

IMA Q/A's: To Cultivar or To Wild Type?

By Greg Sykes (greg@grsykes.com)

Q: I am about to add more native plants to my yard. Do you recommend cultivars or wild types?

A: Let's first define some terms for our readers. "Cultivars" are plant varieties originating either naturally or through human-controlled cross-pollination; in either case, people perpetuate the plant and its preferential characteristics via self-pollination or cuttings. "Wild type" refers to organisms with traits derived entirely from natural procreation.

Answering the original question, the best choice depends on the application. To help illustrate, consider the winterberry (*Ilex verticillata*), a native species found around Royal Lake and other neighboring parks. Both seed-grown wild specimens and many cultivars are commercially available. True to all hollies, winterberry has male and female plants and the female must be within pollination range of the male to bear the berries; the males produce no fruits. Insects munch on the leaves without severely injuring the plant; in turn, these bugs may end up as bird food or benefiting other wildlife. Unlike the spiny evergreen leaves on American holly (*I. opaca*), winterberry leaves are soft and drop in autumn revealing the beautiful, scarlet berry bunches. The brilliant berries remain throughout the frozen months, enhancing the landscape while offering resident birds a nibble. In late winter or early spring, before the new season's shoots emerge, hungry birds burning energy on spring migrations gladly devour any remaining winterberries.

Homeowners wishing to add winterberry might have a limited space or want a bush to be the garden's focal point. In this case, a cultivar (e.g., Winter Red, Cacapon, and Red Sprite—a dwarf form) might be chosen to guarantee that the purchased plant is female, has a desired berry quantity, and grows to a known size. Meanwhile, Southern Gentleman, Jim Dandy, or other male varieties may be placed in an inconspicuous corner. If space permits, several kinds of winterberries situated around the property create an interesting mix. Along hedges or in wooded areas, wild types form a visually appealing assortment while maintaining a healthy gene pool. Robust genetic diversity is a major factor in the wild type's favor because it helps bolster the species' survival: more alleles (variations of genes) within a population improve the chances of at least some individuals expressing the right traits to endure a specific hardship. For example, genetic diversity was the American elm's (*Ulmus americana*) salvation in battling Dutch elm disease. On the other hand, cultivars are genetically identical; if one clone is susceptible to a blight, all of that variety's members are equally vulnerable. When choosing wild type specimens, try picking ones from seed stock collected and grown near your area since those plants already contain traits geared towards the region's weather and soil conditions. Purchases from a reputable nursery helps ensure that the wild type plants are legitimately raised and not poached. Never dig plants out of the parks! Certain cultivars are more commercially accessible than others or their wild counterparts, but a little searching opens up tons of options, especially at native plant sales and specialty nurseries.



Figure 1. Winterberries are an outstanding native alternative for non-native invasive shrubs, such as [heavenly bamboo](#) (*Nandina* sp.) and [winged burning bush](#) (*Euonymus alatus*). From a distance, winterberry's dense, bright ruby displays almost look like long lasting autumn foliage! Shown here is a Winter Red from Green Spring Gardens in December.

When folks plant to attract and feed wildlife, usually the cultivar or wild type dilemma matters little. The time cultivars impact wildlife behavior is when the variety strays too far from its native form. Such was the case with Winter Golds, which produces pastel orange winterberries instead of normal vibrant red. One local property has numerous natural and cultivated winterberry shrubs including Winter Gold. The berries remained over this past winter until an early spring flock of cedar waxwings migrated through the neighborhood. During their rest stop, they gobbled up every single red berry but left the Winter Golds untouched. In fact, the orange fruits ended up rotting on their branches! Was this cultivar's berry appearance too odd for birds to recognize? After all, many ornithologists agree that birds see the color red yet have different spectral perceptions than people do. Did orange berries look unripe to the birds? Was an unpalatable flavor conveyed with the strange fruit coloration? As only the birds know those answers, we can learn many native landscaping do's and don'ts by observing wildlife behavior.

Q: Are there any native berries that no wildlife eats?

A: The only one coming to mind is Osage-oranges (*Maclura pomifera*). Given its tough, softball-sized fruits and huge, formidable thorns adorning the trunk and branches, scientists believe these gigantic berries may have been food for a now extinct animal, such as giant sloths or mastodons. Osage-orange's traditional range spans eastern Texas and into Oklahoma and Missouri, but people transplanted it across many other states. You can find this tree growing in old Fairfax County farmsteads, such as Annandale Community Park.

In addition to reading about native flora and fauna, join us for an Invasive Management Area (IMA) workday and meet some of the woodland critters for yourself! To be notified about future workdays, contact me at greg@grsykes.com and ask to be on the IMA volunteer list.

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