Plant History: Expanding the Horizons of a Small Garden

Mary Harrison

While waiting for spring, the pleasures of plant history can add another dimension to the pleasures of the garden.

We city gardeners tend to covet the acres enjoyed by the country or even suburban gardener whose every plant whim, we imagine, can be readily indulged. With no space limitations the need to choose carefully and eliminate ruthlessly evaporates. Each new object of desire can be acquired and, within limits, given the best possible living conditions. Not so for us. Each and every plant acquisition must be justified on a very rigorous set of values. No variable can be ignored: color, size, seasonal interest, exposure, prejudice, the family, the neighbors, even the cats.

At the beginning of winter, rather than yearn for plants my plot cannot accommodate, I turned my thoughts to the plants that lay buried in the snow. As individuals appeared in my mind’s eye, I realized that I didn’t know much about them beyond their physical characteristics and their willingness to survive. I began to make an inventory, thinking perhaps to compare their qualifications, justify their presence. I found my city lot supported quite a large collection. Most of the trees and shrubs, bought as seedlings at Arnold Arboretum plant sales, are barely out of their adolescence and still cause anxiety when any threat to their development is manifest. But their size and age do not reduce the pleasure of observing them gradually acquire some of the characteristics that make their mature brethren so desirable.

As I continued to think and read about this hodgepodge of plants, a new dimension began to absorb me, to transform my attitude to the “collection,” and double its interest for me. I have been exploring the origins and history of these plants: When were they discovered and by whom? Where did they originate and who introduced them to the world of botany, horticulture, and domestic gardening? Who named them and what factors contributed to those names? Suddenly my diminutive plot seems as large as the world itself. Not only do these trees and shrubs and flowers connect me with all the hemispheres, but they take me back in time and introduce me to the company of gardeners, natural historians, clerics, physicians, illustrators, and botanists, many of whose names are borne by the plants themselves.

These people were part of a long established tradition and a time when professions and occupations were not neatly compartmentalized. The boundaries of explorer, botanist, and geologist were blurred. Politicians might also be gifted illustrators and observers of nature. John White, of the colony of Roanoke, recorded all classes of the animal kingdom he observed, as well as the flora and people of the area. John Smith, of the Virginia colony and friend of John Tradescant, thought of himself primarily as a
soldier of fortune, an explorer, and mapmaker. Yet he has left us detailed descriptions of the vegetation, the geography, and geology he observed in North America.

It is our great good fortune that these were glorious days of letter writing and journal keeping, when it was routine to record and comment upon everything new. It was to just such journalists and recorders that I eventually turned for the details of plant histories. As in tracing human genealogy a good starting point seemed to be the origins and meanings of plant names. This proved profitable and very entertaining. Many plants have names that describe features of their structure (Calycanthus) or behavior (Impatiens); some have names derived from the names of naturalists (Fothergilla) or collectors (Tradescantia). Although I explored the names of all the plants on my list, it was largely the group whose names are associated with people that most appealed to me, and I began the next stage of the search with Tradescantia.

**Tradescantia**

I referred earlier to the selection process my plants are subjected to, yet I find one of the most interesting and well documented has joined the garden uninvited. Indeed, I see it popping up in sidewalk cracks and intruding in otherwise disciplined perennial borders. I refer to Tradescantia, spiderwort, whose blues range from the palest to the deepest in these spontaneous outbursts. It bears the name of John Tradescant (1570-1638), gardener to Charles I and collector of plants in his own Lambeth garden.

John Tradescant traveled in Egypt, Europe, and the East in search of new plants, and his son John (1608-1662) had the good fortune to travel to North America at a time when its vast and diverse vegetation was becoming known to Europeans. As was observed by John Josselyn, a seventeenth-century English visitor and author of *New England's Rarities Discovered*, “The plants of New England for the variety, number, beauty, style, and vertue may stand in Competition with the plants of any Countrie in Europe.”

John Parkinson (1567-1650), a contemporary collector and writer about seventeenth-century gardens, tells us, “This spiderwort is of late knowledge, and for it the Christian world is indebted unto that painfull industrious searcher and lover of all nature's varieties, John Tradescant.” He adds that he “first received it of a friend [John Tradescant, the son] that brought it out of Virginia.” Tradescant records receiving another spiderwort in 1633, this one with white flowers. By 1640 a third, with pink and reddish blooms and known as Moses-in-the-Bullrushes, had joined the others in the gardens at Lambeth.
A companion to these acquisitions was another North American plant, *Platanus occidentalis* L., our native sycamore. In 1640 the younger Tradescant took some form of propagating material of *P. occidentalis* to England from a collecting expedition in North America. Thomas Johnson (1604-1644) noted that “growing in the Tradescant garden were one or two young Asian planes (*P. orientalis* L.).” Some botanists have speculated that a natural hybrid, *P. x acerifolia* Aiton, the London plane, resulted from the proximity of the two species. Others think that the Asian plane might not flower freely and thus not produce pollen in England, and that the cross might have been made in a more benign climate and the issue brought to England. Whatever its origins, there is a tradition that the London plane grew in the Tradescant garden. Spiderwort would certainly have been among its companions. Spiderwort and plane, both tough survivors, continue their association on this side of the Atlantic, and the street tree outside my garden provides afternoon shade for its seventeenth-century companion.

**Aquilegia**

Almost as tenacious as the spiderwort is the columbine, another plant collected by Tradescant in North America and taken by him to England. Parkinson, in *Theatrum Botanicum*, published in 1640, described it as “a plant newly introduced from Virginia by Mr. John Tradescant.” It had already appeared in France, having been collected by Jesuits in Canada in 1633.

John Gerard approved of the columbines and recommended they be “sowne in gardens for the beautie and variable colors of the floures.” He described their wanton behavior of producing a large range of colors, saying, “these floures are of a colour somtimes blew, at other times of a red or purple, often white or mixt colours.” Of the double varieties he says, “The floures thereof be very double, that is to say, many of those little floures (having the form of birds) are thrust one into the belly of another, sometimes blew, often white and otherwhiles of mixt colors, as nature list to plaie with hir little ones.” John Parkinson observed the columbine’s way of surprising us each year by appearing in new locations and varying hues, and commented, “The rarer the floures are the more trouble to keepe; ordinary sorts on the contrary will not be lost, doe what one will.”

**Aster**

It seems that contemporaries kept very close track of what went on in the Tradescant garden. Gerard noted that “There are kept in the
gardens of Mr. Tradescant two starreworts . . . which bear blueish floures . . . said to have come from Canada or Virginia.” Indeed, this aster was collected in North America by John Tradescant the Younger. It was first known as Aster virginiana and later as A. tradescantii L. This was the first of many asters introduced by Tradescant before 1633, and it is not surprising that he remarked, “Sure your country is inexhaustible in asters,” a commentary that anticipated Asa Gray’s. “Never was there so rascally a genus, they reduce me to despair.”

Aster tradescantii grows from southern Nova Scotia to New York and west to Michigan, but not in my garden. A. novaeangliae L., the New England aster, continues to be my prime representative. In 1710 it, too, found its way to England. The transatlantic traffic in asters went two ways, and Peter Collinson (1694-1768), who was very active in introducing North American plants to England, sent the “China aster,” Callistephus hortensis (now C. chinensis L.) to his good friend John Bartram in 1735.

Fritillaria imperialis L.
A plant with the name Fritillaria imperialis would inevitably have a less democratic background than plants with vulgaris and canadensis in their names, and indeed this proved to be so. It is a native of Persia and the Himalayas and was introduced to Vienna by Carolus Clusius (1526-1609), Director of the Botanical Gardens at Leiden. Gerard knew it as Crowne Imperiall and described it in the section on lilies. (Fritillaria was then known as the Chequered Daffodill.) Crowne Imperial reached England in 1596 and by 1597 Gerard had it in his garden “in great plenty.” It was on the list of plants in the Tradescant garden by 1634 and came to North America by way of Peter Collinson, who sent seed to John Custis, father of Martha Washington.

According to Parkinson, it “doth grow sometimes to be as great as a pretty bigge child’s head, but somewhat flat withal” and “of an orange color.” Gerard’s description of the nectaries at the base of the petals inspired him to write, in his characteristically lyrical fashion, “In the bottom of each of these bels there is placed six drops of most cleare shining sweet water in taste like sugar, resembling in show sweet orient pearles.” These nectaries inspired a story in the plant’s Persian homeland. It tells of a queen who was unjustly doubted by her husband. A compassionate angel turned her into Fritillaria imperialis, and until the queen is reunited with her husband, her tears remain.
Another legend says fritillaria was too proud to bow with the other flowers as Christ entered the Garden of Gethsemane. When reprimanded, it blushed and hung its head in shame and ever since has had tears in its eyes. But not everyone sees it in the glow of romance. The name Stink Lily has been bestowed on it for the "root being rub'd a little smells as like a Fox, as one Fox smelleth like another." (Parkinson rose to its defense, stressing its "stately beautifulness," adding that the smell was not unwholesome.) More recently Vita Sackville-West described it as a "sullen and foreign looking thing."

**Browallia**

Seeds of *Browallia* were gathered in the neighborhood of Panama by Robert Millar, who gave them to Phillip Miller of the Chelsea Physic Garden in 1735. He in turn gave a specimen to the Royal Society under the name *Dalea*. Linnaeus named it *Browallia* in honor of his friend Browall, fellow countryman, botanist, and Bishop of bo in Sweden.

An entry in Allen J. Coombes' *Dictionary of Plant Names* provoked a search into the question of the specific names attached to *Browallia*. Coombes states, "*Browallia demissa* [weak]. Renamed by Linnaeus from *B. elata* [tall] after falling out with Browall." Further reading revealed that Browall had advised Linnaeus to finish his studies abroad, then marry a rich girl—this despite Linnaeus' engagement to Sara Lisa Moraea. Linnaeus did, indeed, spend the winter of 1737-1738 in Leiden and went on to France. While abroad, he had news that "his best friend B." had taken advantage of his absence to court Sara Lisa Moraea and had almost succeeded in persuading her that her fiancé would never return to Sweden. However, the bishop's suit failed; Sara Lisa and Linnaeus were married in 1739.

The entry under *Browallia grandiflora* in *Curtis's Botanical Magazine* of 1831 reports: "The intimacy and subsequent rupture between Browall and Linnaeus were commemorated by the latter in the specific appellations which he bestowed on the only three individuals of the Genus then known. *B. elata* expresses the degree of their union; *B. demissa* its cessation; while the ambiguous name of a third species, *B. alienata*, while it intimates the uncertain characteristics of the plant, implies the subsequent difference between the two parties." Much to my regret I have so far
not tracked down any other reference to B. alienta.

**Calycanthus floridus** L.

This shrub is one of the great number of plants John Bartram (1699-1777) brought back from his many collecting trips. A farmer by occupation, Linnaeus considered him “the greatest natural botanist in the world.” His interest in botany led to an active role as agent, collecting and exchanging seeds and plants with notable clients in England. Peter Collinson, the prosperous English merchant, was among his most enthusiastic recipients. In 1765 Bartram became Botanizer Royal to King George III, and in addition to this honor, received a small stipend.

*Calycanthus floridus*, Carolina allspice, had neither flowers nor seeds when Bartram came upon it in South Carolina, so he wrote a description of its location to Samuel Wyly, an Irish Quaker in whose house he had been staying before setting out on this collecting trip, and asked for his help. Wyly sent Bartram a plant that grew vigorously in his garden at Kingsessing, Pennsylvania. Seeds were sent to friend Peter Collinson in England, and calycanthus was blooming in his garden by 1763.

Alexander Garden (1730-1791), a Scottish physician who settled in Charlestown in 1752, said of calycanthus, it diffuses “an aromatic fragrance seemingly of strawberry, pineapple, and the clove, called sometimes by the name of Bubby Blossoms from ladies often carrying them in their bozoms.” Garden first referred to it as *Buereria*, or *Frutex cornifoliis*, the sweet shrub. This last name was used by Mark Catesby, the English naturalist, collector, and artist, to accompany the illustration of calycanthus that he included in the first volume of his *Natural History of Carolina, Florida, and the Bahama Islands*.

John Ellis, an Englishman who corresponded with Garden and received new plants from him, wrote to Linnaeus suggesting the plant be called *Gardenia*, but Linnaeus declined. He did, however, suggest that Garden send him a new genus from North America so that he could name it *Gardenia*. This request went unheeded at the time.

*Calycanthus* also escaped being called *Basteria*, which Phillip Miller of the Chelsea Physic Garden wanted to name it in 1753, “in honor of his worthy friend, Dr. John Baster.” Eventually Linnaeus gave it the botanical

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description _Calycanthus_, which means calyx flower, "because the sepals and petals are indistinguishable."

**Fothergilla**

The first recorded collection of _Fothergilla_, the witch alder, was made by Alexander Garden. He found it in the Carolinas and thought it was a new genus, which he called *Anemelis*. He sent information concerning it to Linnaeus in 1765 and later dispatched specimens both dried and pickled "in spirits of wine."

Linnaeus thought it was a species of _Hamamelis_, and a series of letters passed between the two men between 1765 and 1773 in which they argued over the classification of the witch alder. Garden finally prevailed in establishing it as a new genus, but it was named _Fothergilla_ by Linnaeus after Dr. John Fothergill (1712-1780), an English philanthropist with a lifelong interest in natural history. In 1773 Garden wrote to Linnaeus, "I am very glad that the most elegant shrub, called by me _Amemalis_, has at length obtained its proper place, for I was much afraid that it must have submitted to range under the banner of another."

Linnaeus never published a formal description of the witch alder. The founding of the genus and the formal description is attributed to J. A. Murray (1740-1791), a pupil of Linnaeus, who revised a portion of Linnaeus' work. Garden's name, however, was given to the species _Fothergilla gardenii_ Murray. Fothergilla was grown in the Bartram's garden under the name of _Gardenia_ about the year 1785, the first fothergilla recorded in cultivation in North America.

**Hypericum**

_Hypericum_, St. Johnswort, was briefly another candidate for the name _Gardenia_. After a stay with Dr. Cadwallader Colden on the Hudson River, near Newburg, New York, Alexander Garden travelled south to continue his observations and acquisitions of new plants. About a mile from New York City on his way to Pennsylvania, Garden found a plant he thought to be a _Hypericum_. He sent a description of it to Jane Colder, the daughter of Cadwallader and herself a collector and documenter of plants. She was familiar with it but had it filed in her collection only under the identification "Number 152." She told Garden that, "using the privilege of a first discoverer," she would name the plant _Gardenia_ in his honor. The plant was demonstrated not to be a new genus and was indeed a _Hypericum_.

Garden's name was finally attached to a plant that was unfamiliar to him—the "Bay leaved Jasemin," acquired by a Captain Hutchinson who found it at the Cape of Good Hope, a plant with "the most wonderfull fine smell and large double white flowers."

This naming process was an experience in part shared by Bartram. He, too, was unfamiliar with the _Bartramia_ named for him. It was a native of Florida and was subsequently placed in another genus, one species of which retained _bartramia_ as a specific name. The genus name was later revived and applied to a genus of mosses. Bartram originally regarded mosses "as a cow looks upon a pair of new barn doors," but eventually he "made good progress in that branch of Botany, which really is a very curious part."

**Kalmia latifolia L.**

In 1748 Peter Kalm (1715-1779), Finnish botanist and pupil of Linnaeus, came to North America to collect plants that might be suitable for cultivation in the Scandinavian climate. He found and admired an evergreen plant whose flowers "rival that of most of the known trees in nature." Its most common name is mountain laurel, but it is also known as spoonwood, a name linked to the Indian practice of making spoons and trowels from the wood of the root. When dug, the root was easily worked but became hard and smooth when dry. In spite of its beauty, the plant is said to be so toxic that even the nectar secreted by the flowers is suspect. One wonders with what consequences mountain laurel spoons were used, and
whether a connection was ever established between their use and the longevity of their users.

Mark Catesby had seen this plant during his travels in Carolina and in 1726 imported both seeds and plants to England where it initially proved difficult to propagate. However, Peter Collinson had success with plants he requested of Colonel John Curtis of Virginia in 1736. Apparently his plants came from a more northerly part of America than Catesby’s. It is possible that Kalm, having visited Collinson’s garden on his way to America in 1748, saw mountain laurel in cultivation before he collected it in the wild.

Kalm met Bartram on his travels and recorded in his notebook his impressions: “We owe to him the knowledge of many rare plants which he first found and which were never known before. I also owe him much, for he possessed that great quality of communicating everything he knew. I shall therefore in this work, frequently mention this gentleman.” On Kalm’s return to England Bartram continued to supply him with seeds, but Kalm, when he catalogued his collection of new plants, failed to acknowledge the great help he had received from Bartram, who was justifiably disappointed.

Stewartia

In 1687 the Reverend John Clayton located the first plants of stewartia near Williamsburg, Virginia. The population from which he gathered specimens is still in existence. This species, S. ovata (Cavanilles) Weatherby, was also observed in the Carolinas by Andre Michaux [1766-1803], botanist to Louis XVI. He had come to North America in search of plants and was especially interested in American trees to replenish the French forests and birds to populate them.

In 1742 another John Clayton (1686–1773), whom Jefferson called “the first American botanist,” sent to Mark Catesby in England plants of another stewartia, S. malacodendron L., a native of the coastal plain from Virginia to northern Florida. Catesby reported, “For this elegant plant I am obliged to my good friend, Mr. Clayton, and three months after its arrival it blossomed in my garden at Fulham.” Dried herbarium specimens of Clayton’s stewartia ultimately reached Linnaeus, who founded the genus Stewartia. He named it for John Stuart, Earl of Bute, acknowledging his efforts to establish a botanic garden at Kew.

The most commonly cultivated species of stewartia grown in North American gardens is S. pseudocamellia Maximowicz probably because of all the stewartias its exfoliating bark is considered the most attractive. It was introduced by Thomas Hogg (1820–1892), a first-generation American who was sent to Japan on a diplomatic mission by Abraham Lincoln. Like many of his collecting predecessors, Hogg man-
perhaps next winter's diversion will be the history of botanical illustration, a wonderful and vast subject scarcely touched upon in this essay. The art as we know it appeared in the West in the early Christian era, in the form of illustrated manuscripts on the medicinal use of plants. John Gerard [1545-1612], a practicing surgeon, gardener, plant collector, and herbalist, published his Herball or Generall Historie of Plants in 1597. It contains eighteen hundred woodcut illustrations, printed mostly from blocks used in previous herbals. In 1633 a second edition was published, “corrected and amplified” by Thomas Johnson [1604-1644], an apothecary, botanist, and publisher. This edition included three hundred newly discovered plants from the New World and is the edition most frequently cited. It was one of three herbals, Culpeper's and Parkinson's being the others, that seventeenth-century settlers in New England consulted.

Curtis's Botanical Magazine was the creation of William Curtis [1746-1788], an apothecary who forsook that business to follow his interest in botany. Aiming to describe and illustrate the great eighteenth-century influx of plants to Europe, Curtis established his magazine in 1787 and remained its editor until his death in 1799. William Jackson Hooker [1785-1865] took over the direction and illustration of the magazine in 1826. When he became Director of the Royal Botanical Gardens at Kew, a connection between the two institutions was forged. In 1904 the text of the magazine began to be written by a number of writers instead of solely by the editor. When in 1922 the magazine fell into financial trouble, it was taken over by the Royal Horticultural Society. In 1970 the copyright was transferred back to the Royal Botanical Gardens at Kew, and since 1984 it has been incorporated into Kew Magazine.

The earliest plates in Curtis's Botanical Magazine were hand-colored engravings. This method was replaced by lithography in 1845, and hand coloring, surprisingly, ceased as recently as 1948, to be replaced by offset lithography. Among the most notable of the artists whose work appeared in the magazine is Sydenham Teast Edwards [1769?-1819]. Son of a Welsh schoolmaster, Edwards was brought to London for further instruction in art by William Curtis after he was introduced to some of Edwards' drawings. They became companions on botanical expeditions, and in 1788 Edwards' first plate for the Botanical Magazine was published in the second volume. In the next twenty-seven years almost all the drawings in the magazine were his. In 1815 Edwards left the Botanical Magazine to establish a rival publication, The Botanical Register.

Walter Hood Fitch [1817-1892], a young apprentice to a firm of Glasgow calico designers whose first plate was published in 1834, became the magazine's sole artist, illustrating it until 1877. Sir Joseph Hooker described him as "an incomparable botanical artist" with "unrivalled skill in seizing the natural character of a plant." Walter's nephew, John Nugent Fitch, lithographed nearly twenty-five hundred drawings for the magazine. He also illustrated The Orchid Album [1882-1897], now in London's Natural History Museum.
Stewartia ovata (then S. pentagynia) drawn by Walter Hood Fitch. Curtis’s Botanical Magazine 1842. By courtesy of the Gray Herbarium Library, Harvard University

Stewartia pseudocamellia leads me out of the nineteenth century into the present, out of the safety of winter history into the horticultural reality of spring. Has my stewartia survived the winter? Will it outgrow the problems that threatened it last fall?

It has been an enlightening sojourn in the company of people I was inclined to romanticize, for the names summoned up visions of benevolent gardeners in smocks and of gallant and intrepid collectors, all sharing their common interest and plants in harmony. In reality, of course, they partook of the full range of human attributes and frailties: The generous and dedicated are easily exploited; the arrogant complacently ignore those they have depended on; one-upmanship and political contrivance abound. But the delight in the enterprise is none the less for that. Among them were writers able to convey the excitement of their discoveries and artists who documented, often with exquisite skill, their observations in a language universally understood. Through them it is possible to appreciate the long journey many plants have taken before settling comfortably in our gardens among representatives of other times and other continents.

Bibliography


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