The Dawes Arboretum
7770 Jacksontown Road SE, Newark, OH 43056
USDA Hardiness Zone 5b

The most telling element of any Midwestern garden report for the year 2012, whether it pertains to hollies or some other group of woody plants, would have to reflect the absolute severity of weather conditions prevailing over most of the growing season. The number of unique plants accessioned, propagated, planted or exchanged, is unfortunately rather insignificant in my mind as I, along with the hollies I cultivate, had to endure a magnitude of heat and drought that I had never before experienced.

It began on the eve of 2012 as the average January temperature in 2012 for central Ohio was an astonishingly warm 40.8˚ F (4.9˚ C). The lowest recorded January temperature, on January 15, was 5.2˚ F, (–14.9° C) and then on January 31 readings soared to 60.5˚ F (15.8˚ C).

Temperature readings from March 13 to March 31 were even more remarkable and discouraging with the highest ever recorded temperature on March 21 of 84.4˚ F (29.1° C) and the average high temperature of 67.1˚ F (19.5° C). After this unusually warm period I observed the April defoliation of second- and third-year-old leaves on a number of American hollies (*Ilex opaca*), thereby reducing the photosynthetic potential of many trees to the first year bud growth. Reflecting back, we were fortunate indeed that this species survived and generally performed adequately despite this potentially devastating event. Still, the noticeable dearth of good fruit production on our American hollies can most likely be traced back to this March anomaly.

The summer of 2012 kicked our butts as it proved to be the third driest and the second warmest since the advent of modern record keeping. We recorded 42 days in excess 90˚ F (32.2° C) and an average maximum temperature 91.1˚ F (32.8° C) and 87˚ F (30.6° C) for July and August respectively. Significant precipitation deficits were also recorded for July, August and November. The holly collection was perhaps the only area in the Arboretum to escape widespread injury and death.

If we had held an HSA annual meeting in 2012, members would have been generally dissatisfied with the aesthetic quality of our evergreen hollies. Bountiful American holly is a cryptic example. Last year I reported phenomenal fruiting on this cultivar,

but this year I observed nary a branch with fruit. One notable exception to the relative sterility of the collection in 2012 has been Satyr Hill American holly, which outperformed all other selections, bearing copious fruit clusters still visible as late as February 23, 2013. In consolation, however, our deciduous hollies bore above average fruit production during the winter of 2012-13. Colder temperatures in the first part of winter have kept fruits firm and retarded the mass harvesting by birds that normally commences by early January. Good fruit color and persistence was thus observed during the latter half of February 2013 on several common winterberry (*Ilex verticillata*) cultivars including 'Afterglow', 'Firestorm', 'Oosterwijk', 'Spriber' (Berry Nice™), and 'Winter Red'.

This past year I spent considerable time and effort attempting to rejuvenate our inkberries (*I. glabra*). It is generally accepted that this species does not age well and is recalcitrant to suckering with the tendency to form a top-heavy, vase-shaped shrub, often harboring a great deal of dead wood. Thus, cycling out old plants in favor of new propagules is customary as the species is exceedingly easy to asexually propagate. Fortunately, the diverse nature of plants always works against our oversimplification of matters and such is the case with one inkberry accession I observed this year. In November, 1994, we received seed of this species from Reeseville Ridge Nursery, Reeseville, WI, collected from wild populations in Ocean Beach, NJ. Plants in our collection are now nearly 20-years-old and have continued to defy the norm by staying relatively compact, densely branched and suckering profusely.

The characterization of our American holly also bespeaks of this oversimplification. Many seem to consider this species a mere pejorative version of English holly (*I. aquifolium*) and thus focus too literally on the term "opaque." This fails to take into account the many fine, dark foliaged selections that retain excellent winter color and, of course, are useful in colder climates where its European counterpart will ultimately fail. In this vein, one should list as noteworthy the American holly cultivars 'Brilliance', 'Dan Fenton', 'Jersey Princess', 'Judy Evans', 'Mamie Eisenhower' and 'Richards'.

I say, kudos to plant diversity and man's application of this phenomenon.

In summary, five plants were removed from the collection in 2012, two of which, *I. ciliospinosa* (no established common name), and large gallberry (*I. coriacea*), are marginally hardy to central Ohio. Two deciduous cultivars, Byers Golden possumhaw (*I. decidua* 'Byers Golden') and Red Sprite common winterberry (*I. verticillata* 'Red

Sprite') were removed because of weak growth or outright death as in the case of Vleck longstalk holly (*I. pedunculosa* 'Vleck'). Byers Golden and Vleck were both lost from the collection.

The fate of Byers Golden possumhaw is worthy of further comment. The International Code of Botanical Nomenclature (ICBM) is the accepted authority that governs all registered cultivars including hollies. The ICBM states explicitly that cultivars should clearly display a distinguishing quality or phenotype unique to the species as well as the capacity for asexual reproduction and uniformity across successive generations. Byers Golden is a great plant with fantastic fall fruits but is nearly impossible to propagate asexually and exceedingly difficult to cultivate. The Arboretum has had three successive failures with this cultivar even though, in each case, plants were vigorous and well sited. This highlights the importance of establishing a plant's reproductive capability before registration. Otherwise, like Byers Golden, some selections may never prove to be more than a nice plant in someone's collection.

Thirteen different taxa were accessioned in 2012, many of which were repropagations of existing American hollies exhibiting poor growth. A particularly exciting seed accession is Carolina holly (*I. ambigua*), collected and donated to The Dawes Arboretum by Alabama plantsman Mr. Wayne Webb from native populations in Wilcox Co., Alabama. According to personal observations by fellow holly enthusiast Ray Head, this population of Carolina holly produces the largest and most colorful fruits of any he has observed.

A total of 16 new hollies were planted in 2012 bringing the total number of distinct holly taxa on grounds to 393.

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