

The

JANUARY 1962

Boxwood Bulletin

A QUARTERLY DEVOTED TO MAN'S OLDEST GARDEN ORNAMENTAL



Edited Under The Direction Of

THE AMERICAN BOXWOOD SOCIETY

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Please address all communications, including manuscripts and change of address to the Boxwood Bulletin, Boyce, Va.

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

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The Boxwood Bulletin

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FRONT COVER

The cover picture, photographed and prepared by Dr. R. O. Flagg of the Blandy Experimental Farm, illustrates the leaf types of three very different kinds of Box. Left: Buxus sempervirens rosmarinifolia (Madiot) Baill.; a very narrow leaved form of the species widely scattered through southern Europe, north Africa and western Asia. Center: Buxus balearica Lam., from the Balearic Islands, Spain and Sardinia; a tree box growing to 60 feet in height, in the warm climates to which it is adapted its leaves become almost two inches in length. Right: Buxus microphylla koreana Nakai; a hardy, low-growing, spreading box seldom attaining two feet in height. As its name suggests, it has small leaves and comes from Korea. All are here reproduced at natural size.

We Apologize

We apologize for the delay in issue of this January number of The Bulletin. While this has been caused by several factors essentially beyond our control, every effort will be made to get future issues out in the month of designation.

J. Churchill Newcomb

It is with regret that the tragic and untimely death must be reported of the President of our Society. J. Churchill Newcomb was really the Founder of The American Boxwood Society. It was his interest in boxwood in all its aspects which furnished the stimulus, the spark, that brought together those interested in this plant. The results of his facile and fluent pen are well apparent in the first issue of The Boxwood Bulletin. They are further seen in connection with the editing of several articles in the present issue. His knowledge of journalism and of journal composition and organization were immense.

The passing of this enthusiastic, charming and able man marks a loss in many fields. The American Boxwood Society must, certainly, record the "loss of a giant" from its ranks.

Boxwood Garden Series

The suggestion has been received that each issue of The Bulletin should carry at least one article dealing with a Boxwood Garden, or a Boxwood Planting. It has been estimated that there are probably at least 450 rather notable such collections. In addition there are many smaller, or newer, or otherwise different boxwood collections which, while often quite modest, may be of even more interest to our readers — for one cause or another.

Some simple arithmetic indicates that it will take "several life-times" to adequately cover the descriptions of the plantings in which we would all be interested. At least this is true if only one collection is described in each issue.

A great many readers of The Bulletin doubtless know one or more boxwood collections intimately and in some detail. Descriptions of these, accompanied by illustrations if possible, would be welcomed by The Bulletin. In this way the knowledge of one person could be shared by many.

There are probably other members of the Society that would be interested in developing a detailed knowledge of some boxwood planting in their area. Perhaps such members would like to plan an article for the Bulletin, dealing with such a planting or collection, as they develop their knowledge of it.

Do you know of an outstanding, or an unusual, or an otherwise interesting garden or collection of boxwood? Would you be willing to describe it? If so, please contact The Boxwood Bulletin, Box 85, Boyce, Virginia.

Editorial Help Needed

There is a great deal of detail involved in assembling a small journal such as our Bulletin. Even after the articles are prepared and at hand, they must be edited to a somewhat similar style. Two proof-readings follow. Composition of the issue must be planned. "Filler" items need to be arranged to make the pages balance. There are countless other items involved.

While there is some drudgery involved, the editing of any paper is also of considerable interest to many people. There is something stimulating, sometimes almost inspiring, in writing, organizing, putting ideas together, etc. — and then to see if the end result appears good (we hope), bad or indifferent.

There are doubtless many members of the Society, within easy driving distance of Boyce, that would be interested in such editorial work. Would you like to help with the April and subsequent issues? If so, please drop a card to The Boxwood Bulletin, Box 85, Boyce, Virginia, or call Boyce 58 indicating your interest. A mutually agreeable schedule will be arranged.

Aspiring, or even willing, editors "Front and Center." Your help is needed. The same may be said, of course, of authors. Before the editors can work they need your boxwood stories, the accounts of your experiences, your description — and pictures — of some interesting or notable boxwood plant or garden, etc. Don't be bashful! We are all amateurs together. It is the combining of our collective experiences and information on boxwood which will make our Bulletin an interesting success.

1962 Annual Meeting

Tuesday, May 1, 1962 has been designated as the date for the 1962 Annual Meeting of The American Boxwood Society. This meeting will be held at the Blandy Experimental Farm, Boyce, Virginia. The program will follow the same general pattern as the 1961 meeting.

Members will gather at 10 A.M. The morning will be devoted to observation of plantings, exhibits, herbarium specimens and literature of boxwood. Arboretum plantings may be examined; the radiation facility will be open. Perhaps best of all, this will be a time when friendships can be renewed and personal observations on plants and plantings can be exchanged.

A box luncheon will be available at noon for all who request and reserve a lunch. Last year Kentucky fried chicken was the feature, and the luncheon cost was \$1.50 each. Definite plans have yet to be made for this year's luncheon, but the cost will be approximately the same as in 1961.

The formal program will begin about 1:30 P.M. There will be addresses by several authorities of wide experience with boxwood. This part of the program will be followed by the business period, at which time officers and directors will be elected, and other business will be attended to.

Every effort will be made to get the April issue of the Boxwood Bulletin to the membership prior to May 1. In that case a detailed program will be at hand prior to the annual meeting. If the April Bulletin does not reach the membership prior to May 1,

(Continued on Page 21)

SOME "WELFARE" PROBLEMS OF BOXWOOD

By FREEMAN A. WEISS

Ardent readers of the first issue of *The Boxwood Bulletin* were duly impressed by the "box score" (page 15), which presented the results of a reader-interest survey in the yet-to-be Society's questionnaire, one year ago, among prospective members. The highest scoring interests were: Care of Boxwoods, 20 per cent; Diseases of Boxwood, 20 per cent.

Quite properly then, the first choice of subject for a combination popular and technical discussion in the new *Bulletin* was the care of boxwoods; and this was ably presented by our distinguished Director, and V.P.I. Horticulturist Emeritus, A. G. Smith, Jr. As we know, his discussion appeared under the title "Boxwood in Virginia" and it is, indeed, there that boxwoods have flourished long and well. Some possible exceptions to that fortunate status were mentioned; also, as features of basic and routine care, some ways of preventing or overcoming serious defections are outlined. With most of these conclusions all can agree, even those whose boxwood interests began (but did not linger there) in situations where that desired state of perfect health was variously threatened and where more effective ways of overcoming difficulties were wanted:

Experience of this kind, not only my own but also of some other boxwood lovers, led us to become side-line specialists in the causes of health failure in boxwoods, though basically we are on the same ground that Professor Smith so well describes. The plant itself, even as the host which may support its enemies which constitute our scientific interests always holds the cultural priority.

The fact that health failures in boxwoods may occur even when the usual recommendations for proper care are followed, or more likely when some are missed, though one isn't sure just where, leads to the second finding of the questionnaire, that 20 per cent of the respondents want further information on boxwood diseases. Naturally this includes all the potential causes of health failure, whether they are microorganisms, those "invisibles," insect pests that we can see, or those underground marauders such as nematodes. Also, of course, those adverse variations in physiological response to factors, that are difficult to identify or correct by present understanding.

Even in the many treatises on the care and feeding of infants, there are whole chapters on the kinds of ailments that infants may have. Like humans, boxwoods should survive to a respectable old age, to succeed in which they may have to avoid or overcome ailments such as they never encountered in youth. Enemies of boxwoods is still a live subject.

As this may continue for an indefinite time, just as we expect other boxwood interests to keep a lustrous future for our Society, no attempt will be made here to cover the subject of diseases of boxwoods in either detail or finality. In the first place Professor Smith's article, together with presenting essential care requirements for boxwoods, also describes the effects of their most prevalent enemies and ways of preventing their serious damage. Likewise, the readily available *Farmers Bulletin 1855* of the U. S. Department of Agriculture covers this subject as it was known until quite recently. (Question: does designating this bulletin as adapted to

farmers' needs indicate what they may be expected to grow when present excesses in corn and cotton production are overcome?)

In a subrosa suggestion from the present author, our Society directors and perhaps the Treasurer might acquire, by purchase if necessary, a sufficient supply of F.B. 1855 to send a copy to all present members, or, at least, to all new members as they join.

For those desiring more detailed information on boxwood diseases (for instance those of fungus origin) one can find a good deal of help in Cynthia Westcott's *Plant Disease Handbook*, first published by the D. Van Nostrand Company in 1950, revised and greatly extended in 1960. Also in *Diseases and Pests of Ornamental Plants* by P. P. Pirone, B. O. Dodge, and H. W. Rickett (3rd edition) published by the Ronald Press in 1960. General information on the pests of boxwoods, especially insects and mites, with some on nematodes, is available in Dr. Westcott's *The Gardener's Bug Book* (2nd edition) American Garden Guild, 1956 and in the 3rd edition of the Pirone-Dodge-Rickett book cited above.

Private horticultural libraries are likely to contain at least one of the editions of these helpful garden manuals. All should be available, or soon become so, in our Society's library, hopefully to be established in its headquarters at the Blandy Experimental Farm. It can at least be mentioned here, though further details will await a later issue of the *Bulletin*, that, plan to promote the issuance of a comprehensive and up-to-date Boxwood Handbook and that I have made arrangements to have it include the latest available information on boxwood enemies and their control.

In order to keep this use of good space in *The Boxwood Bulletin* from being only a rehash of old garden lore, like conversation over a garden fence, some details are being added on the subject of its title that are not yet to be found in the present garden handbooks.

One of these relates to nematodes as potential and perhaps disturbingly frequent pests of boxwoods. By earlier gardeners in this country the importance of nematodes — those minute, barely visible, unsegmented roundworms or threadworms, usually in gardens found underground — was not recognized as a serious garden problem. True it was known that one kind of nematode, now known to have many varieties differing in host preference and geographic distribution, caused the deformity of plant roots known as root-knot, but this was most familiar as a pest of tomatoes and other herbaceous garden plants, most prevalent in the Southern States. Boxwood culturists have not found anything on roots of their woody plants that suggested root-knot nematodes either here or abroad. Although Nematology — the special science of these roundworms, whether as parasites of animals or plants, or just living in nature—began in Europe, its development as an important economic problem in all phases of agriculture was, to a large extent, promoted in this country notably by two eminent investigators (and scholars!) in our Department of Agriculture, namely Nathan Cobb and Gotthold Steiner. Many of the present authorities in this field were students of one or both.

It was Dr. Steiner, together with his one-time colleague in the U.S.D.A., Dr. B. O. Dodge, who first

recognized nematodes as potential pests of boxwoods. Two of Steiner's students or proteges were A. C. Tarjan and A. Mortan Golden, whose graduate studies in this field were carried out at the University of Maryland. At first only the ubiquitous and nearly omnivorous root parasite, known as *Pratylenchus* was recognized in this connection. First mention of it as a boxwood pest appeared in U. S. Bulletin 1855 and in the Dodge-Rickett and Westcott books cited above. Dr. Golden was the first to recognize a boxwood-infesting nematode as a distinct species, which he described as *Rotylenchus boxophilus*, which means a *Rotylenchus* or a variant of *Helicotylenchus* which loves boxwoods. He showed that its "love" for boxwood roots is a significant factor in a complex of chlorosis, bronzing, defoliation, dieback, and ultimate death of affected plants.

Serious students of boxwood ailments should read Golden's description of this pest in Bulletin A-85 of the University of Maryland Agricultural Experiment Station. Those interested more in a quick suggestion for control of nematode pests of boxwoods, other than discarding plants showing symptoms such as those mentioned, and changing the site or the soil, should request Plant Path. Mimeo. No. 28 from the University of Maryland, College Park, Md. It is entitled "How to apply nematocides to shrubs" and was authored by J. B. Wilson, a charter member of the American Boxwood Society.

A second recent discovery relating to the subject of keeping boxwoods healthy is a report by Dr. Frank A. Haasis of the North Carolina State College, Raleigh, N. C., entitled "*Phytophthora parasitica*, the cause of root rot, canker, and blight of boxwood." Published as a research note in the plant disease journal *Phytopathology* (51:734. 1961), it can probably be obtained from Dr. Haasis as a reprint, or consulted in the Society library at the Blandy Farm. This *Phytophthora* is a veteran in the root rot business, affecting many kinds of plants, but this is the first mention of it on boxwoods. It is a serious parasite of all cultivated citrus species, causing foot rot ("mal di gomma") and brown rot of fruit of lemons, oranges, and grapefruit. It is an aggressive parasite; it attacks plants because it likes to feed on them, not just because their care is neglected. One of its forms causes a serious and widespread disease of tobacco. An eminent plant pathologist once advised tobacco growers, if they liked to chew tobacco, not to spit in the beds. He was speaking of tobacco mosaic, a virus disease, but perhaps his warning emphasizes a need not to neglect plant diseases anywhere. As for the *Phytophthora* that attacks tobacco the only promising control yet devised is the quest, and some success, in producing resistant forms of the host.

Charter Members

Names of the following charter members of the American Boxwood Society to our regret were omitted inadvertently from an edited and corrected list as published in the October, 1961, issue of The Bulletin:

Mrs. Robert Bierly, 6411 Adelphi Road, University Park, Md.
 Mr. George Gilmer, Court House Square, Charlottesville, Va.
 Mr. Charles W. McComb, Department of Entomology, University of Maryland, College Park, Md.
 Mr. Joseph W. Palmer, Lantern Hill, Box 225, Route 2, Vienna, Va.
 Mrs. Frederick F. Sturm, Questover, Berryville, Va.

The Boxwood Question Box

While in Williamsburg, Va., recently, we purchased a dwarf boxwood in a small pot, grown at Berkeley Plantation. Would you please send me information about the care and cultivation of this plant. I would also like to know if this plant can be kept in a pot or planter for a couple of years.

Mrs. J. Barsman
 Rockville, Md.

Ans. With proper soil, drainage, water, and care your dwarf boxwood should grow well in a pot for a considerable period of time. As it grows you will occasionally need to shift into the next larger size of pot in order to have it appear as good as possible. A few tiny pinches of a complete fertilizer, such as Vogoro, might be applied a few times a year to the soil in the pot, to advantage. I should think that usually you would not encounter red spider, leaf miner, or any of the other insects which sometimes plague boxwood, as long as you keep your plant in the house as I gather from your letter is the case. W.S.F.

Is it possible for me to get a list of very old trees and plants of the species and varieties of *Buxus* that have been found in this country, with sizes and age of the material?

Mr. Hart M. Dymond, Sr.
 Chambersburg, Pa.

Ans. We do not have a list of very old plants of *Buxus* which have been found in this country, with size and age of material, as inquired about in your letter. If a source of such material comes to mind or to hand, I will get in touch with you concerning this. W.S.F.

We are having lots of trouble here in Birmingham with Boxwoods. As the plants grow older, some of the limbs have a tendency to droop and leave large holes. No disease such as dieback is in evidence. Apparently the limbs are not strong enough to support the leaves.

I am retiring from active landscape work and am planning to keep pleasantly occupied by confining all my efforts to boxwoods and azaleas. Birmingham has a large number of boxwoods; and lots of them are in bad condition. No one here is qualified to render much service.

At this time I would like to find something for canker that would take the place of Bordeaux. This, when used, discolors the foliage.

You may be interested in the following tentative fertilizer and spray program for boxwoods under Birmingham conditions.

[Fertilizer]

- (1) Use a light application of ground limestone every 24 to 36 months.
- (2) Fertilize in late winter with the following mixture, using 1 gallon of material to each foot of plant in height:
 - Peat (Canadian) 1 bushel
 - Cotton Seed Meal 5 pounds
 - Ammonium Sulfate 1 pound
 - Iron Sulfate 4 ounces.

[Spray]

- (1) For canker, blight and leaf spot use 3-3-50 Bordeaux in Feb., April, May, and November.

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Figure 1. A row of "English" boxwood that was protected by burlap frames during the winter of 1961. Figure 2. An adjacent row of "English" boxwood that was left unprotected. Note that these plants have been forced open by the heavy snows. Figure 3. Burlap covered frames used at Wye Plantation to protect the boxwood shown in Figure 1. Figure 4. A close-up of the interior of the plants shown in Figure 2. The pointer indicates a splitting of the bark.

The Value of Winter Protection in Maryland

By J. B. WILSON

One of the limiting factors involved in the culture of boxwood in Maryland and areas to the north is winter injury. It can be either direct or indirect in nature.

Direct winter injury may result from scorching of the foliage (desiccation) of exposed plantings during periods when the soil is frozen, from mechanical breakage by a heavy burden of snow, or from the alternate freezing and thawing of snow accumulated beneath the foliage. This alternate freezing and thawing injures the cambium and causes a splitting of the bark (Figure 4). Splitting may result in a girdling or part girdling of the branches since there is a separation of the bark from the wood in the affected area.

Direct injury also may result from heavy snows that weigh down the branches thereby exposing interior branches to winter sunscald (Figure 2). When the interior branches are exposed to the sun during the day, the cambial regions become active. However, as the sun sets in the evening, there is a sudden drop in temperature resulting in the death of these active regions.

Indirect Damage

The effects of winter injury are often delayed until late in the following season when there is a sudden wilting and dying of the terminal areas of the plant. This condition is very prevalent during hot, dry periods such as we experienced during the past summer. When the injury is not too severe or when the summer is not dry, these areas may callus over and the branches recover.

Even when plants are not killed and when they apparently recover from winter injury, they are weakened and are thereby more susceptible to other problems such as drought, nematodes, insects or fungi. Also plants may not die outright but be deformed by severe pruning of injured branches.

Winter Protection

Valuable boxwood plants must be protected from winter damage. There are various methods by which protection can be provided. Wind screens or anti-transpirants may be used to protect exposed plants from drying winds. Such screens may be constructed of any material that will remain in place and will not disintegrate. Cornstalks that are held together with wire and fastened to a fence or stakes make a good screen. Straw mats, which can be constructed or purchased, make very good screens. An advantage of this type screen is that it may be rolled up and stored when not in use. Burlap tacked to a frame makes a good screen when anchored with stakes. Sheet plastic or bamboo may also be used.

Frames should be constructed around valuable plants whenever snow damage is likely to occur. Lath or other materials may be used for framing. A single layer of burlap makes a good covering for such a frame. The top as well as the sides must be covered. The frame should be constructed large enough to provide several inches of air space between the burlap and the branches. Portable frames of this type were used at "Wye Plantation" on the

Eastern Shore and saved many plants from injury during the severe winters of 1960 and 1961 (Figures 1 and 3).

Upright varieties or compact plants are less likely to be forced open by snow than are the spreading types. Chicken wire pulled snugly around plants which have a tendency to spread open will prevent them from opening up and exposure of their center branches.

Wilt-Pruf, an anti-transpirant, has been used with success at "The Mill" in Harford County to prevent wind burning, but was unsuccessful in preventing snow damage in 1961.

Where it is impossible to protect plants with frames, snow accumulation and its resulting damage may be prevented or reduced by sweeping the snow from the plants with a broom. Care must be used, however, so as not to injure the foliage. If the snow is not too heavy, it may be removed from the plants by placing the broom under the branches and shaking them gently.

Of course, the best remedy for this problem is to select or develop boxwood varieties which are winter hardy and which have the structure to withstand snow injury, but with our established plantings we must use other methods, such as those mentioned above, to prevent winter injury.

In addition to these protective measures, winter injury can be reduced by keeping the boxwood in a vigorous growing condition. Plants should be allowed to "harden-off" before cold weather arrives, that is, they should not be fertilized after midsummer and there should be a gradual reduction in watering as the end of the growing season approaches.

1962 ANNUAL MEETING

(Continued from Page 17)

please take this notice as THE OFFICIAL CALL for the 1962 ANNUAL MEETING.

A good representation of the membership is expected at the annual meeting on May 1. In order that the event may be planned as efficiently as possible it will be appreciated if each person who plans to attend will SEND A CARD to The American Boxwood Society, Box 85, Boyce, Virginia indicating (1) Intent of being present, and (2) Requesting reservation of a box lunch, if desired.

Guests of members will be welcome, as will all persons interested in any phase of boxwood culture.

Notice!

American Boxwood Society

ANNUAL MEETING

May 1, 1962

to be held at

The Blandy Experimental Farm

near Boyce, Va.

(see page 19 for more details)

Boxwood Fertilization At Colonial Williamsburg

By A. R. EATON

The first boxwood plants, it is reasonable to assume, were brought to this country from England as early as 300 years ago. Not until 1726, however, is boxwood specifically mentioned in the writings of Williamsburg gardeners. This mention is by John Custis of Williamsburg in a letter to his friend Peter Collinson in England.

Today about three miles of boxwood hedges and numerous informal plantings of this hardy and attractive plant are used throughout the restored gardens of Colonial Williamsburg. The restoration organization's boxwood fertilization program contributes to the health and long life of these plants.

The aim of any fertilization program is to maintain a healthy plant with normal yearly growth and a good, deep root system. We have tried just about all the materials and methods we know of with varying results. Some of our boxwood plantings are fertilized two or three times a year; others receive fertilization once in a two or three year period, and some at possibly five-year intervals. Detailed records listing all pertinent data, are kept for each feeding.

Fertilization during the first year is most important. At planting time a generous coat of bonemeal is placed in the planting hole and worked into the bottom of the hole. When the planting hole is about half filled with good soil, a light sprinkling of 6-10-4 broad leaved evergreen commercial fertilizer is applied. New plants are mulched with compost, ground bark or a similar material to keep the soil moist and cool.

When plant growth begins, a liquid feeding program with a soluble fertilizer (23-21-17 or 17-17-17) is started. This feeding is applied as a soil drench and on the foliage as a sort of starter solution. The application is repeated during the first year in late May and early July.

Liquid feeding with soluble fertilizers has been a big help to us. We find we can make these applications here at Williamsburg up into July and still have no winter injury.

And if we do not get results from liquid feeding, we know, at least, that lack of fertilization is not our problem.

We do believe that one or two favorable growing seasons and a good fertilization program will overcome nematodes as quickly as anything.

And we have found that Wilt-Pruf, applied to plants which are subject to winter burn, is of great help. We make one application in November and another in February.

A light application of 6-10-4 mixed with an equal part of rotted sawdust or peat moss is used for the second year's fertilization program. This mixture is put into holes drilled or barred in the back fill at a depth of 8" to 15", the depth depending upon the size of the plant. *This type of fertilization encourages a deeper root system.*

Our program for fertilizing established plantings of boxwood varies greatly according to the individual plant's use. In formal plantings where the boxwood is competing with trees, shrubs, perennials or ground covers, fertilizer (6-10-4) is usually applied

once a year. This application is made in February or March and is put into drilled holes at the outer foliage line. If certain plants put on little new growth or if the foliage color is not uniform, a soluble fertilizer is applied as a foliar spray and some is jetted into the root area. A mulch of chicken manure is used on these formal plantings once in every three years. Ground pine bark or compost mulches are applied at least once a year to conserve moisture and to keep the roots cool.

Established informal plantings of boxwood are fertilized much less frequently. The same fertilizers and mulches are used. These plantings are usually mulched periodically, once in two or three years, but are only fertilized as conditions indicate.

GENERAL SUMMARY

1. Apply bonemeal at planting time.
2. Use a good (6-10-4) broad leaved evergreen fertilizer as needed. Apply below ground level to encourage deeper rooting.
3. Advantages of water soluble fertilizers to supplement regular feeding.
 - (a) Helps new plants get started.
 - (b) Quick response.
 - (c) Foliar feeding spray helps in control of spider mites.
4. Mulches
 - (a) Helps new plants get started.
 - (b) Graded ground bark is good mulch because:
 1. Neat and easy to apply.
 2. Conserves moisture but lets rain through quickly.
 3. Discourages surface roots and weed seedlings.
 4. Economical — breaks down slower, so longer lasting.

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American Boxwood Society

ANNUAL MEETING

May 1, 1962

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near Boyce, Va.

(see page 19 for more details)

Source Material Upon Boxwood

Following a suggestion made by the editor in the first number of *The Bulletin*, namely that the American Boxwood Society should "discover, list, and where feasible, obtain all books, brochures, articles, and catalogues devoted in large or important part to boxwood," Dr. Walter S. Flory has done more than pick up the ball. In presenting the following list of fifty-one printed sources of material on boxwood he has compiled the most extensive bibliography on the subject with which we are familiar in any language.

Though he modestly offers this bibliography as though it were a mere beginning and obviously it cannot be complete, we are confident that no one henceforth will be able to contribute references to as many additional sources. Dr. Flory again has carried the ball to make a remarkable score, far above what any of his teammates as yet have or probably ever will contribute to our knowledge of previously published material.

Credit must also go to Dr. T. H. Alphin, another distinguished fellow member, who originally compiled a portion of this bibliography while studying at the Blandy Experimental Farm.

The Society now will wait with attentive interest to observe what additions may be made to this list as a result of the extensive learning and generous assistance of other articulate experts and scholarly authors among its members. Several months ago Mrs. J. B. McCarty author of that charming book *The Story of Boxwood* and one of five Honorary Life Members of the American Boxwood Society, presented to the president of the society two copies of her work, which he in turn gave to the Society for its collection. He now eagerly anticipates announcement of further gifts. Members who are at a loss to make a selection for that purpose may find Dr. Flory's valuable bibliography, as follows, a useful and suggestive guide.

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Some of the articles dealing with boxwood are cited in the foregoing references. Additional lists will appear in *The Bulletin* from time to time. It will be appreciated if readers will call attention to important articles, papers, or books which do not appear on these lists.

*These articles are available, either in book or bibliofilm form, at The Blandy Experimental Farm.

Annual Meeting

Don't Forget

May 1, 1962

(see page 19)

THE BOXWOOD QUESTION BOX

(Continued from Page 19)

- (2) For scale, leaf miner, box psyllid and mites use Malathion in May or June.

Ans. As many varieties of boxwood grow older, their limbs tend to droop. The varieties of *sempervirens* that are most numerous in the United States, by the time they are twenty years old or thereabouts and have reached heights of about eight feet (or, if thirty-year-old *suffruticosa*, say a height of about three feet) usually have limbs sufficiently long and low growing on their bottom tiers to droop upon the ground. There, they often sucker in accumulations of mulch, wind-blown leaves, and organic debris into which heavy rains and deep snows have pushed their branchlets.

If one removes many of these lower branches or loses them due to injury, the limbs immediately above them, robbed of their support, incline to droop more conspicuously, and, as a result, holes appear in the leafy mass of boxwood. To prevent such suckering it is advisable to lift up those low limbs of box that lie upon the ground and shake them free of earth and litter, several times a year.

In much older boxwood, when the lower limbs have been permitted to sucker, they will build up their own root system in the area where they rooted, then grow up and out, and as a result eventually shade and strangle the growth of higher limbs that will be found to have drooped down behind them, resulting in that uneven growth and shaggy masses of foliage, that many gardeners consider unsightly, too, save in the case of thick growing and billowing *suffruticosa*.

Under these conditions, as the higher limbs lengthen and droop, opening wider holes in spaces they formerly covered, new limbs will put out from the main trunk and additional twigs and foliage will eventually refill the gaps. But for more reasons than one it is best to prevent suckering.

Some varieties of boxwood, of course, are more pendulant, some more erect, some open and some compact, some columnar or pyramidal, some spreading and drooping, and some are true "weepers", though they are rare. But until very recently the majority of gardeners have purchased or slipped and planted sprigs from these varieties without discrimination and usually without sufficient knowledge of the characteristics of the varieties or serious attention to their own tastes or needs.

Most varieties of boxwood in the Atlantic Seaboard States, north of Florida and central Alabama, may be made more compact and so maintained, if half or more of their extremities are pruned back a number of inches, every few years, thus causing their foliage to thicken. With such regular shearing as is necessary to maintain formal box hedges, edgings, and topiary work, the foliage becomes so tightly compact and, incidentally, makes such a solid protective shield that, during forty years of interested observation and experience, with boxwood, the editor does not recall seeing any damage from winter kill with boxwood in Virginia that has been regularly and properly clipped. J.C.N.