



# TEXAS A&M FOREST SERVICE

## *Tree Health Issues*

## **Mistletoe**

Mistletoe is most commonly associated with cozy Christmas nights by the fire while perhaps sneaking a kiss beneath the sprig in the doorway. However, what isn't common knowledge is that the plant itself is actually a parasite and, while socially it may bring good cheer, biologically it can be quite damaging to trees.

The parasitic characteristics of mistletoe are actually quite interesting; it does not strictly derive all of its "food" from the tree. The plant attaches itself to the outside of a tree while penetrating into the trees growth rings with its "root" system. The root system of the mistletoe does steal water and nutrients from the tree, but the leaves of the mistletoe still undergo the photosynthetic process.



Several species of mistletoe can be found throughout the world and this plant is mentioned in the mythology of many cultures. The American mistletoe or oak mistletoe, as it is commonly called, occurs throughout the United States and effects deciduous trees. Tree species affected include: oak, sugarberry, cherry, sycamore, elm and more.

Mistletoe is most commonly found on trees that are already weakened due to drought, storm damage or other pathogens. The presence of mistletoe on the tree could be a symptom of a larger problem affecting the tree.



Because mistletoe is a parasite and damaging to trees, trees of value should be treated. Pruning is the primary method of mistletoe control. When the presence of mistletoe is limited, pruning can be a safe and effective means at ridding the tree of this parasite. The infected branch should be made on the tree should be made back to the branch collar. However, because pruning a tree removes living tissue, trees with large infestations of mistletoe should not undergo extensive pruning. In these situations the cure may be more harmful to the tree than the disease.



Dwarf Mistletoe

While American mistletoe affects deciduous trees, it does have a counterpart that attacks coniferous trees (commonly known as evergreens). Dwarf mistletoe, like American mistletoe, is also a parasite and several species exist. Dwarf mistletoe spreads by sticky pressurized seeds that when burst can spread upwards of 50 feet. The seeds then adhere themselves to the surface of nearby trees. Like American mistletoe, dwarf mistletoe will send a root like structure into the host plant's vascular system. Once inside the vascular system, dwarf mistletoe will begin to suck nutrients and water from the tree. Because of the pressurized nature of the dwarf mistletoe seeds and its ability to spread in upwards of a 50-foot radius, treatment options may include an area of quarantine around the infected trees.

Because mistletoe derive their water and nutrients from their host, they can harm trees. A mistletoe infection could weaken the tree's ability to fight off other parasites, or properly compartmentalize decay and wounds. Hire an ISA Certified Arborist who can diagnose and recommend the proper treatment. To locate a certified arborist, visit <http://www.isa-arbor.com/findanarborist/>.