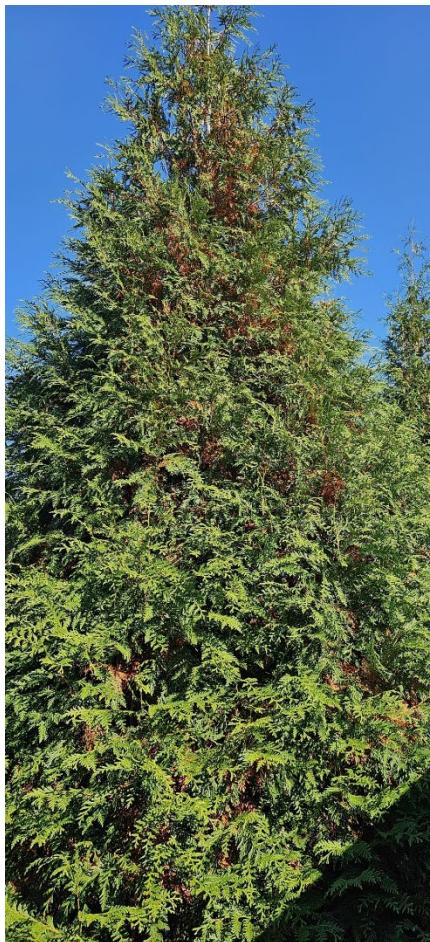


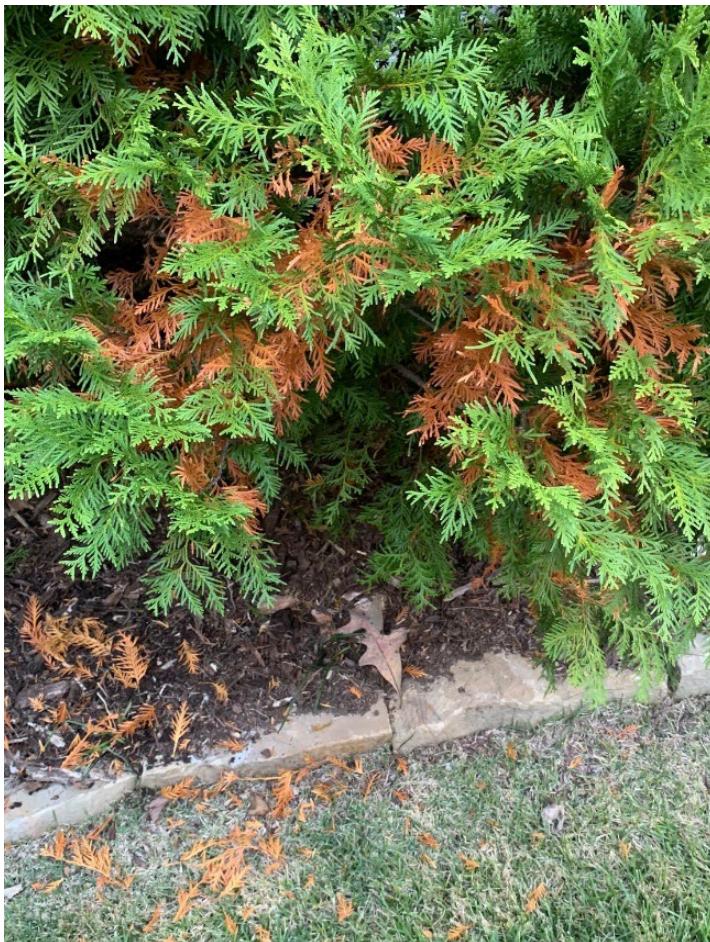
Annual Evergreen Changes

We are well into fall. Pumpkin spice is everywhere, and many trees and shrubs are looking barren in preparation for winter. Though there are certain trees and shrubs that still look green: many conifers and other evergreens. But even evergreens go through changes in preparation for winter and the upcoming spring.

Evergreens don't keep their foliage. They are evergreen because they don't drop all their foliage at once, but it is natural for them to divert resources away from their oldest leaves, letting them die so that the plants can focus their energies on the younger, healthier, and less shaded leaves. Even before a plant lets them die, the older leaves, closer to the center of the plant, become less efficient at photosynthesis over time and eventually don't get much sunlight either as new growth develops above them. Some evergreens, like cryptomeria, will hold onto these dead leaves for several years before dropping a large number at once.

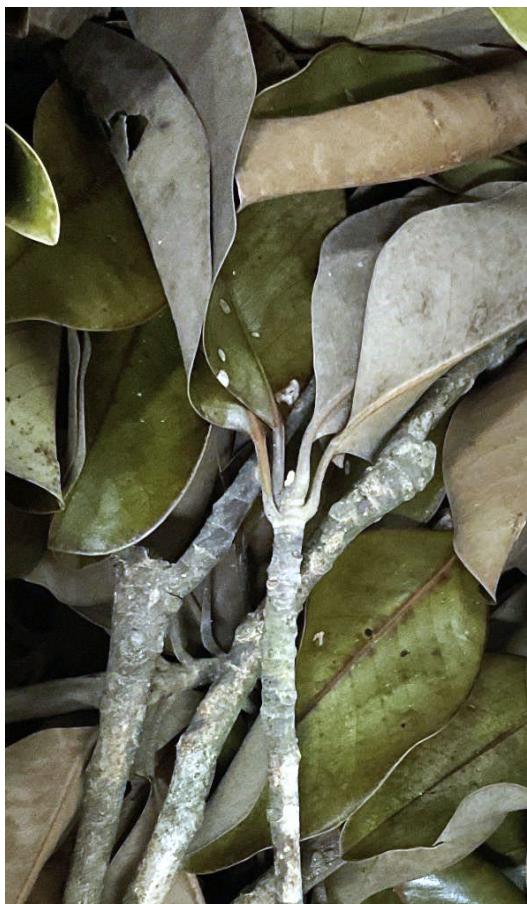


Jesse Matlock



Sarah Burr

Many conifers will drop their leaves in late summer through the fall, getting rid of their least efficient leaves as daylight decreases and the older leaves become more of a burden with less energy being gathered per day. Other conifers and other evergreens wait until new growth in the spring is mature enough to not be as easily damaged by frost or sunburn before dropping their old foliage. Evergreen magnolia trees often do this. If old magnolia leaves are falling copiously in the spring, this is often just a natural process.



Jason Pavel, University of Arkansas Cooperative Extension



Morgan Taylor, University of Arkansas Cooperative Extension

A common change in late winter for evergreens is a bronzing or orange hue appearing on the foliage, particularly on the upper surface. This is a natural phenomenon that slowly develops during the dormant period when photosynthesis is slower, and the other colors of the foliage begin to show. These leaves aren't brittle, bleached, or completely brown. Instead, they are still supple and should start to lose that bronze hue when spring arrives and new growth begins.

Another natural phenomenon for conifers is the production of male and female cones. Not all conifer cones look like pine cones and people will worry about browning on the leaf tips of their Leyland cypress or arborvitae and galls forming on their junipers or cedars because the cones they produce don't look familiar to everyone. Below are images of the male cones of a Leyland cypress and the 'berries' produced by a cedar.



Jason Pavel, University of Arkansas Cooperative Extension

The natural loss of older foliage, the retention of old, dead foliage inside the tree, the winter bronzing of newer foliage, and the production of unusual reproductive structures all can make people worry that their tree is sick or dying. The good news is all of these are perfectly natural phenomenon that are simply a part of the life cycles of your evergreen trees and shrubs. Being able to recognize these symptoms and separate them from whole branches dying, new foliage browning and/or dropping, or a general decline in plant health can help reduce your worry and let you appreciate the natural beauty of the annual evergreen life cycles. If you are uncertain about what you are seeing, you can always contact your local county extension office, and they can help you determine if anything should be sent in for testing.