In Pursuit of Ironclads

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Rhododendrons were celebrated embellishments of nineteenth-century England's great estates, but these star performers did not find a place in New England gardens until hybridizers solved a dilemma: the hardy species lacked good color, and species with good color lacked hardiness. The American Rhododendron catawbiense possessed hardiness, but bore flowers of "a disagreeable purple rose." Species with desirable color, such as the deep red Himalayan R. arboreum, lacked hardiness, even in much of Britain. Over the century European plantsmen developed hundreds of hybrids with R. catawbiense as the primary hardy parent. In the 1850s Anthony Waterer of Knap Hill nursery in Surrey began hybridizing rhododendrons for color, but especially for hardiness. David Leach described Waterer's achievement in Rhododendrons of the World (1961), "For their time [his hybrids] represented a triumph of the hybridist's art: the principles of heredity in plant breeding were not then in use; there were but a handful of species available as parents; and the English climate did not test the full limit of hardiness which Waterer had imparted to his creations with such remarkable success."

A visitor described Knap Hill (seen in the photo above) in 1892.

The Knap Hill nursery is the most extensive, as it is the oldest, establishment in England in which the cultivation of American plants has been made a specialty. Its extent exceeds 200 acres, of which more than 60 acres are allotted to the cultivation of American plants. . . . Running straight through the nursery is a very long carriage-drive connecting two public roads, and this drive Mr. [Anthony] Waterer generously permits the public to
A pioneer in rhododendron culture in New England, H. H. Hunnewell of Wellesley, Massachusetts, first wrote of planting rhododendrons in his diary of 1856, when *hardy* meant summering in the ground but wintering indoors, like figs. Each year he recorded conditions and performance and shared his knowledge freely and enthusiastically. In 1896 he found reason to congratulate himself.

June [1896]. In looking back over the horticultural records that I have been in the habit of making in this journal for more than forty years, I find I have invariably at this season expressed my admiration of our beautiful show of rhododendrons, though until of latter years my plants were small and so limited in number that they have made a very modest appearance compared with the thousands in my collection at the present time, many of which are more than fifteen feet in height and fifty feet in circumference. . . .
It is a singular fact that this shrub and the Kalmia latifolia, both natives of this country, should be so little cultivated here; for among hardy plants they are undoubtedly the most ornamental, and the rhododendron especially stands at the head of the list of rare and desirable shrubs in England,—and well it may, for it combines more qualities than any other shrub during the entire year, with its gorgeous trusses of a dozen or more flowers of every shade imaginable of white, purple, and crimson, its magnificent evergreen foliage, and, lastly, its noble habit of growth. . . .

I have heard it whispered about that I have too many rhododendrons—as if one could have too many diamonds! In reply I say it has been my aim and desire for half a century to possess the largest and best collection of this shrub of any one in the country, and I have succeeded, and feel proud of my success. It has been my hobby, I confess, and I have worked hard for it, but it has not prevented my giving attention to other things and having a liberal supply of other shrubs, though they attract very little notice from my numerous visitors compared with the rhododendrons.


Most Americans discovered rhododendrons in 1876 when Anthony Waterer brought 1,500 plants in 80 varieties to the Centennial Exhibition in Philadelphia. (He presented most of those plants to C. S. Sargent, and in the 1880s sent what he thought to be his hardiest varieties to the Arnold Arboretum for testing.) The Philadelphia display was an eye-opener: gardeners were smitten, Americans ordered hundreds of thousands of plants from England and began hardiness trials in earnest. Lists of the hardiest hybrids appeared frequently in garden magazines, not least in C. S. Sargent's weekly, Garden and Forest (1888–1897), and from 1911 the Arboretum's Bulletin of Popular Information.

Expectations were very high and hopes even higher; year after year promising new hybrids appeared. But weather took its toll on most of those candidates, and near the end of his life Sargent lost patience: "More money has been wasted probably in this country during the last fifty or sixty years in attempting to cultivate broad-leaved evergreen Rhododendrons, for which with few exceptions the climate is not really suited, than on any other plants [1926]." Nonetheless in the 1920s a short list of reliably hardy catawbiense hybrids emerged, earning the tag ironclad: 'Album Elegans', 'Album Grandiflorum', 'Atrosanguineum', 'Delicatissimum', 'Everestianum', 'Mrs. Charles S. Sargent', 'Roseum elegans', 'Purpureum Elegans', 'Purpureum Grandiflorum', and a few others.

Three-quarters of a century later, five original Waterer plants on that list still grow in the Arboretum at the base of Hemlock Hill: 'Album Grandiflorum' and 'Purpureum Grandiflorum' planted in 1886; 'Album Elegans' and 'Purpureum Elegans', 1891; and 'Atrosanguineum', 1896. Not on the list are four other survivors from the nineteenth century: 'Bicolor', 'Delicatissimum', 'Mrs. Harry Ingersoll', and 'Parsons Grandiflorum'. The latter was bred at Knap Hill but introduced by the only American nursery to hybridize rhododendrons in the nineteenth century, the Long Island firm of Samuel B. Parsons. Not until the 1920s, after the passage of Quarantine No. 37, when imports were banned, prices rose, and supply diminished, did other American plantsmen turn to hybridizing these American plants. Sargent would be cheered by the results.