plant Society Newsletter

P.O. Box 856
Sewanee, TN 37375

Bulk Rate
U.S. Postage
PAID
Permit No. 54
Sewanee, TN

TENNESSEE NATIVE PLANT SOCIETY NEWSLETTER



Volume 17, Number 2

June 1994

MORE PHOTOS SOUGHT FOR 2001 FLORA GUIDEBOOK

A new call for photographs is out in preparation for the TNPS wildflower guidebook.

More than 700 photographs are expected to be used in the book, which will be published as part of the Tennessee 2001 Flora Project.

As many photographs as possible will be included, not only to show the best known species but to include representative species from some of Tennessee's special regions and habitats, like the cedar glades.

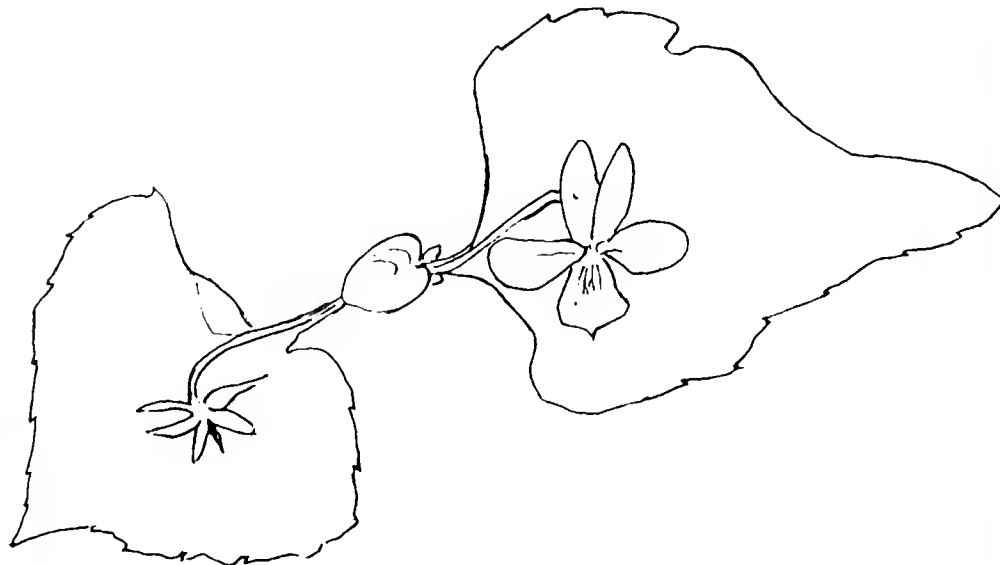
About 5,000 photographs were received in the first call last year, and those were cut down to about 1,300 photographs.

Jack Carman, chairman of the photo selection committee, said those 1,300 remaining photos include many duplications, so that more will have to be eliminated. More important, the selection process has shown that photographs of many species the committee had hoped to include have not been received.

Therefore, a new want list has been sent to the photographers who submitted the initial collection. Those photos are due by November. Anyone wishing to have the new list may write to Jack Carman at 106 LaSalle Lane, Tullahoma 37388-3249.

Plant descriptions are being compiled under the guidance of the description committee, chaired by Dennis Horn of Tullahoma.

Publishing arrangements are still being made, and gifts will be sought to publish the book at a cost of well over \$100,000. The book is being published in commemoration of the first comprehensive guide to Tennessee plants, the *Flora of Tennessee and Philosophy of Botany* by Augustin Gattinger.



CANDY SWAN TO BE TNPS EDITOR

Beginning with the August issue, the *TNPS Newsletter* will have a new editor. She is Candy Swan, a TNPS member from Cookeville.

Candy was coordinator of the state roadside wildflower project when she was working with the Tennessee Tech Agriculture Department, which had a contract with the state.

Previously she was a state park ranger/naturalist at Big Ridge and Standing Stone state parks. Currently she is teaching in the Putnam School System.

In addition to her education in biology and her experience as a naturalist, Candy brings to the *TNPS Newsletter* some editing experience. She is the editor of the newsletter for the Upper Cumberland Chapter of the Tennessee Ornithological Society.

Correspondence to the newsletter should now be addressed to Candy L. Swan, 1172 Dry Valley Road, Cookeville, TN 38501.

ALSO IN THIS ISSUE

Photography
by David Duhl

Page 4

Annual Meeting
and Plant Conference

Page 7

TENNESSEE NATIVE PLANT SOCIETY NEWSLETTER

June 1994

Volume 17, Number 2

This Newsletter is a publication of the Tennessee Native Plant Society and is published six times a year, generally in February, April, June, August, October, and December.

The Tennessee Native Plant Society (TNPS) was founded in 1978. Its purposes are to assist in the exchange of information and encourage fellowship among Tennessee's botanists, both amateur and professional; to promote education of the public about Tennessee flora, and wild plants in general; to provide, through publication of a newsletter or journal, a formal means of documenting information on Tennessee flora and of informing the public about wild plants; and to promote the protection and enhancement of Tennessee's wild plant communities.

Dues are \$15 for the calendar year (\$10 for students and senior citizens, \$20 for institutions, and \$150 for life memberships). Membership privileges include a subscription to the TNPS Newsletter. Dues may be sent to the Tennessee Native Plant Society, Department of Botany, the University of Tennessee, Knoxville, TN 37996-1100.

TNPS OFFICERS

Mary Martin Schaffner of Nashville,
President

Dennis Horn of Tullahoma,
Vice-President

Andrea Shea of Nashville,
Corresponding Secretary

Nita Heilman of Clarksville,
Recording Secretary

Karen Yarbro of Knoxville,
Treasurer

DIRECTORS

John Churchill of Johnson City

H.R. DeSelm of Knoxville

Shirley Nicholson of Knoxville

Bertha Chrietzburg of Nashville

Kay Jones of Columbia

Harold Scott of Columbia

Larry Wilson of Memphis

Sally Mirick of Knoxville

Latham Davis, Editor

THANKS FOR THESE YEARS AS YOUR EDITOR

One privilege an editor has is the opportunity to write an occasional editorial, and now that I am at the end of my tenure—all three-and-a-half-years of it—I'll take advantage of the opportunity.

Mainly, I'd just like to say some good things about this organization and thank everyone for the opportunity as editor to have had some fun.

I am relinquishing my responsibilities to Candy Swan, and I am happy to have found a new editor who is both experienced at editing and has good knowledge of native plants. I hope Candy will enjoy herself half as much as I have these short years.

I have not resigned as editor very willingly. I have simply run out of time, with two business ventures consuming all my waking hours and then some.

The pleasure of being your editor has not only come from the opportunity to write about and edit information about native plants, but it has come from my encounters with members of this organization. Whenever I manage to race off to a TNPS field trip, I must admit I am not seeking out new native plants so much as seeking the company of our members who know about those plants. With difficulty I am restraining myself from mentioning people's names, for I cannot name nearly all of them.

Part of the charm of this society is that its members have a single-minded interest in native flora. Peripheral activities sometimes suffer. Our members, somewhat obsessive by nature anyway it seems, don't have extra time in their lives except to pursue beautiful, unusual, and rare native plants. And if on a field trip you hang close on their shoulders you can pick up a lot of fascinating information about the incredible field of botany. I have tried to include in the pages of our newsletter some of that information, as well as some of the charm of those members, sometimes successfully, sometimes not. But if my work *for the fun of it* has been of some service to TNPS, that is my bonus reward.

I will not end this discourse without entering a plug for our society's major people event.

If in the past you have been unable attend field trips, consider making a special effort to attend the annual meeting September 23-25. For the second straight year, the annual meeting will be held at Arnold Engineering Development Center between Manchester and Tullahoma, southeast of Nashville. Excellent accommodations will be available at the Forrest Inn and Arnold Lakeside Club through our TNPS annual meeting coordinator Kay Jones. If the inn fills up, excellent motels are available within a ten-minute drive.

Best of all, amateur and professional botanists will be providing formal and informal programs on their favorite subjects. And the time of year should be perfect to observe up close the rich meadow flora of the AEDC reservation.

I hope I will see you there. And if not, I'm happy we have connected, even in a small way, through this *TNPS Newsletter*.

—Latham Davis



Why Cardinals Are Loved by Hummingbirds

If you have become acquainted with the lobelias, you have probably been struck by the differences in the species. Not that the existence of those differences is especially unusual. To the contrary, the variations in color, habitat, and structure are somewhat typical of vascular plant families and genera. Nevertheless, the differences help us to remember and appreciate them more.

The checklist of the *Vascular Plants of Tennessee*, edited by Eugene Wofford at UT, lists nine species of lobelia in the state. Most field guides name no more than three or four.

One of the most striking is the *Lobelia cardinalis* or cardinal flower. Its intricate flower but vibrant red color can stop a group of hikers in their tracks. The stop is almost always along a stream bank or marshy seep.

Gardeners and propagators say that cardinal flower is not so particular about moisture in cultivation so long as the site is not allowed to dry out. But in moist areas that persist well into late summer, *cardinalis* can be two or three times as tall (up to five feet) and its tubular flowers can be twice as large (more than an inch) as those planted in perennial borders.

The cardinal flower's leafy stem is topped by racemes of flowers. Toothed leaves two to five inches in length alternate up the erect stem, with little or no branching. Look for blooms in early July; they will persist into October.

The upper lip of each flower is split into two lobes, the bottom lip into three, and the fused stamens form a red tube from which the anthers protrude. The unusual shape and brilliant red color assures visits from the chief pollinators—hummingbirds.

On this point, a difference between *cardinalis* and its cousin, the blue lobelia, raises evolutionary questions.

Nell Blanchard in *Nature's Garden* notes that bees prefer blues, hummingbirds red. Thus the shorter-tubed blue lobelia elected to woo bees. (Blanchard also says, "Our scarcity of red flowers is due . . . to the scarcity of hummingbirds." Other authors blame the infrequency of *cardinalis* on collecting.)

Blue also predominates among the lobelias and those blue species, unlike *cardinalis*, do well in drier and sunnier locations.

Cardinal flower can be grown from seed, by stem cuttings in summer, and by division of the rosettes before or after the growing season. Each flower produces a round capsule containing thousands of tiny reddish-brown seeds. The capsules ripen from the bottom of the spike to the top, splitting open at maturity to disperse their seeds. □

FLORA OF NORTH AMERICA VOLUMES AVAILABLE

Flora of North America (first two volumes): A reminder of this first-ever comprehensive description of the plants growing naturally north of Mexico.

Volume I contains a series of introductory essays that provide a foundation for the Flora. The essays, written by nearly two dozen botanical authorities, discuss climate, geology, the histories of vegetation and its current status, expeditions and research and discussions of overall classification and how to use the book. Volume II contains taxonomic treatments of ferns and gymnosperms. In all, fourteen volumes of the Flora will be published over a period of twelve years.

(*Flora of North America*; Oxford University Press; New York; 1993; \$75/volume.) Copies may be ordered by calling 800/451-7556. □

PRESERVING HISTORIC LANDSCAPES IN THE GARDEN

A New Book, *The Natural Habitat Garden* by Ken Druse:

In this colorful volume, Ken Druse, both author and photographer, is joined by *New York Newsday* garden editor Margaret Roach. They set out to show how gardens can be more than collections of plants; they can be harmonious communities made to resemble North America as it was in the years before European settlement. Druse writes, "When I wrote *The Natural Garden* in the mid-1980s, I proposed that nature be the source of design. Now instead of just making gardens that resemble the earth, I want to change the earth's diminished domain by growing native-plant gardens modeled on nature's original communities."

Druse's goal is laudable and attractive to most students of native plant botany, but it may be beyond the capacity of all but the rare gardener. Gardens, by their nature, are grown on altered landscapes in contrived environments. It is one thing to grow *Iris cristata*, *Trillium sessile*, and wild geranium. But how many gardeners are able to maintain a habitat that preserves the hundreds of lesser known, sometimes delicate species?

Nevertheless, Druse provides valuable insights. For instance, "A quarter of the earth's organisms may become extinct in the next thirty years. Only 1.4 million plant and animal species have been recorded so far by scientists, who estimate that there are 10 million to 100 million out there. Gardening can dramatically affect this biodiversity."

The Natural Habitat Garden presents more than 500 color photographs of gardens from all over the country that are inspired by regional habitat types. It is divided into chapters on Grasslands, Drylands, Wetlands, and Woodlands.

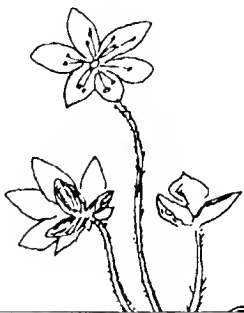
(*The Natural Habitat Garden* by Ken Druse; Clarkson Potter Publishers, New York, NY, 1994; 256 pages; \$40.) □

CULLOWHEE NATIVE PLANT CONFERENCE JULY 21-23

The Cullowhee Conference on Landscaping with Native Plants is celebrating ten years of successfully bringing together enthusiasts on native plant landscaping. This year's conference is being held July 21-23, as always at Western Carolina University in Cullowhee, North Carolina.

Several Tennesseans helped with the first conference in 1984. Leo Collins was particularly instrumental, and Collins has helped organize other native plant conferences, including the Mid-South Conference, being held this year in Memphis.

Persons wishing more information about this year's conference in Cullowhee may write to Sue Deitz, Division of Continuing Education, Western Carolina University, Cullowhee, NC 28723 or call 704/227-7397.



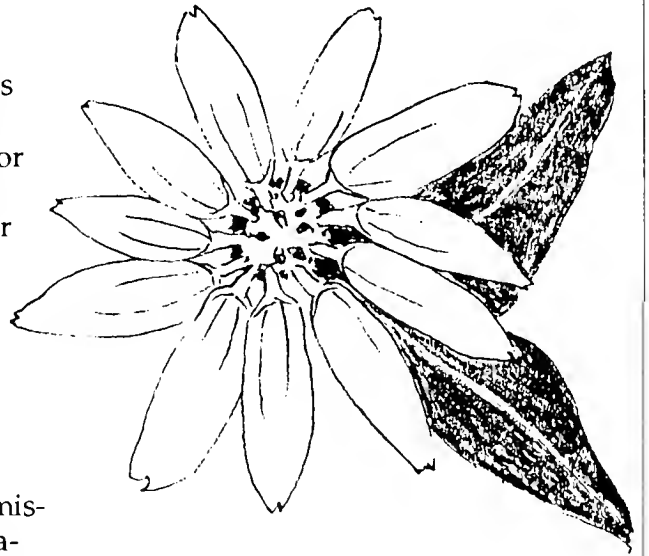
MINT PROTECTION

A note from the catalogue of Sunlight Gardens of Andrea Sessions and Marty Zenni (174 Golden Lane, Andersonville, TN 37705):

Did you know that mountain mint repels fleas, gnats, and ticks? *Pycnanthemum incanum* is quite effective at keeping those thirsty little buggers off your legs. Rub leaves on your socks or put some branches in your boots when you walk in infested areas. Try throwing some leafy branches into the dog house to relieve your pets. But who has fleas anyway?! Be sure to plant lots of plants! □

PHOTOGRAPHING FOR THE TNPS WILDFLOWER GUIDE-BOOK

In the winter of 1994, seven sugar-crazed photographers and one dedicated botanist secluded themselves in a room for four consecutive weekends, ate lots of sweets, and looked at over 3,500 slides and prints. The goal was to make the initial photo selections for the NPS guidebook. What follows are our observations and suggestions which might be helpful to those who wish to contribute photos in the next round of submissions. For simplicity, I've summarized the most common difficulties we had in selecting photographs, and some points to consider for each.



Sunlight. Many photographs suffered for being photographed in bright sunlight. In photography, it is sometimes preferable to look for even lighting. When it's not there, create it yourself by casting a shadow with your coat or an umbrella. Doing this will most certainly eliminate bright spots and distracting highlights.

Go with the flow. Some photographers failed to match the format of the slide—horizontal or vertical—with the image. In general, if the flow of the subject is from side to side, consider a horizontal format. If it is from top to bottom, a vertical photograph might be in order.

Foliage. In some cases, the most beautiful wildflower photograph was accompanied by the foliage of an entirely different plant—great for aesthetics, but a questionable strategy for selection in a guidebook. It might be helpful to consider photographing the wildflower with its own foliage so as to tell a more complete story of the subject.

Foliage redux. On a similar note, many photographs were exceptional, but showed the wildflower, disconnected with any foliage at all. This was a particular problem if the foliage was the key to identifying the wildflower. Again, great for aesthetics, but maybe not so for a guidebook.

Background. Sometimes an otherwise beautiful wildflower image was compromised because the subject did not stand out from the background. The ideal situation would be the subject completely in focus, the background not recognizable at all. It's a trade-off: as you change the aperture from f/5.6 to f/8 to f/11 I to get more of the flower in focus, more of the background will come into focus as well. The solution may involve placing the camera parallel to the subject (essentially placing the flower in a single plane), allowing for the use of a larger aperture (f/8, for example). It's also helpful to find a subject that is relatively far away from the background (a tall flower at the edge of a field, for example).

The artist within. While we all try to be artistic with our photography, there is a fine line between artistic and literal representations of wildflowers. For guidebooks, you need to be on the literal side.

Color. On several occasions, the technical merits of some photographs were quite high, but the color compromised selection. It's true that some films don't record blue very well, some have greens that favor yellow-green, and some reds that favor orange. Beyond these limitations, try to use your film before the expiration date stamped on the box, and don't let it get too hot along the way—you can't imagine the colors you'll get. For literal photography, let nature choose the palette. I don't even want to consider what "true" color is!

Overexposed whites. It seems like I read somewhere the adage that bright whites are great for laundry, but not so for photographs. Many times we witnessed breathtaking images that had overexposed whites. The reason is simple: film can only record about two stops brighter than middle tone, and pure white is beyond those two stops. The solution is equally simple: underexpose your photograph 1/2 to 3/4 stops to bring those whites within the range the film can handle.

You'll be hearing more about the re-submission procedure for the Tennessee Wildflower Guidebook later. I hope you'll keep some of these points in mind. I think it will help.

David Duhl

(David Duhl is a nature photographer living in Nashville and may be contacted at 817 Kent Road, Nashville, Tennessee 37214.)

A PASSION FOR THE PASSIONFLOWER

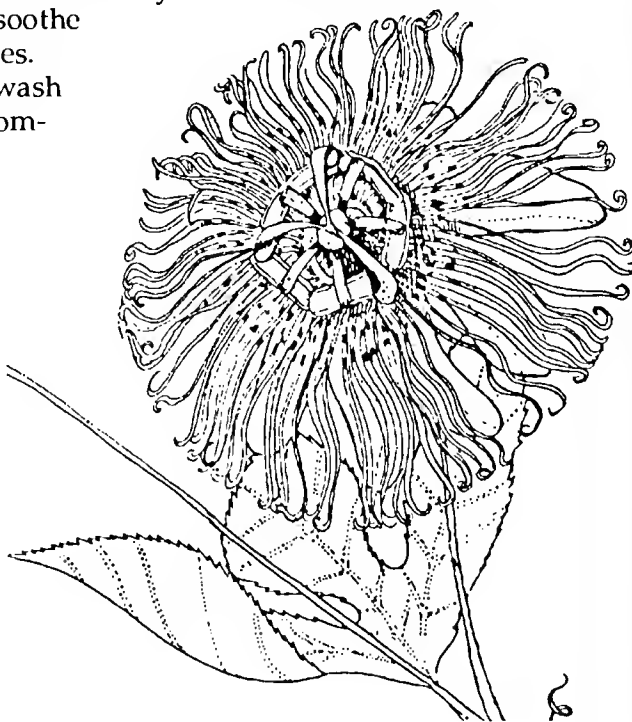
Mid-summer is blooming time of Tennessee's state wildflower, the passionflower or maypop (*Passiflora incarnata*).

The passionflower is one of nature's most striking and unusual wildflowers.

Early Jesuit missionaries attached religious meaning to the passionflower. It became known as the *flor de las cinco llagas*, or flower of the five wounds—five sepals, five petals—and special meanings were given to the other parts of the flower.

Although potentially harmful in large amounts, native Americans and early settlers used the passionflower medicinally. Native Americans made a poultice with roots to soothe bruises, boils, cuts, and earaches. Pioneers made a soothing eyewash and used the plant to treat insomnia, tension headaches, and epilepsy.

Gardeners who wish to propagate the passionflower from seed may become frustrated because germination takes two years, and only a very small percentage of seed is viable. The best way is to propagate from stem cuttings six to eight inches in length which are kept under a mist spray. Or order from native plant propagators.



EASTERN NATIVE PLANT ALLIANCE CONFERENCE AUGUST 25-27

The Eastern Native Plant Alliance is sponsoring a three-day conference in August, to spotlight the issues of landscape planning, restoration, and management.

The conference will be held August 25-27 at Winterthur Museum and Gardens. Winterthur is located in the Brandywine Valley on Route 52, six miles northwest of Wilmington, Delaware, and Interstate 95.

Registration costs \$30, which includes two refreshment breaks and two box lunches. Other information about registration, program, and accommodations may be obtained by contacting Greg Edinger, Bowman's Hill Wildflower Preserve, P.O. Box 103, Washington Crossing, PA 18977 or by calling 215/862-2924.

ENPA membership is open to organizations that promote or demonstrate native plant conservation in the eastern U.S. or southeastern Canada and to individuals committed to serving as liaison to an appropriate organization. Annual dues are \$25. The address is Eastern Native Plant Alliance, P.O. Box 6101, McLean, VA 22106.

TURTLE ISLAND BIOREGIONAL MEETING EMPHASIZES REGIONAL ISSUES

The sixth biennial Turtle Island Bioregional Gathering will be held August 14-21 at Camp Piomingo, Kentucky.

The site is thirty miles southwest of Louisville, Kentucky, at the mouth of Otter Creek on the Ohio River.

Further information may be obtained by writing to Shepard Hendrickson, 341 N. Hamilton, Indianapolis, IN 46201 or by calling 317/636-3977. □

THE DEPARTMENT OF TRANSPORTATION BEGINS PLANTING ALIEN WILDFLOWERS

A pilot study, costing \$150,000, was completed last year for the Department of Transportation.

The program established sites and made recommendations for the planting of native flora along interstate and state highways. Key recommendations were that the state avoid mowing certain areas where native plants already existed and that certain species of native plants be planted in suitable areas.

This year the department began planting about twenty species of wildflowers along the interstate. However, all but three of those species are aliens. Thus the Department of Transportation is substantially ignoring the \$150,000 study. What is worse is that some of the species—dame's rocket, for instance—has proven elsewhere to be invasive to native plants. Of course, some of the alien species will live only one season and not survive, but others will spread.

Candy Swan, a TNPS member and a coordinator of the roadside wildflower project, was quoted extensively in a story published recently in the *Nashville Tennessean*. Her work had successfully shown the promising potential of using wildflowers along highway rights-of-way.

Candy pointed out that the new plantings were initiated for the state bicentennial, and the use of alien plants to the exclusion of natives, therefore, seems especially ludicrous.

In taking this course, the Department of Transportation is also ignoring the work of its sister department—Environment and Conservation—which has been discouraging the use of alien species in plantings. DOT is also ignoring successful highway wildflower projects in other states, most notably Texas and Virginia. Those states have not only beautified the roadways by allowing native wildflowers to spread, but they have cut expenses significantly by reducing the amount of mowing. Those efforts have also become part of those states' tourist promotions.

FEDERAL LISTING FOR TENNESSEE'S LARGE ROCK CRESS

Arabis perstellata var. *ampla* in Rutherford County

Two varieties of *Arabis perstellata* are up for addition to the Federal List of Endangered and Threatened Species. These perennial members of the mustard family (*Brassicaceae*) have the common names of large rock cress (var. *ampla*) and small rock cress (var. *perstellata*). They are known from only a few populations in Kentucky and Tennessee.

A report of the Fish and Wildlife Service lists only two extant populations of *A. perstellata* var. *ampla*, both in Rutherford County, Tennessee. Variety *perstellata* is currently known from twenty-six populations in Kentucky—twenty-four in Franklin County and two in Owen County.

According to the report, "The species is endangered because of either potential or current threats from habitat alteration due to residential, commercial, or industrial development; timber harvesting; grazing and trampling; and competition with native and exotic weedy species, especially the European garlic mustard (*Alliaria petiolata*).

Both varieties have round stems and alternate leaves. Their stems and foliage have a grayish coloration due to the large quantity of hairs. Their stems arise from horizontal bases and grow more than 30 inches long, often drooping from rock ledges.

There are six stamens, with two shorter than the other four. Flowering occurs from late March to early May. Fruits mature from mid-May to early June. Their oblong seeds are reddish brown; somewhat flattened, about one mm or .04 inch long.

Both varieties have been associated with steep limestone cliffs or slopes with limestone outcrops. The plants have definite shade-light requirements, surviving in full shade or filtered light, but are not found in full sunlight.

Large rock cress was discovered in 1959 on steep limestone cliffs above the Stones River in Davidson County by Dr. R. B. Channel. A year later these populations were distinguished from the Kentucky populations by their generally larger size, thinner and more entire leaves, and lesser pubescence.

The three previously known Davidson County sites have been extirpated, and during the recent study, one of the two Rutherford County sites could not be located. But one additional population was discovered in Rutherford County. One consists of only about twenty-five plants, the other contains several hundred plants scattered over about 2.2 acres. Both sites are on private land and are threatened by competition by weedy invaders.

Listing on the Federal List of Endangered and Threatened Species provides for certain measures of protection by federal, state, and private agencies and groups. Some additional protection against taking is also provided.

Further information about the study of *Arabis perstellata* may be obtained by writing J. Allen Ratzlaff at the Asheville Field Office, U.S. Fish and Wildlife Service, 330 Ridgefield Court, Asheville, NC 28806 or by calling 704/665-1195, ext. 229. □



Get Ready for the TNPS Annual Meeting

Return to Arnold Center September 23-25

June is not too early to begin planning your trip to the TNPS Annual Meeting, set for September 23-25 at the Arnold Engineering Development Center.

The AEDC reservation is home to thousands of species of late summer wildflowers. Nearby are May Prairie, a state preserve, and other sites.

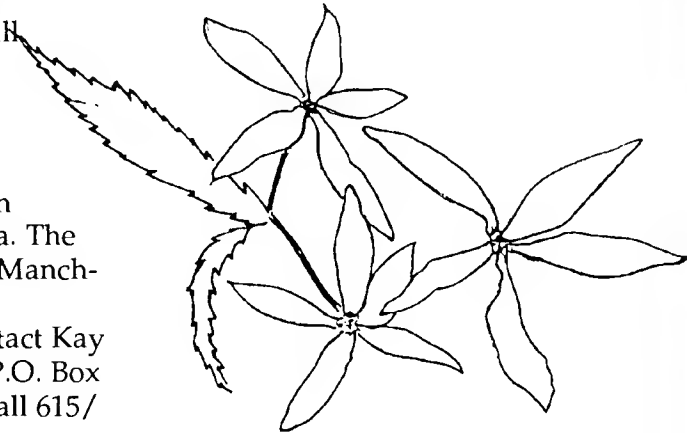
Details about prices are not available. But Kay Jones said that when those details are announced, probably in August, be prepared to make your reservations promptly.

TNPS will have a joint meeting this year with the Kentucky Native Plant Society and perhaps also the American Association of Field Botanists. The usual rich schedule of lectures and illustrated presentations is anticipated.

Accommodations and facilities at AEDC are first class and are provided at a reasonable price. Breakfasts and evening meals will be available at the Forest Inn and Arnold Lakeside Club.

The Arnold reservation is located near I-24 between Nashville and Chattanooga. The AEDC exit is just south of Manchester.

Anyone wishing to contact Kay Jones may write to her at P.O. Box 193, Hampshire 38461 or call 615/285-2777 evenings.



NATIVE PLANT CONFERENCE IN MEMPHIS TO BE HELD OCTOBER 21-23

Plans continue to be made for the Mid-South Native Plant Conference to be held October 21-23 in Memphis.

TNPS is sponsoring the event along with the Memphis Horticultural Society, the Memphis Botanic Garden, Lichterman Nature Center and native plant societies from Arkansas, Kentucky, Illinois, and Mississippi.

The conference will be held at the theater of Christian Brothers University. The steering committee reports that the theater, which seats 500 people, also has a lobby for exhibits, and classrooms are in a nearby building for various programs. Meals will be available in the nearby cafeteria at a cost of \$5 to \$8 a meal.

The committee voted to set a registration fee of \$75, with a special discount price of \$60 for early registrants. Money must be received by October 1. Other details are still being worked out.

Larry Wilson of Memphis, a TNPS member, serves on the committee. He may be contacted at the Lichterman Nature Center, 5992 Quince Road, Memphis, TN 38119 or by calling 901/680-9756.

SOUTH CUMBERLAND HIKES AUGUST 6 OFFER ABUNDANT MEADOWS, MOUNTAIN FALLS, AND ORCHIDS

Two very different hikes await members on August 6 in Grundy County on the Cumberland Plateau.

Bertha Chrietzburg leads the way, and she asks that everyone meet at 9:30 a.m. at the visitor's center of the South Cumberland Recreation Area. The center is located three miles north of I-24 on Highway 56 between Monteagle and Tracy City.

The first hike will take members into a mixed meadow and lightly wooded area behind the center. This is an area that was once cleared for a golf course. It includes ponds and streams, as well as dry grassy slopes. The hike will be moderate, appropriate for the whole family.

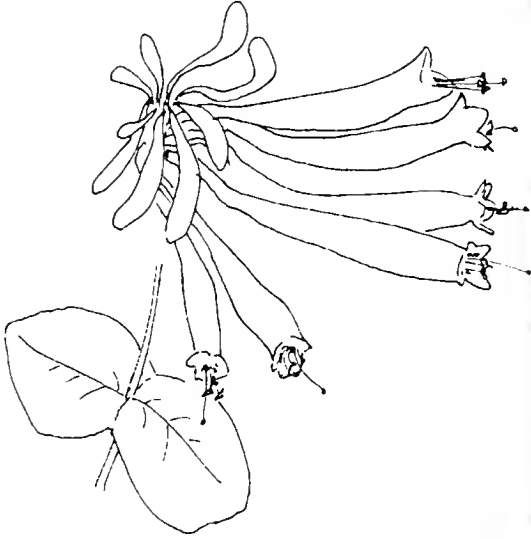
Bertha says we can expect a wide variety of summer meadow flowers. She expects to find two species of yellow fringed orchid. *Platanthera ciliaris* is most frequently found and sometimes *P. cristata*.

The group will return to the picnic area at the visitors' center for lunch; so be prepared by packing something to eat.

After lunch Bertha will lead a caravan to Foster Falls, about 20 miles away beyond Tracy City. Foster Falls is the termination of the Fierey Gizzard Trail and part of more than 100 miles of trails connected to the Stone Door and Savage Gulf area. If you are not familiar with this area, you have a treat in store.

At Foster Falls, Bertha said she hopes to find the white fringeless orchid (*Platanthera integra*) along with a variety of wildflowers growing along the rocky cliffs and streams.

MAKE YOUR PLANS TO
ATTEND THE ANNUAL
MEETING OF TNPS
AT THE ARNOLD
CENTER RESERVATION
SEPTEMBER 23-25.



TIME TO RENEW YOUR MEMBERSHIP

For your convenience, a membership form is included here, although you may want to save the field trip schedule on the opposite side of the page. If you are saving the field trip schedule, you may either make a copy of the membership form or simply send your name and address and check for dues to the TNPS address in Knoxville.

If you are in doubt about whether you are paid for the current calendar year, simply look at the date on the mailing label of this newsletter.

Name _____

Address _____

City/State/Zip _____

Membership Categories: Regular \$15, Student and Senior \$10,
Institutional \$20, Life Memberships \$150

Mail To: Tennessee Native Plant Society, Department of Botany,
University of Tennessee, Knoxville, TN 37996-1100

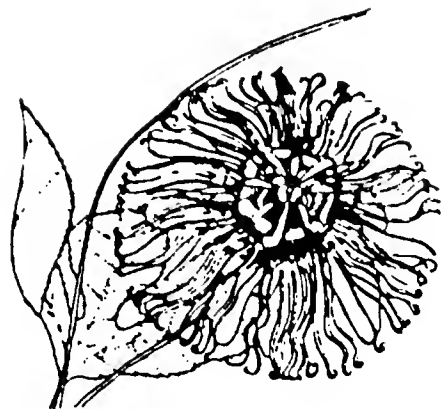
Vol. 17, No. 2; June 1994

Printed on recycled paper

Tennessee Native Plant Society Newsletter

P.O. Box 856
Sewanee, TN 37375

Bulk Rate
U.S. Postage
PAID
Permit No. 54
Sewanee, TN



TENNESSEE NATIVE PLANT SOCIETY NEWSLETTER

VOLUME 17, NUMBER 3

AUGUST 1994

ENVIRONMENTALLY AND ECONOMICALLY BENEFICIAL PRACTICES ON FEDERALLY LANDSCAPED GROUNDS

This was the topic of a memorandum from President Clinton on April 26, 1994. This was also the time when the Tennessee Department of Transportation continued to plant alien wildflowers on Tennessee interstates and other sites. The following is from the President's directive.

The Report of the National Performance Review contains recommendations for a series of environmental actions, including one to increase environmentally and economically beneficial landscaping practices at Federal facilities and on federally funded projects. The memorandum defines environmentally beneficial as utilizing techniques that compliment and enhance the local environment and seek to minimize the adverse effects that landscaping will have on it. In particular, this means using regionally native plants and employing landscaping practices and technologies that conserve water and prevent pollution.

ANNUAL MEETING AEDC

SEPTEMBER 23-25 Call Kay Jones at 615/285-2777 today!

Please send all correspondence to the TNPS Newsletter to Candy Swan, 1172 S Dry Valley Road, Cookeville, TN 38506 615/528-4698

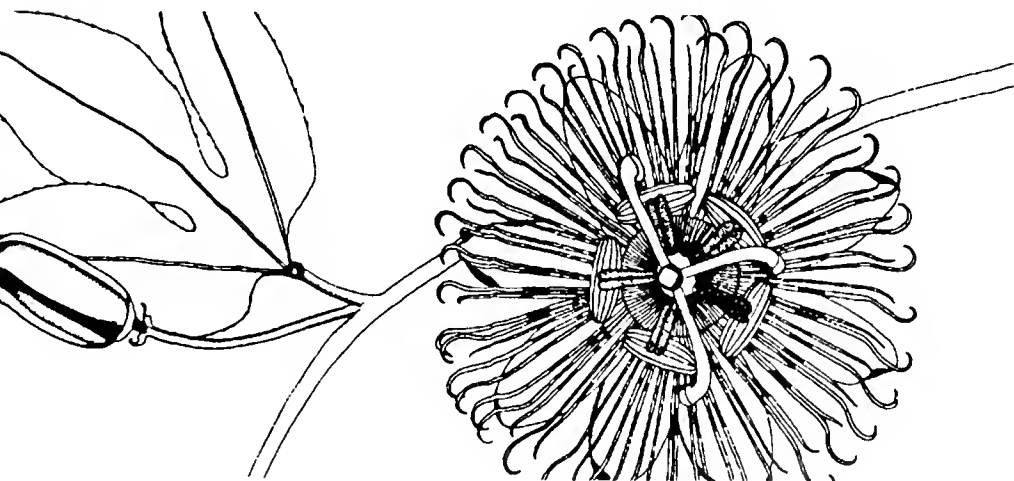
IN THIS ISSUE

How to Store Your Photographs
by David Duhl

Annual Meeting Reservation Information

How to grow *Asclepias tuberosa*

Plant Sales



August 1994
Volume 17, Number 3

This Newsletter is a publication of the Tennessee Native Plant Society and is published six times a year, generally in February, April, June, August, October, and December.

The Tennessee Native Plant Society (TNPS) was founded in 1978. Its purposes are to assist in the exchange of information and encourage fellowship among Tennessee's botanists, both amateur and professional; to promote education of the public about Tennessee flora, and wild plant in general; to provide, through publication of a newsletter or journal, a formal means of documenting information on Tennessee flora and of informing the public about wild plants; and to promote the protection and enhancement of Tennessee's wild plant communities.

Dues are \$15 for the calendar year (\$10 for students and senior citizens, \$20 for institutions, and \$150 for life memberships). Membership privileges include a subscription to the TNPS Newsletter. Dues may be sent to the Tennessee Native Plant Society, Department of Botany, the University of Tennessee, Knoxville, TN 37996-1100.

TNPS OFFICERS

Mary Martin Schaffner of
Nashville,

President

Dennis Horn of Tullahoma,

Vice-President

Andrea Shea of Nashville,

Corresponding Secretary

tary

Nita Heilman of Clarksville,

Recording Secretary

Karen Yarbro of Knoxville,

Treasurer

DIRECTORS

John Churchill of Johnson City

H.R. DeSelm of Knoxville

Shirley Nicholson of Knoxville

Bertha Chrietzburg of Nashville

Fay Jones of Columbia

Harold Scott of Columbia

Larry Wilson of Memphis

Gally Mirick of Knoxville

Candy Swan, Editor

FROM THE EDITOR:

I look forward to serving as Editor for the Tennessee Native Plant Society Newsletter. Latham has done a wonderful job the past few years. I hope I can do as well.

I know the Newsletter will be a lot of fun. It has always been an invaluable source of information for many people interested in native plants and the public education, protection and enhancement of Tennessee's flora.

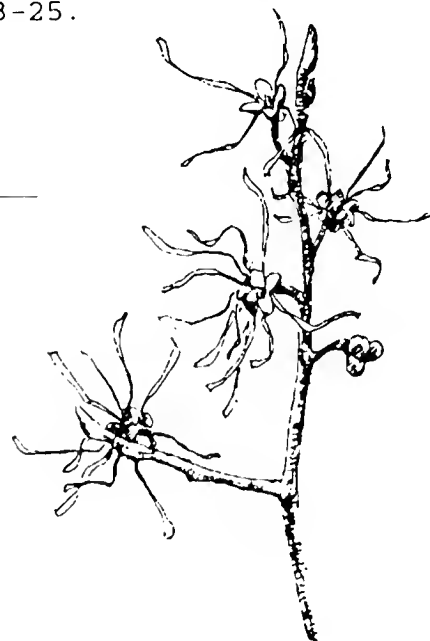
Although we could fill volumes on the native plants of Tennessee; Latham, myself and past editors have sometimes had trouble filling the eight pages of the Newsletter. The information is out there, it's just sometimes difficult to get it all together in a timely and interesting manner.

The Newsletter is an intergral part of the Tennessee Native Plant Society. As important as field trips and meetings, it is often the only connection for many members to TNPS. Information contained in the Newsletter should be of the highest quality possible. For this to happen, the newsletter needs as many members as possible involved in its creation..

Please send any information, articles, artwork, field trips, native plant tips, etc. for future newsletters. This is a general plea to all members, since I won't be able to contact you all by phone!

Remember, information not shared is lost, so share what you know with the rest of the native plant enthusiasts in TNPS. I hope everyone had a wonderful summer. Hope to see you at the Annual Meeting at AEDC September 23-25.

Candy Swan



MID-SOUTH NATIVE PLANT CONFERENCE UPDATE

Go Native! Using Native Plants in the Landscape will be the focus at the Mid-South Native Plant Conference in Memphis. This year's meeting, October 21-23, will be held at Christian Brothers University.

Topics this year will include: "Thoughts for Design of a Woodland Garden", "Why I Like Native Plants-the Story of My Garden", "Native Grasses in the Landscape", "The Butterfly Connection: If You Plant It, They Will Come" and "Don't Stomp that Caterpillar!".

Conference participants will also have the opportunity to visit a Virgin White Oak Forest, survey the Landscaping projects at the Memphis Zoo and the Native Plant Landscape at Lichterman Nature Center.

Registration cost is \$85. Pre-registration, by October 1, is \$70. Registration includes the evening meal on Friday and the noon meal on Saturday, three snacks and a limited edition 1994 MSNPC T-shirt. Make checks payable to: MSNPC and mail to:

MSNPC, LNC
5992 Quince Road
Memphis, TN 38119

STORING YOUR PHOTOGRAPHS

We've all come to appreciate discovering a wildflower in a new location, and how its appearance changes with time. As time passes, it's not there anymore, at least not as we remember it. The same is true of memories. They fade and we sometimes can't find them. Fortunately, this does not have to be true of the photographs of wildflowers that we make. Like memories, photographs are stored and retrieved. How we store them makes a big difference on how they last. What follows are some points to consider.

Prints. The prints we get from the processor are not made to be archival. It's understood that any fading or color shift over the years can be corrected by reprinting from the original negative. There are some things you can do to slow down the process, though. Always store prints under cool, dry (not humid) conditions in a dust-free box. Try not to touch the printed image, too. If you handle prints by their backs or by the border (if there is one), it really does help.

Custom prints are a different story, entirely. Prints for the wall are meant to be viewed in the light, obviously. Therefore the prints need to be made to last. To be sure, you can get inexpensive color prints suitable for framing from any negative. But, to do them justice--and have them last--consider another choice.

Cibachrome prints are designed to be archival, with not noticeable color fade or shift for at least nine hundred years! In a future article I'll discuss the other advantages of Cibachrome prints. For now, I'll just emphasize that they won't change in your lifetime.

No matter what print you have made, it's essential that it never touch the framing glass. Many people give a lot of thought to picking a mat that goes with the print or room decor. There's a second advantage of matting the print. It keeps the print from touching the glass, which prolongs its life. Purists will go even further. They use backing and matting that are acid-free, which means that it won't contribute to the long-term decay of the print.

photos con't.

SLIDES. Slides made in past decades tend to fade. Look at some and you'll see the colors shifted to the yellow end of the spectrum and actually washed out. For a long time, one truism held that Kodachrome lasted, while other slides did not. Today, they all last. It turns out that it's not a property of the film, but of the processing. Today's slide films--with the exception of Kodachrome--are processed by a procedure called E-6. E-6 processed film is believed to last for at least 75 years, compared to 100 years for Kodachrome. Like negatives, it's important to keep them stored in the dark under dry, dust-free conditions.

Some people keep slides in the boxes that the processor returns them in. Others prefer slide storage sheets. Both work very well. If you choose slide storage sheets, be aware there are two types to choose from. Some are not archival and will actually cause your slides to decay. You can identify these because of a distinct "plastic" odor that they produce. The kind I would strongly recommend have no such odor. They're usually made of polypropylene. Now, you may wish to store these sheets in hanging folders or in a three-ring notebook stored upright (never store slides in plastic sheets flat on a shelf). In fact, several companies make individual slide protectors. Many people prefer to insert each slide into an individual protector, storing the protected slides in a plastic sheet.

There's no doubt that slides and prints have changed over the years. Fortunately for us, they've changed for the better and will last--maybe as long as our memories. Of course for some of us, that's not saying much!

David Duhl



NATIVE TREASURES

BUTTERFLY WEED

Asclepias tuberosa

Butterfly weed is a must in every native wildflower planting. One plant will provide you with beautiful color, a long season of bloom and all the butterflies you could ask for. It grows throughout Tennessee on roadsides and in dry fields. The orange color makes it easy to identify and makes it one of our most beautiful roadside wildflowers.

Butterfly weed has the characteristic nasty taste of the milkweeds, but not the milky sap. Animals that depend on the plant for food, namely the monarch butterfly caterpillar, develop the same nasty taste and avoid being eaten by predators. The flowers attract many species of adult butterflies and other insects. I once had a two year old plant, grown from seed, that was 3 feet in diameter and had over 100 blooms at one time!

This plant thrives in dry soil and full sun. It competes well with grasses and can even stand to be mowed (at the expense of seeds). If your soil is on the moist side, simply dig a hole for the plant and replace the soil with pea gravel. This keeps the top of the taproot dry and prevents it from rotting.

asclepias con't.

The taproot, which seems to go on forever on older plants, will grow into the surrounding soil under the gravel. Because of the extensive taproot, Butterfly weed should not be transplanted. Root cuttings can be taken from established plants.

Asclepias tuberosa is actually very easy to grow from seed, if you are lucky enough to find a plant that has seed. Seeds benefit greatly from even a short period of moist stratification. Place the seeds in a ziplock bag with a small amount of barely moist potting mix or sand. Keep in the refrigerator for 2-8 weeks. Even two weeks increases the rate of seed germination significantly. Sow the seed in potting mix and water lightly, keeping the soil on the dry side during all phases of the plant's life. Do not let the plants become root bound in pots. There is also some indication that the seeds need some light to germinate, so barely cover the seeds with the potting mix.

Seedlings can be planted in the fall or spring. Find a permanent spot, with the right soil and light conditions. Butterfly weed usually doesn't come up until May, so mark the spot well and be patient. The summer show is worth it!

MAKE MEETING RESERVATIONS NOW!

Call Kay Jones now to make your reservations for the annual TNPS meeting, September 23-25 at the Arnold Engineering Development Center, located between Manchester and Tullahoma. Leave interstate I-24 at Exit 117 just south of Manchester and follow the signs to AEDC and the Lakeside Club and Forest Inn. Members approaching from Tullahoma should travel to the last traffic light on Hwy. 55 and turn right. Follow the signs to AEDC.

Rooms are located at the Forest Inn and Arnold Lakeside Club. Each room has a coffee maker, microwave oven and refrigerator. Two evening meals will be \$10 each and breakfast on Saturday will be \$5.50. A buffet dinner with ham and roast beef will be available Friday night. Chicken cordon bleu will be served Saturday night. Saturday's breakfast will be a buffet.

Cost for the meeting will be \$2 per attendee and \$8 per night for lodging (one or two per room). The total cost for the full weekend is \$43.50. Camping is also available nearby. Payment must be made in advance. Kay must report to AEDC the number of people who will be attending, so please call her at 615-285-2777 (evenings) as soon as possible. Kay's address is P.O. Box 193/Hampshire, TN/38461.

AEDC is home to thousands of species of late summer and fall wildflowers. May Prairie and other botanically rich sites are nearby. Many programs and field trips are scheduled for the meeting.

**ANNUAL MEETING RESERVATIONS
CALL KAY JONES
615/285-2777**

NATIVE PLANT SALES

SEPTEMBER 24 9 a.m.-2 p.m.

Ijams Nature Center will have their FALL PLANT SALE. A number of local nurseries will be on hand with native wildflowers, trees and shrubs. They also have wonderful butterfly and wildlife plantings throughout the grounds. Ijams is located on Island Home Avenue in Knoxville.

OCTOBER 1

Lichterman Nature Center in Memphis will have their annual fall plant sale. Always a huge selection of native plants. Plant preview will be Friday, September 30.



One who plants a garden plants happiness--

chinese proverb

These landscaping practices should benefit the environment, as well as generate long-term cost savings for the Federal government. For example, the use of native plants not only protects our natural heritage and provides wildlife habitat, but also can reduce fertilizer, pesticide, and irrigation demands and their associated costs because native plants are suited to the local environment and climate, something that ecologists, environmentalists and others have been saying all along.

Because the Federal government owns and landscapes large areas of land, our stewardship presents a unique opportunity to provide leadership in this area and to develop practical and cost-effective methods to preserve and protect that which has been entrusted to us. Therefore, for Federal grounds, Federal projects and federally funded projects, I direct that agencies shall, where cost-effective and to the extent practicable:

- (a) use regionally native plants for landscaping
- (b) design, use or promote construction practices that minimize adverse effects on the natural habitat
- (c) seek to prevent pollution, among other things, reducing fertilizer and pesticide use, using integrated pest management techniques, recycling green waste, and minimizing runoff.
- (d) implement water-efficient practices and planting regionally native shade trees around buildings to reduce air conditioning demands.



- (e) create outdoor demonstrations incorporating native plants, as well as pollution prevention and water conservation techniques, to promote awareness of the environmental and economic benefits of implementing this directive. Agencies are encouraged to develop other methods for sharing information on landscaping advances with interested nonfederal parties.

The Federal Environmental Executive shall establish annual awards to recognize outstanding landscaping efforts of agencies and individual employees. To enhance landscaping options and awareness, the Department of Agriculture shall conduct research on the suitability, propagation and use of native plants for landscaping. The Department must make the results available to agencies and the public.

TDOT and other agencies have until April of 1996 to advise the Federal Environmental Executive on their progress in implementing the President's directive.

The Columbine, newsletter of the National Council of State Garden Clubs, recommends using native False Dragonhead *Physostegia virginiana* and Pink Turtlehead *Chelone lyonii* as alternatives to *Lythrum* sp. in the garden.



PURPLE LOOSESTRIFE

Lythrum salicaria

Purple loosestrife is an invasive exotic species from Eurasia. There are about ten known locations in Tennessee, including the Big South Fork Recreation Area and the shoreline of Old Hickory Lake. It prefers moist areas and spreads rapidly, outcompeting native cattails, grasses, sedges and rushes along marshes, river banks, ponds and reservoirs.

Purple loosestrife, like many exotic invasives, was brought here in the early 19th century as a garden plant and has now spread over much of the temperate United States. The plant has attractive purple flowers in late summer and many cultivars are sold by nurseries. Any of these plants are potentially dangerous, since the *Lythrum* species cross-pollinates. The plant has been outlawed in many states and placed on the Noxious Weed List. When stands of Purple Loosestrife are found, they can be hand-pulled (before the seed matures) and burned.

RENEW YOUR MEMBERSHIP IN TNPS

DATES TO REMEMBER:

SEPTEMBER 23-25 ANNUAL
TNPS MEETING AT AEDC.

OCTOBER 21-23 MID-
SOUTH NATIVE PLANT
CONFERENCE IN MEMPHIS.



Look on your mailing label if you are in doubt as to whether your dues are paid for the current calendar year.

Name _____

Address _____

City/State/Zip _____

Membership Categories: Regular \$15, Student and Senior \$10, Institutional \$20, Life \$150

Mail To: Tennessee Native Plant Society, Department of Botany, University of Tennessee, Knoxville, TN 37996- 1100

Vol. 17, No. 2, August 1994

Printed on recycled paper

TENNESSEE NATIVE PLANT SOCIETY NEWSLETTER

1172 S DRY VALLEY RD.
COOKEVILLE, TN 38506

Bulk Rate
U.S. Postage
PAID
Permit No.86
Cookeville, TN



TENNESSEE NATIVE PLANT SOCIETY NEWSLETTER

43511

VOLUME 17, NUMBER 4

OCTOBER 1994

NATIVE SEED SOURCES NEEDED FOR TENNESSEE

Native wildflowers prove to be hardy, adaptable, economical, persistent and beautiful. Why then are so many states planting cosmos, bachelor's buttons and poppies along the roadsides? One reason may be that there really aren't that many commercial sources that offer native seed in large quantities. Native seed is out there though and many states have found inovative techniques to get it.

Several states have adopted the "sowing instead of mowing" attitude. Instead of mowing wildflowers during the peak of bloom, they wait until the seeds mature and harvest the seeds. Using the resulting seeds or hay to sow new areas.

The Departments of Natural Resources and Transportation in Wisconsin have begun native seed production on three prison sites. The Illinois Department of Conservation grows seed for its own use and shares with their DOT. Ohio has its own nursery, sharing its seed with a local Park District. Texas plants about 60,000 pounds of wildflower seeds annually and have an 800 number to inform travelers about where and when the flowers bloom.

Tennessee must keep trying to find ways to keep native wildflowers on our roadsides and public lands, as other states are successfully doing.

TIPS

Clean up your flower beds and get ready for winter. Mulch beds, divide plants and remove dead and diseased plant material.

Collect seed. Label and store carefully in a dry, cool area or stratify seed in barely moist potting soil and place in refrigerator for 4-8 weeks before planting.

Use native grasses as specimen plantings.

IN THIS ISSUE

Highlights of Annual Meeting
by Milo Pyne

Manipulating the Light
by David Duhl

Butterfly and Hummingbird
plants for fall planting

Eastern Columbine



August 1994
Volume 17, Number 4

This Newsletter is a publication of the Tennessee Native Plant Society and is published six times a year, generally in February, April, June, August, October, and December.

The Tennessee Native Plant Society (TNPS) was founded in 1978. Its purposes are to assist in the exchange of information and encourage fellowship among Tennessee's botanists, both amateur and professional; to promote education of the public about Tennessee flora, and wild plant in general; to provide, through publication of a newsletter or journal, a formal means of documenting information on Tennessee flora and of informing the public about wild plants; and to promote the protection and enhancement of Tennessee's wild plant communities.

Dues are \$15 for the calendar year (\$10 for students and senior citizens, \$20 for institutions, and \$150 for life memberships). Membership privileges include a subscription to the TNPS Newsletter. Dues may be sent to the Tennessee Native Plant Society, Department of Botany, the University of Tennessee, Knoxville, TN 37996-1100.

TNPS OFFICERS

Mary Martin Schaffner of
Nashville,
President
Dennis Horn of Tullahoma,
Vice-President
Andrea Shea of Nashville,
Corresponding Secretary
Nita Heilman of Clarksville,
Recording Secretary
Karen Yarbrow of Knoxville,
Treasurer

DIRECTORS

John Churchill of Johnson City
H.R. DeSelm of Knoxville
Shirley Nicholson of Knoxville
Bertha Chrietzburg of Nashville
Kay Jones of Columbia
Harold Scott of Columbia
Larry Wilson of Memphis
Sally Mirick of Knoxville

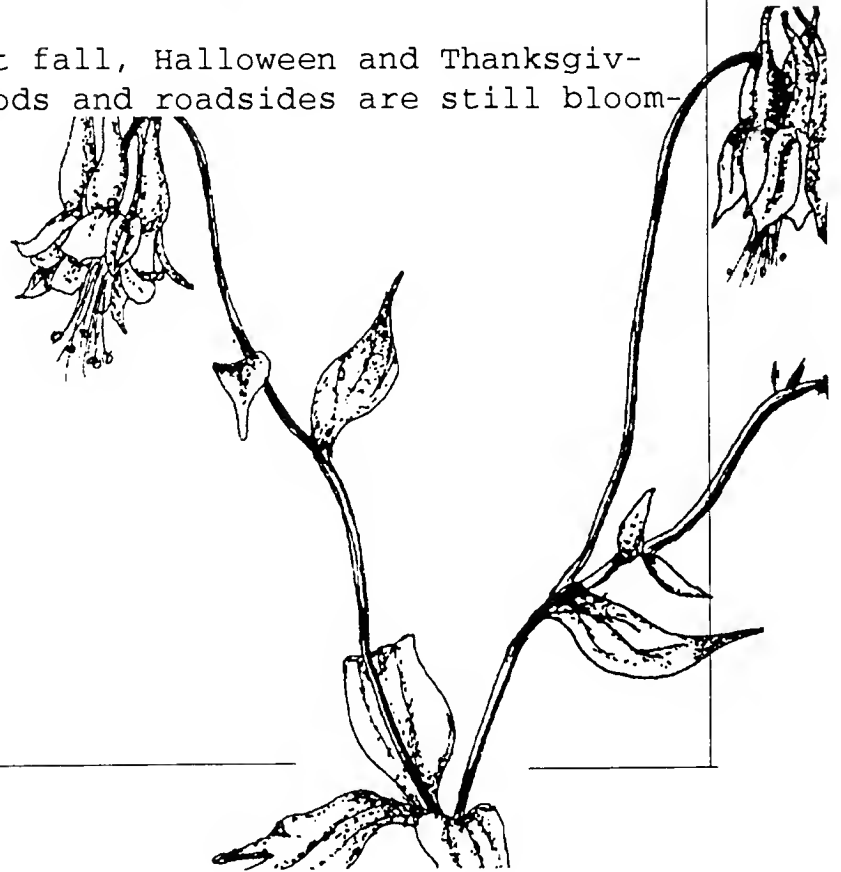
Candy Swan, Editor

FROM THE EDITOR:

On the back page you will find the new deadlines for the Newsletter. If you wish to submit articles, artwork, notices, fieldtrip information, etc. in the future, please adhere to the schedule. Dated information must be received by the stated deadline, either by mail or by phone. For instance, if you are leading a field trip in March, you should send it to me by January 15, for the February Newsletter. (Exception, **December 1** is the deadline for the next Newsletter).

The schedule can be cut out of the Newsletter and is suitable for framing, being magneted to your refrigerator or tacked, stapled or taped to your bulletin board, desk or dashboard, wherever you spend the most time. Again, everyone is invited to submit material for publication in the Newsletter. Thank you to those who already have.

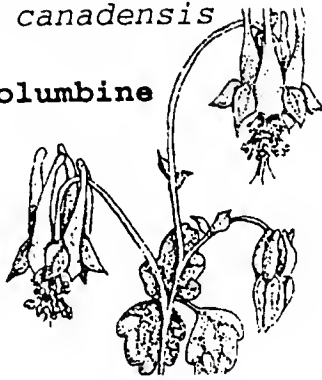
Have a great fall, Halloween and Thanksgiving! The woods and roadsides are still blooming. Enjoy!



NATIVE TREASURES

Aquilegia canadensis

Eastern Columbine



The native columbine is easily grown from seed or established plants purchased from native plant nurseries. The seed needs a short period of moist stratification (chilling in the refrigerator) and must receive light to germinate, so seed should be sown on top of the soil or potting mix and gently pressed in.

Plants can grow from 1 to 3 feet tall, depending on conditions, and have very interesting red and yellow nodding, spurred flowers from March until June. The genus name comes from the Latin word for eagle, as the spurs suggest the talons of the eagle. Columbine usually grows in calcareous soils but will do well in any well-drained soil, in light shade to sun. Plants grown in the sun appreciate extra moisture. Plants reseed heavily and make a good ground cover in areas that receive little traffic, or slopes and rocky areas.

Columbine is a tough, beautiful native that will withstand drought and thrive with very little care. The flowers are also a favorite of early migrating hummingbirds.

ANNUAL MEETING OF THE TNPS, SEPT 23-25 1994

by Milo Pyne

The annual meeting of the Tennessee Native Plant Society was held from 23-25 September at the Arnold Engineering Development Center near Tullahoma. Lodging and a venue for the evening programs were graciously provided by the Forest Inn on the base. This meeting was a joint one with the Kentucky Native Plant Society, our sister organization to the north. Thanks are due to the staff and management of the Forest Inn, to Dennis Horn and Jack Carman for local arrangements, and to Kay Jones for registration. Notecards, hats, tee-shirts and other TNPS paraphernalia were available to those in attendance.

The meeting began Friday evening with a slide show by Jack Carman of a series of images of wildflowers submitted for inclusion in the Wildflowers of Tennessee which is to be produced by the Society over the next two years. These slides covered a great variety of the state's flora, and seeing them was a great inspiration as well as an opportunity to review the identities of many of the state's plants.

Following a hearty breakfast on Saturday morning, the principal activity of the weekend, the field trips, commenced. One excursion, to Warren County, went to a site to see the kidney-leaved grass-of-Parnassus (*Parnassia asarifolia*). This species has its staminodes (false stamens) shorter than the stamens, and leaves wider than long; it is found in mainly acidic soils. This site also contains several orchid species, which were past bloom. Members of TNPS brought it to the attention of the Nature Conservancy and the Tennessee Natural Heritage Program, who are working to conserve it.

With the help of Dr. Margret Rhinehart, this group traveled in the afternoon to one of only two known sites for the shadow-witch orchid (*Ponthieva racemosa*). This species of the southeastern coastal plain is most unexpectedly found in a calcareous seep in the virtual shadow of the Cumberland Plateau, at what is possibly its northern limit in the interior of the continent. This site was very colorful with a variety of *Eupatorium* as well as cardinal flower (*Lobelia cardinalis*).

Under the leadership of Jack Carman and Milo Pyne, another group visited various sites in Coffee County, most notably May Prairie State Natural Area. This site was one of the early acquisitions by the Natural Areas Program, and remains one of the most important botanical study areas in the state. Current efforts of the Natural Heritage Program to employ controlled burning in its management are an attempt to control an invasion of red

maple into the grassland. Another burn will be conducted with the assistance of the Tennessee Division of Forestry in November of this year.

May Prairie is an ever-changing mosaic of different plants growing in wetter and drier zones of this grassland. During our visit, the dramatic blooms of the southern prairie-dock (*Silphium pinnatifidum*) had declined, but many other plants were still evident. One of the rarest plants in Tennessee is a coastal plain disjunct, the false asphodel (*Tofieldia racemosa*). Its only station in the state is at May Prairie. It shares this distinction with the snowy orchid (*Platanthera nivea*). Other noteworthy plants seen that day included two gentians, soapwort gentian (*Gentiana saponaria*) and Sampson's snakeroot (*G. villosa*). On a personal note, I owe an apology to Jack for my insistence that the former gentian was *G. clausa*. This latter plant is not known from Coffee Co.; my error in keying. The blue gentian in May Prairie opens up a little in the afternoon, as I observed the other day on a repeat visit. The unusual white-flowered swamp lousewort (*Pedicularis lanceolata*) was also in bloom on the edge of the Prairie; prairie milkweed (*Asclepias hirtella*) was seen in fruit.

Also seen were so many different species of *Agalinis* that I my head is still reeling. This pink-flowered genus of the Scrophulariaceae is easy to distinguish from other genera, but trying to key them gives me a headache. The rarest one in Tennessee is *Agalinis pseudophylla*, which has very short leaves. One can spend so much time looking at the wildflowers that one forgets that the grasses, which provide most of the biomass in the ecosystem. The most dramatic-looking grass there is the giant plumegrass (*Erianthus giganteus*). In addition, the four best-known elements of the western tall- and mixed-grass prairies are at May Prairie; these are big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium [Andropogon] scoparium*), Indian grass (*Sorghastum nutans*), and switchgrass (*Panicum virgatum*).

We finished up the day with a visit to two forested sites, Rutledge Falls and the Short Springs State Natural Area. Rutledge Falls is privately owned, and the gracious landowners permit public visitation, with signage encouraging visitors to stay on trails and not to lit

ter. The trail to the creek was bordered with the goldenrod *Solidago flexicaulis*, and a careful examination of the moist shaded zone under a limestone overhang revealed a population of the bulblet bladderfern (*Cystopteris bulbifera*). On a seep along the creek, we saw the other *Parnassia*, the large-leaved grass of Parnassus (*P. grandifolia*). This species is restricted to calcareous sites has leaves about as wide as long and stamens which are longer than the staminodes. It is listed as a plant of Special Concern in Tennessee. Also seen here were Barbara's-buttons (*Marshallia trinervia*), and other wildflowers of moist sites.

A quick visit to the upper reaches of Short Springs permitted us to view several ferns, including Christmas fern (*Polystichum acrostichoides*), New York fern (*Thelypteris noveboracensis*), cinnamon fern (*Osmunda cinnamomea*) and royal fern (*Osmunda regalis*). We hoped to see the blooms of the monkshood (*Aconitum uncinatum*), but we were early and only saw the foliage.

The meeting concluded with a program given by Landon McKinney of our sister organization, the Kentucky Native Plant Society. His program concentrated on the rare plants of Kentucky and their associated plant communities, with information on efforts being made to protect them by the Kentucky Nature Preserves Commission, by whom Landon is employed.

The concept of joint meetings with the Kentucky Society was enthusiastically received, and we are looking forward to meeting with them in the Fall of 1995. Watch future issues of the Newsletter for more details.

SCENIC AMERICA

The Tennessee Scenic Byways Workshop was held in Murfreesboro on June 29, 1994. On this matter, as in many, there seems to be little communication or coordination among state agencies. Most byways programs have come into effect since the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

Here are some of the suggestions that came from the workshop:

- * there should be a state inter-agency commission
- * more combined uses, such as bike/pedestrian, trail and coordination in signage should be featured
- * design standards should respect the roads and their resources
- * the program should reveal the "real" Tennessee
- * TVA and Parks and Recreation should be involved
- * public participation is key
- * improved billboard controls and enforcement
- * program should be sustainable
- * public must feel they own byways
- * statewide interpretive plan should be created to "make sense out of state" for travelers
- * partners from TDOT, Envir. and Conservation, Planning, Tourism, Eco. and Community Development, TEC, garden clubs, etc.

If this makes as much sense to you as it did to me, you'll probably want to call or write for more information.

SCENIC AMERICA
21 Dupont Circle, N.W.
Washington, D.C. 20036
(202) 833-4300

FALL GARDENING

Fall is the best time for planting most native perennials. Now is also a good time to get into your gardens and get them ready for winter. Divide plants, get rid of dead and diseased plants and mulch if necessary. Many seeds are mature and ready for harvesting. Label seeds as you collect them and put them in small plastic or paper envelopes, not in your pocket and into the washing machine as I sometimes do.

Here are some butterfly and hummingbird plants you might think about adding this fall:

Lobelia cardinalis
Cardinal flower

Asclepias tuberosa
Butterfly weed

Eupatorium fistulosum
Joe-pye weed

Liatris spp.
Blazing star

Lindera benzoin
Spicebush

Campsis radicans
Trumpet creeper

Aristolochia durior
Dutchman's pipe

Aesculus pavia
Red buckeye

Asimina triloba
Paw Paw

Silene virginica
Fire pink

Phlox divaricata
Wild blue phlox

Monarda fistulosa
Bergamont

**TENNESSEE EXOTIC PEST PLANT COUNCIL
(TN-EPPC)**

The TN-EPPC is a non-profit organization established to:

- * raise public awareness about the spread of invasive exotic plants into Tennessee natural areas.
- * facilitate the exchange of information concerning management and control of invasive exotic plants.
- * provide a forum for all interested parties to participate in meetings, workshops, and an annual symposium, and to share the benefits from the information provided by TN-EPPC.
- * serve as an educational, advisory, and technical support council on all aspects of exotics.
- * initiate campaign actions to prevent future introductions of exotic plant species.

Some TN-EPPC Projects:

- * location of purple loosestrife population on Old Hickory Lake, plants cut by U.S. Army Corps.
- * developing an exotic species list for Tennessee, ranking exotics according to degree of threat.
- * developing a list of natives that could be grown in state nurseries for conservation purposes.
- * completed a list of natives for landscaping in Middle Tennessee to be printed in a brochure, "Landscaping with Natives".
- * presentations and training workshops on exotics for groups.

The TN-EPPC is an affiliate of the Tennessee Environmental Council, which will give TN-EPPC a voice on TEC's Policies and Issues Committee. TN-EPPC will promote awareness of "biological pollution" through TEC.

The formation of the TN-EPPC marks the beginning of a state-wide coordinated effort that addresses the issue of exotic pest plants with specific attention given to protecting natural areas. Public support and participation is crucial to the success of TN-EPPC. If you would like more information, or if you would like to join TN-EPPC, write:

TN-EPPC
c/o Friends of Warner Parks
50 Vaughn Road
Nashville, TN 37221

Up-coming events, photos and slides of exotic species should be sent to:

Darlene Panvini
1537-B
Vanderbilt University
Nashville, TN 37235

Warner Parks Exotic Removal
Volunteer Day
Nashville, TN.
November 12, 1994 8:30-12:00
Call (615) 352-6299 to volunteer

PHOTOGRAPHING WILDFLOWERS -- PART VIII

By David Duhl

MANIPULATING THE LIGHT

Magicians are not suppose to reveal their tricks. I still want to know how they do it, though. With mirrors of course! At least that's the answer I usually hear when nobody really knows. Wildflower photographers have tricks up their sleeves too, only we use reflectors and umbrellas. And we tell.

First, take away the light. Not all of it, of course. The fact is, when the light is direct--like on a sunny day--it is very contrasty. Wildflowers look great in this light. They look fresh when they're all awash in sunlight. Unfortunately, the photographs do not fare so well. The reason is that the film cannot handle the bright areas the the shadowed areas at the same time. The result is a contrasty image that frequently loses its appeal because of the bright (overexposed) areas and the dark (underexposed) ones. It doesn't look that way to the eye, but the film gets the last word here.



The solution is to even out the light by taking away the brightest areas. You can use a jacket, or you can stand over the subject; making sure your shadow is cast over the area you're going to photograph. If you really want to get some strange looks from passers-by, use an umbrella to cast a shadow. Not just any umbrella mind you, but a white one. If it's not white, the subject can actually take on the color of the umbrella. Again, the point is to cast a shadow over the subject.

In some cases, it might be enough to cast a shadow over the background while leaving the subject in the bright light. This works best for small subjects like Indian pipe or Beech drops, where the inflorescence isn't large enough to cast a small shadow upon itself. If you use this technique, you'll find that the bright subject against the shaded background really makes the subject stand out.

Now, add the light back. It sounds crazy, but just hear me out. Remember, we want the light to fall where it's to our photographic advantage. We could do this by reflecting light back on the subject, exactly where we want it to be.

You can use a mirror, a white card or your handkerchief; anything you carry that is white. As in the case of the umbrella, the subject might take on the color of your reflector. It doesn't have to be a bright, sunny day for this to work. You just want to bounce the ambient light where you want it to be.

You can also use a photographers reflector. This is a piece of cloth with an elastic border so it folds up nice and compact. One side is white, the other gold (for "warm" light). They're also easy to make. Just get one of those things that they sell to put in your windshield to keep you parked car cool--the kind that folds up. Get some white fabric and sew it on one side, gold lame' on the other. Total cost, about twenty dollars.

The point is, you want to use any trick you can think of to bounce ambient light onto the subject. This works especially well with flowers that have a dark center, like *T. sulcatum* or wild ginger. They could really use the help.

To summarize, take away the light you don't want and replace it with the light you do want. It really is magic.

NEWSLETTER DEADLINES

December Newsletter
NOVEMBER 15

February Newsletter
JANUARY 15

April Newsletter
MARCH 15

June Newsletter
MAY 15

August Newsletter
JULY 15

October Newsletter
SEPTEMBER 15

A Word From the Society's Treasurer:

Because the treasurer of TNPS serves without remuneration (as do the president and all other TNPS officers, including the Newsletter editor), we try to simplify the way dues are handled. Memberships do not run for any 12 month period (as do magazine subscriptions) but only from January through December. The date on your Newsletter address label indicates the last year, January through December, through which you have paid.

It would be most helpful to the treasurer if you would 1) check your address label to see how up to date you are, and unless your label reads 1995 or later, 2) send in a check for dues now, before the Christmas rush.

Thank you!

Karen Yarbro, Treasurer

Vol. 17, No. 4, October 1994

Printed on recycled paper

**TENNESSEE NATIVE
PLANT SOCIETY
NEWSLETTER**

1172 S DRY VALLEY RD.
COOKEVILLE, TN 38506

Bulk Rate
U.S. Postage
PAID
Permit No.86
Cookeville, TN