



George Landis Arboretum NEWSLETTER

Volume 11 · Number 3

Summer 1992

Acorn Sprouts

The acorn we planted this spring has grown into a successful gift shop! Joani Momberger, manager of the Acorn Shop, reports that business has been quite good. Especially on plant sale days, but also on any day with nice weather, Arboretum visitors have stepped into the shop in droves to admire the handiwork.

Best sellers so far include the Garden Friends (antiqued cement sculptures) from Hallocraft, birdfeeders, and gardening books. The handmade cards are selling well as are kids stuff and dried flower arrangements. Sherri Byrnes of the Herb Cupboard designed our very own potpourri recipe, dubbed Misty Morning, which gives our guests a scented reminder of their visit.

Signmaker Peter Irwin of Sharon Springs contributed the glorious sign that adorns the entrance to the shop. A longtime friend of the Arboretum, when he was contacted to ask if he would sell artwork in the shop he was delighted that the Arboretum would at long last have a gift shop. When he offered to make a



sign, Joani says she didn't know exactly what to expect. As you can see from the photograph (if you haven't already seen it in person) it is handsomely crafted and adds a tremendous amount of class to our operation!

If you haven't seen the shop yet, why not come a little early for the Mettawee River Theater? Special shop hours before the July 17 performance are 5:30-7:30 (the show is at 8:00 p.m.). Regular hours for the Acorn Shop are Saturdays and Sundays from 10-4.

Education Update

Our spring calendar offerings have attracted many participants, both members and non-members. Only two classes were cancelled due to under-registration, while most averaged 12-15 students. The Saturday Series lectures and walks have also been popular

Upcoming events include excit-

ing classes for children taught by Laura Lehtonen, one of which is a series designed to tackle the perennial parent problem "What do I do for an hour and a half while the kid is in class?" The Arboretum Escapes offer two classes at the same time, one for the child and one for the parent, on similar topics. Check your calendar for details and come try one!

GE Matches Employees Gifts to Arboretum

About a year ago Arboretum member Steve Evans, Schenectady, began the process of getting the Arboretum qualified to receive matching gifts from General Electric. Now GE employees' and retirees' gifts to the Arboretum are matched 1:1 by GE. This May we received their matching gift for 1991 contributions by their employees—a smashing \$4,675. Our sincere thanks to Mr. Evans for getting us started on matching gifts, to all our GE contributors, and the General Electric Co. for the great gift!

As a not-for-profit educational institution the Arboretum qualifies for most matching gift programs. We have recently become involved with two other matching gift programs though our members contributions—New York Telephone and Times Mirror. The process is usually quite simple: The donor picks up a matching gift application at his place of employment. Usually part of the form needs to be completed by the donor, then you mail it to us with your gift and we complete it and send it in. This very simple process has the grand effect of doubling (in most cases) your gift to Arboretum. If your employer offers a matching gift program, please take a few minutes to find out how you can participate. If there's any documentation needed from the Arboretum we'll be happy to oblige!

At the Garden

Director's Report

Pamela H. Rowling

Every year seems to be different lately. Perhaps this perception is due solely to the attention that I give seasonal shifts since I began taking care of the plants at the Landis Arboretum. Spring as you recall was stalled this year by extended cold. Finally it warmed and plants began to grow, only to have tender new growth burned by below freezing temperatures in late May. It is

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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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interesting to note the various species damaged by this late cold snap. Native sumac, ashes and Oriental fringe trees alike were set back (as were the garden keepers) by this surprising temperature drop. Another interesting effect of the late spring has been the subsequent condensing of the blooming period. Late May through June were glorious: early blooming plants that had held back and June-blooming plants erupted simultaneously. Star and Saucer Magnolias and lilacs and crabapples, to name a few, all blooming in unison. The spring bulb display was spectacular in the Van Loveland Perennial Garden, followed by Delphinium, Filipendula, Clematis, early Aconitums and peonies. A garden bench donated in memory of Charles Johnson by his wife Joan, recently installed at the top of the garden, provides a much appreciated place to sit and a nice perspective of the garden.

The grounds are looking quite tidy this year. We were able to allocate a small amount of our budget to hire additional help with the monumental task of keeping the lawn areas mowed. As a result we have been able to spend quite a bit of time adding to the collections plants produced in our greenhouse. These small plants are adjusting well to their new surroundings.

Educational programs have really kept things hopping. From special workshops, such as trough making, to the wonderful evening class Drawing in the Greenhouse and the Saturday Series all have been well attended and enjoyed. My deepest thanks to all the volunteer program presenters who give so generously of their time and expertise to share their knowledge with others. The Arboretum is also con-

tinuing to grow in its role as a resource for area school children and teachers. Staff science educator Laura Lehtonen and her enthusiastic group of volunteers have guided many busloads of youngsters through the Arboretum as they learn about nature and the environment.

This year's special publications: The Woodland Trail Guide, Birding: A Habitat Guide, and History: How the George Landis Arboretum Came to Be, have been generously duplicated by an anonymous supporter and are available to all those interested.

The Arboretum hosted a meeting of the N.Y.S. chapter of the American Chestnut Society in early June. A workshop on the fascinating technique of mudpacking trees was held using our grove of American Chestnuts as patients. The technique essentially serves to control the growth of the disease organism biologically. We also added six new trees to our planting. Many garden clubs have come to the garden for tours this season. Through our off site presentations we have reached additional interested members of area historical societies and rotary organizations.

We have finished the lower parking lot project. This undertaking was an excellent example of how so very much gets done at our garden and is an excellent example of the value of working together. The parking area improvement project was initiated using a small amount of money granted to the Arboretum by New York state as a Legislative Member Item. Due to budgetary cutbacks the original amount granted was reduced a number of times and threatened to make the correction of this serious drainage problem impossible. Subsequent donations of time, equipment and materials from the following local businesses allowed the project to move forward: Wallace I. Johnson, Inc.

Continued on page 3

This Native Plant

The Sourwood Tree

by Deborah Coyle

Oxydendrum arboreum, Sourwood Tree, Sorrel Tree, Lily-of-the-Valley Tree.

While researching information for this article I found myself wondering why my knowledge and/or exposure to the Sourwood Tree has been so limited. A possible consideration for its limited use as landscape material in our area is the low pH requirement (5.5-6.5) that is common for members of the Heath family. Other members of this family more familiar to us are rhododendrons, azaleas and mountain-laurel.

Introduced to cultivation between 1747-52, the Sourwood tree's native range is from western Florida to southwest Pennsylvania. It will be found growing in moist, well-drained sites along streams or streambank ridges, frequently associated with oaks and pines. Although not occurring naturally as far north as New York, it is hardy through Zone 5.

This deciduous tree is considered by many to be an excellent

choice for specimen plantings. Dirr states that many gardeners rank the Sourwood second only to the Flowering Dogwood as an all-season ornamental.

In cultivation the Sourwood will reach an ultimate height of 25'-30' with a 20' spread, or it can be grown as tree-shrub reaching approximately 20' in height. Growing in the wild the tree will reach a height of 50' plus.

The appearance of this pyramidal shaped tree with drooping lateral branches is enhanced by its deeply fissured, gray/brown bark. The leaves are alternate, simple and elliptically shaped with a fine saw-toothed margin. Leathery and glossy, the dark green leaves turn a brilliant red in the fall. The genus name *Oxydendron* is derived from the Greek words oxys (sour) and dendron (tree), with reference being made to the sour taste of the leaves. In mid-summer small, white, urn-shaped flowers (1/4" long with 5 lobes, resembling Lily-of-the-Valley flowers) hang in very showy 4"-



10" long panicles from the ends of the branches. The fruit is a dry, woody, egg-shaped capsule, 1/3" long and covered with fine hairs. This pendulous fruit will mature in an upright position and persist into winter for added landscape interest.

The tree may be planted in partial shade, but for maximum flowering and fall color, full sun is recommended. Optimum conditions for growing are moist, well-drained soils, with dry locations being tolerated. This would not be a good selection for polluted areas or city landscapes. The Sourwood tree is not plagued with any serious disease or insect problems, however leaf spot and twig blight may be a nuisance.

Plants are propagated from seed sown in fall after collection and placed under mist and continuous lighting. Stratification is not required, however a 3-month cold period will speed germination and reduce light requirements.

For those who can provide a favorable growing environment, the Sourwood is definitely a tree worth planting.

Further reading: Michael A. Dirr, Manual of Woody Landscape Plants and Donald Wyman, Trees for American Gardens.

Deborah Coyle is a summer intern at the Arboretum.

At the Garden, continued from page 2

(Delanson), Rupp Rental and Sales Corporation (Albany), and DeLuke Trucking and Excavating (Delanson). This type of support is extremely valuable to us and I extend my most heartfelt thanks to all those who helped. We now have a drained, gravel-surfaced parking area and will never again have folks get their cars stuck here.

The two plant sales held since our last newsletter were both great successes. The weather was extremely cooperative on both occasions - lovely days. Dr. John Abbuhl headed up the Rare Plant Sale and both he and the great crew of volunteers who staffed the event are to be

congratulated. Both sales provided ample opportunities to project how we could better serve our customers in the future. Many of these ideas will become reality in upcoming sales.

By now all members have received the July-September calendar. An impressive array of activities await you. Programs are available for the young and not-so-young. Come, take a peaceful walk, watch the birds, participate in a program and most importantly enjoy the garden that you help to make possible.

Calendar in Brief

For details on these events and classes please consult your full-length calendar.

JULY

- 7 Onteora Gardens Tour
- 9 Japanese Flower Arranging
- 11 Heirloom Vegetables
- 15 Nature for Young Children
- 15 Volunteer Barbecue
- 17 Mettawee River Theater
- 18 Botany for Gardeners:
 Plant Identification
- 18 Butterfly Gardening
- 18 Growing/Harvesting
 Everlastings
- 21 Arboretum Escape
- 22 Nature for Young Children
- 23 Nature at Night

AUGUST

- 1 Volunteer Workday
- 1 All About Oaks
- 4 Arboretum Escape
- 5 Nature for Young Children
- 6 Nature at Night
- 8 Conquering Garden Insects
- 13 Nature at Night
- 15 Botany for Gardeners:
 Intro. to Plant Groups
- 15 Woodland Trail Walk
- 18 Arboretum Escape
- 19 Nature for Young Children
- 20 Nature at Night
- 21,22 Star Parites
- 22 A Visit to the
 Conifer Collection

SEPTEMBER

- 10 Keys to Learning Fall
 Wildflowers
- 12 Volunteer Workday and
 Pot Luck Supper
- 12 Breakfast with the Birds
- 12 Wild Berry Identification
- 19 Fall Gardener's Workshop
- 26 Wildflower Field Day

Mettawee River Theater Co.
presents

THE GEESE DREAMER

an enchanting outdoor performance of myth and music

8 p.m., Friday, July 17
at the Arboretum

Tickets available at the door:

\$3/adult, children free (special price for busloads of kids)
Bring lawn chairs or blankets and bug spray!

This program is made possible with public funds from the NYS Council on the Arts and is sponsored by the Schoharie County Arts Council, the Landis Arboretum and the Village Ice Cream Parlor.

SPECIAL HOURS FOR THIS EVENT:

The Village Ice Cream Parlor (Esperance) will be open both before and after the show.

The Acorn Shop (at the Arboretum) will be open from 5:30-7:30 before the show.

New Faces at the Arboretum

This summer we are pleased to have with us our first-ever intern from SUNY Cobleskill. A student in the Plant Science Department, Deborah Coyle will earn her Bachelor of Technology degree in December. She is most interested in plant propagation and hopes to find work in that field upon graduation. Here at the Arboretum she will be working on propagating by cuttings plants from our collections and

working on field verification of plants and updating the maps.

At the annual meeting of the Board of Trustees five new Trustees were elected. Florence Grimm, whom many of you know as our Volunteer Coordinator, will be expanding her activities here! Also joining the Board are Arthur Willis, Edward Eilers, Tim Waters, and Steve Young. Welcome aboard!

Garden Exotica

Tilia cordata, the Little Leaf Linden

by Pamela H. Rowling

Esteemed for shade and ornament, the Little Leaf Linden (*Tilia cordata*) is a tree worth considering when planning the garden. The genus *Tilia* is of note for being a temperate member of a predominantly tropical family (*Tiliaceae*). There are approximately 30 species of *Tilia* which inhabit temperate regions of the northern hemisphere.

In general a genus of large rectilinear trees, one of the best species for the smaller property or park is *Tilia cordata*, the Little Leaf Linden. This relatively slow-grower is a native of Europe and is found growing wild in Britain. In its native haunts Little Leaf Linden may reach an eventual 90' in height. Most trees in

cultivation remain well below this height. The tree naturally assumes a neat pyramidal habit. The dense foliage—glossy dark green above, paler beneath—casts a perfect shade. Individual leaves are small (1 1/2-3" long) and heart-shaped, resulting in a fine textured effect.

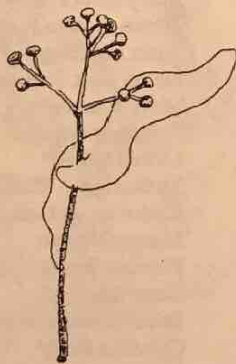
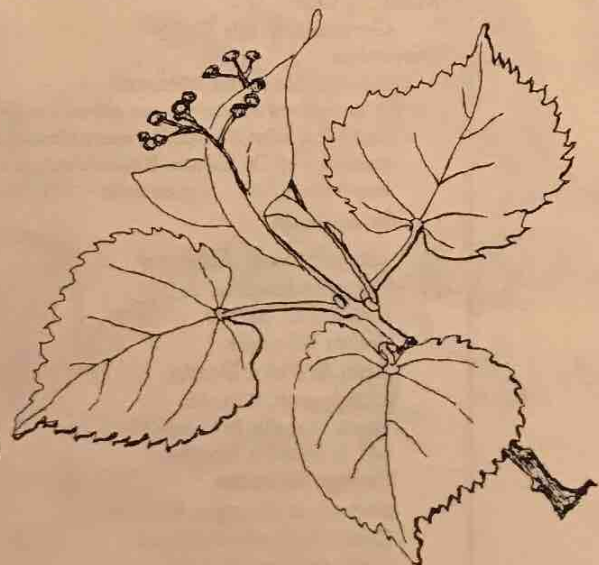
Tilia cordata is the latest of the lindens to bloom (late June, early July) and its flowers are small and inconspicuous. The pendulous clusters of dull white to pale yellow flowers are borne on leafy shoots of the current year's growth. Flowers are always produced on a long, narrow, membranous bract to which the lower half of the stalk of the inflorescence is united. The presence of this eye-catching pale

bract is one of the most characteristic features of this genus. The bract is persistent, remaining with the fruit and providing an ornamental aspect until winter.

Of easy culture, *Tilia* are not particular about soil. Their only apparent dislike is dry locations and droughty soil. Plants placed in such a location will be unthrifty and lose their leaves early in the fall. Propagation of the species is by seed which requires cold stratification. Increase may also be achieved by stooling (a type of layering where the tree is cut to the ground and soil is mounded around stump sprouts until they root) or grafting of named clones onto seedling understocks. A number of chewing insects are known to attack lindens and so occasional sprayings appropriate to the particular pest may be in order.

Many outstanding cultivars are available. *T. cordata* 'pyramidalis' forms, as the name suggests, a wide pyramid. 'Swedish Upright' is slow growing, rectilinear and slender in habit. 'Handsworth' is a color variant: the one year old twigs are a lovely light, yellow green color and offer a striking feature in the winter landscape. Probably the most widely distributed cultivar is 'Greenspire' which forms a strong central leader and radially-produced lower branches. 'Greenspire' is widely used for street trees and parks.

Textural beauty, shade, ease of culture, relatively slow growth, hardiness, and tolerance of even severe pruning (when used as a hedge) make *T. cordata* highly versatile. It is an ideal subject for planting as a street tree, lawn specimen, or as a boundary hedge.



How Does Our Garden Grow?

New Members (*) and Renewals March-May 1992

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Memorials

Edwin Rosenblum Memorial

A generous amount was given by Dr. and Mrs. John Abbuhl to start a fund in memory of Dr. Edwin Rosenblum, late husband of Treasurer Phyllis Rosenblum.

Minna Morgan Memorial

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LOGO CONTEST WINNER!

Congratulations to Ariel Slomka who entered her logo design with other students in her second grade class from Elmer Avenue School of Schenectady. Ariel is 8 years old and will be in third grade this fall. Her design includes an acorn and oak leaf in an oval frame. You will see her logo in the next issue of the newsletter. Ariel and her family will receive a one year membership to the Arboretum and a chance to see her artwork in print. Thank you Ariel!

Students Visit the Arboretum

Many school groups visited the Arboretum this spring to learn about trees and other plants. We have included a letter from one student who wrote to volunteer guide, Jane Weyers.

June 12, 1992

Dear Jane,
Thank you for showing us some of the woods it was fun. I saw a chipmunk he is cute. I liked when we made envelopes. And I liked what I saw over the cliff it looked nice.

your friend,
Bachel
K.



Volunteers

Volunteer Notes

This is the time of year we really appreciate our great group of volunteers who manage even during the craziness of spring to spare time from their own gardens to help out at the Arboretum. As this seasonal burst of frantic activity slows its pace we look forward to the chance to thank you in person for your labors...

The third annual Volunteer Recognition Barbecue will be on Wednesday, July 15—a chicken dinner hosted by Trustees and Staff—and we sincerely hope all our active volunteers and their spouses will join us for the evening. If you have contributed 10 or more hours this year (since the last BBQ) you should receive an invitation by July 1. If you haven't heard from us by then don't be shy, call the office and let us know! Assemblyman Paul Tonko, a longtime supporter of the Arboretum, will be our special guest at the barbecue.

Several new volunteers have joined us recently. Marlene and Gene Taylor, recently arrived from Texas, have become Friday morning regulars. Arriving at 7 a.m. with weed wacker and edger and a host of other tools they've been tidying up beds from the Homestead to the Library. Cindy King discovered the Arboretum recently when she took the botanic illustration course, and has now joined Carol Loucks et al

working in the perennial garden on Wednesdays.

The two plant sales this spring went very smoothly, thanks to the many folks who worked not just those two days but the days before, too. Some of the new hands who helped were Bill Kowalski, Dolores Kloczko, Laura Teague, Phebe Downs, Florence McKie, Patricia Barden, Julia and Pieter Blonk, Margaret Carballeira and Louella Smith. Thanks to all those, named and un-named, for a great job. There were many compliments from our visitors about how well things went and what nice volunteers we have!

A couple of big events are coming up that need crew! Four volunteers are needed for the Mettawee River Theater performance on July 17 and many on September 26 which will be our first Wildflower Field Day. This new event will have an educational focus but will include entertainment and exhibitors.

There's no workday planned for July—just the party! The next workday will be on August 1: mulching, deadwooding and brush removal are planned. September 12 will be a workday and a potluck supper—bring a dish to share, well supply the beverages—so we can enjoy the fruits of our labors while the weathers still nice. The October 3 workday will have as its primary goal the caging of the rhod-

ies for winter.

Volunteer Teachers

Volunteer teachers at the Arboretum have the special job of working with school groups during weekday mornings. The programs offered to schools have gained in popularity and the need for and dependence on these volunteers has increased as well. This spring Jane Weyers, Bob Farrell, Richard Standish, Joan Sondergaard, Maria Pascual, Pam Yourno, Phebe Downs and Erica Batchelder took a three-day training. The training sessions prepared the volunteers to teach three different lessons to elementary-aged students: Inside-a-Tree (K-2), Adapt-a-Plant (2-5) and What Tree Am I? (4-5).

These volunteers have helped in other activities for children both at the Arboretum and "away". In May and June they participated in a variety of programs from Something To Do Day at the Scotia-Glenville Childrens Museum to a Kindergarten Field Day for the Martin Luther King Magnet School in Schenectady. Special events like Arbor Day and Family Day have also brought our volunteer teachers out to enjoy botanical activities with children and their families. We are grateful for their enthusiasm and time and hope more Arboretum members will consider donating time to help with our educational programs for children.

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

Enclosed is my check for \$ _____ made payable to The George Landis Arboretum.

Name _____ Daytime Phone _____

Address _____ Home Phone _____

City _____ State _____ Zip _____

I would like to volunteer. (Please circle the type of work you are interested in, or write in your suggestion.)

Field Work: mowing, pruning, etc.

Office Work / Projects: 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, New York 12066

Gardener's Workshop

Fertilizing Trees

by Anne Best

Part I. Of all aspects of tree maintenance the question of fertilization is least clear in the minds of experts and lay people alike. Some recommend using fertilizers both during and after planting. Others avoid using any fertilizers until after the young tree has grown for one or two years. My feeling is that the correct amount of fertilizer (in contrast to too much fertilizer) spurs steady growth, safeguards against disease, and helps in the re-establishment of a tree after it has been damaged by mechanical means or been attacked by insects or suffered through a drought.

In a forest most trees grow very well by themselves. Fallen leaves form a useful mulch and later decompose along with twigs, branches and dead animal matter that covers the forest floor. These fallen elements return mineral nutrients and nitrogen to the soil. In this cycle of growth followed by decay the fertility of forest soil is naturally maintained. Trees in an ornamental setting are often denied the benefits of healthy accumulation of fallen leaves, twigs and fruit. Also, lawn grasses greedily devour available water and essential nutrients before they reach the roots of any tree. As a result of insufficient nutrients trees may grow

slowly, exhibit weak color, dead branches, few new buds, and be slow to produce healing calluses over wounds.

After planting a new tree wait a few weeks or months before fertilizing. Too often an overabundance of fertilizer will burn sensitive new roots. Even manure may prevent tiny rootlets from gaining access to soil moisture and oxygen or by releasing toxic substances during decomposition. If the tree seems to be doing well leave it alone. If not, it is time to fertilize, assuming all other planting instructions have been accurately followed.

The elements that are most rapidly used and exhausted are nitrogen, phosphorus, and potassium. Trees require more of these elements than of the others in the soil.

Nitrogen influences cellular growth and thereby promotes production of healthy twigs, wood and green leaves. This element also helps in the synthesis of chlorophyll, a deficiency of which results in undersized, yellow leaves. An excess of nitrogen will result in injury to the roots.

Phosphorus aids development of roots while strengthening the tree against adverse conditions.

Potassium or potash plays a role in the production of sugars, starches and cellulose. It thereby promotes a tough stem while contributing toward the development of healthy foliage.

The question of chemical versus

natural fertilizers deserves consideration. The natural fertilizers are derived from plant or animal remains. This organic matter adds humus to the soil and benefits the tree, but is much slower-acting than chemicals. Natural fertilizers last much longer than inorganic varieties.

Both chemical and natural fertilizers contain the three essential plant nutrients and are shown on the package as the fertilizer analysis. For example: 10-6-4, 3-4-3. The first number denotes the percentage of nitrogen; the second, phosphoric acid; and the third, the potash.

Chemical fertilizers are commonly much more quickly available to the plant. My biggest objection to them is that they can burn roots, discourage soil micro-organisms, leach nitrogen into the water supply, and stimulate too much growth which can leave the tree vulnerable to disease and insect attack and environmental problems such as drought stresses. So, I like to play it safe and stick with organic methods.

Part II, in the next issue, will cover when and how to apply fertilizers.

Anne Best is owner of Greenspace Environmental Design, Delmar.

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