UNIVERSITY OF TENNESSEE ARBORETUM

Oak Ridge, TN (USDA Hardiness Zone 7a-6b)

2009 Annual Report

Holly (*Ilex*) is a diverse species group. Holly species are found in a wide range of climatic conditions – from dry to wet, from hot to cool. In addition, many individual species are also adaptable to a wide range of climates outside of their natural range. The UT Arboretum sits astride the demarcation line between USDA plant hardiness zones 7a and 6b (0° to 5° F and -5° to 0° F) at an elevation of 970 feet. This location is about in the middle of the range of hardiness zones in the Eastern US, and thus is ideal for growing many holly species. Annual precipitation averages 55 inches a year. This condition of having a favorable climate for many holly species was recognized early when considering a design for displaying hollies in the UT Arboretum's collection.

Early in its inception, the UT Arboretum embraced the design theme of displaying plants in "Plant Association Models". An Association Model assembles plants not by species, but by their geographic (native) origin. For example, we have plants native to Central China, Southern US Coastal Plain, Western US Conifers, Eastern US Conifers, etc. in their respective association groups. This same theme was followed in the design of our holly collection. For the most part, the Arboretum's hollies are arranged in groupings according to geographic origin, i.e., Chinese and Oriental hollies; Japanese hollies; English, European, and Western Asian hollies; and locally native species. Among these geographic groupings are specie hybrids and interspecific hybrids that share parentage among or between holly species with different geographic origin. The design plan worked well until the collection began to outgrow the allotted space for each grouping... plans are just that, plans!

Annual mean precipitation at the UT Arboretum, over the last several years, has bounced around the mean, but never seems to hit the mark. In 2008 we were 4.19 inches below the mean, and in 2009 we were 14.86 inches above the mean. The additional precipitation in 2009 produced abundant vegetative growth and facilitated an abundant fruit crop. Likewise, seasonal temperatures were more favorable, thus avoiding the late season freeze that completely ravaged the fruit and vegetative growth in 2007.

The newest addition to the UT Arboretum Holly Collection, of which we are most proud, is not the addition of new plants. In 2009 we began construction on what we call the "Holly Entrance", or what we affectionately refer to as the "Holly Wall". This stone and masonry structure includes a sitting bench and column. The column bears three plaques: one which dedicates the collection to the memory of Mr. Harold "Mr. Holly" Elmore, one which names the collection the "Harold Elmore Holly Collection, and one from the Holly Society of America which identifies our holly collection as an "Official Holly Arboretum". Construction of this feature was a joint effort between the Arboretum crew and volunteers from the UT Arboretum Society. This new structure will welcome visitors for years to come.

Richard M. Evans, Center Director

UT Forest Resources Center & Arboretum