

Boxwoods and Winter Dessication  
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Boxwood is a broadleaf evergreen shrub. It keeps its leaves all winter and they are not needle-like as pine or spruce are. Even though boxwood leaves are tiny, they're referred to as broad-leaf plants as opposed to needle-leaf plants.

A petite, neat and tidy shrub that remains green all winter, they have become popular and are being used more in landscapes. If planted in Nebraska, it is critical to plant them in the right location and pay close attention to watering all summer and fall. During winter, they are likely to need extra attention too.

A common issue with boxwoods is the entire plant or a portion of the plant turns brown after winter. This is because green leaves continue to lose moisture over winter, especially on windy or warmer days. The lost moisture cannot be replaced by roots from cold or frozen soil and plant tissues dry out and die.

Referred to as winter dessication, this is the challenge in growing any evergreen, but especially broadleaf evergreens. The broad leaf surfaces lose even more moisture than the narrow and waxy surfaces of needles.

If you choose to plant a boxwood, select a location with a north or east exposure and protected from winter winds. Even with correct watering, boxwoods growing in full sun or on wind exposed sites are likely to dry out over winter and turn brown or die.

Boxwoods planted in a good location still need correct watering and an organic mulch layer to conserve soil moisture. Keeping the soil consistently moist from spring up until the soil freezes in fall is critical. It is equally important not to overwater. Too wet of soil leads to weakened roots that cannot efficiently take up water and plants still suffer dessication.

A two to three-inch layer of an organic mulch, like wood chips, placed on bare soil is ideal. Avoid inorganic mulch, like rocks on landscape fabric. Light colored rock reflects sunlight and increases air temperature to increase moisture loss from leaves. And research shows rocks on top of a weed mat eventually leads to an abnormally dry soil beneath the landscape fabric, even with irrigation.

Setting up a temporary windbreak during winter might decrease winter dessication injury in boxwoods and other evergreens like Arborvitae and Japanese Yew. Stakes and burlap are often used for this purpose. Windbreaks are best put in place in November or early December.

Evergreens, like boxwood, can be sprayed with antitranspirants available at garden centers. These products work by placing a waxy layer over leaves to prevent moisture loss from leaf pores. These products are messy to work with and need to be applied strictly according to label direction. They also require more than one application to be effective all winter.

While boxwoods seem popular, if the risk of growing one or the extra work they require is not appealing to you, select a shrub better adapted to your landscape and Nebraska. As we experience an increase in weather extremes, selecting less adapted plants becomes an even higher risk.

A few shrubs to consider include 'Pawnee Buttes' western sandcherry (*Prunus besseyi*), 'Gro-Low' fragrant Sumac (*Rhus aromatica*), clove currant (*Ribes odoratum*), Coralberry (*Symphoricarpos orbiculatus*), New Jersey Tea (*Ceanothus americanus*), Ninebark (*Physocarpus opulifolius*), Silver buffaloberry (*Shepherdia argentea*) and Saskatoon Serviceberry (*Amelanchier alnifolia*).

While all good shrubs for Nebraska, learn more about each one to be sure it is a good shrub for your site. Consider the growing environment the shrub needs along with its size and aesthetics.