Mary Gibson Henry, Plantswoman Extraordinaire

Mary Harrison

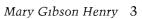
In the eighteenth century the amateur was a familiar breed of botanist, especially in Colonial America. John Bartram, who was to become the king's botanist in 1765, learned his art through experience in the field and by corresponding with horticulturists and botanists on both sides of the Atlantic. Jane Colden, sometimes referred to as America's first woman botanist, learned from her father and the books he procured for her, and through correspondence with botanists who admired her ability to recognize unusual species around her home in New York State. In the twentieth century the tradition continued and was represented especially well by Mary Gibson Henry.

Mary Henry was born in 1884 at her grandparents' house near Jenkinstown, Pennsylvania, to Susan Worrell Pepper and John Howard Gibson. Her mother's family were Quakers who had come from England with William Penn and taken part in the founding of Philadelphia. Horticulture was a traditional pursuit on both sides of the family. George Pepper, a great-grandfather, had been a member of the first Council of the Pennsylvania Horticultural Society in 1828, and her Gibson grandfather, a keen plantsman, had his own greenhouse. Her father enjoyed hunting and camping, and contributed to her interest in the natural world.

The home of Mary's family was in the center of Philadelphia and had no garden, but before her father's death in 1894, the family often visited Moosehead Lake in Maine. There, under her father's influence, her familiarity with the countryside developed. She became especially interested in native plants, and her first acquaintanceship with twin-

Mary Gibson Henry (second from left) photographed in the ballroom of her grandparents' house, 'Maybrook', in Wynnewood, Pennsylvania. To her left is her daughter Josephine deNemours Henry, and at her right is her aunt Mary Klett Gibson. At the far right is her daughter Mary Gibson Henry Davis.







flower (*Linnaea borealis*), a dwarf evergreen shrub, awakened in her "not only a love for and appreciation of the absolute perfection of the flower itself, but also for the dark, silent forest that shelters such treasures." Many years later (1932) she came upon this plant again, in northern British Columbia, growing "in damp, shady woods, in lower altitudes and on bare, bleak, stony mountain tops up to 6000 feet."

Mary attended the Agnes Irwin School in Philadelphia for six years; when she left in 1902, her formal education ended. In the years following school she visited the Grand Canyon and the Colorado Rockies, and on a trip to Europe she climbed Mont Blanc with her brother and several guides.

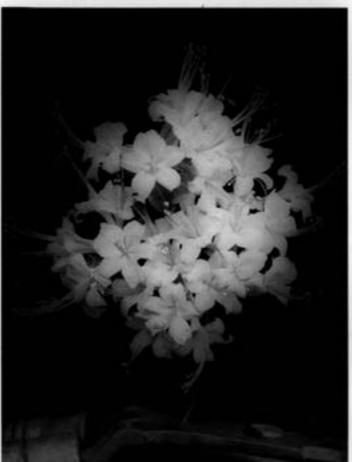
In 1909 she married John Norman Henry, a physician who later became Philadelphia's director of public health as well as president of the General Alumni Society of the University of Pennsylvania. The couple first lived in Philadelphia where Mrs. Henry had "a nice backyard . . . and a tiny greenhouse." In 1915 they acquired a large farm in Maryland with a view to building a home there. The plan was abandoned when World War I interfered and Dr. Henry volunteered for duty overseas. Nevertheless, long summers spent in existing bungalows on the property allowed Mrs. Henry to develop a large kitchen garden, acquire some exotic ornamentals, and experiment with native rock plants. In addition to gardening in Maryland, she cultivated orchids in the Philadelphia greenhouse, and in 1924 she published an essay on the subject in Garden Magazine. She read widely in horticulture and botany, and it was her reading during this period that first developed her interest in wild plants of the southeastern United States. Two books were of special significance to her, Manual of the Southeastern Flora by J. K. Small and The Travels of William Bartram, which she found an "unending source of inspiration."

Time to indulge horticultural interests was limited, however, for Mrs. Henry quickly became the mother of five children, the youngest of whom died at the age of six. Although basically confined to home during the twenties, she continued to expand her knowledge about plants by studying nursery catalogs, often from distant places—*Trees and Shrubs* from a nursery in Tunbridge Wells, England; *Coolidge Rare Plant Gardens* (1923) from a California nursery; *Himalayan and Indigenous Plants, Bulbs, Seeds* (1927) from a nursery in Bengal, India. Seed lists came from the U.S. Department of Agriculture's Office of Foreign Plant Introductions, and from the Royal Botanic Garden, Edinburgh, which she had visited in 1923. (Following that visit Mrs. Henry initiated a correspondence with the R.B.G.'s Regius Keeper, William Wright-Smith, that lasted until he died in 1956. Indeed, Wright-Smith was among the earliest of several mentors to whom she looked for professional advice.)

In 1926 the Henrys bought Gladwyne, a rundown farm of ninety hilly acres twelve miles from the center of Philadelphia, where they hoped to combine the functions of their Philadelphia and Maryland homes. As the Henrys' architect described it, a greenhouse was built with a house attached. Planting must have begun immediately, for a 1928 inventory of the Gladwyne garden records over 200 shrubs and plants, with multiple varieties of several species-seven Cornus florida and three Hamamelis vernalis, for example. Mrs. Henry's interest in diversity within a single species was later reflected in her passion for collecting and hybridizing and an unflagging pursuit of particular colors and dimensions. By 1931 there were some 850 trees and shrubs in her garden, some of them new Asiatic finds acquired from the collectors Forrest, Wilson, Rock, Farrer, and Ward.

Another of Mrs. Henry's early mentors was Francis Pennell, curator of botany at the Academy of Natural Sciences in Philadelphia, from whom she sought help with identification. When she expressed an interest in collecting wild plants for her garden, it was he who urged her to collect herbarium specimens along with the plants and schooled her in how to document her finds.

In part, Mrs. Henry attributed her desire to collect to William Bartram. His glowing description of *Rhododendron speciosum flammeum* (now *R. speciosum*) had fired her desire to acquire a specimen, and when her search in commercial outlets and botanical gardens



One of the showlest of native American azaleas, Rhododendron speciosum (now R. flammeum), the Oconee azalea Mrs. Henry's repeated journeys in search of this plant resulted in seven color variants Its range is confined to USDA zones 6 and 7.

proved unsuccessful, she decided to seek it in the wild. This was the impetus for a long life of annual and sometime biannual collecting trips that continued until her death in 1967.

Her sympathetic husband encouraged her to fulfill her ambitions and was able to equip her handsomely with the tools and transport needed for her expeditions. A car (specifically, a Lincoln Continental), "outfitted with an 'attic,' an electrically lit desk and a bookcase" was designed. "The rear compartment is insulated and ventilated so that newly collected plants can travel comfortably. Three plant presses, numerous buckets, spades etc. are part of the equipment." This unusual vehicle was driven by a chauffeur, Ernest Perks, who remained with the Henrys for sixty-five years. On some of her journeys Mrs. Henry was also accompanied by her daughter Josephine, a skilled photographer who took color photographs of plants later used by Mrs. Henry in her lectures.

On her first trip to the Southeast she covered 2,000 miles and on that and later trips collected seven color variations of *Rhododendron speciosum*. Later expeditions were made along the Atlantic Coastal Plain, on the Piedmont Plateau, in Appalachia, and in the mountains of east Tennessee and Alabama. Mrs. Henry planted her finds at Gladwyne and sent herbarium specimens to the Academy of Natural History in Philadelphia and the Royal Botanic Garden, Edinburgh.

Experience quickly taught her that "rare and beautiful plants can be found in places that are difficult of access.... Often one has to shove one's self through or wriggle under briars, with awkward results to clothing... Wading usually bare legged through countless rattlesnake infested swamps adds immensely to the interest of the day's work ... On several occasions I have been so deeply mired I had to be pulled out." She also learned that the habitats of many of the plants she sought were in urgent need of protection. In the Southeast she found the swamp

habitats of wild lilies being used as waterholes for cattle or as dumps. To encourage the growth of grass for grazing, farmers often burned brush, destroying wild azaleas at the same time. These threats reinforced her determination to collect and cultivate American natives and to eventually introduce them to American gardens.

During a family holiday to Canada's Jasper National Park in 1930, the Henry family learned of a "tropical valley" in northern British Columbia that was reportedly frost-free in spite of the extreme winter temperatures surrounding it. Their curiosity aroused, the family decided to explore the area; for Mrs. Henry the opportunity to collect in completely new territory in terrain ranging from 2,550 to 9,000 feet was an irresistible challenge.



Mary Gibson Henry and members of her family at the outset of their expedition to British Columbia in 1930.

The Canadian Department of the Interior had little information on the area. Mrs. Henry summarized it later, "Waterfalls and rapids in the rivers make traveling by water impossible, while the distance by land is great over wide stretches of bog and mountainous country still in its virgin roughness, and much of it yet unmapped." However, an old schoolfriend of Dr. Henry, then head of the Canadian National Railways, gave them helpful advice, and the Canadian government sent along a topographer, K. F. McCusker, to map the territory as they explored. Since the Henry family included two sons and two daughters ranging in age from 14 to 21 and their travels would take them to remote areas, they also arranged for a physician to accompany them.

The party left Philadelphia by train on June 25, 1931, arriving at Pouce Coupé, in northern British Columbia, on June 30. From there they motored to Fort St. John, where they joined the 9 men, 58 horses, and all the supplies that

would accompany them. For the next eighty days, they traveled fifteen to twenty miles a day on horseback with occasional stops to collect plants, seeds, and herbarium specimens. The journey led them alongside rivers and through meadows filled with Jacob's ladder (Polemonium), larkspur (Delphinium), and penstemons. In the higher country bellflower (Campanula) and forget-me-not (Myosotis) were abundant. "Collecting plants while riding with a pack is not always a simple matter. A trowel goes in a leather sheath on one side of my belt and a knife on the other side. A strong pair of saddle bags is fastened to the pommel on my saddle, in which each morning are placed several empty jam cans. Each evening all full cans are aired and watered, and in the morning are all carefully packed in wooden packing cases on the horses. Quite frequently the cans were frozen solid to the ground and I had to use my ax to chop them loose." Mrs. Henry's collecting methods proved reasonably successful, and

Tropical Valleys in the Far Northwest

Reports such as those heard by the Henrys of "tropical" valleys in Canada's far northwest were frequent at the time. The heating agent was the many sulphur springs in those valleys. In the 1920s their warmth enabled a trapper working out of Fort Laird, within seven degrees of the Arctic Circle, to grow winter crops of potatoes, onions, and tobacco.

The area the Henrys were interested in exploring lies between the Peace and Liard rivers, roughly 56° north latitude & 121° west longtitude and 58° north latitude & 123° west longitude. The first Europeans had made their way through the northern Rocky Mountains by way of the Peace River some 150 years previously, but few botanical collectors had been there. In 1872, the Canadian botanist John Macoun, working for the Canadian Pacific Railway, collected in the vicinity of Fort St. John (established about 1805) and Hudson Hope (established in 1808). He also collected for the Canadian Geological Survey, which carried out a scientific investigation of the Peace River in 1875. Further surveys by others had been made in 1887 and 1891, resulting in some knowledge of the distribution of certain trees and shrubs.

In response to the Henrys' discussions with the Canadian Department of the Interior, one of their topographers, K. F. McCusker, was assigned to accompany the group and to map the territory. The expedition began on 25 June 1931, covered a thousand miles on foot and horseback, and lasted eighty days. Near sulphur springs, Mary Henry noted "rank growth of delphinium often over eight feet tall and raspberries, roses and vetches growing in the thickest, most luxuriant tangle." A pool nine feet in diameter with crystal clear water and temperatures estimated at about ninety degrees Fahrenheit provided an "Arctic Tub" enjoyed by the group.

McCusker gave Henry family names to many of the rivers, lakes, and mountains they encountered. One mountain at 9,000 feet "stands forth pre-eminently, its snowcovered summit towering above the others, the highest mountain we saw all summer." This McCusker named for Mary Henry and subsequently British Columbia's Department of Lands made the name official.

In the following year Hugh Raup, then an associate researcher at the Arnold Arboretum, made an Arboretum-sponsored collecting trip to the same territory. He described his experience and catalogued his and Mary Henry's collections in *Phytogeographic Studies in the Peace and Upper Liard River Regions, Canada.* He included a brief account of the Henry expedition and noted that Mrs. Henry "collected 350 numbers of flowering plants and ferns, making notable additions to the known flora of the region."

On a lecture tour of England and Scotland in 1948, Mrs. Henry presented an account of her travels to the Royal Horticultural Society and to the Royal Scottish Geographical Society, which awarded her the Mungo Park Medal for Exploration in Northern British Columbia.

many of the plants survived the journey back to Philadelphia. Opuntia frigida, Monarda mollis var. menthaefolia, Artemesia frigida, Amelanchier florida, and Cornus stolonifera survived at Gladwyne for some years, but many of the northerners were unable to adjust to the local climate.

Mrs. Henry considered the most interesting find of the expedition to be Lapland rosebay (Rhododendron lapponicum), collected near St. Paul's lake in northern British Columbia. She sent a specimen for identification to Alfred Rehder, the curator of the herbarium at the Arnold Arboretum, who reported that it was previously known in North America only in the East northward of the higher mountains of northern New York and New England. He declared it "an extremely interesting discovery... its occurrence in Western North America is of great phytogeographical interest . . . I have placed a small twig of it on record in our herbarium . . . for neither we nor the Gray herbarium had any specimens of this species from the West."

Herbarium specimens were also distributed to the Academy of Natural Sciences of Philadelphia and the Royal Botanical Garden, Edinburgh, and a few woody plants came to the Arnold Arboretum. The Royal Botanical Garden, Edinburgh, also received seventy packages of seed, and fifty cans of living plants went to Gladwyne.

Mrs. Henry traveled back to the Peace River area in 1932, 1933, and 1935 with her daughter, Josephine, and K. F. McCusker, the topographer. They communicated with Philadelphia via twelve carrier pigeons they brought with them and received messages from Dr. Henry by radio receiver.

Following these trips to British Columbia Mrs. Henry continued collecting in the southeastern part of the United States. Nothing could surpass her delight in the northlands, but comparatively few plants from there were able to survive the hot summers in Philadelphia, whereas plants from the Southeast flourished there. "As a field botanist," she wrote, "duty calls me to those fertile fields of our southern states where so many treasures lurk in out of the way corners."

From 1931 to 1935 Mrs. Henry wrote six parts of her account of the Peace River expedition, *Collecting Plants Beyond the Frontier*, published by *National Horticulture Magazine*; two final segments appeared in the same journal in 1949. During this period she also wrote twentythree other articles, most of them published in *Horticulture* or in *National Horticulture Magazine*. Her topics included uncommon oaks and rare rhododendrons, little known violets and unusual honeysuckles, hybrid jasmines and Indian begonias. Based on her own personal experience, she evaluated plants for cold hardiness and recommended soil mixtures, transplanting methods, and greenhouse techniques.

Following her husband's death in 1938, Mrs. Henry turned her attention to expanding her garden. At the summit of the land at Gladwyne was a huge deposit of Baltimore gneiss around which she developed a naturalistic rock garden. The plantings included native American alpine plants, some of them collected in northern British Columbia; many varieties of phlox, silene, and artemesia; hymenocallis from Georgia and Florida; tradescantia from the Gulf of Mexico; gentiana from New Jersey; and yuccas from eighteen different locations; calycanthus and low-growing magnolias from Georgia; and many varieties of dwarf rhododendrons. A trillium garden was planted in a woody area near a small stream, and collections from Texas, New Mexico, and Arizona were established in a desert rock garden. Each plant was provided with a soil mixture and habitat as similar as



Hymenocallis henryae. Mrs. Henry found this new species in western Florida, botanist Hamilton Traub described and named it. Mrs. Henry collected species of Hymenocallis from eleven southern states. Some were planted outside and lifted for the winter At one time she had 125 varieties of lily, "distinct, beautiful variants of eastern American lilies." As she herself noted, lilies "engaged much of my time."



"As for my rock garden, the largest of the existing pile of rocks were too big to move and all I did was to rearrange the smaller ones and to make paths and steps that are scarcely distinguishable. Soils were changed into suitable mixtures" (1943) Mrs. Henry gives scale.

possible to its original growing conditions; the change in latitude often resulted in plants remaining desirably small and compact.

Visitors to Gladwyne often commented on the range of plants growing there. E. H. Wilson, in identifying *Quercus pumila*, which Mrs. Henry had sent him, expressed surprise that this southeastern plant should prove hardy in Philadelphia; and William Judd, Arnold Arboretum propagator and one of Mrs. Henry's advisors, was impressed by the many rare and unusual plants that could not be found elsewhere so far north.

At the end of the 1930s Mrs. Henry began to receive recognition for her achievements. She became a director of the American Horticultural Society and a council member of the Pennsylvania Horticultural Society. When the Rock Garden Society inaugurated their bulletin in 1943, she was appointed associate editor and wrote the first article in volume one, number one, "A Rock Garden of Natives." In 1941 she became a research associate in the department of botany at the Academy of Natural Sciences, Philadelphia. That same year the Pennsylvania Horticultural Society awarded her their Schaeffer Gold Medal for her "notable contribution to horticulture. Her keen eye has detected many species and varieties of horticultural value. These have been transplanted to or propagated in her garden at Gladwyne and her skill in their culture has made possible the demonstration that many highly attractive native plants can be grown far from their native haunts... As a result of her untiring efforts we are now more



Phlox x henryae, a cross of P. nivalis and P. bifida, originated at Gladwyne, "a chance seedling in my trial garden." P x henryae, a pale pink with deeply notched lobes, is in the foreground with P. bifida in the rear.

than ever aware of the tremendous potentialities of the native American flora for supplying plants worthy of cultivation."

It was at this time that Mrs. Henry began to make her plants available to nurseries. The Upper Banks Nursery, operated by Fairman Furness, was a fifty-acre garden and rare plant nursery along Ridley Creek in Media, Pennsylvania. In 1940 Mrs Henry gave Furness permission to gather cuttings of many of the plants in her garden. When the plants were ready for distribution in 1942, he published a catalog, *Rare and Native Shrubs Collected by Mary Henry*, that included varieties of *Rhododendron, Calycanthus, Halesia, Philadelphus,* and *Syringa* that she had developed. The Mayfair Nurseries, rock garden specialists in Hillsdale, New Jersey, also offered plants from Gladwyne, including many varieties of Mrs. Henry's phlox and penstemon.

Over the years her interest in collecting and breeding lilies had grown. In 1946 she was awarded the silver medal at a lily show organized by the Massachusetts Horticultural Society. "The most outstanding exhibit of lilies from the American wilds was the eight selections of Lilium philadelphicum now being cultured by Mrs. Henry at Gladwyne, Pennsylvania," wrote the judges.

Perhaps the most satisfying achievement in her work with lilies was the discovery of a fragrant, yellow specimen in a cattle pasture in southern Alabama, near the Gulf of Mexico. "I had long hoped," she confessed, "that I might chance upon some species which had remained unknown to science." In addition to herbarium specimens she collected seeds, which were successfully propagated at Gladwyne and bloomed after five years. The species did prove to be a new discovery; Mrs. Henry named it Lilium iridollae, for it represented to her "the pot of gold at the foot of my rainbow."

In 1949 Mrs. Henry's garden was threatened with destruction when the State of Pennsylvania and the U.S.

Army Engineers decided to use Gladwyne "as a dump for the silt, sewage and refuse to be pumped from the bottom of the Schuykill River." She called upon her many botanist friends and colleagues around the United States and in Great Britain to support her appeal to the governor of Pennsylvania to spare the property. Not only was the appeal successful, but the letters her supporters wrote provide clear evidence of Mrs. Henry's status in the horticultural world. All spoke of the importance of her collection of native and rare American plants and of its great scientific and horticultural value. Some put the garden in the same class as the Royal Botanic Gardens at Kew and the Arnold Arboretum. Mrs. Henry was described as a highly competent botanist and an extremely skilled horticulturist. The president of the

Royal Horticultural Society pointed out that her fine American flora,"much superior to the ordinary run," were being distributed to gardens in England. Hugh Raup, professor of botany at the Harvard Forest, wrote, "She has been an indefatigable student of horticultural values in the native American flora, in the finest tradition."

To safeguard the garden's future, Mrs. Henry established the Henry Foundation for Botanical Research, dedicated "to the collection and preservation of choice, rare and endangered New World Plants."

A year or so before her death Mrs. Henry was advised by her physician to reduce the strenuous level of her activities. She nevertheless continued to lead a full life as outlined in the 1966 publication Accomplishments of the Foundation, which recounts her activities during the last full year of her life. Between May and August she spent 42 days in the field, traveling in Delaware, Maryland, Virginia, West Virginia, Kentucky, North Carolina, and Florida, and collecting some 75 plants, including another Lillium iridollae and a Styrax americanum that still grows at Gladwyne. That same year she filled orders from retail nurseries all over the United States and from individuals from Peru to Israel. She distributed Gladwyne material to the Morris Arboretum, the University of Arkansas, the Royal Botanic Garden, Edinburgh, Hilliers Nursery in England, and the Agricultural Experimental Station in Puerto Rico. Visitors to her garden included members of the American Rhododendron Society, the U.S. Department of Agriculture, the New York Botanical Garden, the Royal Botanic Garden, Edinburgh, and the department of botany at Princeton University.



Mrs. Henry wrote in her autobiography, "Winters have found me enmeshed deeply in the routine work of my tiny greenhouse and six coldframes... about 600 pots and flats to be repotted and taken care of and that duty devolves entirely on me. Most of the pots contain Amaryllids and what began as 'winter fun' has turned into a serious breeding program."



Lilium iridollae (the pot-of-gold lily) was perhaps the most cherished of Mrs. Henry's many finds She collected the original specimen and seeds in southern Alabama, 1940. A single-flowering plant of three to five feet in height, her seedlings first flowered in 1945.

On a collecting trip in North Carolina in April 1967, Mary Gibson Henry died at the age of eighty-two. Her years of devotion to horticulture had produced many solid achievements: over a hundred articles had been published in journals such as Herbertia, Bartonia, and National Horticultural Magazine; herbaria in Scotland and North America had received thousands of specimen sheets from her collections; the hardiness of plants previously thought too tender for Philadelphia had been demonstrated; new species and varieties had been introduced to arboreta and nurseries; interest in American flora for American gardens had been stimulated; the garden at Gladwyne had been preserved for future generations.

Following her mother's death in 1967, Josephine deN. Henry became director of the Foundation, a position she held until 1996, when she was succeeded by Mrs. Henry's granddaughter Susan Treadway. These successors have continued to expand the collection of native American plants and to maintain the natural qualities of the garden. Through lectures, plant sales, and garden tours, new generations are introduced to the work and ideals of the garden's founder.

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Note

To visit the Henry Foundation for Botanical Research, call 610-525-2037 or write to the Foundation at Box 7, Gladwyne, PA 19035, for reservations and information about membership, educational programs, plant sale, hours, fees, directions, and parking.

Mary Harrison is a volunteer in the Arboretum's herbarium and library. She has annotated the letters and diaries of William Judd, the letters of Oakes Ames, and indexed the minutes of the Horticultural Club of Boston. Her next undertaking will be the annotation of the diaries of plant explorer Joseph Rock.