Join Us in Philadelphia

Society members from across the country will be gathering in Philadelphia for our 38th Annual Meeting this September 14-18. Philadelphia was not only the cradle of liberty in the 18th century, it was also the cradle of American horticulture, nurtured by the Bartrams and a host of botanists, plant collectors, seedsmen, naturalists and horticulturists living in and around the Delaware Valley from the colony's very founding in 1683. With its rich garden history and tradition, this city is regarded as the gateway to the gardens of America. Today it boasts more gardens and arboretums accessible to the public than any city in the nation. This is a city proudly aware of its garden heritage, as evidenced by the collaborative projects of its many garden institutions, and by its popular and prestigious Philadelphia Flower Show in the spring.

The Pennsylvania Horticultural Society, which sponsors that mighty show, is graciously helping us plan an exciting program for you, our members, this fall. Among the activities planned will be a cocktail reception at the P.H.S. headquarters; morning lecture and panel discussions; and afternoon bus tours to the Main Line, Longwood, the Wilmington area and the Brandywine Valley, where we will visit both public and very special private gardens. There also will be a full-day tour of gardens in Chestnut Hill and north, with lunch at the Morris Arboretum. Saturday night will feature the presentation of AHS awards for horticultural excellence at our Annual President's Banquet.

At the close of the Annual Meeting there will be a Post Conference Tour of fine public and private gardens on the Eastern Seaboard. Visits include the outstanding Duke Gardens in New Jersey, the Princeton Nurseries and Rutgers University Arboretum. In New York State we will visit the Planting Fields Arboretum and Old Westbury Gardens. Stops in the Hudson Valley will in-

Continued on page 16

Inside This Issue

New "Plants Wanted" Column Started ........................................... 2
More New Plants for Your Garden ............................................. 3
Gesneriads Can Harbor TMV .................................................. 3
Let Your Greenhouse Do the Talking ....................................... 8
First Yellow Geranium Introduced ......................................... 12
River Farm Notes

Our appeal for help to bring a greenhouse to River Farm brought tremendous response from Society members. At this writing, in early March, we have received a total of $37,562.68 from our members. Your enthusiasm is contagious; we’re all very excited and very thankful.

Industry has also responded to our appeal. A well-known greenhouse designer has been kind enough to donate his services to design our greenhouse. His expertise in solar design will help us to achieve the energy-efficient structure we need. By the time this news edition of American Horticulturist reaches you, the designer will have completed his preliminary drawings and will be well into the final stages of his construction drawings. If all goes according to plan, construction will begin this summer. It won’t be long after that when we first walk through the door of our finished greenhouse.

The designer’s generosity is not the only helping hand we will receive from outside our general membership. I’ve learned recently that a corporation has generously offered to supply the glazing material we’ll need. We are hoping other companies will donate more of the essentials: automatic timers, automatic watering systems, environmental monitoring systems, pots, implements, soil ingredients, plant carts and additional supplies of pesticides and fertilizers. We want to construct the most exemplary greenhouse modern technology can provide. I will keep you informed of our progress in future articles.

Once completed, this greenhouse will provide the Society with one of the most important teaching tools it has ever had—a greenhouse specifically designed to meet our educational goals.

Our greenhouse will be approximately 40 feet by 20 feet and will feature an energy-efficient uneven span design. It will look something like a huge lean-to with its long slope oriented to the south for improved sun collection. Its northern wall will be insulated for reduced heat loss. Every aspect of the design of this greenhouse will be of educational value.

As you might expect, we will use our greenhouse largely to produce plants for our numerous displays here at River Farm, but beyond this, we want to use this structure as an actual classroom for students of all ages and levels of ability. We plan to conduct classes in propagation, greenhouse growing, greenhouse design and greenhouse management. Our greenhouse will serve as a place for AHS student interns to gain practical experience and will also function as a plant research site. Our plans abound, and we cannot wait to begin their implementation.

In months to come, I will be telling you much more about our greenhouse and plans for its use. Because of your generosity, the Society’s new greenhouse will be very, very special.

—Steve Davis

New “Plants Wanted” Column Started

Many of you are familiar with the Society’s plant locator service, one of our most often used membership benefits. With this issue of the newsletter we are expanding that program in hopes of helping members looking for rare and unusual species that are unavailable in commerce. In our new “Plants Wanted” column we will publish a list of plants and the names and addresses of members who are looking for them. Individuals who are growing, or who have access to any of the species listed, can write their fellow member to help them obtain these plants.

Please send your “Plants Wanted” lists, including genus, species, common name and a brief description, to the Editor, American Horticulturist, in care of the Society. We will publish them on a space available basis after checking for retail sources through our catalogue file.

The Society’s Acting Director, Dr. Gilbert S. Daniels, has agreed to start the “Plants Wanted” column with two species he has been trying to locate for several years. If you are growing or know of a source for either of these plants, please write to Dr. Gilbert Daniels, c/o AHS, PO Box 0105, Mount Vernon, VA 22212.

Lysichiton americanum, an ornamental skunk cabbage commonly called yellow or western skunk cabbage.

Lysichiton camtschatcense, a species of skunk cabbage from northern Japan.
Gesneriads Can Harbor TMV

Scientists at the University of Florida have found that tobacco mosaic virus (TMV), a disease most commonly associated with tomatoes and tobacco, occurs in several genera in the gesneriad family. Six gesneriad collections were surveyed, and all had virus in a percentage of the plants. The incidence ranged from 11 to 81 per cent, and TMV was found in 14 of the 20 genera tested, including Columnea, Codonanthe, Episcia, Gloxinia, Kohleria, Nemanthius, Sinningia, Smithiantha and Streptocarpus. TMV has not yet been found in African violets, Saintpaulia sp.

Foliage symptoms of TMV in members of the Gesneriaceae are often inconspicuous, making it difficult to recognize and dispose of infected plants. It is probably a good idea to discard any plants that remain unhealthy for long, because if virus is responsible the plant will never recover. TMV can persist in smoking tobacco and can be transferred from a smoker's hands to a plant. The precautions orchid enthusiasts take to prevent the spread of virus in a collection will help keep virus from spreading in a gesneriad collection as well. Wash your hands thoroughly after handling each plant or group of cultivars, and always use clean propagating tools. Orchid growers flame or dip-sterilize their tools; gesneriad growers should use clean razor blades after grooming or propagating each plant.

—The Gloxinian, March, April, 1983

More New Plants For Your Garden

Several interesting new plants will be available this spring, including a thornless blackberry, a chocolate-colored sweet pepper, a vineless, shorter season sweet potato, an apple for sub-tropical areas and a new, hardy strawberry.

'Hull Thornless' is genetically thornless blackberry cultivar. Unlike thorn-free cultivars, where the trait is the result of a chance mutation, its spurs will always remain thornless. 'Hull Thornless' bears firm, sweet, attractively colored fruit, and should be available at local nurseries and garden centers. It was developed and released by the U.S.D.A. Agricultural Research Service at Beltsville, Maryland.

'Coco' pepper bears large, long, pimento-type fruit that has a sweet, mild flavor. The fruit is an unusual, shiny, chocolate brown. 'Coco' pepper is available from Gleckler's Seedmen, Metamora, OH 43540. Their catalogue is free.

'Vardaman' is an attractive new sweet potato with dark-green foliage and a vineless growth habit that makes it easy to cultivate between rows. It produces excellent tasting potatoes and yields are better than average. 'Baby bakers' can be harvested in 90 days; full sized yams take a few days longer. 'Vardaman' is available from Steele Plant Company, Gleason, Tennessee 38229. Send a self addressed, stamped, business-sized envelope for their catalogue. 'Gordon' apple trees produce crisp, juicy, attractive, sweet-tart fruit that is suitable for cooking or eating. Best of all, they require only 300 to 500 hours of temperatures at 45°F or below to produce fruit. Most apples require more than 1,000 hours of sub 45°F temperatures to blossom and fruit. 'Gordon' was developed in Whittier, California, just south of Los Angeles in U.S.D.A. Zone 9, and is available on both standard and semi-dwarf root stocks. It should be available at your garden center and nursery, but it also can be ordered through the mail from Armstrong Nurseries, Inc., PO Box 4060, Ontario, CA 91761. Their catalogue is free.

'Northland' strawberry is an extremely hardy, productive cultivar that produces runners freely and bears its fruit in midseason. Its attractive, large- to medium-sized fruit is bright red both inside and out and is mild flavored. 'Northland' was developed and released by the Minnesota Agricultural Experiment Station, St. Paul, and should be available in local nurseries and garden centers in Minnesota and other areas where hardiness is a problem.
Denver Garden Features

Water-Conserving Landscaping

Visitors to Denver should take time to visit the grounds of the city's Water Department Administrative Office, transformed last summer into a garden demonstrating a new concept in water conserving landscaping called xeriscaping, a word derived from the Greek word for dry, xeros. Xeriscaping involves a comprehensive approach to landscaping that combines design, plant selection, construction, irrigation, soil preparation, drainage, mulching and maintenance to produce an attractive landscape that requires a minimum amount of water.

To many, the idea of a water conserving landscape in a dry region suggests expanses of gravel accented by an occasional yucca or cactus, but the xeriscaped grounds of Denver's Water Department prove that a low water landscape can be colorful, inviting and varied. In all, 68 species of plants, both introduced and native, are represented in the garden, and a separate area demonstrates five types of sod that were specifically developed for their drought tolerance.

The garden is divided into separate areas demonstrating varying degrees of water conserving landscapes. The so-called “Typical Zone” is planted with commonly used plants but demonstrates that certain precautions, such as proper soil preparation and mulching, can help reduce the amount of water needed to maintain the landscape.

The largest and most prominent part of the garden is devoted to very drought tolerant plants, most of which can survive on natural rainfall alone and still maintain their appearance throughout the year. Here the visitor will find sempervivums, blue fescue, sedums, zinnias, several species of juniper, potentilla, sumac, yucca and several species of trees.

The garden won a National Water and Energy Conservation Award from the Irrigation Association and an award from the Associated Landscape Contractors of America. It is located at the Denver Water Department Administrative Office, 1600 West 12th Avenue, Denver, Colorado.

Sempervivum Newsletter

Sempervivum enthusiasts familiar with the British publication on their favorite plant, called Houseleeks, may not know there is an American publication to which they can subscribe. The Sempervivum Fanciers Association Newsletter has been published quarterly since 1975, and each six- or eight-page issue contains at least one photograph. The subscription price is $10 per year, $12 for foreign members. For more information or a subscription write Dr. C. William Nixon, 37 Ox Bow Lane, Randolph, MA 02368.
Great gardening books from Sterling Publishing at a special discount rate

BUY ANY OF THESE TITLES FOR 30% LESS THAN THE RETAIL PRICE!

MODERN VERSION ALL IN FULL COLOR

CULPEPER’S COLOR HERBAL, Nicholas Culpeper

A book that’s been in print for over 300 years! You bet! Because it’s complete, it’s colorful, and it’s forever timely with its hundreds of safe, effective, and inexpensive remedies to everyday health problems. And now the original classic work, with all its charm and elegance, has been combined in this all new, large format edition—with modern full-color presentation throughout.

THE LORE OF FLOWERS, Neil Ewart

With illustrations by Nina O’Connell

This rare and romantic look into the stories behind flowers includes all the legends, herbal lore, historical associations, and name origins of familiar flowers, along with a revealing look into the language of flowers—those meanings and the significant sentiments they expressed in earlier times.

56 pages of exquisite illustrations—44 of them in full-color—depict many of the species in their natural environments, taking you through a paradise of gardens, fields, and meadows. You will need about how Tulipmania, lasting for several years, was responsible for the winning and losing of many family fortunes—about how the Thistle became the national flower of Scotland—and how the tragic death of a young man gave the Crocus its name. Also included is a list of each official state flower in the U.S., plus a sprinkling of appropriate poems written by such bard as Shakespeare, Wordsworth, and Shelley. This enchanting potpourri of beauty and charm will inform and delight the naturalist, botanist, gardener, historian, writer, and the little bit of poet that’s in all of us. 182pp. 7 3/4 x 9 3/4. Hardcover $18.95 retail, $13.90 to members of AHS.

GROWING PLANTS WITHOUT SOIL, Hans-August Rotter

Did you know that plants can actually grow better, larger and healthier in water without soil? This book based on the modern science of hydroponics, shows you how plants can flourish without the need for messy potting soil.

Also includes invaluable tips on light requirements, fertilization, temperature, water needs, pest control, growing outdoors, in greenhouses, and in professional nurseries. Learn to polish, shade, stake, train, cut back, prune, trim, transplant, and propagate. With special advice on keeping your plants healthy while you’re away, creating decorative arrangements, and growing them in business offices, there is no reason not to immediately get started with this groundbreaking method to plant cultivation! 120pp. 7 3/4 x 9 3/4. Hardcover $12.95 retail, $10.00 to members of AHS.

PLANT PROPAGATION FOR THE AMATEUR GARDENER, John I. Wright

Create new plants from the ones you already have, and avoid paying inflated prices for purchased plants and shrubs. It’s simple with Wright’s clear, detailed and professional advice on seeds, cuttings, grafting and division, plus more! 57 exemplary plans and line drawings, the best ways and time to propagate common garden plants; methods that can be used in any climate and in any part of the world, plus extensive indexes of both common and scientific names to aid in the location of exactly the right species. This is the perfect book for home gardeners who want to increase the splendor of their gardens at no cost! 176pp. 7 3/4 x 9 3/4. Hardcover $15.95 retail, $11.90 to members of AHS.

SCIENTIFIC GREENHOUSE GARDENING, P. K. Willmott

At last! A book which explains the principles of professional greenhouse management in plain language for the home gardener. An award-wining horticultural consultant and writer explains all the aspects of greenhouse gardening in detail, including:

- Type of small greenhouses
- Heating and ventilation
- Soil, seed and potting composts
- Watering and irrigation
- Vegetables & fruits under glass
- Propagations, fertilizers, more!

Using all the newest materials and methods, and explained in extraordinary detail (with 44 photos and 129 diagrams), you’ll learn to cultivate tomatoes, melons, cacti, Hyacinths and other good things. All year round with fabulous results! 200pp. 7 x 9 3/4. Hardcover $17.95 retail, $13.80 to members of AHS.

ORDER FORM


NAME

ADDRESS

CITY STATE ZIP

**DISCOUNT PRICE TO AHS MEMBERS

<table>
<thead>
<tr>
<th>QTY</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CULPEPER’S COLOR HERBAL Paper</td>
</tr>
<tr>
<td></td>
<td>CULPEPER’S COLOR HERBAL Hardcover</td>
</tr>
<tr>
<td></td>
<td>THE LORE OF FLOWERS Paper</td>
</tr>
<tr>
<td></td>
<td>THE LORE OF FLOWERS Hardcover</td>
</tr>
<tr>
<td></td>
<td>ORCHIDS AS INDOOR PLANTS Paper</td>
</tr>
<tr>
<td></td>
<td>ORCHIDS AS INDOOR PLANTS Hardcover</td>
</tr>
<tr>
<td></td>
<td>GROWING PLANTS WITHOUT SOIL Paper</td>
</tr>
<tr>
<td></td>
<td>GROWING PLANTS WITHOUT SOIL Hardcover</td>
</tr>
<tr>
<td></td>
<td>PLANT PROPAGATION FOR THE AMATEUR GARDENER Paper</td>
</tr>
<tr>
<td></td>
<td>PLANT PROPAGATION FOR THE AMATEUR GARDENER Hardcover</td>
</tr>
<tr>
<td></td>
<td>SCIENTIFIC GREENHOUSE GARDENING Paper</td>
</tr>
<tr>
<td></td>
<td>SCIENTIFIC GREENHOUSE GARDENING Hardcover</td>
</tr>
</tbody>
</table>

*Just Published
**Includes Postage and Handling Charges

All books hardcover unless otherwise indicated.
MARCH 1-AUGUST 31
Atlanta Historical Society Exhibition
Celebrating Georgia’s 250th Birthday
Theme: Land of Our Own: Landscape and Gardening Tradition in Georgia 1733-1983
Atlanta Historical Society, 3101 Andrews Drive, N.W., Atlanta, Georgia
Information: Susan V. Levine, Atlanta Historical Society, 3101 Andrews Drive, N.W., Atlanta, GA 30305, (404) 261-1837

APRIL 23-MAY 8
46th Annual Maryland House and Garden Pilgrimage
Information: Maryland House and Garden Pilgrimage, 1105 A Providence Rd., Towson, MD 21204

MAY
1
Private Gardens of Annapolis Tour
Annapolis, Maryland
Information: Historic Annapolis Tours, Inc., Old Treasury Building, State Circle, Annapolis, MD 21401, (301) 267-8149

5-8
American Rhododendron Society 39th National Convention
Red Lion Inn-Lloyd Center, Portland, Oregon
Information: Harvey Welch, 4155 S.W. Hillsdale Avenue, Portland, OR 97201, (503) 277-4252

7
Brandywine Conservancy Wildflower Plant and Seed Sale
Brandywine River Museum, Chadds Ford, Pennsylvania
Hours: 9:30 a.m. to 2 p.m.
Information: Brandywine River Museum, Brandywine Conservancy, PO Box 141, Chadds Ford, PA 19317, (215) 388-7601

7-8
Annual Geranium and Pelargonium Show
Plummer Park, 7377 Santa Monica Boulevard, Hollywood California
Hours: Saturday Noon to 5 p.m.; Sunday 10 a.m. to 4 p.m.
Information: (213) 469-8665, 837-8827

12-13
Fourth Annual Menninger Flowering Tree Conference
Florida Cypress Gardens
Information: Florida Nurseriesmen and Growers Association, PO Box 16796, Temple Terrace, FL 33687

15
Spring Open House
American Horticultural Society
River Farm, Mt. Vernon, Virginia

15
Lilac Sunday at Arnold Arboretum
Jamaica Plain, Massachusetts

MAY 15-27
Royal Horticultural Society Chelsea Flower Show
Chelsea, London, England
Information: The Royal Horticultural Society, Vincent Square, London, England SW1P 2PE, Telephone 01-834-4333

MAY 25-29
Greater New York Orchid Society Show
New York Botanical Garden, Bronx, New York
Information: The New York Botanical Garden, Bronx, NY 10458, (212) 220-8616, 8637

MAY 26
Roses and May Flowers Day
William Paca House and Garden, 186 Prince George Street, Annapolis, Maryland
Hours: 10 a.m. to 7 p.m.
Information: Historic Annapolis Tours, Inc., Old Treasury Building, State Circle, Annapolis, MD 21401, (301) 267-8149

MAY 26-JUNE 9
AHS Tour of Germany and the International Horticultural Exhibition
Information: See page 9 of this newsletter

JUNE 3-5
American Rock Garden Society Annual Meeting
Cornell University, Ithaca, New York
Information: ARGS Annual Meeting, Box 3, North Campus Union, Cornell University, Ithaca, NY 14853

JUNE 4-5
Delaware Flower Show
 Hagley Soda House, off Buck Road, Greenville, Wilmington, Delaware
JULY 7-10
JUNE 10-12
Fourth Hardy Plant Study Weekend
Edmonds Community College, Lynwood, Washington, 15 miles north of Seattle
Information: Study Weekend Fort, Evie Douglas, 11907 Nevers Road, Snohomish, WA 98290

JUNE 11
New England Gardening Day
Strawbery Banke Historic Neighborhood, Marcy Street, Portsmouth, New Hampshire
Hours: 9:30 a.m. to 5 p.m.
Information: Strawbery Banke, PO Box 300, Portsmouth, NH 03801, (603) 436-8010

JUNE 13-15
Society for Economic Botany 24th Annual Meeting
Miami, University, Oxford, Ohio
Information: Dr. Charles Heimisch, Botany, Miami University, Oxford, OH 45056 or Dr. Hardy Eshbaugh, Systematic Biology Program, National Science Foundation, Washington D.C. 20550

JUNE 16-19
American Hibiscus Society Annual Convention
Vero Beach, Florida
Information: American Hibiscus Society, Drawer 5430, Pompano Beach, FL 33064, (305) 943-8625

JUNE 17-19
American Peony Society 80th Anniversary Convention
Domes, Milwaukee, Wisconsin
Information: American Peony Society, 250 Interlachen Road, Hopkins, MN 55343, (612) 938-4706

JUNE 18-19
First Annual Lotus Blossom Festival
Lilypons Water Gardens, Brookshire, Texas
Hours: 11 a.m. to 5 p.m.
Information: Lilypons Water Gardens, Brookshire, TX 77423, (713) 934-8525

JUNE 19-23
Plant Growth Regulator Society of America 10th Annual Meeting
Kellogg Center for Continuing Education, Michigan State University, East Lansing, Michigan
Information: David Parrish, Agronomy Department, Virginia Tech, Blacksburg, VA 24061

JUNE 21-23
International Symposium on Urban Horticulture
New York Botanical Garden, Bronx, New York
Information: Dr. Daniel F. Karnosky, Director, NYBG Institute of Urban Horticulture, Cary Arboretum, Box AB, Millbrook, NY 12545, (914) 677-5343

JULY 6-10
Bonsai Clubs International 19th Annual Convention
Ramada Court of Flags Resort Hotel, 5715 Major Boulevard, Orlando, Florida
Information: L.B.C. '83, Mr. Robert Hutchinson, 7900 Mindello Drive, South Miami, FL 33143

JULY 7-10
North American Lily Society Annual International Show
Southfield Sheraton Hotel, Detroit, Michigan
Information: The North American Lily Society, Inc., Dr. Robert C. Gilman, Editor, 517 South Elm Street, Owatonna, MN 55060

JULY 9-10
Third Annual Lotus Blossom Festival
Lilypons Water Gardens, Lilypons, Maryland
Hours: 11 a.m. to 5 p.m.
Information: Lilypons Water Gardens, Lilypons, MD 21717, (301) 874-5153

---

For Your Garden of Good Things

GARDENER'S SOAP
Prized by French gardeners for generations, this soap is so gentle it can even be used to wash the leaves of plants. Helps remove persistent dirt from work clothes, clay pots, window boxes, and more. Comes with wooden washboard soap dish.

#A22 Gardener’s Soap $7.50 plus $1.25 post. & hdlg.
#A44 Gardener's Soap 3/$21.00 plus $2.25 post. & hdlg.

SOIL TEST LAB
Don’t guess — test! This complete soil test kit lets you conduct simple, accurate tests to improve the soil pH of your outdoor and indoor plants. Allows up to 80 tests. Includes handy work area, apparatus, solutions, procedure cards and lab guide, and a calculator that quickly converts soil test readings to the type of fertilizer needed.

#A77 Soil Test Lab $16.50 plus $1.85 post. & hdlg.

Send $1.00 for our colorful new Spring Catalogue (free with order).

---

AMERICAN HORTICULTURIST • 7
Let Your Greenhouse Do the Talking

Have you ever been away from home and wished you could adjust a vent in your greenhouse by remote control? Well, with the new Environmental Greenhouse Operations Reporter, EGOR for short, it’s possible. EGOR is a complete environmental control system for the greenhouse that can be accessed by telephone and can “talk” to you by means of a computer synthesized voice. After telephoning EGOR and giving the proper password, the telephone’s push buttons become a computer input panel. Pushing one button, for example, may prompt EGOR to verbally respond, “the temperature in the greenhouse is 79° F;” another key or combination of keys will instruct him to operate vents, cooling or heating systems, pumps or give other verbal reports about greenhouse conditions. EGOR can measure all key environmental factors, even those required by hydroponic growers. He even has a telephone alarm system through which he can automatically call and tell you the exact nature of a problem in the greenhouse.

EGOR is a system for professionals, or for amateurs with large, valuable collections. Since his price tag starts at $5,600, those of us with smaller collections will have to wait for technological developments that may one day bring his price down. For more information on EGOR, write or call Hoppmann Corporation, 14560 Lee Road, PO Box 601, Chantilly, VA 22021, (703) 631-2700.

New Directions in Tomato Breeding

South American species tomatoes and genetic engineering are playing important roles in current tomato breeding programs. Two companies interested in producing cultivars for the commercial processing market, Campbell and Heinz, are using genetic engineering to reduce water content in the fruit, thereby reducing the need for irrigation. Low-water-content fruit could be transported from the field to the processing plant more easily and would also require less cooking. In another program Heinz is crossing a Peruvian species of tomato, found in the Andes at altitudes of 12,000 feet, to introduce drought and disease resistance as well as salt tolerance into the breeding lines. Cornell University is using a Brazilian species whose fruit does not produce ethylene in its breeding programs. Fruit that does not produce ethylene will ripen more slowly. Scientists hope cultivars with this characteristic could be allowed to ripen on the plant before shipping—thereby improving the taste of supermarket-purchased fruit.

—FloraScope, February, 1983
Upcoming AHS Events
The Following Society Sponsored tours and other events have been scheduled for this spring and summer. For information about any of these events write or call the Society’s Office of Education.

May 12-26
Our annual trip to the famed Chelsea Flower Show. Also scheduled are visits to public and private gardens in Sussex and the Cotswolds, including Sissinghurst and Pusey.

May 26-June 9
Tour of West Germany’s great parks, public and private gardens. The International Horticultural Exhibition in Munich will be a highlight.

July 17-31
Exploration of the Canadian Rockies and the West Coast. Visits to Banff, Lake Louise, famed Butchart Gardens and many of the area’s best private gardens are planned.

September 9-29
Tour of South Africa

October 3-14
Autumn in New England Tour

Society Founded
Gardeners with an interest in conebearing trees, including such species as Cupressus, Pinus, Picea, Juniperus and Thuja, will want to join the newly-founded American Conifer Society. This new, non-profit society will devote itself to developing, preserving and propagating conifers as well as educating the public about these valuable plants and clarifying nomenclature.

Membership will include a subscription to a quarterly publication and invitations to annual meetings. For more information write Mr. Jean Iseli, Secretary, American Conifer Society, 15241 SE Tickle Creek Road, Boring, OR 97009 or Robert Fincham, President, American Conifer Society, 425 North 5th Street, Lehighton, PA 18235.
Controlling Lead Uptake in Urban Gardens

Large quantities of organic matter and a soil pH maintained at a near neutral level are the answer to a problem faced by many urban gardeners—lead contaminated soil. According to scientists at Cornell University, adding large quantities of well-rotted compost, manure or other organic matter (at least 25 percent by volume) and keeping the soil pH between 6.5 and 7.0 will prevent plants from taking up lead through their roots. In experiments conducted by plant physiologist Nina L. Bassuk, program leader of Cornell’s Urban Horticultural Institute, lettuce grown in soils with low levels of organic matter took up much more lead than lettuce grown in highly organic soils. “In soils containing large quantities of organic matter (40-50 per cent or greater by volume), the lead uptake was zero, even though lead concentrations were as high as 3,000 parts per million,” she says. Leafy vegetables and root crops (lettuce, spinach, potatoes, beets) are more likely to absorb lead than vegetables grown for their fruit such as tomatoes, squash or peppers.

Most pesticides will loose some degree of their effectiveness in alkaline water (a pH value of seven is considered neutral). Some fungicides also are pH sensitive and should not be combined with materials such as hydrated lime or mixed in alkaline water. These include Captan, Botran, Lesan and Carbamate fungicides.

Greenhouse Grower, February, 1983, recommends you take four precautions to reduce the effects of alkaline hydrolysis: 1) frequently check the pH of your water 2) read pesticide labels to see if material is sensitive to alkaline water 3) do not mix pesticides until you are ready to use them, especially if you are combining pesticides 4) if your water is alkaline, and you are using a sensitive pesticide, add a product to neutralize the pH such as Spray-Aide, Buffer-X, Nutrex, Sorba spray or Tri-fol. These should be available from your local garden center or nursery, especially if alkalinity is a problem in your area. Adding commercial vinegar (acetic acid) to the water has been suggested as a home remedy, but, according to Dr. Christine Stephens, a professor of vegetable and ornamental diseases at Michigan State University, it “is not reported to give satisfactory results because of its instability and failure to remain on leaf surfaces.”

Pesticides Decompose in Alkaline Water

Pesticides can be ineffective in controlling pests for several reasons, including incorrect application rate, improper timing, inappropriate chemical used for the insect involved and old chemicals that have outlived their effective shelf life. One seldom-considered factor is water quality. The rate at which this process occurs varies according to the chemical involved and the alkalinity of the water. Malathion, for example, loses its effectiveness very quickly in water that is just above neutral. Other pesticides affected by alkaline water include Parathion, Sevin, Orthene, Di-Syston and Lanate. Some fungicides also are pH sensitive and should not be combined with materials such as hydrated lime or mixed in alkaline water. These include Captan, Botran, Lesan and Carbamate fungicides.

Other pesticides affected by alkaline water include Parathion, Sevin, Orthene, Di-Syston and Lanate. Some fungicides also are pH sensitive and should not be combined with materials such as hydrated lime or mixed in alkaline water. These include Captan, Botran, Lesan and Carbamate fungicides.

World Record Watermelon

A father and son team from Tulsa, Oklahoma brooked the record for the largest watermelon with a cultivar named ‘Carolina Cross’, which they have been developing since 1977. The record-breaking fruit, which exceeded the existing record by 19 pounds, weighed 219 pounds, was 34 1/2 inches long and had a circumference of 61 1/2 inches.

‘Carolina Cross’ is available from Grace’s Gardens, 10 Bay Street, Department 112, Westport, CT 06880, catalogue 50c.

Bird of Prey Scarecrows Effective

If your scarecrow isn’t doing its job, try using a model of an owl or hawk to scare the crows and blackbirds out of your garden. Stationary models work for a short time, but birds quickly become used to them. Michael R. Conover, writing for the Connecticut Agricultural Experiment Station’s publication Frontiers of Science, reported that the most effective models he used in a series of tests he conducted were kites with hawks painted on the underside. The kites were suspended 60 feet beneath a helium balloon and flown 90 feet above the ground. Evidently, the movement of the hawk-kites prevented the birds from becoming habituated to them. The kites reduced bird damage to blueberries by 35 percent, and, in a test on ripening corn, by 83 percent.
Pinch Your Petunias

Get ready to pinch your petunias as soon as the hot weather appears. Petunias are thermophotoperiodic, so their growth habit varies according to temperature and daylength. At temperatures of 62°F and below, the plants will always be well-branched, bushy, compact and multi-flowered. From 63°F to 75°F, day length affects the plants' growth habit. If they receive less than 12 hours of daylight at these temperatures they will be single stemmed and have only one flower. Long days at these temperatures will produce more ideal-looking plants. At temperatures over 75°F, day length no longer has an effect, and the plants will always be tall and leggy and bear very few flowers.

Pinch petunias at planting time in the early spring to encourage branching and flowering. By the second week in July they need a second pinching. Cut off each stem about three or four inches above ground level, weed, fertilize and clean up dead and dying leaves. You will have flowers again in about two weeks. Pinch again in mid August and near the end of September (early in September if frost dates in your area come early) to maintain the display.

Gypsy Moth Control Methods Tested

Since its introduction in the 1960's, scientists have worked to develop new strains and improved formulations of Bacillus thuringiensis (Bt) that are more effective in controlling gypsy moths and other destructive caterpillars. The U. S. Forest Service and the Connecticut State Department of Environmental Protection tested the effectiveness of three new strains of Bt on gypsy moths in 1981 and 1982. They found the most effective control was two applications of a formulation called Dipel 4L applied at a dose of one quart per acre mixed in one gallon of water. Three per cent of a spreader/sticker called Acrylocoat® was added to the mixture. Single applications at a higher dose (1.5 quarts per acre and 2 quarts per acre) were also tested and proved effective. They reduced defoliation to about six and eight percent, respectively, and saved the cost of making a second application. Untreated control plots were 72 per cent defoliated in 1982.

Bt is more effective against small, younger caterpillars, so spray applications were made early in the season (May 17) for this reason. -Frontiers of Plant Science, Fall 1982

Gardeners Prepare for '84 Olympics

Californians are planning to plant, clean up and beautify a 200-mile area around the city of Los Angeles in preparation for the 1984 Summer Olympics. AHS California members who would like to help should write or call L. A. Beautiful, 404 South Bixel, Los Angeles, CA 90017, (213) 482-1655.

—Florascope, February, 1983

The official rose for the 1984 Olympics is 'Olympiad', a red rose from Armstrong Nurseries. 7,000 'Olympiad' roses will be planted in and around Los Angeles before the games. 'Olympiad' will be available in December, 1983 from Armstrong Nurseries, PO Box 4060, Ontario, CA 91761.

—Florascope, March, 1983

How Many Tools Do You Need To Do All These Gardening Jobs

- Turning over the soil
- Spading and raking seedbeds
- Weeding and cultivating
- Digging furrows and hillling plants
- Trimming and pruning bushes and shrubs
- Cutting edges around paths and gardens
- De-thatching the lawn
- Aerating the lawn

Only one Mantis

Mantis will do them all for you... quickly, easily and economically!

The Mantis Precision Gardening System takes the hard work out of gardening. With the Mantis Tiller/Cultivator and its variety of useful attachments, you can turn all your yard and garden chores into downright fun!

For the complete Mantis story, write for our FREE information and find out how much fun gardening can really be.

Mantis Manufacturing Co.
2681 Huntingdon Pike, Dept. 186
Huntingdon Valley, PA 19006

Please send complete information on Mantis Precision Gardening and all the Mantis attachments!

Name __________________ Address __________________
City __________________ State __ Zip ______________
First Yellow Geranium Introduced

One of the most exciting plants introduced this year is the yellow flowered geranium hybrid offered by Thompson and Morgan. This new plant represents a color breakthrough among cultivars of the common bedding geranium, and its appearance promises many more yellow flowered cultivars in years to come.

The plant bears semi-double, primrose-yellow flowers that fade to cream as they age. Its foliage is medium green and resembles that of an ivy geranium. Although the plants are attractive, compact and relatively free flowering, hybridizers at Thompson and Morgan see room for improvement, and their breeding program continues. One of the objects of the program is to produce a plant with brighter yellow flowers. They are also looking for a stronger, more vigorous plant. This first yellowflowered geranium is only recommended for use as a houseplant because it is not as tough as the common bedding or zonal geranium. Finally, they are looking for a plant that bears as many flowers as zonal geraniums breed true from seed, producing yellow flowered offspring. These geraniums breed true from seed, producing yellow flowered offspring, although each plant produces very few seeds.

The yellow flowered geranium has an interesting history. Its appearance was a sheer stroke of luck, say representatives of Thompson and Morgan. The plants appeared unexpectedly in the breeding program that produced the 'Startel' series of stel
ergium, whose star-shaped flowers come in all of the commonly known geranium colors. The yellow flowered plants appeared accidentally among the seedlings of a cross between Pelargonium quinquefolium and a named cultivar of the common bedding geranium.

Thompson and Morgan have contracted with a California firm specializing in tissue culture to propagate enough yellow geraniums for distribution in this country. The plant also will be available in the British Isles and Europe, but plants sold there will be cutting-propagated. Supplies are very limited, and, as a result, the plants are quite expensive—$12.00 per plant plus $2.95 to cover shipping and handling for each plant. Even at this price, the company is limiting each customer to only two plants. To order a yellow geranium write Thompson and Morgan, Department SP3, PO Box 100, Farmingdale, New Jersey 07727. Cultural instructions will be sent with each shipment.

Temperature Key to Germination

Improve verbena germination by storing seed packets in the refrigerator for seven days before sowing. After sowing, alternate day and night temperatures. During the day, soil temperatures should be 75° F. Nighttime temperatures of 60° F are ideal.

—Florascope, March, 1983

New Horticultural Society Greenhouse

The Horticultural Society of New York announced the opening of its new greenhouse on February 14, 1983. The 23-foot-long, 12-foot-high structure envelops the entire front of the Society's headquarters at 128 West 58th Street in New York City. The greenhouse will be filled with new and unusual plants, seasonal exhibits and displays designed to complement the lectures and courses taught at the Society.

The plants will be for sale and come with growing and care instructions.

The Horticultural Society of New York's new greenhouse, as well as their library and gallery, are open weekdays from 10:00 a.m. to 4:00 p.m. Call or write The Horticultural Society of New York, 128 West 58th Street, New York, NY 10019, (212) 757-0915 for more information and a free educational brochure.
GARDENER'S MARKETPLACE

AFRICAN VIOLETS
Large selection from leading hybridizers. List 40¢; PLEASANT HILL AFRICAN VIOLETS, Route 1, Box 73, Bremenhaven, TX 77835.

ALTERNATE ENERY PLANTS
FREE FUEL! Novel ornamental shade tree yields car/tractor fuel substitute. Large yield, fast growing; Zone 6. Guaranteed. Seeds 50¢/5.00. Trees $15.00, Postpaid. HI-PRO NURSERY, Dept. 1169 R.R.1, Boxwell, B.C. VOB 1AD.

AUSTRALIAN WILDFLOWER SEEDS
Rare, selective, collection. 200 species of brilliant, AUSTRALIAN WILDFLOWERS. Planting guide with order. Books available. Two International Postal Reply Coupons for FREE descriptive lists. BUSHLAND FLORA AUSTRALIAN SEED SPECIALISTS, Box 119, Scarborough 6019, Western Australia.

THE AVANT GARDENER
"DIFFERENT, EXCITING, GREAT FUN TO READ—for the gardener who wants to get out of gardening!" Subscribe to THE AVANT GARDENER, the most useful, most quoted of all gardening publications. Every month this unique news service brings you the newest and most practical on-going gardening information—new plants, products, techniques, with sources for every item, plus feature articles, special issues. Now in its 14th year. Awarded the EXOTIC GARDENERS 10590. Pots: 100, 2"-$6.42; 100, 3"-$8.67. Print, 50¢/5.00. Trees, Supplies

AZALEAS & RHODODENDRONS
FRAGRANT YELLOW AZALEAS—Great selection of varieties in landscape sizes. Mail order catalog $2.00 (deductible), CARLSON'S GARDENS, Box 305-AH2, South Salem, NY 10590.

EXOTIC VIREYA-Malaysian Rhododendrons Container, Greenhouse, House Plants. New Catalog, other Rhododendrons, Azaleas, Companion Plants, $2.00 refundable. THE BOVES NURSERY, 1737-C SW Coronado, Portland, OR 97219.

BEGONIAS
THE THOMPSON GREENHOUSE "A Living Museum of Begonias" owned and operated by Millie and Ed Thompson. Over 1400 different species and cultivars displayed. While in New York plan to visit, HOURS: 9-12 Noon Monday, Wednesday, Thursday, Thursday, Saturday, 2-5 P.M., Fridays, Other times by appointment. Call the Thompsons at (516) 283-3237. LOCATION: Southampton College Campus, Southampton, N.Y. Open all year. No admission fee. A number of small plants are available for sale. Branches and garden groups are welcomed, Seminars by the Thompsons are also available. For arrangements and scheduling call (516) 283-3237 or (516) 382-1633.

Copy must be received two months prior to publication date. Send orders to the attention of Cindy Weakland, American Horticultural Society, Box 0105, Mt. Vernon, VA 22121. Or call (703) 768-5700. Payment for all classified advertisements must be made in advance. All copy subject to the approval of the Society.

Classified Ad Rates:
50¢ per word; $10.00 minimum per insertion.

BROMELIADS
DECORATIVE BROMELIADS at reasonable prices. 22 page DESCRIPTIVE LIST $1.50. Also 80 page booklet BROMELIADS FOR MODERN LIVING with 135 color photos. $5.00 for both. THE BROMELIAD TREASURY, 619 Bend Drive, Sunnyvale, CA 94087.

BULBS
If you're looking for top-quality flower bulbs, in larger quantities, and at affordable prices, write for our FREE price list: MCLEURE & ZIMMERMAN, QUALITY BULB BROKERS, 1422 Thorndale, Chicago, IL 60660.

CATCH & SUCCULENTS
Winter hardy cacti & succulents. Echinocereus, Cephalocereus, Opuntia & Others. Send 25¢ for descriptive list: WINTER COUNTRY CACTI, 8338 E. Lehigh Dr., Denver, CO 80237.


BOOK SEARCH SERVICE
Send your list of wanted gardening books. I'll try to find them. No obligation. (Out-of-print, hard-to-find, antiquarian), EDWARD F. SMILEY, BOOKSELLER, RFD 3, 43 Liberty Hill Road, Bedford, NH 03102.

BOOKS
DRY SPRING FLOWERS FOR WINTER BOUQUETS! Two Step-by-Step Books: PRESERVED FLOWERS 3rd Ed., $2.95 and DRIED BOUQUETS 2nd Ed. $8.95. SHOW AND TELL DIRECTIONS, hundreds of explicit photos. Williamsburg, Modern bouquets, bridal keepsakes, etc. Add $1.00 postage one or both books. FREE NEWSLETTER (send stamp). ROBERTA MOFFETT, Box 3597, Wilmington, DE 19807.

Horticultural and Botanical Books Bought and Sold. Current Sale Catalogue, over 1,000 Titles, $1.00. POMONA BOOKS, Rockton, Ontario, Canada, LOR IJOX.

EXOTICA 4, enlarged to 16,300 photos, by Dr. A.B. Graf. 2,590 pages in 2 volumes, $175. TROPICA-7,000 color photos of exotic plants and trees, $115. EXOTIC PLANT MANUAL 4,200 photos, $37.50. EXOTIC HOUSE PLANTS 1,200 photos, $8.95. Circula rs gladly sent. ROEHRIS, Box 125, E. Rutherford, NJ 07073.

BRITISH TEAK GARDEN SEATS
Solid Teakwood Garden Seats—featured in the adverts & gardens of England. The perfect heirloom gift for church, park or private garden. Send $1.95 (deductible for color catalogue and current price list). COUNTRY CASUAL, 17310 Germantown Road, Germantown, MD 20874. (301) 428-3434.

AMERICAN HORTICULTURIST • 13
DRIP IRRIGATION

DRIP IRRIGATION—ideal for flowers, vegetables, etc. Save water, reduce disease, increase yields, durable. Free information. MISER IRRIGATION, Box 94616 AH, Lincoln, NE 68509-4616.

DOG REPELLENT

Protects garbage cans, shrubs, gardens and lawns from roaming dogs. The waterproof repellent that works for weeks. Treats over 225 running foot or 500 square foot. One container with directions $3.50 or 2 for $6.00 ppd. LOUMAC CHEMICAL COMPANY, PO Box 8382 AS, Charlotte, NC 28211.

EDUCATION

THE NEW YORK BOTANICAL GARDEN SCHOOL OF HORTICULTURE. A program designed to train professional horticulturists through a combination of academic work and practical field experience. Curriculum includes botany, horticulture and landscape design, with work experience at both the Botanical Garden in the Bronx, and at the Cary Arboretum in Millbrook, NY. Full-time and part-time programs available. Licensed by the New York State Education Department. For catalogue write: School of Horticulture, Education Building, THE NEW YORK BOTANICAL GARDEN, Bronx, New York 10458. Or call: (212) 220-8739.

EPHYLLUM HYBRIDS

EPHYLLUMS (ORCHID CACTUS), RHIP-SALIS, HOYAS: 6 different rooted Ephyllum cuttings $12.00. Orders outside United States add $10.00 for “Agriculture Inspection Fee.” Family run business since 1924. Catalog 50¢. BEAM EPHYLLYUM GARDENS, Dept AH, 1643, 2686 Paloma Street, Pasadena, CA 91107.

FLORAL ART

FLORAL ART—Beautiful hand-signed, full color prints and fine art posters by international artists, JUSTIN COOPERSMITH. Send for FREE CATALOG. COOPERSMITH ART, 612 Shoup Avenue, #4, Woodland Hills, CA 91367.

FLOWER ARRANGING SUPPLIES

Pine Cone, Sea Shell Projects Booklet, Plus Discount Hardware Supply Catalog. Send $1.00 (refundable). ARTCRAFTS, Box 1356-HS, Santa Barbara, CA 93102.

FLOWER VALE LAPEL PINS


GARDENERS SOIL TESTING


GLADIOLUS

Flowering size, mixed 30 for $4.35. By color—white, peach, crimson, yellow and violet—30 bulbs $6.35 postpaid. HANCOCKS, Rte 4, Box 933, Manchester, TN 37355.

GREENHOUSE ACCESSORIES

PROPELLERS! AQUAMONITOR mist controls get the highest in plant survivals and profits. Write, we will prove it! FREE! AQUAMONITOR, Box 327-E, Huntington, NY 11743.

GREENHOUSE GROWING

Hard-to-find hobby, greenhouse equipment and supplies. Unusual Catalog. $2.00, refundable. CHARLEY'S GREENHOUSE, 12815-AH, Northeast 124th Street, Kirkland, WA 98033.

HELP WANTED

Head gardener, former historic house museum and public garden. Estate background and knowledge of herbaceous plantings essential. Must have had supervisory experience. Housing available. Write: Director, Old Westbury Gardens, PO Box 430, Old Westbury, NY 11568.

HERB PLANTS

10 Herb plants—$8.00. State inspected. UPS paid. Send 25¢ for list. ABC HERB NURSERY, Rte. 1, Box 313, Lecomia, MO 65540.

HERBS

A HERITAGE OF HERBS by Bertha Reppert now in paperback; $7.50 postpaid includes catalog. THE ROSEUM HOUSE, Mechanicsburg, PA 17055.

HORTICULTURAL GIFTS


HOSTAS FOR SHADE


HOUSE PLANTS


INDOOR GARDENING/GREENHOUSE SUPPLIES

START YOUR SEEDLINGS! Tools, equipment and information for greenhouse and indoor gardeners. Prompt service. Catalog .50¢. GROTEK, South Berwick, ME 03908.

INTERESTED IN A SHADY DEAL?

Protect your plants from blistering sun with SHADE CLOTH. Write or call (collect 404-778-8654) 7:30 a.m.—4:30 p.m. e.s.t. weekdays for FREE informational kit. Your custom fabricated order, complete with reinforced binding and brass grommets, is normally shipped within 10 days. SATISFACTION GUARANTEED. Economical, effective, long lasting, practical and a proven way to create a more beautiful, healthy and efficient greenhouse. Used also as patio shade, protective bird netting, tarpaulin and swimming pool cover. Mastercard and Visa. YONAH MANUFACTURING COMPANY, Box 280 AH, Cornelia, GA 30531.

IRIS

More than 1,500 varieties of Bearded Iris at special prices. Catalog $1.00, refundable with first order. CAL-DIXIE IRIS GARDENS, 14181 Pear Street, Riverside, CA 92504.

MAPLES


MISCELLANEOUS

Learn organic gardening & Farming first hand! As a member of Sativa, you can arrange to visit working Midwest farms/homesteads for a weekend or longer. Room & board provided FREE! Yearly $8 membership provides 6 annual newsletters with opportunities & locations. Write: NATIVA, Box 2410, Champaign, IL 61820.

NATIVE PLANTS-HARDY PERENNIALS

RUSSELL GRAHAM PURVEYOR OF PLANTS. Featuring hardy cyclamen, native plants, hardy ferns, novelty daffodils, lily species, specialty bulbs and hardy perennials. An extraordinary selection of uncommon plants. Descriptive catalog $2.00 (refundable on 1st purchase). Visitors welcome by appointment only. RUSSELL GRAHAM PURVEYOR OF PLANTS, Dept. 2A, 4030 Eagle Crest Road NW, Salem, OR 97220.

ORCHIDS

ORCHIDS! ORCHIDS! ORCHIDS! Bromeliads, Spider Plants, Books, Peters Fertilizers, Potting Mixes, Supplies for indoor and greenhouse culture. REQUEST CATALOG. FOX ORCHIDS, INC., 6615 West Markham, Little Rock, AR 72203.

PEONIES


PERENNIALS

Outstanding collection of rare and choice herbaceous perennials at reasonable prices. Send $1.00 to SWEET SPRINGS PERENNIAL GROWERS, Dept. AH, PO Box 1315, Arroyo Grande, CA 93420.

PHALAENOPSIS (MOTH) ORCHIDS

Blooming size, values to $20.00. Minimum order 3 plants, $9.50 each, postpaid. Catalog $1.00, credited on first order. GREEN VALLEY ORCHIDS, RT 1, Box 2335, Folsom, LA 70437. (504) 796-5785.

PLANT HANGERS

BEAUTIFUL PLANT HANGERS. Colors for any decor. CARDEE HOUSE OF MACRAME, 5317 North Arrow Drive, Peoria, IL 61614.

PLANTS—RARE BUT AFFORDABLE

**Erratum**

The cover article in the November, 1982 issue of American Horticulturist news stated horticulturist Peter Ascher was the first person to grow North American terrestrial orchids from seed in a growth medium in which all the ingredients are known and defined. Other individuals have germinated Cypripedium and other terrestrial species in fully defined media, and although Ascher's method may be an improvement, he was not the first to accomplish this feat.

Readers who would like copies of two scientific papers on the subject can send their request along with a self-addressed, stamped, business-sized envelope to Assistants to the Editor, in care of the Society.
‘Bradford’ Pears Need Corrective Pruning

‘Bradford’ pear, the remarkably disease and insect free tree that has become a common sight along streets and in yards across the country, can develop serious structural problems if not properly pruned. Semi-mature trees have a dense, tight, closely branched habit, and, according to Joseph Jannarone, Superintendent of Forestry, Parsippany-Troy Hills, New Jersey, as the "main trunk grows and expands it literally pushes apart and severs entire tree branches at their intersection with the trunk." Corrective pruning solves the problem. Prune trees in the autumn after the leaves fall or in the winter. Remove multiple leaders, prune back lateral branches and generally open up the center of the tree. Watch for suckers or water-sprouts throughout the summer and remove them.

—The Shade Tree, January, 1983

Space Shuttle Carries Test Seed

Space shuttle Challenger carried vegetable and flower seed on its maiden voyage. Scientists at the Geo. W. Park Seed Company, who provided the seed, used it to study the effects of space travel on germination, dormancy, vigor and genetic mutation. The ultimate goal of the project is to develop new seed packaging and storage methods for outer space. ‘Janie Yellow’ marigold, ‘Afternoon Delight’ portulaca, ‘Hotline’ salvia, ‘Bush Baby’ watermelon and herb seeds such as basil and sesame made the trip.

—Greenhouse Grower, February, 1983

AHS Awards

The AHS committee chaired by board member Mrs. B. P. Bole, Jr., which is responsible for making horticultural awards at major garden shows, recently gave citations to displays at the Boston and Philadelphia flower shows. The Pennsylvania Horticultural Society received a citation for its display, “City Green,” at the Philadelphia Flower Show. In Boston, Allen Haskell received a citation for his display, “Shade Garden of Hostas.”

Free Nitrogen in Grass Clippings

According to the Connecticut Agricultural Experiment Station in New Haven, more than 50 percent of the nitrogen you apply to a lawn in the form of fertilizer can return to the soil if you don’t rake and remove grass clippings. Results indicate that the clippings contribute very little to thatch build up in a lawn. Both Cornell and Michigan State Universities have reached essentially the same conclusion. Raking is only desirable if the grass has gotten unusually tall between mowings.

—National Landscape Association Tech Notes, December, 1982