



## Autumn Gold to “Black Gold”

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Podcast and web video at [arboretum.unl.edu](http://arboretum.unl.edu)

“Autumn is a second spring when every leaf is a flower.” *Albert Camus*

The best weather conditions for good fall color are ample sunlight, cool-but-not-freezing temperatures and dry weather. The color change occurs as chlorophyll disappears and the yellow and orange pigments become visible. Minimal wind and rain, as well as adequate moisture through the growing season, help minimize leaf drop and enable plants to go through the complex process that results in autumn’s beautiful colors.

Surprisingly, the timing of this process is dependent more on length of night than any other factor and therefore, in any given region, occurs about the same time every year. Like many other processes in the garden, the changes are subtle and gradual but well worth noticing.

Fall color is both intense and rapid in New England, where just a few species can dominate a forested area. Woodlands in Nebraska tend to be more diverse and many species here have less dramatic autumn foliage. Nevertheless, there are some wonderful species for the Great Plains:

Maples offer some of the strongest fall color and also the earliest. Sugar maple (*Acer saccharum*), Shantung and red maple, in particular, can turn a vivid scarlet.

Oaks turn later and coloring is less dramatic but lasts longer. White oak, *Quercus alba*, turns reddish-brown, pin oaks a deep red under the right conditions and red oaks vary from browns to reds depending on conditions and seed source.

Serviceberry or *Amelanchier* species run the full gamut of fall color. Shadblow and Regent serviceberry are pumpkin to red-orange. Native Saskatoon is buttery yellow while the deep green foliage of apple serviceberry gradually shifts to scarlet.

Black chokeberry or *Aronia melanocarpa* is a tough shrub that forms dense thickets for wildlife cover. Foliage turns a stunning rich crimson or purple in fall.

American hazelnut or *Corylus americana* is a large, multi-stemmed native shrub with dark green leaves that can offer a blend of yellow, orange and red in fall. Most hybrid hazelnuts were selected for the great-tasting, high calorie nuts they produce rather than fall color, so if fall color is your primary consideration you may want to avoid newer hybrids.

Other options for buttery yellow fall foliage include redbud, *Cercis canadensis*, magnolia and ginkgo. Fan-shaped ginkgo foliage is beautiful in any season, turning golden yellow in autumn. Though the leaves may hold for awhile they tend to drop all at once, particularly after a freeze.

Burning bush or *Euonymus alatus* is common throughout the Midwest. An even hardier, and very similar, Nebraska native is eastern wahoo or *Euonymus atropurpurea*. It has similar scarlet foliage, and also bright fuchsia pink capsules with shiny red seeds, similar to bittersweet in appearance but with more pinks and reds. The fruits dangle from the branches, visible even through foliage, and persist well into winter.

Sumacs are unrivaled for their gold, red and maroon fall colors. They tend to spread and form thickets, so they’re best planted in a confined space. The cutleaf selection *Rhus typhina* ‘Laciniata’ tends to be even more spreading and suckering than other sumacs. For fall color, ‘Prairie Flame’ sumac is a compact selection with rich maroon fall color; ‘Tiger Eye’ has golden-yellow leaves that turn red and orange in fall; and the deep green leaves of ‘Gro-low’ sumac turn orange-red.

Viburnums offer an amazing variety of fall color. Blackhaw viburnum has red to purple fall color and bluish-black fruit. American Cranberrybush viburnum, including ‘Wentworth’ and ‘Spring Red,’ has red fall color and bright red fruit. The arrowwood viburnum selections ‘Autumn Jazz’ and ‘Red Feather’ are a kaleidoscope blend of yellow, orange and red. Other notables include Koreanspice viburnum with wine-red fall color and Burkwood with brilliant orange-red. Most viburnums are large shrubs but a number of smaller cultivars are available also.

Don’t Waste Them!

As beautiful as they are on the tree, once the leaves hit the ground, those striking colors just don't elicit the same excitement. Rather than bringing out gas-guzzling, noise-making mowers, blowers and vacuums to deal with the residue, consider layering them with soil and other organic residue to make compost or create a new garden bed.

Whether you call it "lasagna," "berm," "mulch" or "layer" composting, there's a myriad of benefits: garden beds can be built on top of soil or even on top of existing lawn; requires less physical labor than bagging and hauling; decomposes to create a rich humus; more closely mimics nature's way of creating new soil; uses materials already at hand—with the exception of hay, which can help loosen the mixture and increase aeration; and, if it's done correctly and with a lot of water, can do its work in the course of just one season.

Though composting can be as simple as throwing waste in a designated spot, many "how-to's" recommend a very structured process that discourages all but the most enthusiastic follower. In mulch gardening, a series of thin layers of organic waste is built up and then—the essential part—the whole area is heavily watered down to decompose. Watering encourages insect and worm activity, settling in, decomposition, and prevents drying out or "pressing" the materials. Since layers are quite thin, moist and not stacked very high, the temperature doesn't get as high as in normal composting; and since it offers the right conditions for worm and insect activity, more labor-intensive methods of turning and mixing the layers are unnecessary.

To start a new bed on top of lawn, you may want to first lay down soaked layers of newspaper to help smother existing grass. Then begin the layering process, alternating thin layers of leaves (the more decomposed or broken the better), soil, kitchen waste, compost, grass clippings and hay. Moldy, rotted hay is best if you can find it. You can also add used coffee grounds, still in filters if you want, from home or work. Water it in periodically as you're layering it and don't add woodchips or sawdust, which will slow down the decomposition. As it breaks down, it will settle to about half the depth of the original layers. Keep it moist through winter, and by spring you will have turned autumn's gold into "black gold."