Repotting: Repot every other year and keep developed bonsai slightly root bound on occasions; more frequent repotting can result in larger leaves as the tree becomes especially vigorous. Spring is the best time, but it can be repotted in summer and fall if needed. As box is a broadleaf evergreen, there is more leeway with appropriate times to repot than with deciduous trees. It can be repotted in summer and autumn if need be, but avoid repotting during very hot weather or during a growth spurt. Use basic bonsai soil. Boxwood dislikes acid soil, and the use of limestone in the soil mix or adding an occasional dose of lime to the soil is recommended. Soil must be well drained. Their root system tends to have a stringy quality that tolerates root pruning well. It is not the matted fibrous roots of potted azaleas or junipers, but has similar characteristics if it becomes root bound. I have had good luck just cutting out wedges and the periphery of the stringy roots when repotting. Wiring the tree into the pot is very important for re-establishment of roots in the pot. This allows them to be grown in a variety of individual styles as well as in miniature landscapes. After repotting, water thoroughly and keep the plant in a shady location for several weeks so that new roots may grow.

Design and Styling: Boxwood have a naturally multi-stemmed growth habit that lends them to being styled like large spreading park trees and it is with this style that they look their best when grown as bonsai. The most beautiful style for Boxwood is the informal upright.

Species useful for bonsai:
- Buxus harlandii: Harland box - A native of Taiwan, the Harland box can grow to 33 feet. Its leaves are thinner than other box species. This box doesn't like cold, and should not be exposed to temperatures below 37°F, but it has been grown successfully as an indoor plant. If the temperature goes above 65°F, the Harland box enjoys a daily misting, and the amount of food should be reduced. During the winter, keep the tree at a temperature below 65°F; between 46°F and 50°F is best.
- Buxus microphylla: Japanese box - Grows to 5 feet, and has evergreen leaves under 1 inch long. It tolerates both sun and shade. All B. microphylla varieties are scentless. It grows best in zones 5-8.
- Buxus microphylla 'Compacta': dwarf boxwood, Kingsville box. Quarterly spray with Black Leaf 40 mixed with soap.
- Buxus microphylla 'Koreana': Korean boxwood - the most hardy box, it grows in zones 4-8, but expect the foliage to brown in the winter. It is a low, spreading variety, growing to only 3 feet.
- Buxus microphylla 'Morris Midge': Morris Midge boxwood.
- Buxus sempervirens: common box, English box - this box can grow to 25 feet in a mild climate, and therefore appears as both hedges and small trees. Its evergreen leaves grow to 1 1/2 inches. This box is hardy in zones 6-8 with some winter protection at the upper end of the range, although there is a cultivar, 'Vardar Valley' which is hardy to zone 5. This is a long-lived plant, and historic boxes from Colonial days are still alive in Virginia.
- Buxus sinica - A native of China, similar to other small boxes.
**The Boxwood**

*(Buxus sp.)*

**General Information:** Boxwood is a category of evergreen shrubs with approximately 70 different species. Typically found in the rocky hills of Africa, Asia, Central America, and Europe, the Boxwood is small, making them ideal for bonsai. In the springtime, the Boxwood will display male flowers of beautiful yellow, surrounded by single, female flowers.

Although you have many choices for bonsai; there are Kingsville, Morris Midget, Dwarf English, Japanese, and Common Boxwood, to name just a few. The two that work best for bonsai are the Japanese Box (Buxus microphylla) and the Common Box (Buxus sempervirens). For both of these species, you would find leaves of glossy, dark green. The only real difference between these two species of Boxwood is size, with the Japanese Box being a slower growing and smaller version. My personal favorite is the Kingsville, simply because of it's dwarf size. It will only grow 1/4” per year so make sure you start with a well established tree.

Boxwood have many good characteristics that are useful for bonsai. Dark green leaves that reduce well, naturally short internodes and they can take hard pruning that prompts prolific back budding. Boxwood also have shallow, fibrous root systems that often produce powerful surface roots and nebari. **Caution:** box leaves are poisonous, and eating even a few can kill a small pet.

**CARE**

**Temperature:** Boxwood are hardy to only around -40°F, during temperatures below this, extra protection should be provided. To maintain good health, Boxwood bonsai should be kept outdoors during the winter months so that they can experience a dormancy or rest period. During this period, your bonsai should be protected from drying winds and extreme cold conditions. This can be achieved by utilizing cold frames, window wells, enclosed unheated rooms, or mulch beds.

Foliage can become yellow or bronzed after frosts during the Winter but it will green up again during the Spring.

**Lighting:** Boxwood bonsai grow well in either direct or indirect sunlight. We prefer to grow boxwood in shady areas, out of the hot afternoon sun. Sometimes the direct afternoon sun can burn delicate leaves, especially when shining through a household window. Direct morning sunlight is great for almost all bonsai because of its low intensity.

Boxwood are forgiving in their growing location as they have been adapted to many locations over the years. Originating as an under story plant they tolerate medium shade, filtered sun, or full sun for the varieties adapted for hedging. If you have a specimen that is getting leggy then try putting it in the ground in full sun for a year or two. It will back bud and fill in allowing you to chase the foliage pads back to where they should be for your design.

**Air:** In the summer, box appreciates fresh air.

**Watering:** Boxwood likes water, particularly when in a pot. It is important to keep the shallow root system cool and moist. Small boxwood bonsai should be kept damp and watered twice daily in hot weather. However, do not allow the soil to become saturated or the pot to stand in water. Allow the box to dry somewhat between waterings.

**Fertilizing:** During the growing season, Boxwood needs to be fed about every two weeks. Use a liquid bonsai fertilizer with one application of pulverized organic fertilizer during active growth. Fertilize with general purpose fertilizer.

**Pruning / Training:** Boxwoods regularly need thinning of the foliage mass to allow light into the inner branches to stop them becoming bare and to prompt back budding. Regular pruning helps to increase ramification and reduce leaf size as well.

**Insects / Pests:** Nematodes, mites and leaf miners, scale insects, black fly, greenfly, and red spider mites. Although box is very disease resistant, honey fungus and rust are sometimes encountered. In addition, a fungal disease known as Box Blight can seriously damage mature Boxwood. With this, the leaves would develop spots, which then lead to quick defoliation. Other symptoms include black streaks on the bark and a grey colored fungus on any remaining foliage. Unfortunately, the bonsai will usually die in about two to three months. Currently, the cause of Box Blight is unknown, as is a cure.

**Propagation:** Boxwood can be air layered successfully, and are best started in April. Cuttings can be taken from Autumn to early Spring; use cuttings of at least 4”/10cm length for greater success. It may take a month or two for the cutting to take on signs of life. Look for new leaves to appear before you give up.