



George Landis Arboretum Newsletter

Volume 9 • Number 4

October, November, December, 1990

PUPPETS at the ARB

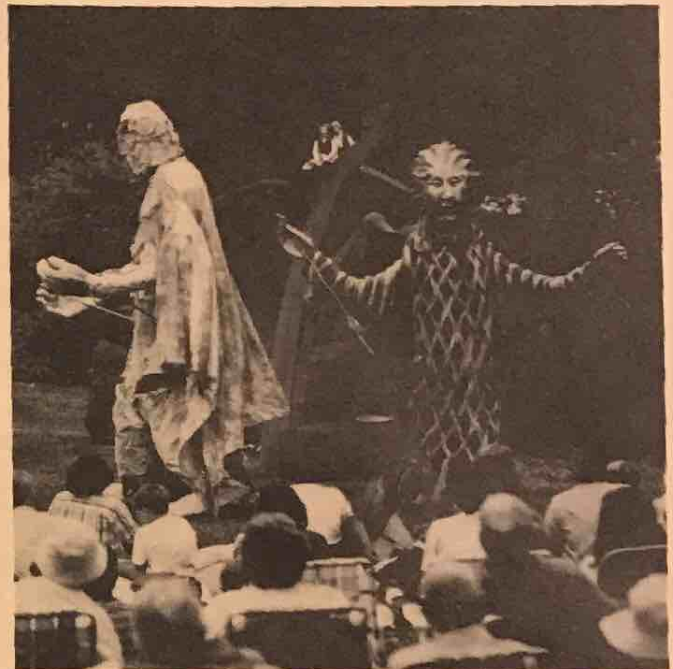
Amy Lent

Cars rolling up clouds of dust on Lape Road were the first sign of the huge crowd that came to watch the Mettawee River Theater Co. at the Arboretum on July 27. As dusk crept in and the dust settled, 350 visitors arranged themselves on lawn chairs and blankets to watch the musical, magical story unfold.

The hillside now nicknamed the Spruce Amphitheater came alive with the play "Time Out of Time", drawn from a Scandinavian legend. Portrayed by Mettawee's troupe of talented actors and musicians with the help of some very unusual puppets, ranging in size from hand-held to ten-feet tall, the play enchanted us all!

The performance was made possible with public funds from the NYS Council on the Arts and was sponsored by the Schoharie County Arts Council. As a "pilot" program for future cultural events at the Arboretum, it was a smash hit and bodes well for more events like this next year. We hope to have Mettawee back, as well as some other shows coordinated by the Arts Council. Even if we have public arts funding next year, we will probably have to charge a modest admission fee next year instead of casual donations.

A wonderful evening's entertainment was enjoyed by many, many folks-- the largest turn-out for an Arboretum event in recent memory. We happily anticipate a series of summer evening shows next season, and sincerely hope that you few who missed Mettawee this year will get to see them next time.



Scott Keidong/Daily Editor

COUNTRY DAY

FALL FESTIVAL at the ARBORETUM
Saturday, September 29 10 am--5 pm
Demonstrations of sheep-shearing, spinning, weaving, woodcarving, basket-making. **For the children:** bring old clothes to make a scarecrow, paint your face or a pumpkin face; create with Fall leaves. **Crafts for sale:** wool items and yarn, ceramics, woodcarvings, dried plants, baskets, quilts, houseplants, hardy chrysanthemums, and more. **Good food** to eat and take home.
Music: by Sappush Hollow and the Helderberg Hootowls.
Admission: \$2.00 per car.

**GEORGE LANDIS
ARBORETUM
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**FRIENDS OF THE
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Interested persons contact
Peter Rumora(518) 449-5374

LITERARY STAFF

Kathie Lippitt.....Editor

Amy Lent.....Copy Editor

Anne Jaster.....Art Editor

Shirley Redington.. Book Review

Contributors: Mary Ann Finley,

Arnold Gussin, Anne Jaster, Amy

Lent, Pamela Rowling, Beverly

Waite

Do write us about your favorite topic: be it plant, tree, season, or how you started your garden. We would all like to hear from you.

Notices received by the 1st day of January, March, June, and September will be printed in that newsletter. Send all material to the ARBORETUM, P.O. Box 186, Lape Road, Esperance NY 12066.

At the Garden
by Pamela H. Rowling

Clematis Garden

A new important focus at the Arboretum will be directed on the collection of Clematis species and hybrids being donated by our president, Elizabeth P. Corning. Planned to go in a semi-circle around the old parking lot across from the Lape Homestead, it will add considerable summer fragrance and beauty as well as year around interest.

1990 Programming Successful

Summer is coming to a close. The deep green hues of summer are being replaced by a more subdued palette suffused with golds and the first touches of red.

The meadows were a birder's delight filled with wildflowers, goldfinches and four families of bluebirds.

Volunteers have made many improvements at the garden. Dick Law's stonework is admired by all visitors to the greenhouse work area. The thinning in the woodland was completed through the Herculean efforts of Bob Grimm who split and hauled many cords of wood out of this area to be used to heat arboretum buildings. The Rhododendron garden has been lovingly groomed by Florence Grimm and Beverly Waite. Gil O'Brien and Carol Loux have contributed many hours; Gil performing much needed pruning of trees and shrubs and Carol in perennial garden maintenance. And all the while Anne Jaster's art students came in increasing numbers each week to chronicle through their work the changing scenes. Mary Anne Haas, who has added to our arts group with her skills as a sculptor and painter, was very instrumental in making a reality of the dream of an art studio in the barn.

Sixty people attended our volunteer appreciation party. It was a wonderful opportunity for all the folks who keep the garden together to meet one another and just enjoy the fruits of their labors.

Our first perennial sale was a great success and will be repeated in 1991.

As completion work continues on the greenhouse, through the many hours of labor donated by Ted MacDowell, growing continues inside. Benches and groundspaces are filled with crops of trees and shrubs to be offered at our 1991 plant sale. Unusual species of *Syringa*, *Evodia*, *Hovenia*, *Leycesteria*, *Pterostyrax* and *Aesculus* will be among the plants offered.

Our summer PIC Youth Employment help has gone back to school and Amy, myself and our dedicated helpers are dressing up the grounds in anticipation of our first Country Day Fall Festival on September 29.

I hope members will take the opportunity on the 29th to come enjoy their garden and have a nice family outing.

Two new programs to add to your schedule:

Saturday, October 6, 10:00 am, Crafts with Fall leaves, for the younger set (pre-schoolers, elementary), taught by Vicki Rosenberg. Cost: \$3.00.

Saturday, October 20. Starwalk. The August Starwalk rained out, so we'll try again. Meet at the Visitor Center (upper parking area) at around 8:30 pm. Beginning stargazers interested in learning about a few tools and techniques should come at 8:00. Leader Beverly Waite will be there, rain or shine, for the "Intro" to stargazing, so if you have questions don't let clouds deter you. [box on above]

Membership Update

I goofed! Last issue's membership column should have included some vital statistics; so here is a double dose!

In April, May and June we welcomed 38 new members and 69 renewals. A belated welcome to Katharine Gordon, Laura Enders, Oakridge Adult Home, Patricia Fagan, Ione Seiken, Mr. & Mrs. Paul Munson, Theresa Luksa, Jean Nikolaus, Paul Winkeller, Robert Klappmeyer, Janice Bell, Ruth Bonn, Billie Potts, Sarah Downes, Elizabeth Miller, William Boyce, Sandy Brousseau, Maryann Gridley, Charles Klaer, Howard Burchman, Terrance LaVigne, Charles Huppert, David & Sandra Martin, Patricia Hulst, Bill Vought, Dorothy Naple, Peg & Charlie Guyder, Eleanor List, George & Joan Momberger, Maurice Lockwood, Mr. & Mrs. Carl Hubbard, Elaine Graham, Helen & Bob Ringlee, Ruth Farrell, Louella Smith, Julie Jordan, Michael & Vicki Rosenberg, and Charlotte Ramsey.

July and August were good to us, too! (Due to our early deadline for this issue, September's gains will be reported in the next issue.) So far this quarter, 63 members have renewed, and 22 new folks have joined us. We welcome Anne Coggeshall, Louise Hughes, Peggy Levin, George McCroy, Michelle Monforte, Patricia Cleary, Susan Anthony Brownell, Colleen Quirion, Cheryl Friedman, Linda Young, Kathleen Young, Michael Riley, Charles Tamasi, Alan Rand, Christine Heller, Mary Anne Haas, William & Jean Carberg, William Sivers, Richard & Mary Raczkowski, Jane A. Smith, Richard Dallek, Harriet Mooradian, Pamela Hotaling, and all the way from Junction City, Kansas, Ms. Margaret Mosher!

The membership drive is showing results already! Several people have brought in new members and the race is on. Total current membership is 440. Our goal of 800 still looks pretty far away, but you've got plenty of time to try your hand at recruiting and win yourself an Umbrella Pine.

1990 Programming Successful

Something else grew in our garden this season, something besides the plants, that is. Overall attendance at educational programs increased by 100%. The Wildflower Identification Walks were the most popular, again, with over 70 people in the two sessions. Only one program was rained out, Beverly Waite's Starwalk, and it is rescheduled for October 28.

The programs for children taught us that parents and kids want more, so we added more and will continue to do so! We invited the Scotia-Glenville Children's Museum to teach two of their programs here (Membership continued page 8)

WISH GRANTED !!! WE GOT IT!!!

Our Thanks to:
BETTY PLAUTH
for the Locking
Supply Cabinet
Our Thanks to:
OUR NEW VOLUNTEER
WRITERS

THE ARBORETUM
"WISH LIST"
GROUNDS EQUIPMENT
A brush chipper

LIBRARY/OFFICE
Typewriter stand
Work station for computer
Vacuum cleaner

CONSTRUCTION
MATERIALS/LABOR
repairs to barn

COLLECTIONS
Books to update the
library
(per list generated by
horticultural librarian
Shirley Redington: see
Director)

GREENHOUSE
PARAPHERNALIA
(See Director)

MEMORABILIA:
appropriate to historical
Arboretum display

LITERARY STAFF
Send us the neat stuff you
have written. We would
LOVE that.

NEWSLETTER
Editor needed
must be computer friendly
work without pay-
long hours quarterly
Call Kathie Lippitt
399-4544

Why Leaves Change Colors

by Arnold Gussin

In mid-July, when you are still enjoying your summer, the trees around you are beginning to prepare for the onset of winter. People sense and react to changes in their environment by using their nervous or endocrine (hormonal) systems. Plants, because they lack nervous systems, rely solely upon environmentally induced changes in their hormones. In mid-July you may still be summering but the length of the night is increasing and this night length has an effect on the ratio of a pigment in plants (phytochrome) that can exist in two forms. Plants "know" what season is approaching by the relationship of the amount of phytochrome in its night-time form to the amount in its day-time form; this ratio, likened to an hourglass, leads to the production of the hormones necessary to prepare the plant for the forthcoming winter.

What are some of the effects produced by the hormonal changes that begin to occur when the nights grow longer? Initially, the synthesis of the green pigment (chlorophyll) slows down and there is destruction of existing chlorophyll. As a result, the yellows (xanthophylls), oranges (carotenes) and browns (tannins), which were always present in the leaf, but which were masked by the predominant chlorophyll, become visible. As the fall season approaches, with its longer cooler nights and still warm days, the sugar that is manufactured in the leaves during the day (in the process of photosynthesis) is not readily moved out of the leaf at night (cold temperatures slow down chemical processes). This accumulation of sugar leads to the synthesis of the red colors (anthocyanins); other factors involved in the synthesis of the reds are soil pH, depletion of minerals (nitrogen, phosphorous and potassium) from the soil and the leaf, and the degradation of proteins.

After all of the above events the leaves decay on the tree and then are mechanically removed from the tree by the wind or the rain. The tree will remain (COLORS continued on page 7)

Horsechestnuts and Buckeyes

by Pamela Rowling

Everyone can identify the horsechestnut; it has a paraphernalia all its own. Beginning with its large, often times resinous winter-resting buds and opposite leaf scars, the tree is an amateur botanist's delight. In early spring the buds unfold leaves which resemble limp green flags. The mature leaves are large, deep green and bold in design. They consist of 5-7 (rarely 3-9) toothed leaflets radiating from the end of a long stalk. In summer tall, showy panicles appear at the ends of leafy shoots of current year's petals. Colors are variable depending on the species being considered and range from white to yellow to scarlet red.

In early autumn the leaves change to warm golden hues and the maturing fruits become evident. The fruit is a large 3-valved leathery capsule. Here too, depending on the species the capsule may be adorned with warts, prickles or it may be smooth. As its last trick of the season, and to the delight of many, the capsule splits to reveal 1 or 2 wonderfully smooth and shiny mahogany colored seeds. In many parts of the world the seeds are referred to as 'conkers' and have inspired endless games involving sticks, bats, targets and the like. Although inedible for humans the seeds are reputed to be attractive to wildlife (squirrels and deer) as a food source. The bottlebrush buckeye (*Aesculus parviflora*) appears to be the only species in our collections that we need to beat the wildlife to in our autumnal seed foraging expeditions.

Botanically all buckeyes and horsechestnuts are in the genus *Aesculus* which is derived from an ancient Latin word for mast bearing tree. All species are deciduous and share the traits noted above. The common name 'horsechestnut' generally denotes species native to Europe and Asia while 'buckeye' is used to refer to North American natives.

Horsechestnuts and buckeyes are essentially ornamental trees. Their timber is of little value. They are loved for their billowing outlines, bright green summer color, sharply defined foliar effects and

spectacular flowering. Ease of flowering coupled with their dramatic presence is undoubtedly the reason for the popularity of this group of plants. Quick growing yet long lived, the oldest dated horsechestnuts in Britain were planted in 1664 and stand today at 125 feet in height.

Although not fatal, foliar diseases cause disfigurement in some species. The common horsechestnut (*Aesculus hippocastanum*) and the Ohio buckeye (*Aesculus glabra*) frequently suffer from diseases which cause the foliage to brown and drop early. These problems are most evident in wet summers and during periods when plants are undergoing physiological stress.

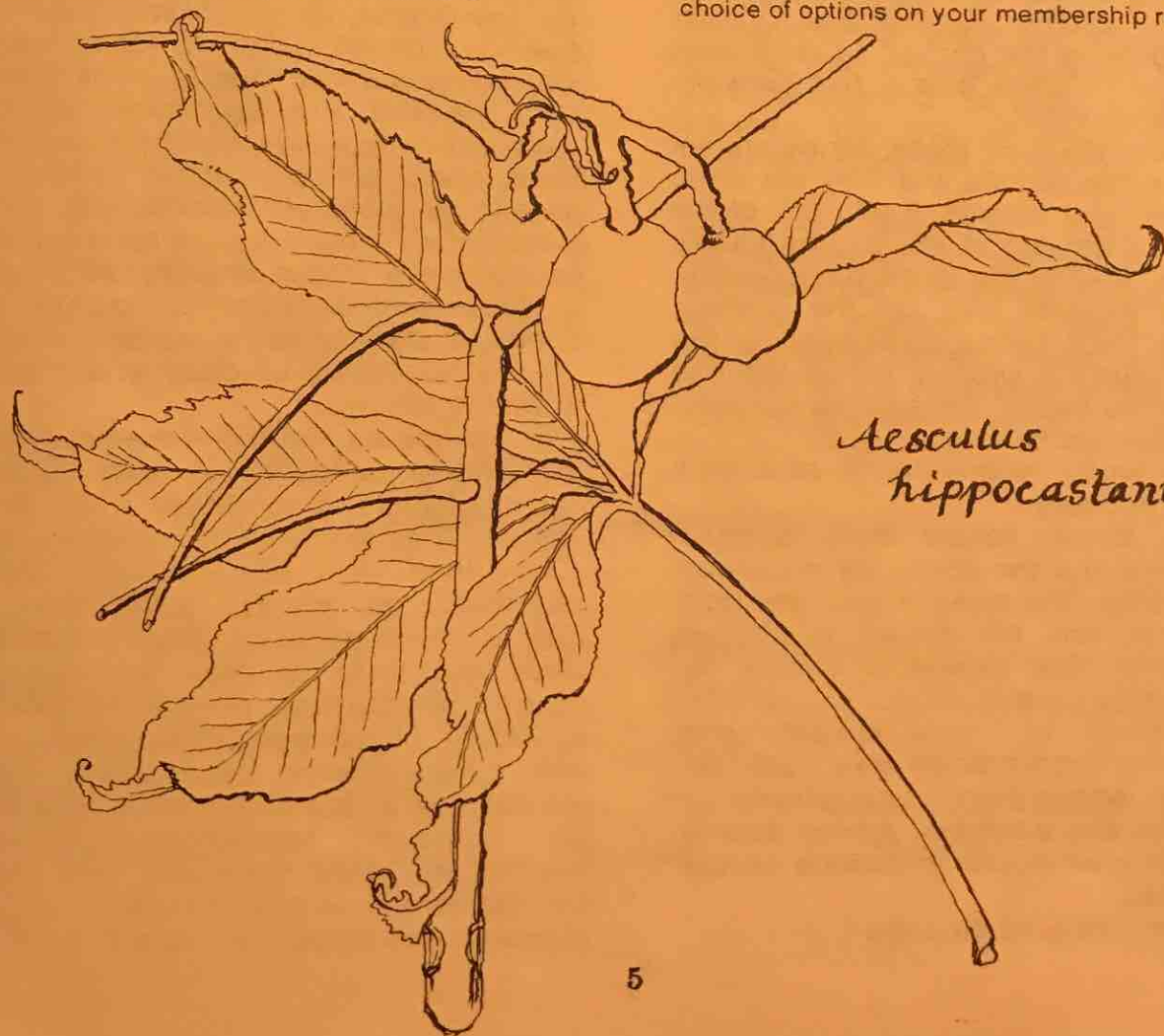
Horsechestnuts and buckeyes grow readily from seed collected as soon as ripe in the autumn and given a period of cold moist storage. Vegetatively, the plants may be propagated by grafting or budding and certain species (*A. parviflora*) can be increased through the use of root cuttings.

One of the most outstanding *Aesculus* in the collections of the Arboretum is a

specimen of the bottlebrush buckeye or *Aesculus parviflora*. Planted in 1951, this buckeye forms a broad suckering shrub rather than the single trunk habit expressed in the majority of other species. The bottlebrush buckeye is useful both as a large specimen on the lawn (its eventual height of 8-12 feet is matched equally by its suckering spread) and as a component of a border planting. This plant does not suffer from the various foliar ailments of the Ohio buckeye and common horsechestnut and has no serious insect pests. A particularly useful feature of this species is its late flowering season. Twelve-inch slender panicles are produced in July and have few rivals for grace and overall beauty.

Our specimen is located on the right hand side of the upper garden entry across from the entry to the Meeting House. It is a "must see" on your mid-summer visit next year.

[Editors note: *Aesculus parviflora* is one of the plant options for arboretum membership at the \$25.00 level and above. Be sure to make a note of your choice of options on your membership renewal.]



*Aesculus
hippocastanum*

Arbo Woes

by Beverly Waite

Plaintive moans of "I've lost my trowel again" are interspersed with shrieks of "... not in the poison ivy!" An errant truck knocks stones from a newly built wall. The mower jams itself sideways between the broom and a boxwood, leaving the rider stranded, or runs-with-the-bit downhill, trailing breathless observers, the driver in shock.

Flower beds that were pristine in November are corrupt in June, loaded with weeds that flourish with the spring rains. Great ruts that were dug in mud harden into concrete; they are impossible to mow and must be hand-clipped, an activity as silly but as necessary as weeding the mulchpile. A branch leaps out with a kick to the stomach. A wetting in the Duck Pond threatens those who dip a bucket for water. A birding instructor loses a follower and the next week cannot find the leader. The books in the Library mildew and warp against cement block walls. "They're picking the chairs," so once more a sweep-up of white plastic bits from the Meetinghouse floor.

Superficial troubles, these, for we are not addressing the serious, but they are some of the grass-root hassles, if you will, of the day by day working at the George Landis Arboretum. Steady the steps in the Quarry. Put up a handrail. Dig out the ditches. Mulch the lilacs before dead-heading the peonies. Twist the wrench. Fill up the gas tank. Cool the copier. Engage the speaker. Return the phone call.

But it works, somehow. It all comes together eventually.

The trowel handle gets sprayed glitter-orange and the poison ivy is zapped with herbicide. The rocks around the pole are replaced and the dirtwell is planted with sedums. The mower is tamed, its driver solemnly careful.

Applications of new clippers and strengthening fingers slowly beat back the weeds. The vicious branch later prevents a turned ankle and a tumble. A hose snakes through the greenhouse to provide all the water needed.

(Arbo Woes continued on page 7)

Christmas Wish List

a bibliographic commentary
by Shirley Redington

First you have to ask Santa for more bookshelves and another coffee table or two. If money is no object, start your list with a diamond ring or Thomas Everett's ten-volume *Encyclopedia of horticulture*. Otherwise Donald Wyman's *Gardening encyclopedia* will do. It is the best single-volume encyclopedia available. Make sure you specify the latest edition.

Naturally, you have already acquired *Arboriculture* by Richard Harris, Ruth Clausen's *Perennials for American gardens*, and Allan Armitage's *Herbaceous perennial plants* (heretofore raved about in this newsletter). Do include Beth Chatto's *The green tapestry* for the coffee table. There is nothing like her juxtaposition of colors to dispel the wintertime blahs. Speaking of color associations, the Atlantic Monthly Press has done us a big favor in reviving Louise Beebe Wilder's *Color in my garden*, written in 1918. Wilder was a popular garden writer in southern New York following World War I. She can be considered our own Gertrude Jekyll or Vita Sackville-West. Her suggestions still make more sense this side of the Atlantic than most contemporary English writers. Her style is palatable and palettable as her own garden must have been. I give it an "A" for excellence, a "B" for bedside reading, and a "C" for coffee table. So please, dear Santa, whatever else you have in mind, do drop a little copy of *Color in my garden* down the chimney.

If wild flowers and herbs are your thing, I recommend *Landscaping with herbs* by James Adams and *Herbs...* by Emelie Tolley. The former accomplishes much more than its title implies. Adams describes the plants, gives their folk history, the chemicals that make them smell and taste as they do, and even recipes. His chapters need to be savoured as well as his recipes. Tolley is so replete with mouth-watering photography that it too belongs on the coffee table. It is useful for potpourri instructions, Christmas decorations, floral bouquets, and herbal cooking as well as herb culture.

(Christmas continued on page 7)

(Arbo Woes continued from page 6)

The birder, because of her error, makes a new friend, introducing field techniques that may please for a lifetime. The Library walls are sealed and support oak shelves for books that had been piled on the floor. The wire seats are consigned to the barn, replaced by folding chairs without a hint of plastic.

Daily we are rescued, led, or encouraged by The Little Red Hat. A tractor with tow chain shows up here, a smile or an Executive Decision lifts spirits there. The drudgery of mowing, weeding, and repairing creates its own reward of satisfaction which is deepened as more lasting changes and improvements become manifest. As GLA shapes up annually the programs grow. More and more visitors find their way about, some to share Arboretum chores, others to enjoy the beauty and restorative power.

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(Christmas Wish continued from page 6)

For you rock gardeners, H. Lincoln Foster's *Rock gardening* should be your first acquisition. A sequel of sorts has just been published: *Cuttings from a rock garden* by H.Lincoln Foster and his wife, Laura Louise Foster. The first section is her history of their famous home and garden, "Millstream". The latter part consists of plant portraits by him and essays by both of them. She was a master illustrator of plants and they both had a golden writing talent for conveying their plantsmanship and philosophical musings to the reader. A serious rock gardener would have a whole

section of his library devoted to alpines, wild flowers and companion plants. I'll mention just one more: *Rock gardens through the year* by Karl Foster, seventh edition revised by Bernhard Rölllich. What an exhaustive, encyclopedic but enthusiastic presentation of the descriptions and culture of every conceivable kind of rock garden plant: alpines, bulbs, grasses, and ferns!

If you collect dwarf conifers, and that seems to be the rage nowadays, you would be certain to have the indispensable *Manual of dwarf conifers*, by Humphrey Welch. Next you would ask Santa for *Manual of cultivated conifers* by Gerd Krüssman and tell him to throw in *Conifers* by D.M. van Gelderen with incomparable photography by J.R.P. van Hoey Smith. I think I heard of a new edition, so be careful! These two can be thought of as companion volumes; the former, the authoritative text; the latter, the illustrations.

By now our list is too long for Santa to handle and we haven't even mentioned the beautiful bonsai coffee table books; the specialty books on such subjects as rhododendrons, Japanese maples, lilacs, kalmias; the excellent journals that come with membership in plant societies and arboreta; the fine gardening magazines. There is always next Christmas!

~ ~ ~ ~ ~

(COLORS continued from page 4)

dormant throughout the winter, but it will anticipate the impending arrival of spring by its internal hourglass --- the phytochrome system whose varying ratio will lead to the production of the hormones required to break dormancy.

GEORGE LANDIS ARBORETUM

Friend \$15 - 25
Sponsor \$25 - 50
Supporting \$50 - 100
Patron \$100 +

Name
Address
Phone
City State Zip

Amount Enclose Renewal New Member

Sheep

The flock in woolly fold, as Keats would have it, would make a poor showing against the group of little sheep growing beneath the fingers of several GLA devotees.

Tiny and fuzzy, as each one is crafted from pipe cleaners and raw wool it seems to take on a personality of its own (not to mention the occasional one more closely resembling a dachshund or a bear.

In a variety of "breeds" the little figures will stand as stocking stuffers, tree ornaments, table favors, or an addition to a collection of miniatures, animals, or ... sheep. Look for them, modestly priced, at the Country Day fall festival on September 29 at the Arboretum.

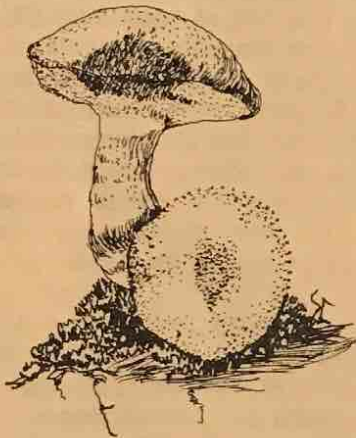
Betty Corning, Margaret Law, Evelyn Sturdevan, Trisha Cleary, Betty Plauth and Beverly Waite are among the workers. Don Otterness, supplying guidance, has

provided the fleece from his own flock. Waite, pleased to have learned the knack of carding from him, has readied the cleaned wool for use.

(Programming continued from page 3) in mid-August. Both were well attended and liked by both the children and their adult companions, so we plan to have more of the travelling museum programs during the school year as well as next summer.

We are ready to roll with our new field trips to the "Wonderful World of Trees" for elementary students. Anita Sanchez trained six enthusiastic volunteer guides, and we're ready for the school buses to start rolling in.

We are very pleased to have offered programs attractive to so many people, and hope that next year we can reach an even larger group.



George Landis Arboretum
Lape Road
Esperance, NY 12066

GEORGE LANDIS ARBORETUM
Lape Road, P.O. Box 186, Esperance, NY 12066
Telephone (518) 875-6935

A living museum, open free of charge for visitors from April to November, the Arboretum is a non-profit organization dedicated to environmental and horticultural education.

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