

# AMERICAN HORTICULTURIST

NEWS EDITION—MARCH 1983

## River Farm Notes

Enough of winter and iced day-dreams! As I write this column on a cold January afternoon I prefer to conjure up images that accompany warmer seasons—specifically two of last fall's plantings that promise a spectacular summer show.

As you may recall, in the fall of 1981 the last Ideas Garden bed was completed. This bed, 90 feet long by 10 feet wide, was designed as our official American Hemerocallis Society Display Garden. Thanks to the efforts of Carl Orndorff, who, with the American Hemerocallis Society, was instrumental in helping us establish this garden, last summer's visitors to River Farm were rewarded with the first show of blooms from this lovely collection of plants. The American Hemerocallis Society plans to renew our Display Garden every four years through a series of annual replacement plantings—each year one quarter of the plants in the display will be moved to new homes in our perennial borders, and new selections, both old favorites and new cultivars, will take their place in the official display. Last fall brought us to the first scheduled renewal planting, and next season's display promises to be exciting.

The other new fall planting, which shares the daylily bed, is our official American Lily Society Display Garden. The 100 plants assembled in this single bed represent every type and color of lily imaginable, and I look forward to our first blooming season.

These lilies did not simply appear, as if from the flick of Merlin's magic wand. The American Lily Society has worked hard to bring this display to our grounds. As was the case with the American Hemerocallis Society, the American Lily Society has a representative to whom we



Illustration by Elizabeth Ayella

owe much. Mrs. Donna Cutts, long a friend of our Society, is our Merlin, and we cannot thank her enough for the magic she has helped to create.

Thanks to the efforts of such

friends and, of course, Mother Nature, a new growing season will soon usher in yet another magical transformation in our gardens. . . . Enough of winter and iced day-dreams!

—Steve Davis



## 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 Department of Education.

### March 3, 10, 15 and 31

Winter Lecture Series at River Farm

### March 19-22

Spring Symposium, Charleston, South Carolina

### March 22-23

Post Symposium tour of the Cooper River and Brookgreen Gardens

### April 1-24

"China Discovery" tour of the warm provinces of Yunnan, Sichuan (Szechwan) and the Southwest. The prolific rhododendrons and azaleas



The geranium field at the International Horticultural Exhibition in Munich will reach its full splendor in 1983. It is studded with yellow and white daisies and blue geraniums and polemoniums.

are a feature as are the Buddhist cave sculptures at Dazu and sacred Mt. Emei, the site of much botanical research.

### April 14-28

Spring tour of California's private and public gardens, parks and nurseries from San Francisco to San Diego. The itinerary includes visits to Strybing Arboretum, Hearst Castle, Descanso Gardens, a winery and the Getty Museum.

### April 28-May 18

Tour of Japan in the spring featuring a visit to Kyushu, Japan's southern island famous for its rhododendrons and azaleas. Also scheduled are visits to public and private gardens in Kyoto and Tokyo and lovely Hakone National Park.

### April 30-May 7

"Spring in Bermuda" tour of this island's public and private gardens

### 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. A highlight will be the International Horticultural Exhibition in Munich, which takes place once every 10 years. Members will have another opportunity to participate in this exciting tour from September 6-20.

## AMERICAN HORTICULTURIST

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### PUBLICATIONS DIRECTOR

Judy Powell

### EDITOR

Barbara W. Ellis

### ART DIRECTOR

Rebecca K. McClimans

### EDITORIAL ASSISTANT

Jane Steffey

Address all editorial correspondence to:  
The Editor, American Horticulturist  
American Horticultural Society  
Box 0105  
Mount Vernon, Virginia 22121

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Member of Society of National Association Publications

## Membership Invited to Submit Board of Directors Nominations

It is time to begin thinking about nominations for the Society's Board of Directors election scheduled for the Annual Meeting in Philadelphia, September 14-18, 1983. AHS President Nat Dane has appointed a Nominating Committee for 1983. It consists of Mrs. Edward C. Sweeney, Chairman, Mr. Richard J. Hut-

ton and Mrs. Harry J. Vande Kamp.

Members are encouraged to submit names to the Nominating Committee. Suggestions should be accompanied by resumes detailing the candidate's horticultural and/or professional interests, and should be addressed to the Nominating Committee in care of the Society.



## 1983 Awards Nominations Sought

Members are invited to recommend candidates for the Society's 1983 awards, to be presented at the Society's Annual Meeting in Philadelphia, September 14-18, 1983. The Awards and Citations Committee will meet soon to nominate individuals and welcomes suggestions from the general membership. They will be determining a roster of candidates for the Liberty Hyde Bailey Medal, the G. B. Gunlogson Award and the seven Citation awards.

The Liberty Hyde Bailey Medal is the highest award the Society can bestow on an individual. Past recipients include such notable horticulturists as Dr. Donald Wyman, author of *Wyman's Gardening Encyclopedia*; the late David Burpee, president of W. Atlee Burpee Company, Inc.; and Alfred Byrd Graf, author of *Exotica* and the *Exotic Plant Manual*. To qualify for this prestigious award an individual must be a resident of the North American Continent and must have made significant contributions in at least three of the following areas of

horticultural activity: teaching, research, writing, plant exploration, administration, art, business and leadership.

The G. B. Gunlogson Award is given for the creative use of new technology to make home gardening more productive and enjoyable. A recent recipient, Dr. Calvin Lamborn, was the developer of the 'Sugar Snap' pea, the most important breakthrough in vegetable breeding in years.

Citations are awarded to individuals, firms or institutions who have accomplished something unusual and of national importance in one of the following seven aspects of horticulture: scientific, commercial, professional, amateur, teaching, landscape architecture and horticultural writing.

If you would like to suggest nominations for any of these categories, please forward the name(s) of your nominee(s) as well as pertinent biographical information to Ms. Carolyn S. Marsh, in care of the Society, no later than May 31.

## CCC Alumni Group Formed

The National Association of Civilian Conservation Corps Alumni (NACCCA) is trying to locate about two million potential members who served in the Civilian Conservation Corps (CCC) during the 1930's and 1940's. A national organization dedicated to reviving the comradeship and preserving the history and accomplishments of the CCC, the NACCCA plans, through its national headquarters, state chapters and individual members, to organize projects and programs designed to help solve the problems of both young and senior Americans and problems related to the environment and natural resources.

Membership in the NACCCA is open to individuals associated with the original CCC (1933-1942), as well as members of similar organizations such as the YCC, YACC, California Conservation Corps and other state organizations patterned after the CCC. For more informa-

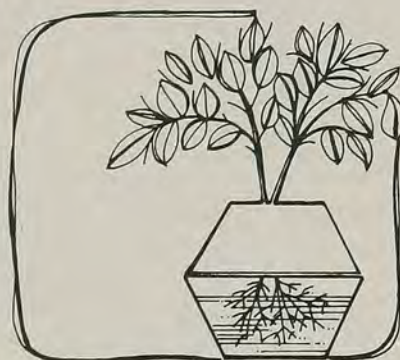
tion about the NACCCA write or call the National Association of Civilian Conservation Corps Alumni, Redstone Building, Suite 318, Loehmann's Plaza, 7245 Arlington Boulevard, Falls Church, VA 22042, (703) 573-3883.

## Members Receive Living Wall Discount

Society members are now able to purchase Living Wall<sup>TM</sup> gardens at a 10 percent discount. Living Walls<sup>TM</sup> were featured in the May, 1982 issue of *American Horticulturist* news, and were one of the most popular aspects of the Ideas Garden display at River Farm this past season. For more information, a price list or to place an order write the American Horticultural Society, Att: Barbara Gray, PO Box 0105, Mount Vernon, VA 22121.

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## Dumbarton Oaks

### Stanley Smith Garden Internship

Applications are invited for a Garden Internship, funded by the Stanley Smith Horticultural Trust and open to men and women, of any nationality, not over 25 years of age who have demonstrated an interest in gardening, horticulture, or botany and who plan to become professional gardeners, preferably in private gardens. The intern will work for one year in the gardens at Dumbarton Oaks, gaining experience in various aspects of gardening and in the problems of managing a large garden. They will also have access to the Garden Library.

Applications should be addressed to the Director, Dumbarton Oaks, Washington, D.C. 20007, and be accompanied by a curriculum vitae, a copy of the high school and/or college record, and two letters of recommendation addressed specifically to the advantages to the applicant of working at Dumbarton Oaks. The appointment will be made by the Director of Dumbarton Oaks acting in consultation with Advisor for the Gardens and the Superintendent of Gardens and Grounds. If necessary, interviews will be scheduled. The appointment will be for one year from September 1, 1983. The stipend will be \$11,000.

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April 15, 1983

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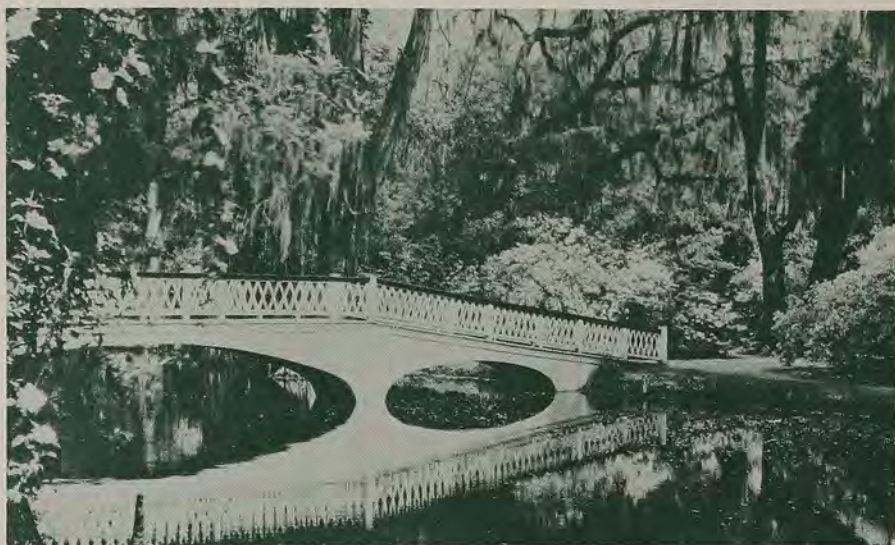
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## Come Join Us in Charleston!



Magnolia Plantation and Gardens, famous for its spring displays of azaleas and camellias, will be one of the highlights of the Charleston Symposium.

Last call for reservations for the Society's Spring Symposium in Charleston, South Carolina—hotel space is limited.

Make your air travel reservations by calling Eastern Airlines' special Convention Desk weekdays from 9:00 a.m. to 8:00 p.m. The toll-free number is (800) 327-1295, Florida residents dial (800) 432-1217. Eastern will make reservations for you at discounts of up to 30 percent on their own coach flights, or without discounts on another airline of your choice. Purchase your tickets from your local travel agent, any Eastern office, or ask Eastern to mail them to you along with an invoice.

You will be staying at the Mills House Hotel, which is convenient to Charleston's extensive historic restoration district. We think the accommodations are superb because they

will allow you to enjoy the contrast between the bustle of this colorful city with its charming walled gardens, period houses and scenic harbor and the elegant, formal gardens of nearby lowland plantations—many of which you'll be seeing. Lectures, the Spring Symposium Banquet, garden tours and a chance to meet some of your fellow members promise to make this Charleston visit a memorable one.

For more information on the Society's Spring Symposium in Charleston, or the two-day post symposium tour of private plantations on the Cooper River and the Brookgreen Sculpture Gardens, see the January issue of *American Horticulturist* news or write or call the Society's Department of Education, American Horticultural Society, PO Box 0105, Mt. Vernon, VA 22121, (703) 768-5700.

## Member Discount at Washington Hotel

AHS members planning to visit Washington, D. C. in the coming months will want to remember a new membership benefit—discounts at the Ritz Carlton Hotel (formerly The Fairfax). The Ritz Carlton is a small, elegant hotel located near the Dupont Circle subway station, providing easy access to the U. S. Botanical Garden, the museums, monuments, National Airport and Union Station. The discount rate of \$75 for

a single or double room, available on weekends only on a space available basis, is one-half the regular rate for a double room.

To take advantage of these rates call or write Richard Lang, Reservations Manager, Ritz Carlton Hotel, 2100 Massachusetts Avenue, N.W., Washington, DC 20008, (202) 293-2100 and identify yourself as a member of the American Horticultural Society.



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### CLIMBERS & WALL PLANTS—Peter Rose

Dress up your gardens, homes, fences, trellises, patios and other sundry supports with the enchanting colors and effects obtained by climbing plants. Practical advice on cultivation, growing, pruning, training, propagation, pests and disease control is complemented by 16 pages of full-color photographs. Photos that capture the beauty of 48 magnificent climbers and wall plants on arbors, brick walls, and dramatic park pergolas. Descriptions of the wide range of plants available include the favorite clematis, climbing roses and wisteria. So no more claiming unfamiliarity or ignorance about climbing plants. This comprehensive horticulturist's handbook will teach every interested gardener how to garland their surroundings with excitement and breathtaking beauty. 160pp. \$17.95 retail, \$14.00 to members of AHS



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From artichokes to zucchini, roses to peonies, and basil to oregano, there are hundreds of tips and ideas in this series on plotting and planning a garden, how to get color all year long, how to get the best from the soil and eliminate pests, how to grow your own tastier, healthier and cheaper vegetables than the store bought ones, and how to enhance your cooking with tasty herbs you grow, cut and dry yourself. This is a series you won't want to do without when you realize that in addition these gardening books are:

- \*Authoritative
- \*Compact
- \*Colorful
- \*Informative
- \*Interesting
- \*Unbeatable Values

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(5 1/2" square)  
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\$3.95 retail, \$3.50 to members of AHS.



### THE COMPLETE GUIDE TO WATER PLANTS

—Helmut Muhlberg

At last! Here is a book which explains how to create the remarkable world of aquatic plants in your own home aquarium. The cultivation, anatomy, physiology and propagation of these strange and beautiful plants is given, along with all the well-known species that have been successfully cultivated in fresh water. Over 50 illustrations, plus 221 photos—109 of them in color—appear throughout this comprehensive reference book, making this a true stimulant for every culturist wanting to expand the scope of his hobby. 391 pp. \$12.95 retail, \$10.50 to members of AHS.



### THE ILLUSTRATED REFERENCE ON CACTI AND OTHER SUCCULENTS IN 5 VOLUMES—Edgar & Brian Lamb

This encyclopedic survey of the world's succulents provides a means of fast and easy recognition of these fascinating plants—found in such places as Mexico, Arizona, South Africa, the Canary Islands, South America, and even England! The talented father and son team of Edgar and Brian Lamb cultivate all the plants included in this series in their internationally known "Exotic Collection" in southern England, and are also responsible for the magnificent photographs taken of each species (over 1,300 photos exist in the series with 400 of them in splendid full color). This informative collection is easy to understand for the novice hobby grower, but comprehensive enough for the professional botanist as well. Each volume 261–310pp. \$20.95 retail, \$16.20 to members of AHS.



### ORCHIDS AND THEIR CULTIVATION—David Sander

This book clears up the old fallacy that orchids are an expensive and at best, chancy hobby requiring special houses and special treatment for successful growth. This second largest group of flowering plants, the orchid family, is far simpler and less exacting to cultivate than many other plants, and within limits, they will stand actual neglect. So have no fear! This fully informative and updated easy reference book will provide you with excellent accounts of the history, general cultivation, propagation, and fertilization techniques of orchids, including chapters on:

- \*seed raising
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- \*how to deal with pests
- \*collecting and importing orchids
- \*greenhouse construction and automation

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- \*a calendar of monthly orchid activities
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### ORDER FORM

Mail prepaid orders to the attention of Barbara Gray, American Horticultural Society, Mount Vernon, Va. 22121. Virginia residents, add 4% sales tax. Make checks payable to the American Horticultural Society.

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_____	THE ILLUSTRATED REFERENCE ON CACTI AND OTHER SUCCULENTS IN 5 VOLUMES	
_____	Vol 1 \$16.20	Vol 3 \$16.20
_____	Vol 2 \$16.20	Vol 4 \$16.20
_____	Vol 5 \$16.20	
_____	ORCHIDS AND THEIR CULTIVATION	\$15.50

#### ADDITIONAL BOOKS OF INTEREST

QTY	TITLE	**DISCOUNT PRICE TO AHS MEMBERS
_____	THE HERBALIST	\$10.30
_____	ORCHIDS IN COLOR	\$10.00
_____	POCKET ENCYCLOPEDIA OF ROSES IN COLOR	\$8.20
_____	PONDS AND WATER GARDENS	\$6.00
_____	RHODODENDRONS AND AZALEAS	\$13.50
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# GARDENER'S DATELINE

## FEBRUARY 26-MARCH 6

**Central Ohio Home and Garden Show**  
Multipurpose Building, Ohio State Fairgrounds, Columbus, Ohio

Hours: Monday through Friday 4 p.m. to 10 p.m.; Saturday 1 p.m. to 10 p.m.; Sunday 1 p.m. to 7 p.m.

Information: Hart Productions, Ind., 1172 West Galbraith Road, Cincinnati, OH 45231

## FEBRUARY 26-MARCH 6

**Southern Living Show**  
Charlotte Merchandise Mart, 2500 E. Independence Boulevard, Charlotte, North Carolina

Hours: Monday through Saturday 10 a.m. to 9:30 p.m., Sunday 10 a.m. to 6 p.m.

Admission fee: Adults \$3.50

## 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

## MARCH 3, 10, 15, 31

**Winter Lectures at River Farm**

Information: Call or write the Society's Department of Education

## MARCH 4-13

**Cleveland Home and Flower Show**

Public Hall and Convention Center, Cleveland, Ohio

Hours: Opening Friday 4 p.m. to 11 p.m.; Monday through Thursday 11 a.m. to 10 p.m.; Friday and Saturday 11 a.m. to 11 p.m.; Sunday 11 a.m. to 8 p.m.

Admission fee: \$4.

Information: Edward J. Baugh, Managing Director, 636 St. Clair Avenue, N.W., Cleveland, OH 44114, (216) 621-3145

## MARCH 5-13

**Cincinnati Home and Garden Show**

Cincinnati Convention-Exposition Center, Cincinnati, Ohio

Information: Hart Productions, Inc., 1172 West Galbraith Road, Cincinnati, OH 45231

## MARCH 5-13

**Long Island Flower Show**

George E. Nold Exhibit Hall, State University of New York, Farmingdale, Long Island, New York

Hours: 11 a.m. to 10 p.m.; show closes at 8



p.m. on last Sunday, March 13

Information: Frank S. BonGiorno, 211 Burrs Lane, Dix Hills, NY 11746, (516) 643-8480

## MARCH 5-13

**25th Annual Indiana Flower and Patio Show**  
Indiana State Fairgrounds, Exposition and Expo-Pavilion Buildings, Indianapolis, Indiana

Hours: Monday through Thursday 11 a.m. to 9 p.m.; Friday and Saturday 11 a.m. to 10 p.m.; Sunday 10 a.m. to 6 p.m.

Information: PO Box 20189, Indianapolis, IN 46220

## MARCH 6-13

**Philadelphia Flower Show**

Philadelphia Civic Center, Philadelphia, Pennsylvania

Hours: Monday through Saturday 10 a.m. to 9 p.m.; Sunday 10 a.m. to 6 p.m.

Admission fee: Adults \$5.50, children under 12 \$2.75

Information: Pennsylvania Horticultural Society, 325 Walnut Street, Philadelphia, PA 19106, (215) 625-8250

## MARCH 9-13

**Washington Flower and Garden Show**

Washington Convention Center, Washington, D.C.

Information: TJS Productions, 7668-B Fullerton Road, Springfield, VA 22153, (703) 569-7141

## MARCH 10-13

**Metropolitan Louisville Home, Garden and Flower Show**

Kentucky Fair and Exposition Center, Louisville, Kentucky

Hours: Thursday and Friday 6 p.m. to 11 p.m.; Saturday 1 p.m. to 11 p.m.; Sunday 1 p.m. to 9 p.m.

Information: Tony Short, Show Manager, The Home Builders Association of Louisville, 1800 Arthur Street, Louisville, KY 40217, (502) 637-9737

## MARCH 11

**Dinner lecture at Longwood Gardens, "The Ill-Tempered Garden"**

Speaker: Frederick McGourty  
Longwood Gardens, Kennett Square, Pennsylvania

Fee: \$22, pre-registration only

Time: 7 p.m.

Information: Continuing Education, Longwood Gardens, Kennett Square, PA 19348, (215) 388-6741 Ext. 516

## MARCH 11-13

**Metropolitan Miami Flower Show**

Tropical Park, Bird Road and the Palmetto Expressway, Miami, Florida

Information: Heather Molans, Metropolitan Miami Flower Show, 6171 S.W. 79th Street, South Miami, FL 33143

## MARCH 12-20

**39th Buffalo Home and Garden Show**

Buffalo Convention Center, Buffalo, New York

Information: Buffalo Home and Garden Show, Suite 1530, Statler Building, 107 Delaware Avenue, Buffalo, NY 14202, (716) 852-2006

## MARCH 12-20

**New England Spring Garden and Flower Show**

Bayside Exposition Center, 200 Mount Vernon Street, Boston, Massachusetts

Information: Betty Levine, Flower Show Secretary, Horticultural Hall, 300 Massachusetts Avenue, Boston MA 02115, (617) 536-9280

## MARCH 17-20

**Central Missouri Home, Lawn and Garden Show**

Hearnes Multipurpose Building, Columbia, Missouri

Hours: Thursday and Friday 2 p.m. to 10 p.m.; Saturday noon to 10 p.m.; Sunday Noon to 6 p.m.

Information: Page Enterprises, Inc., Route 3, Box 12, Gravois Mills, MO 65037, (314) 372-2277



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# HORTICULTURAL EXPLORATIONS



The American Horticultural Society proudly presents its summer Explorations. They are especially designed and exclusive. We visit both private and public gardens. In addition, local escorts give us highlights of history, scenery and culture. These programs are suitable for all levels of horticultural interest.

## CANADIAN ROCKIES (July 16 - 30)

A new itinerary to explore the native alpine plants and wildflowers of the Rockies—Calgary, the great national parks of Banff, Lake Louise, Jasper—with beautiful mountain scenery. In western Canada see the fine developed gardens of Vancouver such as Queen Elizabeth and Van Dusen Botanic Garden. Also quaint Victoria and Butchart Gardens. Visit private gardens, greenhouses, local flower growers.

## SOUTH AFRICA (September 9 - 29)

South Africa is a naturalist's paradise with an abundance of flora and fauna including 150 species of *Protea*. We see it at the peak of spring bloom. Highlights include the Darling Wild Flower Show, the orchid house at Durban Botanical Gardens, a stay in Kruger Game Reserve to see the wild animals and the world-famous Kirstenbosch Botanic Garden. Also visit private gardens.

Other horticultural explorations available in 1983 are: Bermuda (April 30-May 7), Spring Japan (April 28-May 18), Spring and Fall England (May 12-26 or Sept. 8-22), Germany and IGA '83 (May 26 - June 9 or Sept. 6-20), Fall New England (Oct. 3-17), Fall Orient (Nov. 1-24).

For any of these programs, please write for your free brochure to Mrs. Dorothy Sowerby, American Horticultural Society, Box 0105, Mt. Vernon, VA 22121. OR telephone 1-703-768-5700.

## MARCH 19-22

### American Horticultural Society Spring Symposium

Charleston, South Carolina

Information: See the January, 1983 issue of *American Horticulturist* news or call or write the Society's Department of Education.

## MARCH 20

### Rhododendron Species Foundation Early Blooming Species Walk

Federal Way, Washington

Hours: 1 p.m. to 5 p.m.

Admission: \$2 per person, children under 12 free

Information: Rhododendron Species Foundation, PO Box 3798, Federal Way, WA 98003, (206) 927-6960, 838-4646. See also the article in the August, 1981 issue of *American Horticulturist*. Plants propagated from the garden's collections will be on sale during these hours.

## MARCH 26

### Dinner lecture at Longwood Gardens, "Sculpture in the Garden: The Search for Nirvana"

Speaker: Donald Claude Noel

Longwood Gardens, Kennett Square, Pennsylvania

Fee: \$22, pre-registration only

Time: 7 p.m.

Information: Continuing Education, Longwood Gardens, Kennett Square, PA 19348, (215) 388-6741 Ext. 516

## MARCH 27-31

### Association of Interpretive Naturalists 1983 National Workshop

Purdue University, West Lafayette, IN

Information: Peggy Van Ness, AIN, 6700 Needwood Road, Derwood, MD 29855, (301) 948-8844

## APRIL 1-24

### AHS Tour of Southwest China

Information: See page 2 of this newsletter

## APRIL 3-MAY 29

### Rhododendron Species Foundation Primary Blooming Season Sunday and Wednesday Walks

Federal Way, Washington

Hours: Sundays 1 p.m. to 5 p.m.; Wednesdays 10 a.m. to 3 p.m. Wednesdays guided tours at 10 a.m.

Admission: \$2 per person, children under 12 free

Information: See March 20, RSF Early Blooming Species Walk.

## APRIL 7-9

### 28th Annual American Daffodil Society Convention and National Show

Williamsburg, Virginia

Information: Mrs. H. deShields Henley, 115 Conifer Road, Newport News, VA 23606

## Colonial Williamsburg



Williamsburg Garden Symposium participants will enjoy spring flower displays like those of the Powell-Waller House garden.

## APRIL 8-24

### Dogwood Arts Festival

Knoxville, Tennessee

Information: Dogwood Arts Festival, 203 Fort Hill Building, Knoxville, TN 37915, (615) 637-4561

## APRIL 14-28

### AHS Tour of California

Information: See page 2 of this newsletter

## APRIL 17-21

### 37th Annual Williamsburg Garden Symposium

Williamsburg, Virginia

Information: See the January, 1983 issue of *American Horticulturist* news or write the Colonial Williamsburg Foundation, Mrs. Trudy S. Moyles, Registrar, PO Drawer C, Williamsburg, VA 23187

## APRIL 23

### Berry Botanic Garden Rare Plant Sale

Western Forestry Center, Canyon Road, Portland, Oregon

Hours: Noon to 4 p.m.

Information: Mary Hoffman, 19766 South Impala, Portland, OR 97045, (503) 656-1575, 1911

## APRIL 23-MAY 1

### Historic Garden Week in Virginia

Information: Send \$1 for *Historic Garden Week in Virginia Guidebook* to The Historic Garden Week Headquarters, 12 East Franklin Street, Richmond, VA 23219, (804) 644-7776

## APRIL 28-MAY 18

### AHS Tour of Japan

Information: See page 2 of this newsletter

## APRIL 28-OCTOBER 9

### 4th International Horticultural Exhibition Munich, West Germany

## APRIL 29-MAY 1

### Azalea Society of America 5th Annual Convention

Washington, D.C.

Information: Dr. Charles H. Evans, 9233 Farnsworth Drive, Potomac, MD 20854



#### APRIL 30

Arnold Arboretum Arbor Day Celebration  
Jamaica Plain, Massachusetts

Information: The Arnold Arboretum of Harvard University, Att: Kate Nixon, The Arbor Way, Jamaica Plain, MA 02130, (617) 524-1718

#### APRIL 30-MAY 7

AHS Tour of Bermuda

Information: See page 2 of this newsletter

#### 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

#### MAY 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) 227-4252

#### MAY 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

#### MAY 12-26

AHS Spring Trip to England and the Chelsea Flower Show

Information: See page 2 of this newsletter

#### MAY 15

Lilac Sunday at Arnold Arboretum

Jamaica Plain, Massachusetts

Information: The Arnold Arboretum of Harvard University, Att: Kate Nixon, The Arbor Way, Jamaica Plain, MA 02130, (617) 524-1718

#### MAY 15-21

African Violet Society of America, Inc., 37th Annual Convention

Red Carpet Hotel, Milwaukee, Wisconsin

Information: Mrs. Barbara Zimmerman, Registration Chairman, W238 S3712 Big Bend Road, Waukesha, WI 53186, (414) 542-0616

#### MAY 25-27

Royal Horticultural Society Chelsea Flower Show

Chelsea, London, England

Information: The Royal Horticultural Society, Vincent Square, London, England, SWIP 2PE, Telephone 01-834-4333

#### 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

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**AFRICAN VIOLETS-GESNERIADS**-Free pamphlets, "Helpful Hints with African Violets" and "Gesneriad Growing Suggestions" available by sending stamped, addressed envelope to GESNERIAD-SAINTPAULIA NEWS, Box 549, Dept. AH, Knoxville, TN 37901.

African Violet Starter Plants, \$18.00 per dozen postpaid all different and labeled. Peggy's African Violets, 1106 Klondale Ave., Kannapolis, NC 28081.

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THE EXOTIC PLUMERIA (FRANGIPANI) by Elizabeth H. Thornton covering cultivation, propagation and care of plumerias. Send \$4.50 to Plumeria Specialties, 2121 San Felipe, #111, Houston, TX 77063.

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CACTUS/SUCCULENT PLANT and seed catalog, \$1.00. MESA FLORA, Star Route 1, Box 1047, Yucca Valley, CA 92284.

## CARNIVOROUS PLANTS

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Bittersweet Hill Nurseries, Rt. 424 & Governor's Bridge Road, Davidsonville, Md. is presenting a GALA HERB WEEKEND, March 19-20. Free Herb Garden Designs, Exhibits, Demonstrations, Door Prizes, Display Herb Garden Tours and a special sale on favorite Herb Plants. Public Invited! (301) 798-0231.

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**POSITION WANTED**

Married couple wishes gardening position on estate with greenhouse. Both Sandhills Community College horticulture grads. with grounds maintenance and greenhouse experience. Resume/References. Paul M. Schmidt, 2812 Robinhood Road, Greensboro, NC 27408.

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# How to Measure Levels of Toxicity in Plant Soils

An ordinary moisture meter, commonly found in hardware and plant stores, can be used to measure fertilizer and other chemical salts in the soil. With a few minor modifications these devices can actually measure concentrations of these materials up to 400 parts per million (ppm), far above the levels that would promote optimum growth in even most mature plants. Since millions of seeds, seedlings and cuttings have been killed by toxic chemicals contaminating their growing or rooting medium, gardeners can use these instruments to improve their success rates when propagating plants.

Many of the plant deaths caused by chemical salts are due to excessive fertilizer levels, but toxic chemicals have even been found in peat. Plants killed by high fertilizer levels actually die of thirst. When the level of fertilizer or other chemical salts in the soil exceeds the concentration of salts in the roots of a plant, water is drawn out of roots and into the medium, causing wilting and, if the situation is not corrected, eventual death.

Although called moisture meters, these devices actually measure electrical current produced by chemical salts dissolved in water when the meter's probe (which generally consists of the two dissimilar metals zinc and steel) is placed in the soil. Up to a point, as the chemical content increases, so does the reading.

You can demonstrate this by placing a moisture meter in a glass of distilled water and then slowly adding liquid fertilizer, salt, vinegar or other chemicals to the glass, drop by drop. Distilled water will not register on the meter, but the reading will slowly increase as these substances are added.

This demonstration also illustrates that a proper reading of salts in the soil is possible only when you use water that is as pure as possible. Otherwise you will be reading the salt content of the water as well as the soil. Set out heavily chlorinated water several days in advance to allow time for the chlorine to evaporate. Distilled water, water from a dehumidifier and uncontaminated rain water are all good sources.

Ordinary moisture meters will measure concentrations up to about 100 ppm. (This is equivalent to  $\frac{1}{2}$  teaspoon of table salt per six gallons of distilled water, if you want to test your meter.) By adapting the meter as shown in the accompanying sidebar, you can measure up to 400 ppm by pushing the button installed in the side of the meter.

To test the salt level in peat or any other growing medium, thoroughly saturate it with pure water, place the probe in the medium and take the very first readings that appear. After a few seconds a film will build up on the metal probe, and this will cause the readings to drop off. Be sure to clean and dry the metal probe promptly, otherwise readings will not be accurate. Also, don't leave the metal probe in the medium any longer than necessary because electrical currents will cause

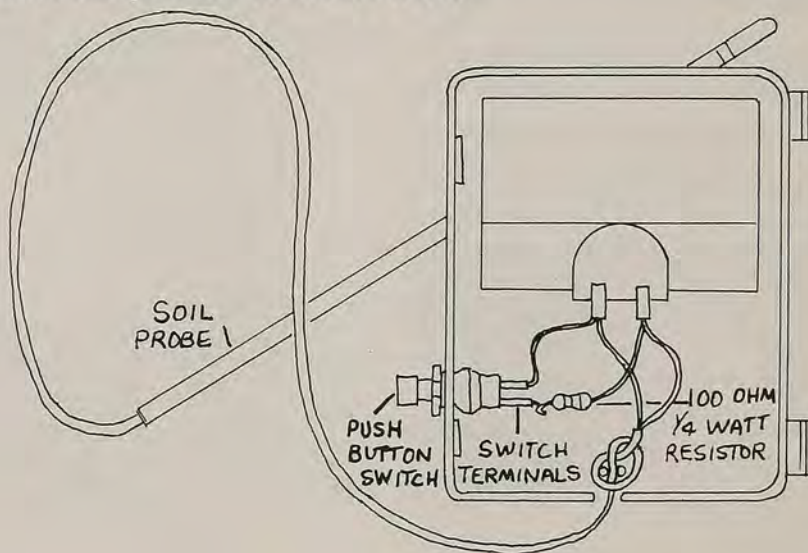
the tip to erode.

Peat or another similar growing medium is probably contaminated if the reading is above six or seven on the regular scale (60 or 70 ppm). Flush it out thoroughly with pure water before germinating seed. Mature plants can withstand higher levels than seedlings or cuttings.

If you consistently water your potted plants with pure water, use the meter to monitor fertility and salt levels in the soil. Record keeping will help you keep track of the fertilizer levels that work best for each plant. If you only use soilless media, most of the reading on your meter will be caused by the fertilizers you have added.

—Adapted from an article by John G. Lofthouse, *American Rhododendron Society Journal*, Summer, 1982.

## How to Adapt Your Moisture Meter



With a few minor changes a moisture meter can be adapted to measure up to 400 ppm of salts in a growing media. Pry the back of the meter off with a sharp knife, drill a small hole in the side of the front part of the meter and install a Miniature Push Button Switch (Radio Shack Catalogue # 275-1547). Wire the switch as shown in the diagram, using a 100 OHM  $\frac{1}{4}$ -watt resistor (Radio Shack Catalogue # 271-1311) to connect one of the sides.

You will need a small piece of wire to connect the other terminal of the switch to the meter. Glue the back of the meter back on when you have finished wiring.

A small card taped to the front of the meter will remind you of the different readings you can obtain. The full scale of the normal meter is about 100 ppm; with the button depressed the full scale is about 400 ppm.



## USDA Asian Lab Seeks Enemies of U.S. Pests

Many of this country's most serious pest insects are not native to the United States, and, surprisingly, most pose no problem in their native lands. These insects left their natural enemies, the predators and parasites that normally control their populations, behind when they were introduced to this country.

Reuniting these exotic pests with their natural enemies is the goal of Agricultural Research Service (ARS) entomologist Robert W. Carlson and the Asian Parasite Laboratory in Seoul, Korea. The Asian Parasite Lab is one of four overseas ARS facilities that discover, study and export the natural enemies of these insects for use here at home.

Insects that feed on food crops are not Carlson's only targets. Red pine scale (*Matsucoccus resinosae*) and hemlock scale (*Fiorinia externa*), which spread disease as well as damage trees directly, are also Asian Parasite Lab priorities, as is the Japanese beetle (*Popillia japonica*).

Equally high on the exotic pest hit-list are the pear psylla (*Psylla pyricola*), a plant louse threatening fruit in the Northwest, and the gypsy moth (*Lymantria dispar*). According to Carlson, the moth is widespread in Korea but is not a pest in that country. By collecting the moths from the wild, Carlson hopes to learn why. Last spring, he and assistants Kim Chung-Je and Han Ho-Yeon collected the eggs, larvae and pupae of the moth. What they really bagged, however, were the gypsy moth's many natural enemies. Among the apparent natural enemies collected were: tachinid flies; chalcidoid, ichneumonid and braconid parasitic wasps; and a previously unidentified species of pyralid moth whose larval form is a suspected predator of gypsy moth eggs.

Once Carlson preliminarily identifies, studies and rears large numbers of the most promising parasites and predators he sends them by air to the ARS Beneficial Insects Research Laboratory in Newark, Delaware. Here the insects are quickly uncaged and placed in quarantine to prevent their escape until their own parasites are eliminated. At Newark, the natural enemies are further evaluated and/or sent to other state and Federal labor-

atories throughout the country.

Carlson's work does not end with the capture and export of these biological control agents. The host parasite/predator relationship is complex, influenced by many physiological, behavioral and ecological variables. Great genetic variation often occurs over an insect's geographic range, so in addition to exporting natural enemies to the United States, Carlson and his counterparts at ARS facilities in Buenos Aires, Rome and Sevres, France must study insect behavior and ecology as well. Host ranges, biologies, distribution, rearing and evaluation techniques are all equally important to the successful introduction of a biocontrol agent.

By exploiting these relationships, a good natural enemy may become a great one. According to Carlson, *Pediobius foveolatus*, an Indian wasp, is a highly effective control of the Mexican bean beetle. The wasp lays its eggs in the beetle's larvae, and when the eggs hatch, the wasps' larvae eat the beetle. Unfortunately, in most parts of the United States the wasps cannot survive our winter. Each spring they must be reared in large numbers and released again—an expensive, time-consuming process. If Carlson can discover how this wasp overwinters in its natural Asian habitat, it might become a year-round resident of the United States. A one-time release of the wasp in conjunction with other control methods could be enough to send the bean beetle packing.

The Asian Parasite Laboratory is co-sponsored by the South Korean government. In return for laboratory and greenhouse space, ARS provides the Korean Office of Forestry with technical assistance, including access to the computer-based literature services of the U. S. National Agricultural Library in Beltsville, Md., and the identification of insect and mite specimens by the Systematic Entomology Laboratory of Beltsville's Insect Identification and Beneficial Insect Introduction Institute. The agreement may become a model for U. S. cooperation in biological control research with other nations.

—Andrew Walker  
Agricultural Research Service

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## New Seed Saving Method: An Update

Further investigation into the new seed saving method reported in January's *American Horticulturist* news has brought to light another method for using polyethylene glycol to improve the performance of old and damaged seed as well as specific instructions on how to use it.

Lowell W. Woodstock, the plant physiologist at the U. S.D.A. Seed Research Laboratory in Beltsville who conducted the experiments with polyethylene glycol (PEG), actually soaked (not just coated) seed in a 30 percent solution of 6,000 molecular weight PEG and water (one part PEG to two parts water). When the seed began to take up water he transferred it to moist paper towels for germination.

PEG can also be used to pretreat seed, according to Woodstock, and this treatment seems to improve the way the germinating seed handles environmental stress. Soybeans wrapped in paper towels moistened

with a 30 percent solution of PEG and held at 59°F (15°C) for one week germinated more rapidly and more uniformly than untreated seed. British scientists have treated carrot, celery and tomato seed with PEG with good results and have found

the treatment is especially useful in areas where the seed must germinate under cool conditions.

Polyethylene glycol is relatively easy for an individual to purchase from chemical supply companies. To locate one in your area look in the yellow pages or call the chemistry department of your local high school or university.

## New Cold-Hardy Forsythia Available



Gardeners in Minnesota and other areas known for their harsh winters should look for a new cultivar of forsythia at garden centers and nurseries this spring, 'Northern Sun'. A cultivar specifically recommended for areas where the common forsythia, *Forsythia X intermedia*, is not reliably hardy, 'Northern Sun' will produce a spectacular display of clear yellow flowers even following winter temperatures of -30°F.

'Northern Sun' is a hybrid whose parentage includes the Korean species *F. ovata* and, apparently, *F. europaea*. Its flowers appear in late April in the St. Paul area, and each bloom is about three quarters of an inch in length and one inch in width. Mature plants have an approximate height and breadth of eight to 10 feet. 'Northern Sun' should be planted in full sun and will benefit from renewal pruning to keep the plant shorter and more compact. Remove approximately one third of the older stems immediately after flowering to encourage new growth at the base of the plant.

## Plant Cell and Tissue Culture Course

A course consisting of lecture-discussions and laboratory exercises in most aspects of plant cell and tissue culture will be held at The University of Tennessee, Knoxville from August 15 to 26, 1983. This course is designed for persons with a degree in science or experience in plant tissue culture who need a thorough

knowledge of and training in plant cell and tissue culture. The fees for the course will be \$1,050.

For further information please contact Dr. D. K. Dougall, Botany Department, The University of Tennessee, Knoxville, Tennessee 37996, (615) 974-2256.