EDITORIAL

Reflections on our Annual Meeting

The American Horticultural Society, as the national organization dedicated to promoting horticulture throughout this great land of ours, makes a conscious effort to achieve a geographical balance when selecting sites for its annual meetings. We do this for a number of reasons. First, we want to encourage as many of our 40,000 members as possible to attend an annual meeting at least once every several years without undue financial burden to themselves. Second, we want to focus national attention on the unique or special horticultural resources in various parts of the country—plants and gardens and people. Third, we want to take advantage of, and highlight, major new developments in American horticulture whenever possible.

Texas, the site of our 1984 Annual Meeting, satisfied all three of these considerations admirably. The Society had never met in the Lone Star State, and the establishment of the National Wildflower Research Center in 1982 provided the perfect catalyst for bringing the meeting to San Antonio and the Texas Hill Country. The presence of this new organization also encouraged us to focus on an important issue affecting the lives and welfare of more and more Americans every year: the need to conserve or improve our increasingly depleted, or polluted, natural resources (particularly water), while still enriching our lives through gardening.

The meeting accomplished its primary purpose: it provided the opportunity for many different native plant groups to come together in order to learn from a distinguished array of speakers and to share their own experiences in different regions of the country. Although I have personally witnessed the steadily growing demand for native plants in southwestern landscape settings, I was both astounded and gratified by the extent and magnitude of the response to the theme of this year’s meeting—“Beautiful and Useful: Our Native Plant Heritage.” More than 300 people from coast to coast (and representing many, many places in between) attended the meeting. This turnout demonstrated the ever-burgeoning interest in the use of wildflowers and other native plants to conserve basic resources, preserve our natural heritage, and enhance our landscape from both an aesthetic and a functional standpoint.

To me, the meeting served notice that as gardeners, we are coming of age, or, if that assessment is a bit premature, that we are at least witnessing the beginning of a new age in American landscape gardening. I believe the importance of this new age is equivalent to, if not greater than, the significance of the era during the last century when the naturalistic landscape style swept through Britain.

The educational sessions at the Society’s meeting highlighted the use of native plants in cultivated landscape settings and other such settings influenced by man. However, they could only touch lightly on some of the motivations, opportunities and challenges connected with promoting a more dominant role for native plants in American horticulture. Mrs. Lady Bird Johnson’s presentation, “The American Wildflower—A New Frontier,” was the inspirational highlight of the entire meeting. Her gracious hospitality and willingness to encourage this important horticultural movement won the hearts and inspired the minds of all in attendance.

Mrs. Johnson was not only deserving of the Society’s First National Achievement Award for exceptional contributions to the field of horticulture; it is difficult to imagine anyone ever being so uniquely qualified for such recognition again. In my view, it is now important for all of us to join Mrs. Johnson in encouraging and supporting a leadership role for the National Wildflower Research Center, which advocates, researches and teaches the practical and aesthetic uses for native plants in general and wildflowers in particular.

As is (and probably always will be) the case with the peoples of so many other technologically emerging nations, we have literally taken our natural heritage for granted. It is somewhat satisfying to reflect on the fact that we have benefited from the foresight of a few enlightened conservationists throughout most of our history. However, it is even more heartening to know that all of us as individuals, as families, and as a nation are beginning to appreciate the rapidly diminishing natural world about us. Let us work together in the knowledge that even though vast portions of our landscape are forever altered or gone, we may still surround ourselves with the remnants, understand the richness and diversity of the plants left to us, and reconstruct some of nature’s beauty in harmony with man’s other needs.

—Charles Huckins, Executive Director
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The diverse sorts of plants found in the barberry family provide an interesting study in contrasts; in fact, they have confounded some botanists and taxonomists trying to arrive at a reasonable classification. Here in the barberry family, Berberidaceae, are the ubiquitous thorny shrubs and hedges of that name, not to mention Oregon grape, the delicate American twinleaf, a "bamboo" that is not a bamboo, a versatile ground cover plant, and a root that is a source of a compound used in research on some types of tumor therapy. All are grouped together botanically as Berberidaceae because they share certain characteristics of floral parts and fruit.

Members of the barberry family are shrubs or perennial herbs with simple or compound leaves. Some of the shrubs are evergreen. The flowers, which are bisexual, bear four to six sepals as well as four to six petals. Sepals and petals are often similar, and there are as many stamens as petals, or twice as many. The fruit is a berry.

Members of this family occur mostly in the temperate regions of the Northern Hemisphere, but they also appear, to a limited extent, in the Southern Hemisphere. Many species in this family are prized ornamental plants; however, in general, they do not have great economic importance.

Horticulturally, the most important genera of the barberry family are Berberis and Mahonia. Because of their similarities, these two genera were once combined in a single genus. Their foliage is the distinguishing characteristic: Berberis species have simple, spiny leaves and thorny stems; leaves of Mahonia are pinnately compound, and the stems are thornless.

There is a strong resemblance among the 400 species in the genus Berberis, but the plants vary in size from as low as one foot in height to 20 feet tall. Over 50 species are cultivated in America. All are more or less spiny. Barberries have yellow wood and inner bark; all are spring-blooming and bear yellow flowers in longish clusters. Each flower has six petals and stamens. The stamens explosively discharge their pollen when touched. The globose or oblong berries, with one to several seeds, may be red, black or blue-black.

Many Berberis species lose their leaves in the autumn; others are evergreen. All of the deciduous kinds display fine autumn coloring. The spines with which they are armed are often formidable in size and strength. Some spines are simple, while others are three-parted and often curved.
E. H. “Chinese” Wilson, renowned plant explorer of the Arnold Arboretum, gathered barberries in the region of the Chino-Tibetan border, on mountain peaks in Formosa, and in southern India and Equatorial Africa. In his lifetime he added about 30 new barberry species to Western gardens. His Oriental plant explorations have greatly enriched our gardens, giving us plants well worth growing for beauty of habit, foliage display and decorative fruit.

Although *Berberis* species are desirable horticulturally, some must be rigorously excluded from the landscape in wheat-producing regions because they serve as alternate hosts to black stem rust of wheat and certain other cereal crops. Fortunately, some of the most ornamental species and varieties are immune or resistant to the rust fungus. In the United States, all nurseries are regulated and must ship only rust-resistant stock; state agencies are responsible for inspection of the nurseries. Immune or resistant barberries have few other insect or disease pests, and make good additions to the garden where low maintenance is important.

According to botanical sources, *Berberis vulgaris*, European barberry, was present in America as far back as 1737. It was undoubtedly brought to the American colonies by the first settlers. Since that time, it has become naturalized; it is hardy to USDA Zone 2. This barberry was once cultivated for its fruits, which were thought to have antiseptic properties. The colonists made jams, jellies, pies and drinks from the edible fruits, and sour sauce from the leaves. The fine-grained wood is yellow; a yellow dye obtained from under the bark was used to stain wool and leather.

However, *B. vulgaris* is an alternate host to wheat stem rust, and its cultivation has declined. Farmers of China, Europe and America knew of the presence of this rust long before scientists had worked out its life history. The Barberry Law of Massachusetts, enacted by the provincial government on January 13, 1755, called for “extirpation or destruction on or before June 13, 1760, of any barberry bushes standing or growing on public or private lands in any towns of the province.”

*Berberis thunbergii*, Japanese barberry, is probably the most widely known exotic shrub in the United States. It was discovered in the mountains of Japan and sent to St. Petersburg Botanic Gardens by the Russian botanist Carl Maximowicz in 1864. In about 1875, seeds from St. Petersburg were received at the Arnold Arboretum, and from there, plants were distributed in this country. The species name honors the Swedish professor of botany, Carl P. Thunberg (1743-1828).

Hardiness, ease of culture and general attractiveness have made Japanese barberry one of the most popular shrubs grown in this country. In the spring, a barberry’s arching branches are strung with hanging yellow blossoms; in the autumn, the flowers are replaced by shining scarlet berries. The autumn leaves turn varying shades of orange and red to crimson, and fruits of glowing red persist through the winter. *B. thunbergii* is an indispensable barrier hedge plant, for it is very thorny.

There are numerous excellent varieties or cultivars of Japanese barberry, each one of which has special merit. ‘Erecta’, a patented form known as truehedge columnberry, is erect and very compact. ‘Minor’, commonly called box barberry, is a dwarf that can be clipped to form a border hedge only a few inches high. Other cultivars can be obtained from the many nurseries that handle Japanese barberry, the species most commonly available.

*B. thunbergii* is one of very few barberries that does not generally hybridize with other species with which it is grown; usually, seedlings are true to type. This plant has, however, been used by breeders as a parent of some very desirable hybrids.

*Berberis julianae*, wintergreen barberry, is a native of China introduced by Wilson to England in 1900 and then to the Arnold Arboretum in 1907. It was named for Princess Juliana, who was later queen of the Netherlands. Its long, narrow, dark green leaves are pale...
beneath and have margins that are toothed and spiny. Clusters of yellow flowers are followed by bluish-black, egg-shaped berries. This eight-foot shrub is one of the most popular of the Chinese introductions.

A valuable addition to the barberry clan came with the production of the hybrid B. × mentorensis, a cross between B. julianae and B. thunbergii. It is a vigorous semi-evergreen that withstands hot, dry summers and temperatures as low as −20°F.

Best known among barberries native to parts of the Southern Hemisphere are Darwin's barberry, B. darwinii, and Magellan barberry, B. buxifolia. Charles Darwin discovered B. darwinii on an island off Chile during the voyage of the Beagle in 1835. A splendid hedge plant that reaches a height of 10 feet, Darwin's barberry is an evergreen species with small, spiny leaves, orange flowers and abundant, bluish-purple berries. Magellan barberry, B. buxifolia, is suited to the South and regions west of the Rocky Mountains. This species is from southern Chile, where its globose blue berries have been used for conserves.

An erect, eight-foot evergreen shrub, B. buxifolia var. nana, and in another compact form in which the thorns are longer than the leaves.

Wilson lavishly praised the qualities of the genus Berberis as a whole, and clearly identified his favorites. "The most beautiful of all barberries," he wrote, "is the hybrid B. × stenophylla, whose parents are two South American species, B. darwinii and B. empetrifolia. It is an impenetrable evergreen bush with slender interlacing stems densely clothed with narrow black-green leaves. From the mass of branches every year are produced arching shoots each a foot or more long which in spring are wreathed from end to end with rich golden yellow flowers; in the autumn they are laden with globose berries which are covered with a bluish-white waxy bloom."

This hybrid, known also as rosemary barberry, is a graceful evergreen that is admirable as a specimen plant on the lawn, as a covering for steep banks or as a hedge plant. Its lance-shaped leaves are green above, pale beneath, and spine-tipped with rolled margins. It does not prosper in areas north of Washington, D.C., and although it is widely used in USDA Zone 6 and southward, it does not thrive in the East. Seedlings from this hybrid have been raised and named, providing variations in foliage and flower color; the cultivars are widely used in England.

Wilson named one of his introductions from western China B. wilsoniae to honor his wife. He described it as "a most charming low-growing species of elegant habit." B. wilsoniae is almost prostrate; the arching and ground-hugging branches are well suited for banks and rockeries. Its berries are coral or salmon-red, and its leaves are tipped with prickles. It is semi-evergreen, the leaves persist in warm climates.

Wilson identified B. verruculosa, warty barberry, as his favorite of the evergreen barberries that he discovered and introduced. Donald Wyman, formerly of the Arnold Arboretum, also recommends it as one of the best of the evergreen barberries for ornamental use. B. verruculosa is a three-foot plant of compact habit with overlapping branches. Perfect for the rockery, and hardy from Zone 4 southward, it bears solitary, golden yellow flowers that are larger than those borne by most barberries. The leathery leaves, which are lustrous green above and white beneath, have spiny margins. The autumn color of the foliage is bronze.

Mahonia is a genus of about 100 species of American and Asian evergreen shrubs. All of these species were once included in Berberis. The genus Mahonia bears the name of Bernard McMahon (1775–1816), a famous American botanist and horticulturist, and author of The American Gardener's Calendar (circa 1807). All mahonias are evergreen, thornless shrubs with compound leaves that have from five to 15 spiny-margined leaflets. The spring-borne terminal flower clusters are yellow and fragrant. Some mahonias are hardy in northern states with protection. As with barberries, some species are susceptible to wheat stem rust.

M. aquifolium—Oregon grape, holly mahonia or holly barberry—is a one- to three-foot shrub that is native to the Pacific Coast sections of North America. It spreads by underground stems and bears dense, erect clusters of fragrant yellow blossoms above its lustrous foliage. Its leaves have five to nine leaflets, and the leaflets frequently have spines on their margins. Globose, blue-black berries account for the plant's common name. Oregon grape does well as far north as Montreal and is hardy from Zone 3 southward. This species has many variants, and a number of its cultivars are widely used ornamental shrubs in temperate climates. The famous British plant collector David Douglas introduced the species to England from America about 1825.

M. bealei also bears upright clusters of fragrant yellow flowers. A seven-foot shrub familiar in southern gardens, it is hardy to Zone 7. This leathery-leaved mahonia from China is often confused with the Japanese species, M. japonica, which bears pendent flower clusters. Both are vigorous shrubs that are well suited to the climate of California.

M. repens, creeping barberry or creeping mahonia, is an excellent evergreen ground cover. This native of the American and
Canadian Northwest spreads by creeping underground stems and produces terminal clusters of fragrant yellow flowers. *M. trifoliolata* (formerly *Berberis trifoliata*) is the plant known as "agarita" of Texas and Mexico. This very dense eight-foot shrub, with its spiny-toothed, thrice-divided leaves, is not hardy north of Zone 6. Jelly is sometimes made from its blue-black fruit.

\( \times \) *Mahoberberis* is a hybrid genus including offspring of three or four crosses between *Mahonia* and *Berberis*. The species in this genus have either simple or compound leaves on the same plant, and spines are generally lacking. Flowers or fruits are scarce or nonexistent. None of these hybrids are exceptional ornamentals, but they are resistant to stem rust.

*Nandina domestica* is another woody member of the barberry clan. It belongs to a genus with just one species that was created by the botanist Carl Thunberg to give identity to this interesting and attractive plant. Thunberg took the Japanese name *Nanten* for the genus. He gave the species the name *domestica* because the plant is always grown near the Japanese home. Its aromatic twigs have been used as toothpicks or toothbrushes. According to one quaint superstition, dreams must be whispered into the plant's foliage either to prevent or to ensure that they will come true. Originally from northern China and India, *Nandina* has for many centuries been cherished and claimed by the Japanese. William Kerr first brought the plant to England in 1804. Later collections were made by E. H. Wilson.

*Nandina* in no way resembles the barberries, save in structure of flower and fruit. The grace and featheriness of its leaves remind one of bamboo, so it bears the common name heavenly bamboo. Six- to eight-foot canes terminate in elegant, pinately compound foliage. *Nandina*, a handsome landscape plant, bears erect trusses of small white flowers that are followed by masses of scarlet berries. It thrives in shade or sun, but attains its full size only in Zone 7 and southward. (For more on the uses and culture of *Nandina*, see "The Bamboo Alternative" by Gail Gibson in the October 1982 issue of *American Horticulturist*.)

*Epimedium* and *Vancouveria* are both genera of low, rhizomatous perennial herbs in the barberry family. Both of these similar species have somewhat woody or wiry stems. Epimediums are natives of the temperate regions of Europe and Asia; van-
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STRANGE RELATIVES

couverias are native to western North America.

The 21 species of epimediums have been frequently confused in cultivation. Three species, as well as a number of hybrids, are widely cultivated for their fine flowers. Depending upon the cultivar, the mounds of threecarved leaves range from eight to 22 inches tall. Although individual blossoms are small, their profusion creates a fairyland among the heart-shaped leaflets, which are borne on wiry stems. The form of epimedium flowers is difficult to describe. In most cultivars, the petals have spurs or nectaries that extend over the petaloid sepal. The effect is almost a column in miniature. Epimediums produce their red, rose, violet, yellow or white flowers in the spring before leaves mature. The leaves are almost evergreen; the foliage of some species turns a rusty color and persists through the winter. These barberry family members are hardy and are suited to woodland areas and for use as ground covers. The meaning of the botanical name, derived from the Greek, is uncertain. This herb is sometimes listed as barrenwort, possibly based on its reputed medicinal use in China in times past. (For more on epimediums, see “Epimediums” by Mrs. Ralph Cannon in the April 1984 issue of American Horticulturist.)

Vancouveria is the North American equivalent of Epimedium. Vancouveria has leaflets that are rounded at the tip and flowers with six inner sepals, petals and stamens. (Epimedium flowers have only four of each.) The name honors a British explorer, Captain George Vancouver of the Royal Navy (1757-1798).

American woodlands and wildflower gardens abound in herbaceous representatives of the barberry family. These herbaceous wildlings enjoy a prominence of their own; they seem strange relatives of the woody and thorny shrubs that are their kin.

One of these is the mayapple, Podophyllum peltatum, which is readily recognizable because of the pairs of large, lobed, umbrella-like leaves that it bears on foot-high stems. Mayapples grow in colonies that seem to stalk across the woodlandscape; if they were less rampant, we might treasure them more. Some of the largest leaves are a foot across. Mayapples produce their leaves singly or in pairs. When the stem branches, the plants produce two leaves; in the fork hangs a single flower. The flowers have six waxy sepals and six to nine petals, and there are as many, or twice as many, stamens as petals. Mayapple fruit is a fleshy berry. The pulp of the fruit is edible, but not the seed.

Podophyllum peltatum is native from Quebec to Florida and Texas. Samuel de Champlain, the first European to see and describe the plant, found it in 1615 in the territory of the Huron Indian tribes. In early years it was listed as Anapodophyllum, the wild duck’s foot leaf, but this awkward name was reduced to Podophyllum by Linnaeus in 1737. The specific epithet peltatum describes the way in which the flower and fruit are shielded by the big leaves. The plant has received many vernacular names but is best known among English-speaking people as mayapple; its French equivalent, pomme de neuf, is used in both France and French Canada.

The drug podophyllin is obtained from the rhizomes of both the American P. peltatum and the Asian species, commonly called Himalayan mayapple, P. hexandrum. An extract from this plant is often used in treating certain warts, and some cancer specialists use it for other skin growths. Dr. Jonathan Hartwell of the National Cancer Institute devoted five years of his life to pharmacological investigation of a Penobscot Indian cancer remedy that resulted in production of podophyllin from the root of P. peltatum.

In 1981, Barbara Griggs wrote in Green Pharmacy: A History of Herbal Medicine, “Apart from the huge antibiotic field, postwar research initially concentrated on drug plants whose pharmacological activity was already well known—among them mayapple. Podophyllin was an obvious choice for investigation with its long history in folk and Indian medicine of use against skin cancer... Today the resin of [P. podophyllum] is still the drug of choice in the treatment of soft warts, and it is also being studied for anti-tumor action.”

Umbrella leaf, Diphylleia cymosa, is a resident of rich woods of western Virginia to northern Georgia. Non-flowering plants produce a single umbrella-like leaf with the stem attached at its center. Flowering plants produce a pair of leaves, each deeply cleft and attached to the stem at the margin. Between the two, a cluster of small white flowers arises in April or May; roundish blue berries follow.

Another American wildflower favorite is twinleaf, Jeffersonia diphylla. This little gem, which was named for Thomas Jefferson, grows naturally in the woods from New York State to the Deep South and
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so different from barberries that it seems shaped leaflets. The minute flowers lack sepals or petals but have six to 13 stamens a foot above the ground. 

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Jane Steffey is an active AHS volunteer and serves as Editorial Advisor to American Horticulturist.

Thalictrum dubia, from China.

Blue cohosh, Caulophyllum thalictroides, is another eastern North American wildflower of the barberry family. Cohosh is an Algonquin Indian name; the plant is also known as papooseroot and squaw-root. American Indians used powdered root of blue cohosh to facilitate childbirth. The medical profession later employed it in treating various disorders, although it is not officially approved for use in the United States. The thrice-divided leaves of cohosh resemble meadow rue, Thalictrum spp.; hence the specific epithet. Solitary stems, each bearing a large, almost stalkless, compound leaf near the apex, arise from thick rhizomes. Greenish-purple flowers are produced in terminal clusters from April to May. As the berry-like fruit matures, it opens to reveal a pair of blue seeds.

From the wooded West Coast of upper California to British Columbia comes vanilla leaf, Achlys triphylla. Some people call it sweet leaf and pluck its scented leaves to hang in their homes. This species produces leaves that are divided into three fan-shaped leaflets. The minute flowers lack sepals or petals but have six to 13 stamens with long filaments. The flowers are borne in a dense spike on a leafless stalk about a foot above the ground.

Some groups of species in the barberry family—Mahonia and Berberis, Epimedium and Vancouveria, for example—are so similar they are separated into different genera on the basis of only a few diagnostic characteristics. Other members of the family, such as may apples and twinleaf, seem so different from barberries that it seems hardly possible that they are even related. The barberries are strange relatives indeed.

Jane Steffey is an active AHS volunteer and serves as Editorial Advisor to American Horticulturist.
A Portrait of Beatrix Farrand

BY MARGARET PARKE
No one who worked with Beatrix Farrand could fail to be impressed by her professional attitude to her job. Always the first to be out in the morning, she was the last to come in at night. Her energy seemed to surmount any obstacle—even the worst onslaughts of rain and cold. In her tweeds and Mackintosh, we could see her tall, erect figure—conversing—in all weathers—with architects, builders, gardeners, tactfully collaborating with them all and slowly winning them to her ideas. Nor for nothing was she known among our friends as Queen Elizabeth. Her finely chiseled face and dignified bearing seemed indeed the personification of royalty” (Obituary by Mrs. Leonard Elmhirst, Dartington Hall News of the Day).

The aristocratic woman in Harris tweeds, sloshing about in the mud at a construction site in this scene is not a contemporary, as one might think. Rather, she was born into Philadelphia society in Victorian times, and lived her life during an era when a woman’s role was greatly restricted by social mores.

Beatrix Jones Farrand (1872-1959) was a pre-eminent landscape architect of the “country-place” era in American landscape history. Her career spanned 50 years, and when she died at the age of 87, about 110 of her garden designs, including parts of nine college campuses, had enhanced our landscape. Alas, only a few of these remain as she designed them; such is the fragility of landscape architecture. Only a few of her major works survive: Dunbarton Oaks in Washington, D.C.; the Abby Aldrich Rockefeller Garden on Mount Desert, Maine; and parts of the campuses at Princeton and Yale.

Beatrix Farrand was born in New York in 1872, the only child of Mary Cadwalader Rawle and Frederick Rhinelander Jones. The genteel world in which she lived was described by Edith Wharton, the younger sister of Farrand’s father, as “five generations of gardeners.” (It was also a world that some social critics have pronounced as largely affluent, self-centered and unproductive.)

As a young girl, Beatrix enjoyed trailing after her grandmother in her Newport garden, cutting off the dead flowers from ‘Baroness Rothschild’, ‘Marie Van Houtte’ and ‘Bon Silene’ roses. Her uncle, John Cadwalader, used to take her along on shooting trips to Scotland, and was among the first to observe a strong streak of determination in his young niece. “Whatever she wishes to do, will be done well,” he prophesied.

When Farrand was about 11 years of age, her carefree childhood was shaken by her parents’ divorce. It seems that her father disappeared from her life after the divorce; at least there is little evidence that he maintained any influence. Her mother, Philadelphia-born and adept at directing charity organizations, became the literary agent for her sister-in-law, Edith Wharton, with whom friendly relations continued. Farrand found herself surrounded by artists, writers and famous figures of the time, that Mrs. Farrand hated the painting of her in 1896 by Sara Choute Sears, an unhappy-looking young woman gazing at us with sad eyes, but even here the bearing that earned her the nickname “Queen Elizabeth” is evident. (Mrs. Lewis “Amy” Garland, a member of Farrand’s household and garden staff at her Reef Point home in Maine for 30 years, observed that Mrs. Farrand hated the painting and eventually removed it from its spot above the fireplace.)

Had she followed the traditional route of marriage and childbearing, estate and country-place gardens of her time would probably never have reflected the vitality and elegance of her talents. Apparently she had to work to maintain her accustomed standard of living. She was strong-willed and resourceful, but at the same time wellbred and conventional, and not the kind to flout late-Victorian social values. She had a fine voice, and for a while considered making singing her career, but in the end she turned to her love of plants. After all, she would say, she came from “five generations of gardeners.”

Gardening was accepted as a natural pastime for the Victorian gentlewoman, and it was simply a step further for society to accept women landscape architects—both activities were viewed as extensions of the nurturing role. Despite the prejudices against working women, Farrand found herself working in the cultural mainstream, and her outstanding artistic talents brought her to the top of her profession.

Farrand met Professor Charles Sprague Sargent, the first director of the Arnold Arboretum, through a meeting with Mrs. Sargent. It was Sargent who encouraged Farrand to study landscape gardening. Presumably Edith Wharton—herself a force in reviving classical tastes in architecture and decoration, and author of Italian Villas and Their Gardens—also influenced her. There were no specialized schools that Farrand could attend at the time; Harvard opened its school of landscape architecture, to men only, in 1900, and the Lowthorpe School of Landscape Architecture, Gardening and Horticulture, which was for women, was not founded until 1901. Sargent offered to take her on as a student at the Arnold Arboretum, and she began her education under his tutelage in 1893. (Sargent, with Frederick Law Olmsted, was laying out the grounds of the Arboretum at the time, so he was able to introduce his student to the practical skills of surveying and staking out the land.)

Sargent understood that “the plant must fit the ground,” not the other way around, and his young student absorbed this understanding and appreciated the importance of the natural characteristics of a site. Her feel for these characteristics became the cornerstone on which she planned her gardens. Farrand shared Sargent’s high regard for the value of native plants in the landscape, and learned to use them effectively in combination with cultivated forms. Her use of plant texture and form as strong design elements in and of themselves was to become a hallmark of her designs in later years.

Farrand also studied botany, an interest that would consume her throughout her long love affair with plants. Some who knew her said that she possessed an almost psychological understanding of plants.

While still in her early 20’s, Farrand visited the Columbian Exposition in Chicago and witnessed the triumph of the Beaux Arts over the fading Romantic style. Then, in the spring of 1895, she set out to study...
the important gardens on the Continent and in England with Sargent's blessing. The journals she kept during her travels could be dubbed "the education of a landscape architect." She visited the Villa Aldobrandini and pondered the view of the Campagna near Rome. She recorded her impressions of the Villa Lante, the Boboli and other gardens in France, Holland and Germany. She viewed all of these marvelous landscapes with the sophisticated, critical eye that was developed during her earlier travels with Edith Wharton and honored under Sargent.

Although her experiences on the Continent would enrich her work, her affinity for the landscape and gardens of England proved to be the strongest and most lasting. (She even preferred the English appellation "landscape gardener" to "landscape architect.") She visited Kew, Hampton Court, Hyde Park, Kensington Gardens and Penhurst, and she met the great English landscape theorist and practitioner, Gertrude Jekyll, whom she admired. Later, as Farrand's work matured, her own unique style synthesized many "Jekyllian" elements; her informal garden designs linked garden to countryside, and used masterfully blended color schemes as well as wild and native plants.

When Farrand returned to New York in September 1895, she set up shop in her mother's house in New York City. Women in landscape architecture at that time were not offered the opportunity to work on large-scale public or civic projects, as were their male counterparts, such as the Olmsted brothers, or the large firms of Charles Eliot and Hare and Hare. The only work available to women was in designing estate gardens and large country places.

The social contacts of Farrand's mother helped at first. In 1896 Farrand was commissioned to design a garden at Tuxedo, New York; other commissions in New York and in Newport, Rhode Island followed. Within three years she was prominent enough to be chosen one of 11 charter members (and the only woman) of the American Society of Landscape Architects. Her reputation spread, her practice expanded, and she opened an office at 124 East 40th Street in New York City.

Farrand was "cut of the same cloth" as many of her wealthy clients, and looked at their world with a shared frame of reference. No wonder she excelled at creating their gardens, which were backdrops for their social activities.

In her work style, she was uncompromising in her efforts to provide the best for her clients; she developed a pattern of presenting four alternate drawings for each design. She never forgot that a garden should reflect the owner's tastes. (One suspects, however, that she was not above changing their minds if she felt that artistic appropriateness was at stake.) Often she had life-size mockups made of architectural details in a garden—a gate, ironwork pattern or bench—so that expensive decisions could be made confidently on site.

She never mastered some of the more technical skills of surveying or drawing perspectives and elevations of sites, although those who worked with her said that she could "sketch well enough." She preferred to delegate these tasks to others and to spend her energies on design concepts, meetings and correspondence with clients, and supervising the work. Her capacity for hard work could only have been possible for someone committed to excellence and with great reserves of physical and emotional energy. Amy Garland recalled that when she would come in for breakfast at 6:30 a.m., she would often notice Farrand "fully dressed and busy at her desk—she had already been working for some time. Then she would take a few cookies from the cookie jar, and that would be her lunch because she wouldn't come home again until evening." Farrand was known to collapse from exhaustion after a strenuous round of field trips, prompting Edith Wharton to comment, "She seems to slave at her work in a way that ought to belong only to the beginnings. The impulse to accept more work when one already has too much is probably insupportable from the creative mind."

Farrand's work expanded to include college campuses. In 1912 she was asked to help with the layout of the Graduate College being built at Princeton University. This project led to work on campuses at Yale, Oberlin, the University of Chicago, the California Institute of Technology and others. Her landscape plans for colleges were marked by practicality, simplicity and an eye for economic maintenance. Common sense prevailed: "Windows should not be shaded, as light and air are vitally important for the students and Faculty," she wrote in the Princeton Alumni Weekly in 1926. She resorted to her skill in using native species of trees and shrubs for economic plantings, and was a strong promoter of maintaining campus nurseries so that plantations could be renewed or expanded at minimal expense. As in all her work, she insisted on topnotch maintenance—an unyielding requirement that later, at her own garden at Reef Point, proved to be her nemesis.

While working at Yale, she met Max Farrand, who was at that time head of the history department. To those who have only appearances to weigh, it seems that an attraction of opposites took place. In any case, the retiring, scholarly professor was by no means cowed by the imperious, yet impeccably courteous landscape designer. They were married in 1916 when she was 44 years of age. Three years before her death, Farrand wrote an "obituary" in which she alludes to their relationship: "They were neither of them young and each had attained some distinction in their work, consequently they agreed to go ahead with their professional careers and the marriage enriched both their lives." "They understood each other," Mrs. Garland said of the Farrands.

The '20's offered women new opportunities in landscape architecture. Annette Hoyt Flanders, for example, operated a successful New York office with a large staff of women; her practice included residential subdivisions, commercial developments, parks and exhibition gardens in addition to large estates, which still comprised the greater part of her practice. During the Depression, however, only a small number of the most successful women were able to continue their practices, and Farrand was pre-eminent among them. Most of the work available was in private commissions. Besides the Blisses (owners of Dumbarton Oaks) and Mr. and Mrs. John D. Rockefeller, Jr., Farrand's clients included Mrs. Theodore Roosevelt, Mrs. Woodrow Wilson and J. P. Morgan. Many
of her commissions turned into long-term associations lasting 20 years or more. This enabled her to oversee the maintenance and to follow the gardens as they matured, making adjustments in keeping with her original vision of them.

Farrand often formed warm and lasting relationships with her clients. Her intense 11-year collaboration with Mrs. Mildred Bliss, wife of Ambassador Robert Woods Bliss, in creating the garden at Dumbarton Oaks is now legendary, as is their lifelong friendship. Farrand considered Dumbarton Oaks, the 16-acre garden show place in Georgetown, Washington, D.C., the “most deeply felt and best of 50 years’ practice.”

The only landscape work Farrand did outside the United States was at Dartington Hall, a historic medieval manor owned by the Elmhirsts of Devonshire, England, and converted into a private boarding school. (Mrs. Leonard Elmhirst was the widow of Willard Straight, whose Long Island garden was designed earlier by Farrand.) Farrand, 60 years old when she began the project, crisscrossed the Atlantic annually from 1933 to 1939 to direct the work. When World War II intervened, most of the basic problems were solved. In a letter to the Elmhirsts in 1936, Farrand wrote “Probably, it is unlikely that it will be my good fortune to see [Dartington Hall] again, but in memory, the lovely hills, the distant views, the quiet valleys and the great trees are all vividly with me. … Such happy days they were for me, with you both, perhaps the happiest of a long working life.”

Wherever her work took her, whatever responsibilities she accepted, the center—indeed the very heart and soul—of her life remained at Reef Point. Her parents built Reef Point on two acres at Bar Harbor, Mount Desert, Maine when she was eight. Originally a summer home, it was a place where “intimate contact with growing things, observation of passing seasons and changes give flavor to each day.” Eventually, it grew to become six acres of display and test gardens where Farrand, as owner and designer, had no one to please but herself. Here she studied and experimented with various plants, both native and cultivated species. The general plan shows heath, heather and azalea plantations, and large groves of northern hardwoods, spruce, hemlock and arborvitae. There was also a small vegetable garden and an orchard of dwarf fruit trees. Flowers were grown near the house, and perennials, in a special garden. Indigenous plants of all kinds were encouraged to grow, There were also species rose gardens and bog plantings, a “domestic” planting and a British group. The grounds were accentuated with plantings of maples, oaks and pine, and an intricate path and road system connected garden with garden, and gardens to buildings.

In 1927 Max Farrand became director of the Huntington Library, and the Farrands divided their time between San Marino, California, and Reef Point in Maine. The landscape of California presented a new challenge to Farrand. She accomplished some notable works there; outside of landscaping their own grounds at the director’s house, her work at the Santa Barbara Botanic Garden proved to be the most satisfying. However, she was not able to expand her practice significantly, and most of her major work continued to be in the Northeast.

The Farrands had dreams of making Reef Point an educational center for horticulture, as well as a regional institution to encourage the appreciation of outdoor beauty, especially of plant and bird life. Reef Point Gardens was incorporated in 1939, with officers and directors and arrangements for future endowment. In addition to the grounds, there was a library “to help all those who needed horticultural aid, and to contribute its mite to the art of living as expressed in gardening.” The gardens were open throughout the growing season, and many garden lovers visited the place.

When Max died in 1945, many of the Farrands’ goals were already fulfilled, but Beatrice was to miss “his steadying hand.” She established the Max Farrand Memorial Fund, and books were purchased with the income from this fund. She remodelled the interior of the house, at considerable expense, in order to make it more functional for students. By the mid-1950’s, all the plants in the display and test gardens were labeled and recorded. Many uncommon and lovely plants were included, and all were given the finest care possible. There was a herbarium of dried specimens of every plant in the garden, which comprised 2,000 specimen sheets. The reference library—a comprehensive collection of society journals, standard works on plants and horticultural practice, and classics in garden literature and the history of garden design—contained 2,700 volumes. It also contained her lifelong collections of rare books, botanical prints and drawings of historic gardens.

As if these treasures were not already overwhelming, there was the Gertrude Jekyll Collection—the original plans, drawings, letters and other documents of Jekyll’s entire life’s work. Farrand had bought the collection “for a moderate sum” from a dealer in London during the war. In 1955, after consulting with various experts, Farrand dismantled the house and garden at Reef Point. The world had changed from those almost halcyon days at the beginning of the century when she created gardens (almost 50 on Mount Desert Island alone) for the affluent. The Great Depression, and a disastrous fire on the Island in 1947, had changed the fabric of life. Costs had increased and capital, diminished, and there were uncertainties regarding taxation. Reef Point was not near other educational centers, and it was difficult to attract teaching staff. Good gardeners were also hard to find. There was no assurance that the rigorous maintenance standards of its owner could continue, a point that was crucial.

One can only guess at the agony behind Farrand’s words when she announced her decision: “It has taken all the courage the present owner of Reef Point can muster to have arrived at this decision.” One can only marvel at her spirit when she writes, “It is better to be of good courage and arise and do it, than to have to face deterioration of the gardens and waste the resources of the library and collections.”

The library and collections—together with her personal office files of correspondence, original plans and drawings—were offered to the University of California at Berkeley. (This treasure-trove is used today by students in the plant sciences.) The garden was dismantled, and some of the plants were given to Asticou Gardens in Northeast Harbor on Mount Desert. Other favorite plants—azaleas, a Stewartia, akebia and heathers—were taken to Garland Farm in Salisbury, also on Mount Desert Island, where she built her last garden leading out from the French doors of her bedroom. As Amy Garland said, “She couldn’t live without the beauty of a garden.”

Farrand died in 1959. Toward the end of her life, the night table next to her sickbed was extended to hold dozens of bud vases, each containing one of the single roses that she loved.

—Margaret Parke

Margaret Parke is a free-lance writer and photographer whose articles have appeared in American Horticulturist, Organic Gardening, Horticulture and Westchester magazines, as well as the New York Times.
Every year hundreds of people visit the rock garden of the late Dr. T. Paul Maslin in Boulder, Colorado. Dr. Maslin, a professor of biology at the University of Colorado for many years, became interested in botany during his childhood in China, where his parents were missionaries. Throughout his life, he gardened wherever he lived; by the time he began his project in Boulder, he had had experience with six previous gardens.

As a Colorado gardener, Dr. Maslin felt strongly that the Rocky Mountain area has much to offer. It was his belief that although flower growing in the area is in many ways more difficult than in parts of the country with loamy soil and plenty of moisture, gardeners in the Rocky Mountains who want to have a rock garden have a decided advantage. Obviously, there is no shortage of rocks; try to sink a spade anywhere, and it will hit one! And while the mile-high Boulder Valley is at least 5,000 feet lower in altitude than the tundra, it is still high and dry enough to permit the growth of mountain plants that could not survive in warmer, more humid areas.

When the Maslins built their home in 1954, the excavation turned up great blocks of red sandstone. Instead of having these trucked away to make way for a lawn, Dr.

RIGHT: 'Picardy' tulips and the dwarf rhododendron 'Ramapo' thrive among the rocks in the garden of the late Dr. T. Paul Maslin. ABOVE: Showy pink and white primroses fill a corner of the garden.
Maslin kept them for use in his landscape. He sat down with pencil and paper to design his rock garden, pool and other beds, and made a model with little stones and tiny plants, using twigs for trees. Along one border of the 100-by-40-foot lot (which includes the house), he planned a sloping mass of irregular boulders with a stone path that would lead to the plantings. There would be a rock-rimmed pond for water- and moisture-loving specimens, and trees to give some protection to the shade lovers.

A bulldozer was necessary to position the heavy rocks, and it took many hours to orient them just as he wanted. Aside from this initial assistance, however, he did all the work himself.

The first step was to plant the slow-growing things: low yew, juniper, dwarf rhododendrons, and small shrubs such as woody penstemon and cypress. The trees included redbud, golden-rain tree, several crabapples and a weeping mulberry. These small trees now provide some shade, but leave enough light for underplanting. To make certain the soil (which tested neutral, pH 7) was acid enough for rhododendrons, cypress and heathers, he added peatmoss and sawdust. For plants needing a more alkaline soil, he incorporated limestone and builder's rubble.

Today, the garden contains hundreds of small plants. Some are mountain natives, while others were purchased from nurseries or acquired by gift or exchange. The garden also includes plants raised from seeds or cuttings. Although Dr. Maslin did not have a greenhouse or cold frame, he propagated a great many of his own plants. He started seeds in two-inch pots filled with Redi-earth or another type of mix with an equal amount of sand. In winter, he would
LEFT: Dwarf coreopsis shares space with irises and a variety of other rock plants. TOP LEFT: This phlox, thought to be a cross between *Phlox lutea* and *P. purpurea*, was discovered by the Maslins on a collecting trip to Mexico. TOP RIGHT: 'Brazil', an Exbury hybrid azalea, provides glowing color among the rocks. ABOVE: Water lilies, and the ever-changing display at the edge of the pool, provide summer beauty in the garden.

Transfer the seedlings to three- or four-inch pots, put them close together, and instead of covering them for protection, let the leaves drift down on them gradually. He took cuttings from woody stems in late summer, then dipped them in plant hormones and planted them in plastic sweater boxes. Once the plants were rooted, he replanted them in four- or six-inch pots until they were ready to set out.

Among Dr. Maslin's many purchases were lavender-flowered rock jasmine (*Androsace* sp.), blue-flowered *Brimeura amethystina* (formerly *Hyacinthus amethystinus*), and several cultivars of heather and broom, including *Cytisus decumbens*. He believed that heaths and heathers have been neglected by Rocky Mountain gardeners, and was particularly pleased with *Erica carnea*, commonly called snow heather. *E. carnea* is valued for its long season of red or pink bloom (depending on the cultivar chosen) and attractive, glossy foliage. He experimented with many bulbs, as well as gentians, bluebells and saxifrages. The snowdrops and species tulips that he purchased now add charm to the spring garden, while *Crocus speciosus* gives welcome color in the autumn.

Dr. Maslin planted many mountain flowers—some alpine, some from the lower slopes—in the garden. Four species of col-
The bright white flowers of hemlock, candytuft, highlight a group of boulders.

A smooth grass path

ABOVE: This dwarf Canada hemlock, Tsuga canadensis ‘Cole’s Prostrate’, is over 20 years old. TOP RIGHT: The bright white flowers of candytuft, Iberis sempervirens, a tiny plant referred to as rock jasmine; rosy queen’s crown, Sedum rhodanthum (formerly Clementsia rhodantha); Silene acaulis, commonly called cushion pink or moss campion; alpine meadow rue, Thalictrum alpinum; Telesonix jamesii, with its red-dish-purple flowers and nearly evergreen foliage; and Viola adunca, a small alpine species commonly called hook-spur violet.

Since most blooming periods are brief, Dr. Maslin was attracted to plants with interesting foliage. Many such plants are now found throughout the garden. Leaves that are lustrous, sometimes evergreen, add to the winter beauty of the rugged boulders, which range in color from golden brown to dark bronze.

Norman Taylor’s Encyclopedia of Gardening states that rock gardens should be planted only with alpines and other plants of similar dwarf or compact growth habits. According to this view, plants that thrive in flower borders are generally not suitable for rock gardening, while bedding plants such as begonias, geraniums, petunias and lantana are absolutely taboo. Furthermore, such commonplace plants as pulsatila and alysium should be resolutely avoided. However, Dr. Maslin did not always follow these rules as would a strict constructionist. In his youth, he wanted to become an artist, and this artistic tendency is evident throughout the garden. If he saw a spot among the boulders that cried for color, he had no qualms about filling it with a common plant such as a basket-of-gold, Aurinia saxatilis (formerly Alyssum saxatile).

Many of the plants in the garden have interesting histories, particularly a small phlox named for Maslin’s wife. The story of this plant began when Dr. Maslin read about a yellow-flowered phlox that had been discovered in Mexico. Although some dried specimens remained in Kew and other herbaria, the plant had been lost and forgotten for almost a century. Maslin was determined to go and look for it.

In September 1978, he and his wife Mary set out in their van and drove 1,000 miles to the reputed site of the first discovery in Chihuahua, Mexico. After adventures, illness and disappointments, they started back empty-handed. Fortunately, on the way back they came across a stand of multi-colored phlox, and two or three of the plants bore pure yellow flowers. It was difficult to dig up the plants, as the ground was baked hard, and there were only a few mature seeds, which they brought home with great care.

Later that year, Dr. Maslin returned with another botanist, Panayoti Kelaidis, who was curator of the Rock Alpine Section of the Denver Botanic Gardens. When they showed a color photograph of the yellow phlox to a young Mexican, he led them to a fine patch of pure yellow-flowered plants.

This time there were plenty of plants and seeds to bring home. These plants, which are thought to be a natural cross between Phlox lutea and P. purpurea, were planted in the Maslin garden. Others went to the Denver Botanic Gardens and Siskiyous Rare Plant Nursery (2823 Cummings Road, Medford, OR 97501, catalogue $1.50), which now sells several cultivars, including P. ‘Mary Maslin’.

Few people have the time, devotion, strength and scientific knowledge to develop—a dedicated group of volunteers who are associated with the Rocky Mountain Chapter of the American Rock Garden Society. The group hopes to preserve and maintain the garden as a showpiece for the upcoming meeting of the International Rock Garden Society, which will be held in Denver in 1986. (See “Sources” for details.)

Dr. Maslin once said, “When I go out some summer morning and see a bloom on a little plant that I have tended for months, even years, that is my reward.” Today, visitors to the Maslin garden are fortunate to enjoy the fruits of his hard, yet gratifying labor.

Once upon a time, when I was four or five years old, I sometimes lived in a make-believe world rather different from the fairy-tale one of most little girls. I had discovered a very special treasure on a low shelf in the living room. There sat a long row of small, red-bound books stamped in gold—the complete works of Shakespeare, in the University Society of New York edition of 1903. I was far too young to read them, but I quickly learned to find my favorite, Hamlet. Neither the plot nor the poetry lured me, but each volume had a colored frontispiece, and this one had a photograph of a young woman with long, dark hair, wearing a flowing robe of a pale pink material. One arm was upraised, with multicolored flowers cascading from one hand to the other in a long loop—Ophelia and her fantastic garlands, of course.

On many a rainy afternoon I sat, fascinated, on the floor with the open book in my lap. I doubt that the pictured flowers were really the "crow-flowers, nettles, daisies and long purples" of Shakespeare's lines, but they lit my imagination. Years later, in college, I wrote a long paper not on Shakespeare's poetry but on his flowers, no doubt to the surprise and distress of my rather stuffy English professor.

On a recent springtime visit to England, I glimpsed my first cowslip, and it proved quite irresistible. I have burrowed into all the plays and poems once more, and read up on such esoteric topics as Elizabethan furniture, the Warwickshire landowners of Shakespeare's day and, of course, the gardening of the time. Shakespeare and flowers are forever intertwined for me.

England was a rural land in the sixteenth century; all of England held fewer people than does London today. Shakespeare was a country person. He knew the fields, the flowered meadows, the fruited orchards, the neat village gardens of his native Stratford. He also knew the gardens of London; the marvelous "rose scene" in Henry VI is set in the Inner Temple garden, a real place. Quite possibly he knew the great herbalist John Gerard, whose garden was not too far from the poet's lodgings.

Shakespeare once called England "our sea-walled garden." He thought easily and naturally, as a gardener thinks, of growth and decay, pruning and grafting, tending and weeding. He noted the "darling buds of May," untimely frosts and thorns that prick. To him, the "royal family" of England consisted of roots, trunk, branches, leaves and flowers. He was attuned to subtleties of color and fragrance, and to habits of plant growth. All this is expressed in Shakespeare's apt and sensitive simile and metaphor. His mastery and care were as deftly used in describing cowslips in a fairy dell as in portraying the brooding Hamlet at Elsinore.

While exploring the poetry anew, I decided to paint a bouquet. I found, though, that choosing among Shakespeare's flowers was not easy! His most beloved flower, if times mentioned can be used as the measure, was the rose. The old garden roses from his day are indeed lovely, and were a temptation for my brush, as were herbs—rosemary, thyme, fennel and many more. A pretty page might evoke a fragrant country kitchen. I even considered doing fruits rather than flowers, for Shakespeare wrote some enticingly delicious lines, such as these for Titania: Feed him with apricocks and dewberries, / With purple grapes, green figs and mulberries (A Midsummer-Night's Dream ACT III: SC I). And, of course, there are garden flowers, pretty possibilities—marigolds, carnations, crown imperial, "lilies of all kinds". . . .

English wildflowers, however, appealed to me most, for I am essentially a wildflower person. Since Shakespeare mentions too many to crowd into one painting, I chose only 10 of my favorites. I also sifted among the prettiest quotations. For example, When daisies pied and violets blue / And lady-smocks all silver-white / And cuckoo-buds of yellow hue / Do paint the

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I have been interested in annuals for years, ever since my mother gave me some cosmos to plant on Easter Day, 1946. Although I am aware that everyone is into perennials these days—they seem to represent permanence, something that is missing in today's world—I've gotten tired of some of them. For a change, I decided to grow an occasional annual again—mostly in containers, so if a planting doesn't work out I can dispose of the evidence, so to speak. Also, if the chief horticulturist of Wayside Gardens comes for a visit, I can hide the plants behind the barn, and he'll never know. Besides, I'm growing just a few annuals.

Of course, that is not the way my wife tells it. She says I have to send for a replacement of the Burpee catalogue three days after it arrives because the first copy is so badly dog-eared. Well, Mary Ann exaggerates, and in any case, Burpee lists some perennials, too. Besides, she has hidden the Thompson and Morgan catalogue. I realize that some people think I'm crazy to grow annuals, since perennials provide the basis for low-maintenance gardening, and I have to plant my annuals every year and then take them up later. But is the aim of gardening low maintenance, or is it the creation of beauty?

Fashions

Actually, annuals are not quite as "out" these days—nor are perennials quite as "in"—as some would think.

My favorite annual changes from year to year. It has never been a cockscomb, zinnia, petunia or scarlet sage, although my wife claims to have seen a shot of the latter in my slide file, growing in the garden before we were married. The color red is often difficult to capture accurately on film, and I have almost convinced Mary Ann that the slide in question was not of scarlet sage but of an overexposed cardinal flower whose red everyone seems to adore. She protests that the sage red is not at all the same, and that the identification could be cleared up if I were to show her the slide again. Too bad I have misplaced it. In recent years, seed companies have attempted to inject softer tints into scarlet sage, but these sages come across as effectively as do pastel fire engines.

An annual salvia that I prefer is Joseph sage, Salvia viridis, which has purple, dusty-pink or white bracts, depending on the luck of the draw or the cultivar you buy. These muted colors look very pleasing with gray foliage plants such as lavender, kitchen sage (especially Salvia officinalis 'Purpurascens'), chamomile (Anthemis cupaniana)
or *Artemisia canescens* (probably *A. versicolor* of American nurseries).

Joseph sage is not everyone’s cup of tea, and one of my friends referred to it as having an uncanny ability to evoke the mood of a clammy August afternoon in England between showers and before tea. I rather like it because I am not used to rain or coolness in that month. The combinations of purples, soft pinks and gray foliage one often sees in England have a cooling effect. It seems to me these colors are more appropriate in a land of hot summers such as ours. In England, they reflect; here, they temper.

We grow Joseph sage one year, then skip two or three years before planting it again. About 15 inches tall at maturity, it combines nicely toward the front of the border with betony (*Stachys officinalis*), which is taller and has purple-pink flowers. In the background, *Monarda 'Croftway Pink'* and *Lilium 'Black Dragon'* help complete the scene. Individual plants of Joseph sage are not showy, but a dozen or so together can be a refreshing change from bright-colored annuals. They are also fine in tubs mixed with dusty-miller and *Nierembergia 'Purple Rose'*, an annual that grows about eight inches tall and has bell-shaped flowers. Germination of Joseph sage is good; we either sow seeds on the spot in May, or start them indoors under artificial lights. Plants usually self-sow, and there may be a respectable display the next year if seeds are scooped up in spring and re-arranged.

**Color It Purple**

The above is a fairly monochromatic scheme, one annual blending with several perennials of similar hue. But what if we wish to broaden the monochrome with other uncommon annuals? There are many of these, if only we open our eyes and not think of annuals as consistently having psychedelic colors. In fact, some soft hues are more common in annuals than perennials, and I am very pleased to have access to them when designing a border. For example, purple-leaved plants, which are usually brownish-maroon, are rare among perennials but not all that uncommon among annuals. There are some fine ones, and one doesn’t have to resort to the bigness of coleus.

Purple-leaf perilla, *Perilla frutescens 'Atropurpurea'*, is a favorite annual of mine for broadening pink and mauve color schemes in sunny areas. We bought a few seedlings seven or eight years ago but none since, because perilla self-sows, and there is usually a good crop from which to select offspring for resetting each year. It is a prolific plant, particularly in mild climates, and one is well advised to spend a few minutes in May guillotining excess seedlings in the border.

Depending on the soil, this perilla grows from three to five feet tall (it can be kept lower by one or two pinchings in late spring) and almost as wide, giving the impression of a shrub. Its outline and leaf shape resemble *Hydrangea macrophylla*, but its brownish-maroon foliage and second-rate spikes of lavender-mint flowers, which are borne in late summer, set it apart. It is a great foil for other plants, and I enjoy it particularly with perennials such as globe thistle (*Echinops*), white or pink lilies, and that wonderful knock-your-socks-off summer phlox, *'Starfire'*, whose deep cherry-red flowers could probably be seen from a Boeing 747 flying over our garden.

There is also a cut-and-puckered purple leaf form of perilla ('Lacinata' of the trade), but it gives a diseased appearance and doesn’t have much place in a border scheme.

In really deep borders—more than seven or eight feet deep—there may be a need for annuals with larger and bolder foliage than that of purple-leaf perilla. Fortunately, there is an excellent mallow for foliage, *Hibiscus acetosella 'Red Shield'*, which grows about five feet tall and has maroon leaves that remind one more of a lush tropical maple than a hibiscus. The species itself is African, and the growing season in most parts of the United States is not long enough for the red and yellow flowers of this selection to form. On a plant like this they are almost afterthoughts of nature. Be sure to start seeds indoors early, because a long growing season, plus heat, brings out the best in *Hibiscus 'Red Shield'*. Its boldness and the color it provides in the garden can be exceeded only by bronze-leaf forms of the castor bean, *Ricinus communis*, but these are usually out of scale even in the deepest borders, and are best used as exclamation points. Regardless of which of these plants you use, it is important to remember that virtually all of the maroon variants assume their best foliage coloration in sun.

**The Blues**

The percentage of plants with good blue flowers has always struck me as higher among annuals, or plants used as annuals, than among perennials. Blue is usually a good softener or enhancer of other colors, depending on its use, and borders seldom have enough of it. Of course, there are well-known examples in annualdom—lobelias, china asters, some petunias, browallia and ageratum—but I thank nature for a less common one, the mealy-cup sage, *Salvia farinacea*. This is a perennial in very mild climates but is treated as an annual in most of the United States. It is apt to be scorned by new gardeners because the
species and older strains, such as 'Blue Bedder', have a high proportion of leaf to flower, and the flower is nothing to send telegrams to Wisley about.

Yet plants with pronounced spikes have a special value in the garden, since they are usually outnumbered by plants with rounded flower forms. There are a few spiky perennials to relieve the possible monotony—Elatracea, Cimicifuga, Lythrum, Delphinium, violet sages (Salvia × suet.) and the summer veronicas—but not many others that are particularly useful in the garden. Salvia farinacea is helpful in this connection because it not only looks like a perennial, but is one technically. My favorite selection, 'Victoria', grows about 18 inches tall and has a wealth of spikes of deep blue flowers that appear from midsummer to frost, which is a considerably longer bloom period than most perennials have. We usually buy young plants in trays at a garden center in spring, since it takes three or four months for seedlings to come to flowering size—a long time for an annual. As with other sages, full or nearly full sun brings out the best in these plants.

It is ironic that when most gardeners think of the genus Salvia, they think of scarlet sage, for most salvias have blue flowers. Some of the finest blues can be found in this group, including the short-lived perennial Salvia azurea var. grandi-flora (sometimes listed as S. pittens), which may flower the first year from seed if started indoors sufficiently early in winter. Blooms, which appear in September or October, are a good clear blue amid a tangle of gray-green leaves. The four- or five-foot stems are lax; avoid staking, we shear plants twice early in the growing season to make them relatively compact and full of flowers. Another fine, no-nonsense blue that is of gentian sage, Salvia patens, a Mexican perennial treated as an annual. It grows from 18 inches to three feet in height. We shear this plant early in the season, too.

Mary Ann and I disagree about the merits of a number of plants, such as 'Blue Morning Glory', Convolvulus tricolor 'Dwarf Royal Ensign', which has erect stems about a foot tall, is not one of them. When gardeners see its pristine blue flowers, accentuated by yellow and white throats, for the first time, they realize that although the word "blue" has been used with utmost license for all sorts of plants, this is the real thing. Because I have spent a fair portion of my horticultural life doing in—or attempting to do in—another Convolvulus, the field bindweed (C. arvensis), whose roots can be embedded nine feet deep in the soil, I had considerable prejudice to overcome. Fortunately, in the five or six summers we have grown the dwarf morning-glory, we have not noticed any chance seedlings. Still, we have no difficulty germinating store-bought seeds, which we start indoors about six weeks before planting out. 'Dwarf Royal Ensign' makes a lovely tub plant when combined with dusty-miller or creeping zinnia (Sanvitalia procumbens) on a sunny terrace, but there are many possible companions for this agreeable annual from southern Europe.

I suppose most gardeners have a soft spot for the annual bachelor's-button, Centaurea cyanus. My objection is that it has tall, floppy stems and needs more than the usual deadheading to look well. Still, bachelor's-button is a rough-and-tumble plant, and I wouldn't be without it for too many summers. Although it may not be considered prime boutonniere material anymore, it still makes a fine cut flower, and it tolerates poor soil better than do most other annuals. 'Jubilee Gem', a dwarf 18-inch cultivar, is relatively tidy and a true blue. The bloom period, shorter than that of many annuals, can be extended by a second sowing of seed directly in the garden in early summer. Germination is high, and young plants grow to flowering stage in about six weeks. 'Jubilee Gem' also makes a pleasing, unusual tub plant in a sunny spot.

We are also fond of an annual woodruff with small, but generously borne heads of light blue flowers—Asperula orientalis. It grows a foot tall and has an informal (but not lax) habit, unless it is overwatered. Plants perform well in sun or partial shade. They do not flower all summer, but when they start to fade in five or six weeks, we shear them halfway back and fertilize them for another round. There is no harm if you forget to do this, for the seed heads, resembling the fruits of a small clematis, have ornamental value, too. A grouping of annual woodruff makes a fine, out-of-the-ordinary display in a container or tub. Seed sown outdoors directly in the container, or indoors for an early start, germinates readily. It takes seven or eight weeks for the initial flowers to appear.

One selection of nemesia, Nemesia strumosa 'Blue Gem', has blue flowers, but most American gardeners know this South African wildflower only in mixed colors, usually shades of yellow, orange and red, plus white. Normally we refrain from mixed colors because they give a spotty effect in the garden. Still, perhaps because the nemesia tints (except for an occasional cherry-pink) are all compatible, the garden effect can be winning.

Nemesia is a sun-worshiper belonging to the Scrophulariaceae, the botanical family that includes the snapdragon. It is usually less than a foot tall in gardens and, like delphinium, performs best in areas with cool summers. In mild climates, it is better to grow it as a spring or autumn annual. We estimate eight to 10 weeks from seed to flower. Sometimes nemesia can be found in garden centers, but such uncommon charmers are seldom found on the increasingly scruffy lists of the huge bedding-plant growers who dominate the market today. Economics wins, and gardens are the poorer in variety as a result.

Reds, Yellows and Oranges

The reddish-orange seen in Maltese-cross (Lychnis chalcedonica), a couple of other Lychnis species and some daililies is a difficult hue to find in perennials, so we turn mainly to annuals when it is required. However, most annuals with this trait have large flowers of electric intensity that overwhelm other plants. Shock waves aren't usually necessary for garden effect, except conceivably in packs or very large borders, but the restrained use of reddish-orange can sometimes save a dull border from tromping by somnambulists. A little-known annual from South America called mask flower (Alonsoa waseiwizi 'Compacta'), which grows 10 to 12 inches tall, solves the problem for small borders and is a topnotch container plant for sunny areas, particularly with white sweet alyssum or the smaller single-flowered sorts of yellow margarids.

Mask flower, also a member of the Scrophulariaceae, was somewhat popular in gardens of the 1920's and '30's, and was included in Alfred C. Hottes's The Book of Annuals, which was the standard work on the subject in those days. In this country, the less common sort of plant has become scarce over the years, and this is one example. We saw this species for the first time a few years ago at Great Dixter, the garden of Christopher Lloyd, in England, and were so taken with mask flower's felicitous combination of bright color and refinement that we sought it out and have grown it with pleasure since then. The individual flowers, just over a half-inch wide, project themselves considerably farther than other annuals with flowers of a similar size but a more delicate hue. As with a number of uncommon annuals, one must turn to overseas sources for Alonsoa seed. Although some packets are incorrectly sold as the compact form, and contain seed that results in much taller and less graceful

Convolvulus tricolor 'Royal Ensign', commonly called bush morning-glory, makes an excellent tub plant.
plants, the chase for this engaging pixie is worth it.

Perennials with yellow daisies for flowers are about as rare as wasps at a Labor Day picnic, and the same may be said for annuals. However, there is one of the latter that Mary Ann particularly esteems, and I had better mention it if I am going to persuade her to start our Alonsoa indoors under artificial light this season. This is calliopsis, Coreopsis tinctoria, a native wildflower in many parts of the United States. The species itself, which grows up to four feet tall, is a little unkempt and would benefit from an injection of laundry starch in the lax stems, but there are dwarf strains in mixed colors that have well-behaved growth habits. The flowers tell the story, though—profuse little daisies, often less than an inch across, in bicolor shades of yellow, bronze and mahogany, or sometimes all one color or the other. It is difficult even for a curmudgeon to dislike them.

Calliopsis grows well in a variety of soils, including those that are relatively poor and dry. A more important requirement is a bright, sunny exposure. If the spent flowers are not removed, the bloom period won’t extend all summer. Deadheading is a tedious task because of the numerous small flowers, so we shear plants lightly after the first wave of flowers, then apply a mild dose of water-soluble fertilizer.

A good way to grow the dwarf forms, which reach 10 inches or so in height, is in containers; after shearing the plants, we whisk the containers out of sight to a sunny rehabilitation area for a couple of weeks, then bring them back on stage. Seed germination is fast and good, and there isn’t much point in starting calliopsis indoors. We start seeds in the ground or in planters in early May (thinning them as if they were radishes) and can usually expect flowers toward the end of June. If you really like calliopsis, try a second sowing in the latter part of July (later in areas with long, hot summers). Fresh, young plants are usually more attractive in bloom than older ones that have been rehabilitated.

The Art of Compromise

Gardening with spouses is a horticultural give-and-take that may lead to his-and-her gardens. One of our gardens is, of course, dominated by calliopsis and similar yellow daisies of modest account—Baileya, Dyssodia, Layia and their ilk—and the other will, perhaps, ultimately be the same, but we have not quite reached that point. There are always bargaining cards; my diamond is St. Mary’s thistle (Silybum marianum), also known as holy thistle or blessed thistle. Regrettably, Mary Ann chooses to call it by its genus name, accenting each syllable in a deliberately slow manner. The bold and clasping, bright green leaves of this “divine” plant have conspicuous white veins, as if marbled with milk, or even silver. In midsummer, sturdy stalks rise ethereally to four feet and bear classic white- to rose-purple thistles, representing pure elegance when planted among the summer phloxes of similar tint.

Despite my fondness for the plant, old silly-bum is not allowed to cross the border into California because it is a thistle, and my wife would like to see it banned in our state, too. This is because of an unfortunate incident that took place in our garden. Once, during a temporary absence on my part, Mary Ann decided to tidy the borders, throwing all sorts of plant refuse, including the spent flower stalks of the thistle, onto the compost heap. The next year, some 2,000 seedlings germinated on the heap; another 2,000 germinated around the garden because of a spring top-dressing of compost we had given to several borders. She ultimately rogued all of them, except for a few seedlings over which I stood, saying, delicately but firmly, “If these go, so do the calliopsis.” Marriage is a series of compromises, and I won that one.

Many people have tried to talk me out of my fascination with annuals. To those who are skeptical, beware. Someday you may find yourself fascinated with Phacelia, Nigella and Didiscus, and before long, Oxypetalum. You may even find the Park, Stokes and Harris catalogues to be good reading. May you have sweet dreams of mignonette.
I
n July 1962, when my friend Jaime Díaz and I were traveling north along the Pan American Highway toward the small Ecuadorian city of Tulcán, he remarked that the only thing worth seeing there was the cemetery. This rather unusual statement was the first indication that I was about to see one of the world’s most memorable gardens.

This was my first visit to Ecuador, a small South American country located on the equator, whose remarkably diverse terrain stretches from the Pacific Ocean, over the Andes to the tropical rain forests at the headwaters of the Amazon. I was there to study the domesticated plants of the highlands, and my first impression of this beautiful country was formed when I stepped off the plane in Quito and saw the majestic, snow-covered volcano, Cotopaxi.

Jaime, a plant pathologist with the Ecuadorian Ministry of Agriculture, helped me a great deal with my studies while I was in the country. One day in July he called to invite me to join him on a trip to Tulcán, a city in the highlands of northern Ecuador a few kilometers from the Colombian border. He was making the trip to examine a disease of the potato, the principal crop in the region. The next day I found myself in a jeep with Jaime and his assistant, headed north on the Pan American Highway.

Our trip took us up through the páramo of El Angel, not far from Tulcán, which is located at an altitude of 10,000 feet. Páramo is the name for the vegetational zone found above the tree line in the Andes. These highland plains are often shrouded in fog, and are usually dominated by grasses. Here, however, one of the dominant plants is a shrub, *Espeletia hartwegiana*. This striking member of the Compositae, or daisy family, called frailejón in Spanish (from fraile meaning friar or monk), was well worth seeing.

We finally arrived in Tulcán. The next day, after Jaime had finished his work, we went to the cemetery. I had never seen anything like it; all the trees and shrubs were trimmed into ornamental shapes—geometrical designs, figures of animals and human faces. Such verdant sculptures, as they are sometimes called (escultura en verde in Spanish), are more properly known as topiary. I had seen photographs of topiary before, but nothing as spectacular as this, and I was certainly surprised to find it in such an out-of-the-way place as Tulcán.

Jaime introduced me to the artist who created all this sculptured greenery, Azael Franco. Unfortunately, however, my Spanish at the time was hardly adequate to carry on much of a conversation, so I learned little about the topiary or its creator during my first visit.

When I returned to the States, I sent my photographs of the topiary at the cemetery to Dr. Edgar Anderson, one of my former teachers and the director of the Missouri Botanical Garden at the time. I knew that he would be interested in seeing them, as he was an authority on horticulture and landscaping. He wrote back to say that they were the most extreme examples of topiary work that he had ever seen from the Americas.

From talking with Dr. Anderson and
from reading, I soon learned a great deal about topiary. Our earliest record of this practice dates back to Roman times. In the first century A.D., Pliny the Younger wrote a good description in one of his letters of the topiary gardens at his Tuscan villa. Later, topiary spread to other parts of Europe, eventually reaching England, where it became very popular in Elizabethan times. However, it soon had its critics. In an essay on gardens in 1625, Francis Bacon wrote: “For the Ordering of the Ground, within the Great Hedge, I leave it to a Variety of Device; Advising nevertheless, that whatsoever forme you cast it into, first it be not to Busie or full of Worke [which topiary is]. Wherein I, for my part, doe not like Images Cut out in Juniper, or other Garden Stuffe: They be for Children.”

Then, in 1712, Joseph Addison in the Spectator commented: “Our British Gardeners ... instead of humoring Nature, love to deviate from it as much as possible. Our trees rise in Cones, Globes, and Pyramids. We see the Marks of the Scissors upon every Plant and Bush. I do not know whether I am singular in my Opinion, but, for my own part, I would rather look upon a Tree in all its Luxuriancy and Diffusion of Boughs and Branches, than when it is thus cut and trimmed into a Mathematical Figure....”

A year later, in a satire in the Guardian, Alexander Pope ridiculed topiary. Among other things, he wrote: “We seem to make it our Study to recede from Nature, not only in the various Tonsure of Greens into the most regular and formal Shapes, but even in monstrous Attempts beyond the reach of the Art it self: We run into Sculpture, and are yet better pleas'd to have our Trees in the most awkward Figures of Men and Animals, than in the most regular of their own. ... A Citizen is no sooner Proprietor of a couple of Yews, but he entertain's Thoughts of erecting them into Giants, like those of Guild-hall. I know of an eminent Cook, who beautified his Country Seat with a Coronation Dinner in Greens, where you see the Champion flourishing on Horseback at one end of the Table, and the Queen in perpetual Youth at the other.”

According to Richardson Wright in The Story of Gardening (1934), Pope’s criticism “definitely killed topiary work.” This is an exaggeration, for although the natural gardens advocated by Pope and others began to replace the more formal ones, and topiary began to decline drastically, it did not disappear entirely. In the late nine-
teenth century, there was a revival of interest in topiary. Today, topiary gardens can be found in England as well as on the Continent. Although topiary has never been popular in gardens in the United States, a few examples may be seen today, such as at Longwood Gardens (Kennett Square, Pennsylvania), Green Animals (Portsmouth, Rhode Island) and Ladew Topiary Gardens ( Monkton, Maryland).

The plants usually employed for topiary are evergreens, particularly gymnosperms. Cypress, yew and juniper are the best, although one flowering plant, boxwood, also yields satisfactory results. Privet is sometimes used as well.

Most recent garden and landscaping books that I have seen offer little or no information on topiary. If one is interested in learning more about the technique, it will probably be necessary to consult the classics on the subject—Charles W. Curtis and W. Gibson’s *The Book of Topiary* (John Lane, London, 1904) and Nathaniel Lloyd’s *Garden Craftsmanship in Yew and Box* (Ernest Benn, London, 1925)—if he or she is fortunate enough to find a library that has them.

Since 1962, I had made several trips to Ecuador in connection with my botany studies. However, it wasn’t until 1983 that I was able to return to Tulcán. I made this trip especially to see the cemetery, for I wanted to know if it was still as beautiful as I had remembered it, and I wanted to learn more about it. My wife accompanied me this time.

As our taxi took us through the city, I noticed that it had grown considerably, and it was not nearly as dismal as I had remembered it. The cemetery, which was outside Tulcán before, now had residential areas approaching it on three sides. As we entered, I could see that it was as well maintained and as attractive as before. My wife, who had heard me speak of the cemetery often and had seen my photographs, was not disappointed. It was larger than I had recalled, but I suppose the fate of most cemeteries is to increase in size with time. The area filled with the topiary and mausolea covered about three acres. Here, all of the tombs were above ground, but behind this area was another area of an acre in which the tombs were in the ground. The graves in the latter area were very simply marked, and the general appearance led us to the conclusion that this was where the poorer people were buried.

We spent over two hours examining the cemetery and taking photographs. Nearly all of the topiary specimens were shaped from Italian cypress, *Cupressus sempervirens*. A few pines and specimens of *Podocarpus* had also been trimmed, though they do not lend themselves to the detailed work that is possible with the cypress. There were arches, pyramids and columns of various shapes, as well as human heads and figures. Figures of animals included an elephant, a monkey and a swan. Many of the works I saw appeared to be almost the same as they had years earlier. I didn’t recall the mother with child, which must have been created in the interim.

As we walked through the area, we noted different topiary styles in different sections of the cemetery. Later, I found that Mr. Franco referred to these as his Arabian, Egyptian, French, Oriental and prehistoric American Indian styles. Much of the topiary in the Old World style looked something like the European topiary I had seen in photographs, but his American style was unique, and I found it the most interesting by far. I later learned that the artist intended the topiary to be symbolic as well as beautiful. For example, the expressions on the Inca heads were meant to evoke the joy, sadness and suffering associated with life in ancient Cuzco, the capital of the Inca Empire.

Inserspersed with the topiary were flower beds and plots of grass. Most of the ground immediately surrounding the topiary and the paths, however, was covered with white sand or pebbles to provide a contrast with the green of the cypress.

It was a Sunday morning and Father’s Day, and Azazel Franco was not at the cemetery. I had particularly wanted to talk to him, and after asking five different people and with considerable difficulty, we finally found his house, which was not far from the cemetery. While we waited for him in the living room, I saw that the walls were decorated with a number of awards that he had received. From one of these I learned that his full name was José Maria Azazel Franco Guerrero.

He received us most graciously. Although he was 84 years old when we visited, he was still doing some topiary work. He had been born at El Angel, a small village near the paranoí of the same name. In his youth, he had received some practical training in horticulture from Don José Tamayo, a man who had spent some time in the United States. (I already knew from my friend Jaime that he had received much of his inspiration for the topiary from pictures he had seen in books.) In 1936 Mr. Franco was hired by the city of Tulcán to manage the parks. He proposed something grand for the city; the topiary at the cemetery, begun that year, was the result. Over the years, the city has provided his salary, as well as laborers who keep the trees trimmed. The Ecuadorian government has also given financial support, for in Ecuador the cemetery is considered something of a national monument.

We were soon joined by Mr. Franco’s son, one of two whom he has trained to take over his work. Although it was still morning, we were served small drinks of Scotch whiskey, which seems to be a tradition with visitors at any time of the day in Ecuador. We continued to talk about the topiary. According to Mr. Franco, the trees that had been planted in the cemetery nearly 50 years earlier were, for the most part, still in good shape, although a few of them had some dead branches, perhaps caused by the unusually dry summers in recent years. He told me that he hoped to restore these trees by judicious pruning, and that he expected them to last for 500 years.

Shortly after we left his house (around noon), I thought of questions that I had failed to ask. Fortunately, he had given me a brochure published by the National Tourist Office of Ecuador that could answer some of them, but it didn’t give me any information about his technique. All that I had learned is that when a cypress plant is about five years old, he observes it carefully to see what form it might take, and then gives the plant its first pelado (haircut).

After lunch, we went back to the cemetery for a final look at the topiary. Upon our arrival back in the States, I looked up Ecuador in several travel books on Latin America; in only one of them, Rand McNally’s *The Handbook of South America*, did I find any mention of Tulcán. According to the Handbook, the city is “not particularly interesting for the tourist except for the famous cemetery, where the topiary’s art reaches its apogee.” The book was right, and so was Jaime.  

Charles B. Heiser, Jr., Distinguished Professor of Botany at Indiana University, has made many trips to Latin America to study the origin of American domesticated plants. His fifth book, *Of Plants and People*, will be published by the University of Oklahoma Press this spring.
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Continued from pg 21
meadows with delight. . . . (Love's Labour's Lost, Act V: SC II). I chose four flowers from this bright and sunny verse.

First, I chose daisies. I fell in love with English daisies, the tiny Bellis perennis. They are everywhere! Lawns are sprinkled with them; even the most meticulously manicured ones seem to welcome the wee white stars. Now that I have found seeds to be available, I am sprinkling the pretty things in our grass, too. Another of Shakespeare's allusions that I like is this: Without the bed her other fair hand was, / On the green coverlet; whose perfect white / Show'd like an April daisy on the grass (The Rape of Lucrece, Line 393). "April daisy on the grass" is a very simple phrase, but it is perfect.

Next, violets! Shakespeare writes of violets at least 18 times. In most of the allusions, he obviously means the only fragrant violet among those growing wild in England, Viola odorata: O, it came o'er my ear like the sweet sound / That breathes upon a bank of violets, / Stealing and giving odour! (Twelfth Night Act I: SC I). There's a subtle meaning in this quotation from Ophelia: There's a daisy; I would give you some violets, but they withered out the bed her other fair hand was, / On the green coverlet; whose perfect white / Show'd like an April daisy on the grass. (The Rape of Lucrece, Line 393). "April daisy on the grass" is a very simple phrase, but it is perfect.

Inexplicably, called are the violets now, not to slander, / But that the colors are the only flowers that breathes upon a bank of violets, / Stealing and giving odour! (Twelfth Night Act I: SC I). These next lines gave me the cowslip in my painting: Cowslips in the company of lady's lace I'd love to know how it tastes. The folklore on Titania, with the flower-juice touched on her eyelids while she sleeps: Yet lack'd I where the bolt of Cupid fell: / It fell upon a little western flower, / Before milk-white, now purple with love's wound, / And maidens call it love-in-idleness (A Midsummer-Night's Dream Act II: SC I). Primroses, Primula vulgaris, are perhaps the most English of wildflowers. Shakespeare called them "merry springtime's harbinger." Other names were butter rose and golden star; both fit nicely. Last spring they brightened our shady garden for the first time. They grew bounteously in Shakespeare's day, and he typically describes them in masses of bloom: And in the wood, where often you and I / Upon faint primrose-beds were wont to lie (A Midsummer-Night's Dream Act I: SC I). They were so plentiful that herbalist Ger­ ard called them "common . . . needing no description." Housewives once made primrose puddings from the flowers, mixed with honey, almonds and other good things. Frances Perry has a fifteenth-century recipe for Primrose Potage. I'm sure I will never have enough flowers to try it, but I'd love to know how it tastes. The following are some lovely lines on the color and early blossoming from The Winter's Tale: . . . pale primroses / That die unmarried are they can behold / Bright Phoe­bus in his strength. . . . (The Winter's Tale Act IV: SC IV).

In early May we found the winding English lanes lined with sheets of sky-lit English bluebells (Endymion non-scriptus) under beech trees. These are the most graceful of the scillas, slender and nodding. Sur­prisingly, Shakespeare notices them only once, in Cymbeline: / thou shalt not lack / The flower that's like thy face, pale prim­rose, nor / The azure harebell, like thy veins, nor / The leaf of egline, whom not to slander, / Out-sweeten'd not thy breath (Cymbeline Act IV: SC II). To be sure, he writes "harebell," but Gerard also uses this name. In Gerard's Herball (published in 1597), the listing is English Hare-bells. I like his quaint and unpoetic description of the fragrance: "Of a strong sweet smell somewhat stuf­fing the head." Among the old names I found crowtoes and cuckoo's shoes (in Gaelic, brog na culmain, in case you need to know). We had these cheerful little plants in a former garden, but for painting this time, I found a nice bed of them in the herb garden of Planting Fields, labeled as heartsease. They posed charmingly for me, I can understand Ger­ ard's praising the "beauty and braverie" of the colors. In my favorite lines of She­akespeare, Oberon is planning to put a love spell on Titania, with the flower-juice touched on her eyelids while she sleeps: And maidens call it love-in-idleness (A Midsummer-Night's Dream Act II: SC I). The last of my 10 flowers is honey-suckle, Lonicera periclymenum, which Shakespeare also calls woodbine: And bid her steal into the pleas'd bower, / Where honeysuckles, ripen'd by the sun, / Forbid the sun to enter (Much Ado About Noth­ing Act III: SC I).

As you read these words it is April once again. At this time of year I am often found sitting on a bench in a shaded corner of my garden, under a hickory tree. At my feet, to the left, are yellow primroses, and to the right are Titania's cowslip pension­ers. I can see the drifts of blue Endymion non-scriptus we planted last fall, in among the ferns. I'm sure I have my volume of Shakespeare, too, open on my lap. Would you like to join me? If we are very quiet, perhaps Oberon and Titania will come to inspect the flowers. Magic often happens in gardens.

Martha Prince, an artist and writer from Long Island, has written numerous articles for American Horticulturist. Her wildflower paintings have been on exhibit at many places, including the National Arboretum and the Hunt Institute.
Book Reviews

MANUAL OF CULTIVATED BROAD-LEAVED TREES AND SHRUBS, VOLUME I.

First published in 1960 and revised and extensively updated in 1976, Krüssmann’s Manual of Cultivated Broad-Leaved Trees and Shrubs has long been a standard reference for European gardeners and nurserymen. The difficulties of translating a manual of this kind from German to English have kept this unequalled guide to the cultivated species and cultivars of broad-leaved woody plants from being widely available in this country. Fortunately, Timber Press, in cooperation with the American Horticultural Society, is making Krüssmann’s manual available for the first time in English translation. The first of three volumes is now available, and the remaining two are scheduled for publication within the next 18 months.

The plants described in Krüssmann’s work are arranged alphabetically, first by genus, then by species. Although the descriptions of individual species and cultivars are technical, all of the terminology used is carefully explained in a lengthy and well-illustrated introductory chapter. Of particular significance in this work is Krüssmann’s effort to assign each cultivar to the correct species from which it was derived. In addition, the author has included dates of introduction into cultivation for each species, as well as the name of the originator or distributor of each cultivar. Also, while the original German editions made only general references to hardiness, for this edition the translator has added a reference to U.S.D.A. hardness zones for each species, a feature that should be of particular value to the American reader. Although it was not possible to illustrate all of the thousands of taxa that are included in this volume, the book includes extensive illustrations (both line drawings and photographs) to show the differences between species. The extensive references made to illustrations in other works are also very valuable. This is not a book for the beginning gardener, but it is sure to become the ultimate reference work in the field for the serious amateur, the professional nurseryman and the landscape architect.

—Charles Huckins

Charles Huckins is the Executive Director of the American Horticultural Society.

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Other public gardens to be visited include Monet’s Giverny, the Bagatelle and Municipal Garden in Paris, and the arboretum in Rennes. In the area of Dieppe, we have planned trips to several private gardens and a beautiful orchard.

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Other Horticultural Explorations you may request brochures for are: Mediterranean Cruise (April 8 - 24), China (June 6 - 23), Spring England (May 9 - 24), Fall England (September 11 - 26), Fall Orient (November 1 - 25).

**HT REVIEWS**

**HOW FLOWERS WORK—A GUIDE TO PLANT BIOLOGY.**


Although the title of this book suggests a botany textbook or a children’s book, this is a well-written, well-illustrated review of the many facets of botany. The text is written for the inquiring adult, and the reader need not have any technical background in order to understand the principles presented. The author has done an excellent job of presenting what plants are, how they work, and their importance to man. This enjoyable book will both broaden your knowledge and entertain you.

**FERNS TO KNOW AND GROW.**


This is a new edition of a classic work on ferns and their culture. The book includes introductory chapters on the biology of ferns, their identification, propagation, and use in the home and the garden. The majority of the book, however, is devoted to descriptions of individual species. Each species is described in detail and is illustrated with a series of line drawings that show a complete frond and any additional details that are applicable to the identification of the individual species. In addition, the author provides cultural infor-
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—David Attenborough

THE GARDENS OF JAPAN.

This latest work on the gardens of Japan is as much a work of perfection as the gardens it describes. In addition to a history of Japanese gardens, the author presents an explanation of and a guide to some of Japan's most outstanding gardens. All of the gardens are illustrated with breathtaking photographs. For the gardener who has had the opportunity to visit Japan, this oversize book will make you feel that you are once again standing in the middle of these inspiring gardens. For the traveler who is planning a visit, the author offers not only a lesson in Japanese gardening, but also an up-to-date guide to the locations, visiting hours and virtues of some of the best gardens Japan has to offer.

THE WONDERFUL WORLD OF SUCCULENTS.

This guide to the succulent plants of the world was originally published in German. The author, a professor of botany in Heidelberg, Germany, is known throughout the world for his knowledge of and love for these strange plants. The book is illustrated with hundreds of Rauh's photographs, both black-and-white and color, and the author provides descriptions of the plants and their habitats from firsthand experience. Whether you grow a few succulents for your windowsill or maintain a vast collection of them in your greenhouse, this book will make a welcome addition to your library.

—Gilbert S. Daniels

Gilbert S. Daniels is the Immediate Past President of the American Horticultural Society.
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American Horticulturist 41
In the small New England town where I grew up, the color of each front door seemed set by an unwritten code. Dark green, pewter gray, white and acceptable shades of blue or red, these doors were excruciatingly predictable.

This conformity was not confined to the front doors, for invariably on either side stood small forests of overgrown Rhododendron, mounds of tortured Taxus or gangling hemlocks. From house to house, this mood of forested gloom continued unrelieved, except for one doorway. Even now, years later, that narcissus-yellow door remains one of those brilliant memories of childhood.

That yellow door, against a Cape Cod-style cottage, set the theme for a tiny, but effusive dooryard garden. Instead of the requisite piece of sod, religiously referred to as “the lawn,” the daring owners had plowed this sacred ground and planted great sweeps of Narcissus and crowds of Muscari. These blooms were followed in May and June by hundreds of soft gold and yellow bearded iris, blue Siberian iris and Aquilegia caerulea. A succession of yellow and white lilies interspersed with clumps of various blue cultivars of Campanula and Platycodon, underplanted with Stachys and strategically placed clumps of Salvia officinalis, continued the color theme through the summer.

This cottage-style garden, its fence overgrown with yellow roses, was one of our favorite stops on summer bicycle rides. But it is only now, looking back, that I see the method to the seemingly mad scramble of flowers and that bright yellow door. The repetition of the door color in the immediate landscape established a strong visual link between the house and its surroundings. The result was a kind of organic unity of architecture and land, with the house an outgrowth of the garden, and vice versa.

The problem with so many foundation plantings, and the plantings immediately surrounding the house, is that they create a barrier, a netherworld between architecture and landscape. With this viewpoint that denies the very nature of plants, many people see these plantings as a static extension of the house, as solid and unchanging as the foundations they hide.

In order to be effective, the transition between a house and its immediate surroundings needn’t be horticulturally ambitious, as with the yellow dooryard garden. The dooryard, a term that simply means the area where garden and house are brought together, can vary from a brick or slate terrace crowded with clay urns of lobelia and white petunias, to a few carefully selected vines and shrubs.

For example, a roughly 10-by-40-foot front garden in Cambridge, Massachusetts, uses color and a very limited plant palette to link house and land. Here, the front door is painted a kind of lavender-pink, wooden steps are slate-gray, and vestibule and railings, white. Wisteria and pink lilacs are planted on either side of the door.

This color scheme is only effective for about two to three weeks each spring; the ephemeral color relationship goes a step further when the Wisteria petals scatter across the gray stairs. While the brevity of this display may be part of its charm, the season-of-bloom-and-color theme could easily be extended with the ground cover Lamium maculatum ‘Beacon Silver’, with its silver leaves and pink flower clusters from April until autumn, along with plantings of pink and/or white Clethra alnifolia and Rhododendron viscosum for mid- and late-summer bloom.

The dappled shade of a dooryard garden can be linked to a woodland setting with bits of forest understory—shrubs like Fothergilla gardenii and/or F. monticola, planted with evergreens of restrained growth. When brought right up to the door, these plants become a natural link between the dooryard and the surrounding land. The bottle-brush-shaped flowers of F. gardenii, a three-foot dwarf, and F. monticola, a spreading six-foot shrub, are fragrant in spring. Fothergillas are effective with the white-flowered ground cover Tiarella cordifolia in spring; in autumn, their...
usefulness as dooryard shrubs is extended when their leaves turn a brilliant yellow-scarlet; foliage color is more pronounced when the plants are grown in full sun.

In this same woodland setting, native shrubs like the already-mentioned *Rhododendron viscosum*, with its fragrant white blooms in July and reddish-orange autumn leaves, are very versatile. Shade-loving lilies and *Cimicifuga simplex*, *Rhododendron viscosum* or *Clethra* spp. can help draw an even finer line between garden and surrounding woodland when underplanted with cream- or white-edged hostas, such as 'Green Gold'. Like the yellow dooryard garden, here is a place where the evergreen sameness of yews and overgrown hemlocks has given way to welcome fragrance and colors changing through the seasons.

—Margaret Hensel

Margaret Hensel is a landscape designer and writer living in western Massachusetts.
A PORTRAIT OF BEATRIX FARRAND
Readers who would like to learn more about Beatrix Farrand may want to read one or both of the following books recommended by the author. Both are available through the Society’s Book Service. Send orders to Jeanne Eggeman, American Horticultural Society, P.O. Box 0105, Mount Vernon, VA 22121. (Virginia residents, please add 4% sales tax.)


Readers who are going to be in the New York area this spring may want to visit the exhibition on Beatrix Farrand that will open at Wave Hill on April 20. For more information, write Wave Hill, 675 West 252 Street, Bronx, NY 10471.

THE BARBERRY FAMILY
Most garden centers and nurseries carry a variety of barberry family members. These plants are also widely available through mail-order firms, including Carroll Gardens (Box 310, 444 East Main Street, Westminster, MD 21157, catalogue $1.50) and Wayside Gardens Company (Hodges, SC 29695, catalogue $1.00).

OUT-OF-THE-ORDINARY ANNUALS
Seed for out-of-the-ordinary annuals is available from J. L. Hudson, Seedsman (P.O. Box 1058, Redwood City, CA 94064, catalogue $1.00) and Thompson and Morgan (P.O. Box 100, Farmingdale, NJ 07727, catalogue free).

ROCK GARDEN IN THE ROCKIES
For information on the International Rock Garden Society meeting, to be held in Denver, Colorado in 1986, write Denver Botanic Gardens, Att: Andrew Pierce, 909 York Street, Denver, CO 80206.

SHAKESPEAREAN BOUQUET
For readers who would like to learn more about Shakespeare’s flowers, Martha Prince suggests the following books.


Many of Shakespeare’s flowers are available from nurseries and garden centers, or from mail-order perennial firms. Bellis perennis seed is available from J. L. Hudson, Seedsman, and Thompson and Morgan. See sources for “Out-of-the-Ordinary Annuals” for the addresses.

Rosa eglanteria is available from Harrison’s Antique & Modern Roses, Inc. (P.O. Box 527, Canton, MS 39046, catalogue free) and Roses of Yesterday and Today (802 Brown’s Valley Road, Watsonville, CA 95076, catalogue free). McClure & Zimmerman (1422 W. Thorndale, Chicago, IL 60660, catalogue free) lists English bluebells, Endymion non-scriptus.
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But Mary found MARLATE Methoxychlor Insecticide. For years it has been used professionally for grain, cattle and produce. Now it's available in a convenient 16 oz can as wettable powder.

What makes Mary so happy about MARLATE is its low toxicity: it's 15 times less toxic than Diazinon, for example, and 6 times less toxic than Malathion. That's important in an insecticide. Especially if you want to feel comfortable using it in a garden that is enjoyed by kids, and pets. MARLATE's bio-degradable formulation will not affect the environment. MARLATE is gentle. It's non-phytotoxic to most vegetables, fruits, flowers and shrubs, even the most delicate roses and annuals.

But even with MARLATE's low toxicity, convenience, and gentleness to plants, Mary wouldn't be happy if MARLATE didn't control the bugs that were eating at her garden. MARLATE is incredibly versatile. Its fast residual action controls over 300 varieties of insects, including cabbageworms, Japanese beetle, leafhoppers, tent caterpillars, flower thrips, and gypsy moths.

Time-Tested MARLATE® Methoxychlor Insecticide

Let the bugs feel contrary while your garden grows. Ask for MARLATE at your local garden supply dealer.
Put your plants in Nutriponics® planters and your windows will work for you. You can grow African Violets, Geraniums, even Tomatoes or Lettuce and all kinds of plants in our planters.

The lower half of the Nutriponics® planter shown above is transparent so you can see the water level. The roots grow down into the liquid and pull up water and nutrients as needed. You need add water only every two to four weeks for slow-growing plants like African Violets.

Nutriponics® is a suitable hobby for both adults and children. All you need is a window, with or without sun. Nutriponic® kits make excellent gifts.

You will be thrilled at how easy it is to grow your favorite plants using this new technique. We do not grow plants for sale, but we have hundreds of different kinds of plants growing in our research laboratories. Write us for more information or use the coupon below.

WINDOWSILL GARDENS
Dept. AHA  Grafton, NH 03240

☐ Send Information
☐ Send $9.95 kit  ☐ Send $19.80 kit
   Includes planter shown above

Name__________________________
Street _________________________
City ___________________________ State _______ Zip _______

Include $2.50 for shipping