

All gardeners know that deciduous trees lose their leaves in the autumn. The latest weather events of these past two weeks certainly support that statement. Many species such as ash trees are now completely devoid of leaves due to the recent freezes and winds. For most people, that situation seems normal, creating little concern. If, however, one is noticing needles dropping from his or her evergreen trees, should there be cause for concern?

Let's first examine the word evergreen. Such a word implies that the plant will always retain its leaves and forever remain green. The word evergreen is a misnomer. Although most conifer trees are considered to be "evergreen," their leaves, more commonly called needles, do not live forever. They, like deciduous trees, drop needles. What makes them evergreen in appearance is their needles persist more than one year before falling. Since new needles are added yearly, an overlap exists between green needles and those dying, turning brown, and dropping from the tree.

Conifers normally drop needles in autumn. Depending on the species, some hold their needles longer than others. For example, Rita and I have a conifer growing in our backyard that loses all of its needles every autumn. The tree is a bald cypress, appropriately named, since in a matter of a few more weeks, it will be totally bald. Knowing that feature of bald cypress will prevent me from being concerned when the needle drop occurs. Others conifers, such as larch and the dawn redwood also lose all their needles in the fall.



Most conifers, including pine, spruce, fir, cedar, yew, juniper, arborvitae, and hemlock, lose their needles gradually. The older needles are the first to drop. Older needles are located toward the inner boughs of the tree and in the autumn, those needles will often turn yellow, brown, or reddish tan in color before they drop from the tree. Sometimes this change is subtle and goes unnoticed; whereas, other times it is readily noticeable. The latter seems to be the situation for this year.

Lately, I've received numerous calls about evergreen trees losing needles. Callers are concerned the cause is a result of disease or insect pest. Although I can't totally rule out those two reasons, they generally are not the cause for needle drop at this time of year. Furthermore, natural needle drop occurs on the inner needles; if entire

branches or needles at the tips of branches are dying, then something else could be happening. One should always conduct a close inspection of any brown needles to eliminate potential pest problems.

I've discovered that within species of pine trees some hold needles longer than others. The Eastern white pine, Jack pine and Scotch pine hold needles generally for two, or just slightly more than two, years. Of these three, the white pine tree retains its needles for only two years. As a result, with fewer green needles occurring only near the tips of the branches, needle drop in white pine is extremely noticeable. Ponderosa pine holds its needles for a minimum of three years, and the Austrian pine holds its needles for a minimum of four years.



Keep in mind, autumn needle drop is a natural condition and is generally not a sign of disease or insect infestation; however, any factor that increases stress on evergreen trees will intensify the autumn needle drop. Stress factors may include drought, herbicide injury, root damage and disease or insect damage.

One of the best things a homeowner can do for the health of his or her evergreens is to make sure they enter the winter with adequate soil moisture.

Relax. Autumn leaves are falling, as are evergreen needles.