

THE DAWES ARBORETUM

Newark, Ohio USDA Hardiness Zone 5b

An apt characterization of our weather for central Ohio in 2016 would be to describe wide temperature fluctuations in late fall and winter that were preceded by a long dry period from September through November.

The mean temperature for January was 28.1 °F (-2.16 °C) but high temperatures, exceeding 60 °F (15.5 °C), occurred on January 31. In November and again in December unusually warm days of nearly 80 °F (26.6 °C) on November 1 and 70 °F (21.1°C) on December 26 were recorded. The only below zero recording [-3.9 °F (-19.9 °C)] happened on February 20.

We had nominal precipitation totals for 2016 of 33.9" (86.1 cm), but only 5.4" (13.7 cm) of precipitation were recorded for the months of September through November. We experienced several 90 °F (32.2 °C) days in the summer with the highest temperature [92.8 °F (33.7 °C)] occurring on August 27.

Unfortunately, this report is not the only time I have mentioned our experience with dry summers. This now seems to be a common pattern for central Ohio. Even though the genus *Ilex* enjoys the well-deserved reputation for being drought tolerant, this spring I observed unique branch tip abscission on some American holly cultivars (*I. opaca*) which I must now attribute to prolonged drought stress since we had a relatively mild winter that dismisses the likelihood of cold temperature damage.

During 2016 a number of holly taxa were removed, most of which were evergreen. Two longstalk hollies (*I. pedunculosa*) were transplanted several years ago from another garden area to Holly Hill. Neither transplant was able to acclimate properly before the onset of our frigid winters of 2013—2014. One specimen has been removed and the other is on removal for this spring. Two Japanese holly clones (*I. crenata*) were removed after being severely winter damaged in 2014. American hollies Dunn No. 2 (*I. opaca* ‘Dunn No. 2’) and Goldie (*I. opaca* ‘Goldie’) died in 2016. The former has already been removed while the latter awaits its acquaintance with the chain saw.

One hybrid winterberry (*I.* ‘Hopewell Grenadier’) was removed at Holly Hill because of poor performance over several years. A Helen Mitchell American holly (*I. opaca* ‘Helen Mitchell’) was also removed from Holly Hill due to poor rooting. Two Delia Bradley American hollies (*I. opaca* ‘Delia Bradley’) were removed in Central Grounds to relieve competition with surrounding taxa.

Only one new addition occurred at Holly Hill, a transplanted *I. × meserveae* ‘Mondo’ Little Rascal®. Six plants of Shamrock inkberry (*I. glabra* ‘Shamrock’) and three plants of Red Sprite winterberry (*I. verticillata* ‘Red Sprite’) were added in the north end of the arboretum.

In the spring 2017 we will add three evergreen hollies to Holly Hill: *I. opaca* ‘Ashumet’, *I. opaca* ‘Portia Orton’, and an unnamed hybrid between possumhaw and American holly (*I. decidua* × *I. opaca*). The latter originated in 2005 as cuttings from Bernheim Arboretum and Research Forest, Clermont, Kentucky, and is interesting for its nearly spineless leaf margins and orange drupes. Hopefully this specimen, a re-propagation from our original plant, will survive and flourish longer than its parent. Two additional Nova Scotia inkberries (*I. glabra* ‘Nova Scotia’) will be added along with one Stokes Japanese holly (*I. crenata* ‘Stokes’).

The Dawes Arboretum still has possession of three HSA test plants: *I. verticillata* ‘Chickemmo’ (Chickemmo common winterberry); *I.* ‘HL 10-90’ Christmas Jewel®; and *I. serrata* ‘Longwood Firefall’. The Chickemmo is a Polly Hill introduction, and we received cuttings in 1996 from parent plants at Barnard Inn Farms. Our representation now consists of three robust, 7 to 8’ (2.1 to 2.4m) suckering shrubs. A female clone, Chickemmo has medium-sized [$\frac{1}{4}$ ” (0.6 cm) wide] red berries that may persist into March. The holly hybrid Christmas Jewel® is a Saunders Bros. introduction out of Piney River, Virginia, and is noted for its large red berries, nearly spineless foliage and upright, pyramidal shape. Our lone plant, now 3’ (0.9 m) tall, was donated by Ray Head in 2012, and still survives today although no fruits were observed in March 2017. The last trial plant, Longwood Firefall Japanese winterberry, came to Dawes as un-rooted, semi-softwood cuttings in 2015. We now have several one-gallon plants that may find their way into our collections as early as 2018.

Two additional trial plants, *I.* ‘Sled Run’ and *I. × aquipernyi* ‘Dragon Slayer’, were donated to Dawes in 2013 and 2014 respectively. Both succumbed in early November 2014 when the mercury plummeted to an unprecedented 8 °F (−13.3°C). Unfortunately, the cold frames were not yet covered with winter poly, resulting in the wide spread destruction of many potted plants.

Richard Larson, Nursery Manager/Propagator <http://dawesarb.org>