

YOUR GUIDE TO LEAF SEASON

Many trees in Northwest North Carolina will soon be displaying their autumn splendor of reds, oranges and yellows; some have started changing already. Here's some information to help you prepare your game plan for traveling the roads with the prettiest views. Color forecasts can change with the weather, so visit biology.appstate.edu/fall-colors for the latest information and observations.

WILL COLORS BE GOOD THIS YEAR?

Forecasting fall color is still a bit of an inexact science, and not all experts agree on the factors that contribute to the intensity and timing of leaf color. These factors, such as weather, can have a big effect on leaf color from year to year. Leaves begin to turn color at the higher elevations first, with color change working its way to lower elevations over a few weeks.

TURNING EARLY?

According to leaf expert Howie Neufeld of Appalachian State University, this year's color season was shaping up to peak much earlier than usual, but this past week's warm spell slowed down the changes considerably. The current cooler weather should jump start the colors again, putting the area closer to a normal schedule.

However, according to Beverly Collins, a fall foliage forecaster in Western North Carolina University's biology department, higher elevations could still see their peak color earlier than usual — some are already experiencing significant color.

IRMA EFFECTS

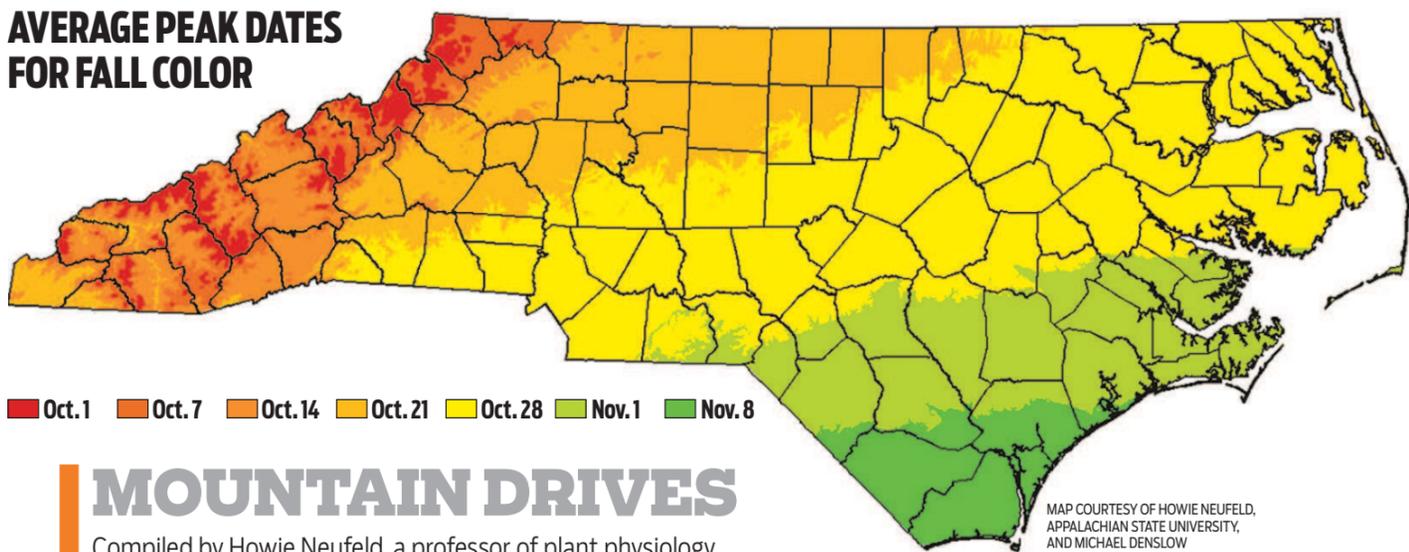
Higher elevations were also more affected by the wind and rain from the remnants of Hurricane Irma a few weeks ago, which knocked off some leaves and branches in western North Carolina and kept parts of the Blue Ridge Parkway closed for awhile.

RED ALERT

Neufeld expects the color to be vibrant this year, because the trees that turn red — such as maples, sourwoods and dogwoods — are looking good. The more red in the trees, the more vivid the landscape.

Online
See a video of some suggestions for where and when to see fall leaves in the state at journalnow.com.

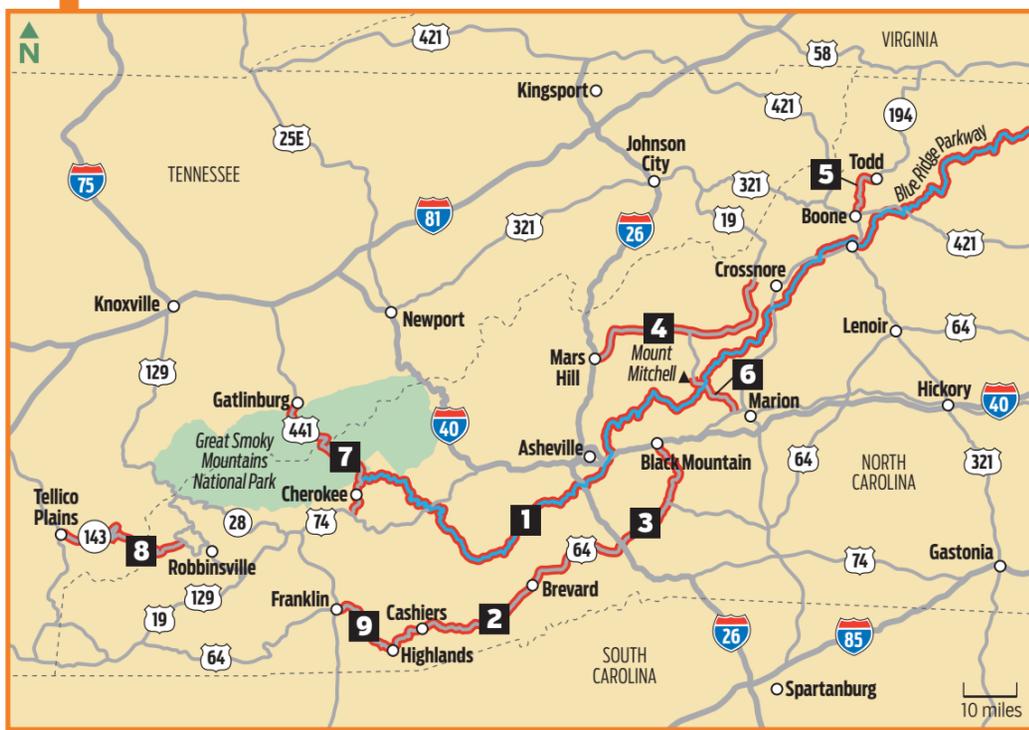
AVERAGE PEAK DATES FOR FALL COLOR



MAP COURTESY OF HOWIE NEUFELD, APPALACHIAN STATE UNIVERSITY, AND MICHAEL DENSLON

MOUNTAIN DRIVES

Compiled by Howie Neufeld, a professor of plant physiology at Appalachian State University:

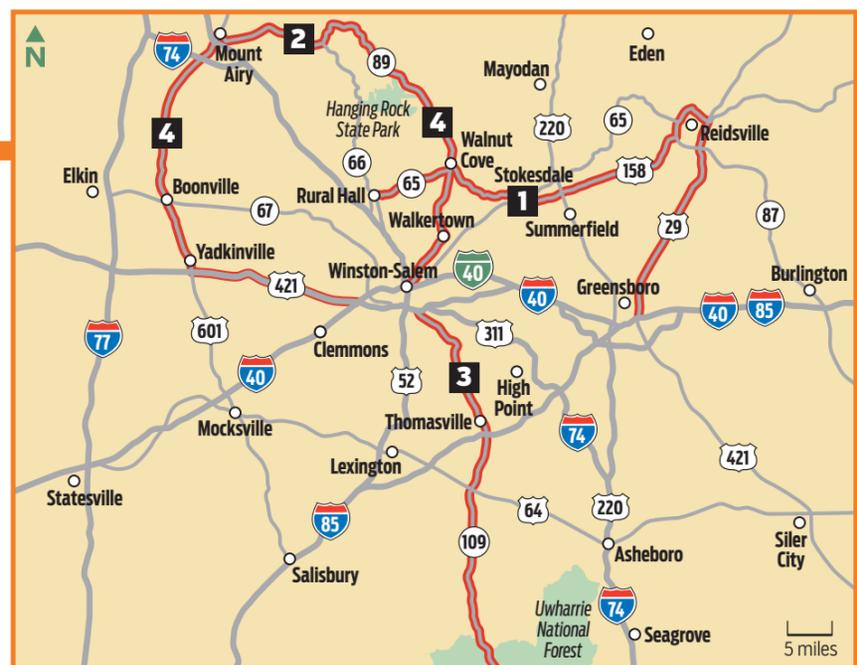


- 1 The Blue Ridge Parkway** from Virginia to the Smokies
- 2 U.S. 64** from Brevard to Highlands and Cashiers
- 3 U.S. 64** from Brevard east to Highway 9 north to Black Mountain
- 4 U.S. 19** from near Crossnore to Mars Hill
- 5 Highway 194** from Boone to Todd
- 6 Highway 80** from near Marion up to Mount Mitchell
- 7 U.S. 441** through Great Smoky Mountains National Park
- 8 Cherochala Skyway** (Highway 143 off U.S. 74/19 from near Robbinsville to Tellico Plains, Tenn.)
- 9 U.S. 64** from Franklin to Highlands in the Cullasaja Gorge

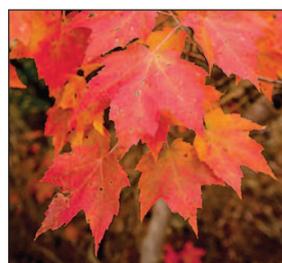
PIEDMONT DRIVES

Compiled by Dick Thomas, the executive director and naturalist at the Piedmont Environmental Center in High Point:

- 1** Take **Highway 65** from Rural Hall toward Stokesdale and Belews Lake, then take **U.S. 158** toward Reidsville, and down **U.S. 29** to **I-40** for a long, scenic loop.
- 2** From Mount Airy take **Highway 89** to Hanging Rock State Park. The many rural roads around the park are often very nice.
- 3** **Highway 109** toward the Uwharrie Mountains is always a beautiful drive in the fall.
- 4** Take **U.S. 421** west from Winston-Salem to **U.S. 601** near Yadkinville, to **Highway 89** toward Walnut Cove, then to **U.S. 311** toward Walkertown.



WHAT MAKES LEAVES TURN COLORS?



JOURNAL FILE PHOTO
Leaves of maple trees turn bright red in autumn.

» Sunlight and warm air cause trees to make **chlorophyll**, a green pigment essential to photosynthesis, which creates the sugars that the trees live on. As days shorten, photosynthesis slows and chlorophyll levels drop. Cooler weather prompts trees to seal off leaves with scar tissue. As leaves die, previously masked pigments come to the forefront.

» Orange and yellow pigments called

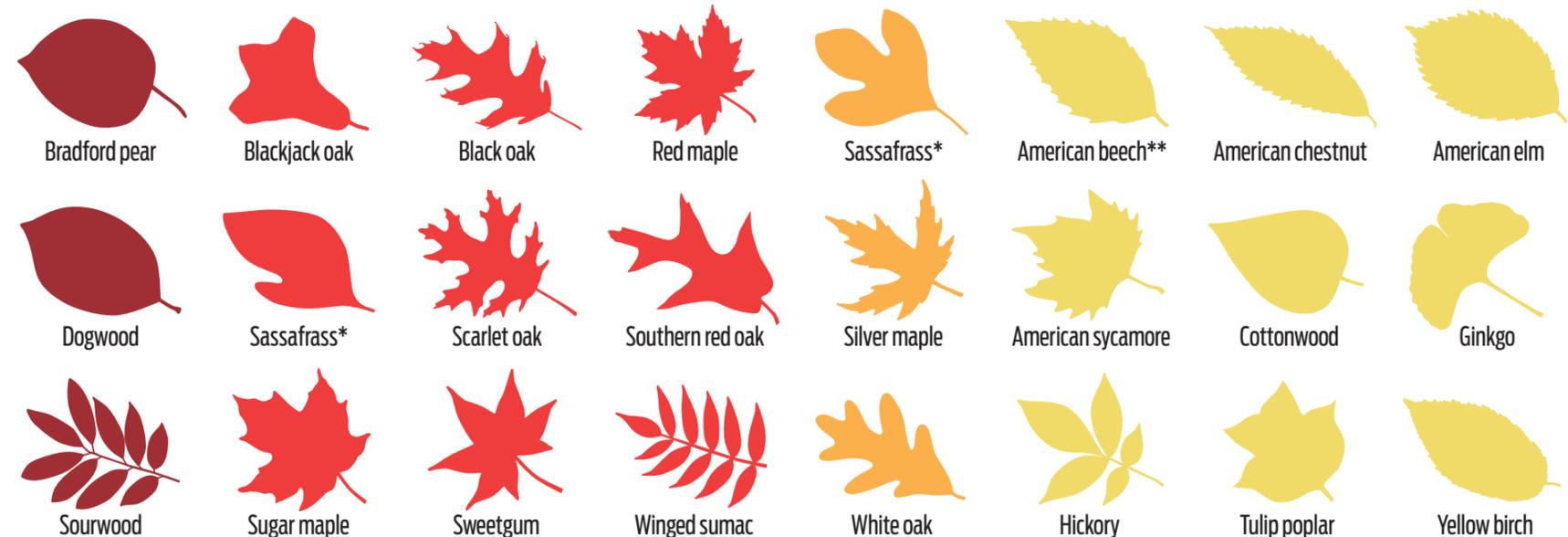
carotenoids are present in all leaves and are consistently seen in fall. Some trees also produce red pigments called **anthocyanins** — but only under the right conditions. This is why some autumns have more red leaves than others.

» Color tends to peak a few days after an area's first reported **frost**. But if the frost is too severe, it can cause leaves to brown and fall off early.

PERFECT RECIPE FOR FALL COLOR

- AMPLE MOISTURE IN THE GROWING SEASON
- +
- DRY, BUT NOT TOO DRY, LATE-SUMMER CONDITIONS
- +
- SUNNY AUTUMN DAYS AND COOL NIGHTS

FALL COLORS OF SOME COMMON TREES IN THE AREA



*Sassafras has at least two leaf shapes and can display the full range of autumn color.

**American beech leaves initially turn yellow and then pale to light orange.

Sources: Howie Neufeld, Appalachian State University; Dick Thomas, Piedmont Environmental Center; Beverly Collins, Western Carolina University; HowStuffWorks.com; University of Tennessee Institute of Agriculture

CASSANDRA SHERRILL/JOURNAL