A quarterly devoted to Man's oldest garden ornamental



The Reverend Benjamin Johnson of Abbeville, S.C., designed this boxwood garden in the early 1860s. See story on page 41. (Photo: Christy Snipes)

## IN THIS ISSUE

Trinity Episcopal Church, Abbeville, S.C., Christy Snipes	41
Winston Churchill Memorial in the U.S. Visited, Mary A. Gamble	44
The Ancient Art of Garden Topiary, La Verne Jaudes	46
Correspondence	48
Notices	
News of the Society	51
The Seasonal Gardener Inside Ba	

## The American Boxwood Society

The American Boxwood Society is a not-for-profit organization founded in 1961 and devoted to the appreciation, scientific understanding and propagation of the genus Buxus L. There are more than 700 members in the United States and nine foreign countries.

#### Officers:

#### PRESIDENT:

Mrs. Robert L. Frackelton

VICE-PRESIDENTS:
Mr. Lynn R. Batdorf
Mrs. Malcolm L. Holekamp

SECRETARY:
Mrs. Joan C. Butler

EXECUTIVE TREASURER:
Mrs. Katherine D. Ward

Fredericksburg, Va.

Silver Spring, Md.
Webster Groves, Mo.
Bluemont, Va.

Bluemont, Va.

PECISTRAP.

REGISTRAR:

Mr. Lynn R. Batdorf Silver Spring, Md. DIRECTORS:

Mr. John W. Boyd, Jr. (1991) Alton, Va. Prof. James A. Faiszt (1990) Blacksburg, Va. Mr. William A. Gray (1990) Charlottesville, Va. Cdr. Phillip D. Larson (1991) Knoxville, Md. Mr. Richard D. Mahone (1992) Williamsburg, Va. Susanne A. Schrage-Norton (1991) Mt. Vernon, Va. Dr. Stephen D. Southall (1992) Lynchburg, Va. Mr.DaleT.Taylor(1990) Wenonah, N.J.

**EX-OFFICIO:** 

Dr. Edward F. Connor Boyce, Va.

BULLETIN EDITOR:

John S. McCarthy Webster Groves, Mo.

#### Memberships:

Memberships for the year May through April include \$12 for four quarterly issues of *The Boxwood Bulletin:* 

Individual\$15Contributing\$30Life\$250Family\$20Sustaining\$50Patron\$500

Non-member subscriptions for groups and institutions, such as botanic gardens and libraries, are \$15 by the calendar year.

#### Available Publications:

Back issues of The Boxwood Bulletin \$4
Boxwood Buyer's Guide (3rd Edition) \$8
International Registration List of Cultivated Buxus L. \$3
Index to The Boxwood Bulletin 1961-1986 \$10

#### Contributions:

Gifts to the Society are tax-deductible and may be undesignated or applied to:

Boxwood Memorial Garden Fund Boxwood Handbook Fund Boxwood Research Fund Boxwood Monograph Fund

#### Correspondence:

For address changes, memberships, dues, contributions, or to order back issues or publications, write:

Treasurer, The American Boxwood Society P.O. Box 85, Boyce, Va. 22620

For general information about the Society, advice concerning boxwood problems or cultivar selection, write to The American Boxwood Society at the same address. You are also welcome to write directly to the President:

> Mrs. Robert L. Frackelton 1714 Greenway Drive Fredericksbug, Va. 22401

#### Call for Papers:

Technical articles, news, history, lore, notes, and photographs concerning boxwood specimens, gardens or plantings are solicited for possible publication in *The Boxwood Bulletin*. Photographs should be suitable for reproduction and fully captioned. Suggestions regarding format and content are welcome. Material should be submitted to:

Chairman, Bulletin Committee 1714 Greenway Drive Fredericksburg, Va. 22401

Material to be returned to the sender must be submitted with a self-addressed envelope carrying suitable postage. Every effort will be made to protect submittals, but the Society cannot be responsible for loss or injury.

The Boxwood Bulletin (ISSN 0006 8535) is published quarterly for \$12.00 per year by The American Boxwood Society, Blandy Experimental Farm, Boyce, Va. 22620. Second class postage paid at Boyce, Va. POSTMASTER: Send address changes to The Boxwood Bulletin, P.O. Box 85, Boyce, Va. 22620. The Bulletin is printed by M-J Printers, Fredericksburg, Va.

# Trinity Episcopal Church, Abbeville, S.C.

## A Mid-19th Century Garden in the Upcountry

Christy Snipes

The year 1858 marked a time of prosperity and plenty for Abbeville in upcountry South Carolina. The affluent congregation of Trinity Episcopal Church under the leadership of the Rev. Benjamin Johnson began to build an impressive new Gothic style church. This edifice was consecrated in November of 1860, but the celebration was overshadowed by the rumblings of political discontent. On November 20th a group gathered in Abbeville for the first time in the South to talk of secession from the Union.

It was during this prosperous yet unsettling period that the landscape at Trinity Episcopal Church was born. The Rev. Benjamin Johnson is credited with the design "of the once beautiful grounds which surrounded the church and rectory, laid off by him in boxwood beds." According to one historian, Mr. Johnson came to South Carolina from Baltimore, Maryland, "in search of health." For whatever reason, Johnson appeared in the state in 1847, ministered at several low country churches, and became rector of Trinity Episcopal Church, Abbeville, in 1855.

A rectory was constructed shortly after his arrival and according to a church historian "the plan of landscaping the grounds established." The Rev. Johnson must have been a landscape gardener of considerable talent, for other notable and distinguished families in Abbeville secured his services. He is credited with the layout and care of gardens at the homes of Major Armistead Burt, Gen. Sam McGowan, Col. J. Foster Marshall, and Dr. J. W. Marshall.

Both secondary resources (Abbeville historians) and primary resource material in the form of the *Account Books of Pomaria Nursery* (1859-1861 and 1861-1866) seem to indicate the veracity of Johnson's landscape

efforts. Benjamin Johnson ordered plants from Pomaria Nursery on four occasions between the years 1860 and 1863. Plants could have been ordered in years prior to 1860, but we do not have an earlier account book to document this.

Nurseryman William Summer operated this enterprise at nearby Pomaria from 1840 to 1878. His nursery had a nation-wide reputation for excellence, and he sold the products of his business to customers both inside and outside of America. Summer also



Trinity Church on Church Street. Boxwoods date from the 1860s. (Photos: Christy Snipes)

An examination of these orders between 1860 and 1863 shows the ethic of landscape gardening in the South and the diversity of plant material available during the period. Benjamin Johnson's requests include the popular picturesque evergreens (horizontal cypress, deodar cedar, Cedar of Lebanon, and Norway spruce); hedge and edging shrubs (privet, pyracantha, cherry laurel, boxwood, and euonymus); the ornamentals (rose); and food production vegetation (peach, cherry, and plum trees; strawberry and raspberry plants).

Pomaria Nursery, Johnson's source, was rich with the newest and rarest horticultural products of the day.

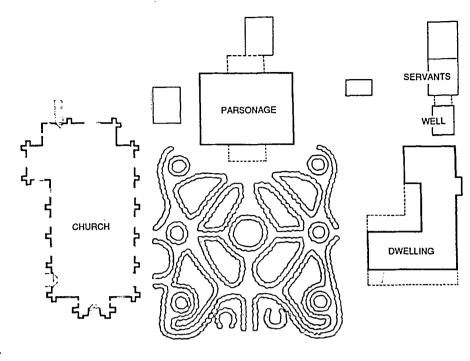
wrote for various horticultural publications of the day such as the *Southern Horticulturist*. In his writings, he promoted vegetable and fruit growing in the South, but also featured trends in ornamental plantings.

Certainly, the boxwood garden at Trinity Episcopal Church reflected this horticultural sophistication. Fronting the rectory and to the side of the church, the ornamental garden was laid out symmetrically in a formal style, with shrubs, flowers, and bulbs planted in the center of the design. Photographs taken circa 1890s show the "English" boxwood (Buxus sempervirens 'Suffruticosa') pattern with assorted ornamental shrubs and

an abundance of large picturesque evergreens near the church. A wooden fence surrounds the property on the Church Street side.

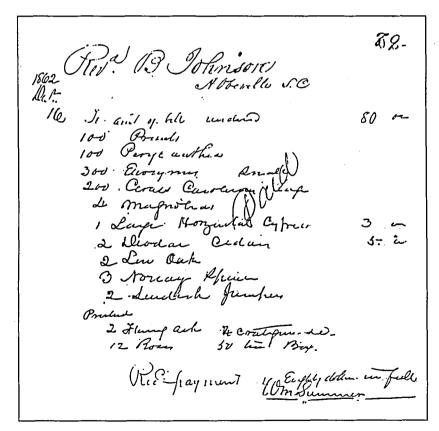
At one time this boxwood pattern was much larger than today. The Sanborn Insurance map of Abbeville, 1889 (the earliest map found of the property), shows no separation between the church property and the adjacent one. It is not until 1901 that the Sanborn map pictures a lane added between the two properties. Later, in 1907, when the present paved street was created, land on both sides was taken, and a portion of the boxwood pattern was apparently destroyed.

We must hypothesize about the appearance of the rest of the landscape at Trinity during the mid-19th century. The land to the rear and side of the rectory probably was the workhorse area of the property. The clothes drying yard, daily chore, and general service areas were situated close to the house. A

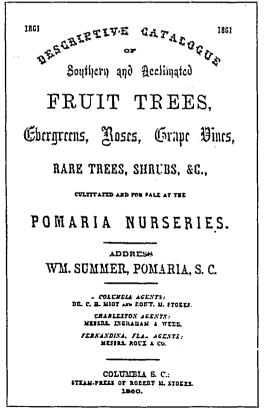


CHURCH STREET

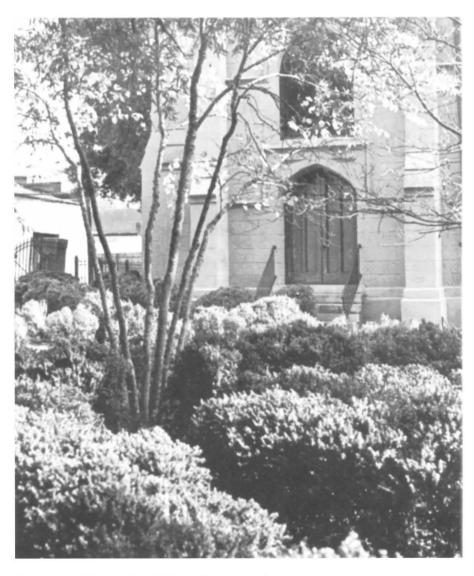
Drawings by Christy Snipes show arrangement of buildings, based on Sanborn Insurance map of Abbeville, 1889.



Pomaria Nursery account book shows an order for "50 tree box" by Johnson on Dec. 16, 1862. From South Caroliniana Library, U.S.C.



Title page of the Pomaria Nursery Catalogue, 1860



Parterres of boxwood in Trinity Church garden

vegetable garden, orchard, and vineyard most likely filled the space to the rear of the rectory. Living hedges probably surrounded these spaces in order to protect the food crops.

On the extreme southeast border of the property an osage orange hedge directed one down to the distant cemetery. It appears that Benjamin Johnson also designed this space; orders for "American" boxwood (Buxus sempervirens) were made by him in 1860 and 1862. There are old specimens surrounding a deodar cedar, the centerpiece of the design. It appears paths were laid out in an orderly flow among the cemetery plots, and notable ever-

greens with a variety of other ornamental vegetation were present.

That the landscape featuring its boxwood garden at Trinity Episcopal Church was handsome is documented, even as early as 1868. The Rev. Wm. Porcher DuBose, who eventually became chaplain of the University of the South, Sewanee, took charge of Trinity in this year after Johnson's departure. DuBose wrote some time later, "The church at Abbeville was one of the most beautiful in the state and the congregation and community one of the most distinguished. . .My rectory was beautifully situated in very charming grounds of the church."

The Rev. Benjamin Johnson's impression on the landscape at Trinity survived over time, providing a source of "pride to the whole village."

In more recent years, there has been concern for the garden's aged condition and interest in its potential for restoration. In 1988, Christy Snipes, M.L.A., of Historic Landscape and Garden Design, was hired as a consultant to conduct historic research and provide a master plan for the boxwood garden. The master plan for this historic garden has been completed, and the project is currently in the stages of fund-raising. Also, Trinity has implemented a program to improve the condition of the existing boxwood, based on suggestions provided by Mr. Lynn Batdorf, Vice-President of The American Boxwood Society and Director of the Buxus collection at the U.S. National Arboretum. Through the gracious assistance of Mrs. Robert Frackelton, President of the ABS and Mr. Batdorf, the old boxwood garden at Trinity is improving in health!

The continued restoration of Trinity Episcopal Church and its landscape is only one shining example of historic preservation and revitalization in Abbeville, lauded as "a national prototype for small town restoration." From the beautiful town square, surrounded by active businesses with their restored 19th century facades, to the refurbished 1908 Opera House and its live performances, to the Burt-Stark House, the last meeting place of Jefferson Davis and his Confederate Cabinet, Abbeville is keenly alive. It is hoped that the restoration of this mid-19th century boxwood garden at Trinity Episcopal Church will provide yet another draw to charming upcountry Abbeville, S.C.

Christy Snipes holds an M.S. in Landscape Architecture from the School of Design, N.C. State University. Her consulting firm, Historic Landscape and Garden Design, specializes in the preservation and restoration of old southern landscapes.

# Winston Churchill Memorial in the U.S. Visited

Mary A. Gamble

The 1989 fall outing of The Boxwood Society of the Midwest took participating members to the central Missouri town of Fulton, seat of Callaway County, to view and visit the Winston Churchill Memorial and Library and its garden.

The Churchill Memorial was originally the English Church of St. Mary the Virgin, Aldermanbury, which was gutted by an incendiary bomb in 1940 during the air blitz of London in World War II. Only the walls, a part of the bell tower and some columns remained of the limestone building, which had been rebuilt after the first twelfth century church burned in the Great Fire that destroyed fourfifths of London in 1666. Sir Christopher Wren (1632-1723), astrologer, mathematician and architect, designed the second St. Mary's and erected it on the foundation lines of the first Gothic edifice. Wren's English renaissance building reflected the originality, elegance and dignity which characterized his work.

From the twelfth to the midtwentieth centuries St. Mary's, Aldermanbury stood at the corner of Love Lane and Aldermanbury Road, near the old Roman wall that surrounded the ancient city of London. The poet John Milton was married there, and William Shakespeare lived nearby.

Today St. Mary's, Aldermanbury, stands restored on the corner of Seventh Street and Westminster Avenue in Fulton, across the way from Westminster College. Wren's St. Mary's was slated for final demolition when the Westminster College Memorial Committee proposed moving the church to Missouri to serve as college chapel and a memorial to Sir Winston Churchill, who gave his famous "Iron Curtain" speech at Westminster College in 1946. The proposal was accepted. The church would be the gift of the Diocese of London to the people



St. Mary the Virgin, one of 83 churches designed by Sir Christopher Wren

of the United States.

In 1964 President Harry S. Truman broke ground at Seventh and Westminster; and in 1965 the dismantling of the ruins of St. Mary's, Aldermanbury, began in London. It was done stone by stone, with each stone numbered. In all, seven hundred tons of stone and masonry were shipped across the Atlantic; and where a stone was missing, its replacement came from the same Dorset quarry which had supplied Wren. An English newspaper wrote at the time: "It is the last word in sentimental extravagance." But that was not the prevailing opinion. It also was called "bold and imaginative" and those who put St. Mary's, Aldermanbury, back together again felt it "a once-in-alifetime" opportunity and experience. Evidence of the project's broad support and appeal is that all costs of dismantling and rebuilding were funded by private contributions.

In dedication services in 1969 St. Mary's, Aldermanbury, was rehallowed by the Bishop of Dover; and



Light streams through hand-blown cathedral glass windows, made in West Virginia to duplicate the originals. (Photos: Claude Badeusz.)

Earl Mountbatten of Burma delivered the dedication address. In the twelfth century St. Mary's, Aldermanbury, was Catholic. It became Anglican after the reformation in Henry VIII's time. Today it is a non-sectarian house of worship for students of the College, as well as the site of cultural and other religious services of the community.

A pleasing and restful adjunct to the church is the green garden which borders it along busy Westminster Avenue. A wide, arrow-straight path bisects the garden, leading past benches and plantings to a 1650 sundial placed before a bench. The wrought iron fence which bounds the garden was patterned after one in the London churchyard in the eighteenth century. Plant materials include four English oaks spaced against the tall concrete base upon which the church rests. Lower plantings include rhododendron, hawthorns, yews and a cultivar of Buxus sempervirens equally at home in England and Missouri.

The idea of a garden for St. Mary's, Aldermanbury in Fulton was conceived by Isabelle Whitmarsh, a noted St. Louis gardener, and a gardener friend. And the Isabelle R. Whitmarsh Memorial Garden was given to St.



Buxus sempervirens is planted in a 17th-century English-style border.

Mary's by her husband T. C. Whitmarsh, an alumnus of Westminster College. The garden was designed by Edith Sinclair Mason, St. Louis landscape architect well known and admired for her mastery of formal garden design as practiced in England

in the sixteenth and seventeenth centuries. The gardener who conceived the idea, the donor and the architect all were influenced by the words in a clipping found by Mr. Whitmarsh in his wife's Bible after her death. The clipping quoted Winston Churchill.

"Plant a garden in which you can sit when digging days are done," wrote Churchill. "It may be only a small garden, but you will see it grow. There will be sunshine there even in the winter time, and cool shade, and the play of shadow on the pathway in the shining days of June."

The BSMW contingent sat in the garden on a bright October day in sunlight warmed Indian summer. In the decades which have passed since church and garden were dedicated in 1969, both have mellowed to fill their Midwest corner with beauty and a sense of continuity and purpose fulfilled.



Franta Belsky's heroic bronze statue of Churchill looks toward the 250-acre tree-shaded campus of Westminster College, founded in 1851.

Mary A. Gamble is a member and past President of The Boxwood Society of the Midwest and an avid boxwood gardener.

# The Ancient Art of Garden Topiary

La Verne Jaudes

The Greek poet Homer, who lived sometime between 1200 and 850 B.C. in the age of myth and fable, sang of a Greek king's garden in which "ships of myrtle sailed in seas of box." Undoubtedly he referred to the ancient garden art of topiary, which the Oxford Dictionary defines as "the clipping and trimming of shrubs into ornamental or fantastic shapes."

The ancient Syrians, who lived in the rich lands of the Middle East where fabled gardens flourished, are said to have invented topiary. The Romans, when their eastern conquest led them to the Fertile Crescent, learned that garden art from the Syrians, and with their love of horticulture and skills at gardening, brought it to perfection. We owe the word topiary to the Romans. It stems from the Latin, "pertaining to ornamental gardening, as an ornamental gardener, one skilled in fanciful landscape gardening."

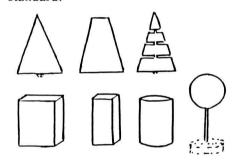
This description left by the first century Roman naturalist, Pliny the Younger, tells us of his country villa garden on the slopes of the Apennines, not far from Rome. Pliny wrote: "The beautiful hall gives onto a terrace of geometrical figures edged with box. On the slope below, two rows of box bushes trimmed like animals lead down to a level lawn walled in by dense, clipped evergreens." (It should be noted that Pliny's garden required the work of 500 slaves to maintain it in perfect order.)

A sudden end came to all this Roman splendor when, in 476, Rome fell to the Vandals from the North. Rome was sacked and burned and the Western Roman Empire collapsed. Ornamental gardening disappeared and with it topiary. The Dark Ages descended over much of Europe.

Gardening and farming — all horticulture — were virtually abandoned, and in danger of becoming lost arts and skills. But much of the

knowledge of both was preserved in the Christian monasteries which were built across Europe beginning with the Benedictine monastery at Monte Cassino, Italy, in the sixth century. When the Renaissance began in the twelfth century, pleasure gardens reappeared along with topiary, which adorned the formal gardens of the Italians, the French, the English and the Dutch. The Italians and French preferred the simpler geometric forms of topiary such as the cone andthe globe.

The geometric shapes shown in the sketch below are among the simplest to develop. There are many variations in proportion and scale of the globe and cube forms, plus the column and the standard.



A good number of plants are suitable, among them boxwood, yew, hemlock, holly and juniper. In starting to work with a plant, it is best to be cautious with the shears, to address the plant a second and third time in a season rather than to remove too much and then be faced with waiting for years of regrowth to correct any error. Circular and cone shapes are the easiest to experiment with before venturing forth with the other shapes.

For example, in 1985 the late Alan Godlewski, then Chairman of Horticulture at the Missouri Botanical Garden, asked The Boxwood Society of the Midwest to "do" some topiary for a future Garden project. He selected six well-matched plants of Buxus microphylla var. japonica in the boxwood nursery and made a sketch

for the pruners to follow. This writer agreed to direct the project. Alan's sketch shows a double truncated cone, and he made the first cut.



When completed the plants are to measure approximately six feet in height overall, with the same diameter at base. The upper cone is to measure 2 to 2 1/2 ft. and the entire plant is to slope in accordance with the sketch. In each successive summer the plants have been clipped at least twice. The photograph (by Ray Jaudes) was made in late spring 1989. It shows good progress.



The shaping of a topiary form will take time. But it is not necessary, as one cynic observed, to be as old as Methuselah to see a topiary to completion.

Two more examples of geometric topiary suggest how topiary can "catch

46 January 1990

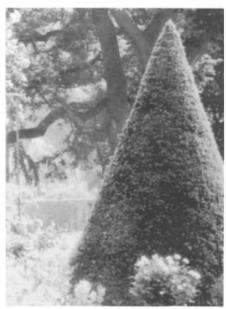
the eye." At right, a perfect cone is shown, courtesy of *Horticulture* magazine. At far right, a tiered cone is highlighted against a broad walkway makes the additional point that a hedge is simply horizontal topiary (photo by Decca Frackelton at Carter's Grove in Virginia). Both cone and hedge take a bit of doing but there is nothing wrong with the string and ladder method.

However, it is when we leave the formal and the geometric and take a look at the abstract, the realistic, the whimsical and the fantastic forms of topiary that gardeners have created that we see the many possibilities open to us. Thomas Church, well known California landscape architect, wrote: "Topiary adds a touch of architectural whimsy....and the owner may have a bit if he wishes."

Harvey Ladew, whose Ladew Topiary Gardens of Harford County, Maryland, have been widely photographed, brings imagination and skill to his topiary productions. He says he has been called "everything from the gardener with all that lovely 'Tipperary' to an authority on Utopia."

Those who have visited Ladew Gardens, or have seen pictures of its topiary, can picture the swan floating on a billowy hedge, a lyre bird displaying its fine feathers, the unicorn, the hunters "riding to hounds," and marvel at the skill displayed. However, most gardeners have neither space, patience nor time to create such ambitious pieces. To illustrate that the whimsical or fantastic is where you find it, we chose a single unique example.

My husband Ray and I found it in the summer of 1988 when we visited Virginia Beach, Virginia. The story is simple. The lady of the house whose garden we visited was unhappy with an overgrown Pfitzer juniper outside her kitchen window. It blocked her view of the bay. She was going to have the offending Pfitzer removed but her son persuaded her to let him try his hand at a bit of creative topiary. He clipped away at the Pfitzer until it no longer blocked the view and, in the process,



Cone-shaped topiary (Photo: Richard W. Brown; by permission)

made what he calls a "condominium birdhouse." The view was saved, the birds like their "condos," and this bit of topiary has become the most talked about detail of a garden filled with many interesting design features. The moral: look carefully before you put a chain saw to an overgrown plant. And remember that it has been said that creating topiary satisfies both man's destructive and creative instincts.

Other forms of creative topiary are the Abstract and the Realistic. Here are examples of each.

The Abstract was created by Polly Mesker, whose lovely formal garden overlooks the Missouri River eight



The Whimsical (Photo: Ray Jaudes)



Tiered-cone topiary at Carter's Grove Plantation in Virginia

miles above its confluence with the Mississippi. She chose yew as the medium. It provides a natural counterpoint to other sculptural works in her garden.

The Realistic is a swan shaped from boxwood in Heronwood, the great Virginia garden of the late Admiral Neill Phillips, recognized as one of our country's masters of topiary. Admiral Phillips sometimes used wire frames and sometimes two or more plants for topiary.

This must be said. Some people like topiary; some do not. The English essayist, Joseph Addison (1672-1719), felt strongly enough to write: "Nature did not depend upon set squares, rulers and compasses to achieve her effects; neither did she create vast, level, geometrically patterned parterres, nor did her rivers and streams run straight as a Roman road. And although she produced a multitude of trees and shrubs of diverse kinds of shapes, none resembled peacocks with tails spread, bears dancing or heraldic beasts. It was man who inflicted such horrid patterns on nature."

The Scottish poet and novelist Sir Walter Scott (1771-1832) declared



The Abstract (Photos: Mary A. Gamble)

that topiary was not an art at all. "A stone," he wrote, "hewn into a gracefully ornamented vase or urn, has a value which it did not before possess; a yew hedge clipped is only defaced. The one is a production of art — the other a distortion of nature."

Whatever the gardener's position,



The Realistic

we think it can be agreed that the placement of topiary can add an accent touch, enhance a perennial border, take the place of statuary as it did in the Middle Ages, or become a sculptural element, a practice used with great skill in Roman times.

The fundamental purpose of

topiary is to please *your* eye and *your* senses, to place in *your* garden a design *you* have developed by your own creative touch.

In conclusion, topiary draws the eye and gains attention. Perhaps now is the time to test your ingenuity and taste and patience. There is a place for horticultural sophistication or whimsy. The techniques of sculpturing plants were once the domain of the professional gardener, the *topiarius*, most skilled of Roman gardeners. Now topiary is for everyone.

La Verne (Mrs. Raymond C.) Jaudes is a founding member and a past President of the Boxwood Society of the Midwest. She is now co-editor of the BSMW Bulletin. The Jaudes' garden was described in the July 1987 issue of The Boxwood Bulletin.

#### **CORRESPONDENCE**

## A Vignette of Old Spout Run Farm

These are the pictures of "Old Spout Farm" that I mentioned to you a while back; and a few words about the farm.

The land here was granted to "Thomas Hatton" in 1636; this was his payment for bringing two boat loads of settlers to America. The original house is of log construction and it was built in the 17th century - then added to in the 18th, 19th and 20th centuries. Now some updating is being completed.

The oldest boxwood here was planted in the 18th century. The box garden was laid out and planted around 1930 by Mr. & Mrs. Malcolm Rorty; many of these plants are much older than the time that they were planted, since they were transplanted here from other gardens.

A most unusual architectural feature is the "Pent," a double chimney connected by several feet of brick work, two stories high. It is here that you find the oldest boxwood, that are older than

the garden.

The name of the farm is derived from the spring that flows out of the cliff. Many vessels came here to get fresh water in the days of the early settlers. They filled their barrels or casks from the pool below the spring.

A couple of notes of history. The naval battle of "St. Leonard's Creek" began here June 10, 1814. Cannon balls have been found on the property. The other note of history concerns the "Duel at the Spout." It seems that Col. Fithugh, a witty and humorous man, made some remarks to his political rival, William Droughton, and then Droughton, losing his cool, challenged Col. Fitzhugh to a duel. Col. Fitzhugh immediately accepted, and said since he was challenged he would choose the place and the weapons. He then said, "Tomorrow morning at the spout."

The next day upon arriving at the site, William Droughton was surprised

to see a pot of beans boiling. Col. Fitzhugh's seconds offered Droughton his choice of two straws, bean shooters, as weapons. This infuriated Droughton. The seconds then announced the duel would be fought with hot beans, "Bean Soup," at ten paces. Now a shout of laughter goes up, everyone here sees the humor, and they all have a friendly breakfast together. Other accounts of this tale may vary, but I like this one best. You might wish to look it up:

The Chesapeake Bay Country (1929 edition) pp. 170-171

Calvert County Recorder, Tues.

November 24, 1981, p. 9

History of Calvert County, Md., by

Charles Stein.

Many thanks to Elizabeth Scheiss of Spout Farm for information and help.

John W. Boyd, ABS Director

48 January 1990



A view of the house at Old Spout Run, from the garden



The oldest boxwood is at the chimney.



A "sea" of 2,500 boxwoods (Photos: John W. Boyd, Jr.)



Crape myrtles among the boxwood edging the paths

## **Checklist Amplification**

Mr. Lynn R. Batdorf, Vice-President, The American Boxwood Society

We note your interesting checklist of *Buxus* names in the January 1989 *Bulletin*. A few comments:

l) p. 47, column 2, Buxus sinica var. insularis 'Cushion' B. Wagenknecht, etc. We believe this is our selection which we called 'Pincushion'. On page 49 you list the excluded name 'Pincushion' from University of Wisconsin - we assume they must have got it from us. At the time, around 1967, we introduced three selections

of Korean boxwood, which we thought superior. These were originally numbered 27, 28, 30. We eventually named these 'Winter Beauty' (27), 'Pincushion' (28), and 'Tall Boy' (30). All three appeared in our 1967 catalogue. We have no idea how the name was shortened to 'Cushion' by B. Wagenknecht.

2) Buxus X 'Green Gem', 'Green Mound', 'Green Mountain', and 'Green Velvet' were all named and introduced by us about 1966 or 1967. As far as we are concerned, the 'Green Mound' name and variety should be just as valid as the other three.

We have found over the last 20 years that the four plants of the 'Green' series

have been the most satisfactory of any boxwood clones we have ever grown here. They remain greener during the winter, and show the least tip burn in spring. The past winter was a tough one here, because of the almost complete absence of snow cover. However, the 'Green' boxwoods came through with very little tip burn.

If you want further information drop us a line.

Kind regards,

Howard H. Stensson President, Sheridan Nurseries Georgetown, Ontario L7G 4S7

## Feil's Nursery

Mrs. Scot Butler, ABS Secretary Dear Mrs. Butler:

In response to your letter of May 9, 1989, Feil's Nurseries is represented more by a landscaping business that has been in the family for over 65 years, but my father, Frank Feil, and I do grow plants on a small piece of land in Massapequa Park, N.Y. At the present time we have several hundred boxwood growing at various stages. The majority of them are Buxus sempervirens 'Suffruticosa', ranging in age from cuttings to 35 yr. old plants. We have also propagated Buxus microphylla 'Compacta', B. m. 'Curly Locks', B. m. 'Morris Midget', B. m. 'Green Pillow', B. sempervirens 'Belleville', B. s. 'Inglis', B. s. 'Pullman', B. s. 'Salicifolia', B. s. 'Ste. Genevieve', B. s. 'Vardar Valley', B. s. 'Argenteo-variegata', B. s. 'Herman Von Schrenk', B. s. 'Newport Blue', and B. sinica var. insularis 'Tide Hill'.

We have also propagated cuttings off of a plant that we have had for over 30 years that is similar to *B. sempervirens* 'Aureo-maculata'.

Our interest in boxwood goes back over 70 years ago when my grandfather, Henry Feil, was a manager for Hart's Nursery, which was one of the premier nurseries on Long Island at the time. While working for Hart's, my grandfather started growing boxwood & holly, and then started his own nursery and landscaping business. Feil's Nursery, in Lynbrook, N.Y. He operated this nursery until 1953. At this time he moved to Cranbury, N.J. where he had a nursery and peach orchard until he died in 1981 at the age of 89. Attached is a copy of his business card which shows his interest in boxwood. At the time of his death he had several thousand boxwood growing in his nursery.

In 1953 my father (Frank Feil) moved to Massapequa Park, N.Y., and continued the landscaping business that my grandfather had started, and

started to grow boxwood and holly. My own interest comes from either heredity or assimilation. I am the Manager of Industrial Safety for the local Bus Authority by trade, but my heart is in growing plants. My idea of retirement is owning my own nursery.

I have 2 brothers, 2 cousins and a uncle that are also in the landscaping business; and another cousin that runs the Bayard Cutting Arboretum in Great River, N.Y. My uncle, Henry Feil, is also a boxwood & holly enthusiast, and has been propagating sports from B. microphylla 'Compacta'....

B. sempervirens 'Suffruticosa' was widely used on the great estates and has maintained limited use in landscapes over the years. In the last couple of years the demand for 'Suffruticosa' has begun to increase with the growing interest in herb gardens, perennial gardens, and dwarf plants. On Long Island 'Suffruticosa' can be a fairly maintenance free plant. I have never experienced bark split, but you will see discoloration in the winter. But after last year, I don't believe that the discoloration is due to winter burn alone. We experienced discoloration in well established plants in October, long before the cold weather arrived.

This leads me to believe that some of the discoloration is due to a sun burn, which is the latent effect of the prolonged heat that we experienced last summer. Most of the plants are recovering; the younger plants seem to recover faster than the old established plants. The Brooklyn Botanic Garden covers their boxwood with conifer boughs in the winter, but we have not experienced the need for this. 'Suffruticosa' also tends to get a little psyllid.

Gary Feil, Feil's Nurseries 84 First Avenue Massapequa Park, N.Y. 11762

Mrs. Butler was put in contact with Mr. Feil when the Feils requested sources of several cultivars. Mrs. Butler is Secretary of the ABS and is the owner of Bluemont Boxwoods.

## NOTICES

## **Annual Meeting**

Mark your calendar. The American Boxwood Society annual meeting will be held at Blandy Experimental Farm, Boyce, Virginia. On Tuesday May 15, 1990, there will be an evening program and reception. On Wednesday, there will be a Memorial Garden tour, business meeting, lunch (pre-register or bring your own), educational program, and auction of named *Buxus* cultivars. Details and registration forms will be in the April issue.

#### Auction

Anyone wishing to donate named boxwood cultivars to the boxwood auction (for the benefit of the Society) should notify Mr. Dale T. Taylor, 105 S. Princeton Ave., Wenonah, N.J. 08090, giving plant names, size and number, and bring them to the meeting. Mr. Taylor will again serve as our tabulator and he needs to prepare the list ahead. Plants in containers 6-inch to 1-gallon sizes are the most convenient to handle.

## Buyer's Guide

A third edition of this popular reference is being prepared by the ABS. Enlarged and updated, the new *Guide* will contain listings for more than 300 nurseries and more than 100 species and cultivars of *Buxus* L. as well as the current International Registration List of Cultivated *Buxus* L. This should be available shortly after you receive this *Bulletin*. To order, send a check for \$8, payable to The American Boxwood Society, to the Society at Box 85, Boyce, Virginia 22620.

### IN MEMORIAM

Mr. Robert L. Frackelton

Mr. H. T. Hallowell (Life Member)

Mr. Grayson M. Kirtland

Mr. Chas. S. Lewis, Jr. (Life Member)

Mr. Robert Semple

# NEWS OF THE SOCIETY

## Memorial Garden Report, Sept. 1989

Plant Acquisition: We are slowly making progress toward increasing the range of specimens within the Memorial Garden and nursery stock that will be added to the Garden when they reach the appropriate size. The Garden presently displays five species, two varieties and 90 cultivars. The nursery stock consists of four additional species and 48 cultivars.

We will be requesting our membership and subscribers to the *Bulletin* to help us obtain species and cultivars we still don't have in our collection.

Boxwood Evaluation: The evaluation of all boxwood plants (more than 800) within the Orland E. White arboretum (the State Arboretum of Virginia) is almost complete. Plants are placed in one of three categories: Ispecimens of questionable value; IIspecimens of arboretum quality, but not a significant taxonomic addition to the collection; and III- specimens of arboretum quality which should be maintained in the collection. This is an evaluation of plants other than those in the Memorial Garden collection.

Propagation Program: This program consists of having two back-up plants in the Arboretum Nursery for each specimen in the Memorial Garden; selected cultivars for the annual ABS plant auction; and selected cultivars for use in garden displays for the forthcoming expansion and renovation of the Memorial Garden. Each part of the program is making progress.

Herbarium Specimens: No progress has been made with this program, but we hope to get it under way in 1990. It will probably take three or four years to complete.

Controlled Hybridizing: Dr. Christopher Sacchi, Curator of the Orland E. White Arboretum has suc-

cessfully crossed several cultivars of *Buxus sempervirens*. The seed will be stratified, propagated in the greenhouse, lined out in the nursery, and some years later, evaluated. He will try to cross two *Buxus* species in 1990. If successful, it could well be a first.

Maintenance program: This has been a tough year for the aesthetic appearance of the Memorial Garden. Pest control was seriously hampered by heavy and frequent spring rains. There was no obvious leaf miner activity, but there was an unsightly, but not seriously injurious, infestation of psyllid. Due to insufficient manpower and decreasing mulch application, chemical applications were required to keep weeds under control. This resulted in unsightly dead grass perimeters, dead standing weeds and some browning of a few boxwood specimens near the ground level.

None of the foregoing has caused any serious damage to the specimens, but certainly played havoc with aesthetics.

P. D. Larson, Chairman

## Spreading the Word

Cdr. P. D. "Swede" Larson, ABS Board Member and Chairman of the ABS Memorial Garden, made several boxwood presentations in the Memphis, Tennessee area on October 4 and 5, 1989. The first program was at the Memphis Botanic Garden and the second, at The Dixon Gallery and Garden. They were sponsored by the Memphis Botanic Foundation, The Dixon Gallery and Gardens and the Memphis Garden Club of The Garden Club of America.

The program was called "The Traditions of Boxwood" and included:

1. Confusions and misnomers surrounding the genus *Buxus* in

- North America.
- 2. Range and distribution of *Buxus* species within the world.
- 3. Brief history of recorded boxwood beginnings and introduction into North America.
- 4. Natural forms of boxwood cultivars at 25 years of age and their attributes.
- 5. General culture and care in varying climatic conditions.
- 6. Methods and demonstration of propagation.
- Landscape and other uses of boxwood.
- 8. Pests and diseases.
- 9. Boxwood cultivar availability.

Each program was concluded by a question-and-answer period, followed by a tour of the appropriate gardens. Cdr. Larson offered a handout prepared by him and printed by the Va. State Arboretum (next four pages).

He left behind the following plants: Buxus microphylla 'Grace Hendricks Phillips'

Buxus microphylla 'Creepy'
Buxus microphylla var. japonica
'Morris Midget'

Buxus sempervirens 'Denmark' Buxus sempervirens 'Elegantissima'

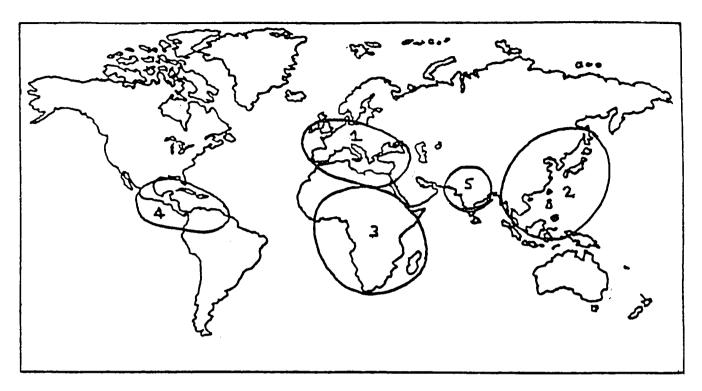
Buxus sempervirens 'Welleri' Buxus X 'Green Mound'

En route, Cdr. Larson visited The Hermitage, the restored home of Andrew Jackson and the Visitors Center just outside Nashville. They had some Buxus sempervirens and Buxus sempervirens 'Suffruticosa'.

He photographed some boxwood in a yard in Memphis where they had "cloud pruned" a large group of *Buxus sempervirens*.

The Memphis Botanic Garden contained no *Buxus* and very few within their compound. Dixon has a reasonable collection, many having originated from cuttings from the Garden Club of Buzzards Bay.

#### RANGE AND DISTRIBUTION OF BUXUS SPECIES



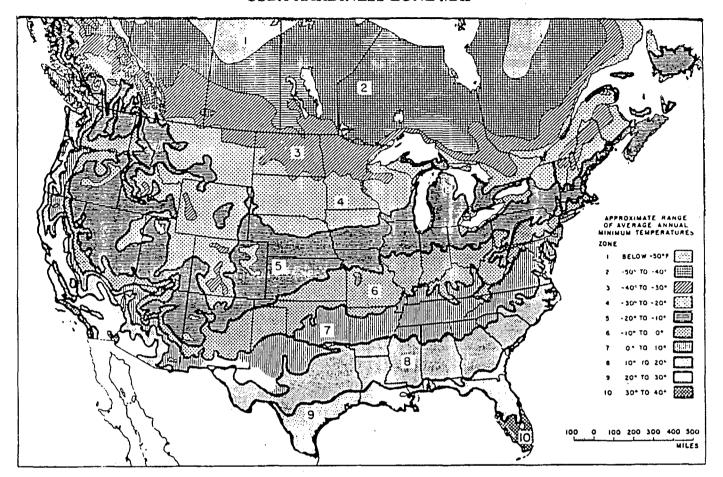
The majority of the cultivated types of boxwood belong to the species *Buxus sempervirens* which are rather widely spread through temperate Europe, northern Africa, and western Asia. The species *Buxus microphylla* and *Buxus sinica* from China, Japan, and Korea, are also quite widely known and grown.

Little is known about the taxonomic relationships among the species in the genus *Buxus*. However, current taxonomic sources indicate that there are some 95 to 100 species. Of these, 14 to 15 species have been sufficiently described in the taxonomic literature, and 80 to 90 lesser known species are reputed to exist. Species in the genus *Buxus* are distributed among 5 regions in the new and old world with only North America and Australia lacking indigenous species of boxwood. Principal boxwood regions include:

- 1. Europe, Mediterranean Basin, and Middle East B. balearica, B. sempervirens
- 2. Asia, China, Japan, Korea, Malaysia, and the Phillippines
  B. bodineri, B. harlandii, B. microphylla, B. sinica, and about 26 lesser known species
- 3. Africa (tropical and southern)
  B. benguellensis, B. hildebrandtii, B. nyasica, and about 5 lesser known species
- 4. <u>Caribbean Islands, Mexico, and South America</u>
  B. bahamensis, B. bartletti, and about 33 lesser known species
- 5. India, N.W. Himalayas, and the U.S.S.R.

  B. colchica, B. himalayensis, B. hyrcana, B. walichiana, and about 5 lesser known species

#### USDA HARDINESS ZONE MAP



#### **BOXWOOD COUNTRY**

Nearly all of North America that lies between USDA zones 5 through 9 can readily be called boxwood country providing that the appropriate cultivars are selected.

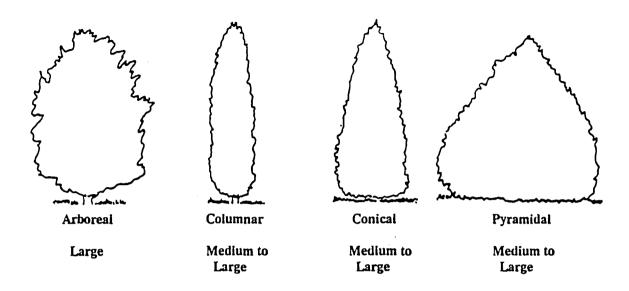
Some individuals would proclaim boxwood country to correspond only to USDA zone 6. This is partially true in that the largest number of cultivars are known to grow in this zone. However, many of these cultivars will readily thrive in zones 5 through 9 as well.

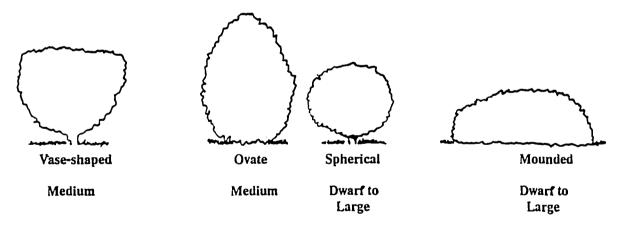
The US Department of Agriculture has often related that some gardeners may question a zone rating when a plant fails to survive its first winter. A single test however is rarely reliable. A small, young, boxwood cultivar may be tender whereas an older plant may become quite hardy. Cultural conditions may also affect the degree of hardiness. Furthermore, a single winter is rarely ever "average."

One of the main keys to success is to select the appropriate cultivar to match your zone, and the natural form that will satisfy the landscaping purpose.

January 1990

#### NATURAL FORMS OF BOXWOOD AT 25 YEARS OF AGE





#### Plant Height at 25 years of age

Dwarf: up to 2½ feet Small: 2½ to 3½ feet Medium: 3⅓ to 6 feet Large: over 6 feet

Boxwoods grow in many natural shapes, sizes, and variations. Sizes range from dwarf to large and even tree-like. Leaf colors vary in shades of green and yellow-green with some having hues of blue and black coupled with variegations of gold, silver and white. There are a variety of leaf shapes and textures as well. All of these varying characteristics make boxwood truly a plant for many landscape possibilities.

#### NATURAL FORMS OF SELECTED BOXWOOD CULTIVARS AT 25 YEARS OF AGE

<u>Cultivar</u>	Species	<u>Size</u>	Zone*	
Arboreal 'Arborescens'	B. sempervirens	Large	5	
Columnar		_		
'Fastigiata'	B. sempervirens	Large	6	
'Graham Blandy'	B. sempervirens	Large	6	
Conical				
'Cliffside'	B. sempervirens	Large	6	
'Pyramidalis'	B. sempervirens	Large	6	
'Tall Boy'	B. sinica var insularis	Medium	5	
Mounded				
'Argenteo-variegata'	B. sempervirens	Small	6	
'Grace Hendrick Phillips'	B. microphylla	Dwarf	6	
'Justin Brouwers'	B. sinica var insularis	Small	6	
'Ste. Genevieve'	B. sempervirens	Large	5	
Ovate				
'Liberty'	B. sempervirens	Medium	5	
Pyramidal				
'Agram'	B. sempervirens	Medium	5	
'Aristocrat'	B. sempervirens	Large	5	
'Belleville'	B. sempervirens	Large	5	
'Inglis'	B. sempervirens	Large	5	
'Memorial'	B. sempervirens	Medium	6	
'Welleri'	B. sempervirens	Large	5	
Spherical				
'Mary Gamble'	B. sempervirens	Small	5	
'Pullman'	B. sempervirens	Large	5	
'Suffruticosa'	B. sempervirens	Dwarf	6	
Vase-shaped				
species	B. harlandii	Medium	6	
Unusual Forms				
'Curly Locks'	B. microphylla	Medium	5	
'Pendula'	B. sempervirens	Large	5 5	
'Prostrata'	B. sempervirens	Medium	6	

<sup>\*</sup>Zone refers to the U. S. Department of Agriculture zones. For each selection, the zone listed is the minimum (coldest) zone in which it has been observed to thrive.

# Minutes of Fall Board Meeting

The ABS Board of Directors met at the home of President Mrs. Robert Frackelton in Fredericksburg, Virginia, on Monday, September 25, 1989. Present, in addition to the President, were Treasurer Mrs. Katherine D. Ward, Secretary Mrs. Joan Butler, Directors Mr. John Boyd, Mr. William Gray, Cdr. Phillip Larson, Mr. Richard Mahone, Mr. Dale Taylor and ex-officio Director Dr. Edward F. Connor, Director of Blandy Experimental Farm.

The President called the meeting to order at 10:00 a.m. The minutes of the spring board meeting of March 13, 1989, were approved as printed in the July issue of *The Boxwood Bulletin* (Vol. 29, No. 1, p. 13).

The Treasurer reported balances of \$11,067.97 in the checking account and \$28,213.34 in certificates of deposit; she also listed the amounts which are earmarked for special funds (Memorial Garden, *Boxwood Handbook*, Research, *Bulletin Index* and *Buxus Monograph*). The full report is available on request.

Annual Meeting: Mr. Taylor suggested that Mr. Paul Stankard might speak about his beautiful glass flower paperweights at the Tuesday evening reception. The dates were tentatively set for May 15-16, 1990. It was noted that 30 named cultivar boxwood plants were all that could be auctioned off in a reasonable time after the formal meeting. Many different cultivars are desirable donations: two of a kind are welcome, as bidders often seek pairs. Mr. Taylor would welcome advance notice from donors listing the cultivars which will be given.

Buyers Guide and Budget: Mr. Taylor asked that budget requests for 1990-91 be sent to him before the spring board meeting. He reported that the mailing project seeking new listings for the third edition of the Buyers Guide had produced many replies including new memberships and donations to ABS special funds. The new edition will appear later in

1989. Mr. Taylor suggested that the *Guide* include a coupon which could be clipped out to send a request for ABS membership and a table which would cross reference cultivar name and source nursery number, so that it would be easier to locate sources for specific plants. He moved that a free copy of the *Guide* be sent to all nurseries listed in it; the motion was seconded and passed unanimously.

Boxwood Bulletin: Mr. Boyd was asked to prepare an article about boxwood used by pioneers moving west as packaging material to protect household treasures. The editor needs articles for the January issue. The deadline for receipt is November 1.

Registrar and Handbook: In Mr. Batdorf's absence, the President reported that the material for the Boxwood Handbook was being entered in a computer and will then be expanded and amplified.

Discussions ensued on how species can be readily identified. Cdr. Larson said that descriptions, measurements and differences noted do not authoritatively determine a plant's identity. Little work has been done on boxwood because it does not have economic importance. Dr. Connor remarked on the need to find an individual interested in boxwood cytology. A systematic study should be undertaken to find a dichotomous key, to determine what character will separate one cultivar or species from another.

Memorial Garden: Cdr. Larson reported on the status and condition of the Garden now [see page 51] and how changes will occur when the new Arboretum landscape plan gets under way. Discussion followed on how plants will be chosen and who will control landscape design and collections policy. Dr. Connor said that decisions will be made cooperatively. with consultation with ABS about future location of the Memorial Garden. Cdr. Larson serves as liaison and suggestions from Board members are welcomed. Sharing ideas will help. Knowledgeable members of ABS can serve as an advisory board.

The present operating staff at

Blandy Farm is very small. A new direction for the Arboretum will center on woody plants which are hardy in the region and on native plants, both woody and herbaceous.

Research: Mr. Gray's report will follow these minutes. The boxwood cultivar evaluation project has been scaled down. The list of proposed cultivars has been reduced to 10. The Board unanimously instructed Mr. Gray to correspond with the Chicago Botanic Garden's Richard G. Hawke to explore his desire to cooperate on this project.

A new proposal from the Hampton Roads Agricultural Experiment Station to explore possible tissue culture experiments with boxwood was discussed. Dr. Banko has already done such work with sourwood.

Dr. Connor remarked that some plants are not receptive to tissue culture and that a botany professor at Harvard, Dr. John Einset, had done a survey of woody plants for this receptivity. It was decided that the Secretary would write to Dr. Einset inquiring whether any studies on boxwood existed. Further consideration will be given to the new proposal at the next meeting, when a rare cultivar could be selected for large-scale propagation if tissue culture proves possible. Mr. Gray reported that Mr. Batdorf had suggested another research project to develop a hi-tech method of boxwood "fingerprinting" but no details were yet available.

*Tour:* A spring tour may be organized in 1990 for the area around Danville, Virginia, which served as capitol of the Confederacy in the Civil War.

Workshops: Professor Faiszt was absent and no report on future workshops was made. The President displayed a copy of a new issue of *The Virginia Gardener* devoted to boxwood, published by VPI&SU and the Cooperative Extension Service.

The meeting was adjourned at 12:45 p.m. Mr. and Mrs. Frackelton then treated the Board to luncheon at a delightful Fredericksburg restaurant.

Joan Butler, Secretary

# The Seasonal Gardener

Practical tips for boxwood enthusiasts from Society members



In April 1981, Ambassador Harrison Symmes was kind enough to give me three favored tiny rooted boxwood plants. *Buxus microphylla* 'Compacta' and *B. microphylla* var. *japonica* 'Morris Midget' he had rooted from cuttings. *B. sempervirens* 'Arborescens' was a volunteer seedling lifted from George Washington's "Weeping Tree Box" at Mount Vernon. This plant no longer exists, having been crowded out finally by adjacent trees.

These three plants immediately went into my protected liner bed, where they remained through two growing seasons until the fall of 1982. At that time, with good four to six inch root balls, they were transplanted to a nursery field for evaluation. This liner bed, enriched soil along the east foundation of our house, is protected from the afternoon sun and drying winds. Winter damage, always a hazard to small plants, has never been a problem. All plants are set on six-inch centers.

In 1986, I decided to propagate this particular 'Arborescens' and the 'Morris Midget' for addition to our nursery product line. With our 'Suffruticosa' and 'Vardar Valley' stock, the very dwarf 'Morris Midget' and the fast-growing 'Arborescens' conical tree would provide a wide range of boxwood forms for diverse landscape uses.

By then, I preferred the 'Morris Midget' over the similar 'Compacta' for several reasons, not the least being my inability to propagate 'Compacta' with acceptable yield. Harrison Symmes' tree box is now attractive in our own landscape planting.

Knowledge of growth rates is essential to any nursery operation. The time required to reach market size is a basic factor in determining cost and price. Obviously, a nursery prefers to maximize the rate of growth. Hence, the following data probably indicate a more rapid growth than would be expected in most landscape plantings.

Our nursery plants are grown in full sun, irrigated during dry spells in spring and summer, fertilized annually with dolomitic limestone in the winter and light applications of 10-10-10 in March and 5-10-10 in June. We do not cultivate, but use bark mulch plus mowing of fescue grass. Other than thinning the largest 'Suffruticosa', plants are not pruned, except for occasional removal of winter damage. Root pruning is not necessary or desirable.

Comparative data have been collected and recently analyzed for the original specimens from Harrison Symmes and for sample groups of 'Suffruticosa' and 'Vardar Valley' propagated and grown here. Findings are summarized below:

#### Growth Rates for Selected Boxwood Cultivars

Cultivar	Date Stuck	To Field	Date Meas.	Meas. Size	Annua Growt Rate	•
'Compacta' 'Morris Midget' 'Suffruticosa' 'Arborescens' (seedling)	9/84	9/82 9/86		10" x13" 12"x14" 20" 56"	1" 3.2"	Low Mound Low Mound Spreader Conical Tree

In brief, our experience indicates that field-grown 'Vardar Valley' and 'Arborescens' can be offered to the nursery trade after four growing seasons, 'Suffruticosa' after five, whereas 'Morris Midget' should be held for seven or eight years. For all, the fair market value increases rapidly thereafter.

William A. Gray, ABS Board Member



#### Annual Statement of Ownership, Management, and Circulation

1. Filing Date:

October 2, 1989

2. Title of publication:

The Boxwood Bulletin

3. Frequency of issue:

Quarterly

4. Complete mailing address of office of publication:

P.O. Box 85, Boyce, Va. 22620

5. Complete mailing address of the headquarters or general business offices of the publishers:

The American Boxwood Society

P.O. Box 85, Boyce, Va. 22620

6. Names and addresses of Publisher, Editor, and Managing Editor:

Publisher:

The American Boxwood Society

P.O. Box 85, Boyce, Va. 22620

Editor:

John S. McCarthy

345 Gray Ave., St. Louis, Mo. 63119

Managing Editor:

Mrs. Robert L. Frackelton

1714 Greenway Drive

Fredericksburg, Va. 22401

7. Owner:

The American Boxwood Society P.O. Box 85, Boyce, Va. 22620

(Incorporated, non-stock,

non-profit corporation)

8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities: None