

A Venerable Hybrid Oak: *Quercus x sargentii*

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Scores of plant taxa—species, infraspecific variants, and hybrids—commemorate Charles Sprague Sargent with their epithets. They range from the cherry palm of the Caribbean, *Pseudophoenix sargentii*, to the vase-shaped Sargent cherry of East Asia, *Prunus sargentii*. In 1915, yet another plant was given the Sargent moniker when Arboretum taxonomist Alfred Rehder recognized the Arboretum director by providing a name for the hybrid between the English oak, *Quercus robur*, and the American chestnut oak, *Quercus montana* (formerly known as *Q. prinus*). While hybrids between these two members of the white oak subgenus (*Lepidobalanus*) had been known since the 1830s, this was the first time the taxon was recognized officially with its own name, *Quercus x sargentii*, the Sargent oak.

From *Q. robur*, the hybrid attains a certain nobility and majesty, not to mention a girthy trunk, broadly spreading canopy, and distinctive auriculate (earlobe-shaped) leaf bases. From *Q. montana* come the crenately toothed leaves, smaller-stalked acorns, and, with age, coarsely furrowed bark.

The Sargent oaks that grow in the Arboretum's living collections can all be traced to the initial lot of acorns collected from a magnificent tree at Holm Lea, Sargent's estate in Brookline, Massachusetts. The seeds arrived at the Arboretum on October 6, 1877. They germinated and yielded multiple seedlings that were planted in the permanent collections and cataloged under accession number 5883. Currently, three plants (A, B, and C) remain in the collection, each looking exceptional for being over 130 years old. Perhaps the most spectacular is 5883-A, a majestic specimen located near the junction of Bussey Hill Road and Beech Path, at the base of the *Forsythia* and *Syringa* collections. With a current height of 84 feet (25.6 meters) and DBH (diameter at breast height) of 55.7 inches (141.5 centimeters), this tree commands attention.

Visitors strolling down Beech Path often pause in awe to admire the tree's massive limbs and rounded crown. Recent landscape renovations to this area, known as State Lab Slope, will not only maintain the health and vitality of this specimen and the surrounding plantings, but also improve visual access. I should note that its siblings (plants B and C) may be slightly smaller, but are also notable and worth a visit. Both are located further along Beech Path, near the edge of the *Fraxinus* collection.

Q. x sargentii is extremely rare in cultivation, and our understanding of it is essentially limited to the specimens grown in our collection as well as those of a few other botanical gardens and arboreta. Certainly, our three trees are exceptional and have stood the test of time, but it would be premature to say much more without further study. I am particularly interested in this hybrid's potential use as a tree tolerant of the vagaries of the managed landscape, especially in urban areas where soils are prone to drought and other limitations. As *Q. montana* is an upland species typically found growing in dry and rocky habitats, one could hope that the Sargent oak is similarly tough. Oaks are difficult to propagate clonally, and attempts over the years to clone the Arboretum's trees have been in vain. However, because *Q. robur* is a species that can sometimes be rooted from cuttings, Manager of Horticulture Steve Schneider and I are conducting several experiments to see if ease of propagation from this parent was passed along to the hybrid. If that is the case, it opens up a great deal of potential for additional study and, perhaps, the Sargent oak's use as a street tree near you.

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For additional information on this hybrid and its interesting history, see: Hay, I. 1980. Outstanding plants of the Arnold Arboretum: *Quercus x sargentii*. *Arnoldia* 40(4): 194–199.