When the Magnolias Don't Freeze

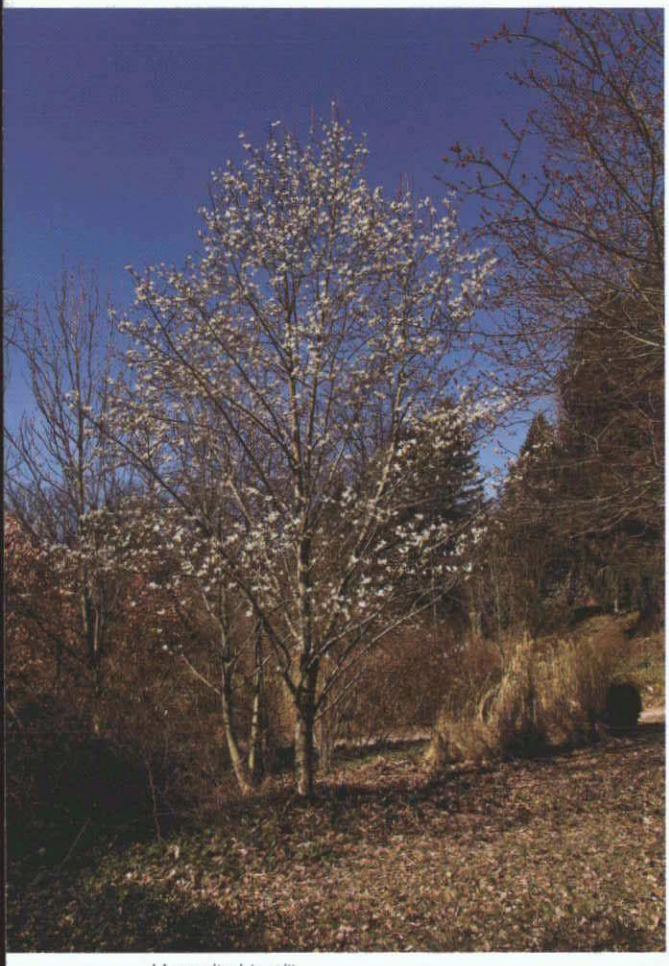
Barry Yinger

For two years in a row, in both springs of 2005 and 2006, I experienced seasons of magnolia flowering with little frost damage. Here in south central Pennsylvania (USDA zone 6a), the expectation of a full season of magnolia blossoms is a triumph of hope over experience not unlike someone twice divorced heading to the altar again for round three. For the past 30 years, in about four out of five years, we have a hard frost just as the early to mid-season magnolias were showing color; but for two years running I have seen the Gresham hybrids and similar hybrids in their full glory.

There are more than 100 kinds of magnolias here, some trees more than 20 to 35 years old, but mostly five to ten years. There are here, I believe, nearly all of the major taxa from nature that are hardy in the open, most from wild seed, plus many selections and hybrids. In particular, in the early 1990s I received from the late Dr. John Allen Smith rooted cuttings of nearly all the varieties he was growing, including some nice Gresham hybrids that were named in the South after Todd Gresham's death. I also received from the J. C. Raulston Arboretum a more or less complete set of grafted plants from the late Dr. August Kehr's test garden not long before his death. Most of those plants survived in the nursery, and many of them are blooming now. The first year that I saw most all of them in bloom together was 2005.

Although we are in USDA zone 6, we had some abnormally cold winters in the 1990s. The winter of 1993–94 was the coldest, with a low temperature of –28°F (–33°C), and a high the following day of –12°F (–24°C). All of the older trees in the garden survived that winter, some with damage but many completely unaffected by the cold. Many flowered normally the next spring. It shows that when they are fully dormant, many mature magnolias can endure very low temperatures, at least for a few days, without much damage.

Most of the Gresham-type hybrids from John Allen Smith have bloomed by now. As I expected, most of them are almost impossible to distinguish from one another or other named cultivars. I can



Magnolia biondii

look down a nursery row here and see many very similar flowers on plants with different names. But among the gifts are some real treasures. 'Jon Jon' is by far the best of the lot here. It blooms just a little later than the others and often misses late frosts. I can see its big rounded near-white flowers with a pink base from the window of my office. Other winners are 'Big Pink' and 'Elisa Odenwald.' The former has a big rounded clean pink flower and many times manages to bloom in years when other Gresham types are ruined. Frequently, it is the showiest tree in the garden in spring. 'Elisa Odenwald' is simply an exceptional *Magnolia denudata* look-alike, a larger-flowered version of a species that rarely completes a bloom cycle here. The flowers have the same wonderful near white flowers with the same elegant shape, but are larger, and appear a couple of weeks later than *M. denudata*. All three of these hybrids came through the killer winter without damage. Among the hybrids named by Todd Gresham, 'Sangreal' still stands out. Its big rounded flowers are deep pink, touched with red in especially cool springs. It also was undamaged by the coldest winters.

Three exceptional magnolias here came from Dr. Kehr's breeding program. 'Daybreak' is probably the best late mid-season magnolia growing here and perhaps the best anywhere. The flower color is hard to describe but there are "tequila sunrise" shades of pink and near orange. The large colorful flowers always miss being frosted,

Magnolia 'Daybreak'

and they appear on young trees. A tree of this variety in bloom stands out, even among a planting of excellent magnolia selections. The second is an unnamed seedling labeled 14-29 Kehr 960116, a *Magnolia* "stellata type" that looks like 'Chrysanthemumiflora' on steroids. The flowers have the highest tepal count I have seen, plus they are unusually large (about five inches in diameter) and deep clear pink. It puts all other pink "stellata type" flowers to shame. The third is an unnamed seedling labeled only "Woodsman × Elizabeth." It flowered for the first time last year, with has deepest yellow flowers of any of Dr. Kehr's hybrids so far, at least in this garden.

The earliest magnolia to bloom here is *Magnolia zenii*, followed closely by *M. biondii*. They can bloom weeks before *M. stellata*. *Magnolia zenii* has moved onto my top ten favorite magnolias list because of its frost resistance and wonderful fragrance. The opening buds will take several degrees of frost without damage. My now large tree is a rooted cutting from the Arnold Arboretum from their original introduction. *Magnolia biondii* here is also from the Arnold's first introduction, but it is nothing special as an ornamental and is eclipsed by *M. salicifolia* and *M. stellata* 'Centennial.'

Soon after *Magnolia biondii*, I see the flowers of *M. salicifolia*. This is probably the most misunderstood hardy magnolia in cultivation. Virtually every tree I have seen in the U.S., including those in botanical gardens, is not the true species; most appear to be hybrids with *M. kobus*. The cultivar 'Miss Jack' is also clearly a hybrid. The two trees here are grown from wild seed I collected on Mt. Hakkoda,

Magnolia denudata

in Aomori, in northern Japan. Once seen, it is easy to distinguish the true species, both from a distance and at close range. The flowers are poised like white moths on very slender branches and the effect in bloom is noticeably different from other precocious magnolias. The leaves are long and narrow, smooth, and of much thinner substance than the other early whites. The two trees here differ in the color of their foliage in spring; one leafs out green and the other reddish bronze. This spring I germinated wild seed from west central Japan (Hyogo Prefecture) and I will be interested to see if it differs from the northern type. One of the seedlings has leaves wildly splashed with creamy white. I think it will be a stable and beautiful variegated form, the first I have seen of this species.

My greatest frustration in growing magnolias has been trying to cut through the hype to find good true yellow varieties for the garden. I have tried all the usual suspects, from 'Elizabeth,' through many Kehr selections, and others. Most all of them are ivory to very pale creamy yellow in most years. Only two are truly and obviously yellow year after year without fail: the late Phil Savage's 'Butterflies,' and Brooklyn Botanical Garden's 'Yellowbird.' 'Butterflies' is precocious, midseason, with a poor

Magnolia zenii

growth habit as a young tree, but with reliably true yellow flowers. It is planted well away from the house where the bright flowers can be enjoyed from a distance without clearly seeing the awkward shapes of the two trees. 'Yellowbird' has a nice upright habit, very tidy, with clear yellow flowers that bloom as the new leaves emerge. In especially cool springs the emerging leaves are bronze red, contrasting with the flowers. Usually the leaves do not obscure the flowers until the end of the bloom cycle.

Several of the late Dr. David Leach's hybrids show great promise. 'Ivory Chalice' is another *Magnolia denudata* on steroids. My tree grew from a rooted cutting to 12 feet tall in two years. The flowers are ivory with the elegant conformation of the species *M. denudata*. The now very tall tree is naturally shapely. Two other Leach introductions are becoming favorites: 'Golden Gift' and 'Coral Lake.' 'Golden Gift' might turn out to be another reliable yellow magnolia; a few more years will tell. The flower is shaped like *M. stellata* on a tree the size of our native *Cornus florida* with somewhat horizontal branching as it ages. It has great promise as a small magnolia for the small home garden. 'Coral Lake' offers a flower with unusual coloration, at least in cool springs. It can be suffused with coral, a color hard to find in the magnolia group, although 'Daybreak' can have similar shades in parts of the flower.

Magnolia grandiflora, in general, does not grow in this area. I have tested most of the clones with special hardiness claims and find that only one, 'Bracken's Brown Beauty,' came through the 1993-94 winter and all subsequent winters with little to no leaf damage, and no damage to the wood. 'Edith Bogue' planted thirty feet away has been killed to the ground twice. 'Bracken's Brown Beauty' has beautiful foliage heavily felted beneath, and often blooms sporadically throughout the summer.

Magnolia virginiana is native in this part of Pennsylvania, along the Susquehanna River a few miles from here, but it is the fully deciduous northern race. I am fortunate to have two forms of the southern "australis" race that are evergreen here. The better one is from the tree at Brookside Gardens in Wheaton, Maryland. No one knows the origin of this tree, but it is tall and narrow with a single trunk and deep green foliage that is unaffected by the coldest winters. Even in the winter with the low of –28°F (–33°C) it kept its foliage in good condition. Unfortunately, it has proved to be very difficult to propagate. Another form was selected by John Allen Smith. It is single-trunked,

very vigorous and fast-growing, quickly making a beautiful specimen. The leaves are undamaged here in most winters.

Several other familiar cultivars of various species and crosses stand out for consistently superior performance. It is hard to beat 'Galaxy' for a naturally shapely, large-growing magnolia that blooms almost every year. Its sister 'Spectrum' has showier flowers with a red cast, but has not bloomed as faithfully; nevertheless it remains a greatly undervalued magnolia. *Magnolia stellata* 'Centennial' from the Arnold Arboretum is the best white of this species. After 25 years in the garden, the two trees here just get better every year. Less well known is the hybrid *M.* × *wieseneri*, rarely planted and said to be hard to grow well. I am happy that I didn't know that when I planted it here. It has thrived, producing its gorgeous, highly fragrant, large white flowers with prominent, highly ornamental red stamens every year in early summer when few trees are in bloom.

Some of the best magnolias are the original species. Nothing can beat *M. sieboldii* (Korean form) for elegance of flower. The nodding, pure white globes with red stamens are outstanding in a genus full of stand outs. The trees here were grown from wild-collected Korean seed, planted on slopes to best view the pendant flowers. Our native *M. asheii* is the most undervalued American native small tree for garden use. It remains a manageable size for a human lifetime, offering oversize leaves that impart a tropical effect in the garden. The enormous, highly fragrant flowers are unmatched by any other small flowering tree.

As more and more of the hardy hybrid magnolias begin to look more and more alike, I have nearly stopped planting new varieties, but it is still exciting to see the plants that are here mature and reach their full potential. With this perspective, I will be able to judge which varieties age well and deserve to be widely planted.

All photographs by the author.