

AMERICAN HORTICULTURIST

NEWS—JULY 1981

River Farm Notes

At this writing the plantings at River Farm are at the exciting stage of transition that bridges spring and summer. Spring holdovers, such as late daffodils and lilacs, bloom with iris and early peonies, masses of roses, marigolds, zinnias, rhododendrons and azaleas.

Our late daffodils are not usually something one would expect to find in bloom in this part of the country during the third week of May, but as an experiment last winter we planted a collection of bulbs during a warming spell late in January. Although we do not recommend this as a normal practice, it has worked extremely well for us this first year. We shall continue this experiment over the next few years, for it is most pleasing to have daffodils in bloom this late in the season.

One of our more traditional bloomers at this time of year, our roses, are also giving us magnificent bloom. The heavy February pruning has given way to tremendous growth, and we now have six-foot-tall hybrid teas and grandifloras that are filled with buds and blooms. Roses require more care than many perennials, but they return the effort a thousand fold.

Another standard bloomer at River Farm this time of the year is iris. We are happy to report that the American Iris Society's donations, planted in our Ideas Garden just last summer, are giving us fantastic first-year bloom. This display was one of the big hits during our recent Spring Open House. Let me describe some of the most beautiful cultivars: 'Foggy Dew' has standards that blend a soft, creamy amber with a very delicate lavender. Its ruffled falls are of subtle white, edged in soft violet. 'Grand Waltz' is a lovely

orchid iris offering shades of purple that gives the appearance of ruffled lace. 'Blue Lustre' lives up to its name. This iris is a silken, rich-blue color with a beautifully contrasting lustrous blue beard. 'Ermine Robe' brings to mind a scene of freshly fallen snow with its unblemished white ruffled petals. 'Frontier Marshall' is a very exciting iris that has an exceptionally rich, shiny crimson

color. 'Pink Taffeta' has a most remarkable, light, rose-pink color. It is heavily ruffled and absolutely exquisite. Whether or not you are an iris fancier you should try growing some of these cultivars. Write to Cooley's Gardens, P.O. Box 126, Silverton, OR 97381 for a catalogue (\$2.00 deductible) listing these cultivars and many more.

—Steve Davis



Barbara W. Ellis



Our Annual Spring Open House was a great success. Artists, craftsmen, gardeners and horticulturists converged on River Farm on May 17 to enjoy a beautiful spring afternoon. Over 1,200 visitors enjoyed tours of the house and gardens and were able to purchase artwork from local artists as well as dahlias, begonias, herbs and seedlings from area plant societies. Our thanks to all of the hard working volunteers who made this year's Open House a great event.

Steve Davis, (second from left), Director of Grounds and Buildings, answers questions in the iris display garden; Visitors enjoy the displays of area artists and craftsmen; Jane Steffey, staff horticulturist, on duty at the gardening question and answer booth.

**Itinerary and Registration
Blank for Boston Annual
Meeting in this issue.**

Turn to page 13.

1982 All-America Rose Selections Announced

The votes are in from test gardens across the country, and four new rose cultivars have been designated as All-America Rose Selections Award Winners for 1982. The winners include two hybrid teas, a floribunda and a grandiflora.

'Brandy', a cross between 'First Prize' and 'Golden Wave', is a hybrid tea with a rich, golden brandy color that ages to an attractive, creamy apricot. In addition to its attractive color, this new rose is also blessed with an easily perceptible, mild tea fragrance. Like its seed parent 'First Prize', 'Brandy' often has long classically slim buds. Its large, four to four-and-one-half inch blooms are graceful and have high centers. Each has approximately 25 to 30 broad, nearly round petals of good substance. 'Brandy' will yield an abundance of flowers for cutting from late spring to early fall. A medium



'Brandy'



'French Lace'



'Mon Cheri'



'Shreveport'

All America Rose Selections

to moderately tall plant that has exhibited better than average disease resistance, 'Brandy' is a vigorous, bushy grower with large semi-glossy foliage.

'French Lace', a floribunda rose that is generally ivory-white in color, bears from one to eight flowers per six- to ten-inch stem. This hybrid often presents an attractive bouquet of roses on a single cane, and is another of what many rose fanciers believe to be a new race of floribundas having large cutting-quality blooms. Although 'French Lace' generally bears white flowers, it often has an interesting habit of showing a very soft pink hue on its blossoms during their early stage of development. Temperature and locality seem to be the factors that affect the amount, if any, of pink that appears. By the time the blossoms open fully, and some can reach a diameter of four to five inches, they are pure white in color.

'Mon Cheri', the second hybrid tea winner, has blooms that will vary considerably depending on their age and the prevailing temperature and light conditions. The buds are a soft, sunrise-pink color, and in full sunlight as they open the petals gradually change to a deep, velvety red. Even when the blooms are fully open the shaded portions of the petals retain pink highlights. 'Mon Cheri' has large, plump, pointed buds that become urn-shaped before opening into a classical tea rose bloom. The flowers, which range from four-and-one-half to five-and-one-half inches in diameter and have from 35 to 40 broad petals, are borne abundantly. 'Mon Cheri' is one of the earliest plants to bloom in the spring. It is an excellent rose for cutting, and generally bears one bloom per cane. The plants have attractive, deep-green, semi-glossy foliage, are of medium height, bushy,

upright-spreading and well-balanced. A cross between ('White Satin' X 'Bewitched') X 'Double Delight', 'Mon Cheri' has several other outstanding roses in its ancestry including 'Granada', 'Garden Party', 'Queen Elizabeth' and 'Peace'.

The last award winner for 1982 is 'Shreveport', a grandiflora rose with medium sized (three- to four-inch) flowers borne in varying shades of orange, salmon and coral. The blossoms are produced either one per stem or in the typical grandiflora cluster. They are borne abundantly, and there are plenty of flowers per plant for both cutting and to provide beautiful color in the garden. Each bloom is very full, having from 45 to 55 petals, and 'Shreveport' has a slight tea fragrance. 'Shreveport' is a vigorous, bushy plant with large, deep-green, glossy foliage. It shows good resistance to rose diseases. With its relatively tall but compact growth habit, this new hybrid should fit well into the back row of a border or foundation planting. It would also make a magnificent flowering hedge.

Gardeners can see the 1982 All-America Rose Selections Award Winners this summer. They will be on display here at River Farm as well as in other official display gardens across the country.

Price Changes on Books

There have been price increases on two books reviewed in *American Horticulturist*. The discounted price on *Insect Pests*, reviewed in the December 1979/January 1980 issue, has increased from \$22.95 to \$26.70, including postage and handling. *Plant Breeding and Genetics in Horticulture*, reviewed in the December 1980 issue, has increased from \$14.95 to a new discount price of \$17.35, including postage and handling.

AMERICAN HORTICULTURIST

VOLUME 60 NUMBER 7

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Board Election

Members of the American Horticultural Society are hereby notified that the Annual Meeting of the Society will take place in Boston on Sunday, September 27, 1981 at 9:00 a.m. in Stanbro Hall at the Boston Park Plaza Hotel (64 Arlington Street). At this meeting, eight directors are to be elected for three-year terms ending with the annual meeting in 1984. All members in good standing of the Society are eligible to vote. If you cannot be present, please sign and return the attached proxy.

Mrs. Charles W. Allen, Jr.

Glenview, Kentucky. Mrs. Allen has been active in civic and cultural affairs in Louisville and the surrounding area for a number of years. She is on the board of United Kentucky Bank and is a trustee of Beria College in Beria, Kentucky. In addition, she is a past president of the Junior League of Louisville and the Children's Hospital. She is also on the Executive Committee of the Greater Louisville Fund for the Arts and a director of the Kentucky Center for the Arts Endowment Fund, Inc. She is a member of Phi Beta Kappa and Phi Kappa Phi.

Mr. J. Judson Brooks (Incumbent)

Sewickley, Pennsylvania. Mr. Brooks is a retired Vice President of the Pittsburgh National Bank. He is a lifelong gardener and a past director of the American Rhododendron Society.

Dr. Henry Marc Cathey

Silver Spring, Maryland. Dr. Cathey is a widely recognized scientist in the field of plant growth regulation research. He was Chief of the Florist & Nursery Crops Laboratory at Beltsville. Last year he accepted the position of Visiting Professor of Horticulture at the Ohio State University. He has just been appointed Director of the U.S. National Arboretum in Washington. Dr. Cathey is a Past President of the American Horticultural Society.

Mrs. Erastus Corning II

Albany, New York. Mrs. Corning is a member of the Executive Committee and a Director of the New York Botanical Garden and a past president of the Garden Club of America. In Albany she is on the boards of the local American Red Cross, the Salvation Army, the Historical Association and Children's Hospital. She is also a Director of the American Rock Garden Society.

Mrs. Malcolm Matheson, Jr.

Mount Vernon, Virginia. Mrs. Matheson is a past president of the Garden Club of Alexandria, Virginia and a former horticultural judge. She presently serves on the garden and grounds committee of Kenmore and on the Woodlawn Council of the National Trust. The Matheson family home was formerly at River Farm.

Mrs. Frances Jones Poetker (Incumbent)

Cincinnati, Ohio. Mrs. Poetker is owner of Jones the Florist, one of the 24 leading florists in America. She is the first woman Director of the Society of American Florists. In addition, she is a member of the Board of Directors of Cincinnati Bell Telephone, Inc. Mrs. Poetker serves as a consultant for manufacturers in the floral accessory field and is the only living woman to be elected to the Floricultural Hall of Fame of America.

Mrs. John B. Rogan

Charlottesville, Virginia. Mrs. Rogan is a member of the Boards of Project Hope, The English Speaking Union and The Virginia Center of the Creative Arts. She is President of The Jeffersonian Wine Grape Growers Society and belongs to the Charlottesville Orchid Society. She has written freelance articles for a number of magazines and is the author of *Doers and Dowagers*, published by Doubleday & Co. in 1975.

Mr. Mark Sullivan, III

Washington, D.C. Mr. Sullivan graduated from Yale University in 1964 and from the University of Virginia Law School in 1967. He has been a partner in the firm of Hamel, Park, McCabe and Saunders for seven years. He has represented the Society as legal counsel for four years. Mr. Sullivan is an amateur horticulturist and maintains a garden at his home in Washington.

**Notice of Election
in conjunction with the
36th Annual Meeting of
The American
Horticultural Society**

(Cut on dotted line and return to
AHS, Mount Vernon, VA 22121)

Proxy to Vote at Annual Meeting

Attention:
Secretary, American Horticultural
Society

I will not be able to attend the
Annual Meeting of the American
Horticultural Society on
September 27, 1981. Please assign
my proxy to Mrs. Edward C.
Sweeney (AHS Secretary) or

to cast my ballot in the annual
election of the Society as follows:
(vote for eight (8))

- Mrs. Charles W. Allen, Jr.
- Mr. J. Judson Brooks
- Dr. Henry Marc Cathey
- Mrs. Erastus Corning, II
- Mrs. Malcolm Matheson, Jr.
- Mrs. Frances Jones Poetker
- Mrs. John B. Rogan
- Mr. Mark Sullivan

Write-in Candidate

Write-in Candidate

and to cast my ballot in other
matters that may properly be
brought before the Annual
Meeting with the same effect as
though I were personally present.

Date

Signature

CALENDAR



July 8-12

American Gloxinia and Gesneriad Society, Inc. 25th Annual Convention
Roosevelt Hotel
New York, New York
Information: American Gloxinia and Gesneriad Society, Inc., 8 Kane Industrial Drive, Hudson, MA 01749

July 9-12

Southern Garden Writers Symposium
Garden Writers of America
Asheville, North Carolina
Information: Southern G.W.A.A. Symposium, Dr. Arnold Krochmal, Chairman, 119 Bell Road, Asheville, NC 28805

July 9-12

1981 International Bonsai Convention
Colony Square Hotel
Atlanta, Georgia
Information: IBC '81 Atlanta, c/o Betty Meiner, 720 Starlight Lane, Atlanta, GA 30342

July 18

American Bamboo Society Annual Plant Sale
Sculpture Court of the Casa del Prado
Balboa Park
San Diego, California
Hours: 10:00 a.m. to 4:00 p.m.
Information: American Bamboo Society, 1101 San Leon Court, Solana Beach, CA 92075

July 18-19

18th Fern and Exotic Plant Show
Los Angeles International Fern Society
Los Angeles State and County Arboretum
Arcadia, California
Hours: 9:00 a.m. to 5:00 p.m.
Information: LAIFS, 14895 Garden Hill Drive, La Mirada, CA 90638, (213) 941-5384

July 18-22

American Association of Nurserymen
106th Annual Convention and Trade Show
Stouffer's Cincinnati Towers
Cincinnati, Ohio
Information: American Association of Nurserymen, 230 Southern Building, Washington, DC 20005

July 19

American Gourd Society Annual Meeting
Fairgrounds
Mt. Gilead, Ohio
Information: American Gourd Society, PO Box 274, Mt. Gilead, OH 43338

August 3-6

Plant Growth Regulator Working Group
8th Annual Meeting
Don Cesar Hotel
St. Petersburg Beach, Florida
Information: Dr. L.H. Aung, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, (703) 961-6511

August 6-8

Marigold Society of America National Convention
Lawrenceville, New Jersey
Information: Mrs. C. Jane Boning, 199 Spring Beauty Drive, Lawrenceville, NJ 08648, (609) 896-1090

August 9-12

International Society of Arboriculture
57th Annual Conference
Boyne Mountain Lodge
Boyne Falls, Michigan
Information: E.C. Bundy, ISA Office, PO Box 71, Urbana, IL 61801

August 14-16

Midwest Bonsai Society Show
Chicago Horticultural Society Botanic Garden
Chicago, Illinois

August 14-16

American Begonia Society 1981 Convention
Ventura, California
Information: Show and Convention Chairman, Jean Natter, M.D., 260 Bennett Ave., Long Beach, CA 90803

August 20-22

American Association of Botanical Gardens and Arboreta
Midwest Chapter Meeting
Dow Gardens
Midland, Michigan
Information: The Dow Gardens, 1018 West Main Street, Midland, MI 48640, (517) 631-2677

September 1-17, 1981

10th World Orchid Conference
Durban, South Africa
Information: The Working Committee, 10th WOC, PO Box 10630, Marine Parade, 4056 Durban, South Africa

September 12

Red Rose Rent Day
Conard-Pyle Co., Star Roses
West Grove, Pennsylvania
Ceremony at 10:00 a.m., public invited
Information: The Conard-Pyle Co., West Grove, PA 19390, (215) 869-2426

September 17-19

American Ivy Society Annual Convention
Bradenton, Florida

September 17-20

American Dahlia Society
48th Annual Midwest Dahlia Conference and Show and 15th Annual National Show
Sheraton-Naperville Hotel
Naperville, Illinois
Information: Mr. and Mrs. Silio A. Moschini, 6139 South Rutherford Avenue, Chicago, IL 60638

September 24-27

American Horticultural Society
36th Annual Meeting
Boston Park Plaza Hotel
Boston, Massachusetts
Information: Dorothy Sowerby, AHS, Mt. Vernon, VA 22121, (703) 768-5700

If your horticultural club or association is planning an event that may be of interest to our national audience, please send us information concerning the nature of the meeting, the dates, times and location *at least three months prior* to the time the meeting will take place. We will be happy to include it in our *Calendar* unless space limitations prevent us from doing so.

With food prices going sky high, an old gardener found a new way to beat the high cost of grocery store produce:

SOLAR POWERED MINI GREENHOUSES!

BY ELIZABETH FISHER

I've been growing vegetables for about 25 years. When I first saw the ad that claims a family can grow their own vegetables year 'round with a miniature greenhouse that uses no artificial light or heat, I was very skeptical. I thought to myself—how can that be? That's impossible. It takes a big, expensive greenhouse. It takes a big set up with lots of artificial light and heat to grow vegetables in freezing cold weather. But my curiosity kept nagging me, so I sent off for the information.

My uncle is a gardener over in West Virginia. I showed him the GUARD 'N GRO literature. His first reaction was "I don't believe it! I don't believe a small, portable greenhouse can make plants grow in freezing cold weather without any artificial light or heat!" But the more I studied it, the more it sounded like a good idea.

FOOD PRICES CLIMB

Another thing on my mind was the price of grocery store vegetables. We're having the biggest increase here since I can remember. Prices for store-bought vegetables are going through the roof. It's very hard on a lot of folks, but backyard gardeners are saving money by growing their own vegetables. I'd been thinking about growing more vegetables, but with the colder weather coming on, I was afraid my crops would not survive the frost and freezing cold. I decided to see if GUARD 'N GRO would protect my plants from those cold temperatures.

EASY SET UP

Now, when I started growing vegetables 25 years ago, I used homemade cold frames to protect my plants in cold weather. But these cold frames were bulky and a real chore to put together. Later, I switched to vinyl sheets stretched over metal hoops, but even that took a lot of work to set up. You can't imagine how I felt when they delivered my GUARD 'N GRO. It was so compact, very simple. I took it out and set it up in just a few minutes.

SAVES MY CROPS

The first time I used GUARD 'N GRO in my garden I was all fixed to put electric heating coils inside GUARD 'N GRO and give my plants plenty of protection. However, it was a very cold season—temperatures that Fall dropped below freezing many times at night—and the first frost caught me by surprise. Almost without warning, the temperature plunged to 26° one night. It was so cold that ice formed on the pond! Well, I was sure my plants were ruined. Imagine my surprise when I looked inside my GUARD 'N GRO! Even though it was freezing cold outside, my GUARD 'N GRO plants were doing beautifully. They were not harmed by the freezing cold that killed crops outside GUARD 'N GRO! Without any artificial light or heat, GUARD 'N GRO saved my plants.

The secret is a network of thermal air cells sealed between each GUARD 'N GRO solar



panel. Developed by a gardener in California, these energy-saving, thermal air cells trap and seal in solar heat to provide a constant, warm growing climate for plants. This warm climate makes plants grow faster and bigger than crops grown outside GUARD 'N GRO. From the information kit sent to me by the GUARD 'N GRO folks, I learned that GUARD 'N GRO works even in cold climates. It has produced superb results in Minnesota, Michigan, Colorado and Iowa. 16,300 GUARD 'N GRO systems are now being used by gardeners in 46 states.

SAVES MONEY

That Winter, I picked lettuce, carrots and spinach from my GUARD 'N GRO garden on Christmas day. This wonderful invention saved my plants from killing frosts, freezing cold, hail, sleet and high winds. With GUARD 'N GRO I grew cool weather crops like lettuce, carrots, broccoli, spinach, beets, brussel sprouts, cauliflower, onions and broad beans...and did away with buying these vegetables in stores. GUARD 'N GRO let me grow vegetables in freezing cold weather... without using any artificial light or heat. And that's what it takes to save money growing your own vegetables in cold weather.

GOOD FRESH VEGETABLES

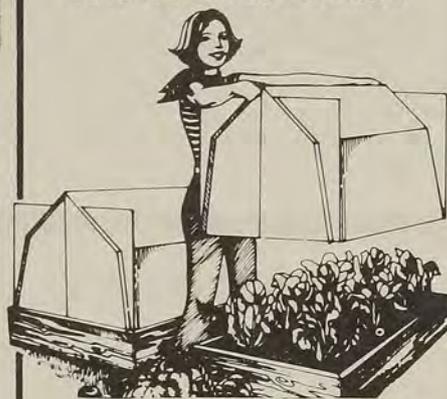
I believe anyone can grow vegetables with GUARD 'N GRO. Even if you just want to have a small garden, you'll save money. It's simple and easy if you just read the instructions. And the best thing about it is you get fresh, rich tasting vegetables and salad greens without all those chemicals in them, and the vegetables cost you only pennies. You certainly can't buy grocery store vegetables for that. And it's a great feeling to have all the vegetables you want—even in winter—when everyone else is paying sky-high prices for vegetables in stores.

The man who invented GUARD 'N GRO really knew what he was doing. Modern technology is a wonderful thing, isn't it?

NOTE: Readers of this publication can get a fact-filled, illustrated information kit on the GUARD 'N GRO including a free trial offer. The information kit is available free, without obligation. Requests should be addressed to GUARD 'N GRO, Dept. AH7, St. James, New York 11780.

Year 'Round Gardener

Save Hundreds of Dollars



WHY PAY OUTRAGEOUS PRICES

for grocery store vegetables when you can grow your own vegetables almost every month of the year with GUARD 'N GRO mini greenhouses? No artificial light or heat needed. 100% solar powered. Makes plants grow big and fast...even in 22° cold. Works year 'round. Cuts your food bills year 'round. For porch, patio, backyard or small space container gardening. Folds flat for storage. Mail coupon for startling facts and FREE TRIAL OFFER.

Not Sold In Stores

GUARD 'N GRO

Dept. AH7 St. James, NY 11780



Yes! Rush me my FREE GUARD 'N GRO fact kit and details about how I may try GUARD 'N GRO this Fall and Winter without risking a penny. I understand I'm under no obligation and no salesperson will call.

Name _____

Address _____

City _____ State _____ Zip _____

Williamsburg Symposium Notes

A new type of insecticide has been approved for large-scale testing in the United States and elsewhere, and it has the makings of a substance both environmentalists and farmers will like. It is apparently 100 percent effective in killing the pupal and adult stages of insects and at the same time is biodegradable and not toxic to humans or other life forms. Furthermore, it is a substance for which insects can never develop an immunity, because it synthetically reproduces a complex chemical produced by insects themselves. The substance? Juvenile hormone.

Dr. Carroll Williams, a Harvard professor who spoke at this year's Williamsburg Garden Symposium, has been instrumental in the development of this new group of so-called "third-generation pesticides." For years he has studied insect metamorphosis and was responsible for isolating and characterizing the chemical make-up of the hormone that causes an insect to develop from larval to pupal stage. Later he and colleagues were able to produce



synthetic substitutes for these hormones. This achievement made the application of these hormones as insecticides financially feasible. When applied in large doses, these hormonal sprays induce precocious metamorphosis, which is lethal to juvenile and adult stage insects. Today enough additional research has been done to enable scientists to isolate insect-specific insecticides of this type for specially targeted use.

Now the goal of scientists in this

field is to develop what they have termed "anti-juvenile" hormones for use against larval stage insects. Gardeners know only too well that many larval-stage insects also do a great deal of damage to plants.

This new type of insecticide is not yet on the market, but it is hoped that this approach will provide a solution to the dilemma now facing us as far as environmentally dangerous pesticide treatment is concerned.

In another talk presented at this year's Williamsburg Garden Symposium, James C. Mikkelsen, President of Mikkelsen's, Inc. in Ashtabula, Ohio, spoke about new hybrid plants his firm is developing. His company is particularly interested in New Guinea impatiens, miniature cyclamen, streptocarpus, hiemalis begonias and kalanchoes. He had several tips for home gardeners who would like to grow these plants, particularly the first three.

New Guinea Impatiens

When preparing hanging baskets of New Guinea impatiens, Mikkelsen recommended that gardeners plant small plants. Doing this will make the watering process easier. If

Dates To Remember

Participants in society sponsored activities this summer and fall will have the opportunity to visit historic Boston, enjoy a Rocky Mountain Alpine spring and tour gardens at the four corners of the globe.

From the 14th to the 27th of July members participating in our **Exploration of Colorado** will enjoy spring in the Rocky Mountains. Read more about this exciting tour in the March insert in *American Horticulturist* news.

Historic Boston is the meeting place for members attending our **36th Annual Meeting** from September 24th through the 27th. For more information on the lectures, tours and other activities scheduled, turn to page 13 of this issue. A **Post Congress Tour of New England** is scheduled from September 28th through October 7th for members wishing to continue their exploration of New England's finest public and private gardens (an itinerary was inserted in the May newsletter).

In the June issue of *American*

Horticulturist, Valerie Sanson's article, "Autumn in England," gave readers a taste of what England has to offer during this season of the year. From September 10th through the 24th, members participating in the Society's **Autumn Tour of Yorkshire and East Anglia** will have the chance to see for themselves how beautiful the gardens and country houses of England's "East End" are in the fall.

Autumn travelers will also have the opportunity to visit **Switzerland and Northern Italy** from September 24th through October 8th. For an account of this itinerary, look for Dorothy Knecht's article in *American Horticulturist* next month.

Participants in our **Exploration of New Zealand**, scheduled for October 21st through November 8th, will have the opportunity to leave the fall behind and tour public and private gardens south of the equator during their spring. Visits to several of New Zealand's famed natural areas, including the thermal wonderland of geysers at Rotorua with its boiling pools of mud and glittering

silica terraces are scheduled. Participants will also visit beautiful Milford sound, and take part in a traditional Maori feast.

From November 1st through the 24th, members will again have the opportunity to **Explore the Orient** on one of the Society's most popular tours, to Japan, Taiwan and Hong Kong. (For an account of this itinerary, read "Notes from the Orient" by Leonore Baronio in *American Horticulturist*, October/November 1979.)

Finally, this fall members may sign up to tour unique gardens and natural areas a bit closer to home on an **Exploration of Florida** scheduled from October 19th through November 2nd. Visits to Cypress Gardens, Corkscrew Swamp Sanctuary, the famed Fairchild Botanical Garden, some of the large foliage plant nurseries in the state as well as lovely private gardens are planned.

For more information, brochures and reservation cards for any of the above activities, write to Dorothy Sowerby in care of the Society.

the plants are too big when they're originally potted, Mikkelsen warns, by summer's end the hanging baskets may need to be watered twice a day. He recommends the cultivars 'Halo' and 'Eclipse' for use in hanging baskets.

Mikkelsen also cautioned that impatiens differ from cultivar to cultivar. Ones bred for use in full sun will not do well in partial shade in terms of growth, leaf color and flowering. He also reminded gardeners that the so-called sunshine impatiens are vigorous feeders. They need a good feeding schedule (at least once every two weeks) with a high, balanced fertilizer such as 20-20-20. The sunshine impatiens also differ from the Sultana types. Sultanas should never be pinched. Their self-branching characteristic is inbred.

Miniature Cyclamen

Miniature cyclamen are being hybridized that will withstand warmer house temperatures of 68° to 70° F without deterioration, Mikkelsen reported. They are also highly scented and can be grown as garden plants. In that case, they should be placed in a bright area, but not in full sun during the middle of the summer.

Streptocarpus

Mikkelsen believes new work with *Streptocarpus* will soon mean they will compete with *Saintpaulia* in popularity. The strains his firm are developing can withstand very low temperatures and little sun and still survive. In fact, Mikkelsen inadvertently left a *Streptocarpus* hanging basket outside at his own home during a three-day snow. It survived and was on display at the Symposium in full, vigorous bloom. Mikkelsen also reported that new strains of *Streptocarpus* are being developed, with the help of irradiation, that will flower for four months.

Finally, Mikkelsen said he believed *Achimenes*, another genus in the same family as *Streptocarpus*, will become very popular as a garden plant thanks to commercial growers' interest.

Mikkelsen New Guinea impatiens, cyclamen, kalanchoes, hiemalis begonias and streptocarpus should be available at your local nursery or garden store. They are also available from Geo. W. Park Seed Co., Inc., S.C. Highway, N., Greenwood, SC 29647.

Coming in August

Helpful how-to articles

on:

buying a solar

greenhouse

and

building a cold frame!

**"Schultz-Instant"
LIQUID PLANT FOOD**

EASY TO USE
Just add 7 drops per qt. in the water
Everytime you water, Everything you grow!

Ultra Pure, Concentrated, 10-15-10,
Liquid All Purpose, Starts & Feeds
Formula! Convenient for all indoor
and outdoor uses. 3 Sizes.

Available at your store or send
\$1.50 for 1/2 qt., \$2.75 for 1 qt.,
\$4.00 for 2 qt. (includes mailing)

**"Schultz-Instant"
Fertilizer**

EASY TO USE
Just add 1/4 tsp. per gal. in the water
Everytime you water, Everything you grow!

Ultra Pure Concentrated, 20-30-20, Soluble,
All Purpose, Starts & Feeds Formula!
Sizes for Gardens, Vegetables, Flowers,
Roses, Shrubs, Trees, Lawns, Greenhouses,
Nurseries. 3 Sizes.

Available at your store or send \$2.50 for
1 lb., Small Garden Size, \$3.95 for 5 lb.
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Tips For Gardening Success in Drought

If your area is hurt by drought and you are wondering how the water shortage will affect your garden this summer, it will pay to know what you can do to help your vegetable and flower gardens tolerate dry conditions.

 Mulch to conserve water. Mulching conserves moisture in the soil by reducing the rate of evaporation and also greatly reduces the presence of weeds, which compete with your plants for precious water and nutrients.

Many organic materials may be used as mulches. Try a three- or four-inch layer of grass clippings (let the grass dry a bit before applying to the garden), straw, salt hay, partially decomposed leaves or compost. A layer of several sheets of newspaper works effectively if weighted down with a top layer of soil or other material. Plastic mulch, available in many garden centers or by mail (W. Atlee Burpee Co., Doylestown, PA 18901) also works well, is easy to use, and is reusable for several seasons.

Try to put on the mulches when the soil is moist, even if you're not ready to plant. You can easily push back organic mulch at planting time, or cut slits or holes in plastic mulch, but ground mulched when dry is apt to stay dry if rain is sparse.

 Use shade to advantage. Moisture evaporates more slowly in shaded soil. Leafy vegetables such as cabbage, lettuce, spinach and Swiss chard do well in partial (not complete) shade—that is, areas which receive full sun for only part of the day. Basil, mint, parsley and tarragon are a few herbs that thrive in partial shade. Fruiting vegetables such as tomatoes, peppers and vine crops need full sun for satisfactory production.

 Harvest young. Pick your vegetables when they are at their prime—don't let them overripen. Picking reduces the moisture requirements of the plants and encourages continued production.

 Space plants closely. Space plants and rows so the maturing

plants just overlap. This will shade the ground to reduce moisture loss and weed competition. If you use a mechanical cultivator, you may need to switch to hand cultivation in the narrower rows.

 Weed regularly. Weeds compete with vegetable crops for every drop of water—and often the stronger, deep-rooted weeds win the competition. Remove the weeds as soon as they show themselves in your garden. Some weeds, like purslane, lamb's quarter and chickweed, may be eaten if picked young.

 Water deeply, not often. Observe local water-use restrictions, if any. Water in the evening or early morning. Use special soil-soaking hoses that allow water to drip slowly into the ground, and place the hoses quite close to your plants. Or set your garden hose, nozzle removed, directly on the ground to irrigate one part of your garden at a time. Let the water run slowly for as long as necessary to soak deeply into the soil. A deep soaking is needed only every 10 to 14 days, unless your plants show signs of wilting from insufficient moisture. Remember that oscillating-type lawn sprinklers throw water where you may not need it and allow much more evaporation than other watering methods.

Waste water can be used at your discretion. If you only have a small supply, use it to get your plants started. Well-rooted plants will survive drought better than weak, shallow-rooted ones.

 Provide windbreaks. Strong or constant winds speed up evaporation. If your garden is fairly small, it may be possible to set up a temporary windbreak using fencing materials, cast-off construction materials or even worn-out bedsheets strung from posts. Just be sure windbreaks do not shade plants that need full sun.

 Save water—literally. Keep two lidded barrels or spare trash cans near your house or garden to hold your recycled water supply. Barrel Number One is for relatively clear, clean water to use for your vegetable garden. Into this barrel pour the final rinse water from your washing

machine and dish washer, plus bath water. If possible, route your roof gutters and downspouts into barrels to save every drop of rainwater for your vegetables and fruits.

In Barrel Number Two hoard other wash water that is perhaps too heavily contaminated to be used safely for edible crops. Use this supply to help your annuals and other ornamentals survive the drought. Heavy concentrations of bleach, fabric softeners, water softeners or detergents, which may be high in sodium, may eventually damage the structure and nutrient balance of your soil. Add gypsum (calcium sulfate), in amounts recommended by your county agricultural extension agent, to counteract the effects.

If recycled water is used extensively, test your garden soil periodically for pH (acid-alkaline balance) and adjust with ground limestone to raise pH or gypsum to lower it. A slightly acid soil is best for growing most vegetables.

—Jeanette Lowe,
W. Atlee Burpee Co.

Tree Care During Drought

Trees can be one of a gardener's most expensive investments, and it is important to protect their health during periods of low rainfall. Dr. Robert L. Tate of Rutgers University, New Brunswick, New Jersey made several excellent suggestions for protecting trees during summer drought in the March, 1981 issue of *The Shade Tree*.

Keep track of rainfall accurately on a week by week basis. Rainfall is usually measured for specific locations which may be miles from your trees. One side of a city may have had plenty of rain while the other was missed by the same storms. Home rain gauges are inexpensive and accurate enough for this purpose.

Remember that newly planted trees that suffer from drought for the first three weeks of a month may not respond if the rainfall catches up to normal at month's end. If rainfall is less than one inch per week, newly planted trees will suffer. Water to make up the difference.

How you water is also critical. Never water more than once a week, and when you water, do it generously in one application. Soak

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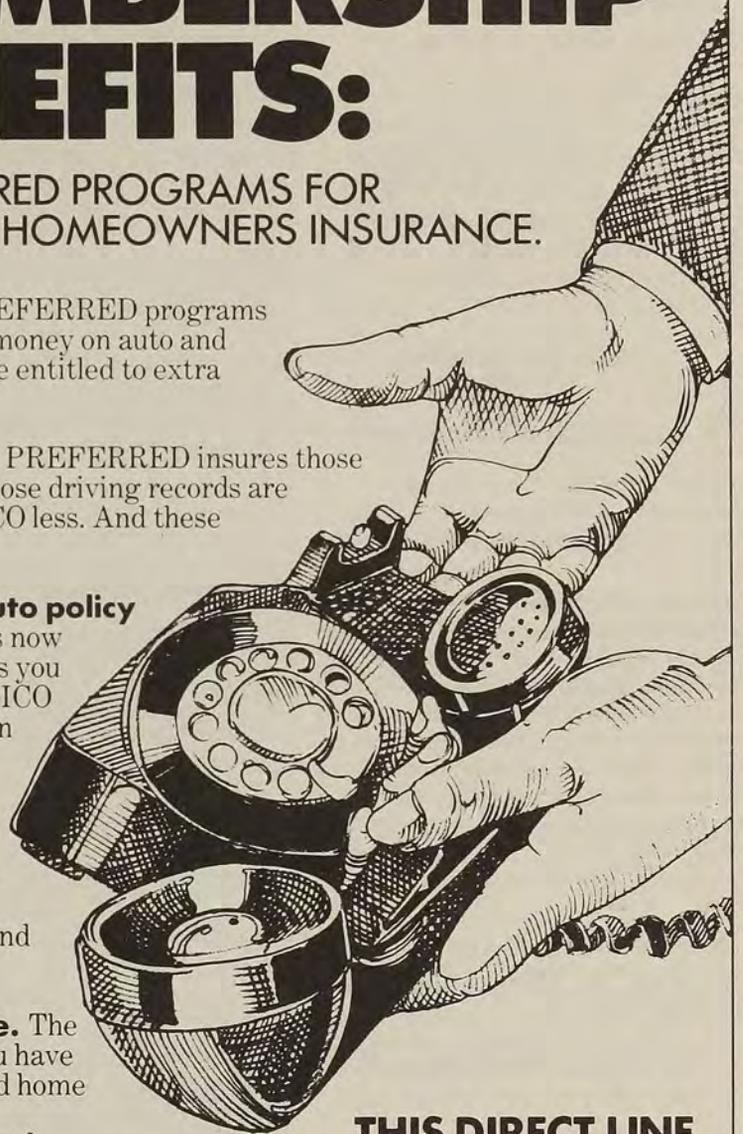
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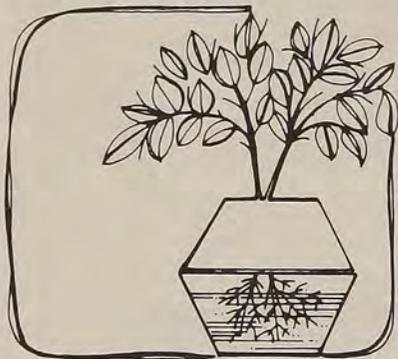
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the soil to a depth of about one foot. Remember, though, that constantly soggy soil will cause severe problems too.

If the soil surface is extremely dry you may have to water in two phases; first, water lightly to soften the surface so you won't waste water by runoff, and then water heavily enough to get water to the root zone.

Trees that have been in the ground from one to five years can survive a longer drought than newly planted ones, but if rainfall is not adequate they need to be watered every two to three weeks. Older, more established trees can survive fairly well in most drought periods provided they are healthy going into the drought. This points out the need to properly maintain trees by controlling insects and disease pests and fertilizing periodically so they are better able to withstand droughts. Older trees should be watered every four weeks during periods of severe drought.

Newly planted trees, and those

that have been in the ground for less than five years, will benefit from a heavy layer of mulch, which will keep the soil cool and prevent evaporation. Also, newly planted trees can be sprayed with an anti-desiccant such as Wiltpruf® or Foligard® to reduce transpiration. (Consult your local nursery for the availability of this service.)

In the event there is a total water ban in your community, and a long term drought, too, older trees that are becoming desiccated may be saved by pruning up to one-third of the foliage to reduce the demand for water on the root system. This is a very dramatic, last ditch resort, but it may save the tree.

Erratum

An error appeared in the May issue of *American Horticulturist* news under the heading “Daffodils to Show and Grow.” The correct address to write for the handbook mentioned is Mr. Ticknor, American Daffodil Society, Tyner, NC 27980.

How To Get More Flowers On Gloxinias

Drastic as it may sound, defoliation is the secret to growing a gloxinia that will bear 50 or more flowers per plant over a period of up to four months. Dan Irons of Matoon Flower Shop, Matoon, Illinois discovered this technique while trying to find a way to control the blooming dates of his holiday gloxinia crops. What's more, he discovered that on these gloxinias, “nearly all the buds opened into full bloom, and that's a rarity, because gloxinias normally have a real problem with the buds falling off before opening.”

Mr. Irons sows his gloxinia seeds in late September or early October for bloom the following spring. When the plants have four leaves, he transplants them into two-and-one-half-inch pots. He transplants them a second time when the leaves touch the edge of the pot, this time into a six-and-one-half-inch pot.

Mr. Irons gives his plants full winter sunlight in the greenhouse, warm (64°F) night temperatures and good air circulation. He waters with tepid water and fertilizes twice a week with a 20-20-20 solution.

Defoliation begins as soon as the

plants' leaves reach over the edge of the six-and-one-half-inch pot. “At this point,” Mr. Irons says, “the plants generally have about eight to ten leaves. This is all we will allow to develop, so as each new, small leaf appears, it is quickly plucked out. . . . Every plant needs to be defoliated about every other day.” Eventually, the plants begin to form buds, and defoliation continues even while they develop. Normally, defoliated plants will produce 50 or more buds. “We've had reports that our gloxinias have kept blooming in customer's homes for four months or longer if they've been given good light,” Irons says.

Mr. Irons has also discovered that if his gloxinias are going to bloom too early for a specific holiday or event he can slow down their development for up to two weeks once the buds have reached the stage just before good color appears. To do this he lowers the temperature at night from 64°F to 58°F. The plants will burst into bloom when the temperature is raised back to 64°F.

—*Florist magazine,*
a publication of F.T.D.

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FRIDAY, SEPTEMBER 25, 1981

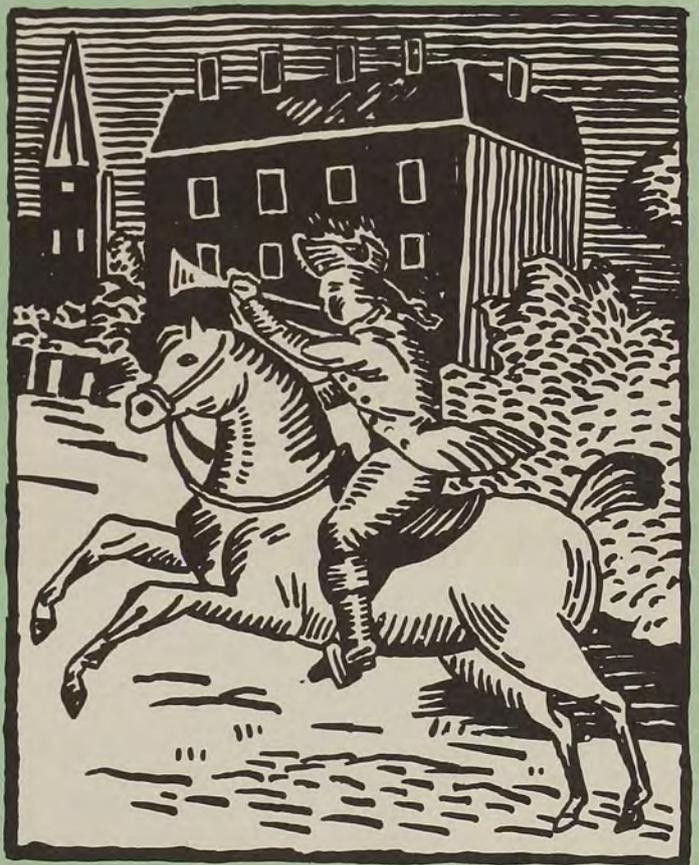
9:00 a.m.-12:00 noon. Educational/Lecture Session. Speakers will be Roger Swain, Thalassa Cruso and George Jung.

- Roger Swain is Science Editor of *Horticulture* magazine and author of the recently published book, *Earthly Pleasures: Tales from a Biologists' Garden*. His topic will be "Our Tropical Rain Forest Heritage."

- Thalassa Cruso is a well-known garden writer and television personality. Among other roles, she starred in a series of 54 programs on gardening produced by PBS. She will speak on her experiences as a "television horticulturist."

- George Jung is an accomplished amateur rose grower and hybridizer. He grows over 300 rose bushes in his own garden and will speak on roses and his special interest, miniature roses.

12:30 p.m.-5:00 p.m. Tour of Arnold Arboretum and the Hunnewell Gardens. Box lunch served on bus en route. The Arnold Arboretum has been called America's greatest garden. It was established over 100 years ago and contains over 6,000 varieties of



ornamental trees and shrubs on its 265 acres. The Hunnewell Gardens, designed by the present owner's great-grandfather, cover 35 acres. Of particular interest here are a fine collection of coniferous trees, a lovely, formally-designed Italian garden and several large greenhouses that feature camellias, rhododendrons, orchids, fruit trees and grapes.

Friday Evening. Lobster/Clambake at The Vale, the former Lyman Estate, now maintained by the Society for the Preservation of New England Antiquities. The greenhouses on the property are the oldest known to be still operating in New England.

September 24-27, 1981



SATURDAY, SEPTEMBER 26, 1981

7:45 a.m.-5:30 p.m. North Shore Tour; visits to several private homes and gardens:

- The first private garden you will visit was landscaped at the turn of the century by the Olmsted Brothers. Close ties between the original owners and Professor Sargent of Arnold Arboretum resulted in an interesting collection of evergreens being established there. The present residence was built in the early 1970's, and the landscape around the house and pool was designed by Carlton B. Lees.
- Long Hill, the former summer home of Mr. and Mrs. Ellery Sedgwick, is now a property of the Trustees of Reservations. The garden was designed around the residence to combine native materials with exotic plants. Features include many rare flowering trees and shrubs, azaleas, rhododendrons, Japanese maples, weeping cherries, tree peonies, lotus and lily pools and a spectacular fall foliage display.
- The rock garden at the third private home you will visit cascades down a hillside near the residence, within

view of the ocean. It features a diversity of alpine plants and has become the full time passion of its owner, a world famous expert on rock gardens and their cultivation. This garden was the subject of a feature story in *Horticulture* last year.

- Tour of Nor'East Miniature Roses, known throughout the country as an excellent source of these plants. Plants will be offered for sale.
 - Lunch in Salem. Afternoon tour of Peabody Museum of Salem and Essex Institute. The Peabody Museum was organized by the sea captains of Salem in 1799 to exhibit items connected with the maritime history of that community, especially the period in which China trade was active. The Essex Institute is one of the oldest and largest privately endowed regional historical societies in the United States. It manages several historic houses and gardens in Salem. The gardens' designs are appropriate to the period in which the houses were built. Inside the houses, period flower arrangements will be on display for your enjoyment.
- Saturday Evening.** Free to explore Boston on your own.

September 24-27, 1981

SUNDAY, SEPTEMBER 27, 1981

9:00 a.m.-12:15 p.m. Educational/Lecture and Plenary Session. Speakers will be Kenn Stephens, Dr. Gordon P. DeWolf and Dr. John L. Creech.

- Kenn Stephens is the Executive Director of the Worcester County Horticultural Society. He has traveled and lectured all over the world, usually on design topics due to his background in theatre arts and design. He will demonstrate flower arranging techniques and will explore the wide relationship of interior design to flowers and plant material.

- Dr. Gordon P. DeWolf is a taxonomist who holds a Ph.D. from Cambridge. He is presently coordinator of the horticultural program at Mass Bay Community College in Massachusetts and is engaged in the revision of Taylor's gardening encyclopedia. He will speak on plants and places of horticultural interest in the Boston area that we will not be seeing on our tour.

- Dr. John L. Creech will be delivering the B.Y. Morrison Memorial Lecture following our Plenary Session. This endowed lecture is administered by the Department of Agriculture, and the Society is proud that its Annual Meeting has been chosen as the occasion for this year's address. Dr. Creech, who is a world-famous plant explorer, recently retired as the third Director of the U.S. National Arboretum. Dr. B. Y. Morrison was the Arboretum's first Director.

12:30 p.m.-5:30 p.m. Following a box lunch on the bus, we will visit the Cox estate, where the gardens are maintained under the supervision of George Pride, former Assistant Director of the Arnold Arboretum.

This estate is surrounded on three sides by water, providing a spectacular view. Small gardens exist around a terrace and swimming pool, but of greatest interest here are plants grown in three greenhouses. Specimens are chosen for their suitability indoors as cut flowers or as pot plants. Outstanding are the orchid and carnation collections.

- Our last stop on this afternoon's tour will be Plimouth Plantation, a replica of the Pilgrim's first fortified village, which was established soon after their arrival in the New World in 1620. Gardens have recently been added here that reflect designs and plantings typical of the era.

6:30 p.m.-7:30 p.m. No host cocktail reception at the hotel.

7:30 p.m.-10:00 p.m. President's and Awards Banquet. The Society will announce winners of its special citations and coveted Liberty Hyde Bailey Medal. Featured speaker will be Carlton B. Lees, well-known landscape designer and author of several excellent books on landscape design. Mr. Lees is also Senior Vice President of the New York Botanical Garden.

MONDAY, SEPTEMBER 28, 1981

Individual departures for home or departures for the Post Congress Tour of New England, September 28-October 7, at which time participants will see horticultural highlights of Massachusetts, Connecticut and Rhode Island. For complete details, write to Dorothy Sowerby in care of the Society or read the Post Congress Tour brochure inserted in the May, 1981 newsletter.

Registration Form

IMPORTANT: All events described in the American Horticultural Society's Annual Meeting program are included in the registration fee. This fee covers all motor coach transportation, all entrance and guide fees, the cocktail reception at Horticultural Hall, the AHS Awards and President's Banquet and three lunches.

\$251 for AHS member \$ _____

\$246 for spouse \$ _____

I enclose a check for \$ _____

It would be helpful if you would send the full amount due with this registration form. However, if you wish, you may pay only \$125 per person now, with the balance due upon your arrival at the Meeting.

CANCELLATIONS: Full refund if written cancellation is received before September 14 less \$35 per person for booking expense. No refunds will be made after September 14.

Upon receipt of your deposit, we will send you a hotel accommodations card that you may complete and mail directly to the Boston Park Plaza Hotel. Hotel rates have been established at \$59-\$65 single and \$71-\$77 double. Suites are also available.

(Below, list your name as you wish it to appear on your name badge.)

Full Name(s) Mr., Mrs., Ms. _____

Address _____

City, State, Zip _____

Eastern Airlines will be our official airline for the 36th Annual Meeting. Upon registering, you will be provided with a special toll-free Eastern number that you may call to make your plane reservations. Eastern will guarantee you the best available rates when you call. If Eastern does not service your area, they will make reservations for you at the best available rates with another airline that does fly from your home to Boston.

Tyvek® Bags Soon to be Available

Many of our readers have expressed an interest in experimenting with the new composting method described by Milton Carleton in the March issue of *American Horticulturist* news. Plans are underway to market the system beginning in midsummer, and at that time a package consisting of a trough in which to chop up materials to be composted, replacement lawnmower blade, a Tyvek® bag and an instruction booklet will be available. Tyvek® bags will also be available separately. For more information on the system write Ludford Connolly and Associates, 50 Melham Court, Scarborough, Ontario, Canada.

Free Book on Shade Tree Sources Available

The 1980 Source Book of Shade Trees in the United States, probably the most exhaustive source book on shade trees for this country, is now available from the Ohio Agricultural Research and Development Center. Authors T. Davis Sydnor and Dr. James Holman list 150 different tree species and cultivars and more than 250 nurseries in the United States and Canada where they can be found.

The source book is available at no

charge. To obtain a copy write to either Mail Room, Ohio Agricultural Research and Development Center, Wooster, OH 44691 or U.S.D.A. Forest Service, State and Private Forestry, 370 Reed Road, Broomhall, PA 19008.

Manual On Horticultural Therapy Training for Sale

A complete planning and operations manual for horticultural training and work co-op (sheltered work) programs serving the handicapped is now available.

The Melwood Manual, developed and written by the Melwood Horticultural Training Center, a recognized leader in the field of horticultural rehabilitation and co-op programs, is an invaluable reference source and guide to anyone interested in using the horticultural environment for therapeutic, training or employment opportunities for handicapped persons. The manual contains a wealth of training and business information enhanced by a number of photographs, charts, appendices and a bibliography.

The Melwood Manual is available for \$20.00 plus \$1.50 shipping and handling from Melwood Horticultural Training Center, 5606 Dower House Road, Upper Marlboro, MD 20870.

Fundraising Idea



If your plant society or horticultural group is looking for a money-making project, consider this idea. The Schultz Company, St. Louis, Missouri, makes a special half-price offer to schools, universities, botanical gardens and other non-profit organizations on their Schultz Instant® ultra high purity liquid and dry fertilizers. The offer, good in the continental United States only, is for use, demonstration or fund raising purposes, and is available to approved horticultural, educational, religious or charitable non-profit organizations with the understanding that the fertilizer will not be resold to dealers, and the profit made by any sales will be used for the benefit of the organization. There is a minimum shipment of \$100.00. Orders can be made in case lots only, and delivery is free. For more information on this special offer phone or write Jean Jones, Public Relations Department, Schultz Company, 11730 Northline, Maryland Heights, St. Louis, MO 63043; the toll-free phone number is (800) 325-3045.

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