

AMERICAN HORTICULTURIST

NEWS—NOVEMBER 1980

A Few Words about This Issue . . .

The publication of this issue marks a new beginning for our newsletter. You will note that its name is now *American Horticulturist* news. This change is prompted, in part, by a feeling among many readers that "News & Views" did not adequately describe the subject matter of the newsletter. A more important consideration, however, was our desire to begin accepting advertising in this publication. By designating this newsletter *American Horticulturist* news, we were able to "piggyback" on the permit we have with the post office which allows us to accept advertising in our magazine. Our newsletter has now become, in effect, an edition of the magazine.

Because we hope to draw more and more advertisers to this format, we soon will be able to increase the number of pages of the newsletter, providing you with more information about what is going on in the gardening world. All in all, we are excited about the change, and we hope you will be too.

In this issue you also will find a book order insert. All of these titles have been approved by our editorial committee; some have been reviewed by Gil Daniels in past issues of the magazine. The discount prices are enticing, and we hope you will want to consider many of the titles for your own library or as Christmas gifts for gardening friends.

Be sure to send us your order promptly to ensure Christmas delivery and to take advantage of these low prices. Prices will go up for almost all titles on January 1, 1981.

Memberships in the Society make excellent Christmas gifts for gardening friends. If you would like your recipient to receive the December issue of *American Horticulturist*, please send us your gift order by the first week in November.



River Farm Notes

Hallelujah, the rains have come! This has been a difficult summer for most of our country, and River Farm was no exception. As this column is being written, we are getting our first rain in almost two months. As if this drought were not enough, for much of that same period both of our wells (our only source of water) were almost completely inoperative due to equipment malfunctions. Makeshift efforts and a lot of work did allow us sufficient water for drinking and for irrigating our primary plantings, but many of our secondary plantings suffered greatly. The most visible damage can be seen in our perennial borders, but there is also noticeable damage to the trees and shrubs, the lawns and our ideas garden.

The perennial borders lack their usual late summer color, and if it were not for the spider plants (*Cleome spinosa*) and several other hardy varieties, these beds would be very drab indeed. We simply did not have enough water to satisfy the thirsty coleus, geraniums, marigolds,

impatiens, etc. However, fall crocus is beginning to pop up everywhere, and the chrysanthemums and wind flowers are on the verge of blooming, so all is not lost.

Many of our trees and shrubs, especially those that usually herald the coming of cooler temperatures with fantastic displays of color, are this year prematurely browning and dropping their leaves. Among our favorites here at River Farm are the red maples (*Acer rubrum*), the mockernut hickories (*Carya tomentosa*), the fringe trees (*Chionanthus virginicus*), the flowering dogwoods (*Cornus florida*), the Washington hawthorns (*Crataegus phaenopyrum*), the ginkgos (*Ginkgo biloba*), the tulip poplars (*Liriodendron tulipifera*), the sassafras (*Sassafras albidum*) and the winged euonymus (*Euonymus alata*), but their usual extraordinary color is not to be seen this year. Should the rains continue we may still have a fine display, but it is doubtful that it will compare to years gone by.

For the last two months our lawns have given the appearance of desert sands; even the weeds had given up, or so we thought until today. Several hours of rain already have shown results. We can see the greening, and we can almost hear the growing. It's a glorious experience.

We had hoped, by this time, to have our ideas garden absolutely brimming with color. Unfortunately, our lack of water made it necessary to keep a portion of our beds unplanted. The ideas garden dahlias have been exquisite, however, and the source of many compliments from our visitors. Also, the All-America Selections vegetable garden has produced quite well, and our iris plantings are healthy and ready for spring. But what could have been, what should have been, will have to wait until next year.

There is much to be thankful for, however. Our roses and, as already mentioned, our dahlias, give us wonderful color. As one visitor commented recently, they are themselves well worth a trip to River Farm. Our drought has been broken, our losses

have not been high, and we are now planting for spring and a new year. Next year will be extraordinary. There will be no droughts and no broken water pumps; there will, instead, be a River Farm bathed in glorious color from early spring to late fall. Of this we are confident, so make plans now for a 1981 visit.

1981 Seed Program Preview

Before we know it, spring will be upon us, so we feel this is quite an appropriate time to make mention of our annual free seed program. Each year we offer a list of seed from which our members may select those varieties they wish to grow in their own homes or back yards.

There will be several changes from previous programs, however, all due to your efforts. If you will recall, last year we solicited your help in evaluating the varieties that we offered; we also asked for ideas and suggestions to help us improve our seed program. Your input has helped us in both areas.

AMERICAN HORTICULTURIST

VOLUME 59—NUMBER 6

EDITOR

Judy Powell

ASSOCIATE EDITOR

Barbara Ellis

EDITORIAL ASSISTANT

Jane Steffey

TAXONOMIST

Dr. Frederick G. Meyer

Address all Society correspondence to:

American Horticultural Society
Mount Vernon, Virginia 22121

Address all editorial correspondence to:

The Editor, American Horticulturist
American Horticultural Society
Mount Vernon, Virginia 22121

AMERICAN HORTICULTURIST is published monthly by the American Horticultural Society, 7931 East Boulevard Drive, Alexandria, Virginia 22308. 703-768-5700.

Dues for membership in the Society start at \$20 per year, \$12 of which is for AMERICAN HORTICULTURIST.

The American Horticultural Society is a non-profit organization. Contributions are deductible for income tax purposes.

ISSN 0096-4417. Second-class postage paid at Alexandria, Virginia and at additional mailing offices. **Postmaster:** Please send Form 3579 to AMERICAN HORTICULTURIST, Mount Vernon, Virginia 22121.

Member of Society of National Association Publications

Our 1981 program will feature a larger, more diverse selection of seed than was offered last year. It will also commence at an earlier date so that seed will be in your hands in ample time for spring planting or transplanting. Thanks to your help, our 1981 seed program should be very exciting.

Remember, this is a free service that we provide for you. Our only goal in this project is to promote horticulture, so when our selection sheets reach you this winter, take advantage of this program and experience the joy of growing plants from seed. Even if you don't have room for any more plants, perhaps a friend or relative does. Be sure to join us in the fun, and look for our seed mailing packet after the first of the year.

Put These Dates on Your Calendar . . .

The Society is sponsoring several tours and other events which you should keep in mind when planning vacations and short excursions during the coming year.

Two horticultural tours of special note are our upcoming trips to Baja California and the British Isles. Participants will depart from San Diego March 29, 1981 for their tour of **Baja and the Copper Canyon**, which is said to dwarf our own famed Grand Canyon. The return is scheduled for April 12.

Later in the spring (May 21 - June 2, 1981), members who sign up for our garden cruise are in for a special treat. While experiencing first-class travel the way only a luxury cruise ship can manage (in this case, the *MTS Argonaut*), participants will tour gardens and other points of interest in the **Island World of Great Britain**, including England, Scotland, Wales, Scilly, Mull, Iona and Orkney.

In July, AHS will recapture spring during our **Denver Symposium**. Members are invited to enjoy the beauty of a Rocky Mountain alpine spring with the Denver Botanical Garden as our official host. One event already planned is an all-day trip to lovely Estes Park and the Trailbridge Road, with dinner and entertainment at the Lazy B Ranch. Mark the dates July 14-18, 1981 on your calendar and plan to join us.

One final day for members in the

Washington area to remember: Wednesday, December 17, 1980. On this day River Farm will be sponsoring its annual **Christmas Open House**. Plan to join us for refreshments and a tour from 1:30 to 4:00 p.m.

AHS Announces Awards for 1980

At the 35th Annual Congress in St. Louis in September, the American Horticultural Society presented awards to six individuals who have furthered the cause of horticulture in this country and who the Society wished to recognize for their efforts. Among the recipients is Dr. Mildred Mathias, who received horticulture's most prestigious annual honor, The Liberty Hyde Bailey Medal.



Dr. Mildred Mathias

Dan Cheatham

Dr. Mathias, Emeritus Professor of Botany, University of California at Los Angeles, is the Executive Director of the American Association of Botanical Gardens and Arboreta. As Director, she developed the AABGA

Errata

An error appeared in the September issue of *News and Views*. In the article headed "Deaths Attributed to Plant Fatalities Misleading," we perpetuated an error made by the Society of American Florists in their publication. A poisonous plant was incorrectly identified as gypsum weed. The correct common name of this plant is jimson weed, botanically known as *Datura stramonium*.

North American Diploma in Horticulture.

Presently, she is advisor to the UCLA Extension Office in developing educational programs of horticultural significance. Of special note has been her work on study programs that will lead to certificates in gardening and horticulture, beginning this fall.

Dr. Mathias has published for over 51 years. Among her works is *Checklist of Woody Ornamental Plants of California*, which is a major reference work in the nursery trade there. She has had 173 works catalogued and is the recipient of at least 15 special awards, among them, the *Los Angeles Times* Woman of Achievement Award and the Botanical Society of America Merit Award. Dr. Mathias has traveled all over the world on plant collecting trips. She is considered one of two or three of the world's leading experts on the family Umbelliferae. She also has made major botanical contributions to pharmacological research on native medicines and poisons from tropical forest regions of Africa and South America. She has been further honored by having three plants and/or new genera named for her. UCLA's botanical garden is also named in her honor.



Dr. Calvin Lamborn

Dr. Calvin Lamborn of Twin Falls, Idaho is the recipient of the Society's coveted G. B. Gunlogson Medal, awarded for the creative use of new technology to make home gardening more productive and enjoyable. Its sponsor is Mr. G. B. Gunlogson of Racine, Wisconsin.

The medal was awarded this year

to Dr. Lamborn in recognition of his development of the 'Sugar Snap' pea, the most important breakthrough in vegetable breeding in many years.

Dr. Lamborn produced the 'Sugar Snap' pea after noting a chance, one-in-a-million mutation of the garden pea in test plants at the Gallatin Valley Seed Company where he worked. Its pod walls were twice as thick as those of regular peas. He crossed this mutation with good quality, edible snow peas and the 'Sugar Snap' was the result. *People Magazine* noted in an article last year that the pea has been called "nothing short of sensational" by James Beard.

Citations Also Awarded

There are seven citations which may be given by the American Horticultural Society to an individual, firm or institution which has accomplished the unusual without being accorded proper recognition. These accomplishments must be of national significance. It is important to note that no category is filled if it is deemed there is no qualified applicant.

The categories for the citations are: scientific, commercial, professional, amateur, teaching, landscape architecture and horticultural writing. Three citations were awarded this year in the categories of amateur, scientific and teaching.

The Amateur Citation is awarded to non-professionals who have made significant contributions to horticulture.

Mrs. Bowman Elder, chosen to receive the Amateur Citation, is a founding member of the Indianapolis Garden Club. She was awarded the club's first medal of merit for good horticultural practices and ability as a teacher in 1961. She was the recipient of the Zone 10 Garden Club of America Horticultural Award in 1972 for "recognition of her outstanding achievement in the cultivation of orchids, preservation of native wildflowers and devoted service to her fellow members." She was instrumental in saving the greenhouses at the Indianapolis Museum of Art and having them reopened to function as a teaching tool. She was also instrumental in having the museum grounds designated as the Eli Lilly Botanical Gardens, where a permanent collection of orchids was established.



The Scientific Citation is presented to an individual who has given, through research, something to horticulture that is immeasurably important and different.

Mr. Orlando S. Pride, to whom the Society presented its Scientific Citation, was the recipient of the Gold Medal of the American Rhododendron Society for his pioneering work as a plant breeder and for the production of a race of super-hardy evergreen azalea hybrids. He was also the recipient of the highest award of the American Holly Society for his work in producing the *Grace Ilex opaca* intraspecific cultivars. These are universally acknowledged to be the hardiest American hollies in commerce. In addition, he was named 'Penn State Man of the Year' for his achievements as a plant breeder, landscape architect and efforts to provide, through his nursery, rare plants of quality for the eastern United States.



For his teaching abilities and the influence he has had on the lives of his students, the Society awarded its **Teaching Citation** to Robert H. Rucker, Pro-

fessor Emeritus of Texas A&M University. While with Texas A&M, Dr. Rucker was coach of the university's award-winning intercollegiate flower judging team for 1975 and 1978. Dr. Rucker was also recently honored by the University and its friends upon his retirement with the establishment of a horticultural scholarship in his name.

A registered landscape architect, Dr. Rucker created master plans for nine colleges and universities in the United States including Baylor University. He is also a director of the National Council of State Garden Clubs, Inc. and has the distinction of being its longest serving board member. He was the recipient of the Council's Presidential Citation and is a life member of the National Coun-

HORTICULTURAL TOURS

Upcoming offerings sponsored
by The American
Horticultural Society

Baja, California and Copper Canyon

—includes “the most dramatic
train ride in the Western
Hemisphere” through Mexico
and an area filled with gorges so
huge they can swallow four
Grand Canyons! Until several
years ago this area was
inaccessible except by horseback.

March 29-April 12, 1981

Garden Cruise of the British Isles on M. T. S. Argonaut

—including stops in England,
Scotland, Wales, Scilly, Mull,
Iona and Orkney with optional
earlier departure to visit London
and the famed Chelsea Flower
Show.

May 21-June 2, 1981

To request additional details or
to make reservations for any of
these horticultural explorations,
write to Dorothy Sowerby, Tour
Coordinator, American Horticultu-
ral Society, Mount Vernon,
VA 22121.

Our 1981 Symposium is sched-
uled for July 14-18 in Denver,
Colorado. Please mark these
dates on your calendar and make
plans to join other members of
the Society in a tour of the Mile-
High City and the surrounding
Rockies, with special emphasis
on alpine gardening and cold-
hardy plants. Accommodations
will be at the world-famous
Brown Palace Hotel.

cil as well as the Texas and Okla-
homa State Organizations.



**The Meritorious
Service Award**
may be given
annually to a
member or
friend of the So-
ciety in order to
recognize pub-
licly outstanding
and exemplary

service on the part of an individual in
support of the Society's programs,
services or activities.

It was given this year to the inter-
nationally-known independent rose
breeder and horticultural consultant,
J. Benjamin Williams. Since 1953 he
has been active in the American Rose
Society as both a director and a con-
sulting rosarian, and in 1975 he pro-
duced the All-America Award-Win-
ning Floribunda 'Rose Parade'. In
1968, one of his new hybrid seedlings
won the silver medal at the Bagatelle
Concours International Rose Trials in
Paris and a Certificate of Merit in
Rome. He has been very active in or-
ganizing new rose societies and in es-
tablishing public rose gardens, such
as the Rose Gardens at Winterthur,
Brookside Botanic Gardens and River
Farm, the home of the American Hor-
ticultural Society.

His exemplary service to River
Farm is evidenced by the fact that he
has donated almost 500 rose bushes
to the Society and has been its con-
sulting rosarian for many years. Over
the past two years, he has been in-
strumental in designing and establish-
ing three rose gardens and replanting
one when it was destroyed by a 1979
storm. In 1980 he was instrumental in
having the rose garden at River Farm
made an official All-America Selec-
tions display garden.

Don't Move Without Us

A reminder: please let us know at
least four weeks in advance if you
will be moving or changing your
name. We need this lead time to
keep your publications coming with-
out interruption. When sending in a
change of address or name, please
peel off a current mailing label, or
copy the row of numbers as well as
your old address onto a card and
send them along with your new ad-
dress. These numbers help us identify

you on our computer files.

Members should note that we have
discontinued the practice of issuing
new membership cards for each re-
newal payment and for each change
of address. Cards are being mailed
out to new members only, so please
hold onto the cards you have. They
are good as long as your name re-
mains on our membership files, re-
gardless of whether or not your ad-
dress has changed. If you need a re-
placement card for one that has been
lost, please write to Judy Canady at
the Society.

PSDC News

The Plant Sciences Data Center's
newest publication, *The Aluminum
Plant Label Catalog*, is still available.
We are happy to report that we re-
ceived an enthusiastic response from
members who read our initial an-
nouncement in the September news-
letter. This catalog offers over 2,400
permanent aluminum plant labels
from a comprehensive library of
plant labels provided by PSDC in the
past two years. All plant label cate-
gories—from plants, roses and bon-
sai, to greenhouse, nature trail and
ID tags—can be found easily in the
catalog by referring to the scientific
plant name and common plant name
indices. Plant label styles are illustrat-
ed for each section of the catalog;
they include labels with borders, text
and illustrations. Cost and ordering
instructions are included in each
catalog. *The Aluminum Plant Label
Catalog* may be ordered from the
Plant Sciences Data Center for \$4.00,
including postage and handling.

PSDC continues to offer other
services to the horticultural com-
munity, two of which are a member-
ship/subscription service for organiza-
tions and societies and the continu-
ally expanding Garden Record Sys-
tem for collections of plants in vari-
ous display gardens.

PSDC's membership/subscription
service is a good investment for soci-
eties and organizations who wish to
install computerized membership
files that will generate continually
updated membership listings, renewal
reminders and labels. Our system can
economize on the time and expense
of the membership system you may
currently employ. We will be happy
to provide further information and

cost estimates to interested groups.

The Plant Sciences Data Center also maintains one of the largest and most unusual databanks of living plant resources in gardens and arboreta throughout North America. The Garden Record System is used by botanic gardens and arboreta who wish to record their collections in an internationally accessible scientific documentation system. Gardens interested in obtaining information about establishing a record system or integrating their system with the Garden Record System are encouraged to consult with PSDC.

Please address all correspondence about catalog orders and other services to The Plant Sciences Data Center of the American Horticultural Society, Mount Vernon, VA 22121.

Four New Members to Join Board of Directors

At the Annual Meeting during our recent St. Louis Congress, the Society elected four new members to the Board of Directors. Four incumbents were also reelected.

The new members of the board are Dr. Gerald Barad, R.J. Hutton, Julia W. Rappaport and Mrs. Harry J. Van de Kamp. Incumbents reelected to an additional term were J. Lyle Bayless, Jr., Mrs. Benjamin P. Bole, Jr., Everett Conklin and Mrs. William Wallace Mein, Jr.

Dr. Barad is from Flemington, New Jersey. Although a doctor of medicine, he has maintained a lifelong interest in botanical studies. His special plant interest is the cactus. In 1955

he was active in the founding of the New York Cactus and Succulent Society and was elected as its first president. He is a member in the International Organization for Succulent Plant Study.

R.J. Hutton, of West Grove, Pennsylvania, is President of the Conard-Pyle Company, growers of Star Roses.[®] A past president of All-America Rose Selections, Inc., he is currently Chairman of the Nursery Marketing Council of the American Association of Nurserymen and is President of the National Association of Plant Patent Owners.

Julia W. Rappaport, from Santa Ana, California, holds a doctorate in education from the University of Southern California. She presently teaches science education in the

New All-America Award Winners Announced

The All-America selections for 1981 have been announced, and three new plant varieties, an impatiens, a celosia and a sweet pepper, have



'Blitz' Hybrid

come up with Bronze-Medal honors.

'Blitz', a dwarf, orange-scarlet hybrid impatiens, is the first impatiens to win an All-America medal in the 48-year history of the award. Its brightly colored flowers average 2 to 2 1/4 inches in diameter, have good substance and stand up well against both sun fading and rain damage. The plants, which begin flowering when still quite small, reach a height of 10 to 12 inches at maturity. Their bronzy-green foliage contrasts beautifully against the blossoms. 'Blitz' does well in full sun in

humid climates but will prefer light shade when sunlight and heat are intense. The developer recommends that plants be fed only moderately in order to avoid stimulating excessive growth.



'Gypsy' Hybrid

'Gypsy', a sweet, yellow, TMV-resistant hybrid pepper, is a very early, heavily-bearing plant excellent for salads and cooked dishes. The fruit is two- to three-lobed and averages three to four inches in length at maturity. It is wedge shaped, slightly curved and tapers to a blunt end. 'Gypsy's' flesh is sweet with no bitterness and is medium thick and crispy. The fruit is greenish-yellow at early maturity and, when ripe, the peppers are orange-red. The plants are compact, have medium-green foliage and average 18 to 20 inches in height and

14 to 18 inches in spread. Plants in warm, humid climates are somewhat larger. Its exceptional performance in even short season areas where standard peppers are often shy producers will make it a popular selection.



'Apricot Brandy'

'Apricot Brandy' is a dwarf plume celosia with an exquisite, apricot-orange plume. The plant is an excellent choice for display beds since it is both uniform and symmetrical. At maturity, this variety reaches a height of from 16 to 18 inches and a spread of about 20 inches. The compact plants are resistant to stem rot and damage from wind and rain. Individual plumes, which even fade attractively as they age, are uniform in size and shape and are borne well above the bright-green foliage.

state university system; in 1971 she developed a study program on botany for mentally gifted 6th graders. Ms. Rappaport is a member of the Herb Society of Southern California.

Mrs. Harry J. Van de Kamp, from Pasadena, California, is an active supporter of Descanso Garden, one of three botanical gardens in Los Angeles County. As the garden's building fund chairman, she was responsible for raising over one million dollars for a new education and exhibition building. For her efforts, she was awarded a scroll from the Los Angeles County Board of Supervisors. In addition to her gardening interests, she has been active in community cultural arts programs and was one of the founders of the Pasadena Music Council.

New AARS Winners for 1981 Announced

Three new hybrid roses have been selected as the 1981 All-America Rose Selections award winners.

'Bing Crosby' is a hybrid tea selected for its consistently fine performance and abundant flowers. Spring flowers are a brilliant medium-ripe persimmon-orange with a slight fluorescent glow. In the fall the flowers turn a deeper color, a pleasant reddish-orange. The blooms are almost always borne on long, straight, single stems, and the heavy petal substance gives each blossom a long life both on the plant and when cut. 'Bing Crosby', which shows above-average disease resistance, is an attractive plant that reaches a height of about five feet, is well branched and compact. The foliage is large leafed, bright green, heavy and waxy.

'Marina' is a floribunda with non-fading coral-orange blooms intensified by both red and gold tones. The flowers are borne in great profusion and are larger than blooms ordinarily found on floribundas. The plant has an attractive growth habit, reaching a height of about five feet, and is well branched and compact. The foliage is large leafed and bright green. In the test gardens 'Marina' has demonstrated an above-average resistance to disease.

'White Lightnin' is a very bushy grandiflora with pure white, ruffled flowers sometimes edged with a light-

pink blush. The long, pointed buds are produced in abundance throughout the growing season and the blooms are of good substance. This rose is blessed with an intense citrus fragrance, unusual in white roses. The plants of 'White Lightnin' are upright and bushy with their many canes clothed in an abundance of glossy, deep-green foliage. The bushes do not attain the height usually associated with grandifloras, but the medium flower size and clustered blooms are definitely grandiflora characteristics. This plant is the first white grandiflora to ever have won an All-America Award in the 41-year history of AARS.

Gather Ye Rosebuds

The last rosebuds of autumn are the most precious of all because they may be saved for Christmas blooming, advises the American Rose Society in the October issue of *The American Rose*. English gardeners have long practiced a reliable method of keeping rosebuds in an excellent state of preservation long after the first hard frost of winter.

The buds may be picked any time before frost, the later the better, but before picking buds, prepare a box or pan of wet sand about eight inches deep in which to store the buds until blooming. Select only fully developed buds, that is, rosebuds that already show some color stripes between the folded petals. Use a sharp knife to cut the stems, making sure that each cut is long and slanting. Put the rose cuttings in the wet sand with the stems covered almost up to the bud. Then store your box or pan in a cool, dark place. An unheated basement will serve very well, but an old-fashioned cellar with earth walls is better. Be sure to keep the sand wet at all times.

In the winter when you want rose blossoms for special occasions, take the required number of buds out of the sand, make another slanted cut on the stem above the old one and immediately plunge the stem into very hot water (just below the boiling point). Allow the opening buds to remain in this water until it cools.

Many gardeners are able to keep their autumn roses until the middle of February by following this simple method of preservation. In areas

where killing frosts come late and rosebuds may be picked in November, it is possible to preserve some of them for Valentine's Day.

AHS Board Members Honored



Clarence E. Lewis, a former American Horticultural Society board member and Professor Emeritus of Michigan State University, has been awarded

the 1980 Scott Garden and Horticulture Award. This award is given annually to a nationally prominent horticulturist for his or her outstanding contributions toward creating wider public interest in the art and science of gardening. Professor Lewis is the 27th recipient of the award.

Professor Lewis has been widely recognized for his excellence in teaching and contributions toward promoting the appreciation and use of superior landscape plants among his students, nurserymen, landscape architects and the public. As a lecturer his talks are well known for the superior slides he uses to illustrate horticultural subjects. Throughout his career Professor Lewis has written over 500 articles and contributed over 1,800 photographs to national horticultural publications and newspapers.



Everett Conklin, a current AHS Board Member, has been inducted into two Halls of Fame within an eleven-month period. On Saturday, July 26th of this

year, he was awarded the highest honor in the world of flowers—induction into the Floricultural Hall of Fame. In September 1979 he was awarded membership in the National Foliage Hall of Fame, the highest award in the field of tropical plants and trees. Conklin was given his floricultural award "in grateful recognition of his outstanding contributions to the establishment, advancement and improvement of floriculture in

America." In addition to his book, *A Guide to Interior Planting*, which is considered an authoritative work by most architects, landscape architects and interior designers, Conklin has authored over 200 articles, is well known as a guest speaker, and as a pioneer flower show producer and interior landscaper.



Dr. Henry M. Cathey, immediate Past President of the American Horticultural Society, has been appointed as the first holder of the D.C. Kiplinger Chair in Floriculture and as

Visiting Professor of Horticulture at The Ohio State University for the academic year 1980/1981.

Dr. Cathey is well known for his research on the effects of light, temperature and growth regulators on the growth of ornamental plants at the U.S. Department of Agriculture, Florist and Nursery Crops Laboratory. He is also highly regarded

for his lectures and remarkably colorful slide presentations.

The D.C. Kiplinger Chair in Floriculture is unusual in that it has been financed almost exclusively by donations from growers, students, alumni and other interested groups in Ohio.

International Horticultural Congress Announced for 1982

Scientists engaged in horticultural research are invited to attend the 21st Congress of the International Society for Horticultural Science August 29 to September 4, 1982 in Hamburg, Germany. The focus of the Congress will be "Horticulture in the Industrial Society," emphasizing aspects such as horticulture near centers of high population density, intensive production, interaction with other branches of the economy and efforts made towards creating and maintaining a sound environment.

For more information on the Congress, contact: Congress Secretariat, 21st International Horticultural Congress, Hamburg Messe Und, Congress GMBH, Congress-Organization, Post-

fach 30, 23 60, D-2000 Hamburg 36, Fed. Rep. of Germany.

New Source of Nitrogen for Plants

The September/October, 1980 issue of *The Gardener*, published by The Men's Garden Club of America, reports the discovery of a new, innovative use for a classic household product. Unflavored gelatine can be an excellent source of nitrogen for nourishing house plants. According to research findings released by Knox Gelatine, Inc., when given to plants on a regular basis, Knox Unflavored Gelatine will make plants greener, fuller and healthier.

To apply, dissolve an envelope of unflavored gelatine in one cup of hot tap water and then add three cups of cold water. Use this mixture once a month as part of your normal watering/feeding schedule. The gelatine gradually releases nitrogen into the potting medium and thus functions as a time-release source of the nutrient, making it more difficult to damage house plants by over application.

AMERICAN HORTICULTURIST



How does your garden grow? *American Horticulturist* is not only filled with beautiful pictures, but also with helpful gardening information which you will want to refer back to time and time again.

Now you can keep your issues of *American Horticulturist* all in one place for quick, handy reference.

These attractive binders will hold 18 issues. That's three years' worth of gardening know-how.

Our magazine title is attractively embossed in gold on a rich, leather-like green spine. Easily applied gold numbers are included to help you add dates and volume numbers.

Three or more binders for \$5.00 each or \$5.50 for one binder postpaid. Send your check to **Binders, The American Horticultural Society, Mount Vernon, Virginia 22121** and we will fill your order promptly.

The CITY GREEN™ HYDROPONIC Kitchen Garden™

Grow your own herbs, salad greens, tomatoes, flowers right in your own kitchen 365 days a year through the miracle of hydroponics

NEW!
FIRST TIME
BEING OFFERED
IN THE U.S.



- No weeds, no pests, no soil.
- Taste the difference of fresh herbs.
- More flavor, better nutrition.
- Serve your own fresh picked salad.
- Grow your own fresh flowers.

Hydroponics isn't new. It's a proven science as ancient as the pyramids, as new as multimillion dollar installations worldwide.

Your **Hydroponic Kitchen Garden™** kit is completely automatic, sets up in minutes right in your kitchen window, balcony or any other convenient spot. The Hydroponic Nutrient Reservoir needs filling only once every 10 days or so. It feeds your plants automatically.

Complete Garden Kit (all you add is water). Even includes herb and lettuce seeds.

Send your name and address (please print clearly) together with check or money order for \$32.95. (N.J. residents add 5% sales tax) to:

Hydroponics Division
Market Makers, Inc.
900 Route 9 • Woodbridge, N.J. 07095

Only **\$29.95** (plus 3.00 handling & shipping)

Satisfaction Guaranteed.

It makes a terrific gift item! Order today. You can't lose!

For fast delivery, call Toll-free 800-331-1750 (Operator 115) and charge to your Visa or Mastercard card.

CALENDAR



NOVEMBER 1

Camellia Society of Potomac Valley
Fall Camellia Show
U.S. National Arboretum
Washington, D.C.

NOVEMBER 7-9

Gourd Display
Belden Village
Canton, Ohio

NOVEMBER 8-9

"Orchids and All That Jazz"
New Orleans Hyatt Regency "Poydras
Mall"

1250 Loyola Avenue
New Orleans, Louisiana

For information write:
Richard Lutri
1919 South Carrollton Avenue
New Orleans, Louisiana 70118
Or call: (504) 886-2196

NOVEMBER 13-16

National Chrysanthemum Society
37th Annual Show and Meeting
Phoenix, Arizona

NOVEMBER 19-23

American Camellia Society
Fall Meeting
Charleston, South Carolina

NOVEMBER 20-21

Conference on Rural Producer
Cooperatives
Massachusetts Cooperative Extension
Service
University of Massachusetts
Amherst, Massachusetts

For more information write:
Cooperatives
104 Hasbrouck Building
University of Massachusetts
Amherst, Massachusetts 01003
Or call: (413) 549-4970 ext. 133

NOVEMBER 29 - DECEMBER 1

Heritage Christmas Flower Show
Cape Cod Horticultural Study Group
Round Barn
Sandwich, Massachusetts
For information call: (617) 888-3300

DECEMBER 6-7

Fairchild Tropical Garden Ramble
Horticultural and Gardening Fair
Fairchild Tropical Garden
10901 Old Cutler Road
Miami, Florida 33156

DECEMBER 17

AHS Christmas Open House
1:30 - 4:00 p.m.
American Horticultural Society
River Farm
Alexandria, Virginia
For information call: (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.

Two New Plants Listed as Endangered

Two rare Texas plants threatened by the possible destruction of their native habitats have been proposed by the Service for listing as Endangered species (F.R. 6/18/80).

Spiranthes parksii, the Navasota ladies' tresses, is possibly North America's rarest orchid. The plant was first collected in 1945 but later thought extinct until it was rediscovered in 1978. Subsequent searches resulted in the location of a second population of the orchid in Brazos County, Texas. By 1979 only nine plants could be located at both sites.

Due to its limited occurrence and extraordinary distinctiveness, the species is extremely vulnerable to extinction due to habitat destruction and collecting. One of the two known populations occurs adjacent to an urban area where land development is inevitable. The other population is located on ranch land which is now used for deer hunting. (Any change in land management practices at this second site could destroy the few remaining individuals.)

Callirhoe scabriuscula, the Texas poppy-mallow, is confined to a small area of deep, sandy soil that has been blown from alluvial deposits along the Colorado River. This member of the mallow family is an erect perennial herb bearing wine-purple petals in an open cup. It averages from two to four feet in height. Because of the plant's erect habit, grazing and associated trampling have seriously reduced plant populations in some areas. These problems also have caused a marked reduction in plant vigor among the remaining individuals. Cultivation, rural development and road construction also have reduced the size and range of remaining populations, all of which occur on private land where they are vulnerable to habitat alteration and collection. Sand mining poses an imminent threat to all existing populations within their habitat in only one Texas county.

The Service has determined that the designation of Critical Habitat is not prudent at this time. Publication of descriptive maps outlining such habitats would make both of these rare plants even more vulnerable to collection.—*Endangered Species Technical Bulletin, July 1980*



INDOOR AND OUTDOOR GARDENING

Plant Propagation

K.R.W.Hammett

"Explains the basic principles that influence plant propagation, and clearly demonstrates the operations involved, emphasizing seeds and cuttings."—*Science News*.

64 pages; 7¾ × 10; black and white photos; Line Drawings; Paper
8564-X \$4.95

Underground Plant Life

Charles R. Self, Jr.

Underground Plant Life takes a close look at the amazing world beneath the soil and investigates such aspects of it as roots, soil types, water, nutrients, soil-borne diseases, bugs and animals. There are sections on growing and storing root vegetable crops, decorative plants grown from rootings, and the care and feeding of root systems.

128 pages; 6 × 9; Drawings; Paper
8752-9 \$4.95

The Greenhouse Book

Sidney Chapman

The widespread use of central heating, large windows, and artificial light has made it possible to grow many of the tender plants which need more heat than is usually found in the average greenhouse. This book includes expert advice on converting rooms to a greenhouse atmosphere.

192 Pages; 5½ × 8½; black and white photos; Illustrations; Paper
8366-3 \$4.95

Turf Culture: A Complete Manual for the Groundsman

Frank Hope

This book brings together, with the aid of 30 color plates and 84 black and white illustrations, all the horticultural, technical and commercial aspects of English grass growing and groundsman'ship in a logical and orderly manner. The comprehensive nature of the book in no way precludes the amateur gardener from gaining as much from its pages as the professional groundsman.

288 pages; 5¼ × 8½; Full color jacket, hard cover
9472-X \$19.95

Pests and Diseases of Fruit and Vegetables in the Garden

A.M. Toms and M.H. Dahl

This book gathers together all the main pests and diseases—together with some physiological disorders—and includes details of agents responsible for their natural control.

With 230 superb color illustrations. The detailed text and the color illustrations will assist in the correct diagnosis and treatment of the pest or disease. The clear presentation of scientific facts is complemented by everyday descriptions and recommendations.

188 pages; 4½ × 7; 80 pages in full color; Full color jacket, hard cover
9464-9 \$8.95

Garden Shrubs and Trees in Color

Eigil Kiaer

Three hundred and sixty-five species are illustrated in magnificent color, with descriptive notes on characteristics and identification, as well as suitable uses and points of cultivation.

Divided in three sections, the first covers the best known and most attractive kinds for large and small gardens, including a selection of roses. The second gives the popular climbers. The third comprises a section of the most characteristic conifers.

190 pages; 4½ × 7; 128 pages in full color; Full color jacket, hard cover
9458-4 \$8.95

The Pocket Encyclopaedia of Roses in Color

H. Edland

Over 398 roses in color, with descriptive notes so that, used in conjunction with the alphabetical Index, will provide a quick and easy international cross-reference to your favorite varieties.

There are also chapters on classification, cultivation and pruning, and copious general hints on successful rose-growing.

176 pages; 4½ × 7; 96 pages in full color; Full color jacket, hard cover
9468-1 \$8.95

Garden Conifers in Color

Brian and Valerie Proudley

This book deals with conifers available to the gardener. Full details of planting and propagation are given—together with the suitability to different soils and climatic variations. A unique feature of this book is the use of temperature zones and their application to the relative hardiness of each conifer.

There are detailed descriptions of well over 500 cultivars, and 118 plates in full color.

216 pages; 4½ × 7; 64 pages in full color; Full color jacket, hard cover
9452-5 \$8.95

Heathers in Color

Brian and Valerie Proudley

Here is the practical handbook, with 64 pages of full color photographs, seasonally arranged, illustrating the remarkable variation of heathers in an annual cycle. This will enable the reader to select varieties of his choice. The comprehensive text gives clear details of all the species, with all aspects of cultivation, grouping and propagation; and methods of countering adverse soil and other conditions. Line drawings bring out distinctive features and important points.

192 pages; 4½ × 7; Full color jacket, hard cover
9454-1 \$8.95

Bromeliads For Home Garden and Greenhouse

Werner Rauh

Beautifully illustrated with 134 original color photos, 315 black and white photos and 90 line drawings, this book is a comprehensive work covering every aspect of the "pineapple family of plants." Translated from German into one complete English language volume this authoritative work presents a major publishing landmark.

560 pages; 6 × 8¾; Full color jacket, hard cover
9514-9 \$45.00

CACTI AND SUCCULENTS

* The Pocket Encyclopaedia of Cacti in Color

Edgar and Brian Lamb

One of the most comprehensive and colorful books available on cacti and other succulents. 326 full color photos and full text notes provide the cacti enthusiast with the perfect pocket sized reference volume.

217 pages; 4½ × 7; Full color jacket, hard cover
9516-5 \$8.95



* Cacti and Succulents for the Amateur

By Charles Glass and Robert Foster

The editors of this practical handbook are the editors of the *Cactus and Succulent Journal of Santa Barbara, California*. They discuss plant names, culture and habitats, offer advice on every subject from potting and labelling, conservation and propagation to dealing with mail order suppliers. They include a chapter on pests and diseases. And then they go on to examine the cacti by groups, and the other succulent plants grouped by family.

72 pages, 7 × 10, 200 photographs, full-color cover, index; Paper 9518-1 \$4.95

Cacti—A Gardener's Handbook for the Identification and Cultivation of Cacti

Professor J. Borg

Over 1500 cacti species described, completely classified. "This book will be of the greatest assistance to growers of cacti...Its scientific accuracy will also commend it to botanists."—Vera Higgins in *R.H.S. Journal*.

512 pages; 5¼ × 8¼; 130 black and white photos; Full color jacket, hard cover

9510-6 \$16.50

The Illustrated Reference on Cacti and Other Succulents in 5 Volumes

Edgar and Brian Lamb

An encyclopedic reference work for both amateur and specialist which provides quick and easy recognition of cacti and succulents. Each specimen is photographed and has notes covering description, country of origin and general cultivation.

Volume 1: 310 pages, covers 250 plants, 250 photos including 32 in full color

9494-0 \$19.95

Volume 2: 261 pages, covers 231 plants, 231 photos including 84 in full color

9496-7 \$19.95

Volume 3: 309 pages, covers 276 plants, 289 photos including 96 in full color

9498-3 \$19.95

Volume 4: 310 pages, covers 290 plants, 208 photos including 94 in full color

9500-9 \$19.95

Volume 5: 288 pages, covers 175 plants, 280 photos including 100 in full color

9502-5 \$19.95

Each Volume 5½ × 8½; Full color jacket, hard cover

Cacti as House Plants

W.E. Shewell-Cooper and T.C. Rochford

This book is a guide to those who wish to start growing them as well as for cacti enthusiasts. Full information is given for the care and cultivation of cacti and other succulents, including special notes on watering, temperatures, propagation, most suitable situations in the home, attention required for cactus bowls of mixed plants, available species and more.

158 pages; 5¼ × 8½; 47 photos, including 24 in full color; Full color hard cover

9504-1 \$8.95

Cactus Lexicon

Curt Backeberg

with descriptions of newer species by Walter Haage

The *Cactus Lexicon* is a comprehensive dictionary of all known cacti species, and contains over 4000 entries, 535 of which are illustrated. It is the standard working tool for all cactophiles, nurserymen and botanists. A monumental summary of all species of cacti.

820 pages; 7 × 10½; 205 color photos, 330 black and white photos; Gold leaf embossed jacket, hard cover

9490-8 \$65.00

Lexicon of Succulent Plants

Hermann Jacobsen

Information from *The Handbook* on morphology, countries of origin, points of identification, arranged as a dictionary in one volume. Over 8500 species covered, plus new information.

664 pages; 7 × 10½; 1200 photos; Full color jacket, hard cover

9508-4 \$32.50

The Handbook of Succulent Plants

Hermann Jacobsen

A descriptive survey of every plant considered to be succulent, arranged alphabetically with 1617 photographs. A set of three volumes, cased.

1441 pages; 6½ × 9½; hard cover, slip case

9506-8 \$87.50

Cactus Growing for Beginners

Vera Higgins

Fourth revised edition of the classic beginners guide to cactus growing, including cultivation, sod and potting, types, insect pests, seed raising and more.

68 pages; 4¾ × 7¼; Fully illustrated with color and black and white photos; Full color hard cover

9512-2 \$3.95

HERBS, WILDFLOWERS AND TREES

* The Complete Book Of Herbs

By Roy Genders

Roy Genders has created a new classic, invaluable to anyone who grows herbs for their culinary, healing, or decorative virtues. He gives hundreds of tips on every sort of herb garden, what will grow best where, how to make it thrive and how to beautify it. Over 100 herbs are covered in detail.

60 pages; 8 × 10, with 16 pages in full color, and 35 drawings, cloth hard cover, index, jacket

3928-1 \$14.95

Paper 3930-3 \$8.95

Culpeper's Complete Herbal

Nicholas Culpeper

"All you need to know about the wondrous medicinal properties of herbs as seen in the 17th century."—*Changing Times*. "The beginning of any herbal reference shelf."—*Boston Sunday Herald*.

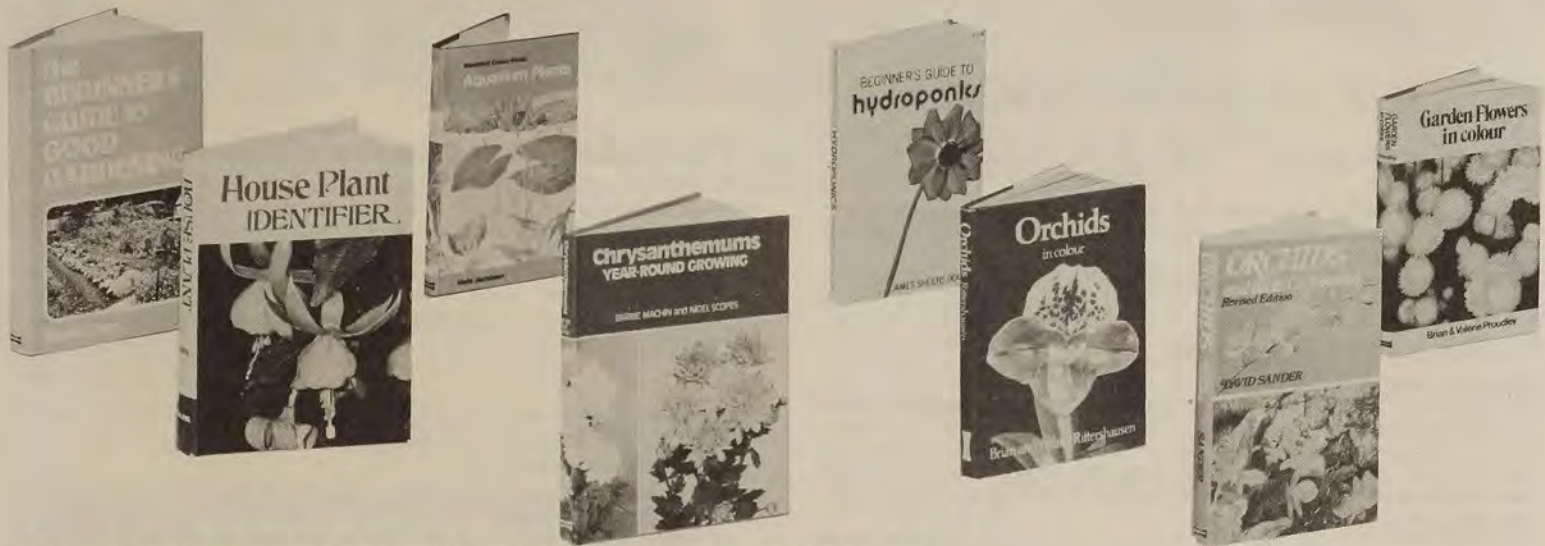
Facsimile of victorian edition.

430 pages; 4¾ × 7¼; 398 herb pictures, 188 in full color, cloth

3900-1 \$11.95

THE COMPLETE STERLING HORTICULTURAL CATALOG

An exciting array of gardening books, packed with valuable tips and techniques and lavishly illustrated, many in full color. From beginning your garden to growing difficult plants, this collection will cover all your needs.



INDOOR AND OUTDOOR GARDENING

*The Beginner's Guide to Good Gardening

David Carr

The first part of the book gives an outline of the various gardening tasks, and how these can best be carried out. This starts with an outline of soil and site, propagation, planting, pruning, training and growing and the care of greenhouse crops, flowers, fruits, trees and shrubs, turf and vegetables.

The second part, in the form of an extended index, is an explanation of gardening terms, arranged in alphabetical order.

243 pages; 5½ × 8½; 230 black and white illustrations; Full color jacket, hard cover

9482-7 \$14.95

House Plant Identifier

Helmut Bechtel

"For those who are not quite sure what plant is what (this book) will help, with it's beautiful color plates on the right and descriptions on the left."—*New York Times*.

"It shows how to identify 47 important plants, and besides each, provides a full-page illustration from a color photograph. The scientific name, description, and cultural directions are included."—*Plant Life*.

256 pages; 4¼ × 5¼, with 120 full color photographs; index; Full color hard cover

3056-X \$6.95

Aquarium Plants in Color

Niels Jacobsen

This compact identification volume is the ideal guide for all aquarists. It describes and illustrates, in full color, 200 aquatic plant species with scientific names, distribution, characteristics, habitats and recommended conditions. In addition to the color plates the text is supplemented by precise line drawings.

130 pages; 4½ × 7; 64 pages in full color; Full color jacket, hard cover

9594-7 \$9.95

Chrysanthemums—Year Round Growing

Barrie Machin and Nigel Scopes

An exciting new look at commercial chrysanthemum cultivation which should quickly become the standard reference on this ever popular flower. The volume contains all the international research carried out since 1973, and is accommodated in a special large format edition that contains 27 color plates, 59 text illustrations and a wealth of essential information.

150 pages; 7½ × 9¼; Full color jacket, hard cover

9474-6 \$22.50

Beginner's Guide to Hydroponics

James Sholto Douglas

"Soil-less gardening holds vast promise for increased food production. This introduction will permit amateur gardeners to take advantage of newly-developed techniques...Detailed instructions are followed by recommended reading and a list of consultants willing to give advice...."—*The Bookmailer*.

156 Pages; 5½ × 8¼; black and white photos; Index; Paper

8158-X \$4.95

Orchids in Color

Brian and Wilma Rittershausen

Now, in controlled conditions, this exotic plant can be grown anywhere in the world. The amateur orchid grower and the enthusiast alike will find a wealth of cultural information in this spectacular color volume that contains full descriptions of 119 popular species, each accompanied by a brilliant full color photo taken especially for the book.

192 pages; 5¾ × 7¾; 100 pages in full color; Full color jacket, hard cover

9480-8 \$12.50

Orchids and Their Cultivation

Revised Edition

David Sander

Completely revised and updated, this edition of the standard available work on orchid cultivation contains new information on composts, chemicals, potting techniques and pest control. An essential buy for all enthusiasts and libraries.

168 pages; 5¼ × 8½; 67 color plates, 24 black and white photographs and 24 line drawings; Full color jacket, hard cover

9478-9 \$19.95

Garden Flowers in Color

Brian and Valerie Proudley

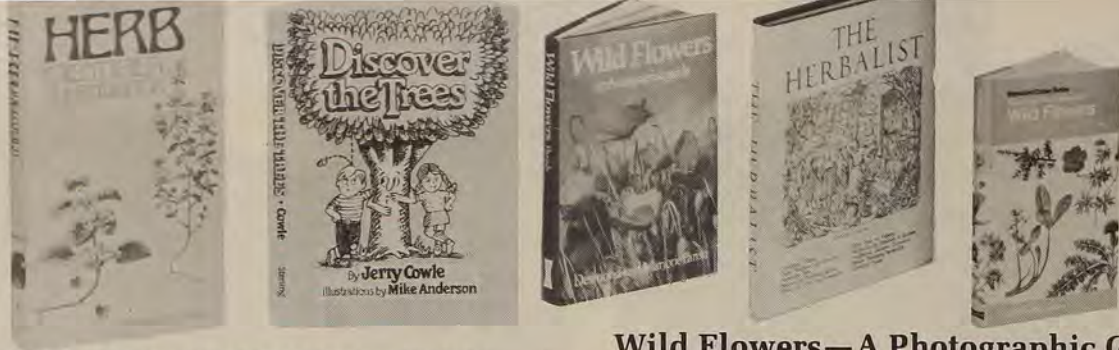
This handy pocket size volume offers over 167 full color photos illustrating the wide variety of garden flowers available today. The specially commissioned photographs were taken on tour in the U.S.A., U.K. and New Zealand by the authors, whose authoritative text includes an up-to-date list of species, descriptions, historical notes and horticultural hints.

200 pages; 4½ × 7; 64 pages in color; Full color jacket, hard cover

9450-9 \$12.95

*Just Published

5



HERBS, WILDFLOWERS AND TREES

Herb Identifier and Handbook

By Ingrid Gabriel
 "Fully illustrated with excellent paintings and line drawings, and arranged alphabetically ... the text describes each plant, leaves and flowers, pollination and germination processes, elements...medicinal uses, and culinary uses, if any, including occasional recipes. All types of herbs—those found in woods, fields, parks, and those grown at home— are included."—A.L.A. Booklist.

192 pages; 4¼ × 7¼, with 120 drawings (including more than 40 in color); 3-part index, giving scientific name, popular name, and geographic location; Full color hard cover 3068-3 \$9.95

Discover the Trees

By Jerry Cowle
 Illustrated by Mike Anderson
 "Packed with information. (It) shows easy ways to identify trees by their leaves, fruit and seed...how to find snacks and toys (like willow whistles and sumac peashooters)...how to tell a tree's age and height just by looking at it...(Contains) instructions for planting seedlings and information about famous trees in American history."—American Nurseryman.

96 pages; 6½ × 8¼, with helpful but humorous drawings (plus 8 pages in full color); index; Full color hard cover 3734-3 \$6.95

Wild Flowers—A Photographic Guide

Desmond and Marjorie Parish
 This beautifully presented book features 100 color photos of European wild flowers in their natural habitat.

Each photo is accompanied by full details concerning locale, distribution, plus other special points of interest. The book is arranged so that the species illustrated and described are in groups which represent nine main habits, from the seashore to the high mountains.
 176 pages; 5¾ × 7¾; Full color jacket, hard cover 9596-3 \$9.95

The Herbalist

Revised Edition
 Joseph E. Meyer
 "Probably the most complete herbal—includes many beautiful photographs and line drawings."—Everything in Herbs & Spices.

304 pages; 5¾ × 7, with 590 photographs (328 in full color); cloth; index 3902-8 \$9.95

The Pocket Encyclopaedia of Wild Flowers

M. Skytte Christiansen
 An invaluable guide to the identification of European wild flowers, with 66 full color illustrations. English names are given, but as these common names vary from locality to locality, the Latin names used by botanists, which are more definite, are also given.

Each flower has a full description to confirm the identification of the illustrations.
 232 pages; 4½ × 7; Full color jacket, hard cover 9588-2 \$9.95

DISCOUNT ORDER FORM

30% Discount Available to Members
 American Horticultural Society, Mount Vernon, VA 22121

SHIP TO _____
 STREET _____
 CITY _____ STATE _____ ZIP _____
 SHIP VIA _____ DATE _____

STOCK #	QTY.	TITLE	** DISCOUNT PRICE TO AHS MEMBERS
INDOOR AND OUTDOOR GARDENING			
9594-7		Aquarium Plants in Color	\$ 8.20
*9482-7		Beginners Guide to Good Gardening	11.70
8158-X		Beginner's Guide to Hydroponics	paper 4.70
9514-9		Bromeliads	32.75
9474-6		Chrysanthemums—Year Round Growing	17.00
9452-5		Garden Conifers in Color	7.50
9450-9		Garden Flowers in Color	10.30
9458-4		Garden Shrubs and Trees in Color	7.50
8366-3		The Greenhouse Book	paper 4.70
9454-1		Heathers in Color	7.50
3056-X		House Plant Identifier	6.10
9478-9		Orchids and Their Cultivation	15.20
9480-8		Orchids in Color	10.00
9464-9		Pests and Diseases of Fruit and Vegetables in the Garden	7.50
8564-X		Plant Propagation	paper 4.70
9468-1		Pocket Encyclopaedia of Roses in Color	7.50
9472-X		Turf Culture	15.20
8752-9		Underground Plant Life	paper 4.70
CACTI AND SUCCULENTS			
9510-6		Cacti — A Gardener's Handbook for the Identification and Cultivation of Cacti	12.80

STOCK #	QTY.	TITLE	** DISCOUNT PRICE TO AHS MEMBERS
*9518-1		Cacti and Succulents for the Amateur	paper 4.70
9504-1		Cacti as House Plants	7.50
9512-2		Cactus Growing for Beginners	4.00
9490-8		Cactus Lexicon	46.75
9506-8		Handbook of Succulent Plants (3 vols.)	62.50
9494-0		The Illustrated Reference on Cacti and Other Succulents	Volume 1 15.20
9496-7			Volume 2 15.20
9498-3			Volume 3 15.20
9500-9			Volume 4 15.20
9502-5			Volume 5 15.20
9508-4		Lexicon of Succulent Plants	24.00
*9516-5		Pocket Encyclopaedia of Cacti in Color	7.50
HERBS, WILDFLOWERS AND TREES			
*3928-1		Complete Book of Herbs	11.70
*3930-3		Complete Book of Herbs	paper 11.70
3900-1		Culpeper's Complete Herbal	6.10
3734-3		Discover The Trees	8.20
3902-8		The Herbalist	8.20
3068-3		Herb Identifier and Handbook	8.20
9588-2		Pocket Encyclopaedia of Wildflowers	7.50
9596-3		Wild Flowers — A Photographic Guide	8.20

* Just Published All books hard cover unless otherwise indicated. ** Includes Postage & Handling Charges
 Mail prepaid orders to the attention of Dotty Sowerby, American Horticultural Society, Mount Vernon, VA 22121. Virginia residents, add 4% sales tax.
 Make checks payable to the American Horticultural Society. MLS 14

Alternative for Petroleum-Based Fertilizer Developed

A high school student from Fairview Park, Ohio, Elisabeth Bryenton, has developed an algal inoculant which will provide plants with as much nitrogen as do the synthetic petroleum-based fertilizers so widely used today. Bryenton, now a sophomore at Princeton University, developed her algal fertilizer as her high school science project.

In addition to winning the grand award at the 1979 International Science and Engineering Fair, Bryenton has received recognition from the Army, Air Force, Department of Agriculture and General Motors. The morning after her high school graduation she was awakened by a phone call from the Pentagon inviting her to a luncheon in Washington with the Secretary of the Army and possibly President Carter. A number of governments besides our own have expressed interest in her development. Scientific curiosity and a desire to correct the tremendous waste of energy involved in production of synthetic fertilizers directed Bryenton toward her field of research.

The inoculant is made of several strains of blue and blue-green algae that have the ability to fix free nitrogen from the air, which is 78 percent nitrogen, and soil in much the same way as do bacteria working in symbiosis with leguminous plants, thus eliminating the need for large quantities of inorganic nitrate fertilizers.

Bryenton's inoculant can be grown in solar heated vats or in waste hot water such as that produced by nuclear power plants. Virtually no additional energy will be required to manufacture it. While Bryenton has applied for a patent for her product, she continues work on refining the mix and solving some of the details of production and distribution. Commercial manufacture and distribution remains a few years off.

The inoculant is a concentrated mixture of several types of algae, some of which occur naturally in soil and others which will survive in soil but occur commonly in water. These algae make nitrogen available in two ways. Some absorb nitrites, which are not usable by most plants, and excrete nitrates, a plant usable form of nitrogen, as a normal part of their life cycle. Other algae in the mixture

have life cycles as short as 24 hours and make nitrogen available as they die and decompose.

When the inoculant is available commercially it will probably be distributed in a liquid concentrate form. The user will dilute it with water and

apply it directly to the soil. It stores well and can be kept in plastic jars. The cost of Bryenton's fertilizer should be less than commercial fertilizer currently available, since the production process is much cheaper. — *Gardens For All, News, Autumn '80*

Lawn Weeds: Problems or Only Symptom?

Before routinely spraying your lawn this autumn for weeds you expect to see appear in the spring, remember that they may be only a symptom of your lawn problem and not the problem itself. R. C. Newman, Department of Horticulture, University of Wisconsin, has compiled a list of common lawn weeds and the environmental conditions under which they occur. In his report, summarized by the Wooster, Ohio Area Extension Service in the August issue of *O.S.U. Area Nursery and Garden Newsletter*, Newman points out that many species of weeds, for example dandelions and quackgrass, occur under such a wide variety of conditions that no inferences can be drawn about their presence. However, the plants listed below occur so frequently in the conditions described that their presence may give clues to overall lawn problems.

Plant	Environmental Conditions
Annual bluegrass (<i>Poa annua</i>)	Compacted wet soils and/or wet soils and moderate shade.
Knotweed (<i>Polygonum aviculare</i>) (<i>Polygonum erectum</i>) Pineapple weed (<i>Matricaria matricarioides</i>)	Compacted soil such as athletic fields. The three species often grow in association with one another. Knotweed starts to germinate 60 days before the last frosts in spring.
Ground ivy (<i>Glechoma hederacea</i>) Chickweeds (<i>Stellaria media</i>) (<i>Cerastium vulgatum</i>) Violets (<i>Viola spp.</i>)	These plants are highly shade tolerant and are frequently associated with shade too dense for any turf grass.
Kochia (<i>Kochia scoparia</i>)	The plant is highly salt tolerant and grows in dry areas on road edges where salt is used for winter ice control.
Rough bluegrass (<i>Poa trivialis</i>) Heal all (<i>Prunella vulgaris</i>) Horsetail (<i>Equisetum arvense</i>) Violets (<i>Viola spp.</i>)	Plants are associated with the combination of shade and moisture or wet shady areas.
Yarrow (<i>Achillea millefolium</i>) Redsorrel (<i>Rumex acetosella</i>) Pusseytoes (<i>Antennaria plantaginifolia</i>)	Plants are associated with very infertile and frequently dry soils such as worn out pasture land.
Prostrate spurge (<i>Euphorbia supina</i>)	The plant is associated with high soil temperatures and hot locations.
Sandbur (<i>Cenchrus pauciflorus</i>) Carpetweed (<i>Mollugo verticillata</i>) Silvery cinquefoil (<i>Potentilla argentea</i>) Mossy stonecrop (<i>Sedum acre</i>)	Infertile, dry and frequently acid soils.
Orange hawkweed (<i>Hieracium aurantiacum</i>) Oxeye daisy (<i>Chrysanthemum leucanthemum</i>)	Where the two plants grow in association with each other, soils are infertile and often very acid.
Hoary alyssum (<i>Berteroa incana</i>) Wormwood (<i>Artemisia annua</i>) Winged pigweed (<i>Cycloloma atriplicifolium</i>)	Sandy, dry soils.
Yellow nutsedge (<i>Cyperus esculentus</i>)	Grows anywhere once established but more frequent in low, wet soils.
Moss	Indicates nothing, grows on all soils but is most frequently associated with shade and wet conditions.
Short-awn foxtail (<i>Alopecurus aequalis</i>)	Wet, waterlogged soils.

AMERICAN HORTICULTURAL SOCIETY

OFFICERS

Dr. Gilbert S. Daniels
PRESIDENT

Edward N. Dane
FIRST VICE PRESIDENT

Mrs. John M. Maury
SECOND VICE PRESIDENT

Mrs. Edward C. Sweeney
SECRETARY

J. Judson Brooks
TREASURER

Thomas W. Richards
EXECUTIVE VICE PRESIDENT

Dr. Henry M. Cathey
IMMEDIATE PAST PRESIDENT

BOARD OF DIRECTORS

TERMS EXPIRING IN 1981:

J. Judson Brooks
Dr. Gilbert S. Daniels
Harold Epstein
Mrs. Joseph G. Poetker
Dr. Harold B. Tukey, Jr.
Theodore Van Veen

TERMS EXPIRING IN 1982:

Richard J. Both
Edward N. Dane
Jackson R. Eddy
Mrs. A. Lester Marks
Mrs. John M. Maury
Mrs. Edward C. Sweeney
Mrs. William C. Weaver, Jr.
Dr. John A. Wott

TERM EXPIRING IN 1983:

J. Lyle Bayless, Jr.
Mrs. Benjamin P. Bole, Jr.
Everett Conklin
Mrs. William Wallace Mein
Dr. Gerald Barad
R.J. Hutton
Mrs. Harry J. Van de Kamp
Julia W. Rappaport

Leaf Spot Lookalikes

Dracaenas, *pleomeles* and *cordylines* are commonly afflicted with leaf spots which can be caused by both fungi and nutritional disorders. The two most common causes of leaf spot on these plants are a fusarium fungus, *Fusarium moniforme*, and a *Phyllosticta* leaf spot, *Phyllosticta dracaenae*. The leaf spots caused by these two organisms are often confused with the damage caused by a nutritional disorder that is due to excessive fluoride in water, potting media or fertilizers. Since diagnosis is the key to giving a plant proper treatment, the following symptoms, which appeared in an article reprinted by the Cooperative Extension Service of the University of Missouri, should prove helpful. It should be noted, however, that leaf spots in general can be caused by a number of other problems, most notably, insects and improper watering.

As a general rule, the three types of leaf spot can be distinguished by where the spots first appear on the plant and secondly, by where they appear on the individual leaves. *Fusarium* leaf spot is characterized by formation of small yellow flecks on the youngest leaves, resulting after spores have washed into the whorl. As the infection develops, spots become reddish-brown and are frequently bordered by a yellow halo. *Phyllosticta* leaf spot occurs mainly on older leaves. These spots also are reddish-to tan-brown and have a yellow halo. As new growth matures, spots caused by both organisms coalesce on older leaves and can be confused with fluoride damage. Fluoride toxicity can appear almost anywhere on leaves. The first symptom of fluoride toxicity on *Dracaena deremensis* 'Warneckii' is a small,

light-brown oblong spot in the white band along the margin of the leaf. These spots can enlarge and eventually become necrotic. The symptoms in 'Janet Craig' are necrotic tips bordered by a yellow band, further confusing it with *Fusarium* leafspot. *Chlorophytum*, commonly known as the spider or airplane plant, develops spots on leaf margins when exposed to excessive fluoride. At this point it becomes obvious that the history of the problem is essential to an accurate diagnosis. If the symptoms do not clearly indicate which agent is the cause, the most reliable method of identification is isolation of fungi from affected tissue under laboratory conditions. When spots are caused by fluoride toxicity, no primary fungi will be cultured although secondary fungi may be found.

After the cause of the spots is determined, measures can be adopted to control the problem. *Fusarium* and *Phyllosticta* leaf spots can be controlled through cultural practices such as removal of infected plants, propagating from disease-free plants and restricting overhead watering. If these practices do not control the disease, application of a fungicidal spray may be necessary. It should be noted that cultural practices and chemical sprays will not remove any existing damage, merely prevent the spread of the problem. Fluoride toxicity can be controlled in most cases by eliminating the source of the fluoride using one of three methods: first, by raising and maintaining the soil pH to 6.0 to 6.5. This makes the fluoride chemically unavailable to the plants. Second, by growing susceptible plants in fluoride-free potting medium. Perlite can be a source of fluoride and it should be washed if used. Third, by using low fluoride fertilizers.

Relative susceptibility of certain plants to *Fusarium*, *Phyllosticta* or fluoride leaf spot and damage

Plant	Fluoride	<i>Fusarium</i>	<i>Phyllosticta</i>
<i>Dracaena</i> spp.	severe-slight	severe-slight	severe-slight
<i>Dracaena marginata</i>	slight	severe	no
<i>Dracaena</i> 'Massangeana'	moderate	severe	?
<i>Dracaena deremensis</i>	severe	severe	?
<i>Pleomele</i> spp.	?	severe	no
<i>Cordylina</i> spp.	severe	severe slight	severe slight
<i>Cordylina terminalis</i>	severe	moderate	severe

European Brown Rot of Fruit Trees Found Here

A European strain of the brown rot fungus of fruit trees has been found for the first time in an American orchard, according to USDA scientists.

A team led by research botanist Lekh R. Batra identified the European strain, *Monilinia fructigena*, from infected pear trees at the Beltsville Agricultural Research Center here. The scientists became suspicious when the fruit showed disease symptoms slightly different from symptoms usually accompanying eastern American brown rot disease, a common malady of United States stone fruit orchards, and caused by *M. fructicola*.

The infected pear trees were destroyed. There is no evidence that the strain has spread.

Fruit scientists here say, however, that growers and researchers should be on the lookout for the new strain. While both strains create mold on infected twigs, blossoms and fruit, the mold caused by the European strain is yellowish-brown, whereas that of the American strain tends to be grayish.

There is no need for growers to take extra precautions at this time, say the scientists. Normal fungicide spraying, they say, will probably control both strains. If you suspect an infection of the new strain, contact your county extension agent immediately. Quarantine records show that *M. fructigena* has been intercepted many times on fruits entering the United States. —*Research News, Science and Education Administration, U.S. Department of Agriculture*

What is Nitrogen Drag?

In a reprint from the Ohio State University garden store newsletter, *Growing Points*, published by the University of California Cooperative Extension Services, defines the term nitrogen drag.

The California Service explains: "When decomposable organic matter is added to the soil either as an amendment or mulch, it becomes a food supply for microorganisms. To build their body protein, microorganisms require nitrogen which they get from soluble sources nearby. This puts an increasing population of microorganisms in direct competition with plant roots for available nitrogen. They out-compete the plant roots for nitrogen and that is why there is nitrogen drag; it is a nitrogen deficiency or starvation in plants. It

Supermarket Tomatoes Can be Ripened at Home

Communication Resources Inc. of Franklin, Wisconsin advises us not to be disappointed by the pale-pink, hard tomatoes that appear in our supermarkets in the winter. While winter tomatoes are picked and shipped before they are ripe, they will fully ripen if treated properly and given the chance, the company asserts.

Winter tomatoes are harvested at a mature green stage, that is, full-sized fruit that has turned from dark

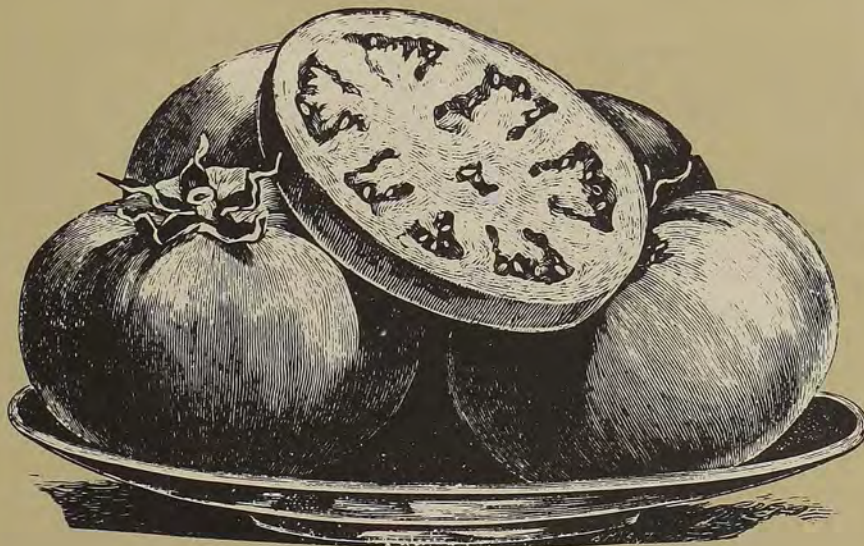
to light green. At this stage the fruit is as large as it will ever get and, in fact, has more Vitamin C than it would if allowed to ripen on the vine. Mature greens are only partially ripened before shipment because fully ripened fruit would arrive in northern markets as boxes of fresh tomato paste. The ripening process can easily be completed at home. Ripening temperatures ideally should be between 65°F and 70°F. Tomatoes redden very slowly below 65°, and below 50° they will go soft without ever turning red at all. This is why unripe fruit should never be placed

in your refrigerator. Humidity levels of 90 percent are ideal.

The easiest way to speed up the final ripening process is to place the fruit in a plastic ripening bowl or a bag that has a half dozen small holes in the sides and store it at the proper temperatures. Sunlight is really not necessary for proper color development.

A final note: Easterners should look for Florida or other domestically grown tomatoes in the produce section of their local market to be sure that the fruit conforms to strict EPA standards regarding pesticide residues. People out West and in the Midwest will probably have to choose between domestic tomatoes and those grown in Mexico. A 1979 report to the Congress by the General Accounting Office shows that 20 percent of the winter vegetables shipped in from Mexico contain residues from nearly 200 pesticides which are either banned in this country or for which no tolerances exist. Because of inadequacies in the FDA's testing procedures, the toxic fruits and vegetables are allowed to go on to markets in this country, so it is wise to ask your grocer where he gets his winter vegetables.

If you would like more information, you can write or phone the Florida Tomato Exchange, Box 29635, Orlando, FL 32814, (305) 894-3071.



persists until a balance is restored."

The California Service suggests four ways in which to combat this problem in your garden:

1. Add additional nitrogen to meet requirements by plants; 1.5-2.0 pounds of nitrogen per 100 pounds of organic matter.

2. Add only moderate amounts of quickly decomposable organic matter which will not cause N-drag.

3. Add only slowly decomposable (large chips) matter in thin layers to avoid rapid decomposition and N-drag.

4. Add only humus, organic matter that is resistant to further decomposition and which is not a readily available good source for microorganisms.

Winter Survival of Roses with Microfoam

Microfoam, a new product introduced by DuPont for use as a protective packing material for fragile articles, has been successfully tested and used for protecting container-grown nursery plants during winter at various locations in the United States and at the Ottawa Research Station in Canada.

Drs. Calvin Chong and R.L. Desjardins of Agricultural Canada in Ottawa experimented with the product on a more limited basis using roses as the test plant. Roses were wrapped with three or four layers of one-quarter-inch microfoam and then covered with a clear polyethylene sheet. The base of each rose bush was mounded with soil and the outer polyethylene sheet was sprayed with a mixture of white latex paint and water to prevent overheating.

With the arrival of spring and the removal of the protective coverings, the "microfoam" roses appeared superior to those roses left untouched or only mounded. They were also greener in appearance. Growth of plants from this treatment was more vigorous in the spring and fewer plants died. Only 25 percent of the microfoam roses died, as compared with 58 percent of the untreated roses and 42 percent of the roses left uncovered but mounded at the base. Microfoam roses also produced earlier yields of flowers and produced more flowers per plant than non-wrapped rose bushes.



Microfoam is made from polypropylene resin, is waterproof, lightweight, flexible and is available in five-foot-wide rolls up to 200 feet long, depending on thickness.

Excessive Flowering in Trees May Be Danger Signal

According to the December newsletter of the Garden Centers of America, excessive flowering in trees can be a symptom of insect injury or other plant health problems. This information comes from Dr. T. D. Sydnor, an ornamental specialist for the Ohio Agricultural Research and Development Center.

The newsletter reports that "when a plant begins to flower heavily for several years, a thorough check should be made to determine if it is in need of assistance."

The problem may be borers. In

that case, look for swollen areas on the trunk or large branches. Take steps to control the borer problem but remember that spraying can be harmful at flowering time.

Diseases may also trigger excessive flowering. Cankers are one example, and they must be removed by pruning even if it means cutting off a major portion of the tree.

Environmental factors can cause excessive flowering, too. According to the report, they can range from "failure to remove plastic twine at the time of planting" or "hitting a tree with a lawn mower" to "destruction of the roots."

On the other hand, *failure* of a tree to flower on occasion is natural and is usually not an indication that the tree has suffered insect or environmental damage.

New Award of Garden Merit Announced

The Pennsylvania Horticultural Society has announced the establishment of a new award, the J. Franklin Styler Award of Garden Merit, the purpose of which is to promote the dissemination of ornamental plants with exceptional garden merit. All plants considered for the award must be hardy in the Mid-Atlantic States and "may be species or cultivars not widely used for ornamental purposes, new developments resulting from selection or breeding, or plants newly introduced to the area from other parts of the USA or from abroad." Any person or organization may submit a plant(s) for consideration. The award is given to the plant and not to the introducer.

In order to ensure adequate consideration and testing for all entries, the award will be given in two stages. The first, Certificate of Preliminary Commendation, will be awarded on the basis of photographs and written entries. The final awards will be made after a plant has been submitted for testing to determine its garden merit. In addition to the period of testing, conducted in botanical gardens, arboreta and private gardens in the Middle-Atlantic, the plant must be registered with the appropriate authority, and proof must be offered that an active program of propagation is under way so that the plant may be distributed. For more infor-

mation on the award and application forms write: J. Franklin Styler Award, Pennsylvania Horticultural Society, 325 Walnut St., Philadelphia, PA 19106.

Timber Theft Increasing

Rising prices for cedar shingles, lumber and firewood have fueled a growing hoard of timber rustlers operating on state and federal lands in the West and, on a smaller scale, in the East. Fortunately, the FBI has joined state and federal forest service officials as a new ally in the field, reports The American Forestry Association in its June issue of *American Forests*. Timber theft has become a multi-million dollar business each year. Investigators have developed some new techniques to track down the increasingly sophisticated rustlers including "fingerprinting" rustled trees. A tree's growth rings are as individual as human fingerprints. Slabs cut from the top of a stump can be used as fingerprints since the rings and telltale marks of the tools used to cut the tree can be matched to a specific log and used as a solid piece of evidence to convict the culprit. In addition, more traditional pieces of evidence such as footprints and trash left at the scene (beer cans, for instance, can be dusted for the more traditional types of fingerprints) are also being used.

Two New Publications Announced

Contributions are being sought for a new publication, *Restoration and Management Notes*, by the University of Wisconsin-Madison Arboretum. The publication's first issue is planned for March 1981. It is intended "to encourage exchange of up-to-date information between ecologists, land managers, naturalists, landscape architects, administrators of conservation agencies and programs and others concerned about or responsible for ecologically sound approaches to the preservation and management of natural areas."

Notices, limited to 200 words, may deal with research, field projects, meetings, publications and other matters related to the management of plant and animal communities native



GARDENER'S MARKETPLACE

Reach the single most devoted group of gardeners in the country by advertising in our classified section.

Readers of *American Horticulturist* are the type who like to buy new and unusual plants as well as old favorites.

41% of our members are engaged in some type of greenhouse gardening.

Over half describe themselves as "advanced" amateurs.

For Rates, turn to page 20.

For House Plants & Ornamentals
An improvement on
AN ANCIENT REMEDY
FOR PEST-CONTROL & PLANT SAFETY

SAFER AGRO CHEM INSECTICIDAL SOAP

- Effectively kills many difficult-to-control insects—Aphides, Mealybugs, Whitefly, Soft Scale, Earwigs, True Bugs & Spider Mites.
- Does NOT harm beneficial insects helpful to biological control—Honey Bees, Lady Beetles, Parasitic Wasps.



- Works where insects have developed resistance to other pesticides.
- Will not harm pets, birds or wildlife.
- Inexpensive. Liquid concentrate mixes readily with water.
- No unpleasant odor. Apply as fine spray. May be top-dipped.

8 oz bottle \$ 4.85 Ppd
2 oz SAMPLE bottle . \$ 2.48 Ppd

Add S. Tax where required.
Money-back guarantee.



INT'L INTERMEDIARY CORP.,
165 O'Farrell St., Suite 609 Cn
San Francisco, CA 94102



Enjoy WATER-LILIES In your own garden.

Lilypons catalogue features everything needed for your garden pool, including the pool.

Lilypons Water Gardens

WATER-LILIES

Fiberglass garden pools,
Lotus, aquatic plants,
Filters, pumps, lights
PVC pool liners, sweeps
Statuary, books, coi
Goldfish, scavengers
Send \$1.75 for catalogue.

LILYPONS WATER GARDENS

1511 Amhort Road 1511 Amhort Road
Lilypons, Maryland 21717 Brookshire, Texas 77423
(301) 874-5133 (713) 934-8525

YES, Please send me the new colorful
Lilypons catalog. I enclose \$1.75.

Name _____
(Please print)

Address _____

City _____

State _____

Zip _____

America. The first issue deadline for contributions is December 31, 1980. For contributions or further information write: Dr. William Jordan, Editor, The University of Wisconsin-Madison Arboretum, 1207 Seminole Highway, Madison, WI 53711.

A new international quarterly, *Journal of Garden History*, will be launched in early 1981. The journal will publish scholarly work with a main emphasis on the architectural history of garden design. Articles on other topics such as iconography, aesthetics, botany, horticulture and the conservation and restoration of historic gardens also will appear.

The editor, Professor John Dixon Hunt of Bedford College, University of London, will be pleased to receive either articles for consideration or suggestions for contributions. A substantial portion of the new journal will be devoted to book reviews. The subscription price for one year is \$70 in the United States. Address subscription inquiries to: *Journal of Garden History*, Taylor & Francis Ltd., Rankine Road, Basingstoke, Hants, RG24 OPR, UK. Editorial correspondence should be sent to the attention of the editor at The Holme, Bedford College, Regent's Park, London, NW1 4NS UK.

Publications for Gardeners of the Future

While gardening books for adults are available by the barrel-full, teachers, parents and grandparents wishing to instill a love of gardening in a child may have difficulty finding the right book for a young gardener. Consider the following books and publications, compiled from lists published in *The Green Scene*, January 1980 and *Gardens for All*, News, Summer 1980, as perfect Christmas gift ideas for gardeners of the future. The books should be available through your local bookstore; the pamphlets are available for free or for a nominal fee from the sources indicated.

Growing up Green. Alice Skelsey and Gloria Huckaby. Workman Publishing Co., New York. A softcover book of activities with explanations of Nature's ways, written for adults as a guide to be used with children ages 3 to 9. \$4.95.

The Pumpkin People. David and



Maggie Cavagnaro. Charles Scribners Sons, New York. A small hardcover book with beautiful color photos. Pumpkins, which are raised, carved into jack-o-lanterns and set afloat with candles, return to break up and slowly decompose on the shore. The underlying theme is life's cycle of birth, growth, death and rebirth. A Sierra Club Book. \$8.95.

The Reasons for Seasons: The Great Cosmic Megagalactic Trip without Moving from Your Chair. Linda Allison. Little, Brown, Boston. A book full of projects and ideas explaining the seasons that doesn't require elaborate props. Aimed at children 10-14. The book is illustrated with line drawings.

What's to Eat? U.S. Department of Agriculture. 144-page softcover book that tells the story of food with illustrations, quizzes, craft ideas, jokes and recipes. For children ages 9-12. \$4.95. Write to U.S. Government Printing Office, Washington, D.C. 20402.

The following publications were prepared by the Washington Elementary School, Berkeley, California. They were published by and are available from the Chevron Chemical Company, 575 Market Street, San Francisco, CA.

A Child's Garden. A teacher's workbook for the elementary grades, free to teachers. 50¢ to others. Quantity discounts available.

A Rural School Garden. 25¢.

All about Trees . . . for a More Livable Environment. Free to teachers. 50¢ to others.

Celebration of Life . . . Trees. Free.

Growing Ideas Kit #1. For ages 6-12. \$1.00.

Ecological Super Posters (and teaching guide). Set of 6, \$3.00.

A is for Apple. Free.

Of course there are hundreds of other excellent publications available. Such classics as *The Carrot Seed*, Ruth Krauss, Harper & Row, New York, 1945; *Flower Children*, Elizabeth

Gordon, P.F. Volland, New York, 1910; and *The Secret Garden*, Frances Hodgson, Burnett, Dell, New York, 1971, would be excellent additions to any child's library. Remember, these are the gardeners of the future!

Books to Send Away For

The Brooklyn Botanic Garden, in conjunction with the American Rock Garden Society, has issued a new publication, *Handbook on Rock Gardening*. The new handbook includes articles on preparation of the garden, rock gardening in the sun and shade, using bulbs in the garden, planning for bloom through the season and rock gardening with alpiners. The handbook, a well illustrated softcover with 76 pages, is available by mail for \$1.95 plus 65¢ postage and handling. To order, write the Brooklyn Botanic Garden, 1000 Washington Ave., Brooklyn, NY 11225.

The biography originally published by Cornell University Press in 1956 as *Liberty Hyde Bailey, an informal biography*, has been reprinted in softcover with a new subtitle, *a pioneer educator in horticulture*. The new edition is available for \$5.95 plus \$1.25 postage and \$1.25 sales tax for New York State residents. Send orders to the DeWitt Historical Society, 116 N. Cayuga St., Ithaca, NY 14850. Make checks payable to the historical society.

A new, free "how to" booklet is available that offers step by step guidelines on planning your own landscape design to suit your own family's needs. It briefly discusses developing a landscape plan, designing for function in regard to public, family and work areas, as well as landscape plants, considering their size at maturity and when to buy. The booklet also discusses a few newer plant varieties and their uses in the landscape. For your copy send a stamped, self-addressed, business-sized envelope to: Landscape Booklet, The Conard-Pyle Co., Rose Hill Road, West Grove, PA 19390.

The U.S. Office of Consumer Affairs has published an extremely useful, idea filled book, *People Power*, on what communities are doing to fight inflation. The 411-page book has sections on food, housing, energy and health and provides two types of in-

formation. First, *People Power* gives details on many existing groups, both local and federally created, which provide examples or offer practical assistance in community programs. Secondly the book provides information on organizing, funding and encouraging such groups. Single copies of the book are free. To order, write *People Power*, U.S. Consumer Information Center, Dept. 682-H, Pueblo, CO 83009.

The European Garden Flora— A Manual of Vascular Plants Cultivated in Europe

In spite of the considerable amount of taxonomic activity that has taken place in Europe during the last 30 years, the classification and identification of cultivated plants have received remarkably little attention. This neglect has resulted in confusion over nomenclature and identification within the horticultural trade and a proliferation of popular books on the subject, generally written by nontaxonomists, often inaccurate and containing misleading information. Most of the existing professional works in this field are out-of-date, incomplete or unobtainable. It is clear that there is a large gap to be filled in the literature on cultivated plant taxonomy and also a large potential market for such a work.

Several European botanists and taxonomists are working to do something about this situation. Under the guidance of a select editorial committee, work is now in progress on a nomenclaturally sound and up-to-date flora of plants commercially available or widely grown in Europe. It will include vascular plants cultivated in Europe, out-of-doors or under glass. The total number of species to be included in the Flora may exceed 10,000. Cultivars will not be formally included unless there is good reason in individual cases.

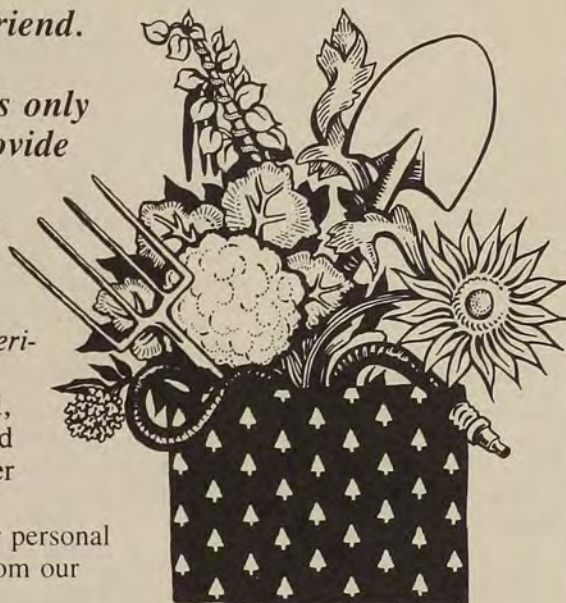
The first volume to be produced will contain Pteridophytes, Gymnosperms and Monocotyledons.

American botanists, taxonomists and horticulturists who would like more information about this work should write to Dr. J. C. M. Alexander in care of The European Garden Flora, Royal Botanic Garden, Edinburgh EH35LR, Scotland, UK.

A Gift for all Seasons

For yourself or a friend. Membership in the Society, which costs only \$20 a year, will provide you or your gift recipient with these benefits:

- Twelve issues of *American Horticulturist*: six issues in beautiful, four-color format and six issues in newsletter format.
- Ready answers to your personal gardening questions from our staff of experts.
- Marvelous horticultural travel opportunities offered at low group rates.
- Discounts on books, and free exotic seeds once a year.
- An open invitation to River Farm, the Society's historic headquarters.



Why not send in your order today? Simply fill out the order blank below and mail it to the Society. You may enclose a check, or if you prefer, we will bill you later. Happy gardening!

American Horticultural Society, Mount Vernon, VA 22121

- YES, I would like to become a member of the American Horticultural Society.*
- I would like to give membership in the Society to a friend.*

My name _____

Address _____

City _____ *State* _____ *Zip* _____

Gift recipient's name _____

Address _____

City _____ *State* _____ *Zip* _____

Sign Gift Card _____

- I enclose my check for \$20.* *Please bill me.*

(\$12 of membership fee is for American Horticulturist)

GARDENER'S MARKETPLACE

Classified Ad Rates:

30¢ per word; \$7.00 minimum per insertion. Special headings, \$2.00 extra. 10% discount for three consecutive insertions using same copy.

Copy must be received two months prior to publication date. Send orders to the attention of Judy Powell, American Horticultural Society, Mount Vernon, Virginia 22121. Or call (703) 768-5700.

Payment for all classified advertisements must be made in advance. All copy subject to the approval of the Society.

CARNIVOROUS PLANTS

Carnivorous, woodland terrarium plants and supplies. Book, *The World of Carnivorous Plants*, \$6.50 postpaid. Illustrated catalog 25¢, Peter Pauls Nurseries, Canadagua, NY 14424.

GARDEN FURNITURE

Solid Teakwood Garden Seats—featured in the arboretums & gardens of England. The perfect heirloom gift for church, park or private garden. Send \$2.00 (deductible) for the 10 page British colour catalogue

and current price list. Precipitation, Inc. 17317 Germantown Road, Germantown, MD 20767. (301) 428-3434.

MISCELLANEOUS

Pecans: Quart each halves, pieces, meal. Three-quart sampler \$9.95 postpaid. Tenepeco, Box 638-HO, Rutherford, TN 38369.

Miniature hand-coloured etchings—herbs, wildflowers, mushrooms, fruit and more. List and photo \$1.50. The Little Farm Workshop, 820 Andrews Road, Bath, PA 18014.

30 varieties berry plants, fruit, nut, shade trees. Roses, flowering shrubs, trees. Write for catalog. Bob Wells Nursery, Box 606, Lindale, TX 75771.

PHOTOGRAPHY

COLOR PHOTOGRAPHY WANTED FOR FUTURE ISSUES OF *American Horticulturist*. Please submit material and a self-addressed/stamped return envelope to Rebecca McClimans, 2900 Connecticut Avenue, NW #442, Washington, D.C., 20008.

PLANT HEATER

The famous Aztec Radiant Electric Heating Panel using only 60 watts of electricity (about a nickel for 24 hours continuous operation) is ideal for starting

seeds and maintaining draft-free uniform heat for growing plants indoors. Also excellent for desk and small area supplemental comfort heating. UL listed. Special offer to AHS members \$12.50 plus \$1 shipping. Send for leaflet "Sun-Gro." Medallion Products, 7910 W. Boulevard Dr., Alexandria, VA 22308. (703) 768-6892.

RARE NATIVE PLANTS

Rhododendron chapmanii, R. austrinum, R. speciosum, R. serralatum, R. prunifolia, Magnolia ashei (Weatherby), M. pyramidata, Stewartia malacrodendron. Grown from native seed or cuttings. Write for prices and shipping dates. Salter Tree Farm, Rt. 2, Box 1332, Madison, FL 32340.

COLLECTORS—rare, nursery-grown trees, shrubs, vines and perennials native to the Southeast. Many hardy northward. Some never before commercially available, others rarely offered. Send SASE for list to WOODLANDERS, 1128 Colleton Ave., Aiken, SC 29801.

UNCOMMON SEEDS

Our latest catalog features many new seeds and bulbs not previously offered. If you are a serious grower of uncommon plants, our catalog is specially for you. 15¢ stamp. The Banana Tree, 715 Northampton St., Easton, PA 18042.

AMERICAN HORTICULTURIST

THE AMERICAN HORTICULTURAL SOCIETY
MOUNT VERNON, VIRGINIA 22121

2ND CLASS
POSTAGE
PAID AT
ALEXANDRIA, VA.