April 1964

The **Boxwood Bulletin**

A QUARTERLY DEVOTED TO MAN'S OLDEST GARDEN ORNAMENTAL



Garden at the Woodrow Wilson Birthplace, Staunton, Va.

Vol. 3 No. 4 Boyce, Va.

Edited Under The Direction Of

THE AMERICAN BOXWOOD SOCIETY

President	. Rear Admiral Neill Phillips
1st V. P	Mrs. William C. Seipp
	Mrs. Clay B. Carr
-	Č
Directors:	Mrs. Thomas De Lashmutt Mr. John Mitchell Dr. J. T. Baldwin, Jr. Dr. Henry T. Skinner Dr. J. B. Wilson Dr. W. R. Singleton (ex officio)
Please address all communications, including manuscripts and change of address to the Boxwood Bulletin, Boyce, Va.	
news notes, photographs so wood specimens, gardens, a probable interest to reader of such material carry the sender and be accompanied ing the proper postage for will be made for the protect	welcome contributions of articles, uitable for reproduction, of box- and plantings, and other items of s. It is requested that every item name and return address of the by an addressed envelope carry- return. While every effort always ation of all material submitted for not assume responsibility for loss
American Boxwood Society October, January, April, and	
of the benefits of member	wood Bulletin is included as one rship in the American Boxwood ues of each member being allotted i.
The Bulletin is \$5.00 per United States and Canada;	annum to non-members in the single numbers are \$1.50 each.
Reprints will be supplied to	members and authors at cost but ime of an article's acceptance for
Make cheques payable to th	e American Boxwood Society.
Boyc Copyrig American	ss mail matter at Post Office, e, Virginia ht 1964 by the Boxwood Society
Printed	in U. S. A. by

Carr Publishing Co., Inc., Boyce, Va.

The Boxwood Bulletin

April 1964 Vol. 3, No.	o. 4
Editor Mrs. Eugene B. Ca	sey
Associate Editors Mrs. Chester L. Ri Mrs. Edgar M. Whit	•
	
CONTENTS	
The Woodrow Wilson Birthplace	45
Clara S. McCarty	45
The Story of Boxwood (Clara S. McCarty)	46
The Boxwood Question Box (Dr. Walter S. Flory)	55
Nematodes Serious Problem to Growers of Ornamentals (W. R. Jenkins, C. M. Heald, Jr. and W. W. Osborne)	56
Blandy Experimental Farm — Past History	57
The Tuleyries (Alice B. Wilson)	59
PHOTOGRAPHS	
The Garden at Stratford House	48
Original Box Garden at Westover	49
Estate of Frank Henderson, Esq	50
Boxwood Garden at Sans Point, L. I. — in the French Style	53
Box at Ashlawn, a Home of James Monroe	54
The Effects of the Lesion Nematode	56

The Tuleyries _____ 58

Woodrow Wilson Birthplace

The Woodrow Wilson Birthplace in Staunton is a twelve-room brick house of Greek Revival architecture. It was built as the manse of the Presbyterian congregation of Staunton in 1846.

The terraced, Victorian garden located at the rear of the home was authentically restored in 1933. This extensive work was a gift of the Garden Club of Virginia, sponsor of Historic Garden Week in Virginia each April.

Edging the upper terrace of this garden are boxwoods more than 100 years old. The lower terrace, is made charming by box-bordered, bow-knot flower beds, characteristic of the 1850s.

Of all the Wilson relics at this National Shrine, which is open to the public, the one creating unusual interest is a Pierce Arrow automobile. President Wilson used this car during his second term in the White House and in later years of private life. It is housed in a garage reached by a brick walkway through the garden.

Over Planting

We found a reply to our original charter membership form in the files that gave us such a laugh we cannot restrain ourselves from sharing it with you. Written to one of the original founders of our Society it went, "Dear _____, No I do not want to become a member. There are too many D__ societies already, Virginia is already so overplanted with box that in 25 yrs. it (you) will need a seeing eye dog to find your way through gardens. Love, etc." Prompted by this dour prediction we immediately bought a German Shepherd before the prices go up.

Boxwood Oboe

Archaeologists digging in 1948 and 1960 at Colonial Williamsburg found among other things part of a boxwood oboe. The oboe was probably made by Benjamin Bucktrout who announced in the *Virginia Gazette* that he made and repaired musical instruments. The C. W. Research department verified the antiquity of the oboe by finding information on the differences of the oboes used in the 18th-century from those of later periods.

(The above from the Colonial Williamsburg News, Williamsburg, Virginia; Volume 17, Number 8; November 30, 1963; and was sent to us by Dr. Baldwin)

FRONT COVER

Unusual Victorian "patterned" garden in the rear of the Woodrow Wilson Birthplace, Staunton, Virginia. Bowknot and circular flower beds are edged and accented with Box, and winding brick walks extend the vista. Picture from the Garden Club of Virginia, who restored the garden with proceeds from Historic Garden Week.

Clara S. McCarty

Modest and unassuming, Clara C. McCarty, author of "The Story of Boxwood", now lives alone at "Waverley", near Delaplane, Virginia, her home for nearly fifty years.

During this time her days have been filled with diversified and absorbing interests. Most rewarding has been the outward and onward reach experienced by the propagation and growing of box from some old plants there, over one hundred years of age. This new generation, in the fullness of time, now adds to the beauty of her own land-scape, while many have gone far and wide beyond the bounds of their rootage.

Tangible evidence of this fulfillment of endeavor is treasured in the comment of a friend some years ago: "You have written your name all over the place. Even more so is the inscription in a recent garden publication gift: "To the dedicated arborist who created her own living memorial."

This creative urge leading to the publication of "The Story of Boxwood" is best expressed in the preface of her book (which follows). That these selections have brought forth approbation is regarded by the author as a most pleasing reward.

ANNUAL MEETING May 13th

COMMENCING 10 A.M.

AT BLANDY EXPERIMENTAL FARM

BOYCE, VIRGINIA

Box Luncheon Will Be Served

PLEASE PUT IT ON YOUR CALENDAR

Post Cards With Detailed Program Will Be Mailed Later

Neill Phillips, President



BY

CLARA S. McCARTY

Drawings by HAROLD B. W. PETERS

FOREWORD

For many years it has been my privilege to live in the open and do much with the propagation of Boxwood, feeling all the while, like Antaeus of old, the regained strength and uplift that comes from the mystic tie with Mother Earth.

In the contentment of my triumvirate — the Lord, the shovel and the hoe, I might have gone to the end but for the Macedonian call to substitute on the program of the Blue Ridge Flower Club; from there to the Warren County Garden Club; and on to the Fauquier-Loudoun Garden Club.

These successive experiences demanded a new resource and intake of factual knowledge over and above actual care and keeping, which led to the research that has brought to me a great satisfaction together with a deep gratitude for the occasions which awakened the need and sign-posted the way.

Special acknowledgment is due Mrs. Donald Durant, Chairman of the Library Committee of the Garden Club of America, for her courtesy in connecting me with the librarian of the New York Botanical Garden Library who, in turn, graciously sent clippings from periodicals and references to other materials which could readily be checked and covered in the Library of Congress.

With permission from the Yale University School of Forestry, I have quoted extensively from Dr. Record's bulletin of 1925, an exhaustive study of the history, commercial uses, etc., of Boxwood. For lilt and life and love and charm I have used Boxwood Gardens Old and New by Albert Addison Lewis (1924), which includes a most delightful flight backward across the passages of Time to the realm of romance, song, and story. My very great appreciation is extended to Mrs. Lewis for permission to use this material.

Grateful acknowledgment is also due Harold B. W. Peters for the pleasing addition of artistry and Ursula Harrison Baird for positive help in publicity.

In the preparation of this little book no claim has been made for the new or original; only, from what has already been written, a chronological re-assembling and a gathering of such fact and fancy as might capture interest and abide in memory.

CLARA S. McCARTY

"Waverley" Delaplane, Virginia March, 1950

I. Boxwood



HE Story of Boxwood begins with our beginnings. In smug complacency we are apt to take satisfaction in the belief that appreciation of the beauty of this fine old shrub, which has stood preeminent for centuries, is a product of our civilization and culture.

Therefore, it becomes a matter of much interest to turn backward to the time when the first shoot was firmly rooted in the heart of the human family and "tranquilize" our thinking with tradition and the knowledge that since the dawn of history no other shrub has challenged the supreme position it has held as "the aristocrat of the garden." The story is continuous down through the ages to this day when it grows in profusion in all gardens worthy

of note and reflects the good taste of those who plant and cherish it.

There is no other shrub in the entire hardy evergreen group about which the imagination can weave the romance that can be woven about Boxwood. No other plant enjoys the appreciation in value that grows with the years: "A fine old plant, with that character and individuality which only a lusty old age can give, makes possible effects in planting for which there is no substitute." It becomes fanciful to reflect that old Boxwood, so warm with peace and beauty, has watched over many troublous days and now, calmer in its old age than in its romantic youth, has at last—

"No enemy
But winter and rough weather."



HE imprint of Boxwood is stamped throughout the chronicles of Time. While some of the following dates must needs be approximate, they are tabled thus to give a clearer concept of the cherished position held by this magnificent shrub throughout successive eras of antiquity.

Pliocene Age.__The earliest fossil forms of Buxus have been found in the Pliocene deposits of France, the period when the great land masses of the earth were rapidly approaching the configuration which they exhibit at the present day.

4000 B. C. The garden of an Egyptian nobleman, presumably including Box, was described in detailed formal plan on his tomb.

1000 B. C. There is no authentic record of the date of Homer, the great epic poet of Greece. Some authorities place him in the tenth, others the eleventh century B.C. In his best known works, recounting legends antedating history, he de-

scribes in the "Odyssey" the wanderings of Ulysses as he comes to the magnificent garden of Alcinous where "ships of myrtle sail in seas of Box." This is the earliest record of a Box hedge which had been shaped and carved and, since it was the work of the Greeks, it must have been handsome and of fine proportions.

In Homer's "Iliad" mention is made that in the Trojan War the yoke for the steeds driven by Priam, King of Troy, was made of Box. (Iliad 24: 268)

992 B. C. Solomon and Semiramis (Queen of Assyria), during whose reigns much mention is made of the spacious green-walled gardens where the wives and concubines went to bathe.

The Hanging Gardens of Babylon were probably made in four receding terraces to form a pyramid of greenery. Since Boxwood has, from the beginning, been indigenous to that geographical area, there is every reason to believe that

it formed the greenery so lavishly used at that time.

- 718 B. C. Boxwood tablets, with their smooth, clean surfaces, were well adapted to writing purposes, and it was upon such a tablet that the admonitory message of Isaiah was ordered to be published "Now go write it before them in a table, and note it in a book, that it may be for the time to come for ever and ever." (Isaiah 30: 8)
- 712 B. C. The glorious promise of the Lord, "I will set in the desert the fir tree, and the pine, and the box tree together." (Isaiah 41: 19)
- 698 B. C. "The glory of Lebanon shall come unto thee, the fir tree, the pine tree, and the box together, to beautify the place of my sanctuary; and I will make the place of my feet glorious." (Isaiah 60: 13)
- 590 B. C. The allegorical ship of Tyre, "Of the oaks of Bashan have they made thine oars; they have made thy benches of ivory inlaid in boxwood, and from the isles of Kittum," (Cyprus, including isles of western Mediterranean). (Ezekiel 27: 6, Revised Version)
- 372 B. C. Loudon, British horticulturist, writing in 1844, says "the Box tree appears to have first been mentioned by *Theophrastus*, who ranks the wood with that of ebony, on account of the closeness of its grain." The books on botany written by Theophrastus constitute the most important contribution to botanical science during antiquity and the Middle Ages.
- 342 B. C. In Sir William Temple's description of the "Garden of *Epicurus*" he writes that innumerable trees flourished within its enclosure and "all sorts of Plants pleasant to the Eye, the Smell, or the Taste." Boxwood grew there.
- 70 and 43 B. C. Virgil calls the wood—
 "Smooth-grain'd and proper for the turner's trade
 Which curious hands may carve, and steel with
 ease invade." DRYDEN'S Virgil.

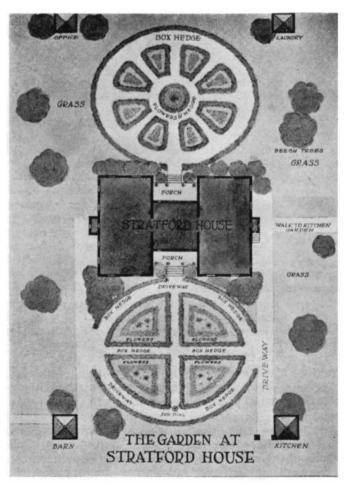
Both Virgil and Ovid allude to the use of Boxwood for musical instruments

- 14 B. C. Vitruvius, celebrated Roman architect, recommends Box for topiary work and it appears to have been much employed in verdant sculpture and close-clipped hedges in the Augustan age.
- 23 A. D. Pliny describes Boxwood as being as hard to burn as iron, as producing no flame, and as being totally unfit for charcoal. He distinguishes three kinds — larger, smaller, and Italian, and speaks of the tree for topiary work and of the wood for musical instruments.

Pliny, the great Roman naturalist and writer, has left a detailed account of his garden, the best known of early times, and it is interesting to find how often he refers to Boxwood. Note a few references:

- ". terrace embellished with various figures and bounded with a Box hedge."
- ".lawn overspread with a soft Acanthus surrounded by a walk enclosed with Tree Box, shaped in a variety of forms."
- ".... broad path, laid out in the form of a Circus, ornamented in the middle with Box cut in numberless different figures together with a plantation of shrubs, fenced in by a wall covered with Box rising by different ranges to the top." (The Roman terrain provided a perfect setting for the pattern of the Hanging Gardens of Babylon.)
- ".... straight walks divided by grass plots, or Box trees cut in a thousand shapes, some forming the Emperor's name, others the name of his gardener."

Our Boxwood of today, with such rootage back in the unbeginning past needs no further tabulation to establish its antiquity and continuity of pre-eminence; and with its dignity, calm, repose, strength, endurance, vigor, it promises to hold the heights in the horticultural world far into the unknowing future.



III. Range and Distribution





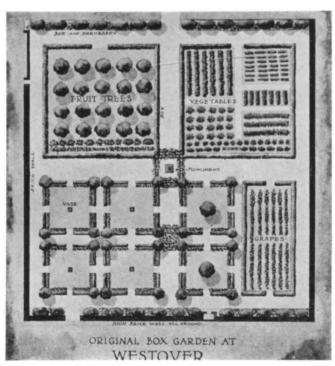
HE natural range of Boxwood embraces southern Europe, part of North Africa, coastal regions of Asia Minor, the Caucasus, north Persia, and from the higher levels of Afghanistan extends along the

Himalayas into China and Japan.

England. The tree has been growing so long in an apparently wild state in southern England, particularly on Box Hill, that many writers consider it a native; others, however, believe it is one of the many introductions owed to the Romans. There is no native growth in the Channel Islands or northern France.

Portugal, Spain. Regarding the distribution in Portugal, Wilkomm (1896) writes, "... special attention should be called to Buxus Sempervirens which advances from the Pyrenees, through northern Spain, to southern Galicia, through the tablelands to Portugal."

France. Box is common in parts of France and one writer says there are pure stands frequently covering large areas. It is the characteristic shrub of the whole Pyrenees region.



Switzerland. In the Jura Mountains there are areas of bushland composed of Buxus Sempervirens to which Baumburger has given the name "fell heath."

Germany. Box is mentioned in mountainous places near Baden where there is a natural underwood of about 80 hectares (approx. 200 acres). Loudon says that it is the only evergreen exclusive of the coniferae that will stand in the open air without protection in Berlin.

Balkans. According to Adamovic, Buxus Sempervirens is very well distributed in a continuous belt through Albania, old Serbia, Macedonia, to the lower Alps. It has been found growing at an elevation of about 4,000 feet above sea-level.

Africa. Box is native to the Madeiras but not the Canaries. It is also found in North Africa.

Georgia. Box is at its best in the Black Sea region of the Caucasus. Box trees are common everywhere. Many are found with a diameter of ten to eighteen inches and a height of over fifty feet. The age of a tree a foot in diameter is estimated to be between 200 and 300 years. (The Britannica states that Box adds one and a half inches in diameter every twenty years.)

From an article in the Russian Information and Review, (1925):

"Buxus Sempervirens occurs in considerable quantities. Thirty years ago Boxwood area covered no less than 7,000 acres but, owing to the high value of the wood and unrestricted exploitation, the area is much reduced." Caucasian Boxwood always commanded a ready market in European markets. During the half century before the war, one firm alone exported at least 5,000,000 poods (about 90,000 tons), while only 40,000 poods (720 tons) were sold to Russia for domestic market. Trade interrupted by World War I has only been recently reseumed. (Yale Bulletin, 1925.)

Persia. Commercial stands over large areas. While the wood is used for the same purposes as Caucasian it is considered of poorer quality and of inferior value.

Box has made appeal to people of all times and degrees of civilization because of its slow persistent growth, its long life, and the ease with which it can be propagated, until now it is found flourishing and beautifying the landscape in many far-flung places of adoption, in some instances reaching a perfection beyond that of its native heath.

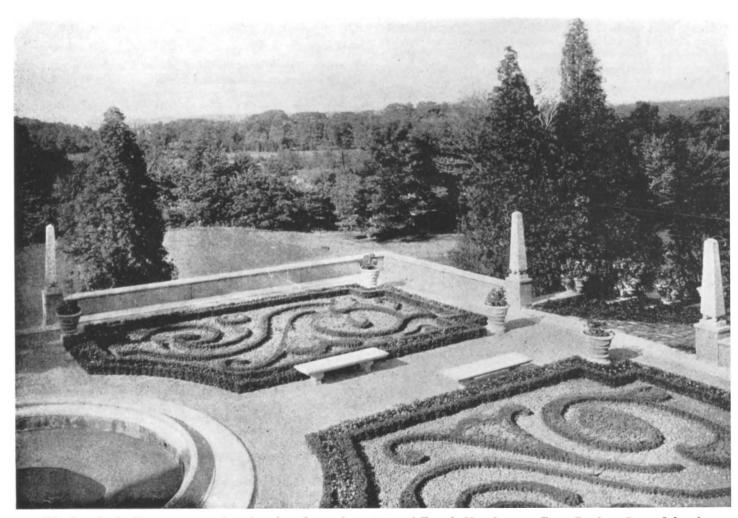
4991241211494

IV. Varieties

ROFESSOR S. J. Record, of the Yale School of Forestry, writes, "The Boxwood, commonly called Turkish Boxwood, is derived from a small group of plants, of which the evergreen Box in our gardens is the type. To this group the famous bootanist, Linnaeus, gave the generic name of Buxus Sempervirens which is but another form of Ovid's Evergreen Box. For a long time this was considered

the only species, though varying forms and varieties came to be recognized, several of which have been elevated by other botanists to specific rank."

Linnaeus, the Swedish botanist of around 1745, made first employment of specific names in nomenclature. He recognized only one species with two varieties: arborescens, a tree-like type; and suffruticosa, without question identical with the dwarfed plant commonly known as "Dwarf or Edging Box."



The lovely Italian parterre, box-bordered, on the estate of Frank Henderson, Esq., Roslyn, Long Island.

Later, one more western European species was added — Buxus-Balearica. Since most of the Boxwood now in cultivation in the Occident is European in its origin, it probably is Buxus Sempervirens or Buxus Balearica.

The Blandy Experimental Farm, Boyce, Virginia, has specimens of Balearica from the Royal Botanic Gardens at Kew and at Edinburgh, and from a collection in France, all of which are identical and quite distinct from all other Buxus seen by the author. (Yale University Bulletin.)

Professor A. G. Smith, Jr., Virginia Polytechnic Institute, has done a lot of work on Boxwood and has issued a very valuable bulletin on the subject. He says there is no American Boxwood and none native to England. He has gathered many seeds and propagated many cuttings from old Virginia plantings and has grown thousands to see if better varie-

ties could be found. There are now growing around Blacksburg, Virginia, more than 1,500 seedlings of Tree Boxwood and no two in this group are exactly alike. He has found the varieties to be endless.

While there are thirty-odd known species, the following classification is probably the best condensation for general use:

Buxus Sempervirens _____ Common Box

Buxus Sempervirens ____ True Dwarf Box

Buxus Sempervirens ____ True Tree Box

(Rather difficult to propagate and is consequently not in general use.)

The Britannica calls Buxus Balearica the Boxwood of commerce or Turkey Boxwood.



V. Commercial Uses



O other wood is so fine textured and of such uniform consistency as Boxwood, of great density, yet easily carved and shaped, the color a pale yellow throughout. The ancient Egyptians made combs

of it, a common use in many countries to this day. The early Greeks and Romans found manifold employment for Boxwood — writing tablets, flutes, spinning tops, combs, jewel cases, carved ornaments and images, inlays and veneers — all made their demand upon the wood, the best of which came from the mountains of Cytorus, where the town of Kitros is now situated.

Cabinet-makers used Boxwood for inlays, dentals, ornamentations on cornices of Sheraton furniture in combination with mahogany and rosewood. In the Jacobean period it was used for the crude geometrical designs with Indian and Persian motifs, for lines in combination with ebony, and for marquetry during the Queen Anne and William and Mary periods.

The invention and demand of the power loom brought a demand for shuttles of wood of great strength and elasticity and of exceeding firmness and uniformity of texture, qualities in which Boxwood is preeminent. The timber became of great demand, and during the period of 1860-1880 the imports into England from the Caucasus, Asia Mi-

nor, and Persia, averaged about 6,000 tons annually.

Then came a sharp decline — inroads of substitutes robbed the true Boxwood of its former high place in trade. Such a change was inevitable but it was hastened by the action of the Russian government. It is said that they offered to sell to a Liverpool firm all the Boxwood in the Caucasus for a lump sum of 10,000,000 rubles with the added stipulation that the purchaser was to make in that region a specified number of versts of military roads to the satisfaction of the Russian military engineers. Failing the acceptance of this proposal an export duty of \$15 per ton was imposed on all Boxwood and walnut shipped from the Caucasus. Stimulated by necessity, the shuttle-makers were not long in discovering other and cheaper woods for their needs.

Among these, the flowering dogwood and persimmons of Virginia were found, upon trial, to answer the purpose for most textiles and their exploitation on a commercial scale began in 1871. The import of Boxwood from the Caucasus, Turkey in Asia, and Persia subsequently declined to less than one-tenth of its former volume. True Boxwood has ceased to be a factor in the shuttle business. The two American woods have largely replaced it for that purpose. In parts of the United States the name Boxwood has been applied to dogwood for considerably more than a century and the wood is sometimes sold as American Boxwood.

Box was universally planted in England for purposes of drying linen. Alice Morse Earle writes, "Somewhere in the year 1710 an order was issued for the destruction of quick setted arbors and hedges as they agreed ill with ladies' muslins." In

this country it was extensively used to hold webs of homespun and flax for benefit of sun and dew which explains the many fine clumps found in almost inaccessible mountain sections in recent times.

280×2812121232

VI. A Boxwood Triprych



OXWOOD, close-grained and hard, is uniquely adapted to the production of minute and highly finished carvings. Portrait medallions were made from it by the German and Flemish sculptors

and medalists of the sixteenth century. Many of the microscopic pieces are so similar in style that they are attributed to a single workshop which flourished in the early part of the sixteenth century either in Flanders or possibly in Germany. They comprise rosary beads, which open in halves disclosing scenes of the Passion, and miniature altar-pieces and tabernacles. These objects are in a florid Gothic tsyle, the scenes crowded with figures in high relief, some even in the round, and framed in tracery. Although such sculptures are seldom of Spanish provenience several have historical affiliations with Spain, a result of the union of Spain and the Low Countries under Charles the Fifth.

In the British Museum is a tabernacle, with many ingeniously contrived compartments, which has its original case bearing the arms of Charles the Fifth. It was obtained in Spain during the Peninsular War.

In the Louvre are two decorative initials M and F, which are interpreted to be the initials of Margaret of Austria (aunt of Charles the Fifth) and of Philibert of Savoy.

The Triptych in the collection of the Hispanic Society of America, in New York City, unmistakably Spanish in architecture and in treatment of the scenes, belongs to the School of Aragon and is an unusual instance of the use of Boxwood in Spain. Of exquisite design and craftsmanship the subject centers around the life of Christ — the Annunciation, the Adoration of the Shepherds, the Adoration of the Magi, Christ bearing the Cross, the Crucifixion, Entombment, Resurrection, Ascension and the Pentecost. Figures of the Evangelists, Saints, and Doctors of the Church are used in the niches for colonettes, and through the central panel is the Tree of Jesse, with the Assumption and Coronation of the Virgin above.

The whole is a miracle of delicate workmanship and indeed a superlative triumph in the use of Boxwood for the sculptor's art.

-By permission, from Hispanic Society Handbook



VII. Fragrance



"To live beside a hedge of old-time Boxwood is to be breathing continually the fragrance of Eternity."



Boxwood Garden in the French style

OXWOOD gives off an odd fragrance, if it may be called that, especially in warm, humid days when the sun sifts through its shaggy foliage and steeps the air of the whole garden with that clean, aromatic, bitter-sweet odor — and again in the evening as it rises through the blue, smoky veil of mist.

Some writers say the witchery of this strange, unanalyzable perfume possesses the magic to carry memory back to other days and other years. Gabriel D'Annunzio in his "Virgin of the Rocks" describes an old garden in which his wanderers breathe the

bitter-sweet odor of Box which reconstructs some memory of their far-off childhood.

One writer calls this hypnotic, elusive scent as "cleanly aromatic" while Wilson, less romantic but more descriptive as many think, refers to the fragrance as "foxy."

Dolly Madison preferred above all else in her garden the blending fragrance of the sweetness of roses and the pungency of Box.

"The legions of grass in vain would blot The spicy Box that marks the garden row."



Some of the beautiful boxwood gardens at Ashlawn, a home of James Monroe, near Charlottesville, Va.

Picture courtesy Virginia Conservation Commission

THE BOXWOOD QUESTION BOX

St. Francis Rectory 397 Ferry Street New Haven 13, Connecticut 1111 Dunbar Avenue Tampa 9, Florida

Dear Sir:

Can you supply information on boxwood — a variety possessing the following qualities:

1) evergreen

2) growth no higher than 2'

3) withstand -25° (northern winters)

I would like the name or names of such varieties and also where they may be purchased.

Thank you.

Sincerely, Rev. Edward V. Muka

Dear Mr. Muka:

There are an increasing number of hardy varieties of Boxwood, but not many are of the dwarf type

you desire.

The Korean Box, Buxus microphylla koreana, is said by Wyman (The Arnold Arboretum Garden Book) to be "the hardiest of all the boxwoods" and that "even in New England" it "may have merit." This variety usually reaches a height of no more than 18 inches and is available from most nurseries. The Tingle Nursery Co., Pittsville, Maryland — among others — carries the Arnold Arboretum type.

"Green Pillow," a variety recently offered by Kingsville Nursery, Kingsville, Maryland, while in short supply, is said to do well in Boston. Mr. Henry Hohman of Kingsville Nursery has a vast amount of information concerning Boxwood, and can probably recommend additional hardy dwarf varieties for

your area.

Sincerely yours, Walter S. Flory

Arlington, Virginia

Dear Sirs:

I met a kindly gentleman at Stratford Plantation in Westmoreland County, Virginia the other day who gave me your address after I asked him questions about the boxwood planted there.

My home is in Northeast Missouri in Shelby County to which I plan to return when my time is

up in the Army which is not too long off.

This gentleman said that you could give me the address of a place in Detroit, Michigan where I could buy some boxwood that would grow in northeast Missouri.

I know very little about boxwood, but I want to learn more. If you could help me in any way I would sincerely appreciate it.

Sincerely, Charles E. Baker

Dear Mr. Baker:

Your recent inquiry to the Boxwood Bulletin has

been referred to me for attention.

At Stratford Plantation you were probably told about the Inglis variety of Boxwood, a new hardy type recently developed in Michigan, and available from the Cottage Gardens in Lansing, or from the Lott Nursery at Three Rivers, Michigan.

Recent issues of The Bulletin have described

other cold hardy Box types.

Sincerely, Walter S. Flory Gentlemen:

We have Korean Boxwood planted along our walk. Up until recently it was doing very well and now it seems that about 8 of our 50 plants are going to die. I have taken a plant to various Nurseries but no one seems to be able to tell me what the trouble is.

What is puzzling is that the boxood is planted in rows about 1¼ foot apart, one plant in the middle will die while the ones on the right and left of it are doing exceptionally well. I water and fertilize them the same way. Some one has told me that a dog watering a plant could cause it to die, is this possible?

I would greatly appreciate your sending me information on the care of boxwood Korean and add my name to your mailing list to receive your bulle-

Thanking you in advance, I am Very truly yours, (Mrs.) T. Raggi

Dear Mrs. Raggi:

Your inquiry regarding the condition of some of your Korean Box has been sent to me for attention.

Without having full knowledge of your situation, we can raise questions as to whether (1) all your plants are well drained (any rocks under certain plants, etc.); (2) or if it is possible that some have been over-fertilized and perhaps "burned" by excess nitrogen. There is the possibility which you raise, of some plants having been damaged by dogs.

An additional possibility may be the presence of nematodes, perhaps concentrated at certain points. If you have not checked for nematode damage, perhaps this should be done. If you need help on this you might contact the Department of Ornamental Horticulture, University of Florida, Gainesville for their advice on this point.

Sincerely yours, Walter S. Flory

2602 Parkside Drive Flint, Michigan

Dear Sir

Could you please send your bulletin on boxwood. Do you have information on winter care of boxwood and a list of the varieties that could be grown in this area?

Yours truly, Rose Goodstein (Mrs. S. A. Goodstein)

Dear Mrs. Goodstein:

Your inquiry on Boxwood varieties for your area has been sent to me for attention.

Inglis Boxwood, developed in Michigan, should certainly be considered first. This is available from Cottage Gardens in Lansing, among other places. Korean Boxwood, widely available, is a hardy dwarf type. Wintergreen is a new hardy variety offered by Scarff Nurseries of New Carlisle, Ohio, while Northern Find is a hardy type recently offered by Woodland Nurseries, Cooksville, Ontario. Vardar Valley and other new hardy varieties have been introduced by Kingsville Nursery, Kingsville, Maryland. This list is not complete but does include many of the best cold hardy boxwood types.

Sincerely yours, Walter S. Flory

Nematodes Serious Problem to Growers of Ornamentals

W. R. JENKINS, C. M. HEALD, JR.,

AND W. W. OSBORNE*

(Excerpts given here are from the original article printed in the July-August, 1963 edition of the New Jersey Agriculture.)

A series of studies has been undertaken at Rutgers to develop a clear picture of the role and extent of nematodes on nursery crops and to suggest to commercial growers a means for controlling these pests.

The first step was to determine what nematodes were present, to what extent they parasitized plants, and a general pattern of their distribution. During the past seven years, several thousand samples from all the nurseries (New Jersey) and most of the different crop plants in these nurseries have been collected and examined for the presence of plant-parasitic nematodes.

All but 1/10 of 1% of these samples contained plant-parasitic nematodes. In the others, the number of plant parasites ranged from 1 to 12 species. In all, some 15 genera containing 45 distinct species were identified during these continuing surveys.

From the results, it was obvious that multiple and diverse nematode problems face nurserymen. A logical sequence of steps has been undertaken to determine the role of these nematodes in the incidence of plant disease. Inoculation tests in the greenhouse have been made with several nematodes.

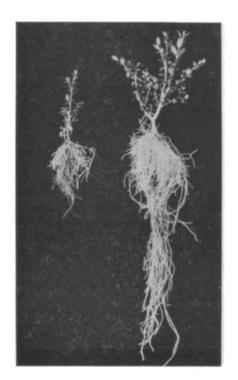
* Research Specialist, Department of Entomology and Economic Zoology, Rutgers University; Extension Specialist, Texas A & M, and Associate Professor, Department of Plant Pathology, V.P.I. Particularly investigated have been the two genera *Meloidogne* and *Pratylenchus*, although other experiments have involved *Criconemoides*, *Trichodorus*, and *Tylenchorhynchus*. It has been shown that *Pratylenchus vulnus* is a pathogen to boxwood and red barberry.

To date, the only commercially available nematocide effective in our soils an reducing the number of nematodes about the roots of the established plants has been 1,2-dibromo-3-chloropropane (DB-CP). This material, at rates from 17 to 25 lbs. an acre, has been found effective for control of *Pratylenchus*, *Trichodorus*, *Tylenchorhynchus*, and *Meloidogyne* on numerous plants.

The best results have been with the use of DBCP on boxwood in which 12.5 lbs. per acre were used, followed in 30 days by a second application at the same rate. In one experiment, 99% control was effected after 60 days and in another experiment, 100% control was observed after 90 days.

At the present time, we suggest to the growers a program which would protect their plants throughout their cultural period from attacks by nematodes. Methyl bromide, chloropicrin, or steam should be used in propagating beds and seedbeds. Plants removed from these beds should then go to soil treats with DD or EDB and if a nematode infestation should appear, subsequent treatment of the established plants with DBCP at rates of 12.5 to 25 lbs. per acre is recommended.

Much additional work is needed in this area and the continuing interest of members of the nursery industry guarantees that it will be done.



The effects of the lesion nematode, Pratylenchus vulnus, on boxwood, Buxus sempervirens. The plant on the left was infected while the one on the right was not.

Blandy Experimental Farm

Past History

Having accepted the gift of Blandy Farm the University of Virginia set about fulfilling the spirit as well as the terms of Mr. Blandy's will.

The Blandy Experimental Farm Committee, chaired by Dr. Reynolds, determined that Mr. Blandy would have wanted advance research conducted in the field of heredity. Answering the questions concerning the reasons for newly produced hybrids seemed the kind of challenge Mr. Blandy would have tackled. Through this committee Dr. Orland Emile White — the Curator of Plants at the Brooklyn Botanic Garden — was brought to Blandy as its' first director.

Dr. White had developed an interest in genetics early in life and while still in college was teaching genetics to other undergraduate students. During World War I he trained Southern farmers to raise castor beans for their oil when supplies from India were no longer available. This oil was used in the engines of our combat planes and was badly needed for regular lubrication. He searched the world for rare plants and visited the Amazon jungles and many other parts of South America. Gaining tremendous knowledge he was asked to give many lectures and described a collection of his specimens of the Amazon for the Encyclopedia Britannica.

Dr. White served dually as Director of Blandy and Professor of Agricultural Biology at the University from 1927 until his retirement in 1955. During his tenure Dr. White initiated and stabilized two outstanding programs: (1) A research program for advanced students in genetics; and (2) a large and logically arranged and well landscaped collection of woody plants. Five research fellowships — for advanced graduate work in plant science, especially genetics, cytology and related subjects — were made available. A few students worked at Blandy while holding other grants or scholarships. As a usual thing these students each year spent one term in residence at the University at Charlottesville and then spent the remaining 6 to 8 months of the year at Blandy Farm engaged chiefly in research work in connection with their graduate degree requirements.

Their life at Blandy was communal. They slept, ate, studied and did their laboratory experiments all in a ten room structure called "The Quarters" because it was thought it had been used formerly to house slaves. Each was assigned his household chores for the week and learned if not to like it to become proficient at cooking, bed-making and the endless dishwashing.

In addition all students participated in weekly seminars, studied the native flora and became familiar with good agricultural and farming organization including economic aspects of the crops and animals involved.

Field trips made with Dr. White not only taught the students to recognize the native Virginia plants but enabled them to bring back to Blandy many beautiful specimens which formed the core of the present Orland E. White Arboretum. (One of these early students was Dr. Walter Flory who later became Curator of the Arboretum and co-founder of the American Boxwood Society.) Later, trips through the southeastern and southwestern states added hundreds of species from those areas. Many of these plants have survived and are now over thirty years old. Plants from warmer temperate and subtropical parts of the earth were brought to Blandy without much success except for two miniature palms and some twenty species of bamboo which have literally flourished.

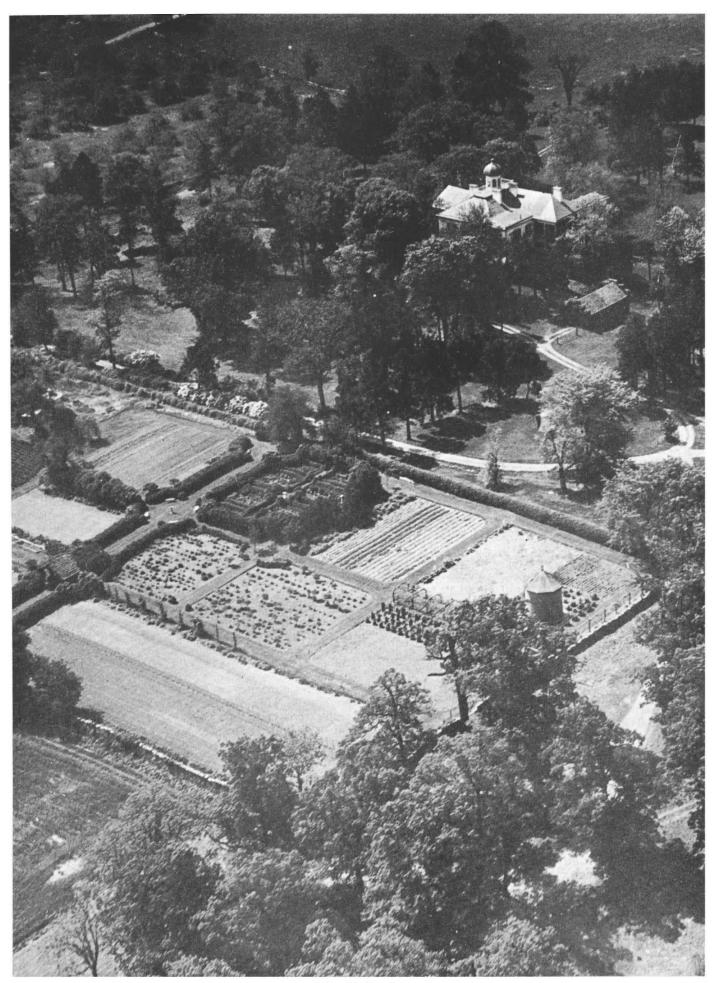
In the mid-thirties a number of stone fences were removed from around the fields near the center of the farm and one hundred and thirty acres were thereby thrown into one area to be developed into an arboretum. In the fall and winter of 1936-37 Dr. A. V. Beatty, with a group of workmen, put into permanent position the older background plants using the German system of classification whereby members of each botanical family are grouped together.

When Blandy endowment funds became available, upon the death of Mrs. Blandy in 1939, expansion was made in area, with some terracing and formal plant arrangement, plants were developed in nursery rows and their numbers increased. Well over 4,000 plant accessions were recorded during the years 1940, 1941, and 1942. In succeeding years many plants were added from accessions secured by graduate students in connection with their research problems. This has been especially true with the collections of boxwood, of the pea family, of American roses, of barberries and their allies, of conifers, and of the ash or olive family.

At the time of Dr. White's retirement, the President and Board of Visitors of the University officially designated the Blandy Farm Arboretum as the Orland E. White Arboretum and named Dr. Walter S. Flory as its' Curator.

Dr. Flory had been in active charge of this plant collection from February 1, 1947. This new title of Curator was in addition to those previously held.

Dr. White laid a solid foundation for Blandy Farm by gaining not only a material collection of plants for its arboretum but by industriously training his students in such a way that they could in their turn return to guide and protect Blandy's beauty and purpose.



The Tuleyries

The Tuleyries

By ALICE B. WILSON

The first record of Joseph Tuley's presence in Frederick County, Virginia, appears in a lease dated November 26, 1793, from Colonel Nathaniel Burwell for a certain parcel of land for a term of 98 years.

Joseph Tuley was born in New Jersey in 1763. He married Anne Brownley in 1787. She was the daughter of John Brownley who moved from New Jersey to the Shenandoah Valley and lived near Greenway Court. The famous post at White Post directs one to Greenway Court.

In 1810 the Tuley's moved to the present site of The Tuleyries. The house in which they lived at that time was called Tanner's Retreat. Mr. Joseph Tuley was a tanner in Millwood, Va., where his son Joseph, Jr. was born in 1796.

Mr. Joseph Tuley, Sr. and his wife died in 1825. They were buried in the Old Chapel cemetery near Millwood. Joseph Tuley, Jr. inherited the land on which The Tuleyries now stands. Like his father, he was very successful in the tanning business. In 1826 he attained the rank of Lieutenant Colonel in the 122nd Regiment of the Virginia Militia, and from that time until his death he was called Colonel Tuley.

In 1830 Colonel Tuley married the widow of Dr. James Jackson, nee Mary Wheeler Edelin, a lady of great beauty and charm. It was about this time that Colonel Tuley began building the mansion known today as The Tuleyries. The architect is unknown, but since the Tuleys traveled extensively in Europe it is thought that they might have directed that the four 28 foot Corinthian columns of the portico be copied from the Tuleries at Versailles, and the stable and slave quarters be in Dutch style.

The old well at the rear of The Tuleyries was referred to in an 1844 agricultural journal. The well had been sunk to a depth of 565 feet through blue limestone, many colors of sandstone, and finally through gray limestone of the hardest quality. The article also refers to the twelve miles of stone fencing on the property at that time, and that more was to be constructed. These are slave-built dry stone walls. They are unusually high in certain areas, especially where the deer park existed.

Avenues of cedars lead from the forge to the smokehouse, and from the house to the garden. The shrubs and trees of many varieties on the extensive grounds are very beautiful. The garden is enclosed on three sides by stone walls.

When Colonel Tuley died in 1860, his wife was granted administration of the estate then said to have consisted of 845 acres. During the Civil War Mrs. Tuley and other heirs suffered great losses. Colonel Tuley's niece, Belinda Frances Wright married Colonel Upton Boyce, a successful lawyer of St. Louis. With the help of her husband, she was able to buy shares of The Tuleyries, thus keeping the property in possession of the family. Colonel and Mrs. Boyce came to live at The Tuleyries in 1866. The railroad station and the village of Boyce, Va., were named for them. Colonel Boyce was instrumental in raising funds to continue the building of the Shenandoah Valley Railroad Company about 1880. Prosperity reigned for some time during the regime of the Boyces. However, after the death of Mrs. Boyce in 1902 and several unfortunate business ventures, Colonel Boyce sold The Tuleyries to Graham F. Blandy of New York.

With a fortune from the stock market Graham Blandy by 1905 had acquired The Tuleyries and adjacent lands totaling over 900 acres. Mr. Blandy employed Mantle Fielding, an architect from Philadelphia, to restore and improve the mansion. The greatest care was taken to preserve the original beauty of the place. Mosey, a former slave, worked for years repairing the stone walls.

In 1908 Mr. Blandy married my older sister, Georgette. Two months after the wedding I boarded a night train in New York, and was on my way to visit The Tuleyries. The following morning at Shenandoah Junction I changed to another train for Boyce, Va. The last three miles of the trip were made in a horse-drawn contraption of The Tuleyries, the place with which I immediately fell in love. I had never seen anything like it before! The house, the grounds, and all the buildings were enchanting. I loved the grass driveways, the orchards, and the open fields to run across. Going to the old icehouse to get ice from under the saw dust was an adventure, or seeing the incubated chickens burst out of their shells. I remember the moonlight on the marble floored patico at night, the summerhouse in the garden covered with Hiawatha roses, and the masses of flowers. My sister divided a part of the garden into twelve flower beds, around which she planted boxwood clippings. This boxwood has now grown so large that it almost covers the paths separating the flower beds. The boxwood borders have now grown to a height of about twelve feet. The weeping box at the front entrance is a very fine specimen.

When Mr. Blandy's will was probated, after his death in 1926, it was learned that he had devised about 700 acres of The Tuleyries to the University of Virginia, to be used as an agricultural college with the stiplation that it be named for him. The Blandy Experimental Farm of the University of Virginia is now internationally known. It is the headquarters of the American Boxwood Society.

Mrs. Graham Blandy, my sister, inherited the

house, the garden, various buildings, and about 200 acres of The Tuleyries. Subsequently, she married Colonel E. L. Bull, and left everything to him at her death. In Colonel Bull's will he devised this inheritance in equal parts to my other sister, Mrs. Clarence C. Pell, and me. Colonel and Mrs. Bull both died in 1939, only three months apart. They, as well as the Tuleys, are buried in the Old Chapel cemetery.

My sister, Mrs. Pell, and I managed the farm together for a short time after which she sold her share to me. My husband, Orme Wilson, and I are the present owners of The Tuleyries.

THE AMERICAN BOXWOOD SOCIETY PROGRAM

Annual Meeting — May 13, 1964

at Blandy Experimental Farm — near Boyce, Virginia

10:30 A.M. (E.S.T.) Registration begins.

10 - 11:45 A.M. Observation of Boxwood:

Specimen plants Herbarium specimens Literature, etc.

Tours:

Arboretum Greenhouses Radiation facility, etc.

Renew friendships, and exchange boxwood experiences.

12 Noon Lunch

(NOTICE: Please write Box 85, Boyce, Virginia, reserving a box lunch - again featuring Kentucky fried chicken. The luncheons will be \$1.50 each.)

1:30 P.M. (E.S.T.) The Formal Program
Read Admiral Neill Phillips, U. S. N. (Ret.),
"Heronwood", Upperville, Virginia, presiding.

- Business Period
 Report of officers
 Election of Directors and Officers
 Other business
- 2. Dr. Francis de Vos, U. S. National Arboretum "Plant Exploration"
- 3. Dr. Conrad B. Link, University of Maryland "Nutrition of Boxwoods"
- 4. Dr. Claude-Fordyce, Jr., Virginia Polytechnic Institute "Boxwood Diseases and Nematodes"
- 5. Mrs. David G. F. Holmes, Colonial Williamsburg "Boxwood in Colonial Williamsburg"
- 6. Adjournment (about 3:15 P.M.)
- 7. Visit to the boxwood gardens at "Tuleyries", the home of Mr. and Mrs. Orme Wilson.

All persons interested in any phase of boxwood are invited to this meeting. Members of the Society will welcome all interested non-members as guests, and as prospective members.

Boyce, Virginia, will still be on Eastern Standard Time on May 13.

The Blandy Experimental Farm is on U. S. Route 50, near Boyce, Virginia, and ten miles east of Winchester, Virginia, city limits. Entrance will be marked.

Please make reservations for box lunches (to Box 85, Boyce, Va.) no later than Monday, May 11.

