

THE OHIO STATE PINE CONES.....????

Sound ridiculous? There's a reason why the buckeye was chosen for Ohio's state tree...It's native to Ohio. When is the last time you saw a pine tree, or any evergreen for that matter, growing wild in the forests, roadsides, fence rows, or stream banks of Northwest Ohio? The large number of brown, and even dead, evergreen trees this spring has brought a flood of questions into the nursery. This seems to happen every couple of years, so we would like to take this opportunity to answer some of them.

Based on our observations, speaking to other nursery owners, and information coming from the extension service, we believe most spring evergreen problems are caused by two things.

1. They got too dry last summer. Conifers by nature have a slower metabolism than deciduous plants and their leaves "needles" don't show signs of stress quickly. Deciduous plants can often lose most of their leaves during the growing season due to drought, insects, disease, etc. and still leaf out again in a few weeks if conditions improve. Deciduous plants also show signs of stress immediately by the leaves looking wilted and drooping. Conifers simply don't respond that fast. It takes them longer to be affected by an environmental stress but it also takes them longer to recover.

In the winter, when the water in the soil is frozen, a deciduous tree drops its leaves so moisture isn't needed to keep them alive. A conifer must take up enough water in the fall to keep the leaves or "needles" alive throughout the entire winter. The needles are designed to retain their moisture much longer than conventional leaves but when new water isn't available from the soil, they must make it on what was taken up the previous summer and fall. The browning caused by this condition is called "winter burn". Even with normal weather conditions, this can occur, to some degree, on certain varieties every year until the tree gets older.

If my evergreen dried out part way through the winter, why did it turn brown in April? The cool damp conditions in the winter and early spring keep it looking fresh even though it's dead. The same way your refrigerator keeps a head of lettuce fresh.

2. Wind born salt spray from nearby treated roadways. Several times while on vacation, our kids after swimming or wading in the lake, have come out only to find a leech attached to their leg. The quickest way to get rid of them? (The leeches that is!) Sprinkle them with salt! It immediately draws the moisture out of the leech and it dries up and falls off.

Salt spray does the same thing, only slower, to evergreen needles. This usually only affects the needles that are exposed and the new buds will flush in the spring. They look bad for awhile, but usually recover.

It's also important to understand that the areas where most evergreens are native tend to have low summer humidity and loose textured soils that do not hold moisture near the surface. Humidity that hangs near the ground (caused by wet grass, or more often, soggy soils that don't drain quickly) can cause fungal diseases that kill the lower branches on some spruces. Keeping spruces mulched out beyond the lower branches will help prevent this. Animal manure or compost will encourage these diseases on spruce. Pines are also susceptible to some diseases that affect the upper portions when high

humidity and poor air movement are present. Planting pines far enough apart, pruning to encourage good air circulation, and thinning over-crowded windbreaks helps prevent problems.

Should we quit planting evergreen trees then if we sometimes have problems with them in Ohio? NO!!! Their benefits in our landscapes to wildlife are many, and they provide year-round beauty and color to our landscapes that, without them, would look pretty drab. Like any landscape project though, it is important to understand their growth requirements so as to pick the right plant for the right situation and to provide the proper maintenance thereafter.

With one possible exception, no conifer will tolerate heavy, clay soil that does not drain.

Eastern Red Cedar is the exception. They grow wild in Ohio by reseeding themselves in some of the worst soil conditions imaginable. (Look on the side of the overpasses at Bluelick Road and Interstate 75 in Lima.) Birds love 'em for their berries and for nesting but most of our customers don't like their spiny, foliage and loose, open appearance as they age.

Arborvitae grows fast, will tolerate more soil moisture than some, tends to be shallow rooted, does fine if mulched properly, very few insect and disease problems.

Scotch Pine grows very fast, does well in most soil types, few disease problems, can get European Pine Sawfly (It's easy to spray for but it freaks some people out.) can get open and leggy with age, very hardy.

Austrian Pine grows fast, does well in most soil types, beautiful dark green color and nice shape, some insect problems, can't be crowded together in a windbreak situation, needs good air movement to prevent disease.

Bosnian Pine is very similar in appearance to Austrian Pine but slower growing, we've observed no disease or insect problems.

Black Hills Spruce is slow growing, holds a nice shape, few insect and disease problems, does well in most soil types.

Norway Spruce is fast growing, has a nice shape when young, kind of open and large with age, few disease and insect problems, can winter burn the first few seasons, very susceptible to salt spray injury.

Colorado Spruce has a medium growth rate, green or blue color, nice shape when young but opens up with age, few insect and disease problems, tolerates most soils, very hardy.

Eastern White Pine grows fast, beautiful, soft textured foliage, shape more open with age, does well in most soil, few disease problems, some insect problems, can winter burn the first few seasons, very susceptible to salt spray injury.

Don't plant any evergreens too close to a highway that gets salted in the winter; especially White Pine and Norway Spruce.

Keeping evergreens mulched out to and beyond the drip line will help tremendously in preserving soil moisture in late summer and fall. Watering at this time is also helpful if we're not getting rainfall. Do not use animal manure or compost as a mulch. Never fertilize evergreens in the fall.