A turn down Allandale Street from the busy and traffic of Center Street in Jamaica Plain is a turn down a country road, crowded with trees and lined by sturdy stone walls. Boston's last working farm, Allandale Farm, can be seen from the road. In the summer it sells fresh sweet corn; in the autumn it sells sweet cider mashed from its own apples. The road straightens out past the farm, and on the left is a deeply shaded, wooden gate that leads into Walnut Hill Cemetery, the resting place of Professor C. S. Sargent, the first director of the Arnold Arboretum, and his good friend, the architect H. H. Richardson.

Also located on the road is the very private, early twentieth-century Brandegee estate with its decaying Italianate gardens. The centerpiece of the estate is an enormous Georgian house set on a great hilltop terrace overlooking sweeping green meadows. Opposite the former stables and the carriage house of the Brandegee estate, now the stables of the Boston Police Department, is a seemingly nondescript clump of woods, the Allandale Woods, the subject of this article. It is typical of the secondary growth that invades old fields, once they are no longer used for grazing. This fragment of land, along with much of the present-day Arnold Arboretum, was the ancestral grounds of a number of old Boston families, including the famous Weld family of Roxbury, once again prominent because of the election of William Weld as present governor of Massachusetts.

Across Center Street from the Arnold Arboretum (between Allandale Street and the VFW Parkway), visitors can explore for themselves the 31-acre Allandale Woods, a jigsaw puzzle of City of Boston parkland and private land to which conservation restrictions have been applied. The Boston Natural Areas Fund (BNAF) has taken the lead in managing the property, which has a special connection to the Arnold Arboretum in that both were part of the original land grant to Joseph Weld that included much of modern-day Jamaica Plain. Superficially, the Allandale Woods looks like an ordinary oak and maple forest of the metropolitan Boston area, most of it an undulating glacial landscape of ridges and valleys, streams, and rocky outcroppings of Roxbury pudding stone, but records reveal it as a place of considerable historical interest as well.

A careful observer can see remnants of old farm walls, estate boundaries, abandoned...
apple orchards, and old foundations that clearly indicate former uses of the land. Probably the most exceptional structure in the Allandale Woods is a six-sided wooden springhouse with a conical cap tipped by a large metal ball. This crumbling structure, built in the 1870s, sits over a pipe that taps the Allandale Spring, a famous source of water in the region. Surrounding the springhouse are several ancient, overgrown apple trees.

**Early History**

The human story of the Allandale Woods begins with the Indians who had camps and lodges in the Saw Mill Brook valley until 1000 B.C. This area was presumably hospitable, with abundant running water and level ground. When the first English settlers arrived in the region, Algonquin Indians lived not far away, near the Neponset River Valley in Quincy, making it easy to imagine Indian hunters and fishermen moving through the primeval Allandale Woods.

The historical record begins on June 5, 1632, when the Reverend Thomas Weld and his brother Joseph arrived in Boston and settled in Roxbury. Joseph Weld became the captain of the Roxbury militia, and fought in the first major Indian war in the New England settlements, the Pequot War of 1637. After defeating the Indians, Weld was one of the commissioners who negotiated the peace treaty; a grateful Governor Winthrop rewarded Captain Weld handsomely with a large estate in the western end of Roxbury called Jamaica End.

There is evidence to suggest that this estate covered all of the land from the present-day Arboretum to the VFW Parkway and north to the spring along Allandale Street. The property was used as a large farm for growing the crops of the day—rye, corn, squash, pumpkins, apples, beans, tobacco, and hay for feeding livestock. Much of the labor for the huge farm apparently came from Indian and black slaves until Massachusetts outlawed slavery in 1783. The remnants of the field boundaries can still be seen in the low rock walls found throughout the Allandale Woods.

The land remained in the Weld family until 1806. During that year Colonel Fleazer Weld, great-great-grandson of Captain Joseph, sold off a large portion of his estate to pay debts he may have incurred while supporting the Revolutionary Army. What was to become the most famous hundred acres went to Benjamin Bussey, a wealthy silversmith and owner of a woollen mill. Bussey's estate is today part of the Arnold Arboretum.

The rest of the land—along the future VFW Parkway and what is now the Allandale Woods—became the estate of Thomas B. Williams. On a site near the rear of the present-day Church of the Annunciation, Williams built a farm that operated for most of the nineteenth century. In 1864, Williams sold twenty acres of his land facing Allandale Street to Henry W. Wellington, and twenty years later, the land was purchased by Maria Souther, probably also a Wellington. The Souther estate consisted of a grand two-and-one-half-story house set on a curving terrace. Below the house was a sixty-foot-long greenhouse and a meandering stream, with the springhouse built at its source and with a pond downstream. Maria Souther's daughter, Marguerite, lived here until 1968 when the house, greenhouse, and spring were sold to the Faulkner Hospital.

Numerous remnants of the Souther estate can still be seen in the Allandale Woods, such as the curving drive with its enormous oaks and sugar maples. Unkempt crabapples, ornamental cherries, and butternut trees persist near the building site. The huge, overgrown apple trees along the stream survive but do not fruit under the shade of nearby trees. The six-sided springhouse, with its conical roof, remains elegant even as it falls into ruin. The meadow below the old estate is still beautiful with black-eyed Susans, crown vetch, and other wildflowers. Yet the vigorous growth of poplars, aspens, and other trees in the meadow suggests that the area will soon again become a woodland.

The remainder of the Williams farm was purchased by the City of Boston in December 1894 to build a parkway that would connect
the Arnold Arboretum and Franklin Park to the Stony Brook Reservation. The landscape architectural firm of Olmsted, Olmsted and Eliot furnished detailed plans in 1896, but the Veterans of Foreign Wars (VFW) Parkway was not completed until 1936. A great stone and cement wall was built at some point to separate these city lands from the private lands to the north. When this wall was built and who built it has yet to be discovered. It is about eighteen inches wide and about three feet high, and runs up and down the steep landscape.

Between 1891 and 1905, Allandale Woods became part of a second extensive Weld estate, that of Mary (Weld) Pratt who married Edward Brandegee, a wealthy clothing manufacturer, in 1902. Her 195-acre estate extended as far as Newton Street opposite the Brookline Country Club and included a 79-room, neo-Georgian house and Italian gardens on the north side of the Allandale Woods. Broken slabs of marble, pieces of Romanesque statuary, and rusty mowing machines can still be seen in the tumbledown garden sheds. Nearby are covered stalls that were once used for keeping domestic animals.

Vegetation

After three centuries of use both for farming and for the cutting of firewood, the Allandale Woods today is a young forest with mostly small trees that have colonized the area. The dominant vegetation along the sides and tops of the ridges consists of oak trees (including the white, black, red, chestnut, and scarlet species) with an understory of blueberry and huckleberry bushes. White pines are surpris-
The long boundary wall that runs through part of the Allandale Woods. Photo by P. Del Tredici.

ingly rare, only occurring as a few scattered trees near the old garden sheds. Openings in the forest contain small trees of black cherry, trembling aspen, sassafras, gray birch, and sweet cherry. Common herbs include wild lily-of-the-valley and sarsaparilla. These ridge tops have thin, dry soil, which makes them prone to fire, such as the one that burned a section of the woods in 1988.

On slopes that are damper and more protected, hickories, hemlocks, and beeches become more common, with numerous sprouts of American chestnut, patches of the maple-leaved viburnum, and scattered clumps of ghostly white Indian pipes. On these lower, damper slopes the forest is composed primarily of red maples and black birch, with scattered ash, sugar maple, mockernut hickory, pignut hickory, and shagbark hickory. In many of these areas, particularly when disturbed by dumping, there is a dense understory of alder buckthorn and common buckthorn, multiflora rose, gooseberry, and a truly prolific growth of poison ivy that covers the ground and grows up tree trunks. On the edge of some of the most disturbed wet ground are large eastern cottonwoods, Asian cork trees, and castor aralias, the last two most likely started from seeds carried by birds from the nearby Arnold Arboretum.

In the center of these disturbed areas of dumping and old quarrying, one finds a tangle of vines, such as wild grape, bindweed, Virginia creeper, catbriars, oriental bittersweet, and brambles. The wildflowers found in the Allandale Woods are almost exclusively weedy species characteristic of disturbed ground (butter-and-eggs, Canada hawkweed, goldenrods, asters, yarrow, and garlic mustard). Some of these are either escaped or persisting ornamentals, such as lily-of-the-valley and dame's rocket. Presumably because of the heavy human impact, only a few native woodland herbs are now found in the Allandale Woods including bastard toadflax, wild geranium, Indian pipes, sarsaparilla, dogbane, false indigo bush, yellow gerardia, cow wheat, Solomon's seal, wild lily-of-the-valley, and false Solomon's seal.

An Ecological Experiment

Many common perennial wildflowers do not occur in the Allandale Woods even though they are common in conservation areas only a few miles away. Apparently during the period of intensive farming, many species were eliminated from the landscape and have been unable to return to the site via natural seed dispersal. In the fall of 1989, the BNAF decided to introduce a number of common perennial species into the Allandale Woods in an attempt to increase the number of native wildflower species present and to test alternative techniques for species introductions.

The first part of the project involved collecting wild adult plants of foam flower (Tiarella
cordifolia), partridgeberry (Mitchella repens), Christmas fern (Polystichum acrostichoides), wood lily (Clintonia borealis), Jack-in-the-pulpit (Arisaema triphyllum), Indian cucumber root (Medeola virginiana), shining club moss (Lycopodium lucidulum), wood sorrel (Oxalis montana), and wintergreen (Gaultheria procumbens) from woods in Newton, Massachusetts, and Sunapee, New Hampshire. With the exception of Jack-in-the-pulpit, which is rare in Allandale Woods, none of these species apparently grows here even though the site looks suitable for all eight species. These plants were transplanted onto what appeared to be suitable sites along the path running from so-called Table Rock down along an old rock wall into a wooded dell. The transplants were checked in the spring and late summer of 1990 and again in the spring of 1991. Based on these limited observations, it is apparent that all species, with the possible exception of Indian cucumber root, have survived transplantation. The Jack-in-the-pulpit, foam flower, and wood lily all flowered in 1991.

While the success of the adult transplants demonstrates that the Allandale Woods is suitable for the growth of native species that do not occur there naturally, the experiment does not say anything about the process of their establishment from seed. In an attempt to investigate this crucial phase of their life cycle, the seeds of ten additional species were obtained from the New England Wildflower Society and introduced into the Allandale Woods at specific marked points during the
Allandale Woods and the surrounding area. The main public trail begins behind the ornate Church of Our Lady of the Annunciation (arrow) and turns through the oak woodland to the distinctive outcrop and flat boulder known as Table Rock.

fall of 1989. None of the species selected occurred in the woods, yet there were many sites that looked as if they were at least potentially suitable for the species. The purpose of using seeds was to simulate the natural process of establishment of new plant populations through seed dispersal by animals or wind.

Species that grow in four different types of habitats were selected for the experiment. Seeds of the first group were planted in open, disturbed ground and included butterfly weed (Asclepias tuberosa) and coneflower (Rudbeckia sp.). The second group, planted in lightly shaded, open forest, included columbine (Aquilegia canadensis), harebell (Cam-
panula rotundifolia), and wild pink (Silene caroliniana). The third group, planted in shaded forest with rich soil, consisted of wild ginger (Asarum canadense), golden alexander (Zizia aurea) and painted trillium (Trilliun undulatum). The fourth group, planted along wet stream banks, included cardinal flower (Lobelia cardinalis) and cow parsnip (Heracleum sphondylium).

A cursory check of the sites in the late summer of 1990 and the spring of 1991 did not reveal any seedlings of any of these species. These failures suggest that the successful establishment of new populations from seed is probably a rare event, with many apparently suitable sites for a species actually being unsuitable for unknown reasons. Another possibility is that under field conditions the seeds may have to undergo a long period of dormancy before they will germinate. Under laboratory conditions there appears to be considerable variability among these species in their seed dormancy requirements. Seeds of butterfly weed germinated vigorously after three months of cold stratification, golden alexander seed required two three-month episodes of stratification, and painted trillium seeds did not germinate at all after two periods of stratification.

Our experience in finding adult transplants far more effective than seed in establishing new populations is in agreement with the conclusions reached by numerous other workers who have tried to recreate wildflower meadows and prairie communities. Simply placing seeds in a new environment is generally not enough to achieve successful plant establishment.

These sites in the Allandale Woods will continue to be monitored in the years ahead for the appearance of seedlings from the experimental seed introductions and for the persistence of the adult transplants. The results will help to determine which technique is the most effective for increasing the biological diversity of a young, disturbed conservation area, with the ultimate goal of partially restoring the original species composition.

During the last three-and-a-half centuries, the land has been the scene of key events both in New England history and in the history of the Weld family, with a cast of characters including Puritans, soldiers, farmers, slaves, Revolutionary War patriots, merchant princes, and, most recently, estate owners and dowagers who have built homes fit for royalty. An appreciation of this history can add to the enjoyment of a stroll through the Allandale Woods—far from the sounds of the modern world.

Acknowledgments
As it exists today, Allandale Woods consists of thirty-one acres of publicly owned or publicly accessible conservation land. The Boston Natural Areas Fund, a nonprofit organization dedicated to the preservation of urban green space, and the Boston Conservation Commission have worked together for the past twelve years to protect Allandale Woods through the outright purchase of land, with public and private funds, and through the procurement of conservation restrictions.

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