Roadside Botany of Illinois - April

Identifying Common Roadside Plants by Bloom Color



Molly Hacker

This monthly series highlights the colorful blooms you might see as you drive through Illinois during the growing season, April - September. It is designed to help you identify common roadside plants by the color of their blooms. It's easy! Find your bloom color of interest in the title blocks of this piece.



Cornus florida, Cornaceae Flowering Dogwood

Cornus florida is a native mid-story tree or shrub, typically occurring in rich woods. Prized for their showy blooms, this species is a popular landscaping tree and claimed by Virginia and Missouri as the state tree, and by North Carolina as the state flower. Each single "bloom" is actually an inflorescence (an aggregate of multiple flowers). The yellowgreen structures in the center of the blooms are the petals of flowers, and the white petallike structures are really bracts (a modified leaf/leaflike structure)! Note the distinct notch on the outer edge of the bract for easy identification, although this feature may not be apparent from the roadway. Cornus florida produces bright red fruits (drupes, a fruit type) that are important food sources for birds and other wildlife species. Compounds contained in the fruits (anthocyanins) have been shown to have antitumor activity (Vareed et al., 2006).



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By Scott Namestnik

Amelanchier spp., Rosaceae Shadbush, Serviceberry, Juneberry

This species, a multi-stemmed shrub or midstory tree with white blooms produces delicious and highly coveted fruits by June. I was introduced to this plant by a group of foraging ecologists gathered around it, where it had been incorporated into a formal landscape setting, "An all-around good plant", I was told, "It's beautiful and an important source of food and habitat for many wildlife species." There are six native species of *Amelanchier* in Illinois (Kartesz, 2015). This species should be more utilized in formal and native landscape design.



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Elaeagnus spp., Elaeagnaceae Autumn Olive and Russian Olive

This species appears as a silvery-white shrub along the roadway in spring. It is a problematic non-native invasive species and widespread throughout the region. The invasion success of this species is attributed to a symbiotic relationship with nitrogen fixing bacteria (Frankia sp.), which gives this species a competitive edge in low nutrient soils. Native to Asia, genetic analyses indicate that this genus diversified in the Qinghai-Tibet Plateau (Su et al., 2014). The silvery-metallic scales covering the leaves, stems and fruits give the plant a metallic luster, and are suggested to be a functional adaptation to conserve water during the seasonal droughts in the region of its origin (Su et al., 2014). The berries are edible, described as tart, and remarkably high in lycopene - up to 17 times higher than in tomatoes (Fordham et al., 2001).



By Scott Namestnik

Phytoimages, "scales from leaves, © 2008 by D. L. Nickrent & K. R. Robertson Phytoimages, © 2011 by Mihai Costea

Narcíssus spp., Amaryllidaceae Daffodils



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These herbaceous perennials are ornamental escapees of the Amaryllis family. Along the roadside, they grow in scattered clumps, in either yellow, white or a mix of both colors. *Narcissus* spp. have been cultivated since ancient times and utilized for their medicinal properties. *Narcissus* spp. are non-native to the US, and their origin / center of diversity has been traced to the Iberian Peninsula in the Western Mediterranean.



Narcissus pseudonarcissus, by Lindsay Namestnik

Taraxacum officinale, Asteraceae Dandelions

Everyone knows this plant. It has got to be the most identifiable plant ever. Taraxacum officinale have a wideranging distribution throughout the temperate zone and have been used as food and medicine by civilizations worldwide. The efficiency of this ruderal plant's distribution is due in part to its dispersal mechanism, wind, and that it produces many seeds. This plant's success is also due to its apomictic ability (a mode of asexual seed reproduction). The "pappus" is the fluffy structure attached to the seed that catches wind it is the "make a wish" portion of dandelion's life cycle. Neighborhood children have ruined many a healthy lawn with this "magical" property.



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Barbarea vulgaris, Brassicaceae Common Yellow Rocket

Packera glabella, Asteraceae Butterweed



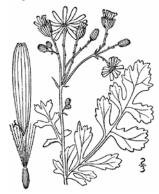
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Scattered along the roadside and blanketing agriculture fields are bright pops of yellows. From a distance *Barbarea vulgaris* can be confused with another yellow bloom, that of *Packera glabella* (see below). There is a subtle difference in hue - *Barbarea vulgaris* is more of a lemon yellow (white undertones) while *Packera glabella* is more of a buttercup yellow (orange undertones). Both of these species have dissected / pinnatifid leaves that form basal rosettes, but in general, *Barbarea vulgaris* is denser and leafier than *Packera glabella*.



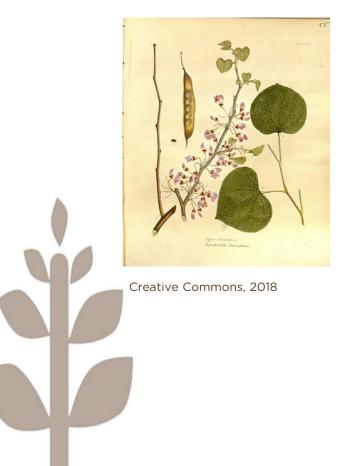
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Cercis canadensis, Caesalpiniaceae Redbud



Cercis canadensis is one of the earliest bloomers along the roadside. By April, it is in full bloom with brilliant pink flowers. It is a native mid-story tree and a delightful addition to any native or formal landscaping. Although this species is known to contain toxic saponins, the edible flowers taste like peas and make a colorful addition to salads.



By Scott Namestnik



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Malus spp., Rosaceae Apple / Crab Apple





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By Scott Namestnik

Malus is a large group represented by the familiar apple, crab apple and pear trees. Members of this group typically appear as a small trees with blooms that span a gradient of pinks to white. The spread of the apple tree through eastern North America is a fascinating one, and traced to John Chapman, aka "Johnny Appleseed". This guy was real, and he did indeed plant apple seeds all over the midwest and northeastern United States in the early 1800's. Refer to Michael Pollan's *Botany of Desire* (2007) for a riveting account of this fascinating figure (and a thorough history of the apple tree)!



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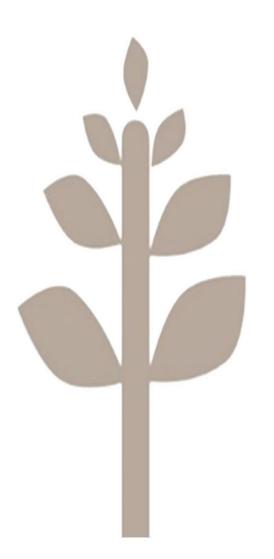
You might notice large leafless trees with tinges of red at the tips of the branches along the roadway. This is likely the native and widespread Acer rubrum. The flashes of red that you are seeing as you zoom past are the flowers and / or fruits. Acer rubrum are early bloomers and in April, you may see both stages of development. Contrary to popular belief, the fruits of maple tree are technically termed "samaras", not "helicopters".



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