Ag Column Chris Ramsey September 29, 2017

## Fall Color Will Soon Be Here!

Already noticing some fall color change in our local landscapes. Fall color usually peaks around the third week of October which should be the weekend of October 21. Plan to get out of enjoy the fall colors this year. According to Dr. Wayne Clatterbuck, UT Extension Forestry Specialist, the change of leaf color occurs as chlorophyll in the leaf breaks down allowing the pigments, carotene and xanthophyll, to be visible. These pigments are responsible for orange and yellow coloring in leaves. With cooler nights and bright sunny days, the leaves produce anthocyanins, which are responsible for the red, pink and purple colors. Weather conditions this year will likely produce some great colors as long as we get at least some rainfall. Drought conditions will likely result in loss of leaves prior to fall color change.

As we progress into fall, Clatterbuck says leaves cease photosynthesis and the production of chlorophyll. This results in a higher concentration of sugars in the leaf. As leaves begin to separate from their stem, sugars get trapped in the leaf. This separation also keeps nutrients and water out of the leaf. Optimum temperatures, light, and water during the final days of summer and early fall encourage sugar accumulation. A higher sugar content will encourage brighter fall color.

As we near peak leaf color, drier conditions and moderate temperatures will increase the color intensity of fall color. Clatterbuck warns that an early frost will kill leaves, making them turn brown and fall more quickly.

You may also notice that two trees of a similar species may have variations in color. Genetic diversity within the species, meaning the trees can accumulate sugars at different rates, causes different color variations. Sugar maples provide great orange color and sweetgum adds some red and purple. Some of the brightest yellows come from ginkgo, hickories, honeylocust and ash. Red maples, blackgum and red oak will show up with the most brilliant coloring.

As you plan your fall driving trips, remember you will see leaves start to change earlier at higher elevations due to cooler temperatures. Although it varies from year to year, we are likely to see our best leaf color during the last two weeks of October. There are many two to three hour drives within our area for you to enjoy. Get out and enjoy the beautiful leaf color this fall.