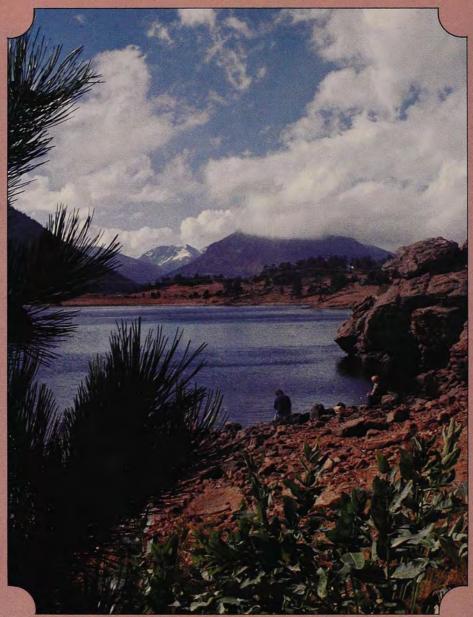
AMERICAN HORTICULTURIST

JUNE 1981



The American Horticultural Society Presents An Exploration of Colorado July 14-27, 1981



Estes Park, Colorado near Rocky Mountain National Park Photograph by Carol Schmeidel

When the rest of the country is beginning to feel the heat of summer, the Rocky Mountains are in the midst of an Alpine spring. Lovely alpine flowers cover the fields and mountain sides with a canopy of color—a display we invite you to enjoy for two weeks as a participant in the Society's special excursion to Colorado and Utah. You will begin your visit in the Mile-High City with a special all-day tour of Denver's Botanic Gardens, then continue west to such lovely areas as Aspen (the famous music festival will be taking place while you are there), Grand Junction, Durango, Winter Park, Colorado Springs, Moab, Utah—and all the breathtaking national parks along this route. Accommodations will be at picturesque inns whenever possible; in Denver, the famed Brown Palace Hotel will be home. Look for more details in the tour brochure inserted in the March issue of American Horticulturist news, or write Dorothy Sowerby in care of the Society for registration material. Join other members of the Society and celebrate the coming of Alpine spring.

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FEATURES

15 Lilies in Name Only By Mrs. Ralph Cannon



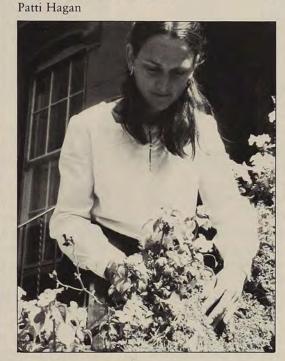
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ON THE COVER: This Hymenocallis is one of many species of flowers commonly called lilies that are, in fact, not members of the family Liliaceae at all. Mrs. Ralph Cannon writes about this plant and other "so-called" lilies in an article beginning on page 15. Photograph by Block's.

VOLUME 60 NUMBER 6

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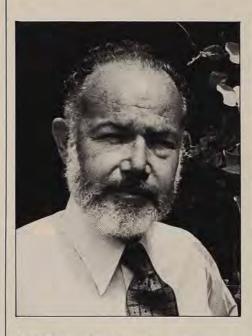
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PRESIDENT'S PAGE



orticultural travel is a tradition as old as traveling itself. The walls of Egyptian tombs recorded the plants grown in Egypt and the plants brought back to Egypt by Egyptian travelers. Herodotus, the 5th century B.C. Greek historian, recorded the plants he saw in his travels as well as the strange customs he encountered. Sometimes the horticultural traveler was actually an explorer, visiting uncharted and uncivilized lands, but more often he was simply an individual visiting strange but civilized areas where the dangers lay more in getting there than in the final destination. Many of the 18th-century botanists who added so much to our knowledge of the flora of the world were simply inquisitive people observing the gardens and fields of people living in strange parts of the world. Pehr Kalm, for example, a student of the Swedish botanist Carl Linnaeus, traveled in eastern North America in the late 1740's. It was through his reporting back to his teacher that Kalm was able to increase Linnaeus' knowledge of North American plants tenfold and to provide information on more than 90 new species. Kalm was a traveler, not an explorer. He arrived in Delaware and then went on to Pennsylvania, New Jersey, New York and adjacent parts of Canada. These areas were already well settled, but the observant Kalm noticed many new and unusual plants among those that were accepted as commonplace by the established

Sometimes one has only to travel in one's own country to discover new plants. In

1773 William Bartram of Philadelphia took a trip through the southeastern United States, including the Carolinas, Georgia and Florida. His journal recorded the discovery of many new and wonderful plants, not the least of which was Franklinia alatamaha, which was never seen again in the wild. It is through Bartram's collection that we enjoy this tree in our gardens today.

Throughout much of the 19th century the English firm of James Veitch and Sons introduced many new plants to horticulture. Twenty-two "travelers" (the official title designated by Veitch) were sent out by the nursery from 1840 to 1905. These men covered the world and introduced thousands of plants into cultivation, many hundreds of which were new species.

New species are often discovered in strange ways. One prominent and widely grown plant is the iron-cross begonia (Begonia masoniana). Its scientific name honors the man who discovered it growing under a bench in an abandoned greenhouse in Singapore after World War II.

I believe I have now made my pointthat you do not have to be an intrepid explorer, challenging unknown dangers in unexplored lands, to be a horticultural traveler. There is a long established tradition that it is the knowledgeable and observant individual who may be following a well traveled route who often finds plants new to cultivation and to science. Many of the remote areas of the world are rapidly becoming easily accessible. Only a portion of the world's plants has been described by science, and only a fraction of those has been introduced into horticulture. There are still unlimited horizons for the avid gardener to discover something new.

If you are in a strange part of the world, careful observation of what is being grown in local gardens can often lead to discovery. The natives may not realize that the rest of the world doesn't know about their favorite garden plant. But you, the traveler, may find a new gem to introduce to your own garden.

One of the benefits of membership in the American Horticultural Society is our travel program. We go to many parts of the world, and we are always looking at plants. Participation in our trips is one way that you can become a modern day plant "explorer." We are fortunate to have been able to rely on the expertise of a truly knowledgeable and professional horticul-

tural travel consultant-Harold Epstein, a longtime member of the Society. His many years of experience in the travel business, and his equally thorough familiarity with plants and plantsmen, has given him the reputation of being one of the most outstanding developers of horticultural itineraries in the world. Through Harold Epstein, our members have been able to visit private gardens to which many other tour groups would not be admitted; they have always been accompanied by knowledgeable horticulturists; and, of course, they have been provided all the amenities of first-class travel-but at a cost that is considerably lower than one would expect for such careful attention to detail.

Of course, we make no claims that traveling with the Society will enable you to turn up new and unknown plants, but many of our trips take you to areas that still have that potential. And traveling with a knowledgeable group of fellow horticulturists will certainly increase your awareness of what is different in a strange garden.

Gilbert S. Daniels

President

Editor's Note: If Dr. Daniels has whetted your appetite for horticultural travel, consider one or more of the following trips we have planned for the coming year:

Exploration of Colorado, July 14-27, 1981

Autumn Tour of England, September 10-24, 1981

Switzerland and Northern Italy, September 24-October 8, 1981

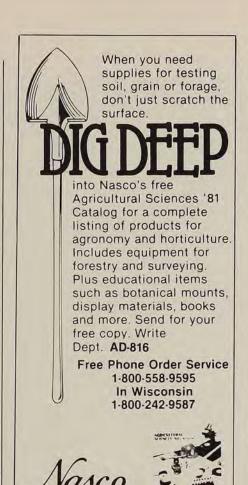
Post Congress Tour of New England, September 28-October 7, 1981

Exploration of Florida, October 19-November 2, 1981

Exploration of New Zealand, October 21-November 8, 1981

Autumn Exploration of the Orient, November 1-24, 1981.

For registration material and itineraries, write to Dorothy Sowerby in care of the Society, Mt. Vernon, VA 22121.





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THE ROBISON YORK STATE HERB GARDEN



The campus of Cornell University in Ithaca, New York is one of the nation's most beautiful, and outstanding among its many attractions is the exquisite herb garden donated to the University by alumnus Ellis H. Robison as a tribute to his wife, Doris Burgess Robison. Located on the eastern edge of the campus, Robison York State Herb Garden is a feature of Cornell Plantations, the University's arboretum. The garden, developed under the supervision of Audrey H. O'Connor, was completed in 1974, but beautiful as it is, it has never been a static display. Its purpose is to provide a comprehensive reference collection of living plants for both study and enjoyment. Dr. John P. Baumgardt, writing in Grounds Maintenance, has described Robison York as "probably the most complete, beautifully designed, modern herb garden in the country." Although of modern design the garden has a regional atmosphere, enhanced by beds of herbs that were used by the area's early inhabitants, by the use of split rail fences and by the exclusive use of beautiful local stone for construction of the raised beds and stone walls.

In the center of the garden is a handcrafted stone sundial mounted on an authentic millstone once used in the area. Surrounding the sundial are four raised beds separated by wide gravel walks. Each bed is divided into three sections by small germander (Teucrium sp.) hedges. In each

ABOVE: The garden is truly a teaching and demonstration garden. Here, herbs that are nectar-bearing are appropriately placed around a straw beehive. LEFT: This sundial marks the center of the garden. The raised herb beds that surround it are grouped according to use.

AGARDEN THAT DELIGHTS



'Hodai' by Anthony J. DeBlasi

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In every issue of American Horticulturist we hope to expand your knowledge and enhance your enjoyment of gardening. We'll show you how to grow new and unusual plants, and we'll take you on pictorial tours of public and private gardens around the world. In one issue you may learn how to dry flowers that will last for years; in another you'll be able to discover what's happening in horticultural research.

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section plants are grouped according to use. The northwest bed contains fragrance herbs, plants used for nosegays and for

The garden's purpose is to provide a comprehensive reference collection of living plants for both study and enjoyment.

herbal teas. The northeast bed is planted with savory seed herbs, dye plants and economic herbs. In the southeast bed will be found culinary herbs, plants of current medical interest and "simples," or plants used medicinally in the past. The southwest bed contains herbs of literature, plants of the ancients and sacred herbs. Some herbs are repeated in two or more locations, indicating their multiple uses. Those plants that are toxic to humans are so labeled and are located where small fingers are least likely to reach them; nevertheless, do not nibble!

This, the central portion of the garden, is surrounded by a wide grass border that is in turn surrounded by ground-level beds. The plant groupings exhibited in the central raised beds are continued in these adjacent ground-level beds. In addition, there is also a bed of plants that were used by area Indians and early settlers and a bed of nectar-bearing plants complete with a straw beehive. One large panel bed is planted with narcissus in the spring and is overplanted in the summer with scented geraniums of over 40 distinct fragrances.

The garden is enclosed on the east and west by split-rail fences, and on the north and south by stone walls. Just outside the garden is the Everett A. Piester Rose Collection, and near the garden's entrance is a collection of potted fragrance plants in redwood bins. The fragrance plant display serves as an introduction to the garden and is particularly popular with children.

The building housing the headquarters of the Cornell Plantations is located near the herb garden. Here you can obtain a self-guided tour booklet as well as a variety of books and pamphlets on herbs and other botanical topics. This building has an interesting history. It was built at the end of World War I as a school for the village of Fall Creek, which is adjacent to the campus. The university donated use of the land

with the understanding that the building would be given to Cornell when it was no longer needed as a school. It served this purpose for about 40 years before being taken over by the Plantation's staff in 1962.

The educational history of the headquarters building is appropriate, since from the very beginning the herb garden was conceived to be an educational facility. This philosophy is reflected in the garden's design, which not only emphasizes accessibility and visibility of the plant displays for groups of people but also its educational program.

The plants in the garden are marked with labels describing their use and significance, but it is much more rewarding to go through the garden with an herbal authority who can answer your questions about the plants-their culture, uses and history. Groups wishing to visit the area may arrange in advance for guided tours. Pamela Mackesey, Head Gardener, will often be found working in the garden, and she is eager to share her knowledge of herbal lore and her experience in growing the plants. Interested persons may participate in Cornell Plantation's volunteer training program, whereby area residents are trained to serve as garden guides.

The garden also serves as a resource for formal courses on herbs. More than a dozen courses have been given since the opening of the garden. Topics such as herb culture, the history of medicinal uses of herbs, herb garden design, herbal literature and the story of fragrance have been covered. These courses are open to the public and are so popular that enrollment sometimes has to be limited.

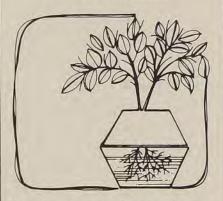
The Robison York State Herb Garden is truly an unusual garden, providing not only a display of a comprehensive collection of herbs but also the opportunity to learn a great deal about these plants and to participate in the garden's operations. The philosophy of the garden is well expressed by the words of Henry Vaughan, a 17th-century philosopher-poet-physician, which are engraved on stone benches in the garden: "The herb becomes the teacher, men stray after false goals when the herb he treads knows much, much more."

-Peter G. Aitken

Peter G. Aitken is a neurobiologist on the research staff at Cornell University. He enjoys photography, especially botanical subjects, as an avocation.

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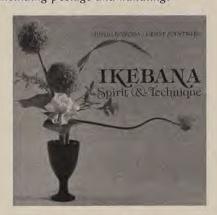
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BOOK REVIEWS

TWO ON FLOWER ARRANGING

IKEBANA—SPIRIT AND TECHNIQUE. Shusui Komoda and Horst Pointner. Blandford Press. Poole, England. 1980. 184 pages; hardbound, \$15.95. AHS discount price, \$12.40 including postage and handling.



DESIGN WITH PLANT MATERIAL.

Marian Aaronson. Grower Books.

London, England. 1979. 119 pages;

hardbound, \$11.95. AHS discount price,

\$11.40 including posters and hardling.

\$11.40 including postage and handling. Ikebana is the Japanese art of flower arranging. To the uninitiated it seems a formidable and highly formalized approach to design, which specialists master only after many years of study. The years of study cannot be replaced by one pass through this book, but the reader can achieve a familiarity and understanding of the art by following the 81 specific examples (lessons) that take the beginner through all the details of preparing the plant material and the container, and placing the components of the final arrangement. The many different design styles are explained by clear photographs, line drawings and step-by-step instructions. This excellent guide will give the beginner a good understanding of the complex rules behind the apparent simplicity of the Japanese flower arrangement.

Design with Plant Material is a look at the principles behind modern English flower arranging. Sixty-three photographs present a variety of plant material used in widely different techniques. The Japanese influence is evident in many of the arrangements, but modern industrial design can also be seen as a strong influence. Lots of very good and different ideas for decorative arrrangements of both fresh and dried plant material are included.

SQUARE FOOT GARDENING. Mel Bartholomew. Rodale Press, Inc. Emmaus, Pennsylvania. 1981. 360 pages; paperbound, \$9.95. AHS discount price, \$9.71 including postage and handling.

This book is a guide to growing vegetables in very small plots. It is applicable to both gardening in the ground and in containers. Since efficient growing in small spaces requires a great deal of planning in order not to waste growing space, a large part of the book is devoted to planning all phases of the vegetable garden-from the initial garden plan and scheduling transplants, to efficient use of the final product. Much of the information is very basic and is directed to the beginning gardener, but there are quite a few good ideas here that might be new to even the most advanced vegetable grower. Vertical gardening, for example, saves space and produces particularly symmetrical fruit, while portable cold frames and homemade cloches allow the gardener to get a real jump on the growing season. This is an excellent book for first time vegetable gardeners and fun reading for the expert.

GROWING CALIFORNIA NATIVE PLANTS. Marjorie G. Schmidt. University of California Press. Berkeley. 1981. 366 pages; paperback, \$7.95. AHS discount price, \$7.50 including postage and handling.

Although written for the California gardener, this book has a great deal to offer gardeners throughout the United States. As one of the richest state floras within the entire country, there are a great many native plants in California that are both worthy of cultivation in gardens and perfectly hardy enough to be grown elsewhere. The author has selected the best candidates for the garden from the state flora and provides descriptions, cultural information and an estimate of garden value for each species. Line drawings and 48 color photographs provide some help with identification. Lists of plants and seeds further increase the utility of this work. If you are interested in native plants or in some more unusual but outstanding garden flowers, you will find this work informative. Unfortunately, hardiness is not specified and must be interpreted from the information given on native habitat within California.

MEDIEVAL ENGLISH GARDENS. Teresa McLean. The Viking Press. New York. 1981. 298 pages; hardbound, \$25.00. AHS discount price, \$21.25 including postage and handling.



This recent publication is a scholarly work that can be enjoyed by all gardeners interested in the history of their hobby. Everything from kitchen gardens to palace gardens and the plants growing in them is treated at length. The stories of the development of individual gardens are particularly fascinating, both from the points of view of the time it took to develop them and the discussion of the costs involved. While Medieval English Gardens has a solid foundation in scholarly research, the reader is not distracted with footnotes or references. The one feature that mars the book is an awkward writing style.

RHODODENDRONS OF CHINA. Judy Young and Lu-sheng Chong (translators). American Rhododendron Society and Rhododendron Species Foundation. 1980. 670 pages; hardbound, \$18.00. AHS discount price, \$15.65 including postage and handling. Originally published in Chinese in 1974, this English translation describes 283 Chinese species of Rhododendron. Each description is accompanied by a full page line drawing, and a key to all species further aids identification. With such a large number of Rhododendron species, many of which are hardy, this book is an outstanding addition to the literature on the genus. The last 40-odd pages deal with technicalities of Chinese translations. It is Save time and money buy books by mail! Order books available at a discount through the Society.

a shame that an equivalent effort was not put into some climatic description of the various provinces of China. It would have been far more useful for the reader to know the growing conditions tolerated by each species than the Chinese characters for the Chinese common name.

NORTH AMERICAN DYE PLANTS. Anne Bliss. Charles Scribner's Sons. New York. 1980. 288 pages; paperback, \$5.95. AHS discount price, \$5.40 including postage and handling.

Many of our native plants provide the raw material for dyeing wool in a surprising range of colors. This little book has a brief introduction to the dyeing process in general. It then presents very brief botanical descriptions and potential dye colors for 125 native plants. Each plant is also illustrated with a well conceived line drawing as an aid to identification. Weavers or knitters who would like to try this process personally will find all the information they need in this text. By using common materials from the kitchen and garden, with the aid of instructions included in this text, a veritable rainbow of colors can be produced.

GARDEN ART. Lorraine Marshall Burgess. Walker and Company. New York. 1981. 192 pages; hardcover, \$25.00.

Ably illustrated with her husband's photographs, Lorraine Burgess' new book presents an inspirational commentary on art in the garden. Her discussion ranges from specimen plants, decorative gates and fences integrated into the existing landscape to the more conventional art of garden sculpture. Readers planning a new garden or looking for the one idea to add sparkle to an existing garden are sure to find a creative suggestion here.

YOUR BIBLICAL GARDEN-PLANTS OF THE BIBLE AND HOW TO GROW THEM. Allan A. Swenson. Doubleday and Company, New York. 1981. 217 pages; hardbound, \$13.95. AHS discount price, \$11.00 including postage and handling.



Many learned works have attempted to identify all the plants referred to in the Bible, but probably no complete identification will ever be possible. Between the problems of translation and the use of common names, positive identification of all of the plants mentioned is not possible. Nonetheless, Mr. Swenson has dealt with more than 40 of them, giving the biblical reference, a brief horticultural history of the plant and cultural instructions for each. In addition, he has described a number of the better known biblical gardens you can visit and offers plans for creating a small biblical garden of your own. If you are interested in having one of the oldest types of theme gardens as a part of your garden, this book takes a very practical approach to the subject. 6

-Gilbert S. Daniels

Instructions for ordering books by mail: Send orders to the attention of Dorothy Sams, American Horticultural Society, Mount Vernon, VA 22121. Make checks payable to the Society. Virginia residents, add 4% sales tax. When a discount price is not listed for a book, please add \$1.25 to the price listed to cover the cost of mailing and handling.

Gilbert S. Daniels is President of the American Horticultural Society.

How to Make a Moss Canoe

couple of summers back I was forced to give over my ground-level backyard garden to two golden retrievers. Despite elaborate dog baffles, the beasts kept digging up my flower plantation. So, gracefully and without actually admitting dog defeat, I withdrew to the top of the fence line, having figured out a way to put my plants to bed along the top rail. Last summer, following a change of house and garden, I decided to recycle the aerial gardening technique I had devised earlier and plant the front stoop rail.

The idea had originally come to me one morning while reading the *New York Times*. I had granted the dogs ground rights, but I still had air rights. I reckoned I could plant the airspace along the rail with the aid of the Fourth Estate, a little chicken wire and some Rube Goldberg variations.

My plan involved the purchase of a roll







ABOVE LEFT: The chicken wire frames of the canoes are first lined with newspapers and an outer, decorative layer of sheet moss. LEFT: Individual plants go into the canoe encased in additional layers of newspaper, which serve as liners for the plant's rootball and as an effective means of holding in moisture. ABOVE: Once the canoe is filled with plants, additional dirt is added to cover each newsprint "pot." Now regular watering is all that is required. OPPOSITE: Author Patti Hagan tends to her completed moss canoe garden.

of two-foot-wide, one-inch mesh chicken wire and a ball of wire for attaching it. I sectioned the chicken wire into five-foot pieces and folded these in half lengthwise, fastening the ends to the railing with twists of wire and letting the middle pouch out.

I then padded the wire-mesh trough with an eight-page thickness of newspaper, lining up the centerfold with the trough bottom. The next step was to soak a fat Sunday Times (Arts & Leisure, Business, Travel, etc.) in water, wad up the moist pages and tuck them into the bottom of the trough. I brought this newsy tilth to within three inches of the rim. (Newsprint holds moisture, is lightweight, fairly organic, and roots grow through it with ease.)

Step three was to line the chicken wire with sheet moss by filling the space between the eight-page newspaper liner and the chicken wire with flat strips of sheet

moss. The green-brown outer skin gave the planters the look of moss canoes. Lastly, I twined together the ragged ends of the cut chicken wire to make properly pointed bows and sterns for each canoe.

This done, the planting of the canoes took very little time. I whipped up a lighterthan-dirt mix of a sterilized potting soil, peat moss, vermiculite and dehydrated cow manure. Then, the plants. Each-geranium, impatiens, lobelia, petunia-was put in the center of a two-page thickness of the daily. I added enough planting mix to cover the rootball, a sprinkle of water, then gathered the corners and swaddled the rootball snugly in the newspaper and placed it flower-side-up in a moss canoe. Once all the plants were upright and neatly spaced, I topped off the canoe with soil mix and trimmed any newsprint sticking up over the gunwales.

The moss canoes are handy for lightweight city gardening by the substitution of daily newsprint for much of the usual soil filler of the standard window box. Moss canoes are highly adaptable. In addition to back fences and front stoops, they are easy to hang from apartment balconies, deck railings and tree branches. In winter, trimmed with greens and holly, they are appropriately festive. And come spring, the moss canoe does not have to be built, only refilled with new annuals. These modern hanging gardens seem to thrive on all the news that's fit to plant, and they are safe from dogs, cats and kids with flower-magnetic softballs. 8

-Patti Hagan

Patti Hagan is on the staff of The New Yorker magazine and gardens in Brooklyn.



THE SAXIFRAGE FAMILY

an you imagine a family's being distinguished by the fact that its members lack striking, distinctive characteristics and have few traits in common? Such is the saxifrage family, the Saxifragaceae. It is a large and widespread family of perennial herbs and shrubs, a few annuals and a very few small trees. Currently the family is considered to consist of a number of subfamilies, but at various times in the past taxonomists have ranked the subfamilies as families in their own right. The uncertainty is understandable when you discover that in this family leaves may be alternate or opposite, simple or compound, flowers may be conspicuous, or not so, with petals separate or overlapping or even absent, and fruit may be a capsule or a berry.

The saxifrage family is a source of a broad array of ornamental plants of many uses in the home landscape, woodland and flower garden, and beyond these decorative species, one genus is of economic value to fruit growers. Within this rich assemblage are found a fragrant shrub that is a state flower, a desirable flowering vine, two hanging basket favorites, the yellow waxbell of Japan and "the makings" of a pie.

For simplicity's sake an arbitrary division or grouping sorts the family members as decorative shrubs, tender species, herbaceous species and fruits.

Collected from far and wide, some of the most popular and familiar flowering plants of a decorative shrub border are of the saxifrage family. Most prominent is undoubtedly Hydrangea, which makes its appearance as a specimen shrub or tree, in a border planting or hedge, or climbing a wall. Hydrangeas are native to North America and Asia. The many species and varieties have been hybridized to give a broad range of plants for summer and autumn flowering in sun or shade. Manyhued cultivars of Hydrangea macrophylla var. macrophylla (also called H. macrophylla var. hortensia) are numerous, having been produced especially for forcing and sale as pot plants. H. paniculata 'Grandiflora', the PeeGee hydrangea, is the familiar landscape hydrangea, a large plant



CLOCKWISE FROM TOP LEFT: Hydrangea macrophylla var. macrophylla. Saxifraga sarmentosa. Bergenia cordifolia. Philadelphus lewisii. Illustration by Alice R. Tangerini.

with pyramidal trusses of white flowers in summer, fading to pink and bronze in autumn. *H. anomala* subsp. *petiolaris* is the climbing form, usable as a vine or groundcover; it will cling to a support by root-like holdfasts and grow to 75 feet in

height, branching and blooming in June with small, white, fragrant flowers.

The species Schizophragma hydrangeoides, Japanese hydrangea vine, is often confused with climbing hydrangea, H. anoma subsp. petiolaris, which, as an ornamental vine, is the better of the two. The chief distinction between them is that the flower of Schizophragma has a prominent white sepal that is absent on the clinging hydrangea.

Among herbaceous species of the saxifrage family, the genus Saxifraga, for which the family is named, is the largest group, consisting of some 300 species, mostly perennials.

The genus Deutzia, which contains many attractive, small shrubs, bears the name of a sheriff of Amsterdam who was a patron of botany and a friend of Linnaeus and the botanist Thunberg. Most Deutzia species are from Asia, but two are native to Mexico. All are neat, floriferous plants with dainty flowers. Nursery catalogs list numerous hybrids among the 50 or so species. Deutzias were extensively hybridized by the French nursery firm of Lemoine in the early 1900's. However, one of the showiest cultivars, long popular in American gardens, is the pink-and-white-flowered 'Pride of Rochester', which resulted from the efforts of a grower in Rochester, New York, before 1893.

Philadelphus, the mock orange, is prized for its fragrance in May and June. The white flowers, single, double or semi-double, appear solitary or in small clusters. P. coronarius, the oldest known species, is the common mock orange, but many hybrids of the species are offered by nurserymen. The French nurseryman, Lemoine, was busy here, too. The arched, curved or drooping branches create an impressive floral display when massed in a shrub border. Some varieties are esteemed for repeat bloom during summer. Several Philadelphus species are native to North America. P. lewisii, growing to six feet high in our western states from Montana to Washington and Oregon, is the state flower of Idaho.

A tender genus of only one species is Carpenteria. C. californica is a California native commonly called tree anemone; it bears fragrant white flowers two to three inches across in clusters. It differs from Philadelphus mainly in being evergreen and in some technical characteristics. The name honors William Carpenter, a Louisiana physician of the mid-19th century.

Also among shrub genera is Ribes, horticulturally important for both its fruit and flowers. Ribes is a large genus chiefly from the temperate zone. Plants have alternate, simple, lobed leaves and flowers with colored sepals larger than the petals. The fruit is a berry in contrast to the dry capsules of many other Saxifragaceae. Familiar to Americans are R. sativum, the red currant, and R. uva-crispa, the gooseberry. The red currant is a relatively modern fruit; its domestication has occurred within the last 300 or 400 years. It is of European origin and it is not spiny, whereas the gooseberry, from Eurasian regions and North Africa, is a spiny plant, as anyone who has picked or stemmed the fruit is painfully aware. The European black currant, R. nigrum, is another fine-flavored fruit, much favored in Great Britain. These fruiting species are very hardy; their cultivation is best restricted to northern latitudes with copious summer rainfall.

Unfortunately both currants and gooseberries are hosts to the fungus that causes white pine blister rust, and in many areas they cannot be planted in proximity to white pine plantations, which rapidly succumb to this particular fungus. Gardeners contemplating inclusion of currants and gooseberries in the garden should write to their state experiment station or county or state extension service to find out whether these fruits can be safely planted in their

The genus Ribes also includes a vigorous, thornless flowering currant, R. sanguineum, as well as other flowering species less well known. R. sanguineum was discovered in western North America by David Douglas, one of the best known of the early 19th century plant hunters in America. When he returned to England from his first collecting expedition, this red-flowered currant, alone among his introductions, was then considered to be well worth the entire cost of the two-year expedition.

Jamesia, consisting of three species of western American native shrubs, was named for Dr. Edwin James, an American botanical explorer in the Rocky Mountain area in the early years of the 19th century. Jamesia americana is grown especially for



its brilliant orange and scarlet fall foliage.

Among herbaceous species in the saxifrage family, the genus Saxifraga, for which the family is named, is the largest group, consisting of some 300 species, mostly perennials. They are native to temperate regions of Europe and America. Usually low-growing, spreading or creeping plants, they include some alpine and arctic species. There is great variation in their leaves, some being thick and fleshy, others, mosslike, often exhibiting extreme hairiness or succulence, which enables them to survive under precarious circumstances.

These saxifrages have been organized botanically into 16 sections based on whether they are mat-forming, cushion-like, deciduous or evergreen, spring or autumn blooming. Great variety is attainable in cultivation because of seasonal changes in foliage color. Many are spectacular in flower. Erect or low-growing flowering spikes produce blossoms of red, yellow, pink, white or purple. Rock garden enthusiasts know them well.

Indoor gardeners produce whimsical effects with Saxifraga stolonifera (S. sarmentosa), its numerous stolons cascading out of the pot with terminal rosettes of leaves, pendant around a hanging basket. This is strawberry saxifrage, too often colloquially called strawberry begonia or strawberry geranium. More applicable is the name mother-of-thousands because of the plantlets, formed at the ends of the stolons, which are easily used for propagation.

Other herbaceous species of special interest are the garden favorites Astilbe, Bergenia, Heuchera, Rodgersia, Kirengeshoma and Parnassia.

The versatile Astilbe is a native of Korea, China and Japan. It is a moisture-loving hardy perennial with feathery plumes of red, rose, pink or white florets. Most of the cultivars offered for the garden or as pot plants owe their origins to the hybridizing work of Lemoine in France and Arends in Germany. Common names include goatsbeard and meadowsweet. It is often carried by florists as spirea, although it is not a spirea (which is a member of the rose family), and confusion is further confounded by the fact that one of the native American spireas is called meadowsweet.

About a dozen Asian perennial herbs comprise the genus *Bergenia*. Three of these are grown for their foliage and early flowering. From thick rootstocks the plants

produce dense clumps or colonies of almost evergreen, fleshy leaves and pink or white flowers in nodding clusters. German-raised and named cultivars are said to have clearer coloring than the species *B. cordifolia*, generally available. Bergenias are suited to moist, shaded situations in the border.

Evergreen, ground-hugging leaves and one- or two-foot leafless stalks of bell-shaped flowers characterize *Heuchera*. The most common and most adapted to garden culture is the hardy *H. sanguinea*, coral bells, which was carried to England from Mexico in an open basket in 1885. Its immediate popularity stimulated hybridists to produce many new cultivars. This species is native to Mexico and Arizona. Other species are from Rocky Mountain areas and from woodlands of the eastern United States.

Kirengeshoma palmata is the yellow waxbell from Japan. Long, thick, bright-yellow, waxy petals account for the common name. Flowering occurs in September on plants three or four feet tall with maple-like leaves on purplish stems. (For an account of firsthand experience in growing this out-of-the-ordinary gem, see Mrs. Ralph Cannon's article in American Horticulturist, February 1981.)

The genus Rodgersia is a hardy herbaceous perennial from China and Japan. Its flowering habit is similar to that of the showy, feathery terminal clusters of Astilbe. The name honors a distinguished American naval officer, Admiral John Rodgers, who commanded an expedition to China and Japan in the late 19th century during which the first species, R. podophylla, was discovered. This plant, known as bronze-leaf Rodger's flower, is valued for its bronze-colored foliage. It boasts longstalked, divided leaves and handsome sprays of yellowish flowers, reaching a height of three or four feet. Other species and cultivars offer differences in foliage shape and flower color. Rodgersias are well suited for moist garden spots.

An enchanting genus of woodland habitats is *Parnassia*, grass-of-Parnassus, fabled to have sprung from the ground on Mt. Parnassus in Greece. Besides the European species, *P. palustris*, several are native to various sections of the United States in wet and shady habitats. A delicate, solitary flower tops a long stem that often bears only a single leaf. Especially appealing are the delicately fringed flowers

of *P. fimbriata* from medium elevations in the Rockies. Grass-of-Parnassus can be included in bog area or poolside plantings.

Tiarella, false miterwort or foamflower, is a stoloniferous woodland genus, readily adapted to cultivation in the woodland or wildflower garden. It grows naturally in rich, rocky woods from Nova Scotia and New Brunswick to Minnesota and further south in the mountains, blooming from April to June. T. unifoliata, coolwort foamflower, is a wildflower of the Glacier Park area.

Mitella, miterwort, is another woodland genus from deep, moist woodlands, flowering from May to July.

One last herbaceous species must be described because it is so familiar to indoor gardeners, most of whom would never have surmised that it is a cousin of gooseberries and hydrangeas. It is Tolmiea menziesii, a single species, honoring Dr. William Fraser Tolmie, a surgeon of the Hudson's Bay Company, Puget Sound. This is the piggyback plant so often seen as a luxuriant hanging basket plant. Its manner of reproducing itself accounts for its common name; young plants arise at the junction of leaf blade and stalk. At an appropriate stage of maturity the young plants drop from the mother leaf to the soil beneath. This sticky-haired, soft-leaved, intensely green plant is native to west coast areas from Alaska to California. It is closely allied in botanical terms to the east coast Tiarella. Flowers are not outstanding, just small greenish-white blossoms on an eightinch stalk. It can be propagated from the little plants on the leaves or from runners and can be grown in woods soil in the shady rock garden or woodland, but it is not hardy despite its origins.

The Saxifragaceae includes other cultivated genera too numerous to mention but many worthy of the gardener's attention. It is not possible within this column to do justice to so distinguished a family. It is obvious that members of the saxifrage family contribute enormously to our traditional landscape patterns and to the collections of enthusiastic specialists. We cannot honestly assign them to an undistinguished position in the plant world because of the uncertainty of some botanical differentiation.

—Jane Steffey

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Lycoris.



BY MRS. RALPH CANNON

he true lilies, members of the genus Lilium, are noble plants and are among the most popular of garden subjects. Many other plants also carry the

Mrs. Ralph Cannon owns 26 acres of Illinois woodland where she has experimented with many gardening projects since 1939.

name lily, but they do not even belong to the same botanical family as the true lilies. Their general appearance suggests a relationship, and so gardeners have assigned common names that imply actual kinship. Many of these plants are little known. Even nurserymen have failed to call attention to their real identity and worthy garden value. Without doubt, a wider use and better knowledge of these so-called lilies would add interest and variety to gardens or at least stimulate gardeners to a further study of them.

The so-called lilies are, in many cases, botanically not too far removed from the true lilies. There are a number of plants that, while not actually belonging to the genus Lilium, are members of the family Liliaceae. These include the daylilies, Hemerocallis, and plantain lilies, Hosta.



(amaryllis family) and the Iridaceae (iris family) also masquerade as lilies, and these are the plants that will be considered here. A number of plants in these families are abundant in tropical and subtropical regions of the world and are hardy only in the southernmost zones of the United States. Although in cold climates these plants cannot be grown and left to overwinter in the garden, they can be planted in the spring. They will bloom and decorate the garden in the summer and early autumn and then can be lifted and stored before the onset of winter. They are more than worth the extra fuss. Several of the so-called lilies

make excellent subjects for growing in-

doors as pot plants and can even be grown

in large containers that are kept out of

doors until late fall when they are moved

to a frost-proof place. As a last resort, they

can be treated as annuals.

Several members of the Amarvllidaceae

The common name kaffir lily is shared by plants in two genera that masquerade as lilies, Clivia and Schizostylis. The clivias are actually members of the Amaryllidaceae and are fairly popular pot plants. They are evergreen, not hardy, and so are not suitable for cultivation in the cold-climate garden. Schizostylis coccinea, also called crimson flag, is a member of the Iridaceae that would add charm to any garden. The plant looks almost like a small gladiolus with grassy leaves. It is especially useful because it blooms in the autumn when its vibrant scarlet, vermillion or crimson flowers are needed to liven up the flower border. These plants have fibrous, fleshy roots and form attractive clumps. They are only hardy in the very southern portions of the country. In the north, clumps can be planted in the garden after all danger of frost has passed. Not only is this socalled lily lovely when grown in pots, providing a good show in the house, but it also can be an excellent source for cut flowers when grown in the greenhouse. Pot them in late spring for summer flower or in the fall for winter bloom, three roots to a five-inch pot, and look forward to crowds of brightly-colored flowers.

The bugle lilies, members of the genus Watsonia, which was named after the English botanist William Watson, are also members of the Iridaceae. These natives of South Africa bear gladiolus-like blooms in shades of rose, salmon, red, scarlet or white. The flowers, borne on spikes that reach a height of two feet, appear in mid or late summer. Leaves are glossy and sword shaped. There are a number of species and cultivars; W. meriana is very popular. These Continued on page 34

ABOVE: Watsonia, commonly called bugle lily. OPPOSITE: Hymenocallis, commonly called spider lily.





Cardening in Containers

TEXT BY FREDERICK MCGOURTY PHOTOGRAPHY BY PAMELA HARPER

ontainer gardening outdoors began for me about 20 years ago when I started to grow a few annuals in redwood boxes. My color choices weren't especially good-hot-pants pink petunias, orange zinnias and that sort of thing, but like most people who grow annuals I was interested in bright hues. It didn't really matter then if the various combinations shattered an occasional pair of sunglasses. That was the pre-pastel period of my gar-

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dening. I am sure I would have been drummed out of the local garden club.

In addition to my lapses on color coordination, I was but dimly aware that plants had different heights and that scale was not just an insect. Fortunately, giant sunflowers never appealed to me or I would have put them in containers, but there were a number of flops. One was Salpiglossis, which is a Texas-sized relative of the petunia, though it sounds more like a throat malady than a plant. It was only three inches tall when I bought it in a little tray from a garden center one Memorial Day, the traditional planting-out time for annuals in the Northeast. Within six weeks the two-foot-tall Salpiglossis, laden with bloom and weak of stem, followed Newton's Law. I scooped up the plants much like a dancer trying gracefully to hold his leading lady who has suddenly fainted. Stakes and strings didn't help much. Salpiglossis was in a five-inch-wide, five-inchdeep metal window box, moreover one

Containerized plants function in formal designs as well as ones that can be termed "country casual," and the types of containers one can use for this purpose, provided they have good drainage, are limited only by one's imagination.



which had no drainage holes. By the first of August Old Salpi, top-heavy and soggy rooted, had given up the ghost, and American horticulture was the richer.

The metal window boxes held a certain fascination for me, mainly because they were cheap, light in weight and lasted a few years if protected from winter. They came in various lengths, too. I amassed one of New England's finest collections. After awhile it occurred to me to use an ice pick to punch a few holes in the bottom for drainage, and plants grew better, even those rare ones that like the moist side of life. Why the manufacturers don't make the holes at the point of origin remains a mystery, for it would save gardeners a lot of woe.

In gardening one seldom has it all one's own way, and it became clear to me that the smaller the container, the greater the need is for watering, regardless of whether the currently popular chemical super-absorbents are mixed with soil or a mulch is placed on top. Summer drought is a more common occurrence than we like to think, and even with normal rainfall it is neces-

"One winter I bought every window box on sale at every discount store in our part of the state."

sary, in the cooler reaches of the country, to water a metal window box at least once or twice a week. In warmer areas daily watering may be necessary, especially if plants are in full sun, as most annuals should in theory be. Man cannot garden by theory alone, however, and to cut down on the seemingly constant watering I learned the desirability of setting containers where they would receive morning sun and afternoon shade, since the summer sun from lunch time on is brutally drying. I am neither mad dog nor Englishman, nor are my plants.

In cities, where heat concentrations are greater, the matter of site is particularly important. In many instances the experienced urban gardener essentially looks upon shade from tall buildings not so much as a problem as an opportunity. If shade seems to come from all sides but light is fairly

good, the container gardener can always rely on the Big Three of the shade-tolerant annuals-wax begonias, impatiens and coleus. Luckily, each has many strains and colors from which to choose. Also, the gardener doesn't have to constantly remove the spent flowers to make these plants look tidy or to perpetuate bloom, as is the case with most other annuals.

It was in fact a miscalculation with impatiens that led me to dreams of glory with container gardening. Each spring for some years I bought a tray or two of impatiens to plant in compost in two large cement window boxes located under an old ash tree. My custom was to plant, water and mulch them at the end of May, then return in late September to uproot them after the first frost had turned them to mush. They performed beautifully, and little or no Continued on page 36

Container gardening need not be restricted to a backyard terrace. In the garden areas

pictured here, strategically placed pots of ornamental kale and tubs of white impatiens enhance the appearance of other plants growing in permanent borders.







Autumn In England

BY VALERIE SAMSON

The American Horticultural Society's Autumn Tour of England has a most unusual itinerary. Of course it includes an intelligent mixture of large and small gardens, visits to some of England's magnificent country houses and also the occasional church or cathedral, but these special treats are usual fare on our tours. What makes this trip unique is that it concentrates on the less well-known parts of England, the eastern region of Yorkshire, Norfolk, Suffolk and Essex. It then culminates in London at the Royal Horticultural Society's famed Great Autumn Show at Westminster Hall. Garden enthusiasts who are familiar with the climate and plantings of western England will be surprised at what eastern England has to offer. Because this region experiences comparatively low rainfall and has large portions of both acid and chalk soil, a different array of plants are available to the British gardener here. Join Valerie Samson, who participated in last year's excursion, on this reading tour of Britain's "East End" and other points of horticultural interest. Then make plans to see the area for yourself on this year's exploration, September 10-24, 1981. Write to Dorothy Sowerby, in care of the Society, for a registration form.

Eastern England was our destination, but since no tour of British gardens would be complete without a visit to Wisley, the Royal Horticultural Society's garden in Surrey, it was here that we began our trip. It is to Wisley that the 70,000 members of the Royal Horticultural Society come for inspiration. In addition to 200 acres of plants, all of which can be grown in the British Isles, the Garden also has a training program for those interested in horticulture as a career. Wisley-trained personnel are to be found in botanical and horticultural establishments throughout the world. We were fortunate to be guided through the gardens by John Clayton, who has been at Wisley for 25 years. The herbaceous borders were magnificent, but most spectacular

Valerie Samson is a British citizen who accompanied members of the American Horticultural Society on last year's Autumn Tour of England.



was the rock garden, considered by many to be the best of its kind in Great Britain. Small gardens designed to help new gardeners with the layout of their own plots were also much admired.

Among the smaller private gardens that were opened to us were those of two wellknown flower arrangers, Sheila Macqueen in Hertfordshire and George Smith in Yorkshire. Their gardens reflected the differences in their floral design styles. Mrs. Macqueen's garden, surrounding an ancient cottage dating back to the 15th century, was informal and almost wild in its conception. Curved borders were filled with plants grown for their beautiful foliage. It was interesting to see that Phytolacca americana (Virginian pokeweed) was cherished in cultivation. Another plant that caused considerable interest was the white form of Astrantia major, with its greentipped bracts, a must for the flower arranger and a favorite in Mrs. Macqueen's own floral creations.

Before leaving the village of Leverstock Green, where Mrs. Macqueen lived, we visited several other small, charming gardens. A cottage garden owned by Mr. and Mrs. Cadnam was immaculate, with roses very much in evidence. Of note was the lovely apricot 'Bethina'.

George Smith received us in his elegant home, the Manor House Heslington, which is very close to the city of York. His beautifully maintained garden was interesting to arrangers and bird watchers alike. We were delighted to locate two barn owls high in the treetops sleeping away the daylight hours. We were fascinated by Mr. Smith's slide presentation of his remarkably dramatic arrangements for Badminton house, the home of the Duke of Beaufort. We also saw slides of the Concours de Bouquets at Monaco, which he attends as a guest of the Prince and Princess and where he acts as one of the judges. He, too, had taken great pains to decorate his home with exquisite arrangements for us to view.

Our excursion through England also included visits to botanical and horticultural gardens. The Northern Horticultural Society's garden at Harlow Car near Harrogate

LEFT: This planting of ornamental grasses is at Wisley, the Royal Horticultural Society's demonstration garden in Surrey. ABOVE: Heather gardens were a favorite of all those participating in the Society's Autumn Tour of England and were usually planted in combination with drawf conifers.



"Although many of the gardens we visited were chosen because they were small or of medium size, we also visited several great houses set in magnificent parks."

was one of the highlights of our tour. This garden is comparatively new, being just 30 years old. It has been designed on a sloping site with a southwest exposure and a loamy, acid soil, a location ideally suited to the cultivation of ericaceous plants. There were over 200 species of rhododendrons and as many named hybrids planted in the Garden, but these, of course, were not in bloom during our visit. Instead, it was the heathers that caught our attention. They were growing around a pool where massive manmade outcrops of the natural sandstone had been placed. The heathers had been planted to give color and interest throughout the year. Another pleasant feature of the Harlow Car Garden was the collection of miniature conifers, all carefully labeled to help the gardener choose and identify suitable plants for his own use. Companion plantings of dwarf conifers and heathers were in evidence in most of the gardens we visited. Although never paired in nature, their juxtaposition appears to have become accepted throughout the British Isles.

Great emphasis was placed on foliage plants in a part of the Harlow Car Garden devoted to species of Arum, Phlomis, Rhus, Bergenia, Euphorbia and Cornus. Many of us were also delighted by the alpine house, which was designed to give a natural effect and included a wide range of alpine plants grown in scree beds and stone troughs. Harlow Car was a pleasure to visit, and since the site was chosen for its exposed location and poor soil, this gave great encouragement to those of us who garden in difficult conditions.

Both Harlow Car and Wisley were horticultural gardens, but our excursion also included visits to botanical gardens. Here the approach was more scientific. Collections of plants grew irrespective of their decorative value or of their suitability to the English climate. Such a garden was the Cambridge Botanical Garden, one of the oldest botanical gardens in the British Isles. Cambridge boasted both a sandstone and a limestone rock garden. Another feature of great interest there was the chronological garden, which demonstrated the paucity of indigenous plants and the range of foreign introductions to England from the 11th century onwards.



The Cambridge University Botanical Garden has a threefold role to play. It functions as a serious institution of scientific research; as an educational center for students of horticulture both at Cambridge and elsewhere; and as a public park. Recently it has also adopted a new role, that of conserving and collecting native flowering plants and large ferns with the aid of the Nature Conservancy Council.

The other botanic garden we visited during our tour was the Leicester University Garden, a much more recent creation than that of Cambridge. It consisted of four large suburban gardens dating from the beginning of this century, the homes adjacent to them having since become halls of residence for students at the University. As in all botanic gardens, a systematic arrangement of many families had been planted. The garden also had some well-established trees, including an unusual form of Cedrus atlantica 'Glauca', which had branches descending to horizontal tips; a fine weeping birch, Betula pendula 'Youngii', and an extensive collection of maples that added great beauty to the garden. The maple collection included Acer griseum, notable for its peeling, metallic-brown bark, a good selection of cultivars of Acer japonicum, including 'Aureum' and 'Aconitifolium', and Acer palmatum 'Dissectum'.

Although many of the gardens we visited were chosen because they were small or of medium size, we also visited several great houses set in magnificent parks whose present owners took great delight in the cultivation of flower gardens. Such a home was Boughton House in Leicestershire, the property of the Duke of Buccleuch. It was a great pleasure to all of us to be shown around the garden of the Dower House by Sir George and Lady Scott, both talented gardeners. Lady Scott is better known as Valerie Finnis, co-founder of the Waterperry Horticultural School and a photographer whose work frequently appears in the Royal Horticultural Society Journal, The Garden. Everyone was enchanted by the charm and delicacy of the plantings at the Dower House. Soft colors and gray foliage predominated. Also of interest was the collection of stone troughs that Sir George and Lady Scott used for Continued on page 38

LEFT: This attractive perennial border planting is part of Bressingham Nursery, owned by well-known plantsman Alan Bloom. ABOVE: Beth Chatto's nursery garden near Colchester was a neglected wilderness before 1960. Now this bog garden is one of many growing next to green walks that meander through five large ponds on the property.



Lavender Gardens

BY LORRAINE MARSHALL BURGESS

re you about to design a new garden or redo an old one? If so, consider a lavender color scheme. If the thought of manipulating color seems a bit much, relax. Spring flower colors tending toward lavender are among the easiest to handle. They almost fall together nat-

Start by focusing on lavender-blue and lavender-pink, and make them your major color notes. Then add a few grace notes of golden yellow as sun-bright accents and a few miniature plants in white for dazzle.

Once committed to lavender you will find scores of early-blooming bulbs and perennials to work with. Mother Nature in spring has always been partial to mauve and magenta. In fact, she seems to like all the purple hues, so why not join her?

Color scheming is an invigorating enterprise. It gives you an excuse to dig up and discard or give away any wrong colors in your garden, to seek out any discordant notes in your color symphony.

Find a new home for the bright red tulips and cerise anemones that someone gave you. Lift out the orange daffodils that came with that bushel shipment, along with any

LEFT: A lavender border in the author's Colorado garden includes lemon-vellow Hemerocallis, lavender-pink Hesperis, or sweet rocket, and pale-lavender iris. ABOVE: Purple pansies like those pictured above, and others available in shades of lavender and yellow, are perfect plants for the garden with a lavender color scheme.

crimson hyacinths. Then catch the scarlet poppies and orange iris, as soon as you can identify them. Some gardener who isn't into color harmonies should be pleased to have them.

Now direct your attention to the things that are already in your garden. Uncover the bluebells, Mertensia virginica, that have been languishing under the oaks, and cultivate those spreads of violets in a woodland corner. Lift a few orphans to group together into a new family. Cut a vague pathway to the garden columbines, Aqui-

legia vulgaris, that seem hidden in the fence line shrubbery, so you can watch them dance their way into spring in paleblue arabesques. Let them keep company with the pretty blue panicled flowers of the slightly lower-growing Jacob's ladder, Polemonium caeruleum.

Then reach into your catalog file and order seeds right now for allblue and all-purple pansies to grow as a friendly greeting beside the kitchen door. Divide and divide again your overgrown clumps of the creeping phlox, Phlox subulata, concentrating on the magenta and lavender shades. Plant them where they can overhang a retaining wall. Add new plantings of common and Persian lilacs (Syringa vulgaris and S. X persica) where they will show to best advantage, and introduce more golden forsythias in a warm corner where they can grow,

Do a casual inventory of existing early blue and lavender perennials, and add a low-growing speedwell such as Veronica repens, some pincushion flowers, Scabiosa atropurpurea, Ajuga, periwinkle-blue Vinca and perennial flax, Linum perenne, if you haven't already. Search out some earlyblooming China aster, Callistephus chinensis, and as many painted daisies, Chrysanthemum coccineum, in pink and lavender hues as you can find. From a friend acquire a big clump of Campanula glom-

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Lorraine Burgess is an artist and gardener, long concerned with meshing these two activities. She is the author of The Garden-Maker's Answer Book.

Confessions of a Lazy Gardener

TEXT AND PHOTOGRAPHY
BY MARTHA PRINCE

I cannot imagine life without a garden! Existence with no plants to grow, to arrange, to love, would be confining, dull and joyless. There is a human need to watch for spring's arrival, to choose treasures to tuck into the soil and to watch them grow. I love designing new areas—a new vista from a window, perhaps, or a new plant arrangement by our terrace "dining room." I am happy painting flowers, or photographing them or just examining one tiny petal for its intricate perfection. Most garden activities aren't "chores" at all, but pleasures. There are, however, supposed necessities of gardening I can do without.

I am not a particularly orderly person,

Martha Prince is an artist and writer who gardens on Long Island. Her special interest is wildflowers, with emphasis on rhododendrons and azaleas. Exhibitions of her paintings have been held at many botanic gardens and arboreta.

and the really routine things most gardens seem to demand are not for me. On a hot summery day I do *not* want to dutifully pull weeds or water the thirsty lawn. I prefer a tall, frosty glass of iced tea, a chaise in the shade, and a book. A garden, to me, should enhance life, not run it.

Every gardener has his personal priorities. Many people truly enjoy demanding gardens and find pleasure in the constant work required for annual and perennial borders and immaculate lawns. I like and admire such gardens, too, but only when the upkeep belongs to someone else! A garden should be a personal statement. What do I want (or need) in a garden? I like informality, easy care, varied moods. I like surprises waiting around the next curve, a seat in a hidden nook, vistas across a lawn, a deck in the treetops. I want the relaxed and cool feeling of woods. I prefer wildflowers, ferns, azaleas and rhododendrons, if I must make a choice in the plant world. Luckily (for me) "my" kind of garden can be an easy one to manage. I must tell you, however, that "easy" gardening requires some hard work in the beginning. A garden doesn't become selfcare, or easy care, without thought and planning.

We have about two acres on a wooded hillside. For flat Long Island, this is truly mountainous—the top of our hill is 120 feet above the water. Long Island Sound is not far away. This was evidently considered a difficult plot on which to build (the architect agreed!), and we paid very little for a perfect spot. for us. As this is our second garden, we applied lessons learned from the first one. Ours is certainly not a finished garden, nor will it ever be. After more than 15 years nearly an acre is still in untouched woodland. We started with no garden at all. First, the living room view was opened up, brick retaining walls and steps built, and planting areas designed. Years later, we are still uprooting saplings and clearing poison ivy! Extending paths, planting evergreens and spreading ferns and wildflowers is a continuing process for lazy gardeners such as we. There are plans for a small semi-circular terrace, far from the house and tucked into the hillside, where we want a picnic table under the white pines and the larches. That is on this year's agenda. We do not feel particularly ashamed of ourselves for things



Phlox stolonifera 'Blue Ridge'.



Glenn Dale azalea 'Coquette'.

"On a hot day I do not want to dutifully pull weeds or water the thirsty lawn. I prefer a tall, frosty glass of iced tea, a chaise in the shade and a book."

undone as yet. Indeed, one of the positive pleasures of gardening is looking forward to the next expansion! I think a really complete and finished garden would lack challenge.

For any easy-care garden, the choice of plants comes first. We have learned what takes care and what doesn't, what we really like and want, and what we like but can do without. I love roses, especially the old ones, but we had gone through the regular sieges of Japanese beetles, aphids and black spot. In the first garden we had lovely iris, but we were not systematic enough about removing leaves and debris, and they rotted. The neighbor's cat slept in our beds of seedlings (she preferred petunias). A very small garden was a lot of frustrating work!

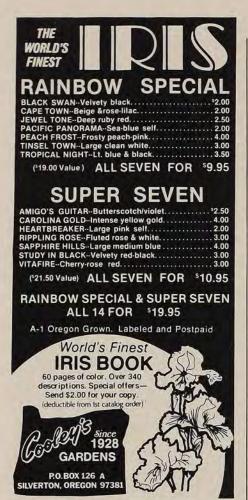
Here, evergreens, groundcover and trees are our staples. We have a good year-round display, whether the rhododendrons have real flowers or snowball ones. We were

quite lucky in our assortment of natural trees; there are two huge green ashes, many oaks, a large hickory or two, an American linden or basswood (Tilia americana), a tulip, a horse chestnut, good white pines, a small forest of hemlocks-and too many maples. The soil is acid humus over clay. The list of acid-loving evergreens is enormous, and enormously varied in shape, leaf, texture and color. Start with the rhododendrons. Hundreds of hybrids and many species are hardy in New York. We have miniatures, such as Rhododendron racemosum (tiny leaves and pink blossoms), long, slender-leaved plants such as R. makinoi and R. degronianum (with velvet indumentum or "fur" underneath), glossy, round leaves (we use 'Bow Bells' with success) and too many differing ones to count. I have to laugh when people ask if a rhododendron garden isn't monotonous except at flowering time. To go with these are all their brethren in the same genus, the azaleas. We have dozens of hardy azalea cultivars, both evergreen and deciduous. If you ask me to name one perfect rhododendron (perfect shape, perfect flowers, perfect leaves, no leaf burn, no bud blast) I think I'd have to say Dexter's 'Scintillation'. For the single perfect evergreen azalea, the Glenn Dale 'Coquette'. To use only those would be dull, however. All

Other marvelous plants include Skimmia japonica (a dioecious plant, so you

need at least one male to have berries), which is low, glossy-green and has red globes larger than holly berries. Leucothoe fontanesiana and its cultivars (including ones with variegated leaves or brilliantbronze new foliage) can be mixed as a drooping evergreen edging for woods or paths. Our American holly, Ilex opaca, and its cultivars are very hardy, as is Illex pernyi (and Ilex X aquipernyi) and Ilex crenata (which can be trimmed as a hedge, if you want a hedge). We have more or less eliminated many hollies from our garden; the lovely English holly suffers bad leaf-burn in the winter, et cetera. We do root some interesting species, just for fun (Ilex cornuta 'Burfordii' is one), but tuck them in protected spots and don't really count on survival.

All these evergreens and the few conifer treasures we have planted, such as bluegray Cedrus atlantica 'Glauca', Chamae-



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LAZY GARDENER CONT'D

cyparis obtusa (the Hinoki cypress) and a mat of *Juniperus* 'Nana', have given no trouble, ever. We do admit to having 25 feet or so of upright yew hedge that needs clipping once a year.

With only a small lawn, "open space" includes a large terrace (blue stone set in sand) and several pebble gardens. These are wonderful-the stones are on top of black plastic, which discourages weeds. Our largest pebble garden is a half-circle by the terrace, backed by rhododendrons. We like to change the planting there, much like redecorating the dining room. Rhododendrons are easy to move. Their shallow roots are the reason one does not cultivate around a plant, which we want to avoid anyway! Right now our decor is Rhododendron 'Roslyn' (lavender), 'Idealist' (cream), 'Bow Bells' (pink), 'Madame Masson' (white with a yellow blotch) and 'Earl of Athlone' (brilliant red). In front of them, or rather between them, is the splendid groundcover, Liriope muscari (sometimes called lilyturf). The dark-green, lily-like leaves are evergreen, and there are pale-lavender spikes of blossoms in autumn. Actually, the plants need a "butch" haircut in spring before the new leaves come, but we usually forget and it doesn't seem to matter.

Another groundcover we use extensively around rhododendrons is Epimedium (we have all the species, I think). These foothigh, carefree and lovely plants are most noticeable for the leaves, but the pretty sprays of almost-hidden flowers come in red, white, lavender, yellow, pink-and-yellow. I'm not sure which species is which, as the first plants were a gift, with no label. These, too, should have a butch-cut in the spring, but they do beautifully with our neglect. We also have quantities of the glossy-leaved Asarum europaeum (wild ginger), which can be divided and spread and spread and spread. Then there is Phlox stolonifera 'Blue Ridge', a charming creeper that blooms almost anywhere. In the woods, partridgeberry (Mitchella repens) has made a lovely carpet under the pines, from one small plant. Foamflower is another woodland cover that takes care of itself. The flowers are fluffy, white plumes above maple-like leaves. The scientific name is Tiarella cordifolia.

Readers who know me already know the wildflowers I love, but I don't remember mentioning one tough and enduring species, *Uvularia grandiflora*, called merrybells. The showy, drooping, bright-yellow flowers have no faults and need no care. They spread into big clumps and can be divided.

Care in planting is the best guarantee of future ease in gardening. All the plants we have chosen need the same soil preparation; a garden cannot possibly take care of itself without both the right soil and the right drainage. The first tool needed is a roto-spader (unless the man-of-the-garden really likes back-breaking work). I can't manage gas-driven equipment, but my husband rather enjoys it. He has turned over all the soil in each area to be planted, and churned in peat and sand in the proper proportions. We mulch well, and the soil never needs disturbing again.

Next to the roto-spader, the most useful tool is a vacuum-shredder-bagger. This both takes care of cleanups and provides our mulch supply. This marvelous invention chews up the leaves on the lawn and terrace (and driveway, and walks), and spews the almost pulverized leaf bits into a canvas bag; when filled we empty this bag into a big plastic garbage bag and tie it. Rows of black bags of ready-to-use mulch are lined up in the garage. Leaves are too precious to burn, and I shudder when I see "gardeners" doing it (in the name of neatness, I suppose).

Then, an automatic sprinkling system . . . for us an absolute necessity. We couldn't leave the house without our faithful servant. My husband installed it himself in sections as the garden grew. As today's equipment and supply prices are so much higher, he looked up his purchases in a current catalogue. If you installed our system now, you would pay about \$700. That is with no labor costs, of course. Here is what we have. There is a six-zone arrangement (partly for flexibility-the steepest part of the hill needs more water because of run-off-and partly because of the water pressure). Each zone is set for hours of the day and days of the week. There is a turnoff switch (for rain) and the whole timing can easily be reset for wet or dry conditions. The plumbing is buried polyethylene pipe leading to properly spaced, rotating sprinklers (the catalogue calls them oscillating arm sprinklers), and to a few smaller misting-heads for filling-in. Presumably, each sprinkler can cover a circle 60 feet in diameter, but some are set for half circles, some for quarter circles. Why water the house, the terrace, the street or the

neighbors flowers? And as a final concession to our laissez-faire gardening, we don't even have to remember to drain out the system in the winter. Automatic drains are located at all the low points. Right now,

"What do I want or need in a garden? I like informality, easy care, varied moods. I like surprises waiting around the next curve, a seat in a hidden nook."

about 21,000 square feet of the garden are covered, and as the garden grows two unused "zones" can be added for another quarter-acre.

What "chores" are inescapable? The only routine care is for the lawn. We have about 1,500 square feet of it, vaguely kidneyshaped and gently sloping. My husband can mow it in less than half an hour one evening a week. It is the only thing we have that needs some fertilizer and lime (except for a few ferns wanting a teaspoon full now and then). We generally don't fertilize our rhododendrons. Every few years we do add a cup of superphosphate to plants that aren't flowering well. The only spray used is Sevin (to protect the rhododendron leaves), and we never do that when the plant is in bloom, to protect the bees. I like unchewed leaves because rhododendrons and azaleas are the only things we "show" (at the American Rhododendron Society), and poor leaves mean a 10point demerit. My husband laughs at me for the blue ribbon mania I developed a few years ago, but the malady is subsiding. I entered nothing last year, and probably won't again. My storage space for ribbons is exhausted, anyway.

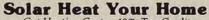
I think I hear some A.R.S. members whispering, "Don't you dead-head your rhododendrons?" Dead-heading is removing dead brown flowers before seed can set. We don't, really, except where the brown clumps are unsightly. After all, arboreta and botanic gardens usually leave them alone! We don't seem to lack blossoming.

You may be asking, "If you have all that

free time, what do you do that can be called gardening?" We enjoy ourselves. We have a small (8' x 12') greenhouse, and we also have two propagation cases, with lights, in the garage. We root all kinds of evergreens from cuttings, we grow seeds of interesting trees we'll never see mature, and we indulge in my passion for the flame azalea (Rhododendron calendulaceum). We grew so many of my azaleas that we linedout at least two hundred in our outdoor nursery area last spring. I have a wee forest of American mountain ash (Sorbus americana) that will probably never show its glorious orange berries in my lifetime; my husband is cherishing a whole palm grove in the greenhouse. We have persimmon (Diospyros virginiana) trees grown from seed, and I plant acorns of chestnut oak (as my childhood treehouse was in one). Still stratifying are Halesia monticola (silverbell) trees and some Davidia (dove tree). As gardeners, we seem to have a belief in immortality.

I think the happiest part of our gardening may well be growing our own hybrid rhododendrons from seeds. We are rather aimless, grow-for-fun hybridizers, with none of the stringent rules of professional ones. Professionals throw out imperfect plants, mercilessly, but as we never intend to sell ours anyway, we keep all our plants. The flower trusses may be too small for the leaf rosettes, or the flower color imperfect; so far we have only considered three as possibly worth registering and naming—'Peach Parfait', 'Tutu' and 'Cherry Sauce'. It is a miracle that such tiny seeds of a few years ago are now handsome, eight-foot plants, with blossoms such as no other plant in the whole world can exactly match! Last spring we had a really lush display, and we smiled happily every time we looked. My husband would rush to see the rhododendron nursery bed every evening before he opened the front door.

Here "work" outdoors is only in the spring and fall. If we lived in another climate, perhaps I would be a busier gardener. New York's hot, humid summer days are just better suited to iced tea in the shade than to weeding in the sun. Perhaps I'll be forgiven by "good gardeners" if the books I read in my chaise are on flowers? They usually are, truly. In my lap lies Redoute's Roses (the Anderson edition from Abbeville Press). . . . and the blossoms are more beautiful than any roses I could ever grow. 6



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plants can be grown out of doors year round only in the extreme southern and southwestern portions of this country (Arnold Arboretum Zone 8). If grown in cold climates, the corms must be planted in the spring after the cold is past and lifted in the autumn before frost. The cultural requirements are similar to those for the gladiolus.

Another group of plants from the Cape of Good Hope are the African corn lilies, Ixia species, so named because they often appear in corn fields in their native land. These plants are also members of the iris family and grow from corms. They bear blooming stalks from one to two feet tall on long, wiry stems and have grass-like foliage. The flowers, borne in spikes or panicles, are vivid and bright in shades of red, scarlet, orange, yellow or white. Often each star-shaped bloom is marked with a dark center eye. The corn lilies bloom over a long period and make excellent flowers for cutting. If the plants are to be grown in the open (they are hardy from Arnold Arboretum Zone 7 south), the corms should be planted in a sheltered, sunny place in November. Plant them in sandy soil three to four inches deep and two inches apart and mulch heavily. Farther north they can be planted out of doors after all danger of frost is past. Ixia is an ideal plant for greenhouses or for growing on a sunny window. Planted in five-inch pots, they can be forced for winter and early spring bloom. Indoors or out they will provide patches of color and add gaiety to any surroundings.

Several members of another well-loved family, the Amaryllidaceae, also masquerade as lilies. One of the major differences between the two families is the superior ovary of the lily family versus the inferior ovary of the amaryllis family.

To choose one favorite to grow among the others is always difficult. Perhaps mine is the Cape lily, *Crinum* species, which we have grown in our woodland for many years. Plant crinums in the spring in full sun and lift them in the fall. Our offsets have been so numerous that I was able to cut a whole vase of flowering stems one morning without ruining the splash of color in my garden. Considering the beauty of this genus, one has to look forward with excitement to the prospect of growing many more of these delightful summer and fall flowering bulbs.

Crinums are as noteworthy for their two-



A white-flowered cultivar of Crinum moorei, commonly called spider lily. Originally from South Africa, the species has rose-red flowers.

foot-long, broad, strap-like foliage as for their large pink or white funnel-shaped blooms. The flowers are borne in loose terminal umbels of six or eight flowers on two-foot scapes. This is a noble plant, beautiful in the garden, and the flowers are admired in arrangements. Their fragrance is exotic. Every garden, large or small, has a spot or two for an accent, something with special interest. Crinums are the perfect plant for this use.

Crinum bulbs are pear shaped and large. They should be planted deep enough to cover their long necks, about five inches. These plants like a soil full of humus, plenty of water and a location in good sunshine. A top dressing of rotted manure during the growing season is helpful. Their root system develops slowly and with time will stretch many feet in all directions. Off-sets are formed and can be removed for new plants. The crinums are generally not hardy north of Arnold Arboretum Zone 7; some species are only hardy in Zones 8 or 9 southward, thus, in most areas of the country they must be stored in a frost-free place during the winter months like the other plants mentioned thus far. After digging the bulbs in the fall, cut the foliage back to about two inches before putting them away for the winter. In mild regions, where the bulbs do not have to be disturbed every year and are left in the ground, they will spread and form thick clumps.

Crinum X powellii is a handsome mem-

ber of this genus, bearing delicately veined, pink flowers in August on two- to three-foot stems. *C. bulbispermum*, one of the parents of *C. X powellii*, is probably the most widely grown member of this genus. Both plants are among the hardiest members of the genus (Arnold Arboretum Zone 7). Many gardeners have found that in a protected location *C. bulbispermum* can be grown outdoors year round as far north as New York City.

Another so-called lily that is attractive in the garden is Amaryllis belladonna, the belladonna lily. In August and September flower buds appear in clusters. The fresh green, strap-shaped leaves are absent at flowering time, and the lack of foliage gives a dramatic effect to the shining stalks and brilliant, trumpet-shaped flowers. These bulbs are useful for brightening up the garden in August when the exuberance and color of the borders are getting past their prime.

The Guernsey lilies, members of the genus Nerine, which are native to South Africa, received their common name when a shipment of Nerine sarniensis bulbs was cast ashore on that island after an English Channel shipwreck. The bulbs survived and established themselves on the island whose name they now bear.

This group of so-called lilies are trickier than some bulbs, but once established they make a beautiful show each year. If you live in a very warm climate (Arnold Ar-

boretum Zone 9) these plants will grow well in a warm, sheltered spot away from the wind. N. bowdenii, also called the Cape Colony nerine, is especially suited for this purpose. In July, plant the long-necked bulbs about six inches deep in a rich, welldrained soil. The flower stalks appear before the leaves, and in September when the plants bloom they will still be practically leafless. After blooming, the leaves must be allowed to grow through the winter until about May so that they can build up a food reserve for the next season. Gardeners in the northern climates need not despair for nerines will perform happily when potted. The scheduling is much the same as for plants grown out of doors in the south. In July plant flowering size bulbs, one bulb per four-inch pot or three bulbs per six-inch pot, in a mixture of two parts loam, one part leaf mold and one part sand. Water sparingly until growth starts, and be sure the bulbs are given perfect drainage. Nerines grown in pots also will bloom in the autumn, and the foliage must be grown through the winter. Before the first frost of the season bring the pots indoors, keep them evenly moist, and allow the plants to grow through late May when the foliage will begin to die back. After resting the bulbs the cycle can be started all over again in July.

Peruvian lilies, Alstroemeria, are South American plants grown mostly in mild areas. Once included in the amaryllis family, they are now classified separately in their own family, Alstroemeriaceae. They have tuberous roots that prefer a sandy loam containing humus and an abundance of moisture. Clusters of lilac, apricot or pink flowers streaked with purple, red, yellow or orange bloom on three-foot stems. They make excellent cut flowers. Generally Alstroemeria is easily grown, but the majority of species are not hardy in the north and thus plants must be stored indoors during the winter months. One species, A. aurantiaca, is hardy to Arnold Arboretum Zone 7 and with proper precautions may be grown out of doors year round much farther north. There are a number of hybrids of several different species available, some more temperamental than others. Plant them in the spring for July flowering. In addition to being planted out of doors in mild areas, they can be used in pots in a cool greenhouse. For propagation, use root divisions in autumn or seed.

Hymenocallis, a genus of plants often

called the spider lilies because of their reflexed perianth segments, is a group of summer-flowering bulbs of surprising beauty. Hundreds of H. narcissiflora, a species most commonly known as Peruvian daffodil, have been grown in the sunny portions of our woodland for years. The bulbs are planted out in the spring when danger of frost is past. Plant each bulb about three to four inches deep, but do not cover the entire neck with soil. They will start to grow almost at once. Blooming stalks will appear within three weeks, bearing lovely white, lily-like flowers. The large trumpet-shaped tubes are surrounded by spidery, curved perianth parts. An added attraction of these lovely blooms is their far-reaching, delicious fragrance. The glossy, strap-shaped leaves are also attractive. This is a plant that never fails to be exciting.

In the fall before the first killing frost, lift the bulbs, keeping all fleshy roots and tops intact. Spread them out on the ground in the shade to air dry for a day. After drying, shake all the loose soil off the roots and cut off the leaves within a couple of inches of the top of the bulb. Pack a bushel basket full of these bulbs, cover it with newspaper and store it in a frost-proof place for the winter. In mild areas (the plants are hardy in Arnold Arboretum Zone 7), these bulbs can remain in the ground year round.

Unquestionably, these so-called lilies have an appeal all their own. Their distinctive flowers and unusual forms will add grace and charm to any floral display, and the extra care you must take to grow them in the cooler regions of the country will be worth your effort. If you do not have room for a colony, why not at least place a few at key positions in your garden? @

Source list for plants:

Amaryllis, Crinums and Nerines: Marcias, 255 Galveston Road, Brownsville, TX 78521

Nerine Nurseries, Welland, Worchester, England

Hymenocallis and some small bulbs: Geo. W. Park, Greenwood, SC 29647 Wayside Gardens, Hodges, SC 29695 Avon Bulbs, Bathford, Bath BA1 8ED, England

Van Bourgondien, 245 Farmingdale Road, P.O. Box A, Babylon, NY 11702 Other "so-called" lilies:

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watering was necessary, since they were shaded and the summers in our northern Connecticut village are cooler than in most areas. I thought container gardening was a cinch and couldn't understand why entire books had been written on the subject (mainly by Californians and/or city dwellers)!

Therefore, one winter I bought every window box on sale at every discount store in our part of the state, accumulating, to my wife's great horror, more than a hundred, which were placed on mostly sunny stone walls all over our property. The next summer was spent running about with hose and watering can, and we skipped the beach. By the end of July the petunias were peaked, and so were we.

Fortunately, there is a season called winter and it is a time in the northland for reflection, or less kindly put, for figuring out what went wrong and to resolve never to let it happen again.

Bigger containers (and grouping them to ease watering) seemed to make sense. By this time I decided to move up. Redwood tubs were out of the question because, while they are durable and attractive, they were beyond our budget, at least for the scale on which we wanted to garden. Also, Mary Ann objected to my scrounging through the greengrocer's garbage to retrieve bushel baskets (which don't make bad containers for a season if the interiors are partly lined with black plastic (polyethylene).

Necessity is the mother of invention, and invention is the mother of discovery. In my wanderings through the discount stores I noticed that there were kitchen departments as well as gardening ones. The large, flexible plastic dishtubs which sold for \$1.98 were ideal for my purposes, and I invested in a century's supply. They had no drainage holes either, but by this time I had become skilled with an ice pick, and this posed no problem. The tubs had two key assets apart from size-they were lightweight, and the plastic kept down evaporation. By good chance most of them were dull brown and would not steal the thunder from the plants. Mary Ann was lukewarm toward the tubs, and acidulous toward the few Kelly green ones that crept in during my zeal to corner the market. Actually, they were a chlorotic Kelly green and could have stood a shot of iron chelates. However, I assured her that we would plant euonymus vines around the base to soften their harshness. By and large they worked well, though one visiting land-scape architect peered through the camouflage and asked sweetly, "Do you take in laundry too, Mr. McGourty?"

Rabbits forced us to increase our container gardening efforts. Our vegetable garden had been in a scrubby old pasture, which apart from the driveway was the only area of our property receiving all-day sun—a requirement for the best growth of food plants except the leaf crops (lettuce, chard, etc.). One year the pasture suddenly became a scene from Watership Down, with rabbits camped out every few feet, within hopping distance of the carrots. They even intimidated the woodchucks, who were also eyeing the carrots.

The logical response would have been a fence around the vegetable garden. I objected on aesthetic grounds, since old pastures in New England aren't meant to be cluttered, regardless of Robert Frost's comments about good fences and good neighbors. It struck me that the ideal spot to put the vegetable garden was at the end of the driveway—in containers. This was based largely on the theory that rabbits don't climb.

We located a half-dozen good-sized, wooden packing crates and put two tomato plants in each, along with stakes cut from ash saplings in the nearby woods. Mary Ann marveled at my optimism. The stakes were nine feet tall, and even by the end of summer the tomatoes hadn't reached the top. The driveway resembled 19th-century Salem harbor with its masts shorn of sails.

There is one thing we learned about tomatoes: they are drunkards. Their thirst exceeds that of any other vegetable, except possibly cucumbers, which nature did not intend for little window boxes. We never needed a thermometer in summer because the tomatoes would tell us when it was more than 85° F. How well I remember the words, "Darling, the tomatoes are gasping again. Be a dear and give them a drop from the hose!" Half an hour later, after musing about tomatoes and how they learned from the old-time boxer called Fainting Phil Scott, who won his fights by dropping to the canvas shouting foul, I would wind up the hose and wash myself down. Today a lot of greenhouses have miniature hoses aptly named spaghetti tubes, which run from individual containers to a central hose to a faucet. This would make a lot of sense adapted to the driveway vegetable garden, but then I wouldn't be able to think about Fainting Phil anymore. And spaghetti tubes aren't the prettiest system, either—even with sauced tomatoes.

Not all of our metal window boxes have rusted away yet, much to Mary Ann's disgust. We inherited several old tables which wouldn't be much worse for wear if left out during summer, and on these were placed boxes for green peppers, lettuce, eggplants and mini-carrots. Seed catalogs these days list a number of compact-growing varieties especially suited for containers. However, extra space was needed, so a couple of sawhorses and sturdy planks were added for more containers. Not a rabbit bothered to climb.

Our only problem in the driveway was with a raccoon, who one September evening raided the melons just as they were coming to the desired point of ripeness a few days before frost. Regardless of the catalog talk, it is hard enough to grow melons in Connecticut because of cool summer nights and a short growing season, but like all home growers we felt like gambling a bit. Seed had been started indoors under artificial light in April, young plants moved to wooden boxes in the driveway at May's end and protected against cutworms by collars cut from paper cups. In the first couple of weeks a tarp of black plastic had been placed around the boxes to reflect heat. The crop itself exceeded our dreams-23 beautiful muskmelons on their way to perfection. Then, the raccoon struck, taking a single bite from each. We consoled ourselves with the thought that he might have developed a bad case of diarrhea later that night.

Melons, in fact almost every kind of container-grown plant, require some form of fertilizing as the season goes by, mainly because the frequent waterings wash away nutrients in the soil. We used to employ a water-soluble fertilizer every three weeks, and still put it to work on an occasional recalcitrant plant, but the special slow-release fertilizers that are mixed into the soil just before planting time, save a lot of time and effort. No additional fertilizing is needed in the course of the summer. The slow-releasers are not inexpensive themselves, but they allow us more hammock time than we used to get.

There appear to be as many soil (or soilless) mixes for containers in America as there are gardeners. Specialty formulations (University of California, Cornell mix) ex-



This container vegetable garden thrives on the edge of the author's driveway. The plants growing on the tabletop have been declared "rabbitproof" on the theory that rabbits don't

ist, mainly for the commercial grower, but can be adapted in the home garden. The city dweller might find it easiest to use a good grade of bagged potting soil with equal parts of coarse sand and peat, or to use an entirely soilless mix. The latter is particularly useful for hanging baskets because of its light weight, but special attention must be given to fertilizing and watering. Such mixes are more-or-less free of soil pathogens. They are based essentially on equal parts of ground peat moss and vermiculite and/or perlite, with a trace of dolomitic limestone. Our own mix is uncomplicated. It consists of year-old compost that is approximately three-quarters decomposed, a shovelful or two of coarse builder's sand per wheelbarrow-load, a cup of lime and a half cup of superphosphate, since our soil, like most in the Northeast, is deficient in phosphorus, an element that encourages good flowering.

Unamended garden soil itself is not satisfactory for containers because it almost invariably lacks the proper structure. If it is used in conjunction with peat and sand, it is best pasteurized first. Pasteurization. incorrectly called sterilization in many garden books, can be accomplished in small quantities by cooking the moistened soil in a 200° F oven for one hour. Close the doors and open the windows-there are nicer scents in the world than roasting soil. Also, it is a good practice to change the soil in garden containers every year.

All sorts of garden annuals, and some perennials such as the hardiest, most rugged sedums, lend themselves to container use. Low height and compactness, or trailing nature, are important, and if you are just getting started it would be well to turn to a source such as the Brooklyn Botanic Garden Handbook, Gardening in Containers, guest edited by George Taloumis. It is available by mail for \$2.85 from the Garden, 1000 Washington Ave., Brooklvn, NY 11225.

Every container gardener has favorite annuals, including some which may be very different from the ones used in flower beds. Creeping-zinnia (Sanvitalia procumbens), a little yellow daisy with a prominent, dark eye, is a plant that comes to its best in containers, as does another miniature study in yellow, the Dahlberg daisy (Dyssodia tenuiloba). Both are nice with the electric blue of Lobelia erinus 'Crystal Palace Compacta' or the softness of Lobelia 'Cambridge Blue'.

We also like to start a container or two of Virginia-stock (Malcolmia maritima), the flowers of which resemble arabis. They may be pink, lilac or white, and plant height is only a few inches. Virginia-stock, like sweet-alyssum, flowers in just five or six weeks from seed sown directly in the container. The bloom period lasts only a month or so during the heat of summer, but if seeds are started by August 1 a long display may be had during the cool days of autumn. One year I noticed that a November temperature of 17° F had not spoiled the flowers. Ornamental ("flowering") kale (Brassica oleracea) is one of the few other annuals that can tolerate such frost and look well in late fall. Snapdragons persist,

Extending the season is important for

anyone living in the cooler regions of the country, and container gardening can be singularly useful in this respect. Not only is it possible to hide the evidence if a container is in crisis and your mother-in-law or landscape architect happens to be coming for a visit, but it is also easy to grow fall bloomers such as cushion chrysanthemums in containers that are out of sight, perhaps on a distant stone wall, then bring them to the terrace or porch as they start to bloom. The flowers last a surprisingly long time, and if heavy frost threatens it is no difficult task to place an old blanket over them, especially if the containers are grouped. Chrysanthemums cannot safely be left in containers in the open over winter in the North. We put them either in a cold frame or, removed from pots, into the garden. Evergreen boughs are placed on top after the ground freezes. The survival rate is as a rule quite high with cushion mums, which are among the hardiest of the breed.

Finally, good grooming is important because containers are usually placed in conspicuous positions—by steps, doors or terraces. Spent blossoms should be removed several times a week. If some leaves are marred or scorched, remove them. Make sure containers are not beyond the reach of the hose! Certain annuals such as petunias look worse for wear as summer progresses. Pruning them back halfway, then feeding and watering them heavily, works well, but it makes aesthetic sense to get the containers out of sight until revival takes place.

Experiment with container gardening this year! 0

Continued from page 25

the cultivation of alpine plants. The tufa of the troughs was an ideal medium for species of *Lewisia*, *Saxifraga*, *Gentiana* and other plants that would otherwise tend to rot in the winter dampness.

Ripley Castle in Yorkshire, the home of the Ingilby family, was another great house on our itinerary. It had a park laid out by Capability Brown, but the wide herbaceous borders were cherished by the present Lady Ingilby, who had filled them with masses of old-fashioned favorites such as the many-colored Michaelmas daisies, Achillea, Rudbeckia and Helianthus. At Ripley we had the added pleasure of eating lunch in the beautiful dining room overlooking the park.

Without doubt, the largest of all the estates we visited was Castle Howard overlooking the Howardian Hills in Yorkshire. All the land to the horizon belonged to the estate. The manor house was built in the 18th century by John Vanbrough for the Howard family, whose home it still is today. Again, the original concept of a great park setting had been maintained. Notable architectural features were the Temple to the Four Winds and the exquisite family mausoleum in which Horace Walpole said it would have been a pleasure to be buried alive!

The present inhabitant of Castle Howard, Mr. George Howard, had developed a lovely walled area within the park. There he was growing roses. This planting featured shrub roses in particular. Jim Russel, formerly of Sunningdale Nurseries, had come to live at Castle Howard and had undertaken the replanting of a vast area of the estate known as Ray Woods. In this 66-acre plantation of informal woodland he was planting not only the widest possible range of rhododendron species, many of which would otherwise be lost to cultivation, but also a large range of other shrubs and trees to replace the original beech, birch and oak planted nearly three centuries ago. It was a rare privilege for all of us to join Jim Russel for a two-hour walk through these woods, which were not yet open to the public because the plants were still very young. He had brought many of the rhododendron species with him from the south, and it was extraordinary to see with what prolific ease they were seeding themselves throughout the plantation.

I now come to a category of garden that gave enormous pleasure to us all, the nurseryman's garden. We visited Alan Bloom



at Bressingham and Beth Chatto near Colchester. In both instances it was the owners who showed us their gardens.

Alan Bloom was one of the first to introduce the idea of perennial island beds instead of the more traditional formal border. His garden at Bressingham was large and took the shape of a shallow bowl with a pool at the lowest level. The beds were stocked with well-associated plants, be they shrubs, perennials or rock plants. Of particular beauty in the early autumn were the astilbes. Astilbe 'Bronze Elegance', with its rose-pink plumes and dark foliage, was an outstanding cultivar, as was the darkred 'Fanal'. Another unusual plant in Bloom's garden was the yellow Asiatic poppy, Meconopsis chelidonifolia, with its erect, leafy stems. A new introduction among the shrubs was the vibrant-red Potentilla fruticosa 'Royal Flush', raised from a seedling of 'Red Ace', itself an excellent, vigorous plant. Attracting attention throughout the tour was the willow gentian. Bloom had the best cultivar, Gentiana asclepiadea 'Knighthayes'.

Bressingham Nursery specialized in the cultivation of dwarf conifers, so with great interest some of us visited the garden of Adrian Bloom, Alan Bloom's son. This garden was laid out on a gently sloping site and resembled an artist's palette; splashes of color, provided by massed heather, were interspersed with beautiful dwarf conifer specimens, all of which were planted in random beds surrounded by impeccable lawns. The deep-pink, double flowers of *Calluna vulgaris* 'Peter Sparkes' and the brilliant white of *Calluna* 'My Dream' were lovely, as were cultivars of the lime-tolerant heaths, *Erica carnea*.

Mrs. Beth Chatto's nursery garden was at White Barn House Elmstead Market. It was almost impossible to believe that this garden was a neglected wilderness prior to 1960. Near the house, where the soil was warm gravel and usually arid because of low average rainfall, the garden had a Mediterranean look. A wide range of sedums and euphorbias, together with thymes and rue (Ruta), were thriving. The northeast part of the garden had better soil, so it became the woodland garden. At its center were five large ponds divided by green walks. This area had been developed as a bog garden with species of Iris, Polygonum, Gunnera and other water-loving plants.

Mrs. Chatto revealed to us that she always planted in groups to form a roughly asymmetrical triangle and that she used large-leafed plants such as bergenias in the front of her borders. Every inch of her soil was covered with foliage for as long as possible to cut down on weeding. She estimated that with constant mulching, both with compost and bark chippings, she had reduced the maintenance of the four-acre garden to about one day a week!

Our final visit was to an Essex garden on a very exposed site. Not yet 20 years old, Hyde Hall was the creation of Dr. and Mrs. R. H. M. Robinson. The garden was situated on what appeared to be the only high ground for miles around. Tender shrubs grew around the house, but in this garden the roses starred. We saw great beds of massed color, as well as a collection of climbing and pillar roses supported by loop ropes and interspersed with clematis, mainly of the small-flowered type. There were also greenhouses to visit, an herb garden, lake, herbaceous borders and special collections of Malus and Viburnum, all in full fruit, that made a dramatic impact on us all.

Mention also must be made of the delightful garden we visited at Saling Court, the home of Hugh Johnson, Editorial Director of The Garden, and also Glazenwood, once the home of Samuel Curtis and now beautifully maintained by the present owners who are not only keen gardeners but also collectors of embroidery, lace and botanical paintings. Their home was a lovely example of a medium-size Georgian house.

Our tour ended with a visit to the Great Autumn Show in London, and it certainly lived up to its name. Some of the more memorable exhibits included T. Rochford and Sons' magnificent display of house plants, in particular a new range of Schlumbergera truncata hybrids, and a new hoya that produced orange and yellow flowers very freely. Blackmore and Langdon had a spectacular display of tuberous begonias. One of the smaller nurseries to win a gold medal was County Park Nursery of Hornchurch in Essex, which specialized in plants from New Zealand. While impossible to grow on the east coast of the United States, these plants were of interest to westerners in the group. The show contained plants for everyone to grow, either in the garden or the greenhouse, and it attracted a tremendous number of visitors, some of whom were owners of the gardens we had visited on our tour. 8

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erata, the clustered bellflower, with its dense, brilliant-blue flower clusters. Divide the clump into at least six parts to start a controlled drift of these easy-to-grow and sometimes rank beauties. Then add several delicate clusters of pale violet-blue wild phlox, *Phlox divaricata*, just for contrast.

In the fall, this one or next, add buckets of bulbs producing flowers with a lavender cast. Choose squills, *Scilla siberica*, with tiny blue flowers, grape hyacinths, *Muscari*, for their blue or purple grape-like spikes, and crocus in all their lavender variations. Then, remembering the need for a touch of golden yellow, buy daffodils to toss down a slope and plant where they fall. Select tulips by color and avoid the reddish hues. Look for 'Texas Gold', 'Yellow Dover' and 'Moonstruck' as warm accents.

With the bulbs in place and marked, add adjacent plantings of golden alyssum, Aurinia saxatilis, globe flower, Trollius, and leopard's bane, Doronicum, to continue the sungold complement. Plant a scattering of purple rock cress, Aubrieta, and catmint, Nepeta. The latter adds a gray foliage with deep-purple flowers.

To make everything sparkle, add some pure-white flowers to serve as buffers between the stronger hues. Use snow-in-summer, Cerastium tomentosum, candytuft, Iberis, and some English daisies, Bellis perennis, the true daisies of history with small ray flowers in white and pale pink.

With all this accomplished you can anticipate spring with high hopes, knowing that all your flowers will be sympatico. Having left nothing to happenstance, admit to your self that Mother Nature still reigns supreme. As your garden borders fill out you can be confident that they will harmonize with the apple and pear blossoms and even the cherry. You may, however, sense a slightly jarring note in the brighter pink of the peach blossom.

Actually there is no reason why this lavender theme cannot drift along happily through the poppy, peony and rose seasons. There need be no friction as long as varieties are restricted to lavender, pink, white or yellow blooms. Include poppies—the Orientals are available in pink, white and mauve, and Icelandic poppies come in white and golden strains. With peonies you will need to pass up the bright reds and maroons, but this still leaves you with



Cultivars of *Iris* come in many shades that are suitable for a garden with a lavender color scheme. Pictured here is *Iris* 'Melodrama'.

beautiful single whites with yellow stamens, single and double pinks and a mauve or two to choose from.

With roses, your choice is somewhat more limited. You should forego the vivid reds, the scarlets and the coral and orange hues, but you can still choose among many pinks and whites, a few lavenders and many pale and golden yellows. Hybrid tea cultivars include 'Promise' in pink, 'Seashell' in peach and gold tones, 'John F. Kennedy' in white, 'Sterling Silver' in lavender-gray, 'Heirloom' in true lilac and 'Kings Ransom' in gold and yellow.

In annuals for midsummer bloom choose yellow marigolds, pink or white zinnias and lavender and purple petunias. This selection will give you the profuse bloom annuals provide while retaining the limited pallette theory.

As the annuals reach peak bloom, the summer perennials will be offering taller flower stalks and more unusual flower forms. Lavender *Veronica*, magenta *Lythrum* and *Liatris*, golden *Solidago* (goldenrod), and blue and white *Delphinium* can give you lovely spires of color. In time the gold-topped *Achillea*, golden chrysanthe-

mums, and yellow and purple coneflowers (*Rudbeckia* and *Echinacea*), can introduce some mellow notes to the summer song.

Yellow and white chrysanthemums and dwarf purple asters can be the prime focus of the early fall garden. One New England aster, *Aster novae-angliae* 'Harrington's Pink', is an excellent choice for the taller grace notes, while the yellow chrysanthemums carry the harmony.

In the herb garden purple marjoram will stay purple, flower to seed, and both dill and caraway will dapple with golden light.

In time the gardening year will gentle down to a quiet gray. This gives you time to evaluate your color exercise. If lavender is to become a permanent feature you might look more closely at disruptive colors in fences, walls and garden furniture and bring them into harmony.

If, after a year of lavenders and gold, you feel denied of bright red and vibrant orange, take a sabbatical from sweet harmonies and move toward dissonant expression. Remember your garden is yours to shape and color to your pleasure. All this article suggests is the lavender alternative.

PRONUNCIATION GUIDE

Guide to Botanical Names in This Issue The accent, or emphasis, falls on the syllable which appears in capital letters. The vowels which you see standing alone are pronounced as follows: i-short sound; sounds like i in "hit" o-long sound; sounds like o in "snow" a-long sound; sounds like a in 'hay".

Acer griseum A-ser GRI-see-um Acer japonicum A-ser ja-PON-i-kum Acer palmatum A-ser palm-A-tum Achillea A-KILL-ee-ah Ajuga ah-JEW-ga Alstroemeria aurantiaca al-stro-MARE-ee-ah aw-ran-TEE-a-ka Amarvllis belladonna am-ah-RILL-iss bell-ah-DON-ah Aquilegia vulgaris ak-qui-LEE-jee-ah vul-GAY-ris Arum AIR-um Asarum europaeum

as-AR-um your-o-PEE-um Aster novae-angliae ASS-ter NOV-ee-ANG-glee

Astilbe ah-STILL-be Astrantia major ah-STRAN-tee-ah MAY-jer Bellis perennis BELL-iss per-EN-iss

Bergenia cordifolia BER-gen-ee-ah cor-di-FO-lee-ah Betula pendula BET-yew-la PEN-dew-la Brassica oleracea BRASS-i-ka o-ler-A-see-ah Callistephus chinensis

kal-iss-STEFF-us chi-NEN-sis Calluna vulgaris kal-LOON-ah vul-GAY-ris Campanula glomerata

kam-PAN-yew-la glo-mer-A-ta

Carpenteria californica

CAR-pen-ter-ee-ah kal-i-FORN-i-ka Cedrus atlantica SEE-drus at-LAN-ti-ka Cerastium tomentosum

ser-ASS-tee-um toe-men-TOE-sum Chamaecyparis obtusa

kam-ee-SIP-er-us ob-TOO-sa Chrysanthemum coccineum

kris-AN-thee-mum cock-SIN-ee-um Clivia CLIVE-ee-ah

Cornus KOR-nus Crinum bulbispermum

CRY-num bul-bi-SPER-mum,

Crinum X powellii

CRY-num POW-ell-ee-eye Davidia day-VID-ee-ah

Deutzia DEWT-see-ah

Diospyros virginiana

dy-OSS-per-os vir-jin-ee-A-na Doronicum dor-ON-i-kum

Dyssodia tenuiloba

dy-SO-dee-ah ten-yew-i-LO-ba Echinacea eck-i-NAY-see-ah Epimedium ep-i-MEAD-ee-um

Erica carnea AIR-i-ka CAR-nee-ah Euphorbia yew-FOR-bee-ah

Gentiana asclepiadea

jent-tee-A-na es-klee-pee-A-dee-ah Gunnera GUN-er-ah

Halesia monticola

HALES-ee-ah mon-ti-KO-la

Helianthus he-lee-AN-thus Hemerocallis

hem-er-o-KAL-iss/hem-er-OCK-a-liss

Heuchera sanguinea

HEWK-er-ah san-GWIN-ee-ah

Hosta HOSS-ta

Hydrangea anomala subsp. petiolaris hy-DRAN-gee-ah ah-NOM-ah-la pet-ee-o-LAIR-iss

Hydrangea macrophylla var. macrophylla hy-DRAN-gee-ah mack-ro-FILL-ah

Hydrangea paniculata

hy-DRAN-gee-ah pan-ick-yew-LAY-ta

Hymenocallis narcissiflora

hy-men-o-KAL-iss nar-sis-i-FLOR-ah

Iberis eve-BEAR-iss Ilex X aquipernyi

EYE-lex ak-qui-PER-nee-eye Ilex crenata EYE-lex kren-A-ta Ilex cornuta EYE-lex kor-NEW-ta Ilex pernyi EYE-lex PEAR-nee-eye

Iris EYE-ris Ixia ICKS-ee-ah

Iamesia americana

IAMES-ee-ah a-mer-i-KAN-ah Juniperus chinensis

jew-NIP-er-us chi-NEN-sis

Kirengeshoma palmata

kir-eng-ah-SHOW-ma palm-A-ta Leucothoe fontanesiana

lew-KO-tho-ee fon-taynes-ee-A-na

Lewisia LEW-iss-ee-ah

Liatris ly-A-tris Lilium LIL-ee-um

Linum perenne LY-numper-EN-ee

Liriope muscari ly-RY-o-pee mus-KA-ree Lobelia erinus

lo-BEEL-ee-ah/lo-BEEL-ya eh-RY-nus Lythrum LITH-rum

Malcolmia maritima

mal-KO-mee-ah ma-RIT-i-ma

Malus MAL-us

Meconopsis chelidonifolia

mek-i-NOP-sis kel-i-don-i-FOL-ee-ah

Mertensia virginica

mer-TEN-see-ah vir-IIN-i-ka

Mitchella repens MITCH-ell-ah REE-penz

Mitella my-TELL-ah Muscari mus-KA-ree

Nepeta ne-PEE-ta

Nerine bowdenii

ne-RY-nee bow-DEN-ee-eye

Nerine sarniensis

ne-RY-nee sar-nee-EN-sis

Parnassia fimbriata

par-NASS-eh-ah fim-bree-A-ta

Parnassia palustris

par-NASS-ee-ah pah-LUSS-tris

Philadelphus coronarius fill-i-DELL-fuss ko-ro-NAIR-ee-us

Philadelphus lewisii

fill-i-DELL-fuss lew-ISS-ee-eye

Phlomis FLOW-miss

Phlox divaricata FLOCKS di-vair-i-KAY-ta Phlox stolonifera FLOCKS sto-lo-NIFF-er-ah Phlox subulata FLOCKS sub-yew-LAY-ta

Phytolacca americana

fy-to-LACK-ah a-mer-i-KAN-ah

Polemonium caeruleum

pol-ee-MOAN-ee-um ser-RULE-ee-um

Polygonum po-LIG-o-num

Potentilla fruticosa

po-ten-TILL-ah fru-ti-KO-sa

Rhododendron calendulaceum

rho-do-DEN-dron

ka-len-dew-LAY-see-um

Rhododendron degronianum

rho-do-DEN-dron de-groan-ee-A-num

Rhododendron makinoi

rho-do-DEN-dron mack-EE-no-eye

Rhododendron racemosum

rho-do-DEN-dron ray-si-MOS-um

Rhus ROOS

Ribes nigrum RY-beez NY-grum

Ribes sanguineum

RY-beez san-GWIN-ee-um

Ribes sativum RY-beez sa-TY-vum

Ribes uva-crispa RY-beez oo-va-KRIS-pa

Rodgersia podophylla

ROD-jers-ee-ah po-do-FILL-ah

Rudbeckia rood-BECK-ee-ah

Ruta REW-ta

Salpiglossis sal-pi-GLOSS-iss

Sanvitalia procumbens

san-vi-TAL-ee-ah pro-KUM-benz

Saxifraga stolonifera

sacks-i-FRAYGE-ah sto-lo-NIFF-er-ah

Scabiosa atropurpurea

scab-ee-O-sa at-tro-pur-pur-EE-ah

Schizophragma hydrangeoides

skiz-o-FRAG-ma hy-dran-gee-o-EYE-deez

Schizostylis coccinea

skiz-o-STY-liss cock-SIN-ee-ah

Schlumbergera truncata

shlum-BER-jer-ah trun-KAY-ta

Scilla siberica STILL-ah sy-BEER-i-ka

Skimmia japonica SKIM-ee-ah ja-pon-i-ka Solidago sol-i-DAY-go

Sorbus americana

SOR-buss a-mer-i-KAN-ah

Syringa X persica si-RING-ga PER-si-ka Syringa vulgaris si-RING-ga vul-GAY-riss

Tiarella cordifolia

tee-ah-RELL-ah cor-di-FO-lee-ah

Tiarella unifoliata

tee-ah-RELL-ah yew-ni-fo-lee-A-ta

Tilia americana

TILL-ee-ah ah-mer-i-KAN-ah

Tolmiea menziesii

TOLL-me-ah men-ZEES-ee-eye

Trollius TRO-lee-us

Uvularia grandiflora yew-view-LAIR-ee-ah grand-i-FLOR-ah

Veronica repens ver-ON-i-ka REE-penz Viburnum vy-BUR-num

Vinca VIN-ka

Watsonia meriana

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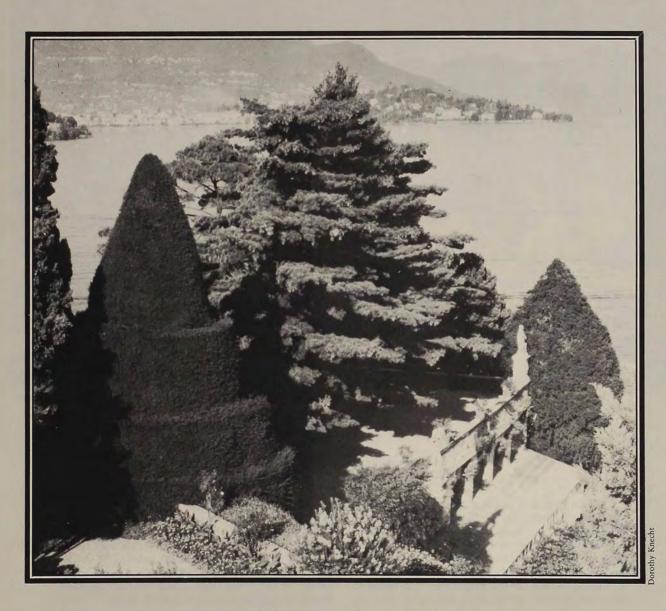
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