

Extension Notes

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AGRICULTURE & NATURAL RESOURCES

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Kentucky forests signal season change

You've probably been enjoying the beautiful fall colors in Kentucky during the past few weeks. Actually, these brilliant colors have been there all along though; they've been masked by a cloak of chlorophylls, green pigments vital to a tree's food-making process.

Trees use and replenish chlorophylls during the growing season. High replacement maintains green leaf color. As fall approaches, the green pigments are replaced at a slower rate due to complex environmental factors and the trees' genetic makeup. The dwindling supply of green pigments unmasks other pigments that were present all along, revealing the spectacular show of fall color.

We can enjoy a variety of fall colors because Kentucky's diverse climate and soil composition enable many diverse trees to grow here.

Black gum, pear, sumac, dogwood, maple, oak and sassafras trees produce various shades of red. Other trees give us a range of orange and yellow hues such as yellow-poplar, birch, hickory and beech.

Since black gum and sumac trees shut down chlorophyll production early, they are the first to reveal fall color. Both change from green to red, leaf by leaf. No leaf seems to be all green or red at the same time, giving a spotty appearance throughout the trees.

You might be surprised to know that what makes leaves change color has less to do with "Jack Frost" and more to do with shorter days activating a "chemical clock" that tells the trees to shut down chlorophyll production and prepare for winter.

When the tree completely shuts down chlorophyll production, a layer at the base of the leaf forms. This abscission layer causes the leaf to fall off the branch, leaving only the bud with next year's leaves and flowers to wait for the signal in the spring to bloom and grow.

For more information on fall tree color or other forestry topics, contact your Carter County Cooperative Extension Service office. The Martin-Gatton College of Agriculture, Food and Environment is an Equal Opportunity Organization with respect to education and employment and authorization to provide research, education information and other services only to individuals and institutions that function without regard to economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity.

Upcoming Events:

- The Northeast Area Livestock Association is currently taking orders for the **winter cattle group mineral order**. Call 474-6686 for more information and to place your order by November 10th.
- The **UK Fall Crop Webinar Series** starts November 2nd @ 10:00 AM. Call 474-6686 for more information and to register.
- **Little Sandy Beekeepers Meeting** – November 7th @ 6:30 PM – Speaker: Tammy Horn Potter, KY Apiarist
- **Extension District Board Meeting** – November 14th @ 10:00 AM