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Colorful Fall Foliage Hard to Predict

MANY trees along city streets have suffered and some may be dying because of the hot summer and drouth.

So it was a pleasant surprise to observe the generally good appearance of trees in rural Oklahoma from Kansas to Texas on recent trips. They may be surviving because of deep subsoil moisture that accumlated during the plentiful spring rains.

This situation offers hope that we might have a good show of colorful foliage this fall, unusual in very dry years.

When we were children, many of us heard the fable that a mystical creature named Jack Frost painted the leaves orange, red and yellow when the first nippy morning arrived. Actually, when a killing frost hits, the leaves of most deciduous trees die. If they haven't already displayed their autumn colors, there may not be any. The leaves will simply turn brown and drop.

Experts say the color in tree leaves occurs as a result of shorter days and longer, cooler (but not freezing) nights. It is an aging process for the leaves. They have definite life cycles that allow the green coloring (chlorophyll) to decay during old age.

(Wonder why leaves take on beautiful colors while we humans simply turn gray, white or bald as we get older?)

Plentiful summer rainfall and non-extreme temperatures are regarded as optimum conditions for green growth and healthy trees. These conditions also are favorable for fall colors.

Forestry experts say the reason some trees and shrubs turn bright yellow while others turn a vivid red or orange may be compared to people who naturally have red, blonde or black hair. Heredity determines what their fall colors will be.

Colors may be in some tree leaves all summer. The rich yellow that shows up in walnut, hickory and sycamore trees in the fall is hidden by green chlorophyll. As the chlorophyll fades, the yellow becomes visible.

In oaks and maples, the red color comes about differently. The layer of cells on the leaf stalk that cuts off food and water also keeps the sugars manufactured in the leaves from moving out. The plant converts these sugars to red and purple pigments.

Evergreens, of course, may add to the show by providing a green background in mixed groves, but they do not go through the processes necessary to produce the brilliant colors.

Several years ago in October, we flew to New England, rented a car, and spent a week driving over those states during a spectacular display of color. The day after we returned home we read that an early freeze and snowfall had ended the show.

The leaves were just starting to color in Oklahoma, so we made a swing through eastern Oklahoma and enjoyed another brilliant spread of nature's chromatic handiwork.

Like our weather, the time and degree of autumn foliage coloring may be unpredictable, but it is a show worth watching.