



Diseases Gear Up for Spring

The following column is the tenth in a series intended to benefit woodland owners.

Each year homeowners need to be aware tree diseases are just as excited as we are about the return of spring. Diseases develop gradually and act intimately with trees by disturbing growth, water uptake, and photosynthesis. Disease signatures tend to be concentrated as brown spots on leaves, cankers on trunks, or decay in roots. The extent of severity depends on the type of disease encountered. Wilts such as Dutch elm disease, Pine wilt, and Oak wilt are among the most damaging in Missouri.

Diseases show up in predictable fashion every year, so if we know where in the growing season we are the better we can prepare for their control. In April, 'winter burn or scorch' can be seen on many evergreens, junipers, and pines. The primary damage occurs on above ground branches because the root systems are still stuck in frozen soil, so trees have a burnt brown appearance, though in most cases will recover as the soil thaws.

Ash, maple, and sycamore anthracnose begin in May. Leaves form brown spots and in severe cases will cause leaves to fall to the ground. In general, leaf pests only cause major problems if the next flush of leaves is lost during the same growing season. A good control measure is to rake up fallen leaves reducing the amount of spores available for future spread.

By May's end and June's arrival, our red oaks may suddenly start dropping leaves in response to oak wilt which is often fatal. Leaves bronze from their tips inward and drop because the water system of the tree is

clogged. Wilts are difficult to control because they are localized within the tree. Trees that die from oak wilt should be removed as soon as possible.

As trees move through July and August, the heat index begins to play a role in 'drought' scorch. Trees express browning along the edge of their leaves and this damage may occur over many types of trees. For the homeowner, mulching and watering trees may help to retain and increase moisture for the tree during dry conditions.

By fall it becomes harder to diagnose disease based on symptoms alone as the damage starts to overlap and look the same. If buds have set, it's likely the tree will return next spring. On the other hand, if branches have died you may wish to remove them to prevent additional spread. A good rule of thumb says if 2/3^{ds} of the tree's branches are dead, remove the entire tree and plant something else. The best advice is always to plant the right tree in the right place. You can improve diagnosis and ultimately provide better tree care if you know when and where to look. Gear up for success!

If you have questions during the disease season contact your local Missouri Department of Conservation office or find your local forester at:

<http://www.mdc.mo.gov/forest/myforester-search.html>

Article by Bruce Moltzan, Forest Pathologist, Missouri Department of Conservation.

Submitted by Peter Maki, Forestry Communication Specialist, Top of the Ozarks RC&D

