

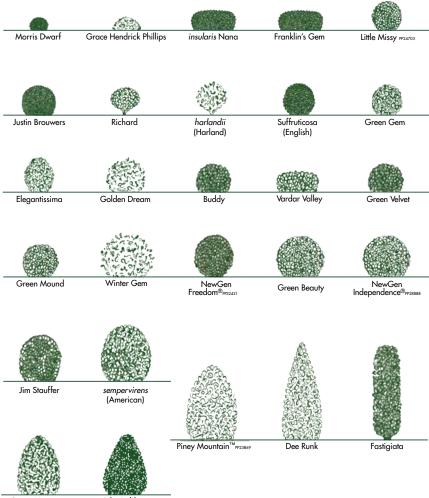
BOXWOOD G U I D E



UNIT LEBRA



BOXWOOD Cultivar Comparison



Green Mountain

John Baldwin



Welcome to the 6th Edition of the *Boxwood Guide*. The *Boxwood Guide* was first published in 2005 as a tool for gardeners, landscapers, and boxwood enthusiasts. With each day, however, we learn more about boxwood. And in turn, we continue to update each edition of the *Boxwood Guide* with the newest information.

This 6th Edition has a different format from previous editions. We chose to publish only the cultivar section. We briefly address cultural information on individual cultivar pages and have tasked our sister company, Saunders Genetics, to offer the full cultural section on their website www.NewGenBoxwood.com. Testing is ongoing and new data is being published regularly, so we feel the web is the best place to offer it. We hope this new format will allow us to keep the most current information only a few clicks away.

This book is the result of a journey that began in 1947 when our dad, Paul, propagated his first boxwood with the help of our grandmother. Tom, Bennett, Jim, Robert, our next generation children, and countless employees want to thank you for taking the time and interest to read and learn more about this fabulous plant that has been part of our family for nearly 75 years. We hope the *Boxwood Guide* helps you better understand boxwood and enjoy them as much as we do.

The Saunders Brothers Family

The Saunders Story



Credit: White House Photo Office

Written by Robert Saunders, 3rd Generation Saunders

The Beginning

The date was 1915. My grandfather and four of his brothers from a family of eleven children, decided to form a farm partnership sharing the money they had made trapping rabbits, and Saunders Brothers was born. With the coming of the Great Depression, money became tight and most of the family was forced to take jobs elsewhere. However, three of the brothers (Dick, Doc, and Sam [my grandfather]) maintained the partnership, thanks to dedicated helpers and sharecroppers, while working off-the-farm jobs.

The Nursery

My dad, Paul, propagated his first boxwood in the spring of 1947. A multitalented science teacher and my grandmother showed him how to make cuttings for propagation. Intrigued, he chose the north side of the red clay, piney-thicket hillside near our current office as his propagation site. An 11-year old friend helped him with the project. He stuck 77 slips into the red earth, which was cooled by its northern exposure and shaded by the pines. He watered them every few days from the little spring branch that was at the bottom of the hill. From this almost impossibly primitive beginning, 25 of the plants rooted. He recalls being truly excited, and at the age of 13, bought out his partner for \$1.00.

Encouraging my dad's interest, my grandfather fenced off an area behind their house in the corner of the barn lot near the woodpile for his nursery. The manure that had accumulated for years in the milk cow lot, plus organic matter from the woodpile, provided a nearly ideal environment for his venture. The small nursery began to grow, and my dad found people willing to buy the boxwood. After college, Dad became very busy running his full-time land surveying business while farming to support his seven young sons. Needing room to expand, he chose to plant the boxwood on the fertile river bottom land.

On August 19, 1969, Hurricane Camille dumped more than 20" of rain on our countryside in one horrible night of destruction and loss of life. Almost all our ten acres of plants on the river bottom were destroyed, along with the container nursery on the riverbank. Only a few plants high on a pine-covered hill survived. With the remaining plants, the current day container nursery was established.

Becoming Boxwood Experts

In the 80s, four of us brothers returned to the farm to join our family operation. Our nursery continued to grow, with a wide range of plants other than boxwood being grown in unheated greenhouses. Simultaneously, our cultivar selection of boxwood began to expand. In the late 90s, the demand for more boxwood, both larger sizes and more varieties, led us to start growing plants in the field again while continuing our container production.

In the 1990s, we began the National Boxwood Trials by supplying around sixty participants with up to 24 different cultivars of boxwood to test. These individuals, commercial growers, researchers, universities, arboreta, and others were located from Connecticut to Chicago, and then south across the "boxwood belt" to Alabama and Georgia. The Trials also included international contributors from the United Kingdom, Republic of Georgia, and the Ukraine. Each contributor reported data annually and the analysis of this data helped us identify the best in boxwood cultivars for specific regions.

In addition, in the early 2000s, we saw the surge in boxwood leafminer in landscapes coinciding with the increased planting of new cultivars of boxwood (other than English and American). In response, we developed our own test blocks of boxwood and purposely introduced boxwood leafminer. Our goal was to determine cultivar resistance, thus reducing the use of pesticides. We collected hundreds of leaves each winter, dissected them, and counted leafminer larvae. This leafminer information, the National Boxwood data, the new relationships from around the globe, and the over 100 cultivars of boxwood we had accumulated, proved to be priceless and the basis of our next mission.



Field Production

The Saunders Story

In 2011, a new beast appeared on the horizon, boxwood blight. When we heard about the disease, we began dedicating enormous resources to learning about it. We donated thousands of plants to research, gave input into multiple research projects, and made every attempt to better educate gardeners and the community about this disease. We traveled both domestically and internationally to better understand a disease that many once thought would be the end of boxwood.

Continuing the Tradition

In the late 2010s, three family members from the 4th generation were welcomed to the business. Each chose to return to the farm after fulfilling their required time working elsewhere, settling into different phases of the business.



James, Annie, and Marshall, the next generation

Today and Tomorrow

Today, we realize that working with researchers from state and federal agencies, as well as international groups, and through a greater understanding of boxwood blight, the battle with the disease will be won with better varieties and best management practices.

In 2020, Saunders Genetics, our newly formed company, launched NewGen Boxwood[®], a family of boxwood that offers greater resistance to diseases and pests as well as incredible garden performance.

NewGen Boxwood[®] are the result of many years of trialing in labs, test gardens, landscapes, production, and other areas. Saunders Brothers is proud to be growing the first two selections, NewGen Freedom[®] and NewGen Independence[®], of a new generation of better boxwood.



Through all of this, our container and field operations continue to grow not only boxwood but over a thousand other varieties of container plants including annuals, flowering shrubs, evergreen and deciduous shrubs, container trees, perennials, and roses. Boxwood, however, continue to remain our signature plant and are grown in both containers and the field.

From our grandfather and his brothers' diligence to keep and grow the farm through the Depression, to my dad's first boxwood nursery when he was 13, to the growth of our business through the 1990s until today, and to our children as they begin to take significant roles in our diversified business, we thank you for believing in Saunders Brothers. As our dad says, "It is like living a dream."

Robert, Tom, Bennett, and Jim Saunders

Boxwood Care

Please visit <u>NewGenBoxwood.com/boxwood-care</u> for the latest information on boxwood planting and site selection, care, pests, and diseases. The website is constantly updated to provide you the best and most comprehensive information available.

Below is a condensed list of practices we believe any gardener should use as a guideline when planting and caring for boxwood.

Drainage

Boxwood prefer well-drained soils. Take care to avoid areas where there is standing water, outlets for gutters or drains, or locations where soils stay consistently moist.

Cultivar Selection

Carefully select your boxwood based on the criteria listed on the cultivar pages of the *Boxwood Guide*.

Soil Preparation

Proper soil preparation is essential to ensure long term success with boxwood. Prepare soils by improving drainage, reducing compactions issues, and introducing up to 20% new soil nutrients and organic matter.

Plant High

When planting, dig the hole twice (or more) as wide as the root ball and only deep enough that you will leave 2" of the root ball above the original soil surface. Backfill with soil onto the sides of the root ball and feather to the top of the root ball.

Irrigation

Water thoroughly at the time of planting and completely wet entire root zone and surrounding area. Periodically water thereafter as needed (weekly). Deep, thorough waterings are better than daily light ones. Allow root zone to dry between waterings. Little to no supplemental water is needed 1½ -2 years after planting.

Mulch

Mulch 1" after planting and ½" annually thereafter. Be sure mulch is aged or decomposing. Mulching is highly effective in boxwood blight mitigation.

Fertilization

Boxwood typically do not need a lot of fertilizer. Avoid using fertilizers that lower pH below desired pH range of 6.5-7.0. Apply fertilizer at the drip line of the plant and on top of mulch.

Pruning

Each cultivar requires differing pruning techniques. Prune in late winter to early spring to create good airflow in and around the plant and maintain desired shape. Clean tools before and after pruning.

Boxwood leafminer

Susceptibility to leafminer differs by cultivar. Inspect each winter/early spring for boxwood leafminer larvae. Based on results, treat as needed.

Boxwood blight

To date, Saunders Brothers has not tested a boxwood that is totally resistant to boxwood blight. We recommend periodic inspections during periods of prolonged rain and warm temperatures (60-77°F), especially in mid to late fall. If boxwood blight is found, use Best Management Practices (BMPs) from Virginia Tech or other reputable source to control the movement of disease.

If boxwood blight is found:

- Remove inoculum and carefully dispose of it.
- Increase airflow in and around the diseased boxwood if it is not removed.
- Mulch to decrease splashing.
- Sanitize all gardening tools regularly.
- Consider the use of fungicides.
- Replant with cultivars that have good resistance to disease. Prune and plant to ensure good airflow and sunlight penetration into the plant, mulch, and avoid splashing water.

Glossary of Terms

Zone

This information is based on the USDA Plant Hardiness Zone Map. Each cultivar is listed with the zones the plant is known to do well in. Know the zone of the area you are planting and choose the cultivar accordingly. Most boxwood are considered cold hardy to zones 5 or 6 and are known to do well into zone 8. Conditions within each zone will vary based on wind, sun, and micro-climate.

Growth Rate

This figure will allow you to compare cultivar growth rate on the same scale. Growth rate varies based on weather, location, soil, and gardening practices. Growth rate should be considered when choosing a cultivar in order to avoid choosing a plant not meeting expectations in size or management practices.

Sun Exposure

Each boxwood is listed with our planting recommendations regarding sun exposure. All boxwood do well in shady areas, while some cultivars will also do well in part-sun or sunny locations. Direct afternoon sun exposure during winter will cause some cultivars' foliage to bronze, but this will typically brighten to green in spring as temperatures rise and new foliage emerges. Please note comments on sun exposure and bronzing in the care section of each cultivar.

Sun.Location is sunny from late morning to late afternoon.Part Sun.Location is shaded primarily from late morning to late afternoon.Shade.Location has minimal direct sun.

Attributes

This section describes the cultivar's overall attributes including specific information on foliage, growth, and overall shape.

Care

Recommendations are made in this section on how to care for each cultivar. Pruning techniques specific to each cultivar are described. Pruning or thinning to allow air movement and sun penetration into the interior of the plant is beneficial in all boxwood. Comments are made also regarding winter bronzing and specific notes are made on plants that are especially susceptible to areas of questionable drainage. All boxwood prefer to be planted in areas with good drainage and should be elevated about 2" above the original soil level to encourage proper drainage.

In addition, with each boxwood listed we have commented on the cultivar's resistance or susceptibility to boxwood leafminer and boxwood blight, the two leading pests of boxwood. More information can be found at <u>NewGenBoxwood.com/boxwood-care</u>.

Comments

In this section, we supply additional information, both positive and negative, on each cultivar based on personal observations of Saunders Brothers as well as other gardeners. We have also included specific details about some of the attributes. The Comments section is where we tell the story behind the plant.

Uses

This section makes suggestions for possible uses of the boxwood cultivar in the landscape. Consider plant growth rate, ultimate size, exposure, and gardening practices, in addition to the possible use, to be sure the plant is properly suited for the specific location.

Substitutes

In this section, we offer a list of boxwood that the chosen boxwood could be substituted for. Substitutes are often similar in habit or use and, in some cases, are superior based on specific attributes or care.

Size

This figure gives the approximate 15 and 25-year-old size of the boxwood listed. Size is greatly affected by gardening practices, weather, and size and age of the plant at installation. Take care not to choose a cultivar that will quickly outgrow the designated space.



Buddy

Cultivar: Buxus sempervirens 'Buddy'

Zone: 6-8

Growth Rate: Medium, 2 to 3 inches per year

Sun Exposure: Sun, part sun, or shade



Attributes: 'Buddy' has beautiful, dark green, large leaves. Its rounded habit is slightly wider than tall. The habit and overall look of the plant is very similar to 'Green Velvet' but it has exceptionally better leafminer resistance. Deer resistant.

Care: 'Buddy' should be lightly pruned with hand pruners or shears in late winter or early spring to maintain desired shape. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Buddy' shows good resistance to boxwood leafminer but is susceptible to boxwood blight.

Comments: 'Buddy' was added to our boxwood production because of its high resistance to boxwood leafminer while looking nearly identical to 'Green Velvet'.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden

Substitute for: 'Green Velvet', Chicagoland Green™, 'Green Mound', 'Green Gem', 'Little Missy'



Size at 15 years: 2' Tall x 2.5' Wide
Size at 25 years: 2.75' Tall x 3.5' Wide



Dee Runk

Cultivar: Buxus sempervirens 'Dee Runk'

Zone: 6-8

Growth Rate: Fast to medium, 3 to 6 inches per year

Sun Exposure: Sun, part sun, or shade



Attributes: 'Dee Runk' is an excellent cultivar with a naturally vertical habit. With some pruning, it can be a tight conical shape. It will develop a broader columnar habit with little to no pruning. Use for narrow hedges or accenting a door or corner. Deer resistant.

Care: 'Dee Runk' responds well to pruning. Use hand pruners or shears. Maintain desired shape each late winter with light pruning, as well as removing any limbs that have been damaged or pulled away from the plant by winter weather. Further light pruning is possible in late spring if heavy new growth pulls limbs away from the plant. If a tight conical form is desired, additional training will be required. Depending on growth and prior maintenance, a heavier pruning every 3-5 years to shape the plant may be necessary. Good drainage is a must for this *sempervirens* cultivar. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Dee Runk' shows moderate resistance to boxwood leafminer and moderate resistance to boxwood blight. Good airflow around and within this boxwood, as well as its upright habit, significantly increase its resistance to boxwood blight.

Comments: 'Dee Runk' is one of the prettiest and most versatile boxwood we grow. We believe this plant is best when pruned into a tight conical form. Its versatility of growing in full sun, part sun, or shade make it a great option in many different landscapes. We have seen some incidents of Japanese maple scale on 'Dee Runk' and are quickly learning more about it. See <u>NewGenBoxwood.com</u> for the latest information. 'Dee Runk' is very similar to 'Fastigiata' and is Paul Saunders' favorite plant.

Uses: Tall specimen, allée, tall hedge, medium hedge, foundation plant, holiday foliage, containers

Substitute for: 'Fastigiata', 'Graham Blandy', Highlander, Green Tower®



- Size at 15 years: 7' Tall x 2.5' Wide*
- Size at 25 years: 10' Tall x 3' Wide* *dependent on habit chosen





Elegantissima

Cultivar: Buxus sempervirens 'Elegantissima'

Zone: 6-8

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Part sun or shade

Attributes: 'Elegantissima' will add color to the landscape with its green leaves accented with creamy-white edges, which differs from many of the white margined cultivars. Use the foliage in holiday decorations. Deer resistant.

Care: With minimal to no pruning 'Elegantissima' will develop into a slightly pyramidal plant. If a more rounded shape is desired, prune lightly in late winter or early spring. Thinning is recommended either in winter for holiday decorations or in late winter to early spring before new growth appears. This will help sunlight and air to penetrate the canopy of the plant and reduce disease incidence. When planting, especially avoid areas of poor drainage. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Elegantissima' shows moderate resistance to boxwood leafminer but is very susceptible to boxwood blight.

Comments: The color of the foliage on this cultivar makes it unique. We have seen it planted in full sun, but it prefers some shade especially in the afternoon. It can really brighten shaded areas. It is a *sempervirens* cultivar, so at time of planting it is important to properly elevate the plant and address all drainage issues.

Uses: Small specimen, low hedge, foundation plant, foliage for holiday decorations, containers

Substitute for: Golden Dream, Aureovariegata, Variegata



Cultivars





Fastigiata

Cultivar: Buxus sempervirens 'Fastigiata'

Zone: 6-8

Growth Rate: Fast to medium, 3 to 6 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'Fastigiata' is an outstanding upright cultivar. The foliage is rich green with a hint of blue. Its true habit is upright. Depending on the gardener's preferences, this



boxwood can either be trained into a narrow column, a conical shape or, with minimal pruning, it can be a broader columnar shape. It is an excellent choice for narrow hedges or accenting a door or corner. Deer resistant.

Care: 'Fastigiata' responds well to pruning with hand pruners or shears. Lightly prune in late winter or early spring to maintain density and desired form. If winter snow or ice has damaged any limbs or pulled them out from the plant, remove them. If a narrow columnar or tight conical form is desired, training is required. Depending on growth and prior maintenance, a light annual pruning followed by a heavier pruning every 3-5 years or so is necessary to maintain form and minimize splaying due to snow and ice or even heavy wet foliage in spring. Little or no pruning will yield a broader columnar habit. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Fastigiata' shows moderate resistance to boxwood leafminer and moderate resistance to boxwood blight. The upright habit of this boxwood, as well as good airflow around and within this boxwood, greatly increases its resistance to boxwood blight.

Comments: This is a good upright boxwood. We have chosen to prune it into a narrow column. Its foliage is slightly bluer than 'Dee Runk'. 'Fastigiata' is thriving in some of our personal gardens as a slender tall privacy hedge. We have seen some incidents of Japanese maple scale on 'Fastigiata' and are learning more about it. Please see <u>NewGenBoxwood.com</u> for the latest information.

Uses: Tall hedge, medium hedge, tall specimen, allée, foundation plant, containers

Substitute for: 'Dee Runk', 'Graham Blandy', Highlander, Green Tower®



- Size at 15 years: 6' Tall x 2' Wide*
- Size at 25 years: 10' Tall x 2.5' Wide*
 - *dependent on habit chosen



Franklin's Gem

Cultivar: Buxus microphylla sinica 'Franklin's Gem'

Zone: 5-8

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Part sun or shade

Attributes: 'Franklin's Gem' is a low spreading cultivar with lime green new growth in the spring. New growth will slowly transition to an olive-green. Deer resistant.



Care: 'Franklin's Gem' should be pruned lightly in late winter to early spring to make a stronger and denser plant. This cultivar can be pruned with shears or hand pruners. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

'Franklin's Gem' shows good resistance to boxwood leafminer and good resistance to boxwood blight. It has few pest or disease issues when planted and cared for properly.

Comments: A light annual pruning will lessen the tendency of the plant to open in the center over time. Demand for 'Franklin's Gem' is increasing as tests show its resistance to leafminer and resistance to boxwood blight. Genetic testing shows it is basically the same plant as *insularis* 'Nana'.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden

Substitute for: insularis 'Nana', 'Tide Hill', 'Little Missy', 'Justin Brouwers'



Cultivars



Golden Dream

Cultivar: *Buxus microphylla* Golden Dream ('Peergold') PP16052

Zone: 6-8

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: Golden Dream has a beautiful rounded and compact habit. The foliage is edged with heavy golden variegation. From a distance, the variegation makes the entire plant nearly a limegreen color. Deer resistant.

Care: Golden Dream can be pruned lightly in late winter or early spring to maintain desired habit using hand pruners or shears. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

Golden Dream shows good resistance to boxwood leafminer and good resistance to boxwood blight. It has few pest or disease issues when planted and cared for properly.

Comments: This unique golden boxwood is relatively new to the market. Remember, it offers more of a lime coloring than the traditional white or creamy variegation. We like the fact that it is a *microphylla* and believe that it will be more tolerant to sunny locations as well as marginal soil conditions. Beginning in mid-fall and through the winter, Golden Dream takes on a natural orange tint as orange-red spots appear in the variegation. It seems to be a characteristic of the plant, so do not be alarmed as it will quickly disappear in the spring as temperatures rise and new growth emerges.

Uses: Medium specimen, medium hedge, foundation plant, foliage for holiday decorations

Substitute for: 'Elegantissima', Aureovariegata, Variegata



Size at 15 years: 3' Tall x 3' Wide
Size at 25 years: 4' Tall x 4' Wide





Grace Hendrick Phillips

Cultivar: Buxus microphylla 'Grace Hendrick Phillips'

Zone: 6-8

Growth Rate: Slow, 0.75 to 1.5 inches per year

Sun Exposure: Part sun or shade

Attributes: 'Grace Hendrick Phillips' has a habit that is mounding and spreading. The growth rate is slow enough that it does not outgrow the landscape but fast enough to be used as a primary plant in many



landscapes. New foliage is light green and matures to a darker green. Deer resistant.

Care: 'Grace H. Phillips' requires little to no pruning, except when used in edging, parterre, or knot gardens. If pruning is necessary, use hand pruners or shears. Occasional sports occur on this plant and they should be removed. Thinning in late winter or early spring is encouraged to allow air movement and sun penetration into the interior of the plant to help reduce disease incidence. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Grace H. Phillips' shows good resistance to boxwood leafminer but is susceptible to boxwood blight. It has few other pest or disease issues when planted and cared for properly.

Comments: From a distance, 'Grace H. Phillips' can be mistaken for *Ilex* 'Helleri', 'Soft Touch', or 'Hoogendorn'. We believe its appealing spreading habit is superior to dwarf *Ilex* because of its drought tolerance and longer life in the landscape. Be patient in the spring, as new growth appears slightly later than most boxwood. We have even seen mature plants cascading in a rock garden or spreading like a groundcover.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden

Substitute for: 'Morris Dwarf', 'Green Pillow', 'Morris Midget'



Size at 15 years: 1' Tall x 2' Wide
Size at 25 years: 1.5' Tall x 3' Wide



Green Beauty

Cultivar: Buxus microphylla var. japonica 'Green Beauty'

Zone: 6-8

Growth Rate: Medium, 2 to 4 inches per year

Sun Exposure: Sun, part sun, or shade



Attributes: 'Green Beauty' is an excellent medium-sized cultivar that has deep green glossy foliage with little winter bronzing. It has a naturally rounded habit that will typically be slightly wider than tall. Its branching structure makes for a very strong plant that can withstand breakage from most me

a very strong plant that can withstand breakage from most moderate to heavy snowfalls. It is very durable and recovers quickly if a limb is broken or if pruning is necessary. Deer resistant.

Care: 'Green Beauty' should be pruned lightly in late winter or early spring to maintain a more uniform shape. It will typically start a secondary flush of new growth in the late summer to early fall that may be burned and discolored by fall frost before it hardens off. These branches or "horns" can be pruned off any time after the first hard freeze of the fall or left on the plant until early spring pruning. If the plant outgrows its desired size, it tolerates radical pruning. Prune with hand pruners or shears. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

'Green Beauty' is susceptible to boxwood leafminer but shows good resistance to boxwood blight. It has few other pest or disease issues when planted and cared for properly.

Comments: 'Green Beauty' has become very popular due to its good resistance to boxwood blight. Its durability, responsiveness to pruning, and disease resistance are very good. We have planted it in locations where diseased English boxwood have died and it is thriving. Pruning as a young plant is a must to develop a good shape. 'Green Beauty' has been planted extensively in the Main Fountain Garden at Longwood Gardens in Kennett Square, Pennsylvania.

Uses: Medium specimen, medium hedge, foundation plant, containers

Substitute for: English, NewGen Independence[®], 'Green Velvet', 'Green Mound', Chicagoland Green[™], 'Jim Stauffer'



Size at 15 years: 3' Tall x 3' Wide
Size at 25 years: 4.5' Tall x 5' Wide



Green Gem

Cultivar: Buxus x 'Green Gem'

Zone: 4-8

Growth Rate: Medium, 2 to 3 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'Green Gem' is a cold-hardy hybrid boxwood with a spherical habit. It is the smallest of the "Green Series" of boxwood (see 'Green Velvet' for more information). It is similar in shape to 'Green Mound' but slightly smaller. Deer resistant.

Care: 'Green Gem' should be lightly pruned in late winter or early spring to maintain desired shape using hand pruners or shears. To minimize bronzing, avoid planting in areas of direct winter sun. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Green Gem' is very susceptible to boxwood leafminer and shows average results in resistance and susceptibility to boxwood blight.

Comments: It was developed in Canada at Sheridan Nurseries. This boxwood has been planted extensively over the past 20-30 years. Its hardiness and non-domineering size is popular with many landscapers.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden, containers

Substitute for: 'Little Missy', 'Justin Brouwers', 'Green Velvet', 'Green Mound'









Green Mound

Cultivar: Buxus x 'Green Mound'

Zone: 4-8

Growth Rate: Medium, 2 to 3 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'Green Mound' is a cold-hardy hybrid boxwood with a spherical habit. It is often referred to as being in the "Green Series" of boxwood (see 'Green Velvet' for more information). It is like 'Green Velvet' but more rounded in its natural shape. Deer resistant.



Care: 'Green Mound' should be pruned lightly in late winter or early spring to maintain desired habit. It may be sheared into edging and other formal applications using hand pruners or shears. 'Green Mound' will bronze slightly in winter especially when exposed to direct sunlight. The bronzed leaves will typically return to green as spring temperatures rise and new foliage emerges. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Green Mound' is very susceptible to boxwood leafminer and shows average results in resistance and susceptibility to boxwood blight.

Comments: This is another of the hardy Sheridan Nurseries boxwood from Canada. It is very popular. In many landscapes, it will reach its 15-year size at a moderate speed and then growth will slow afterwards.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden, containers

Substitute for: 'Green Velvet', Chicagoland Green™, 'Green Gem', 'Little Missy', 'Justin Brouwers'





Green Mountain

Cultivar: Buxus x 'Green Mountain'

Zone: 5-8

Growth Rate: Medium to fast, 2 to 4 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'Green Mountain' is a cold-hardy rounded-conical hybrid boxwood. It is often referred to as being in the "Green Series" of boxwood (see 'Green Velvet' for more information). Deer resistant.

Care: Prune 'Green Mountain' lightly in late winter or early spring to maintain desired habit using hand pruners or shears. 'Green Mountain' is often sheared in a tight pyramid or conical shape to distinguish it from other plants in the "Green Series"; however, when left unpruned, it will develop a more rounded-conical habit. 'Green Mountain' will bronze slightly in winter especially when exposed to direct sunlight, but bronzing will quickly fade as new spring foliage begins to emerge. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Green Mountain' is very susceptible to boxwood leafminer and shows average results in resistance and susceptibility to boxwood blight.

Comments: This is another of the cold-hardy boxwood from Sheridan Nurseries in Canada. Some gardeners believe an annual light pruning is necessary on this cultivar to improve its rigidity as an upright plant, or the plant may open with snow. It grows with relative vigor until it is about 15 years old then slows down.

Uses: Medium specimen, medium hedge, low hedge, foundation plant, containers

Substitute for: 'John Baldwin', 'Dee Runk', 'Fastigiata'



Cultivars





Green Velvet

Cultivar: Buxus x 'Green Velvet'

Zone: 5-8

Growth Rate: Medium, 2 to 3 inches per year

Sun Exposure: Sun, part sun, or shade



Attributes: 'Green Velvet' has a somewhat rounded habit that is slightly wider than tall. The foliage on this cultivar is a beautiful medium to light green in spring and slowly transitions to a dark green. It is a cold-hardy hybrid boxwood that was developed in Canada. It is a selected seedling cross between *Buxus sempervirens* and *Buxus sinica* var. *insularis* and part of the "Green Series" of boxwood which include 'Green Mountain', 'Green Mound', 'Green Gem', and 'Green Velvet'. Deer resistant.

Care: 'Green Velvet' should be pruned lightly in late winter or early spring to maintain desired habit. It may be sheared into edging and other formal applications. Use hand pruners or shears. 'Green Velvet' will bronze slightly in winter especially when exposed to direct sunlight. Typically, in spring, as temperatures rise, bronzed foliage will fade back to green and as new spring foliage begins to emerge. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Green Velvet' is very susceptible to boxwood leafminer and shows average results in resistance and susceptibility to boxwood blight.

Comments: 'Green Velvet' has been very popular for the past 25-30 years. However, with time we are finding increasing issues with boxwood leafminer, boxwood blight, and root rot. We have observed root issues possibly related to poor drainage, which may be explained by its *sempervirens* parentage. In many landscapes, it will reach its 15-year size at a moderate speed and then growth will slow. It is very similar to the cultivar Chicagoland Green[™].

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden, containers

Substitute for: Chicagoland Green™, 'Buddy', 'Green Mound', 'Green Gem', 'Justin Brouwers'



Size at 15 years: 2' Tall x 2.5' Wide
Size at 25 years: 2.75' Tall x 3.5' Wide



harlandii (Harland)

Cultivar: Buxus harlandii (Harland Boxwood)

Zone: 7-9

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Part sun or shade

Attributes: Harland is a vase-shaped grower with unique foliage that is long and slender. Leaves are approximately $1 \frac{1}{2}$ " long and $\frac{3}{8}$ " wide. With a habit that is slightly taller than wide, Harland will tend to create a nearly drooping habit where foliage goes up and over. The unique foliage and profile are very different for a boxwood. Deer resistant.

Care: Harland should be planted in a protected location in the landscape due to its hardiness of Zone 7. In unprotected areas, it will likely sustain winter cold damage. It is one of the first boxwood to flush in spring, thus it is more prone to spring frost damage. Harland requires little to no pruning. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

Harland shows good resistance to boxwood leafminer and good resistance to boxwood blight. It has very few other disease or pest issues.

Comments: We are growing Harland due to its unique foliage and boxwood blight and boxwood leafminer resistance. It is best suited for the warmer regions of the Mid-Atlantic. The Harland species of boxwood is being used in many tests, breeding programs, and experiments due to its excellent resistance to boxwood blight.

Uses: Small specimen, low hedge, foundation plant

Substitute for: None, due to its uniqueness.









insularis 'Nana'

Cultivar: Buxus sinica var. insularis 'Nana'

Zone: 6-8

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Part sun or shade

Attributes: *Insularis* 'Nana' is a low spreading cultivar with lime-green new growth in the spring. New growth will slowly fade to a light green. Although considered a smaller cultivar, it matures relatively fast. Deer resistant.



Care: Prune *insularis* 'Nana' lightly in late winter or early spring to make a stronger and denser plant. This cultivar can be pruned with shears or hand pruners. Thinning is not typically necessary but, if this cultivar is sheared heavily, some thinning in late winter to early spring will allow air and sunlight to penetrate the plant. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

Insularis 'Nana' shows good resistance to boxwood leafminer and good resistance to boxwood blight. It has few pest or disease issues when planted and cared for properly.

Comments: 'Nana' is popular due to its resistance to boxwood blight and resistance to boxwood leafminer. An annual light pruning will help develop rigidity in this boxwood and lessen the chance of the plant opening in the center as it matures. Genetic testing data indicates 'Nana' and 'Franklin's Gem' are basically the same plant.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden

Substitute for: 'Franklin's Gem', 'Tide Hill', 'Little Missy', 'Justin Brouwers'



Size at 15 years: 1.5' Tall x 3' Wide
Size at 25 years: 2' Tall x 4' Wide



Jim Stauffer

Cultivar: Buxus microphylla var. japonica 'Jim Stauffer'

Zone: 5-8

Growth Rate: Medium to fast, 2.5 to 5 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'Jim Stauffer' is an excellent foundation plant that is slightly more vigorous than some cultivars, yet can be maintained in a formal shape. It grows in a comparable height-to-width ratio. It also responds very well to pruning or shearing. It has proven to be more cold-hardy than other



Buxus microphylla. 'Jim Stauffer' can be used as a great substitute for *Buxus sempervirens* (American) when a plant of similar shape is desired, but with smaller ultimate size. Deer resistant.

Care: Lightly pruning 'Jim Stauffer' in late winter or early spring is necessary to maintain a more uniform shape. It will occasionally start a secondary flush of new growth in the late summer to early fall that may freeze before it hardens off. These branches or "horns" can be pruned off after the first hard freeze of the fall or in early spring. 'Jim Stauffer' tolerates more radical pruning if the plant has outgrown its desired size. Prune with hand pruners or shears. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

'Jim Stauffer' shows moderate resistance to boxwood leafminer and good resistance to boxwood blight. It has minimal other disease and pest issues when planted and cared for properly.

Comments: We like this boxwood. It has foliage that is very similar to 'Green Beauty' but its habit is slightly more upright. Its hardiness also makes it the choice of many gardeners in colder climates.

Uses: Medium specimen, medium hedge, foundation plant, containers

Substitute for: *sempervirens* (American), 'Green Beauty', NewGen Independence[®], 'Wintergreen', 'Winter Gem'



Size at 15 years: 3.25' Tall x 3' Wide
Size at 25 years: 5' Tall x 5' Wide



John Baldwin

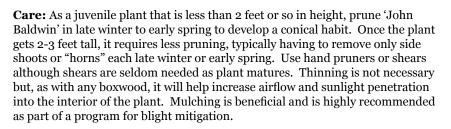
Cultivar: Buxus microphylla 'John Baldwin'

Zone: 6-8

Growth Rate: Medium, 2 to 3 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'John Baldwin' is grown for its true broad, conical habit. Foliage is fine-textured, and leaves are relatively small compared to many boxwood. New foliage has a blue tint which will slowly fade to a blue-green. Its durability, to be used in both sun and shade, makes it valuable in the landscape. Deer resistant.



'John Baldwin' is susceptible to boxwood leafminer but shows moderate resistance to boxwood blight. It has few other pest or disease issues when planted and cared for properly.

Comments: Use this cultivar as an alternative to 'Green Mountain' when a true conical shape with minimal pruning is desired. This may be the best pyramidal growing boxwood that we have seen. From a distance it looks very similar to a *Ilex crenata* 'Steeds'. Being a *microphylla*, it is proving to be more durable regarding disease and its adaptation to a wider range of soil conditions. We have seen it perform well in marginally wet locations; however, we don't recommend planting any boxwood in areas where drainage is poor.

Uses: Medium specimen, medium hedge, foundation plant, containers

Substitute for: 'Green Mountain', 'Dee Runk'



Size at 15 years: 3.5' Tall x 2.5' Wide
Size at 25 years: 6' Tall x 4' Wide



Cultivars



Justin Brouwers

Cultivar: Buxus sempervirens 'Justin Brouwers'

Zone: 6-8

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Sun, part sun, or shade

V V

Attributes: 'Justin Brouwers' is a compact, mounding to rounded cultivar that is extremely versatile. It can be used in applications where it is pruned or in gardens with minimal to no pruning. Foliage is a spectacular deep-green color even in winter. It holds its foliage deep into the interior of the plant. Deer resistant.

Care: 'Justin Brouwers', as a juvenile plant and up to about 10-12 inches, has a slightly upright habit. An annual pruning to round the plant should occur in late winter or early spring. Thereafter it can be left basically unpruned and will develop into a plant that is somewhat rounded. An occasional light pruning in late winter or early spring may be preferred. When used as edging, parterre or knot gardens, pruning and shearing will be necessary. Use hand pruners or shears. Thinning in late winter or early spring is recommended to lessen disease occurrence. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Justin Brouwers' is very susceptible to boxwood leafminer and very susceptible to boxwood blight.

Comments: 'Justin Brouwers' has been a favorite of ours for many years as a replacement for 'Suffruticosa' (English boxwood). If planted and cared for correctly this plant is stunning. However, gardeners should be aware of its boxwood blight susceptibility especially when sheared tightly or in areas of low air movement. In addition, care must be taken to avoid areas of poor soil drainage as this plant is susceptible to root issues. Saunders Brothers is in the process of ceasing production of 'Justin Brouwers' in lieu of better cultivars.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden

Substitute for: 'Little Missy', 'Green Gem', 'Green Velvet', 'Green Mound'



Size at 15 years: 2' Tall x 2.25' Wide
Size at 25 years: 3' Tall x 3.5' Wide



Little Missy

Cultivar: Buxus microphylla 'Little Missy' PP24703

Zone: 5-8

Growth Rate: Slow to medium, 1.5 to 3 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'Little Missy' is a compact rounded cultivar. It is extremely cold hardy and sun tolerant. It can be used in applications where a smaller sized or sheared plant is desired. Foliage is very dark green and comes to a pronounced point at the end of the leaf. Deer resistant.

Care: 'Little Missy' requires little to no pruning, but a light shearing each late winter will increase its compactness. It is considered a Zone 5 boxwood thus it tends to be hardier than some *microphylla* cultivars. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Little Missy' shows moderate resistance to boxwood leafminer and good resistance to boxwood blight. It has very few pest or disease issues when planted and cared for properly.

Comments: The shape and size of 'Little Missy' remind us of a half-sized 'Green Velvet'. It is also a great option to use as a substitute for 'Justin Brouwers' although it is slightly more vigorous. Its winter hardiness and durability, disease tolerance, pest resistance, along with its smaller size are all pluses for this plant.

Uses: Small specimen, low hedge, foundation plant, edging, parterre or knot garden

Substitute for: 'Justin Brouwers', 'Green Gem', 'Green Velvet', 'Green Mound'









Morris Dwarf

Cultivar: Buxus microphylla var. japonica 'Morris Dwarf'

Zone: 6-8

Growth Rate: Very slow, 0.5 to 1 inch per year

Sun Exposure: Part sun or shade

Attributes: 'Morris Dwarf' is an excellent performing cultivar that is very compact. It is outstanding for edging formal beds or in parterre gardens and is low maintenance. It responds well either pruned or left unpruned and is slightly larger than 'Morris Midget'. Deer resistant.



Care: 'Morris Dwarf' requires little to no pruning when used as a specimen. It responds well to shearing when used in edging, parterres, and knot gardens. Thinning is recommended in late winter or early spring which will help reduce chance of disease. Remove undesirable sports with hand pruners by cutting sporting stems back into interior of the plant. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Morris Dwarf' shows good resistance to boxwood leafminer but is very susceptible to boxwood blight.

Comments: 'Morris Dwarf' will bronze in direct winter sun; however, in spring the new growth will quickly cover the bronzing. We have seen it in numerous full sun landscapes but, for optimal beauty, plant it so it receives at least afternoon shade. Remember it is a dwarf boxwood and you must be patient with its growth. 'Morris Dwarf' are planted in a stunning knot garden at Mount Vernon, outside of Washington D.C.

Uses: Small specimen, low hedge, edging, parterre or knot garden

Substitute for: 'Morris Midget', 'Grace Hendrick Phillips', 'Green Pillow'



Cultivars



NewGen Freedom®



Cultivar: Buxus NewGen Freedom® ('SB300') PP32421

Zone: 5-8

Growth Rate: Fast, 3 to 6 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: NewGen Freedom[®] is a relatively vigorous, rounded cultivar that fills space quickly and responds well to pruning, thus making it an excellent choice for residential or commercial landscapes. It is slightly taller than wide. It has beautiful glossy, medium-green foliage. Deer resistant.



Care: NewGen Freedom[®] should be pruned each year in late winter to early spring. If not pruned, the plant may tend to open in the center, especially in spring when new foliage is wet and young. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

NewGen Freedom[®] shows good resistance to boxwood leafminer and good resistance to boxwood blight. It has very few disease or pest issues when planted and cared for properly.

Comments: NewGen Freedom[®] is a spectacular plant when pruned annually. From a distance, its foliage color and shape can be mistaken for English Boxwood. Its habit is more uniform and tighter than *Buxus microphylla* 'Wintergreen' or *Buxus microphylla* 'Winter Gem'. It also looks like *Buxus* Sprinter[®] but has tested as superior in boxwood blight trials.

Uses: Medium specimen, medium hedge, foundation plant, containers

Substitute for: 'Winter Gem', 'Wintergreen', Sprinter®





NewGen Independence®



Cultivar: Buxus microphylla NewGen Independence® ('SB108') PP28888

Zone: 5b-8 (continued testing underway for cold tolerance)

Growth Rate: Medium, 2 to 4 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: NewGen Independence[®] is a very deep green, medium sized cultivar that holds excellent color throughout the winter. It has a rounded habit that is nearly as tall as wide. NewGen Independence[®] can be used in formal plantings where a medium-sized, round plant is desired. It is an excellent replacement for English boxwood for foundation plantings. Branching structure is very strong allowing it to withstand most moderate to heavy snow loads. Deer resistant.

Care: NewGen Independence[®] should be pruned lightly in late winter to early spring to maintain uniform shape. It is not uncommon for fall frosts to burn new growth that occurred in the late summer or fall. These burned shoots can be removed after the first freeze of fall, through the winter, or in late winter/ early spring depending on the gardener's preference. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

NewGen Independence[®] shows moderate resistance to boxwood leafminer and good resistance to boxwood blight. It has few pest or disease issues when planted and cared for properly.

Comments: NewGen Independence[®] was chosen for its leafminer and boxwood blight resistance. On initial inspection, it appears to be very similar to *Buxus* 'Green Beauty' but its leaves are slightly more elongated. It also rates superior to 'Green Beauty' in leafminer trials. NewGen Independence[®] is the backbone of the newly renovated Rose Garden at The White House in Washington, DC.

Uses: Medium specimen, medium hedge, foundation plant, containers

Substitute for: 'Green Beauty', English, 'Green Velvet', 'Buddy', 'Green Mound', 'Jim Stauffer'



Size at 15 years: 3' Tall x 3' Wide
Size at 25 years: 4.5' Tall x 4.5' Wide





Piney MountainTM

Cultivar: Buxus sempervirens Piney Mountain™ PP23869

Zone: 5-8

Growth Rate: Medium, 2-4 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: Piney Mountain[™] is a classic *sempervirens* cultivar, growing more upright than *Buxus sempervirens* (American). The plant's limb structure is extremely strong, thus not allowing it to splay open with snow. Its leaves are remarkably dark green, glossy, and very large, particularly when grown in shade. Deer resistant.



Care: If desired, prune Piney Mountain[™] lightly in late winter or early spring to maintain desired habit. Allow the plant to grow taller and more open to lessen issues with boxwood blight. Be sure to plant this cultivar in well-drained soil about 2-3" above original soil line. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

Piney Mountain[™] shows good resistance to boxwood leafminer and shows average resistance/susceptibility to boxwood blight.

Comments: We added Piney Mountain[™] to our selection based on its near complete resistance to boxwood leafminer, as well as its unique deep, dark green foliage and strong limb structure. It stands out in our test blocks. Plant Piney Mountain[™] and you may never have to spray this plant for leafminer. Piney Mountain[™] is a chance seedling found in the Charlottesville, VA area.

Uses: Medium specimen, allée, medium hedge, foundation plant, foliage for holiday decorations

Substitutes: 'Green Mountain', 'John Baldwin', sempervirens (American)



Size at 15 years: 4' Tall x 2.5' Wide
Size at 25 years: 6' Tall x 3.5' Wide



Richard

Cultivar: Buxus harlandii 'Richard'

Zone: 7-9

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Part sun or shade



Attributes: 'Richard' has unique rounded foliage with an indentation at the tip that almost creates a heart shaped leaf. At first glance, it does not look like a boxwood. The unusual shaped foliage and glossy texture make 'Richard' distinctive. The plant's habit is vase-shaped and slightly wider than tall. It is a *harlandii* cultivar of boxwood that are thought to have come from southeast Asia or China. Deer resistant.

Care: 'Richard' should be placed in the landscape where it is sheltered from harsh winter winds and extreme cold. It flushes relatively early in spring, thus is more prone to frost damage. 'Richard' requires little to no pruning. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

'Richard' shows good resistance to boxwood leafminer and good resistance to boxwood blight. It has very few other disease or pest issues.

Comments: This unique boxwood is beautiful when planted in a protected area. In central Virginia, we have placed it in protected sites on the east or northeast side of the landscape and it has done well; however in the west and southwest locations where it is unprotected, it has suffered winter damage. Great care should be taken when planting in well protected areas of zone 6. We do not recommend exposed areas of Zone 6 or colder. The *harlandii* group is showing good resistance to boxwood blight and is being used as reference point in testing.

Uses: Small specimen, low hedge, foundation plant

Substitute for: None, due to its uniqueness.





sempervirens (American)

Cultivar: Buxus sempervirens (American boxwood)

Zone: 5-8

Growth Rate: Medium to fast, 3 to 5 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: American boxwood is a classic, large growing, upright to rounded boxwood. In an ideal environment, the plant will continue to grow for 75 to 150 years and develop into a massive shrub (sometimes as large as 15 ft. tall and wide or more). It has excellent dark green winter foliage and cuttings are a favorite for holiday decorations. Deer resistant.

Care: Prune American boxwood lightly in late winter or early spring to maintain desired habit. It tolerates more radical pruning if the plant has outgrown its desired size. Use hand pruners, shears, and loppers. Thin in winter for holiday decorations or early spring before new growth appears to increase airflow and light penetration into the interior of the plant thus reducing the incidence of disease. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

American boxwood shows moderate resistance to boxwood leafminer and average results in resistance and susceptibility to boxwood blight. Good airflow around and within this boxwood, as well as the use of mulch, greatly increase its resistance to boxwood blight.

Comments: This boxwood has been the backbone of traditional Colonial American landscapes for many years. Avoid using this plant where it will ultimately be too large for the landscape. Be especially careful to plant this cultivar in areas with good drainage. Maintain good airflow in and around American boxwood to lessen incidence of boxwood blight. Even when infected with boxwood blight, we have seen this plant continue to thrive when mulched, lower limbs removed to reduce splash up, and the plant thinned to increase airflow.

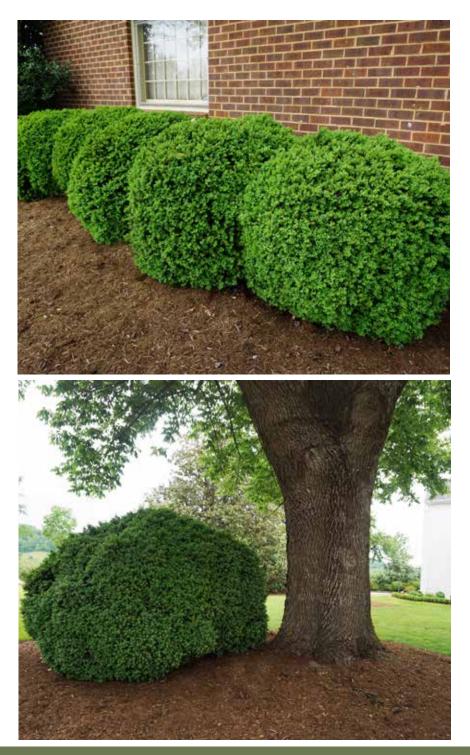
Uses: Tall specimen, allée, tall hedge, medium hedge, foundation plant, foliage for holiday decorations

Substitute for: 'Jim Stauffer'



- Size at 15 years: 4' Tall x 3.5' Wide
 Size at 25 years: 6' Tall x 5.5' Wide





Suffruticosa (English)

Cultivar: Buxus sempervirens 'Suffruticosa' (English Boxwood)

Zone: 6-8

Growth Rate: Slow to medium, 1 to 2 inches per year

Sun Exposure: Part sun or shade

Attributes: 'Suffruticosa' (English) is known for its soft, billowy outline and lush foliage. In its optimal environment English is untouched in its beauty. It is often referred to as "dwarf boxwood" due to its slow growth rate; however, in an ideal environment, the plant will continue to grow for 75 to 150 years and develop into a



the plant will continue to grow for 75 to 150 years and develop into a very large shrub. Its foliage is a favorite for Christmas decorations. English boxwood has a distinct odor especially in spring on wet days. Deer resistant.

Care: English boxwood thrives in shade or partial shade and when left unpruned. Never shear, as it will increase the foliage density and thus the chance of disease problems. Thinning in early winter for holiday decorations or in later winter is recommended to reduce disease incidence. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

English boxwood shows good resistance to boxwood leafminer but is very susceptible to boxwood blight. Pay special attention when planting and caring for English boxwood as it is prone to disease issues.

Comments: English boxwood has probably been the most extensively planted boxwood in the United States over the past 100 years. Unfortunately, many people have planted it on undesirable sites and the plant has not done well. If conditions are not optimal, consider a different cultivar. Also, avoid planting English boxwood in the same space where a diseased English has been removed, they seldom survive. Sadly, we are seeing few successful new plantings of English over the past 20 years or so. Due to the many reasons listed, Saunders Brothers has discontinued production of English boxwood.

Uses: Medium specimen, foundation plant, foliage for holiday decorations

Substitute for: We no longer recommend English boxwood. It is not performing well in most landscapes and should be planted only by the most astute of gardeners.



Size at 15 years: 2.25' Tall x 2' Wide
Size at 25 years: 3' Tall x 3' Wide



Vardar Valley

Cultivar: Buxus sempervirens 'Vardar Valley'

Zone: 5-8

Growth Rate: Slow to medium, 1 to 3 inches per year

Sun Exposure: Sun, part sun, or shade



Attributes: 'Vardar Valley' is appealing due to its distinctive powdery blue new foliage in the spring that matures into deep green by summer and holds through the winter. It also has excellent winter hardiness. It matures into a broad, mounding plant. Deer resistant.

Care: Lightly prune 'Vardar Valley' as needed in late winter or early spring to maintain desired shape and density. Use hand pruners or shears. Thinning is not necessary but, as with any boxwood, will help increase airflow and sunlight penetration into the interior of the plant. Plant only in areas with soils that are well drained. Mulching is beneficial and is highly recommended as part of a program for blight mitigation.

'Vardar Valley' shows good resistance to boxwood leafminer but is very susceptible to boxwood blight.

Comments: The blue spring foliage and majestic appearance of 'Vardar Valley' has made it a favorite of gardeners for years. You must be patient with the plant in its juvenile stages (up to about 18" wide) as its habit is open and its branches are prominent. In many landscapes, it will reach its 15-year size at a moderate speed then growth will slow afterwards. 'Vardar Valley' is used in a stunning planting outside The Oval Office of The White House in Washington, DC.

Uses: Small specimen, low hedge, foundation plant, foliage for holiday decorations

Substitute for: 'Green Velvet', Chicagoland Green™, 'Green Beauty'



Size at 15 years: 1.5' Tall x 3' Wide
Size at 25 years: 2.5' Tall x 5' Wide



Winter Gem

Cultivar: Buxus microphylla var. japonica 'Winter Gem'

Zone: 6-8

Growth Rate: Fast, 4 to 6 inches per year

Sun Exposure: Sun, part sun, or shade

Attributes: 'Winter Gem' is a round-shaped cultivar that is relatively vigorous. It tolerates a wide range of sites and uses. New foliage emerges a lime-green color and transitions to a deep, glossy green. Deer resistant.



Care: 'Winter Gem' should be pruned each year in late winter to early spring to maintain desired shape using hand pruners or shears. Additional lighter prunings may be necessary in early to mid-summer, depending on the desired look and vigor of the plant. 'Winter Gem' tolerates more radical pruning if the plant has outgrown its desired size. It tends to bronze when exposed to direct winter sun, but the bronzing will quickly disappear in spring as temperatures rise and as new growth emerges. Mulching, even on more resistant cultivars, is advantageous for blight mitigation.

'Winter Gem' shows good resistance to boxwood leafminer and good resistsance to boxwood blight. It has few other pest or disease issues when planted and cared for properly.

Comments: This is a great plant to fill space quickly. It has a vigorous growth habit that can get rather wiry, but it can be controlled with a good pair of hedge shears. 'Winter Gem' is similar to the cultivars 'Wintergreen' or 'Faulkner'.

Uses: Medium specimen, medium hedge, low hedge, foundation plant

Substitute for: 'NewGen Freedom®, 'Wintergreen', 'Faulkner'



BOXWOOD Cultivar Summary

Cultivar	Page	Zone	Exposure	Blight Resistance	Leafminer Resistance
Buddy	9	6-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	-	++
Dee Runk	11	6-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+§	+
Elegantissima	13	6-8			+
Fastigiata	15	6-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+9	+
Franklin's Gem	17	5-8		++	++
Golden Dream	19	6-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	++	++
Grace Hendrick Phillips	21	6-8		-	++
Green Beauty	23	6-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	++	-
Green Gem	25	4-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+-	
Green Mound	27	4-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+ -	
Green Mountain	29	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+ -	
Green Velvet	31	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+-	
harlandii	33	7-9	$\bigcirc \bullet$	++	++
insularis Nana	35	6-8		++	++
Jim Stauffer	37	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	++	+
John Baldwin	39	6-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+	-
Justin Brouwers	41	6-8	$\bigcirc \bigcirc \bigcirc \bigcirc$		
Little Missy	43	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	++	+
Morris Dwarf	45	6-8	$\bigcirc \bullet$		++
NewGen Freedom®	47	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	++	++
NewGen Independence®	49	5B-8	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	++	+
Piney Mountain [™]	51	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+-	++
Richard	53	7-9		++	++
sempervirens (American)	55	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	+-	+
Suffruticosa (English)	57	6-8			++
Vardar Valley	59	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$		++
Winter Gem	61	5-8	$\bigcirc \bigcirc \bigcirc \bigcirc$	++	++

Boxwood Blight and Leafminer Resistance Key		
Good Resistance	++	
Somewhat Resistant	+	
Average Resistance/Susceptibility	+ -	
Susceptible	-	
Very Susceptible		

Exposi	Exposure Key				
0	Full Sun				
\bullet	Part Sun				
	Shade				

* Boxwood blight resistance data based on multiple tests and observations from Saunders Brothers 2012-2020.

† Our tests and obeservations have not found any boxwood with total resistance or immunity to boxwood blight.

** Boxwood leafminer resistance data based on multiple tests and observations from Saunders Brothers 2008-2020.

§ Boxwood blight resistance enhanced by plant's upright shape.

BOXWOOD Cultivar Summary

Cultivar	SBI Overall Rating	SBI Comment	
Buddy	++	Like Green Velvet without leafminer.	
Dee Runk	+++	Great upright when pruned correctly.	
Elegantissima	+	Awesome foliage, but proper care is critical.	
Fastigiata	+++	Excellent upright when pruned correctly.	
Franklin's Gem	+++	Low growing boxwood. Careful in pruning and locating.	
Golden Dream	+++	Gold color is unique. Durable plant.	
Grace Hendrick Phillips	++	Good dwarf boxwood. Proper care is critical.	
Green Beauty	+++	One of our favorite medium sized box for many years.	
Green Gem	++	Good small boxwood. Best in zones 4 to 6.	
Green Mound	++	Globular midsize. Best in zones 4 to 6.	
Green Mountain	++	Popular egg shaped boxwood. Best in zones 5 to 6.	
Green Velvet	++	Very popular midsize. Best in zones 5 to 6.	
harlandii	++	Unique elongated foliage. Best in zones 7 and warmer.	
insularis Nana	+++	Low growing boxwood. Prune and locate properly.	
Jim Stauffer	+++	Good hardy medium to large size boxwood.	
John Baldwin	++	Good pyramidal boxwood. Better than Green Mountain.	
Justin Brouwers	+	A beautiful boxwood but proper care is essential.	
Little Missy	++++	Excellent small to midsize boxwood.	
Morris Dwarf	++	A super dwarf boxwood. Proper care is critical.	
NewGen Freedom®	++++	Fast growing boxwood with few problems.	
NewGen Independence®	++++	Green Beauty look with minimal leafminer.	
Piney Mountain [™]	++	True rounded upright with no leafminer.	
Richard	+++	Unique heart-shaped foliage. Best in zones 7 and warmer.	
sempervirens (American)	++	Good large boxwood. Proper care is necessary.	
Suffruticosa (English)	-	Very popular boxwood for years but is a plant of the past.	
Vardar Valley	++	Blue foliage on spreading boxwood. Care is critical.	
Winter Gem	+++	Fast growing boxwood with looser growth habit.	

SBI Overall Rating	
Top Choice	+ ++ +
Good Choice	+++
Average Choice	++
Use with Caution	+
Not Recommended	-



Paul (r) learns about an early boxwood planting. (c 1950)

Paul's sons (Robert, John, and Bennett) inspect propagation beds. (c 1973)





Paul teaching grandsons (Jacob and Patrick) to propagate boxwood. (c 2004)