Now that the leaves are starting to fall off the trees, you are probably starting to notice some of the plants that live in their canopies more than you did a few months ago.

There are primarily three plants that we find there: Spanish moss (*Tillandsia usneoides*), ball moss (*T. recurvata*) and mistletoe (*Phoradendron flavescens*). Of these, mistletoe is the only plant that causes direct damage to our trees.

Although mistletoe is a beloved holiday decoration, it is also a parasite to most hardwood trees, such as oak, hickory and pecan. This means that it takes water and nutrients directly from its host plant.

The primary root of the plant, known as the haustorium, penetrates the branch of the tree and sends out additional roots, called sinkers, throughout the inner part of the branch. These sinkers steal the essential water and nutrients from the tree.

It's hard to control the spread of mistletoe or to prevent it from entering your trees because it is commonly scattered when the berries and seeds stick to the feet and beaks of birds or are consumed and then dropped in their excrement.

If you notice mistletoe growing in your trees, you should eliminate it, especially if its host plant has any value to you. The branch of the host should be cut 1 to 2 feet back from the visible infection area.

By only pruning the mistletoe itself, it will continue to be a pest to your tree, taking away the water and nutrients. Pruning the mistletoe also stimulates it to grow larger and more vigorously, making it more difficult to remove in the future and allowing it eventually to take over the canopy.

The life of mistletoe is limited only by the death of the host. Therefore, remove it from your trees. This time of year is the perfect time to do so. The plant can be more easily seen now, and you can use the cuttings for your holiday decorations.

It is also believed by some that Spanish moss and ball moss can kill trees. These plants are members of the Bromeliaceae family. Like many other bromeliads, these plants are epiphytes, or air plants. This indicates that they do not require soil to root in but can survive and thrive, hanging on branches of trees or other structures.

Spanish moss and ball moss are not parasites. They receive their water and nutrients when water flows across leaves and down branches of the tree in which they are living. They use trees to support themselves. They will not kill a tree by taking water and nutrients from them.

When Spanish moss and ball moss are noticed growing in a tree, it is most likely a sign that the tree is declining. When trees decline, they lose their leaves, opening up their canopy, and in turn, gives room for the Spanish moss and ball moss to grow.

If Spanish moss or ball moss becomes abundant on a tree, it may produce a hazard by becoming too heavy for the tree to hold and causing the branch to break and fall. In this case, control of the plants may be needed. A copper-based herbicide or fungicide can be used, but may cause damage to tender growth on oak trees.

Hand removal of Spanish moss can be done successfully on small trees by standing on a ladder or using a pole. For larger trees, a basket truck or "cherry-picker" is usually necessary. The procedure is labor-intensive and costly. Homeowners would be well advised to let the plant grow and enjoy the Southern look of the epiphytes, unless heavy infestation is endangering the health of the tree.
For more information on mistletoe, Spanish moss, ball moss or other plants, contact the Osceola County Master Gardeners. They are available to take your calls Monday to Friday from 10am to 2pm. They also invite you to visit their new plant clinic.

Jennifer Welshans
Horticulture Agent
Osceola County Extension Service
1921 Kissimmee Valley Lane
Kissimmee, FL 34744
321-697-3000
jwel2@osceola.org
osceola.ifas.ufl.edu
Date: December 15th, 2002