

April 1985

The

Boxwood Bulletin

A QUARTERLY DEVOTED TO MAN'S OLDEST GARDEN ORNAMENTAL



Photo: Albert Stutsman
Elaborate flower and vegetable garden parterres, all edged with clipped dwarf boxwood, make the Chateau de Villandry a show place of the Loire Valley in France. (See Page 88.)

Boyce, Va.

Vol. 24, No. 4

Edited under the Direction of

THE AMERICAN BOXWOOD SOCIETY

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The Editor solicits and will welcome contributions of articles; news; notes; photographs, suitable for reproduction, of boxwood specimens, gardens, and plantings; and other items of probable interest to readers.

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Editor - Scot Butler
Co-Editor - Joan Butler

INDEX

25th Annual Meeting of the ABS 85
Boxwood and the Parterre 87
Boxwood Society of Midwest Offers Cuttings 91
Maintenance of Established Boxwood Plantings 92
Maintenance Calendar for Boxwood 94
Dues Reminder 94
Documenting Humphry Marshall's Boxwood 95
Tour Schedule for 1985 Maryland House and Garden Pilgrimage 102
Maryland Spring Pilgrimage Features Boxwood 103
The Seasonal Gardener 106
Edgar Anderson Remembered 107
Virginia Gardens Favor Boxwood 108
Areas Open for Virginia Historic Garden Week, 1985 113
Buxus-"The Living Antique" 114
Henry T. Skinner 116

ILLUSTRATIONS

Boxwood-edged parterres, Château de Villandry Cover
Detail of boxwood parterre, Versailles 88
Small baroque boxwood parterre, Zaanse Schans 88
Box-bordered parterres at Royal Garden Herrenhausen 89
Formal boxwood parterre in Lisbon Garden 90
Clipped boxwood parterres in geometric patterns, Pitmedden 91
Engraving of Humphry Marshall's House 95
Marshallton Botanic Garden 95
Base of B.s. 'Aureo-variegata' at Marshallton 96
Location of Existing Old Box at Marshallton (figure) 97
Base of B.s. var. arborescens at Marshallton 98
Boxwood sprigs collected at Marshallton 98
B.s. var. suffruticosa at Marshallton 98
Planting at east end of Marshall's House 100
Planting at southwest front of Marshall's House 102
Holly Hill is surrounded by boxwood 103
Boxwood partially obscures entrance and window at Holly Hill 103
Cedar Point features much beautiful boxwood 104
The Reward boasts fine display of old trees and boxwood 105
The gardens at Edgemont are unified by use of boxwood 108
Boxwood provides background for gardens at Brandon 109
Eyre Hall has one of oldest boxwood gardens in the country 110
Gazebo at Dan's Hill is encompassed by boxwood 111
Foundation plantings of boxwood at President's House, Randolph-Macon College 111
Controlled boxwood plantings harmonize with Mediterranean-style home, Lynchburg 112
Courtyard with manicured boxwood provides approach to town house, Yorktown 112

25th Annual Meeting of the American Boxwood Society

Tuesday and Wednesday, May 7-8, 1985

The Blandy Experimental Farm of the University of Virginia, Boyce, Virginia

Program

May 7, 1985 (Tuesday).

8 p.m. Illustrated lecture in the Library at Blandy Farm followed by reception. Mrs. Malcolm Holekamp, "An Invitation to Shaw's Garden with a Walk in the Japanese Garden."

May 8, 1985 (Wednesday).

9:00 a.m. Registration. (See next page.)

9:30 a.m. Guided tour of the Memorial Garden.

10:00 a.m. Coffee — Dining Room.

11 a.m. Annual Business Meeting — Library.

12 Noon. Box lunch. (See next page.)

1:15 p.m. Educational Program:

Mr. Proctor S. Harvey, "Current Use and Designs of Gardens in Virginia."

Mr. William N. Mays, "Tips on Transplanting and Maintaining Boxwood."

2:15 p.m. Auction of boxwood cultivars.

3 p.m. Garden visit (location to be announced).

Program Notes

Mrs. Holekamp is a Vice President of the American Boxwood Society and a past President of the Boxwood Society of the Midwest. A resident of Webster Groves, Missouri, she has had a long and close association with Shaw's Garden (The Missouri Botanical Garden).

Mr. Harvey is a Landscape Architect who is presently working in the Lynchburg area.

Mr. Mays is a Director of the American Boxwood Society and Manager of Sunnyside Boxwood Farm, Amherst, Virginia.

We extend special thanks to the local friends whose help and efforts on our behalf contribute so much to the success of the Annual Meetings.

Registration and Lunch

A \$3.00 registration fee will be charged to help defray the cost of the coffee hour, refreshments and other expenses of the Annual Meeting.

You may reserve a box lunch in advance (\$4.00) or bring your own lunch. If you would like to reserve a lunch, please send your check for \$7.00 per person (which covers registration and lunch), made payable to the **American Boxwood Society**, to Mrs. Robert L. Frackelton, 1714 Greenway Drive, Fredericksburg, VA 22401 (703-373-7975). Use the form below or a facsimile. All lunch reservations **MUST** be received by Mrs. Frackelton by Monday, April 29, 1985.

Directions to Blandy Farm

Blandy Farm is on U.S. Route 50 near Boyce, Virginia. Driving west on Route 50, the entrance is on your left about 4 miles beyond the Shenandoah River Bridge.

Driving east on Route 50 from Winchester and Interstate 81, the Blandy entrance is on your right about 1.5 miles beyond the junction with Route 340.

ADVANCE REGISTRATION FORM

Complete and return this form (or a facsimile) to
Mrs. Robert L. Frackelton, 1714 Greenway Drive, Fredericksburg, VA 22401

* * * * *

Please register the following for the Annual Meeting of the American Boxwood Society:

Name* _____

Address _____

Enclosed is a \$_____ check, made payable to the **American Boxwood Society**, for Registration & Lunch (\$7.00 per person).

Enclosed is a \$_____ check, made payable to the **American Boxwood Society**, for Registration only (\$3.00 per person).

Do you plan to attend the Evening Program (8 p.m., May 7)? _____

Reservations for lunch **MUST** be received by Mrs. Frackelton no later than Monday, April 29, 1985.

*Please list additional names and addresses here:

Boxwood and the Parterre: A Perfect Union

Mary A. Gamble

Parterre [from the French *par*, on + *terre*, earth]: an ornamental patterned arrangement of flower beds and walks (*Webster's New Dictionary*).

The *par terre* was one of the fascinating and imaginative garden design concepts that emerged from the Renaissance. This period, which began in Italy in the fourteenth century, witnessed the building of the most extravagantly beautiful gardens since the hanging gardens of Babylon. In this rebirth of art and architecture—of which gardens were a part—there was a turning away from the grim gloom of feudal castles and a look backward to the airy spaciousness of the classical Roman villa, where the rich and powerful Romans found refuge from crowded Rome in their country villas set in elaborate gardens. Here they could satisfy their inborn love and talent for agriculture and horticulture, as well as display their wealth and power, as they directed their many slaves in the development and maintenance of extensive gardens. Pliny the Younger, for example, kept 500 slaves busy in his villa garden on the slope of the Apennines not far from Rome.

The architects of the Renaissance found inspiration in the past but were not bound by it. They expressed their individual creativity in gardens glorious with space and light, and rich with detail. A major element was the *par terre* which so frequently was edged with elegant, glossy evergreen dwarf *Buxus* that the two became almost inseparable in the gardener's as well as the viewer's eye.

The earliest *par terres* were geometric in outline. A fifteenth century book by a Dominican monk called Poliphilus shows wood cuts of bordered gardens laid out in squares, rectangles, triangles, and the like. Within these shapes elaborate patterns were worked

out in flowers and herbs, edged with low hedges. The Italians were the first to design these decorative plots, but it was the French who gave them their name: *par terre* (1639). The great landscape designers such as André Le Nôtre, who planned the gardens of Versailles for Louis XIV, designed *par terres* of surpassing elegance and artistry. The rhythmic lines of the baroque imparted a flowing grace to the earthbound plots which was lacking in the geometric restraints of the earlier designs.

A popular Renaissance theme was the *par terre de broderie* which imitated the embroidery in which the ladies of that and earlier periods excelled. The coat of arms of the garden's owner was a tempting and popular motif. Symbols, emblems and flights of fancy were incorporated into the designs to give the *par terres* interest in addition to beauty. In some *par terres* plant materials gave way to sand, colored pebbles, crushed brick or stone, wood and metal shavings. There were no simple *par terres*; all were demanding of execution and back-breaking in work.

Today it takes a brave, skilled and confident gardener to attempt the maintenance of a traditional parterre; and it is only prudent to make sure of a reliable source of replacement plants. But wherever there is a parterre, it catches the eye. It demands attention to nuances of design detail and plant selection. It commands admiration.

The accompanying pictures were collected over a period of years and from a number of sources. They show historic parterres in both the geometric and baroque styles.



Photo: Mary A. Gamble

Versailles

Pictured is a detail of one of the parterres in the great Park at Versailles. C. von der Kemp, *conservateur en chef*, writes that at Versailles we "find the triumph of the classical garden in the French style with its flower beds laid out according to rigid principles of architecture, Nature being mastered and ruled by man." Architect of the Park was André Le Nôtre (1613-1700) who was a master of the vast perspective and the exquisite detail.



Photo: Mary A. Gamble

Zaanse Schans

The restored seventeenth century Dutch village of Zaanse Schans, not far from Amsterdam, contains a charming, small baroque parterre. Typically, the green-painted, timbered houses with decorated facades are set in small gardens. In 1697 Peter the Great of Russia came to this village to learn how the Dutch built their sturdy wooden ships. There were then 700 windmills here; today a surviving mill grinds the famous Zaanse mustard which is packaged in Delftware jugs.

Château de Villandry (Cover Photo)

The Château de Villandry near Tours, France was begun in 1532 by Jean le Breton, a courtier of Francois I. Its gardens today owe much to Dr. Joachim Carvallo who purchased Villandry in 1906 and set out to restore house and gardens. Today his grandson continues the work.

The gardens at Villandry have become a show place among show places in the Loire Valley. The original garden plans having been lost, the restoration was based on Renaissance designs published in 1576 by de Cerceau, gardener to Francois I.

The gardens are on three levels with the intermediate level laid out in elaborate flower garden parterres, all edged with clipped dwarf boxwood. Each bed follows a symbolic theme. In the foreground of the cover photograph, for example, is the *Jardin d'Amour* (Garden of Love) in which four squares symbolize tender, tragic, passionate and flighty love in the shape of hearts and flames, swords and daggers, broken hearts, and fans and love letters, respectively. Each square is planted with annuals of a color deemed appropriate to the form of love represented.

But probably the most popular garden is the one on the lower level, the *jardin potager* (kitchen garden) which covers an acre and is divided into nine squares, each with its own geometrical patterns. Here wondrous beds of red cabbage, scarlet-stemmed rhubarb, plump

green broccoli and so forth delight the eye and titillate the taste buds. And all of the beds are bordered with boxwood. At Villandry there are twenty miles of box edging to be cut each year in April.



Photo: Ann Metzger

Royal Garden Herrenhausen

Handsome box-bordered parterres form the centerpiece of the Royal Garden Herrenhausen at Hannover, Germany. This garden is considered a masterpiece of baroque, the most beautiful of its period in Germany. It began as a kitchen garden, but in 1680 was transformed into a pleasure garden for the Hannoverian kings; George I, George II and George III all had the pleasure of strolling along its graveled paths. Its first glass house was erected in 1666, and in 1851 the water lily *Victoria regia* bloomed here for the first time in Europe. For more than a century mulberries were grown on the grounds to supply the Royal Silk Manufactory

at Hamelin. Napoleon put a stop to that.

The outer geometric lines of the parterres enclose designs in lovely curves, some worked out in boxwood. Bold swirls of annuals in a single color are set off by gravel paths in white, pink and dark gray.

Hannover, the regional capital of Lower Saxony, is a city described as "busy and beautiful...of many aspects where past and present, nature and art, trade and commerce all contribute to its attractiveness." The Herrenhausen Garden, called "so modern in feeling it seems to belie its seventeenth century origin," is a jewel of Hannover.



Photo: Albert Stutsman

Lisbon (above)

In Lisbon there is a formal river-front garden with this splendid parterre. Also in the garden is a monument (background at right) honoring the great Portuguese navigators who set sail from this point in the Tagus River on their voyages of exploration during the Age of Discovery. Vasco da Gama sailed from here on July 8, 1497 on the first voyage from Western Europe to India around the Cape of Good Hope.

This particular garden is in the English style, but Portugal has many gardens in which boxwood has an important role. At El Cintra there is a handsome green garden of box. And on a high Lisbon terrace there is a Moorish garden in which the vivid green of the foliage makes a striking background for the white birds: white peacocks, white guinea fowl and white pigeons. This garden is a reminder that the Moors sometimes shielded their harems with boxwoods, just as in some medieval monasteries boxwood was planted on mounts to afford moments of privacy to the monks.

Pitmedden (opposite)

The Great Garden at Pitmedden, near Aberdeen, Scotland, has been described as the "finest example of strictly formal gardening to be found in Scotland today." (For an article on this garden, see *The Boxwood Bulletin*, Vol. 21, No. 1, July 1981, Page 7.) Its builder was Sir Alexander Seton, owner of Pitmedden. An inscription on the lintel of the doorway through which a visitor enters the garden reads: "*Fundat 2 May 1675.*"

The design of the garden reflects the rectangular shape and geometric patterns which were the epitome of good garden design in the seventeenth century. The four great parterres are worked out in elaborate designs which include the coat of arms of its owner and the thistle of Scotland. The parterres are bordered by six miles of clipped boxwood. Yesteryear the hedges were cut by hand, but today electric clippers are used.

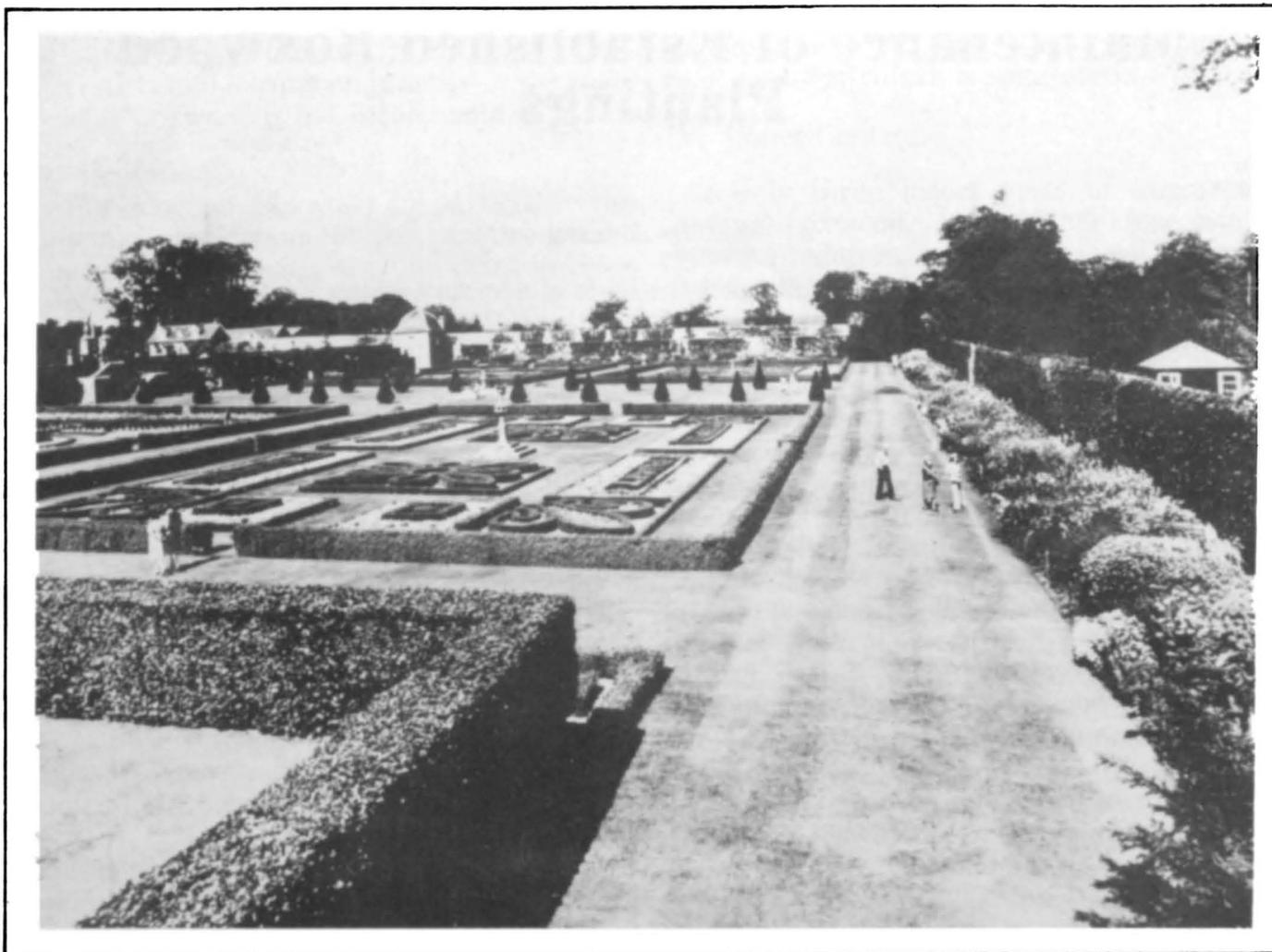


Photo: Courtesy of the National Trust for Scotland

Boxwood Society of the Midwest Again Offers Cuttings

Cuttings of Midwest-Tested Strains to be Available This Summer

For 1985 the Boxwood Society of the Midwest, headquartered in St. Louis, Missouri, is offering 10 cultivars of *Buxus sempervirens* and 4 cultivars of *Buxus microphylla*. With the two exceptions noted below, quantities are limited to 10 each of any one cultivar. The *B.s.* cultivars are: 'Belleville', 'Handsworthii' var. *pyramidalis* 'Hardwickensis', 'Inglis', 'Joy' (limit of 5), 'Myrtifolia', 'Pullman', 'Salicifolia', 'Ste. Genevieve' and 'Vardar Valley' (limit of 5). The *B.m.* cultivars are: 'Curly Locks', *japonica*, *koreana* and 'Morris Midget'.

Cuttings will be taken in late June or early July. They will be dipped in a mixture of Hor-

moden and Safer Solutions before being packaged, and will be shipped "fastest way" from the Missouri Botanical Garden in St. Louis. The cost of cuttings will be \$0.35 each, with a minimum order of \$3.50. Checks should be made out to Mrs. George E. (Jane) Penhale, 304 Carson Road, Ferguson, MO 63135. Phone: 314-521-2712.

Orders must be in Mrs. Penhale's hands by May 15. In view of the severity of the winter, please indicate if a comparable cultivar may be substituted should excessive damage be found in any of those listed.

Maintenance of Established Boxwood Plantings

William A. Gray

(*Editor's Note.* The article which follows is the basis of a lecture which Mr. Gray will deliver at a Virginia Cooperative Extension Service Educational Program in Charlottesville on May 14, 1985. Mr. Gray, a frequent contributor to *The Boxwood Bulletin*, is a Director of the ABS and Chairman of the Research Committee. We thank him for permitting advance publication of this informative text in *The Bulletin*.)

I. Introduction.

1. There are some 40 forms of boxwood, of three species, commercially available in the US and Canada. As a general rule in Virginia, boxwood is nearly always one of two forms: "American" boxwood (the common species plant of *B. sempervirens*, the European box) and "English" boxwood (the dwarfed cultivar *suffruticosa* of this same species). Therefore, this discussion is directed at these two forms, with emphasis on the popular *suffruticosa*.

2. Compared to most woody ornamentals, boxwood has very few insect and disease problems and, if planted in a desirable location, should be relatively trouble-free. Probably 75% of the difficulties that occur in boxwood plantings are cultural or environmental in origin.

II. Cultural Practices.

1. Weed control is one of the continuing maintenance jobs in any landscape arrangement. For boxwood, observe some simple do's and don't's:

a. Do not cultivate. Horizontal feeder roots lie an inch or two below the surface; for English boxwood these extend well outside the drip-line. Root damage inhibits new growth.

b. Do not use herbicides, especially those mixes containing dicamba; such soil-mobile chemicals are another common cause of root damage.

c. Do use a thin layer of coarse bark mulch; hand-pull weeds if necessary. Renew mulch annually.

d. Ground covers help in weed control. Fescue lawns mowed carefully are good. Com-

patible ground covers include Ajuga, Pachysandra, Vinca—even ground ivy.

2. Fertilizing.

a. Boxwood does not need heavy fertilization, and can be damaged by excessive doses of available nitrogen. Established plants of adequate size probably should be fed every three or four years, or whenever the need is apparent. With some mulches, more frequent feeding may be desirable. Broadcast fertilizer in March, never after June.

b. There is a wide variety of preferences for the type of fertilizer. Probably, ammoniacal forms should be avoided. For several reasons, my own preference is for fast-release 10-10-10 granular fertilizer, applied at a rate of about 20 pounds/1000 sq. ft.

c. *B. sempervirens* is native to the chalk and limestone regions of Europe. In our area, if boxwood is fed nitrogen, it can suffer from magnesium deficiency and, possibly, calcium deficiency. Hence, it is recommended that spring fertilization should be preceded by an application of dolomitic limestone the previous winter. Boxwood adapts to a wide range of soil pH values, but can suffer from nutrient deficiency.

3. Pruning.

a. English boxwood seldom needs pruning to restrain its size. When this occurs for antique plantings, it is a special and individual problem. All boxwood can be pruned severely, of course.

b. English boxwood in particular benefits from a regular program of thinning. Remove 5" to 10" twigs by plucking from crowded portions of the top and sides, to allow more light and air to enter the interior. Early December is

suggested; the pluckings make great Christmas decorations.

c. Although a common practice in the past, shearing boxwood is not recommended.

4. Sanitation.

For English Boxwood in particular, the single most important cultural practice is that of cleaning out (hosing out) the plant interior annually. Early summer is the best time. The removal of debris reduces the potential for the growth of canker-producing fungi and, probably more importantly, inhibits the development of aerial roots above the ground.

5. Watering.

a. As for any landscape plant, watering heavily during an extended dry spell benefits established boxwood.

b. Watering is especially important if a dry period occurs during April and May, when the normal flush of new growth peaks.

c. For exposed plantings, watering during January or February if the winter is dry is recommended to reduce foliage dessication.

III. Environmental Factors.

1. Many boxwood cultivars including *suffruticosa* suffer from winter dessication (foliage bronzing) if growing in full sun and exposed to winter winds. Although the flush of new growth may be delayed, plants do not show permanent damage except under the most severe circumstances. Adequate thinning of the plant in December and watering during warm dry periods in January and February do much to minimize this foliage discoloration.

2. Good drainage is essential. Often, the vigor of poorly located boxwood plantings can be improved by diverting surface run-off water.

3. Boxwood are frequently deployed by driveways, paths, and patios. Toxic chemicals moving through the soil can cause serious root damage. Do not use most herbicides, salt or calcium chloride in the vicinity.

4. Fall feeding of nearby lawns with heavy nitrogen dosage can lead to winter damage of boxwood. Do this feeding in late November or December in the vicinity of boxwood.

5. Snow removal, if it must be done, should be handled with care. Light brushing or removal by pitchfork is suggested.

IV. Insect Control.

1. Only three insect pests of importance damage boxwood. Many other insects, including predators, inhabit boxwood. General, undirected, spraying with insecticides is far more likely to kill off harmless and beneficial insects than the boxwood pests.

2. The boxwood leafminer (rare in English boxwood) is likely to be the most damaging insect pest. When it appears, control measures should be taken. The first step is to prune off any heavily infested twigs and branches; March is a good time, before new plant growth begins. When the tiny adult flies emerge in late April or May, spray with an effective contact poison, such as Malathion. Since you will miss some, the third step is to attack the young larvae just after hatching, around July 1st; since these are inside the leaves, use a systemic insecticide such as Cygon or Orthene.

3. The boxwood psyllid, an aphid-like insect, is common on English boxwood, as well as other cultivars; it causes leaf-cupping. Unless very severe, the infestation is more disfiguring than damaging. Control by late winter pruning and by spraying with Malathion, Sevin, or Cygon when new plant growth begins.

4. The boxwood red spider mite, with several generations a year, can be damaging if unchecked by predators and frequent hosing. Although the damage is most visible in summer months, control by Kelthane sprays should be done in May and September or October.

5. Japanese wax scales reportedly occur on boxwood, but very rarely. Control as for other evergreens. Wasps build nests in plants; eliminate the wasps and remove nests.

V. Disease Problems.

1. Boxwood is seldom susceptible to disease. When it does occur, diagnosis is often difficult.

There is no acceptable chemical treatment for established plantings; the principle to observe is to reduce the potential for disease through beneficial cultural practices. Maintain plant vigor and take steps to avoid plant stress.

2. There are two serious diseases, both in the root system. *Phytophthora* root rot, associated with poor drainage, results in browning foliage and root die-back. English boxwood decline, apparently more serious a few years ago, has superficially similar symptoms; heavily stressed plants seem most susceptible.

3. A couple of canker diseases (*Volutella* and *Verticillium*) are minor problems occasionally affecting twigs and foliage. Prune out and destroy infected portions of the plant.



Dues Reminder

We wish to remind regular members (individual, family, contributing and sustaining) that dues for the membership year extending from May 1, 1985 through April 30, 1986 are now payable. Please use the enclosed dues envelope to remit your payment to the Treasurer by May 1, 1985. Prompt payment will establish you as a member in good standing and save the Society time and expense in ascertaining your intentions. Even if you owe no dues by virtue of being a life or patron member, or having already paid your dues for the coming year, you may wish to use the remittance envelope to send a contribution to one of the Society's funds, give a membership to a friend or indicate your chief interest in boxwood. Thank you for giving your immediate attention to this matter.

MAINTENANCE CALENDAR FOR BOXWOOD

Cultural Practices.

January: Spread dolomitic limestone.

January—February: Water exposed plants (dry winters).

March: Broadcast 10-10-10 fertilizer.

April: Renew bark mulch.

April—June: Water thoroughly during extended dry spells.

June—July: Hose out plant interiors thoroughly.

December: Prune to thin overcrowded branches (5"-10" twigs).

Insect Control (follow only if needed).

March: Prune off leaf-miner infestations.

April: Check for mite evidence; apply Kelthane spray.

May: Apply contact spray against leaf-miner adult flies.

April—May: Spray for psyllid.

July 1: Apply systemic spray against leaf-miner larvae.

September—October: Check for mites; apply Kelthane spray.

December: Prune off psyllid infestations.

Documenting Humphrey Marshall's Boxwood

Robert R. Gutowski

Editor's Note. Mr. Gutowski will be completing a two-year fellowship in the Longwood Graduate Program in May. This program in public horticulture administration leads to a Master of Science degree in Ornamental Horticulture from the University of Delaware. The following paper presents the results of Mr. Gutowski's research in trying to determine the age of the oldest boxwoods now growing in Marshallton in Chester County, Pennsylvania in order to establish whether they could have been part of the design of Humphry Marshall's original eighteenth century garden. Mr. Gutowski hopes to make other similar investigations in the future and perhaps some day make a survey of eighteenth century American botanical gardens, very few of which have survived in any form. We wish him well in

finding a position where he can combine his interests in arboriculture, botany, garden history, preservation planning and design.

How Old Is Old Boxwood?

Documenting historic garden plantings is often like solving a mystery. There are puzzles, clues, evidence and conclusions. Recently some old boxwood at the Marshallton Botanic Garden posed such a puzzle. Some rafter-reaching boxwoods growing there are obviously old, but how old?

Humphry Marshall (1722-1801) established his botanic garden thirty miles west of Philadelphia about the year 1774. It is recognized as America's second botanic



Photos: Robert Gutowski

*At left. Engraving (c. 1849) of Humphry Marshall's House by W. Townsend, published in Darlington's book, **Memorials of John Bartram and Humphry Marshall**. Note the projecting observatory on the second floor above the plant room. Marshall was also an astronomer. At right. Marshallton Botanic Garden, February 1984.*

garden. His cousin, John Bartram, is credited with planting the first botanic garden. Marshall's garden was one of three 18th-century Philadelphia gardens influencing the development of science in the new Republic. (1)

Medicinals, herbs, forest trees, flowers and curiosities from around the world grew abundantly. From this garden Marshall carried on his lively plant trade, enriching gardens and forests on both sides of the Atlantic. (2) Here, Marshall wrote the first American botanical book, *Arbustum Americanum: the American Grove*, published in Philadelphia in 1785. (3)

We are fortunate that Marshall's house and garden site survive today. The stone house (c. 1773), now on the National Register of Historic Places, is still lived in, attesting to his skill as a stonemason. Of the old botanic garden, only a few original plants and offspring survive, including some remarkable boxwood.

Tracing the Marshallton boxwood back to the 18th century required extensive site analysis; research in archives, herbaria, other gardens, local lore, manuscripts, and libraries; the taking of soil samples and the measuring with tape of many "old" boxwoods. This yearlong effort was to determine if the existing boxwood could be dated back to Marshall's lifetime and, if so, to provide clues to the design of the garden. The garden ceased as an active botanic garden soon after Marshall's death.

The question of age is important where plants and garden have significant cultural associations. The Chester County Historical Society, as new owners of the Marshall property, are especially concerned with this question. If this boxwood is part of the old garden, then as a living historical collection it requires special preservation and conservation efforts.

(1) Greene, John C. *American Science in the Age of Jefferson*. Iowa State University Press: Ames. 1984.

(2) Belden, Louise Conway. "Humphry Marshall's trade in plants of the New World for Gardens and Forests of the Old World," *Winterthur Portfolio II*. 1965.

(3) Marshall, Humphry. *Arbustum Americanum: the American Grove, or an Alphabetical Catalogue of Forest Trees and Shrubs* Philadelphia. 1785. Facsimile with French edition (1788), introduction by Joseph Ewan. New York: Hafner. 1967.

Marshallton Boxwood Today

As a first step in documenting I mapped and measured the boxwood (Fig. 1). Three kinds of old boxwood are present:

a) *Buxus sempervirens* 'Aureo-variegata', gold-striped common box. The larger of two plants was 17 feet tall, 22 feet wide and the stem measured 10.3 inches in diameter at 3 1/2 feet from the base. The stem is single, hollow, bolted, and has an open cavity. It has a loose habit with slightly pendulous branchlets. The second plant is a small stump which shows both variegated and unvariegated branchlets.



Photo: Robert Gutowski

Base of *B.s.* 'Aureo-variegata', tree size, near southeast corner of Humphry Marshall's House. Scale in inches. January 1985.

b) *B.s.* var. *arborescens*, tree box. Three plants have stem diameters measuring greater than 10 inches at one foot from the base. (I have found this the best height at which to

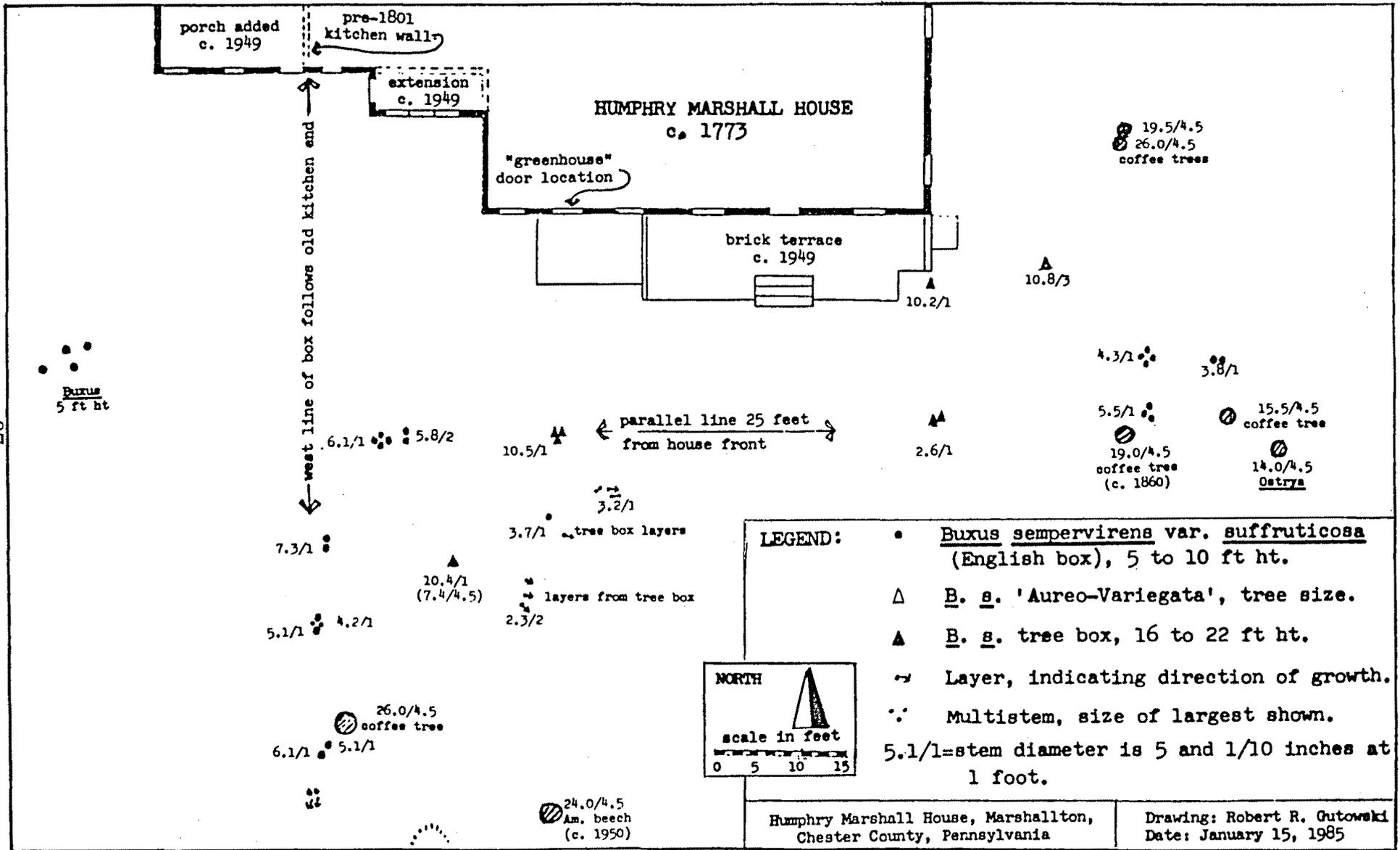


Figure 1: LOCATION OF EXISTING OLD BOX IN MARSHALLTON BOTANIC GARDEN

measure old boxwood. It avoids the basal flare and most branching distortions). Several lesser associated plants appear to be layers. The tallest tree box is now 22 feet tall.

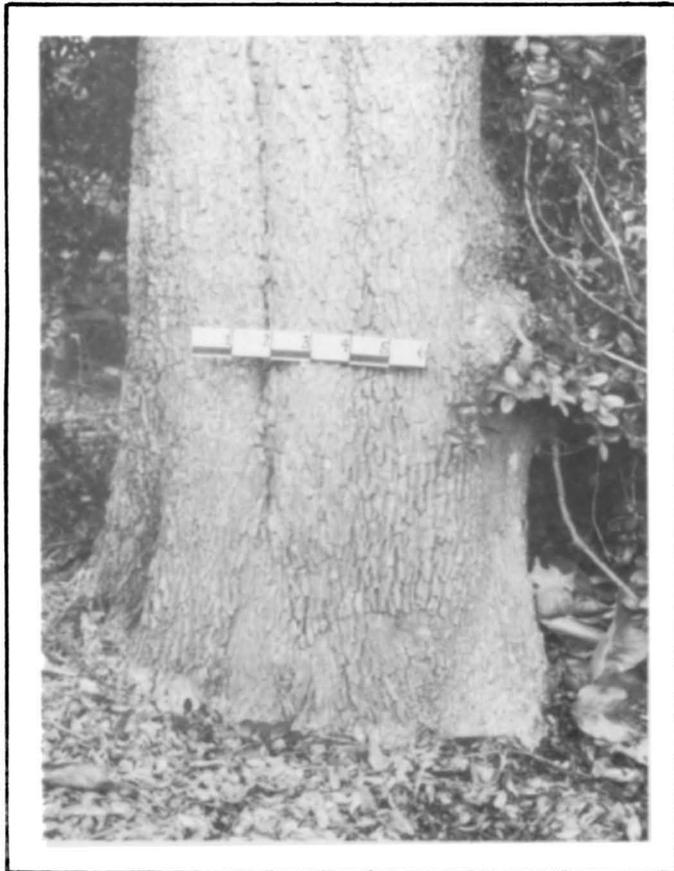


Photo: Robert Gutowski

Base of *B.s. var. arborescens*, tree box, south of plant room on west side of Humphry Marshall's House. Scale in inches. February 1984.

c) *B.s. var. suffruticosa*, English boxwood. There are two plantings differing only in vigor. The largest stem is 7.8 inches in diameter at one foot. All are multistemmed, shrubby plants about 5 to 8 feet tall. The leaf is smaller than the tree box but not as small nor as blunt as some dwarf edging box. Average diameter of the largest stems from each of the eight plants is 5.6 inches at one foot. Plants at the present west edge of the grove are aligned with the pre-1801 kitchen's west wall. All of the English boxwood can be seen as linear arrangements which follow the house's orientation.

At right, *B. s. var. suffruticosa*, English boxwood south of kitchen. Ruler attached to stem is 5 inches long.



Photo: Robert Gutowski

Boxwood sprigs collected at Humphry Marshall's House, January 1985. Top row: *B.s. var. suffruticosa*. Bottom left: 'Auro-variegata'. Bottom right: *B.s. var. arborescens*. Scale in inches.



Photo: Robert Gutowski

Size and Age

Can size information be used with rate of growth to give reliable documentation of age? Boxwood, having been selected for both rapid and slow growth, shows a tremendous range in rate of growth among clones. Environmental influences which affect stem diameter vary from location to location, even within the area of the plant itself. Rate of growth also changes with plant age.

On one visit I arrived just as the arborists were cleaning up boxwood prunings. I was lucky enough to save a section of English boxwood branch before it became woodchips. This section measured 1.7 inches in diameter and contained 65 annual rings, implying a very slow average annual growth of 0.026 of an inch. Assuming that the largest English boxwoods at Marshallton have grown at the same average rate throughout the entire life as the sample did in 65 years, their age can be estimated at 215 (average diameter of 5.6 inches divided by 0.026 of an inch per year).

When comparing the size of the old box at Marshallton with other boxwood of known age, the obvious limitations are variable environment and genetics. Also, few well-documented 200-year-old boxwoods exist. Reports of old box now vanished are usually lacking some specifics such as variety, diameter, measurement height or plant age.

Applying the measuring tape to the 250-year-old boxwood (*B.s.* var. *suffruticosa*) at Gunston Hall revealed that in 1984 these averaged 6.5 inches in diameter at one foot for the largest stem in each of 8 multistemmed plants. The growth rate here — 6.5 inches divided by 250 years equals 0.026 of an inch per year — is similar to the Marshallton estimate, confirming that such rates are reasonable for boxwood of considerable age.

Dating tree box by use of comparison is, I believe, more hazardous than dating English box. Stem diameter at one foot for the old tree box at Marshallton ranged from 10.2 inches to 10.8 inches. In diameter they compare with the oldest tree box at nearby Longwood Gardens, formerly Pierce's Arboretum (c. 1800), and the Tyler Arboretum (c. 1825), formerly the home of Minshall Painter. Tree box at "Tosalma" in Virginia measuring "some 10 inches or more at

the base" was estimated to be 175 years of age. (4) However, I have measured cut tree box from Rockwood Museum in Wilmington, Delaware that was 9.5 inches in diameter with only 78 annual rings. Stem size is a clue, but by itself is not always a very accurate indication of age.

The English boxwood here could date to Marshall's time, and the tree box is at least one hundred years old. But, were the boxwood on the site before 1801?

Early Descriptions

Descriptions of the garden before 1801 do not mention boxwood. Walks, however, are mentioned as features in the garden, and, in accounts of the Philadelphia gardens of Marshall's circle of friends, boxwood-edged walks and tree box are often mentioned. In 1790 the mother of Minshall Painter, a neighbor and relative by marriage to Marshall, planted *Buxus sempervirens* var. *suffruticosa*. (5)

Botanist William Darlington, Humphry Marshall's chief biographer, portrayed Marshall's last years in the garden: "His sight was never so entirely lost but that he could discern the walks in his garden, examine his trees, and recognize the localities of his favorite plants. In tracing those walks with his friends, pointing out the botanical curiosities, and reciting their history, he took the greatest delight to the last." (6)

The few existing accounts of the garden are mostly without details. Soon after Humphry's death in 1801, the garden fell into disuse, and the trees grew into a dense canopy. By 1850 it appeared more like a forest, but a forest of incredible diversity.

(4) Butler, Scot. "Who can top the Boxwood at Tosalma?" *The Boxwood Bulletin* 20:2., October 1980.

(5) Lockwood, Alice B., Editor. *Gardens of Colony and State*. The Garden Club of America, Scribner's Sons. 1931.

(6) Darlington, Dr. William. *Memorials of John Bartram and Humphry Marshall*. Philadelphia. 1849. Facsimile with introduction by Joseph Ewan. New York: Hafner. 1967.

Herbarium Vouchers

The Darlington Herbarium at Westchester State University, Westchester, Pennsylvania contains early boxwood collections from the Marshallton Botanic Garden.

A specimen of *Buxus sempervirens* which matches the existing tree box is labeled: "*Buxus*, Fruit matures beginning of August, 1819; flowers April 21, 1819 ..." On the same herbarium sheet is another collection labeled: "*Buxus arborescens (cum fructi)* ..., Marshallton, May 20, *Ex Herb.*, Dr. Wm. Darlington." This second collection is *B.s.* 'Aureo-variegata'. A later collection of the same two varieties is labeled: "*Buxus sempervirens*, Marshall's garden, April 23, 1829."

These collections establish the early presence of both of the existing varieties of tree box. Darlington and others reported that there were no improvements in the garden between 1801 and the time of these collections. (6, 7). It is reasonable to assume, then, that both varieties of tree box existed in the garden before 1801. Documenting their location and use, however, requires additional evidence.

Marshallton Boxwood After 1850

In 1853 Thomas Meehan, one of Philadelphia's best known plantsmen, noted the stature of Marshall's tree box: "Those who have seen this plant only as an edging to garden walks, can have no conception of the beauty of the tree varieties... some at Marshall's excell anything in beauty I have seen in its native Box-hill in England." (8) This account suggests that Marshall may have used tree box as specimen plants. Meehan also noted "golden-stripped" tree box at Bartram's. Perhaps Marshall and his cousin shared cuttings of these plants.

(7) Hazard, Samuel, Editor. "Chester County Cabinet of Science," *The Register of Pennsylvania*, Vol. I. Philadelphia. May, 1828.

(8) Meehan, Thomas: *The American Handbook of Ornamental Trees*. Lippincott: Philadelphia. 1853.

Marshallton Boxwood After 1880

Photographs and written accounts indicate that the location of the existing boxwood appears unchanged since the late nineteenth century and perhaps earlier.

By the time the Marshall family sold the property, about 1880, the botanical garden had largely disappeared, helped by the dense shade from the crowded trees. Some of the original trees remained when Charles Sprague Sargent described the garden in 1893: "In the midst of that peaceful and pleasant village... the house built by Humphrey Marshall... is still embowered by trees planted by the hands of the father of American dendrology.... Since it has been occupied by the present owner some of the trees have been cut. The thick undergrowth of shrubs, many of them planted by Marshall himself, has been cleared away and a general tidying up has begun. This is perfectly natural for no one wants to live in the midst of a tangled thicket, even if it is a classical one." (9) Sargent's list of surviving trees includes "some venerable box trees" among those plants which seemed to date from the time of the garden's founder.

A photograph dated April 5, 1884 shows the front and east end of the house with two plan-



Photo: Robert Gutowski

East end of Humphry Marshall's House. Tree box are in background. English box in foreground have been pruned. Gold-stripped box is at corner. Tree in foreground, an *Ostrya virginiana*, also appears in 1884 photo.

(9) Sargent, Charles Sprague, Editor. "Editorial: Humphry Marshall," *Garden and Forest*. New York. November 8, 1893.

tings of boxwood. (10) Although more boxwood was present in 1884 than today, these same two plantings reappear in a comparison photograph taken of the same view in 1984. Both pictures show the English box southwest of the house and the tree box south of the kitchen. Not only do the locations appear the same but there seems to be little difference in size.

An article from 1907 contains the only reference, as far as I have discovered, which mentions box-bordered walks, but it is supported by other evidence: "The garden is one no longer. Old residents can remember it as it was when the past century had not yet past its meridian, but the growth of the trees long since shut the sunlight away from the flowers and shrubs, and the lawnmower did the rest. Once an orderly arrangement of box bordered the walks between well kept beds of flowers. Today, however, the children...play in a white canvas tent at the very center of the old garden...hammocks swing where the flowers once bloomed and a Holstein calf...walks in wobbling fashion among the trees." (11)

On the basis of size, the boxwoods pictured in 1884 could have been over fifty years old, placing them before the century's "meridian." But could they date to the eighteenth century? As design features in gardens, walks are usually persistent, but with the changing site use and the loss of understory they would not survive here long beyond the "meridian." The boxwood located more favorably at the grove's edges could have survived. Additional evidence indicates that some of the old garden could have persisted until the account of the 1850 appearance of the garden.

The garden remained in Marshall family hands until about 1880, when it was cleared of most shrubs. A family letter of the 1830s mentions some garden activities. Between 1828 and 1835, over twenty-five different herbarium specimens were collected of herbaceous flowering plants such as *canna*, *rudbeckia*, *lavatera*, *helleborus*, *phlox* and *coreopsis*. Because of the abundant herbaceous plants noted in Marshall's time, and the lack of im-

(10) Harshberger, J.W. *The Botanists of Philadelphia and Their Work*. Davis & Sons: Philadelphia. 1899.

(11) *Daily Local News*. West Chester, Pennsylvania. July 23, 1907.

provements noted between 1801 and 1849, it seems very possible that "well kept beds of flowers" were a feature before 1801, and that boxwood was used as an enclosing or edging feature. This use of boxwood is compatible with the arrangement of the existing box and also with European botanic garden designs of that period which featured rectilinear planting beds.

After 1900

Photographs and pictures of 1913, 1920, 1948 and 1958 all show essentially the same boxwood picture as today. This is also true of written accounts. In 1920 a visiting botanist listed *Buxus sempervirens* among the secondary trees (12), and in 1925 a "gold-tipped box tree, about 8 ft. or 10 ft. high, but rather slender" was mentioned in an article about the garden. (13) In 1958, one researcher mentioned that "there are three kinds of box which may go back to specimens of Marshall's planting." (14)

Conclusions

The chain of evidence extending backward from present day observations to eighteenth century descriptions includes herbarium specimens, reports by botanists and others, photographs, annual ring dating, comparative measurements and site analysis. This evidence indicates that:

1) The existing tree box clones were present in Humphry Marshall's garden.

2) The tree box south of the old kitchen and plant room has existed in that location at least since the mid-nineteenth century.

(12) Harshberger, J.W. "The Old Gardens of Pennsylvania, II. Humphrey Marshall's," *The Garden Magazine*. November, 1920.

(13) Baxter, Samuel Newman. "The Humphry Marshall Arboretum," *The Florist Exchange and Horticultural Trade World*. August 15, 1925.

(14) Belden, Louise Conway. "Humphry Marshall, American Quaker Botanist," Master's Thesis. University of Delaware. 1958.



Photo: Robert Gutowski

Southwest front of Marshall's 1773 House as it appears today, with English box in foreground and tree box behind.

3) The existing English boxwood is conceivably two hundred years old, dating to the eighteenth century.

4) The English boxwood has been growing in the same location since at least the mid-nineteenth century, possibly earlier.

5) Tree box used as specimen plants, and English box as specimens and edgings to walks and gardens were features in the gardens of Humphry Marshall's contemporaries and relatives.

6) The arrangement of the existing English box indicates that it was part of a rectilinear pattern which followed the lines of the house.

Humphry Marshall's studies in plant classification and utility provided reasons to

grow boxwood. Boxwood's applications as a functional and aesthetic design feature, or simply as an ornamental, are additional reasons. Boxwood was locally available from friends and neighbors with whom he exchanged plants. His experience provided the know-how.

It is probable that Humphry Marshall used both tree box and English box in his garden, that the existing boxwood was associated with the early Marshallton Botanic Garden as specimens and design features, and that the current location of the existing English box indicates early garden features, either of borders or of walks.

Significance

Plantings here, including boxwood, may be the oldest surviving American botanical garden plantings. Only one other recognized colonial botanic garden site (Bartram's) survives with as much site integrity.

The Chester County Historical Society will use this information for interpretation, management and planning decisions related to this historic site. The potential for use in garden reconstruction is noted.

This documentation adds to our understanding of a significant period in the development of natural science, botanic gardens, regional horticulture and vernacular landscapes. It also adds to our understanding and appreciation of what has been called man's oldest garden ornamental—*Buxus sempervirens*.

Tour Schedule for the 1985 Maryland House and Garden Pilgrimage

| | |
|--------------------|-------------------------------------|
| Saturday, April 27 | Southern Anne Arundel County |
| Sunday, April 28 | St. Mary's County |
| Tuesday, April 30 | Ellicott City, Howard County |
| Wednesday, May 1 | Long Green Valley, Baltimore County |
| Thursday, May 2 | Poplar Hill, Baltimore City |
| Friday, May 3 | Frederick |
| Saturday, May 4 | Kent County |
| Sunday, May 5 | Talbot County |

at first house visited. When purchasing tickets in advance, please specify dates desired as separate tickets are printed for each day. A 20% discount may be obtained for bus groups of 40 or more. All bus groups must contact Pilgrimage Headquarters in advance.

For a pre-tour copy of a tour book send your name, address and \$2.00 to Pilgrimage Headquarters. Tour books may also be obtained with the purchase of a ticket at the first house visited.

To order a ticket in advance, a pre-tour book or for further information, please call or write:

Admission and Tour Books
 Tickets for each tour are \$10.00 or \$3.00 for a single house. All tickets are available at Pilgrimage Headquarters or may be purchased

Maryland House and Garden Pilgrimage
 1105-A Providence Road
 Towson, MD 21204
 Telephone (301)821-6933.

Maryland House and Garden Pilgrimage



Photo: Scot Butler

Holly Hill, built between 1698 and 1720, is surrounded by fine old boxwood.



Photo: Scot Butler

Old English boxwood partially obscures entrance and window at **Holly Hill**.

Maryland Spring Pilgrimage Features Boxwood in Abundance

Betty Lee Digges

The 1985 Maryland House and Garden Pilgrimage opens on Saturday, April 27 in southern Anne Arundel County where twelve sites will be open to visitors. Some houses, such as **Holly Hill** with its early paneling and floors and fine boxwood plantings, date from the late 17th century. **Boxwood Farm**, begun in 1702, has undergone alterations and additions in each succeeding century; notable are the boxwoods, enormous in size and estimated to be over 200 years old.

St. Mary's County, also in Southern Maryland, has many early houses dotting the shores of the Potomac and Patuxent Rivers and their inlets. Boxwood flourishes in abundance in this county, which will be on tour Sunday, April 28.

There will be some gardens of interest and charm containing boxwood on the mid-week

tours, April 30-May 2, of Ellicott City, Long Green Valley and Poplar Hill in and around Baltimore.

May 3 will find pilgrims traveling to Frederick for a walking tour. The houses range in age from early 19th century to mid-20th century and represent several architectural styles and interesting details. Gardens abound. Terraces, walled courtyards, well-planted patios, small formal gardens—almost every house has one, and the display of wisteria, dogwood, magnolia, holly, boxwood and spring bulbs is a visual delight.

The 48th Pilgrimage concludes on the Eastern Shore in Kent and Talbot Counties. On Saturday, May 4 Chestertown, with its old streets and river views, will also have a walking tour which includes a church, several dwellings and a hotel. Elsewhere in Kent County



Cedar Point, on the Maryland Pilgrimage for the first time since 1962, features much beautiful boxwood on the grounds.

Photo: Norman Harrington

several fine old buildings and a one-room schoolhouse entice the visitor. **The Reward**, built circa 1740, has several interesting features such as unusual window spacing and both Flemish and English bond brickwork. The four first-floor rooms each contain a corner fireplace and pine paneling. On the grounds is a fine display of shrubs, old trees and boxwoods.

The final tour takes places in Talbot County on May 5. Most of the houses overlook a creek, river or the Chesapeake Bay. On the Miles River sits **Shell House**. Divided into three octagonal shapes joined by wings forming a half circle and roofed like pagodas, the design was

inspired by houses in the French West Indies. Along the water side is a gallery with a glass wall, white marble floor and a reflecting pool. **Cherry Grove** with floor-to-ceiling windows overlooks the Choptank River and boasts a widow's walk as well as a lady ghost. The boxwood on the lawn facing the water encloses perennial plantings. **Cedar Point**, open for the first time in more than twenty years, is situated on the Tred Avon River, its porticoed front facing the water across lovely green lawns. Boxwood in abundance is planted around the house whose oldest wing dates from 1700.

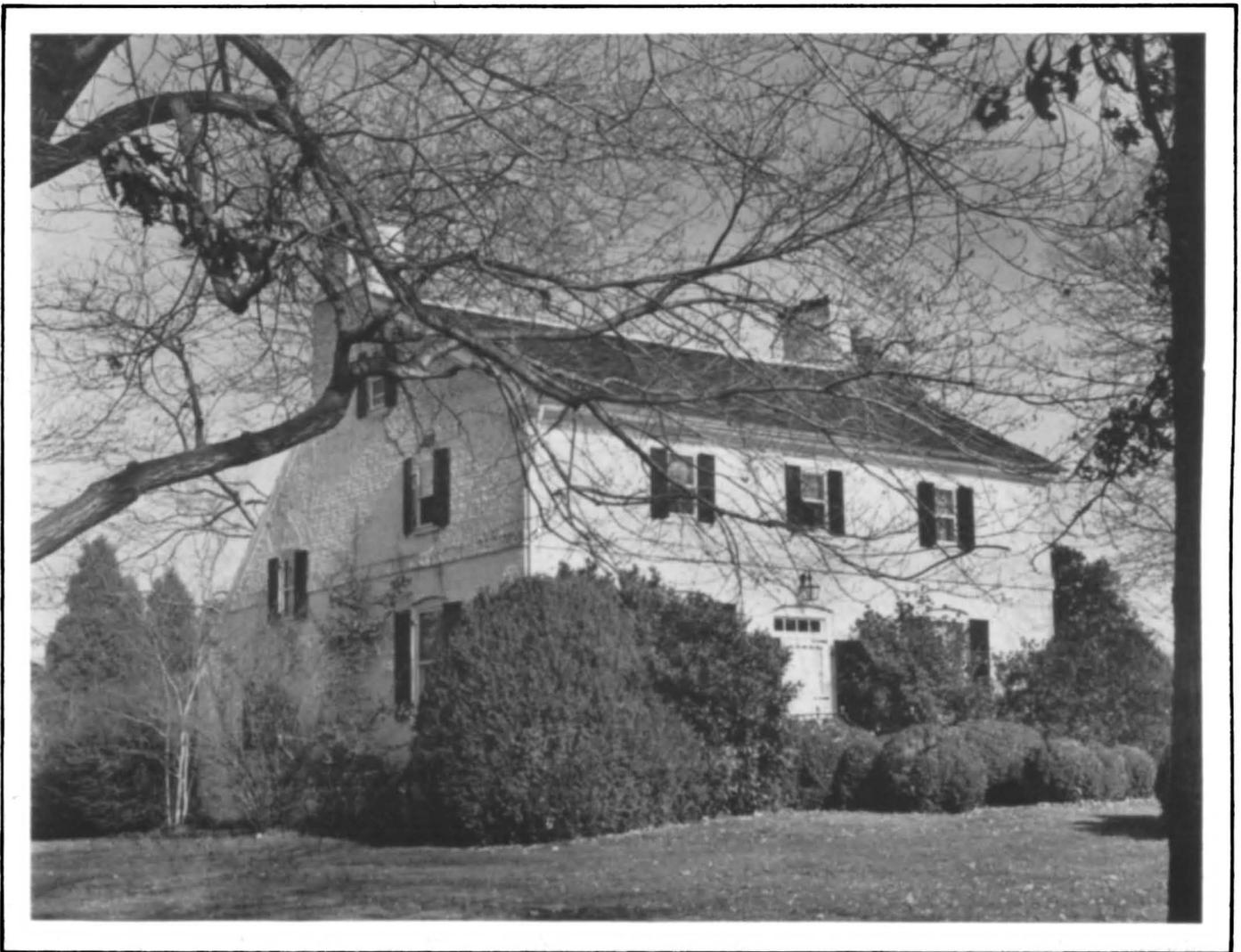


Photo: Courtesy Maryland House and Garden Pilgrimage

The Reward (c. 1740), Kent County, Maryland boasts a fine display of old trees, boxwood and other shrubs. It will be on both the 48th Maryland House and Garden Pilgrimage and the 6th ABS Garden Tour, May 4, 1985.

THE SEASONAL GARDENER

Tips on Spring Care of Boxwood

Albert S. Beecher

Spring is a busy season for the care of established boxwood and it is an ideal time for transplanting or setting out newly purchased plants. Outlined below are some tips on spring care of boxwood.

Planting Site and Soil Requirements. Boxwoods do not do well in soil with poor drainage. Do not plant near downspouts unless the water is directed away from the root system. Avoid locating boxwoods in excessively windy locations. Boxwoods will grow in full sun and will survive in full shade, but will do best in semishade.

The ideal soil is a fairly stiff clay supplied with organic matter. A sandy soil does not have sufficient moisture-holding capacity. Boxwoods are indifferent to soil pH and will grow in slightly acid to slightly alkaline soils (pH 5.5 - 7.5). Your local extension agent can help you with an analysis if you do not know the pH range of your soils.

Planting Tips. Dig the width of the hole twice as wide as the soil ball but make the depth of the hole the approximate depth of the root ball so that the root ball will rest on firm earth. This is especially important if the soil ball is large and heavy. A large ball resting on soft filled dirt will settle and the plant will slowly die from being too deep in the ground. Planting boxwood too deep is one of the most common mistakes homeowners make.

After placing the ball in the hole at the proper depth, fill in the sides of the hole with a good quality, porous soil which is high in organic matter. Do not use commercial fertilizer at the time of planting but delay fertilization until after the plant growth begins. Bone meal worked into the soil can be used at the time of planting. Be sure to water during the planting operation.

Thinning Recommended when Transplanting. Often overlooked at the time of planting is the need to thin the inner branches, thus

reducing top growth and helping to restore the balance between the top and the root system. During the digging operation many roots will be lost and the remaining ones may not be able to support the top unless some foliage is removed.

After Care. Newly transplanted boxwood must be watered throughout the entire first growing season whenever necessary to keep the soil around the roots from drying out. Applying an inch of mulch will be beneficial. Do not mound mulch up around the stem or trunk. This will cause the development of aerial roots. Mulches commonly used are wood chips, sawdust, pine needles or compost.

Feeding. Established boxwood growing in suitable soil with sufficient organic matter does not have to be fertilized every year. Appearance is a good indication as to whether plant food is needed. If plants, not recently fed, have off-color foliage and weak stems, they need fertilizer. If thinning has been neglected, it should be done at the same time and mulch should be applied also, if this has not been done.

What To Use. Boxwood can be fed by broadcasting plant food on the soil surface or by foliar feeding. 10-10-10 fertilizer applied at the rate of 1 to 2 pounds per 1000 square feet of soil can be used. Other popular fertilizers are broadleaf evergreen food or cottonseed meal. If foliar feeding is applied, use the rate recommended by the manufacturer.

Check Your English Boxwood. Have you checked your English boxwood plants recently to see whether they have become so compact that very little light and air reach the center of the crown? If this is the case, the interior shoots may die and the overall plant may be weakened. Pruning or plucking of some of the inner branches will help to open up the plant to admit light to the interior and this will encourage a green center where there will be

green leaves all the way up the stem. If you do not do some of this annual thinning or plucking, even though the plants are growing exuberantly, you are asking for future trouble.

Also check to see whether you have an accumulation of dead leaves inside your boxwood. At least once a year clean out leaves or twigs that have accumulated in the center of the boxwood plants. Without such cleaning, fungus growth on leaves and twigs is promoted, the development of interior shoots is suppressed, and sometimes aerial root development along the branches is induced. Failure to thin or to keep the debris cleaned out of your boxwood plants may be a major factor in contributing to your boxwood decline.

Repairing Winter Injury. If the plants have dead stems, remove these stems by cutting back to live wood. On plants where foliage has turned a reddish brown, delay drastic pruning in the spring until after new growth has started. Very often plants that are fed and given sufficient moisture will produce new foliage and by the end of the spring, the injured foliage will fall and be replaced by new foliage.

Look for Insect Troubles. Be alert especially for the boxwood leaf miner, boxwood psyllid, and the boxwood mite:

If you observe unsightly blisters on the underside of last year's foliage, check for leaf miners;

Cupping of the foliage is an indication of the boxwood psyllid;

When the foliage becomes severely stippled with pinpoint-sized flecks or in severe cases when all of the foliage appears gray, bronzed or chlorotic, check for mites.

If you are not familiar with the life cycles of these pests or the types of damage they can cause, refer to Page 59 of the April 1978 issue of *The Boxwood Bulletin* (Vol. 17, No. 4) and study the paper "Boxwood Insect and Mite Pests." If you are a new member of ABS or have not saved your *Bulletins*, it is possible to order this back issue by sending \$2.50 to the American Boxwood Society, Box 85, Boyce, VA 22620.

For the latest control information regarding these boxwood insect pests, contact the County Extension Agent or Entomologist Specialist at your land grant university. They will be able to recommend the proper insecticide and tell you the time to apply the treatment for maximum control.

EDGAR ANDERSON REMEMBERED

Editors Note: Due to an oversight the following reminiscence of Edgar Anderson by Dr. Duncan Porter was omitted from the collection of reminiscences published in the October 1984 issue of The Boxwood Bulletin, Pages 55-61. We extend our deepest apologies to Dr. Porter and hasten to publish his interesting recollection of a conversation with Dr. Anderson the day before he died.

I arrived at the Missouri Botanical Garden in September 1968 to be the first Curator of the Flora of Panama. Accordingly my friendship with Edgar Anderson was brief, but nonetheless I considered us to be friends and not merely acquaintances. One of my earliest assignments as a member of the Editorial Committee of the *Annals of the Missouri Botanical Garden* was to edit what turned out to be his last scientific paper, "Experimental studies of the species concept."

Dr. Anderson dropped by my office on the third floor of the old Herbarium, now the Administration Building, on a regular basis. Most of our conversations consisted of my listening to and commenting on his reminiscences of past botanical triumphs. However, our most memorable meeting was on 17 June 1969. On that afternoon he walked into my office and stated that he was feeling better than he had for years, and was beginning the writing of his long-delayed second edition of *Introgressive Hybridization*. To one who was a graduate student in the early 1960s, one who had been raised on the book as being one of the most thought-provoking botanical works of the century, this was electrifying news. Imagine my distress when I heard the next day that he had died.

It was fitting that the Missouri Botanical Garden, the institution to which Edgar Anderson devoted the whole of his professional life, should commemorate him with a living memorial. My last duty to this great man was to serve on the committee that initially planned the Anderson Memorial Boxwood Garden.

Duncan M. Porter
Professor of Botany
Virginia Polytechnic Institute &
State University, Blacksburg

Historic Garden Week in Virginia



Photo: Courtesy Virginia Chamber of Commerce

Edgemont, in Albemarle County, is Jefferson's most successful attempt to adapt Palladio's design for the Villa Rotunda to the Virginia countryside. The gardens on five levels are unified through the use of boxwood and other evergreen ornamentals.

Virginia Gardens, Old and New, Favor Boxwood

Charlotte Taylor Massie

Dwarf English boxwood borders, tall American boxwood hedges and boxwood topiary have an enduring appeal in Virginia gardens. Visitors to Historic Garden Week, April 20 through April 28, will have an opportunity to see the various ways that this unique ornamental enhances the design of different gardens and different types of architecture.

Old plantations, new town houses, large mansions, small cottages, suburban estates, and country homes all consider this velvety green plant a necessary element of the landscape.

The 2.5 acres of gardens surrounding **Edgemont** in Albemarle County have been beautifully restored. Each of the gardens on the five levels has a distinctive character of its

own although the boxwood, hollies, dogwood, hydrangeas, rhododendron and azaleas give unity to the whole design. The main house and gardens were designed by Thomas Jefferson in 1795, and **Edgemont** is considered Jefferson's most successful attempt to reduce Palladio's design for the Villa Rotunda and adapt it to the Virginia countryside.

The approach to historic **Brandon Plantation** on the James River is through one of the most beautiful gardens in Virginia. Intermingled with other shrubs, boxwood provides a magnificent background for the brilliant spring flowers and bulbs edging the vista leading to the pink-tinted mansion.

A distinctive feature of the superbly restored gardens at **Morven** in Albemarle County is the

tall boxwood framing the arch that leads to two terraces outlined in boxwood. Views of rolling hills and Monticello in the distance add to the delight of the renowned gardens.

The stately Georgian-style brick house at **Dan's Hill**, just beyond the city limits of Danville, is surrounded by century-old boxwood. They add beauty and dignity to the extensive sloping grounds of this Virginia Historic Landmark with its complement of well-maintained original outbuildings and giant trees, some of which predate the 1833 house.

The boxwood garden at **Eyre Hall** on the Eastern Shore of Virginia is one of the oldest and loveliest in the country. It is enclosed by a wall constructed of brick brought from England as ballast in sailing ships. The oldest



Photo: Courtesy Virginia Chamber of Commerce

Brandon, about 45 miles east of Richmond, is one of the early James River plantations. Boxwood provides a magnificent background for the gardens, which extend to the River.

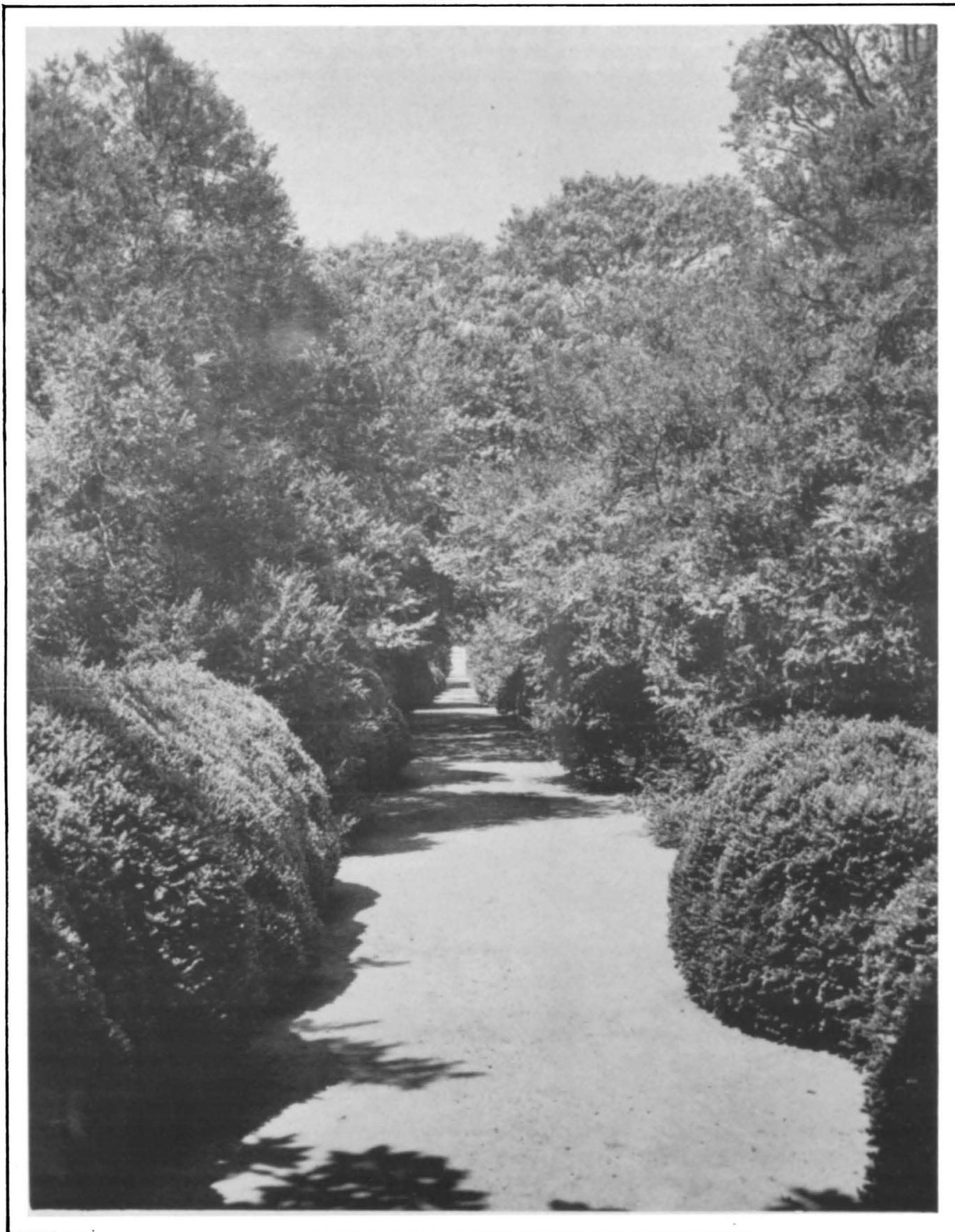


Photo: Courtesy Virginia Chamber of Commerce

Eyre Hall, a Virginia Historic Landmark on Virginia's Eastern Shore, has one of the oldest and loveliest boxwood gardens in the country.

part of the house was built in 1730 with additions in 1759 and the 1790s. The present owner is the tenth generation of direct descendants to own this property without interruption.

In keeping with the style of the Georgian Revival architecture of the **President's House at Randolph-Macon College**, Ashland, are foundation plantings of boxwood. The house, built in 1929, has served as the official residence of the college's president since 1939.

The Mediterranean-style home of Mrs. Saul Blatman in Lynchburg is enhanced by plantings of carefully controlled boxwood which add a classic touch to the symmetrical design of the 1926 house.

A formal courtyard with carefully manicured boxwood leads to the handsome town house of Dr. and Mrs. Darryl Hodgkinson in Yorktown, which is on the Newport News-Hampton Tour.



Gazebo in Dan's Hill Garden, Danville, is encompassed by boxwood.

Photo: Courtesy Historic Garden Week

President's House, Randolph-Macon College, Ashland, has foundation plantings of boxwood appropriate to the Georgian Revival architecture.



Photo: Courtesy Historic Garden Week

The main section of the house is a reproduction of a 19th-century, Federal-style town house.

Many of the beautiful boxwood found in Virginia gardens today were once little cuttings gathered from flourishing shrubs. They were carefully planted and tended, and are the pride of the owners of Virginia gardens.

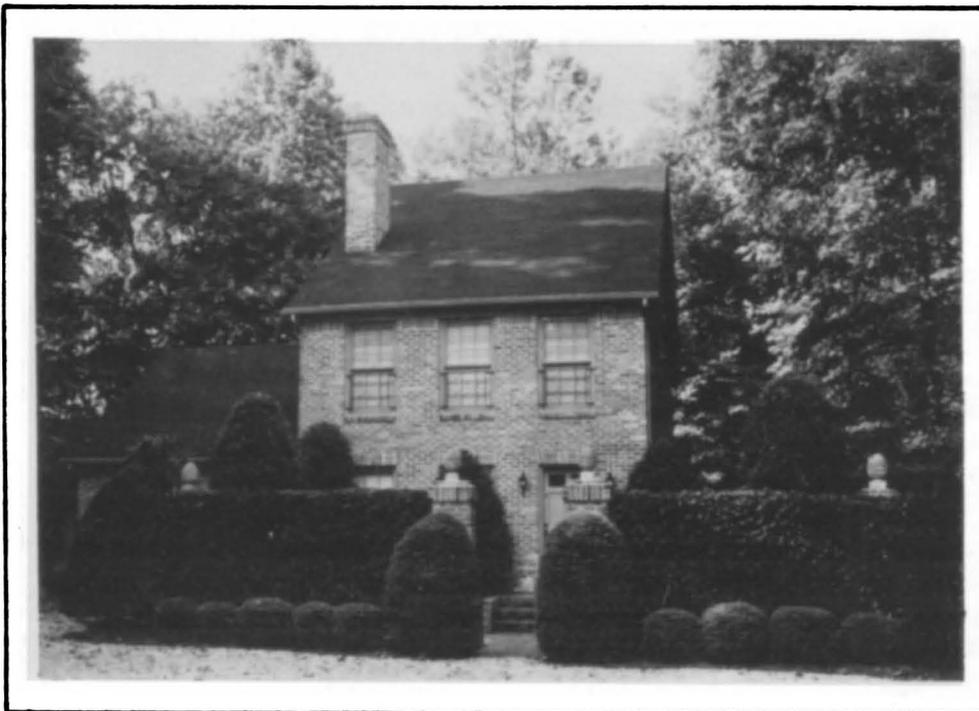
The Garden Club of Virginia publishes a 176-page guidebook with detailed information

about all of the private homes and gardens open in 32 areas of the state for Historic Garden Week. It is available, free of charge, at the Historic Garden Week Headquarters, 12 East Franklin Street, Richmond, Virginia, 23219. If requested by mail the Headquarters would appreciate a remittance of \$1 toward the cost of the postage for this large and informative book.

Carefully controlled boxwood plantings harmonize with the Mediterranean-style home of Mrs. Saul Blatman, Lynchburg.



Photo: Courtesy Historic Garden Week



Town house of Dr. and Mrs. Darryl Hodgkinson, Yorktown, is approached through elegant courtyard with carefully manicured boxwood.

Photo: Courtesy Historic Garden Week

Areas with Private Homes and Gardens Open For Historic Garden Week, 1985

| | | | |
|----------------------------|--|---|---|
| Albemarle | <i>Saturday, April 20, through Thursday, April 25—Morven.</i> | Leesburg | <i>Sunday, April 21, Monday, April 22—Lincoln Area</i> |
| | <i>Sunday, April 21, and Monday, April 22—Friendly Gardens Tour.</i> | Lexington | <i>Tuesday, April 23</i> |
| | <i>Tuesday, April 23—University of Virginia Pavilions and Alumni Hall.</i> | Lynchburg | <i>Tuesday, April 23</i> |
| | <i>Wednesday, April 24, and Thursday, April 25—Country Homes and Gardens Tour.</i> | Martinsville | <i>Wednesday, April 24</i> |
| | | Norfolk | <i>Wednesday, April 24</i> |
| Alexandria | <i>Saturday, April 27</i> | Northern Neck | <i>Wednesday, April 24—Lancaster County</i> |
| Brunswick | <i>Sunday, April 21</i> | Orange | <i>Saturday, April 27, and Sunday, April 28</i> |
| Chatham | <i>Sunday, April 21</i> | Petersburg | <i>Tuesday, April 23</i> |
| Danville | <i>Thursday, April 25—Old Main Street, Historic District Tour.</i> | Portsmouth | <i>Saturday, April 20</i> |
| Eastern Shore | <i>Friday, April 26, and Saturday, April 27</i> | Richmond | <i>Tuesday, April 23, Wednesday, April 24 (Church Hill), Thursday, April 25</i> |
| Fairfax | <i>Friday, April 26</i> | Roanoke | <i>Thursday, April 25—Roanoke Valley Area</i> |
| Fredericksburg | <i>Tuesday, April 23</i> | Staunton | <i>Saturday, April 27—Winter- green</i> |
| Gloucester | <i>Friday, April 26, and Saturday, April 27</i> | Suffolk | <i>Thursday, April 25</i> |
| Hampton- Newport News | <i>Wednesday, April 24</i> | Virginia Beach Resort Area | <i>Thursday, April 23</i> |
| Hanover | <i>Saturday, April 20</i> | Virginia Beach Princess Anne Tour | <i>Thursday, April 25</i> |
| Harrisonburg | <i>Wednesday, April 24</i> | Warren County | <i>Saturday, April 27, and Sunday, April 28</i> |
| James River Plantations | <i>Belle Air—Tuesday, April 23, through Saturday, April 27 Berkeley—Tuesday, April 23, and Wednesday, April 24 Brandon—Wednesday, April 24, through Saturday, April 27 Sherwood Forest—Tuesday, April 23, and Wednesday, April 24 Shirley—Tuesday, April 23, and Wednesday, April 24 Tuckahoe—Tuesday, April 23, and Thursday, April 25 Westover—Tuesday, April 23, through Saturday, April 27</i> | Warrenton | <i>Wednesday, April 24, and Thursday, April 25</i> |
| | | Williamsburg | <i>Tuesday, April 23</i> |
| | | Winchester | <i>Saturday, April 20, and Sunday, April 21</i> |



From the Archives

Buxus— “The Living Antique”*

(Extracts reprinted from *The Book of Shrubs* by Alfred Carl Hottes and published by The A. T. De La Mare Company, Inc., New York in 1931.)

Editor's Note. We wish to thank ABS member Francis A. Alley, Landscape Consultant in Stockton, New Jersey, for calling the following article to our attention. We found it entertaining and worthy, we think, of sharing with our fellow members. The printing of the article is in no way an endorsement of the information contained therein, whether to do with nomenclature, recommended cultural practices or whatever. Rather it is intended to provide an instructive look backward at the state of boxwood knowledge and lore more than half a century ago.

Casting about in my mind for adequate words to express the spirit of Box, this apostrophe by Edwin Matthews was found:

“When we think of Boxwood, we instinctively place it among ancient things and associate it with works of antiquity. Yet like an immortal poem, song or saying, it lives today; it, too, is ‘of the ages.’ Fashion and fads in gardening have brought about many and varied kinds of gardens. Plants have come, reigned—and finally abdicated in favor of others. But Box has survived fashions, changes, and the hand of time for centuries. It is as popular today as it was when ‘knighthood was in flower.’

“Old English gardens are world-famous for their hedges of Box, their Box trees and their Box arbors and mazes, which in that favored climate do so wonderfully well. It is natural that the love and desire for Box gardens should have found its way to these shores along with those who migrated. Without a doubt it has been the scions of ancestral gardens that have formed the nuclei of the wonderful old Box plantings now found in this country, such as those in the States of Virginia and Maryland especially.

“Considering the popularity of Box we may ask: What is it that makes it so well liked? Viewing a beautiful Box-bush, it looks to us like a fusion of rugged Oak, with all the beauty of the finest and most aristocratic evergreen. Its tenacity is such that it is often the only survivor in a garden where care and culture have been withheld for years and years.

“Summer and Winter it metes out its delightful lights and shadows in green; it thrives in shade as well as in sunlight. Here we see it, a column of green, in memory of some loved one; there as an edging to a flower or Rose garden; elsewhere as a billowy mass, softening masonry or making an inviting entry to the home doorway. As green walls for a formal garden, as clipped globes, as trained pyramids and in tree form it is used, while for the city window garden in Winter it is away ahead of all other evergreens.”

In spite of the fact that many sorts of Box are seen, only two species are commonly grown and from these many forms have been derived.

The Common Box, *Buxus sempervirens*, is a native of S. Europe, N. Africa and W. Asia. It is a branchy, dense, evergreen with opposite, lustrous leaves which are characteristically oval, a trifle broader below the middle. The flowers and fruits are generally quite inconspicuous.

Varieties.

angustifolia. Willow Box. Leaves lance-oblong, sometimes called *salicifolia*. More rapid growth than type. Loose in habit.

arborescens. True tree Box. Leaves elliptical; type form, becoming a small tree, and commonest for use in training to tree, pyramid, globe, standard, or bush form or for topiary work.

*So Linda Clement Hines calls it.

argenteo-variegata. Leaves variegated white.

aureo-variegata. Leaves variegated yellow or entirely yellow.

bullata. Leaves large, blistered or puckered.

glauca. Leaves oval and grayish. Called *macrophylla glauca*.

handsworthi. Upright habit. Large, dark green leaves regularly arranged to form a cross when viewed from above. A little hardier than some other sorts.

marginata. Leaves edged yellow.

myrtifolia. Leaves small, elliptic oblong, that is, narrow, pointed. Low growth.

pendula. Branches pendulous.

pyramidata. Upright, pyramidal habit.

rosmarinifolia. Low growth. Leaves small, linear-oblong, curled over at edge.

rotundifolia (latifolia). Leaves broad, oval.

suffruticosa (nana). True dwarf Box. Edging Box. Low growth and very slow. Leaves small, oval. Commonly used for the lowest sorts of hedges.

The *Buxus microphylla*, the Korean B., differs from *B. sempervirens* in having leaves which are broadest above the middle. The leaves are $\frac{1}{3}$ to 1 in. long, light green in color. The branches are more conspicuously angled than the *sempervirens*. The young shoots are smooth, not hairy. The habit varies from a prostrate to a compact shrub, seldom over 3 ft. tall.

Var. *japonica* has more wedge-shaped leaves, a trifle larger, sometimes over an inch long, rounded or notched at the tip. Quite prostrate in habit.

Var. *koreana*. Very similar but rather hairy on branchlets and petioles. E. H. Wilson says of it:

"It was discovered some years ago by Japanese botanists and was brought to the Arnold Arboretum in 1919 by the writer. Never exceeding 2 ft. in height this Box grows freely, is easily increased by cuttings, and so far has not suffered Winter injury here. Like the Japanese Box (*B. microphylla japonica*) the Korean variety takes on a golden-brown hue throughout the Winter and so lacks the cheerful greenness of its European relative. However, since it possesses the supreme quality of hardiness, it is assured of a hearty welcome."

Soil. Tolerant though it is to adversity, Box likes plenty of good and friable soil. Tubbed plants should be enriched from time to time. Marinus van Kleef mentions that in Holland where Box is grown by the millions, the plants are placed in the most fertile spot in the nursery and, no matter how fertile the soil, cow manure is applied abundantly and dug in before the plants are set out. Circumneutral pH 6.0-8.0.

Transplanting. Readers desiring to know how a century-old Boxwood hedge was moved in Philadelphia may be interested in an article in *Country Life in America*, Aug. 1909, by Claude H. Miller. It was found that the Box roots, which in former years had penetrated the soil beneath the plants, had died because the soil was exhausted. Since then, the roots had spread to a diameter of over 8 ft. and only 4 to 6 in. below the surface of the soil. The roots were planked in on two sides and knife blades were forced through the soil beneath the plants with such force that ordinary sandstone "was cut as easily as if it were cheese." Twelve hundred feet of hedge was moved. The work started in March and finished in November, with twenty to thirty men and from one to seven horses employed, at a cost of \$9 per foot. Moving these plants "was like a huge game of chess in which the moves of the Box and the workmen could be planned about two weeks ahead because it was impossible to move bushes across from one part of the garden to another, owing to the mass of intervening Box." I never knew that reading about moving plants could be so exciting!

Wintering Box. *Horticulture* remarks:

"In New England a Boxwood hedge has been growing thriftily for some years in a garden. The gardener makes a point of having the Box go into the Winter thoroughly moist at the roots. If the weather has been dry, the plants are liberally watered about the last half of October.

"Before the ground freezes a mulch of leaves or some rough material is added to keep the frost out of the ground, and care is taken not to bank it up too close to the Box or the latter will lose its leaves. The mulch extends a foot from the base of the plants.

"About the end of December the plants are covered with evergreen boughs as a protection from frosty winds. Burlap is good, if not tied too close to the plants."

Henry T. Skinner

Dr. Henry T. Skinner, a Charter Member of the American Boxwood Society and a Director from its founding in 1961 to 1979, died in Hendersonville, North Carolina on November 26, 1984 after a prolonged illness. Dr. Skinner was Director of the U.S. National Arboretum from 1952 through 1972 and a recipient in February 1984 of the Veitch Memorial Medal, the highest honor that the Royal Horticultural Society can bestow on a foreign national (see *The Boxwood Bulletin*, Vol. 24, No. 1, July 1984, Page 1).

Born at East Sutton, Kent, England, in 1907, Dr. Skinner attended the Wisley School of the Royal Horticultural Society from 1923 to 1926, emigrating to the United States in 1927.

Dr. Skinner became a student assistant at the Arnold Arboretum, Harvard University, Cambridge, Massachusetts from 1927 through 1929. He was an instructor of horticulture at Cornell University, Ithaca, New York from 1931 to 1940, earning his Bachelor of Science and Master of Science degrees in 1936 and 1938, both in horticulture, from that institution.

In 1940 he became curator of the Morris Arboretum, University of Pennsylvania, Philadelphia, where he served for three years. Becoming a naturalized United States citizen in 1943, he served in the U.S. Air Force from that year through 1945. Following the war he returned to the Morris Arboretum, marrying the former Anne Wood in 1951 and earning his Ph.D. in biology from the University of Pennsylvania in 1952. He joined the U.S. National Arboretum that same year as Director.

While at the Arboretum he oversaw establishment of the present research and education programs, as well as the construction of the administration building, greenhouses, and road system.

Following his retirement, Dr. and Mrs. Skinner moved to Hendersonville. Besides his widow, he is survived by their daughter Susan.

Dr. Skinner contributed widely to horticulture. He was renowned for his pioneering work on the taxonomy, breeding, and distribution of native American azaleas. He designed

that gardener's mainstay, the U.S. Department of Agriculture (USDA) Hardiness Zone Map, developed in 1960. In a career spanning 60 years from the time he started his education at the Wisley School, he published more than 250 research and educational papers in technical journals and periodicals. He was editor of *Garden Plants in Color*, published in 1959.

Dr. Skinner served as Chairman of the USDA's survey team on the establishment of the Hawaiian Tropical Botanic Garden in 1962; as a member of the National Shade Tree Conference and of its Board of Governors from 1958; as President of the American Association of Botanic Gardens and Arboreta in 1947; on the Council of the International Society of Horticultural Science from 1966 to 1972; and as President of the American Horticultural Society from 1962 to 1963. He was currently Vice-president of England's Royal Horticultural Society and one of the Trustees of the Henry Francis DuPont Winterthur Museum, Wilmington, Delaware.

Among the many honors Dr. Skinner received were the Jackson Dawson medal for research in plant propagation from the Massachusetts Horticultural Society (1943); the American Home Achievement medal for development of the Hardiness Zone Map (1961); and honors from the American Rhododendron Society, American Nurserymen's Association, Garden Club of America, and American Horticultural Society, among others.

Dr. Skinner will long be remembered with affection by ABS members who were privileged to know him.

The National Arboretum currently is planning an appropriate memorial to Dr. Skinner. Following his family's approval of the plans, a memorial service will take place this spring to recognize his contributions to the Arboretum. Those who wish to do so may send contributions to: Friends of the National Arboretum; Dr. Henry T. Skinner Memorial, 1010 Wisconsin Ave., N.W., #630, Washington, D.C. 20007.

THE AMERICAN BOXWOOD SOCIETY

INFORMATION

Address: Box 85, Boyce, Virginia 22620

DUES AND SUBSCRIPTIONS

Regular (individual) membership dues of The American Boxwood Society are now \$10.00. This includes \$8.00 for a subscription to *The Boxwood Bulletin*.

The Boxwood Society membership year runs from May of one year through April of the following year. Dues are payable in advance of each membership year. New members who join the Society at intervening times of the year are sent all four issues of *The Bulletin* for that membership year and then, like other members, pay dues in advance of the next membership year.

Non-member subscriptions are for groups and institutions such as botanic gardens, libraries, etc. Subscriptions are \$10.00 per year, and run by the calendar year.

At the present time all back issues of *The Boxwood Bulletin* are available except Vol. 22, No. 1, July 1982 (photocopy can be supplied, however). Price per single copy of any and all issues is \$2.50.

The present classes of membership are:

| Category | Annual Dues |
|-----------------------------|-------------|
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| Family | 15 |
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Gift memberships are announced to the recipients by boxwood-decorated cards which state that four issues of *The Boxwood Bulletin* are included in membership.

Contributions are welcome for the Research Fund, the Boxwood Memorial Garden and the Boxwood Handbook.

Members of the American Boxwood Society are reminded of the 1968 IRS decision that contributions to and for the use of the Society are deductible by donors as provided in Section 170 of the Code.

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P. O. Box 751
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If you have contributions for *The Boxwood Bulletin* — articles, news, notes, photographs, suggestions or anything of probable interest to boxwood people — it saves time to direct them to the Editor:

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