

This issue included: Gardener's Resource Directory
Rare Plant Sale Flier
Spring Calendar



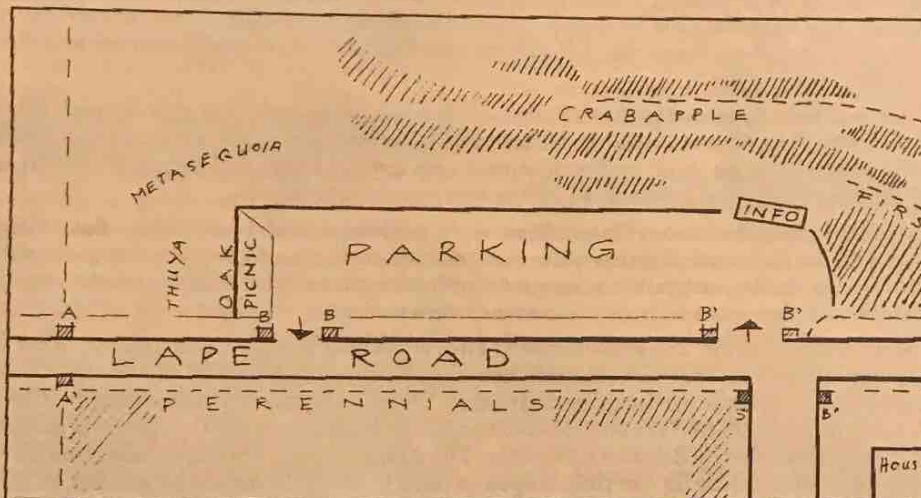
George Landis Arboretum Newsletter

Volume 10 • Number 2

Spring 1991

New Entrance Design Welcomes Visitors to the Arboretum

Pamela H. Rowling



On March 13-14 I met with Dr. Howard Pfeifer to put on paper ideas for our first major "designed" renovation plan at the Landis Arboretum. As previously indicated the area chosen for this initial effort begins at the point of entry onto Arboretum grounds and extends up to the Lape Homestead, with particular attention to the parking area and adjacent hillside. The goal of this project is to clarify for visitors that they have arrived and to invite them to further exploration.

In addition to providing a luscious (and educational) visual display the plantings will be arranged in beds for easy maintenance. Paths to the upper gardens will be on a more gradual slope than currently. Improved signage will direct visitors to the Arboretum offices, Van Loveland Peren-

nial Gardens, Harkness Library and Herbarium, William Raymond Greenhouse Complex, and hiking paths to the old oak and breathtaking views of the Schoharie Valley below.

Parking lot drainage (and resultant mud) should be corrected by this summer through a NYS grant sponsored by Assemblyman Paul Tonko. Although drastically reduced in amount from the original proposal, the final commitment should permit at least the drainage work to proceed.

The plantings will include Nichol's Selections pest and disease resistant crabapples and species tolerant of high moisture situations including *Quercus* (Oak), *Metasequoia* (Dawn Redwood), *Nyssa* (Tupelo), and *Chamecyparis* (White Cedar).

Three Day Volunteer Training Scheduled

Laura Lehtonen, our new Nature Educator, will be training volunteers to teach nature lessons to elementary students. Volunteers need no previous teaching experience, just a love of the outdoors and the ability to work with children.

The volunteers will be prepared to teach the "Wonderful World of Trees" and a new lesson, both for groups at the Arboretum and for visits to schools. We are gearing up to visit schools in order to continue serving students despite there being little budget money to bus them to the Arboretum.

The training will take place on three Thursdays, April 18 and 25, and May 2, from 9:30 to 2:30. Please call the office to sign up. Be sure to bring a bag lunch and dress for the outdoors!



Preliminary work on this project will begin April 13, 1990, as part of the Volunteer workday and potluck. Everyone is invited to come, work and have a nice potluck supper after a good day's workout. If interested in joining us please call the office for details.

When completed this ambitious project will provide a stunning new look for our entrance. Meanwhile, we will be looking at work in progress for quite some time, but it will be laying the groundwork for permanent improvements to the garden and will demonstrate long-term landscape planning.



Readers' Note

The Environmental Clearinghouse of Schenectady will sponsor an Environmental Book Fair at the...

Environmental Clearinghouse
Aqueduct House
2851 Aqueduct Road
Town of Niskayuna
(Near Rexford Bridge, Next to Fire house)

Wed., April 10, 9 am - 8 pm
Thurs., April 11 9 am - 2 pm
Fri., April 12, 9 am - 2 pm
Sat., April 13, 9 am - Noon

Book orders may be placed on the above dates or may be sent in the mail.

For further information, call ECOS at 370-4125

The George Landis Arboretum Newsletter

Is published quarterly for members of the Arboretum. The GLA's mission is to provide natural history and horticultural education through programs and through its plant collections.

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Address correspondence to:

Newsletter Editor

George Landis Arboretum

P.O. Box 186, Esperance, NY 12066

Tele: 518-875-6935.

Material submitted for publication is due on the first day of the month; December, March, June, September.

At The Garden

Director's Report

Pamela Rowling

By now you have all had an opportunity to read our 1990 Annual Report and should all feel proud to be part of this growing garden. We have come a long way in four years! Composing and publishing an annual report helps us not only chronicle events that have happened but provides a base for the formulation of future plans.

I am pleased to welcome Laura Lehtonen as the Arboretum's Nature Educator. A native New Yorker, Laura comes to us from Texas where she worked for seven years as Education Director at the Armand Bayou Nature Center. Her job there "entailed development of educational programs, supervising teachers and volunteer staff and even milking a cow on occasion!" - so we know she'll fit in just fine here at the Arboretum, where every day presents a challenge. Laura will be developing educational programs for children and child/parent pairs, teaching programs herself and teaching volunteer teachers. While the Parks and Rec. grant gives us Laura part-time for the summer only, her tremendous expertise will advance us on our educational mission further than we dreamed possible this year.

Volunteer Coordinator Florence Grimm, a long-time dedicated volunteer herself, has done a great job gathering and organizing our willing workers. (Details in Volunteer Notes.) The importance of volunteers cannot be stressed enough: without their many hours of loving labors the garden would be at a standstill. They provide essential services (and have a lot of fun!)

We have been approved by the G.E. Foundation to receive matching gifts through their More Gifts, More Givers Program. Gifts to the Arboretum from G.E. employees, current or retired, will be matched by Foundation on an annual basis, as long as we receive a minimum of 5 eligible gifts and \$1,000 in any calendar year.

Our bus trip to the Boston Flower Show was a success, and we could almost have filled a second bus. As I write, the trip to the National Arboretum and Longwood has not quite filled up, and so may not go, but response to our horticulturally minded tours was so good that we will plan more trips (with more advance notice).

Horticultural news: The greenhouse is entirely closed in and full of plants. This is exciting! Volunteer Verena Takekoshi has been elaborately treating and sowing seeds obtained from our seed exchange participation. The possibilities are boundless! Steffen's Nursery has contributed the entire collection of clematis plants for the clematis garden originally conceived by Elizabeth Corning. The Albany County Master Gardeners have committed themselves for the 1991 season to work in the GLA perennial garden, so this area is sure to flourish. The American Ivy Society based in Dayton, Ohio, is sending plants for hardiness trials in Esperance. We will be participating in two USDA programs. The Plant Introduction Trials (NC-7, Iowa) is allowing us to participate as recipients of seeds of new introductions. We are proceeding on ways to participate in the introduction and hardiness trials of Plant Introduction Trials (NE-9, New Hampshire).

Arboretum devotee Barbara C. Rusch was lost to us recently in a tragic hiking accident in Thacher Park. A Memorial Fund established in her memory will be used to improve the Van Loveland Perennial Garden, a favorite area of Barbara's. The generous contributions to the fund have allowed us to hire the services of landscape designer Daryl Bradt. The plantings will integrate perennial plants and woody flowering shrubs in a mixed border.

As we go to press with this newsletter we are busy wrapping up loose ends for the Spring Benefit and Auction, preparing for the Rare Plant Sale and an altogether very busy season. And in the meantime, we are being rapidly overcome by Spring fever! *Hamamelis mollis* has been glorious for weeks and the perennial gardens are carpeted with Winter Aconite (*Eranthis*) and Snowdrops (*Galanthus*). Look for the season's exciting calendar of events in your mail in a week or two. I hope you will come visit soon!

Editor's Note: Deadline for articles for Summer Issue is June 1, 1991

This Native Plant

Hardy Native Trees of the Magnolia Family

by Richard Mitchell & Charles Sheviak, New York State Museum, Albany

Both ancient and exotic, the magnolias and their relatives are prized in horticulture for many reasons, but in upstate New York we often think of them as too tropical to grow with much success. Asiatic magnolias like the Kobus varieties are deciduous with flowers that bloom before the leaves come out in the spring, making them favorites for the garden. We'd like to discuss only plants native to North America that are sometimes neglected, even though they might make excellent choices for planting. First we'll talk about three trees native to New York that you might grow with little difficulty, and then we'll go on to more exotic, southern species.

Perhaps the most popular cultivated tree of the magnolia family is the tulip-tree or yellow poplar, often called tulip-poplar further south. Its Latin name, *Liriodendron tulipifera* (meaning tulip-bearing lily tree), is so lyrical that it caught my attention as a child, and was the first scientific plant name I (Mitchell) memorized as a teenager. I had no notion of becoming a botanist at the time, but I wanted to impress my father (a wildlife biologist) by bringing it up casually while out hiking. When I did, he performed the expected double-take, then took the opportunity to show me some things about the tree that I'd never noticed. The orange and yellow "tulip" flowers were in full bloom, so he showed me that the center looked like a spindle and straps of compressed, little matchstick-shaped parts. The outer parts were yellow with pollen, but the inner ones were not. Then we searched in the leaf litter and found one of the dry, tan "cones" that drop off the tree in the fall. It was obvious that it had grown from the center of a flower, and, as the cone shattered in my hand, I realized it was a cluster of winged fruits, much like those of a maple tree. It was my first real botany lesson, and I didn't think much of it at the time, but later, in graduate school, we learned that the pistils and stamens of flowers evolved as "fertile leaves," and it came home to me that tulip trees must be very ancient. According to the fossil record, they've been around since the age of dinosaurs. The leaf-like stamens and spindle of ovaries are vital clues to how ancient this lineage of trees really is.

Tulip tree grows wild in southern and western New York forests, especially in deep, limy soils. It is a popular tree in cultivation inside and outside its natural range. Often called one of the more beautiful trees of North America, its unusually graceful form, showy flowers and yellow fall coloring far outweigh the "dirty" aspects of fruit clusters that shed in the fall. Although it isn't an outstanding shade producer, the tree is fast-growing, and mixes well with other species for landscaping effects. It has an open crown of pale green, elegantly lobed leaves that rustle softly in a breeze. The size of the tree may be quite impressive at maturity with record trunk diameter of over 13 feet and height just under 200 feet. The wood is pale, called whitewood in the lumber trade, and it is an important commodity with many uses, including furniture, musical instruments, wooden utensils and toys.

The cucumber tree or mountain magnolia is another a native plant of the Appalachians that grows naturally south and west of the Adirondacks in New York State. *Magnolia acuminata* is the hardiest of our natives, a handsome tree with leaves up to 20 inches long and eight inches broad. The flowers are greenish and inconspicuous, about 2-4 inches long, and, although some cultivars have showier flowers, the trees are mainly cultivated for their foliage and shade. Cucumber tree is the fastest growing of our magnolias, starting out with a pyramidal crown, but spreading with age, so it is best planted only where there is room for it to expand, and where deep shade is preferred. The trees thrive in rich, loose soils that retain moisture after a rain, and they are somewhat shade tolerant, often growing under oak, hickory, ash or beech in the wild. They may grow up to 120 feet tall with trunks up to five feet in diameter. Because of their hardiness, the bases of young cucumber trees are used as rootstock for grafting less hardy species.

Sweet-bay is native to New York only on Staten and Long Islands, but it is hardy when cultivated further north. It is a true magnolia (*M. virginiana*) that goes by a number of names, including: swamp-bay, magnolia-bay, magnolia-laurel and beaver-tree. Both the leaves and flowers are smaller than those of the cucumber-tree, but the flowers are white and quite charm-

ing, with a strong scent reminiscent of lemon or rose. Although the maximum height is 90 feet, the plants are usually shrubs or small trees with trunks under a foot in diameter. The foliage is interesting, because the leaves are dark green on one side and soft, silvery gray on the other. It will grow in bottomland where the soil is almost always saturated with water, and it is most often cultivated for its moisture and shade tolerance. Flowering occurs in May, but may last well into summer. Southern plants are mostly evergreen, but sweet-bays ranging as far north as New Jersey and Long Island are mostly deciduous, with some variation between individuals regarding the number of leaves shed during the winter season.

Southern Magnolias:

The classic southern magnolia of poetry and song is *Magnolia grandiflora*, an evergreen tree with spectacular white flowers and large leaves that are glossy green above and often fuzzy brown below. A native of Zone 7, it is somewhat difficult to grow in Zones 4B and 5A, where most of us live, but, with some luck, it can be nurtured through a perilous youth to produce quite a nice tree. Some people use artificial shelters, but it has been the experience of one of the authors (Sheviak) that a wind-shelter open at the top may serve as a radiational heat-loss amplifier and possibly increase damage to the plant during severe sub-zero periods. Slat (lath) shelters may work better. There are some cultivars that are particularly hardy: "Edith Bogue," "Samuel Sommer," and others, which should be sought out when buying at a nursery.

Umbrella-tree, *Magnolia tripetala*, is not native to New York State, but it is quite hardy here. A beautiful deciduous tree with a rounded, spreading crown, the umbrella magnolia bears creamy white flowers 7-10 inches across in May or June after its two foot long leaves have come out. It grows wild from Pennsylvania to Mississippi, and is cultivated well northward into Zone 4. It has been reported to escape from nursery stock in New York, and we recommend it as something different to grow in your yard, especially as a subtropical accent adjacent to a woodlot.

- Continued on page 9 -

How Does Our Garden Grow?

Even in winter, our garden grows! Dreams come true and unexpected gifts arrive, wonderful people give of themselves, and the rebirth of the Landis Arboretum is well on its way. Thank you, all.

The 1991 plant dividend for members at or above the Sponsor level will be a choice of *Metasequoia glyptostroboides* (Dawn Redwood) or *Calycanthus floridus* (Carolina Allspice.) Description and coupon will be in next issue. If you reserved a plant dividend for 1990, remember to pick it up at the Rare Plant Sale, May 4.

Membership Update

New Members (*) and Renewals
December 1990 - February 1991

Members

Therese Archer
Patricia Barden
Mary S. Brennan*
Mr. & Mrs. David Bulman
Wallace Dillenbeck
Mr. & Mrs. M.B. Elliott*
Margaret Foster
Mr. & Mrs. George Habetler
Mr. & Mrs. Lawrence Hoehn
Ina Jones
Shirley Krauter
Mr. & Mrs. John Kuzma*
Sonia Loomis
Alice Lutz
Mr. & Mrs. Ingo Maddaus*
Cynthia Martell
Mary Beth McDuffee
Betsy Meyer
Mr. & Mrs. Glenn Paris
Gail Peachin
Mrs. Joseph Pokorny
Marie Pryor*
Lillian Roe
Mr. & Mrs. Joseph Rooks
Mr. & Mrs. Tom Rossman
Mr. & Mrs. Valery Siniapkin
Evelyn Sturdevan
Verena Takekoshi*
Michael & Ruthann Temoshok
Mr. & Mrs. James Torriani
Mary Ann Veeder
Audrey Weidler*
Mr. & Mrs. James Weinman*
Ellen & Jerry Wood*

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Elizabeth J. Samal*
Dr. Arthur O. Schlip*
John Skumurski*
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Bill Winnie*

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Robert Klappmeyer
Dr. Lawrence C. Kolb
Dr. & Mrs. William Wells
Dr. Glenna Winnie

Patrons

Mrs. Andrew Brice
Arnold Gussin
Mrs. Kearney Jones
Phyllis Rosenblum

Organizational Members

Members

Bob's Trees

Sponsors

Albany Evening Garden Club*
Dana Natural History Society
Glenville Hills Garden Club
Guilderland Garden Club
Men's Garden Club of Albany
Ruby P. Myers Agency, Inc.*
Mohawk Hills Garden Club*
Hugh Plat Garden Club

Donations

\$100 - \$1,000

Richard J. Charles (G.E. Matchable);
for general fund

Mabel Harkness;
for library improvements

Willard Roth;
for slide show production

Over \$1,000

Katherine Abbuhl;
for a photocopier

Dr. & Mrs. Robert Raymond;
for general fund and for
greenhouse benches

E. & D. Robison Foundation;
for general fund

In-Kind Gifts

Steffen's Nursery;
clematis collection



Barbara Rusch Memorial

Charles G. Ackerson
Big Simond Club
Hollis & Royann Blodgett
Bureau of Environmental Exposure Investiga-
tion, NYS Dept of Health
Dr. & Mrs. John Brennan
Betsy & Greg Deitch
Delaware Valley Fishing Club
Arthur & Greta DeLong
Bill & Jean DePersis
Diane DePersis
Frank J. Doberman
Lyn Edinger
Martha Egleston
Margaret Farrell
Connie Feldt & Pat Golden
Marie Fountaine
Friends at KWA
Janice & Robert Frost
Katharine & Leonard Gordon
James Gratton
Michael S. Green
Doris Habla
Dean Harding Family
Mr. & Mrs. Frank Hildreth
Mrs. Arthur A. Hitchcock
Joann Hubbard
Ann Joyce
Kingsway Arms Nursing Center
Helen R. Liedel
Augie Liermann Family
J.D. Mattice
Brenda Miller
Oak Hill School
Dr. & Mrs. Fred Ohnmacht
Joan & Graeme Newman
Lisa & Larry Pierce
Jim Purtell
Patricia & Edward Renshaw
Reading Department, SUNY Albany
Retrovirology Laboratory, NYS Dept of Health
Mr. & Mrs. Michael Rimberly
St. Anne Institute
Sharon Rogner
Gerald & Jane Snyder
Janet Stuart
Judith & John Tobison
Dr. & Mrs. Jeffrey Varney
Linda Woods

1990 Annual Report Corrections

Member

Richard Dallek

In-Kind Gifts

John C. DeMis;
survey of the Arboretum

Garden Forum

Spring Bird Activities

Beverly Waite

The Garden Forum is a column where Arboretum members and visitors can contribute articles of common interest.

Today was fun," my companion said. "So often birds just sit there, but today so many seem to be *doing* something." I smiled. It was the second time I had taken a birdwalk with Avis around the George Landis Arboretum and I still wasn't sure of her level of experience. The remark was that of a beginner. She knew many of the birds and had eyesight as sharp as an expert's, yet a seasoned observer would know that a bird "just sitting there" is resting, digesting, guarding, sunning, hunting or hiding - all bits of behavior. What were some of the actions that Avis interpreted as inactivity?

The gurgling, bowing Cowbird and the dramatic pendulum swing of the male Ruby-throated Hummingbird were examples of *courtship display*. Although birdsongs may be used in courtship, their *vocalizations* go beyond that to calls in alarm, distress, communication with their young, singing in exuberance, or to make a territorial claim. The Robins chasing, the Crows shagging a Red-tailed Hawk gave other signs of *territorial defense*.

Boundaries threatened are not as frightening as nests disturbed. Once we thought of *nesting* we became aware of a pair of Blue-winged Warblers carrying dry grasses to build their ground nest. We found Wrens and Tree Swallows in bird houses and Barn Swallows nesting in a colony in the rafters of a tool and tractor barn.

All these nesting birds were insect eaters exhibiting different *feeding habits*. The Warblers gathered insects and larvae by working their way through treetops. Bluebirds dropped to the ground in search of insect prey, while Tree Swallows skimmed the fields. A Red-breasted Nuthatch hitched his way over cones to dig out pine seeds.

Avis was startled by *regurgitation*. I didn't see it and have forgotten what bird spit out an indigestible morsel, but could tell her that hawks and owls send back thumbsized pellets of bones and fur; some birds feed their young by regurgitating half-digested food.

I was pleased to present *hybridizing* when an unusual Brewster's Warbler came through, the offspring of a Blue-winged and Golden-winged Warbler.

We touched upon *classification* as we found six species of flycatcher - the Arboretum's mix of woods, farmyard and water is to their liking. We sorted out *seasonal distribution*: permanent resident - Black-capped Chickadee, summer resident - Bobolink, spring migrant - Tennessee Warbler. We had an example of *regional distribution*: common - the Common Yellowthroat, living up to its name with a dozen or more scattered throughout the damp, shrubby areas; rare - the Red-headed Woodpecker and the Olive-sided Flycatcher at the outermost edge of their ranges.

Species identification of course comes first for the learning birder, then the Life List (the challenge of the new bird), but the eventual fascination of the game is the study of bird's life styles and systems and their biological uniqueness.

Volunteer Notes

Florence Grimm

The ever-growing corps of GLA volunteers met on February 2 for a strategy session: over 30 people attended to hear Pamela Rowling, Amy Lent and Florence Grimm describe the work to be done this year. Volunteers signed up for specific tasks such as working at events as well as groundskeeping and construction which are seemingly endless!

There is plenty of work to do (and fun to be had), so don't worry if you were unable to attend. Field work tasks are listed on the volunteer bulletin board in the barn, so you can easily see where you can pitch in. Pamela, Florence or the group leader for the area of your choice can help you get started. Volunteers are asked to record their hours in the notebook (important in grant applications) and are reminded that

you can "earn" a generous 12 cents per mile from the IRS for commuting here to work. Weekend volunteers should call Pamela during office hours to plan their work. Any event you see on our calendar is likely to need volunteers, so if you're interested call the office.

We know for sure we're a twelve month operation now - people showed up to work every day this winter! Dave, Chuck and Mike cleared the x-c ski/hiking trail and a multitude of tree and brush removals. Chuck built the exhibit for the Garden Show. Anne, Thea and Ruth worked on cataloguing the herbarium. Dick C. fixed the engraver (and we can teach you how to make plant ID tags - it's fun!) Verena has become our chief propagator. Ted started the long job of siding the barn. Jack programmed and taught us how to use our data base, and Natalie did dozens of hours of data entry. Joan helped on several visual arts projects, and Elaine S. worked assiduously on the newsletter. The list goes on and on, but I must mention the great crew of 16 that took turns staffing our booth at the Garden Show: they were superb at promoting the Arboretum. And, last but not least, Vicky, Betty, Mike, Phyllis, and Elaine G., who sold ads for the Gardener's Resource Directory.

Listed here are the group leaders for various areas/tasks: you can contact them or Florence (842-7436) for questions, planning, or to set up a date to work together. Van Loveland Perennial Garden - Carol Loucks, Pam Yourno; Quarry Rock Garden - Kathie Lippitt; general garden maintenance - Beverly Waite. Betsy Thompson is collecting GLA history prior to 1990 and will appreciate your contributions.

"Spring Cleaning" the Arboretum - April 13, 9 a.m. 'til suppertime! 1. The entrance landscape; root pruning trees to move later, laying out and mulching beds, moving stone. 2. General cleanup, fallen branches, raking, remove protective cages, burn major piles, etc. 3. The Homestead; removing shutters, scraping and painting house (sides facing Lape Rd. and driveway) and shutters. As always, bring your favorite tools. If you're interested in working on the house, you might want to call Florence to see what's needed - we have scaffolding but need lots of other tools. Many able bodies are needed, bring your selves and something for the potluck supper, we'll keep you busy all day.

Volunteer wish list: electrician to design master plan for burying all our utility lines, rearranging our electric service entrances, and backhoe or ditch witch and operator to dig all those trenches!

Book Review

GARDENING WITH WILDFLOWERS?

Shirley Redington

Some would say, "Don't!" A couple of years ago, a member of our rock garden society chapter contributed a pretty little specimen for our plant sale. The director of the garden center sermonized him in front of everyone for the crime of potting up an "endangered" plant. The "culprit" said he learned that the area was to be bulldozed and that he tried to save as many plants from extinction as he could. The sermonizer rejoined: "Yeah, everybody says that."

While on a horticultural tour of Costa Rica, our guide dug up a common roadside weed with his bare hands and gave it to my husband saying: "When was the last time you gave your wife an orchid?" I asked Roger Swain, who was with our group, what the best way was to preserve it for importation to Schenectady, and then how to care for it. Roger proceeded to sermonize me on the questionable ethics of such an act. I couldn't help agreeing with him, so the little plant was donated to an orchid botanic garden we were about to visit (where it was undoubtedly thrown in the trash).

Lincoln Foster's book, Cuttings From a Rock Garden, describes at least one example of a rescue of a lovely flower that was found in the wild. It was dug and propagated so successfully that it is fairly common in the trade today. So far as he knew, no other specimens have been seen in the wild. It is the double pink *Anemonella thalictroides*.

According to William Brumback, a propagator for The New England Wild Flower Society, ethical collection should be governed by four rules: 1. Collect only common widespread species; 2. Never decimate a local population; 3. Take only those that have a good chance of survival in cultivation; 4. Maintain the population on a sustained-yield basis. Since the above guidelines are difficult to enforce or to follow intelligently by conscientious gardeners, Brumback suggests purchasing plants from nurseries that are known to do their own propagation. When a catalog claims "nursery grown" and charges a small price for a slow-growing plant, it should be suspect and boycotted. He maintains that certain items like *Trillium*

grandiflorum and the pink lady's slipper (*Cypripedium acaule*) can't possibly be propagated and grown to saleable size without a hefty price tag. One good source is the New England Wild Flower Society. They hold plant sales and conduct a seed order business by mail.

Just as Roger Swain relented and did give me advice on the care of my "dug-in-the-wild" orchid, I will mention a few of the best books on the acquisition and culture of wildflowers. (If there is no annotation, it means I don't own the book, or can't find it.)

Nursery Sources: Native Plants and Wildflowers, published by the NEWFS. This is a list of conscientious nurseries throughout the country who do offer seeds and/or propagated plants. If you are in no hurry, it might be better to wait a few months, because they are in the process of updating and expanding the list.

Two excellent books that include cultural tips for many wildflowers are by H. Lincoln Foster: Cuttings From a Rock Garden and Rock Gardening.

The Brooklyn Botanic Garden Handbook #119: Gardening With Wildflowers and Native Plants includes several articles on design and culture of a wide variety of plants as well as an extensive nursery source list. The New England Wild Flower Society publishes a long bibliography entitled: Books For Native Plant Enthusiasts.

William Brumback offered his own personal recommendations for the following titles within that bibliography: Hal Bruce, How to Grow Wildflowers and Wild Shrubs and Trees in Your Own Garden. The author gives descriptions and growing requirements for many Eastern U.S.A. plants and an occasional historic anecdote. The style of writing is personal and engaging, though eminently authoritative. The New Wildflowers and How to Grow Them, by Edwin Steffek. He starts with a short statement on conservation, purportedly the reason for writing the book. Then he gives a general treatise on transplanting, propagation, and care of wildflowers, including special pH requirements. The major section of the book is an encyclopedia of genera and species with description, habitat, and culture in each case.

One book that I do not own, but intend to acquire immediately, on Brumback's recommendation, is Harry Phillip's Growing

and Propagating With Wildflowers.

Ortho Books offers Landscaping With Wildflowers and Native Plants. Last on Brumback's list is John Mickel's The Home Gardener's Book of Ferns.

Two inexpensive but priceless booklets published by The NEWFS are: Propagation of Wildflowers by Will Curtis and revised by William Brumback and Garden In The Woods Cultivation Guide by Brumback. The former was originally written by the designer of Schenectady's Central Park (a little known fact locally). It gives methods of seed growing; discusses division, cuttings, soil mixes, and timing. It is amazing how comprehensive a treatment of these two subjects can be telescoped within so few pages.

Most of the titles listed in this column may be purchased through The NEWFS Bookstore. No one book is enough. They all have gaps and overlapping strengths. They are all relatively inexpensive. However, if one were to purchase them all, it might be economically sound to join the Society for the member's discount. Membership starts at \$30 per year. Furthermore, it is worth a trip to Framingham, MA to see the best of these plants *in situ* at The Garden In The Woods.

The address is:

New England Wild Flower Society, Inc.,
Garden In The Woods
Hemenway Road
Framingham, MA 01701.

Arboretum Wish List

Greenhouse: flower pots

Grounds Equipment: Brush chipper,
heavy duty weed whacker.

Office: computer work station.

Thank you...

Katherine MacArthur Abbuhl,
for the new photocopier.

Glenn Snider, for the coffemaker.

Wayne & Ann B'Rells for the
television and VCR.

Dick Charles, for the typewriter
stand, vacuum cleaner, wheels for
the wagon, and tractor repairs.

In the Shade of the Oak

Dandelion Diary

Elaine Suss

If you will but look, signs of spring are everywhere about us. Spring is a time of awakening, an ideal time for a walk in the open woods, before the leaves reappear. In his book, A Farm and Village Boyhood, Fred Lape tells us, "In the Spring I went to the woodlot for wildflowers. Mayflower, that word which so varies with locality, was for us the Hepatica....I would pick until my fingers could hold no more of the soft furry stems and then take the little bouquet home to my mother."

Like Fred Lape, many of us can't wait to get out into the woods, see the delicate spring wildflowers at our feet, and to know that growing things will return again as we impatiently await the greening of the landscape.

The Dandelion, one of the earlier wildflowers, is an extremely common weed. (A "weed" is defined as a plant growing where we wish something else would grow.) They flourish despite our determined efforts to exterminate them. But how beautiful they are growing in a field as you look out over a sea of yellow splashed with green.

I would like you to begin your spring wildflower explorations with the Dandelion, because it is so abundant, not easily decimated, and not on the protected or endangered plant lists in New York State, as are many of the spring wildflowers.

The questions that follow pertain to a Dandelion study, and you can consult a Dandelion for the answers. Once you've gone through the accompanying questions pertaining to a Dandelion study, you can easily transfer or expand your knowledge with other wildflowers, and either a Peterson Wildflower Guide or a Newcomb's Wildflower Guide at your side.



Observations:

1. Where do you find dandelions growing? If they are on the lawn, how long are their blossom or seed stems? If in a meadow or among high grass, how long is the blossom stem? Why is this? Is the stem solid or hollow? Does it break easily?
2. Dig up a dandelion root and then explain why this weed withstands drought, and why it remains, when once planted.
3. Sketch or describe a dandelion leaf. Why was the plant named "lion's teeth"? How are the leaves arranged about the root? How does this help the dandelion or hinder other plants? In what condition do the leaves pass the winter under the snow? Why is this useful to the plant?
4. Take a blossom not yet open. Note the bracts that cover the unopened flower head. Note the ones below and describe them.
5. Note the dandelion flower-head just open. Which flowers open first? How do the buds look at the center? Examine a floret and note the young seed. Where is it attached?
6. What happens to the dandelion blossom on rainy or dark days? How is it hidden during the rain? When does it reappear? Do you think this has anything to do with insect visitors? Do bees and other insects gather nectar during dark or rainy days?
7. Note at what hour dandelions on the lawn go to sleep and at what hour they awaken on pleasant days.
8. Make notes on a certain dandelion plant three times a day: How long does it take the dandelion head to open fully on a sunny morning? How long does it remain open? How long does it take the flower-head to close? What proportion of the flowers in the head, blossom the first day? The second day? How long before they all blossom? Does the flower-head remain open longer in the afternoon on some days than on others, equally sunny? Does the stem bend over before the blossom-head opens?
9. After all the flowers have blossomed, what happens to the plant? How long does it stay shut up tight? Measure the stem and see if it stretches up during the time? How does the dandelion look when it opens again? Look at a flower-head full of seed, and see how the seeds are arranged to make a perfect globe. Shake the seeds off and examine the bald head with a hand lens. Can you see where the seeds were set?
10. Examine a dandelion seed with a lens. Describe the balloon, the beak or stem of the balloon, and the seed. Why do you suppose the seed has hooks?
11. How early in the spring, and how late in the fall, do dandelions blossom?
12. Watch a bee when it is working on a dandelion flower. See where it thrusts its tongue and which flowers it probes.
13. Tell all the things that you can remember which the dandelion does in order to live and thrive in spite of us.
14. What use do we make of the dandelion?

Policy statement: Nowadays we have to be conscious of the fact that many plants are protected in New York State. Except for the Dandelion, please don't pick anything. Leave the plants for others to enjoy.

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Lape, Fred. A Farm and Village Boyhood. Syracuse University Press. 1980. Page 25. Newcomb, Lawrence.

Mitchell, Richard S. and Charles J. Sheviak. Rare Plants of New York State. Bulletin #445. New York State Museum, 1983.

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Recycling Theme for Arbor Day Activities

Our Arbor Day celebration this year will focus on Plant a Tree, Save a Tree. Nurseryman Jeff Schworm will instruct adults on tree planting and aftercare, and there will be several fun activities for kids and parents using recycled items, a "Tree Detective" hike, and the awards for the essay contest. Plan on a fun day for the family: Saturday, April 27, 10:00 a.m.

HELP!!! You can recycle some stuff from your house and greatly help our Arbor Day program. Either bring these items on the 27th or drop off at the Arboretum before then: cardboard tubes (e.g. toilet tissue, towels), yarn, magazines with nature pictures, seed catalogs, used gift wrap, styrofoam meat trays and shredded office paper.

Garden Exotica

Asiatic Magnolias

Pamela H. Rowling

When one thinks of Magnolia, more often than not, they are envisioning one of the Asiatic species or their hybrids. This is undoubtedly due to their unrivalled beauty (many of them blooming before their leaves in the early spring garden,) ease of culture and ability to tolerate conditions in hardiness zone 5.

Magnolia x soulangiana (Saucer Magnolia) is a hybrid of two Asiatic species (*M. denudata*, Central China, and *M. liliflora*, China). It has wonderful flabby purplish flowers (petals and sepals alike) borne before the leaves and contrasting with the smooth grey branches. Both species that compose this well-known hybrid are hardy in zone 5. *M. liliflora* is a shrub reaching 9' and has campanulate (bell shaped) showy flowers appearing in succession and partly with the leaves. *M. denudata* (Yulan Magnolia) is a splendid wide spreading tree growing in height to 45'. This specimen displays its flowers (campanulate, of purest white and fragrant) in early May.

Magnolia stellata (Star Magnolia) is another widely planted spring bloomer. A native of Japan, it is hardy in zone 5. Sepals and petals (collectively called tepals) are alike, white, 12-18 per flower, narrow oblong and finally reflexed. The Star Magnolia flowers when quite small - a bonus for impatient gardeners. It has served in

the formation of a number of popular hybrids noted for their early flowering, hardiness and unusual color. One example is *M. x loebneii* (*M. stellata* x *M. Kobus*). Popular cultivars of this hybrid are cv. 'Leonard Messel' and 'Merrill'. *Magnolia Kobus*, native to Japan, is the hardiest of the Asiatic Magnolias, but does not flower freely when young. Its contribution to various hybrids has been its hardiness and increased flower size. It is also frequently used as an understock for grafting Magnolia cultivars.

There are a number of other Asiatic species that warrant further investigation in our hardiness zone: *Magnolia Sieboldii* (Oyama Magnolia,) *Magnolia Wilsonii* (Wilson's Magnolia) and *Magnolia obovata* (Japanese Whiteleaf.)

As with many early spring flowering shrubs siting in a protected cooler exposure (i.e. North facing) may retard blooming just enough to prevent frost injury to flowers.

Grow some Magnolias, native American or Asiatic, you will love them.

Gardeners Workshop

Spring

Andrea Modney

Spring may well be my favorite season in the perennial garden. Not just for those first long-awaited blooms, but for the sheer excitement of it. As the sun warms the soil and creeps inexorably over into the northern side of things, my little minions push off their earthen blankets, and with tender noses stretching for the light unfold towards their destiny.

Daily now, until early summer, I will embark upon a Garden Tour. This punctilious inspection of my vast kingdom may take leisurely hours if I have them to spare, five minutes when time is short.

Why do I spend so much time looking at mud and debris? Because it gives me a delightful thrill to come across an old friend I'd nearly forgotten just as it breaks the earth, and to witness the dramatic changes as it comes to full stature and bud. Occasionally I can't restrain myself from picking off a crust of earth, or lifting aside a tree leaf that burdens some bold sprout.

Here's the very essence of perennial gardening. The magic. I sow not, but year after year my treasures present themselves for my pleasure.

Of course, the reality is that I worked hard for their benefit the preceding season. And far from being their Queen, I am, in fact, their devoted servant. But that really does not intrude as I stroll the soft green Elysian fields strewn with anemones, primroses, violets, and other marvels.

IPM - The New Attitude for the New Age

With the apple comes the worm, and the beetles with the rose. As summer advances, the kinds and numbers of pests will increase. They'll be back, so get out the pesticides. Right? Well, wait a minute.

The wholesale use of pesticides is not regarded as the path of deliverance. The number of reasons why not are as varied as the pesticides themselves. Not least among the reasons is that they are hazardous to birds and beneficial insects as well as the human applicators.

There is an alternative approach which has gained widespread practical acceptance. IPM, Integrated Pest Management. Basically, IPM is the "integration" of any and all methods of pest control. Not all at once, of course. The idea is to begin the treatment of a pest problem with a simple, natural approach and only escalate to chemicals when all else fails.

Though we are here concerned with insect control in the perennial garden, the IPM concept is applicable to weeds, diseases, varmints, and is functional on as large a scale as commercial agriculture.

The first principle is that a healthy, well-groomed plant is a resistant plant. Research has shown that insects do prefer to munch on weakened plants. Correct moisture, pH, and nutrients keep plants strong. Fungus and disease spread quickly through overcrowded plants that don't enjoy adequate ventilation. Enlightened plant cultivation, then, deserves a place at the very head of the IPM approach.

Handpicking is the first line of defense once the gardener decides action is necessary. Small, soft insects, such as aphids, are easily squashed. Knocking hard-bodied pests, such as Japanese beetles into a jar of soapy water is effective and satisfying. A bracing shower with the garden hose may force many kinds of insects to relocate. My favorite weapon is a spray bottle of soapy water. (Use dishwashing soap, such as Lux, not a detergent.) This is effective against a surprising variety of insect pests. If something stronger is required, try an environmentally friendly solution of insecticidal soap.

- continued on next page -

- Gardeners' Workshop continued -

At what point does one reach for the potent chemicals? Perhaps never. It might be easier and cheaper to discard the affected plant. Consider, too, that most perennials can make a vigorous comeback after complete defoliation.

Sometimes the only sensible thing to do is accept the presence of the pest, and take the long term solution of planting things they're not partial to.

Taking a broad view of it, we can see that IPM is much more than a paradigm for pesticide application. It is virtually a philosophy of modern gardening. The IPM practitioner recognizes that the natural world is full of insects, weeds, and varmints which are as likely to take up residence in the garden as anywhere else. The garden may well also host predators that will keep the pests under control. The threshold at which pest damage seems to demand a more severe degree of management is entirely up to the individual gardener.

Perhaps a modest degree of pest damage is a small price to pay for greater leisure and peace of mind. And there is that certain tranquility that comes with acceptance.

TIPS

Natural pesticides, such as pyrethrin, can be just as poisonous to non-target beings as any synthetic.

Only buy as much pesticide as you need for the current problem. Leftovers are hazardous, may not keep, and are impossible to dispose of. It may be cheaper by the gallon, but that's a false savings if one can't use all of the product.

Clean up garden bed. Remove winter mulch. Cut back flower stalks and ornamental grasses before new growth starts.

Prune back woody perennials (lavender, caryopteris, some clematis, etc.)

Fertilize when new growth appears. Use well-rotted manure or humus from the compost pile. (I rarely use 5-10-5, but if you wish to do so, apply it lightly, being careful not to let any granules fall on the leaves or crown of the plants.)

Plant seeds. Many perennials are grown from seed. I have had good luck sowing seeds outdoors in a nursery bed, even those for which indoor germination was recommended. Experiment. Keep soil moist.

Dig and divide from now until the weather gets hot. Do summer and fall perennials now, spring plants when they finish blooming.

Set new plants promptly, as soon as they're hardened off. Keep up with watering them until they are established.

Weed when the soil is damp for ease, but be sure the leaves are dry, so as not to spread disease. Keep ahead on weeding. Get them while they're small and few.

Set stakes and cages for tall and floppy plants before the foliage is tall enough to make this difficult.

Pinch back chrysanthemums and asters.

Villian of the season - the cutworm. This is the varmint who makes your seedlings disappear while you're asleep, small transplants to topple and die under its predations. Though the cutworm works at night, you might come across it where your seedlings used to be. Description: an earth-brown caterpillar about 2 inches long. It will be lying on its side like a fat letter "C". Kill it with your trowel.

Magnolia Trees...From page 3

So-called *Magnolia cordata*, the yellow cucumber tree, is probably no more than a shrubby, yellow-flowered variety of our native species. It grows wild in Georgia, and is also planted elsewhere in the south. It is recommended for Zone 5 and milder climates, and might make an interesting graft onto northern cucumber-tree rootstock. The flowers are more showy, opening widely, up to 4 inches, and they are creamy to bright yellow.

Fraser magnolia (*M. fraseri*) is reportedly hardy to Zone 5, but seems difficult to grow in our area for some reason. It is particularly susceptible to winter bud kill, although it survives some pretty severe conditions in mountainous areas where it occurs naturally from Virginia to Georgia. A large tree with spectacular flowers and basally lobed leaves, it does not make a particularly good garden plant, but spring shows of the native plants in the Appalachians can be quite spectacular, especially on years when the flowers come just before the leaves, much like an asiatic magnolia. We do not recommend this species unless you are easily challenged and have particularly warm, sheltered south-facing slopes on your property.

Propagation:

As soon as the seeds are red and ripe they should be stratified by keeping them in a cool, but not freezing, place for 4-6 months before planting. Don't let them dry to brown or black before stratifying them. Propagation may also be accomplished by air layering and various kinds of grafting procedures. Bud grafting has been accomplished with native species using asiatic Kobus stock in Zone 4 and star magnolia (*M. stellata*) stock further south.

Yes, I would like to become a member of the George Landis Arboretum in the following category:

- \$15 Member
- \$25 Sponsor, or Garden Club
- \$50 Supporter
- \$100+ Patron

Name

Address

Enclosed is my check for \$ _____
(made payable to the George Landis Arboretum).

I would like to volunteer.

My daytime phone number is _____

(Please circle type of work you are interested in, or write in your suggestions.)

Field Work: mowing, weeding, pruning, etc.

Office Work/Projects: word processing, writing (newsletter, other publications), fund-raising, herbarium/library, mailings.

Events/Programs: adult education, youth education (e.g. field trip guide), slide show presenter, Saturday Lecture Series (host or lecturer), plant sales, special events.

Please mail to: Director, George Landis Arboretum, P.O. Box 186, Esperance, N.Y. 12066.



Spring Calendar Highlights

APRIL

- 12 8:30 pm **Star Party** Stargazing with the friendly Albany Area Amateur Astronomers, upper parking area. Free. (Cloud date 4/13)
- 13 9:00 am "Spring Cleaning" Volunteer Work Day and Pot Luck Supper, meet at barn.
- 18 9:30-2:30 **Volunteer Teacher Training** (cont. 4/25 and 5/2).
- 22 1:00 pm **Drawing in the Greenhouse** taught by Laura Lehtonen, and Anne Jaster.
- 27 10:00 am **Arbor Day Celebration** "Plant a Tree, Save a Tree" Fun and learning for young and old: Awards for children's essay contest, making recycled paper, "envelopes", and kids' binoculars, and "Be a Tree Detective" nature hike. Lecture on Tree Planting and Aftercare by Nurseryman Jeff Schworm. Refreshments. Free, but please call to register.

MAY

- 4 11:00 am **Rare Plant Sale** Unusual trees and shrubs for your garden, discount for members, lunch will be available.
- 6 **Ants in Your Plants** Insects and plants depend on each other in many ways. Instructor: Laura Lehtonen. By pre-registration. 4:00-5:30 (8-10 year olds)
- 9,16,23 **Seeds, Sprouts and Spring** This three session class for parent/child pairs Instructor: Laura Lehtonen. By pre-registration, 9:30-10:30 (3 year olds) 11:00-12:00 (4 year olds)
- 11 10:00 am "Why don't my pictures look like what I took a picture of?" Ron Klupka
- 13, 20 **Eating Botany** Instructor: Laura Lehtonen. By pre-registration 4:00-5:00 5/13 (5-6 year olds) 4:00-5:00 5/20 (7-8 year olds)
- 16 7:30 am **Birding with Beverly**
- 18 7:00 and 10:00 am **Birdwatch** led by John Bousman, Meet at Lower Parking Lot.
- 18 2:00 pm **ECOS** tours the Arboretum Meet at Lower Parking Lot.
- 19 7:30 am **Breakfast with the Birds** Reservations required; space is limited.
- 19 2:00 pm **Arboretum Annual Meeting**, Meeting House.
- 22 7:30 am **Birding with Beverly**.
- 25 10:00 am **Designing Perennial Borders** Nancy Douglas,

JUNE

- 1 10:00 am **How to Create a Bonsai** Pauline Muth.
- 8 11:00 am **Perennial Sale** Both unusual perennials and old-time garden favorites will be for sale, discount for members, refreshments available.
- 14, 15 9:30 pm **Star Party** (No cloud date).
- 15 10:00 am **Go Native: Using Native Plants to Attract Birds** Laura Lehtonen.
- 22 9:00 am **Volunteer Work Day** and Potluck Supper (note changed date)
- 22 10:00 am **Designing Annual and Tulip Beds**
- 29 10:00 **Propagation by Cuttings** Arboretum Horticulturist Pamela Rowling will teach how to propagate trees, shrubs and perennials vegetatively with cuttings. In the Greenhouse.
- 30 1:00 **Family Day** Participatory nature activities for kids and parents. Special event: Dean Davis will introduce us to Animals Nobody Loves. Pre-registration required.

SNEAK PREVIEWS

JULY

- 17 6:00 pm **Volunteer Recognition Barbecue**
- 19 TBA **Mettawee River Theater Co.**

AUGUST

- 10 9:00 **Volunteer Work Day** and Potluck Supper
- 24 TBA **Moonlight Madness** - Members only, Brooks Chicken BBQ, live music, moonlight walk in the woods.

SEPTEMBER

- 2 **Country Day Fall Festival**

OCTOBER

- 5 9:00 "Putting the Garden to Bed" **Volunteer Work Day** and Potluck

George Landis Arboretum
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