

Broken Arrow Nursery plants: an exploration of underutilized plants, our introductions and the future[©]

A.R. Wheeler^a

Broken Arrow Nursery, 13 Broken Arrow Rd, Hamden, Connecticut 06518, USA.

INTRODUCTION

Since its inception, Broken Arrow Nursery has strived to be a premiere destination nursery that acquires, develops, and grows rare, unusual, and garden-worthy plants. We work tirelessly to offer superior quality, outstanding customer service and expert advice to gardeners and enthusiasts.

Vision

The vision of Broken Arrow Nursery is to inspire a love of plants and enrich the lives of our customers through the unique, great plants we grow and knowledge we freely share. We are breeders, collectors, propagators and promoters. In our efforts to achieve this vision we have developed and introduced a diversity of trees, shrubs and perennials through the years. This paper will provide a summary of some of our past plant introductions, a summary of a few underutilized and exceptional offerings as well as a glimpse toward future plant selections.

PAST INTRODUCTIONS

Kalmia latifolia

This exceptional state flower of both Connecticut and Pennsylvania is frequently referred to as one of the most beautiful of all flowering plants. Native throughout eastern North America, it is commonly found growing along roadways and power lines or in shaded, acidic woodlands. Wild plants typically showcase eye-catching pale pink flowers in late May and early June. Added interest is provided by their beautiful, glossy, dark green foliage. In the landscape, plants grow best in full sun or part shade in moist, well-drained, acid soil.

We tend to be biased concerning this outstanding shrub, but with good reason. Our founder, Dr. Richard Jaynes has been actively researching, breeding, and selecting improved forms of the species for more than 50 years. The result is more than 30 cultivar introductions that include a startling range of flower colors and plant habits. At the nursery we currently hold one of the largest collections of mountain laurel in the world. A cross-section of noteworthy introductions include:

- *Kalmia latifolia* 'Peppermint'. The blush-pink flower buds open to display striking near-white flowers with a unique maroon-red pattern that resembles a classic peppermint candy. Winner of the Ames Award at the 1991 Boston Flower Show.
- *Kalmia latifolia* 'Freckles'. An older, compact-spreading selection with white flowers each marked with 10 purplish-cinnamon "freckles". Plants show medium leaf spot resistance and flower nicely from a young age.
- *Kalmia latifolia* 'Sarah'. An eye-catching selection with dark red buds that open vibrant pink-red (Figure 1). Our exceptional 8-ft specimen plant always impresses visitors when in flower. The foliage is dark green and free from disease when grown in the open with some air circulation. Plants are always in high demand!

^aE-mail: AWheeler@brokenarrownursery.com



Figure 1. *Kalmia latifolia* 'Sarah'.

- *Kalmia latifolia* 'Carol'. Bright, intense red buds contrast well with the near white, newly opened corollas. Open flowers darken to pink as they age. The low growing plants have broad, wavy, leaf spot resistant foliage.
- *Kalmia latifolia* 'Firecracker'. The result of five generations of breeding work with notable parentage including the likes of *K. latifolia* selections 'Carol', 'Sharon Rose', and 'Sarah'. Plants offer brilliant, deep red flower buds that open near white and age to pale pink (Figure 2). The overall effect is a striking, bicolor display of red buds and white open flowers. This floral affect, combined with the glossy, dark green foliage and excellent disease resistance make it a promising alternative to 'Olympic Fire' and other red-budded cultivars. Plants are more compact than the species maturing approximately 4 ft by 4 ft in 10 years under normal garden conditions.



Figure 2. *Kalmia latifolia* 'Firecracker'.

- *Kalmia latifolia* 'Keepsake'. A recent introduction that is the result of five generations of controlled crosses begun in 1966. Plants display striking raspberry-red flower buds that open to near-solid purplish burgundy flowers with a fine white edge (Figure 3). Flowers are backed by pest free, glossy, bluish-green leaves.



Figure 3. *Kalmia latifolia* 'Keepsake'.

- *Kalmia latifolia* 'Little Linda'. A fine addition to the miniature (little leaf) laurel group. It is the first named mountain laurel to combine miniature habit with red-budded flowers. The buds open to display white corollas which age to pink. Foliage is reduced in size, dark glossy green and leaf spot resistant. Plants display a compact-rounded growth habit.
- *Kalmia latifolia* 'Minuet'. A distinctive, vigorous miniature laurel with pink buds that open to bright cinnamon-maroon banded flowers. The small leaves are lustrous dark green and recurve from petiole to tip. Plants display excellent branch structure and a compact-rounded form. One of the best!
- *Kalmia latifolia* 'Tinkerbelle'. A miniature laurel with heavy textured flowers that are deep pink in bud and medium pink in flower. Foliage is dark green and resistant to leaf spot. Plants show good vigor and will mature somewhat broader than tall.

Looking beyond mountain laurel

Looking beyond mountain laurel our efforts have led to a diversity of unique deciduous trees and shrubs, conifers and herbaceous perennials. Key selections include:

- *Clethra alnifolia* 'Ruby Spice'. A rich pink flowered form of summer sweet clethra that has become quite popular in the industry. Flowers are the darkest pink to date and hold their color well in the heat of summer. Honored with many horticultural awards including the Cary Award and the Pennsylvania Horticultural Society Gold Medal. Height is 5-6 ft.
- *Hamamelis virginiana* 'Harvest Moon'. 'Harvest Moon' has attractive, burgundy-flushed new growth that matures to dark green. In late fall, plants offer numerous clusters of large, lemon-yellow flowers that are closely spaced along the branches (Figure 4). The overall effect is a much showier display than is common for the species. In our trials, plants have flowered up to 2 weeks later than the species and remain showy after the foliage drops. In cultivation, plants are vigorous and assume an upright, vase-shaped habit when grown in full sun. Height is 15-20 ft.



Figure 4. *Hamamelis virginiana* 'Harvest Moon'.

- *Hamamelis* × *intermedia* 'Sweet Sunshine'. An upright, semi-compact hybrid witch hazel with highly fragrant, bright yellow flowers. The original plant has grown next to our main driveway for more than 30 years where it has reached approximately 18 ft in height. Plants have received strong reviews and always solicit comments from nearly all customers when in flower in late winter and early spring. Formerly listed as *H. mollis* 'BAN Select'.
- *Ilex verticillata* 'Sunsplash'. A variegated winterberry holly that offers bright, gold-splashed foliage throughout the growing season and respectable crops of orange-red fruit in autumn and early winter (Figure 5). The foliage quality offers a wonderful extension to the ornamental display of this noteworthy species.



Figure 5. *Ilex verticillata* 'Sunsplash'.

- *Rubus cockburnianus* 'Razzle Dazzle'. This 2011 introduction boasts showy pink, cream, and gold mottled foliage that remains colorful throughout the growing season. The variegation pattern is intricate, and resistant to sun scald and scorch making it a valuable addition to the shrub border or prime garden position. Like the species, white dormant canes add color during winter. Plants are good garden performers growing slightly slower than the species and reaching 4 ft tall × 6 ft wide.
- *Viburnum dentatum* 'Island Treasure'. A recent introduction discovered as a branch sport in Maine. Plants offer foliage that is brightly streaked and splashed with creamy-gold variegation (Figure 6). Typical white, flat-topped flower clusters in spring followed by crops of blue fruit in autumn. Plants are vigorous, performing best in a drought free area with some afternoon shade.



Figure 6. *Viburnum dentatum* 'Island Treasure'.

- *Pinus strobus* 'Little Giant'. This plant resulted from a witches' broom found growing in Sleeping Giant State Park, Hamden, Connecticut. Plants have excellent, dark blue-green needles and develop a squat-conical habit. Our original plant has averaged 2-3 in. of growth annually and reached approximately 3 ft in height after 12 years.
- *Stewartia rostrata* 'Pink Satin'. An exciting color breakthrough for the species showcasing pale, shell-pink flowers backed by a ring of burgundy-purple bracts (Figure 7). Flowering commences in mid-May continuing for a 2- to 3-week period. Each blossom is approximately 1.5 in. in diameter with pigment coloration that radiates throughout each petal. The large, immature fruits add ornamental appeal with a rich, pinkish-red blush that stands apart from the glossy green foliage. New growth emerges in spring flushed with burgundy and develops attractive scarlet tones in autumn. Plants are well formed developing a distinctive pyramidal habit when young and averaging 6-12 in. of growth annually. Our original specimen measured 13 ft tall × 6 ft wide at 13 years of age.



Figure 7. *Stewartia rostrata* 'Pink Satin'.

- *Epimedium* 'Space Invaders'. This 2012 introduction was selected from a batch of open pollinated seedlings whose seed parent was *E. chlorandrum*. Essentially evergreen, the dark green, spiny edged, glossy foliage remains attractive into January. In April, flowering stems emerge above each 12-15 in. tall slowly spreading plant. Flowers consist of showy reflexed white sepals and 1- to 1½-in. long spurs (petals) that are pale yellow and uniquely speckled with rusty orange.
- *Epimedium* 'Raspberry Rhapsody'. This 2012 introduction was selected after 7 years of evaluation. This open pollinated seedling of *E. sutchuenense* has flowers comprised of mauve-rose spurs (petals) and pale pink sepals held above 12- to 15-in. clumps. Leaves emerge in shades of mahogany-red before becoming green during the summer. Shaded woodland sites with consistent moisture are ideal; however our plant has performed exceptionally under drier conditions.

UNDERUTILIZED PLANTS

In addition to our plant breeding and selection efforts we strive to find, propagate, and promote underutilized and exceptional plants. The following represents a small cross section of plants we feel a worthy of broader landscape consideration.

***Calycanthus floridus* 'Michael Lindsay'**

Among the best of the group! Dark, lustrous, green foliage turns soft, butter-yellow in fall. Ample dark maroon flowers emit a strong, pleasant fragrance that is reminiscent of strawberries and melon. Plants are strong growers when cultivated in rich, evenly moist soils. Height is 6-10 ft.

***Hamamelis virginiana* 'Little Suzie'**

A charming compact selection of common witch hazel with bright yellow flowers in October/November and yellow fall color. Plants are compact, tightly branched, developing a formal, rounded framework. Excellent for late season interest and valuable for smaller properties. Plants average 3-6 in. of growth annually and can be expected to reach 6 ft in height after 10-15 years.

***Hydrangea strigosa* (syn. *H. aspera* subsp. *macrophylla*)**

A dramatic and unusual hydrangea boasting large 8 in. heavily felted leaves that add unique foliage texture. Impressive clusters of lavender-mauve, lace-cap flowers add value during summer (Figure 8). Plants perform admirably in rich, evenly moist soils and have

proven to be quite a bit more cold tolerant than some reports suggest.



Figure 8. *Hydrangea strigosa* (syn. *H. aspera* subsp. *macrophylla*) in flower.

***Magnolia* × *soulangeana* 'Milliken'**

A unique, compact saucer magnolia found as a witches' broom near Rhinebeck, NY. Plants are compact and dense with short internodes and a rounded outline. In spring they flower profusely with standard sized, whitish-pink flowers.

***Nyssa sylvatica* 'Autumn Cascades'**

A weeping selection of black gum. Plants showcase glossy, deep green leaves that develop excellent red, orange and yellow fall color. If a tree form is preferred, some staking is required to develop and maintain a central leader. Ultimately plants can obtain a framework similar to *Fagus sylvatica* 'Pendula'.

***Ptelea trifoliata* 'Aurea'**

An elusive plant rarely propagated and offered for sale. The trifoliate leaves are bright gold in spring transitioning to lime-green by late summer. Plants are strong growing showing adaptability to varied soil conditions. Height is 8-12 ft.

Viburnum lantanoides

A standout native viburnum that is seldom available but deserving of greater landscape consideration. Plants generally have a broad, spreading habit with arching branches that often touch the ground and root in. They develop creamy-white, 3-5 in., flat-topped flower clusters in May and June followed by prolific crops of red-black fruit. The large, cordate leaves are medium green during the growing season and can turn respectable shades of yellow, pink and burgundy in fall. Plants perform best in moist, rich soils in partial shade and make a great choice for the woodland garden, naturalizing or for attracting wildlife.

THE FUTURE

The future is bright for new introductions. We continue to breed, select, and evaluate a broad diversity of trees, shrubs, and herbaceous perennials with several promising selections planned for introduction in the coming seasons. A few noteworthy selections are listed

below.

***Hamamelis virginiana* (orange-red flowered selection)**

A strong growing common witch hazel selected from a native population in Prospect Connecticut. Plants average 8-12 in. of growth annually and can be expected to reach 10 ft in height after 7 years (Figure 9). In autumn, orange-red flowers emerge with crimped petals. Flowers intensify in color as the weather cools.



Figure 9. *Hamamelis virginiana* unnamed orange-red flowering selection.

***Prunus maritima* 'Orange Marmalade'**

A beach plum selected for its large, orange fruit, prolific bloom and strong growth. Plants can be rooted in high percentages from greenwood stem cuttings and will flower and fruit abundantly from a young age. Fruit set is aided with cross pollination from other individuals. The vigorous plants can be expected to reach 5-7 ft in height over 5 years.

***Styrax japonicus* (unnamed selection)**

A vigorous Japanese snowbell selection developing a dominant central leader and pyramidal habit. The green leaves are infused with burgundy tones and remain attractive through the growing season. Abundant, 1-in. white blossoms are backed with a rich burgundy-purple calyx and supported by a similarly colored pedicel. The original plant reached approximately 14 ft tall and 9 ft wide at 11 years of age.