

Cover of Book (with authors and entrant name deleted)

Cover showing an engaging planting of *Rudbeckia fulgida* var. *deamii*, native plants in Connecticut.



Hestercombe, in Somerset, England, is exalted as the finest example of the collaborations between Edwin Lutyens and Gertrude Jekyll. It has been fully restored in recent years and is open to the public.

# INTRODUCTION

I start with the premise that very little is new in design, but I still can't help being enthusiastic about so much that I see. Garden designers all stand on the tilled ground of the practitioners that came before us. Great revelations are rare. Design trends are a continuum of ideas connected in new forms; they are the result of incremental shifts that move from one oeuvre to the next with messy overlaps. These overlaps, however, are where distinct ideas become clear in hindsight. Today the easy, free interchange of ideas expedites the creation of both trends and traditions in any given discipline. At times we are left guessing whether a good idea will be just a temporary fad or become imbedded at a deeper level and ultimately be accepted as part of a bigger movement. Now more than in the past, many ideas are proposed and explored concurrently, crossing disciplinary boundaries and combining in more fluid and amorphous ways. In the past, single ideas could start whole movements. Modern communication and information technology is fast and immediate, and therefore proponents of new thinking are recognized faster and their ideas may be either quickly discounted or adopted at record speed. Traveling around the country and photographing gardens for this book allowed me to see the work of many firms firsthand. I noticed a trend: designers who really know plants and who are comfortable using a variety of plants tend to practice multiple design styles. Only a few firms have signature styles and stay within those confines.

I observed that the ideas espoused by the pioneers of modern landscape architecture are shifting. In the United States, Dan Kiley, James Rose, and Garrett Eckbo were the

From the Introduction, pp. 8-9 (with authors and entrant name deleted)

The introduction gives an in-depth perspective on why planting design is relevant to landscape architects today. An overview of historical context sets the stage for each chapter of the book and a deeper exploration of each style of planting.



Plantsman and garden designer Piet Oudolf uses his own garden in Hummelo, in the Netherlands, to develop, test, and demonstrate his ideas on planting design. Here, yew hedges are carved into sinuous waves.

Roberto Burle Marx (1909–1994) was trained in opera and self-taught as a painter. Through the encouragement of Oscar Niemeyer, Burle Marx shifted his focus and talents into landscape design. He spent time in Germany, where he was influenced by the avant garde movement. Burle Marx almost single-handedly introduced landscape architecture as a profession in Brazil and South America, profoundly influencing the generations of garden designers and landscape architects who have come



Even in Oudolf's former nursery stock beds, topiary forms created a backdrop for the plants that were ultimately to be dug and divided.

after him. He designed the gardens; his brother grew the plants and built the projects. Burle Marx is widely known for his promenades in Copacabana and Ipanema, and at Flamengo Park.

Burle Marx had a deep love of plants and was voracious in his acquisition of them. His mother's farms became his home base, botanical garden, and nursery, where he would trial and supply his projects with the plants he needed. He is well known for explorations into his native country to find plants to use in his work; he also

imported plants from Asia, South Africa, and Central America to expand his palette, however. He realized there was no real industry in Brazil to help maintain his projects, so he sought out the most durable plants he could find. His style was highly graphic and sculptural. His bold aesthetic was also highly refined and joyous. Once his work began to be published internationally, many designers made pilgrimages to see his projects and to meet him. Raymond Jungles and James van Sweden have both since brought his influence to North America. Burle Marx was engaging and generous with time, and he enthusiastically transmitted his love of art, landscape design, and plants to anyone who took the time to visit him. I was fortunate enough to meet him a half a dozen times, and my own work has been influenced by him in important ways as well.

Van Sweden and Wolfgang Oehme founded Oehme, van Sweden Landscape Architects in 1977. Combining Wolfgang Oehme's training in Germany—and a deep knowledge of plants that harkened back to Karl Foerster's legacy—and Jim's background in architecture, horticulture, and landscape architecture, the two created pioneering work. Their partnership fostered a signature style of durable, temperate plants and a bold, contemporary vision that set landscape architecture on edge when their work first began to be published and seen, and is

From the Introduction, pp. 20-21.

The Dutch master planter Piet Oudolf teamed with James Corner Field Operations and GGN at the High Line in Manhattan and Lurie Garden at Millennium Park in Chicago to bring public attention to spectacular planting integrated into iconographic public projects.



The mottled trunks on a mature allée of London plane trees are a striking complement to the fossilized Israeli limestone that clads the new Barnes Foundation in Philadelphia. *Platanus x acerifolia* is used extensively in urban settings across Europe and in the temperate Northeastern United States for its tough constitution and longevity.



Purple-leaved Japanese maples and a wall picturesquely covered with Boston ivy greet visitors at the entrance to the Barnes Foundation as they stroll on a path that transects the water feature.

From *Plants as Architecture*, pp. 32-33.

In the first chapter on 'Architectural Planting' the Olin Partnership exemplifies how the Barnes Foundation is integrated into the Philadelphia city core and celebrates the new museum by giving it context on the site.



ABOVE: Steve Martino highlights bougainvillea and ocotillo (*Fouquieria splendens*) as specimens on the edge of a dining terrace. The bougainvillea is pruned heavily to expose its trunk and stems, and is espaliered on a rock wall. Denser plantings would have detracted from the space's austere architecture.

RIGHT: The foliage of *Agave weberi* and a desert ironwood (*Olneya tesota*) benefits from a backdrop of a vibrant orange-red wall, which allows the eye to perceive their forms in detail.

well. Many designers still follow his dictate for designing gardens: place complex architectural, finely detailed, and visually complicated areas near a residence, then let them give way to naturalized and informal spaces as one moves out into the surrounding land.

Ellen Biddle Shipman (1869–1950) adapted her knowledge of the plant palette she used in the Northeast and Midwest to her most important commission, Longue Vue Gardens in New Orleans. Shipman used boxwood extensively and often created spaces that were based on squares and rectangles, such as low hedge frames that spill over with annuals, perennials, and summer-flowering shrubs. She was known for her adept skill at creating romantic flower gardens within a strict architectural frame. Stan Hywet Hall in Akron, Ohio, and Reeves-Reed Arboretum in Summit, New Jersey, are two other examples of her work, and have been restored and are open to the public.

In the modern era, Dan Kiley (1912–2004) used bosques of trees, hedges, and strong architectural forms on the ground plane in a way that was greatly influenced by his travels in Europe and his study of André Le Nôtre (1613–1700), and especially



ABOVE: What appears to be a simple *Dasyllirion* planted in gravel is, upon closer inspection, a masterful design move by Steve Martino: its dome shape picks up the curve of the low wall, the angle of the sunlight that strikes that portion of the garden illuminates each individual leaf in sharp detail, and a hybrid mesquite tree provides an area of deep shade by way of contrast.

RIGHT: A dense planting of palo verde trees, ocotillos, and various other desert plants screen the house from the street and create a lush vista for anyone sitting on its main terraces.

Vaux le Vicomte. His highly structured landscapes featured detailed spaces that were often formal and asymmetrical, with visual connections or borrowed views to the larger vista. Kiley's most famous residential project is the Miller Garden in Columbus, Indiana, which is based on a grid and very rectilinear and architectonic in form; allées radiate from the main residence to create views along axes that lead the eye into the distance. Kiley did not always use straight lines, however, but as a man of his day, explored bold circular and curvilinear forms as well. He often worked with the architect Eero Saarinen (1910–1961), their most famous collaboration being the Jefferson National Expansion Memorial in St. Louis, Missouri, and the landscape surrounding it. There, Kiley designed great circular or looping walks with lines of trees that complemented the Gateway Arch itself.

Today, we can see how another form important in historic European and American gardens—the topiary—must have looked by visiting Longwood Gardens in southeastern Pennsylvania. The extensive display of over fifty forms highlights how topiaries can be both architectural building blocks as well as purely decorative sculptures. Topiaries were counterpoints to nature for seventeenth-century garden



In Phoenix, with a markedly different plant palette, Steve Martino creates structure in this residential project with native plants.



From *Artfully Naturalistic Gardens*, pp. 70-71.

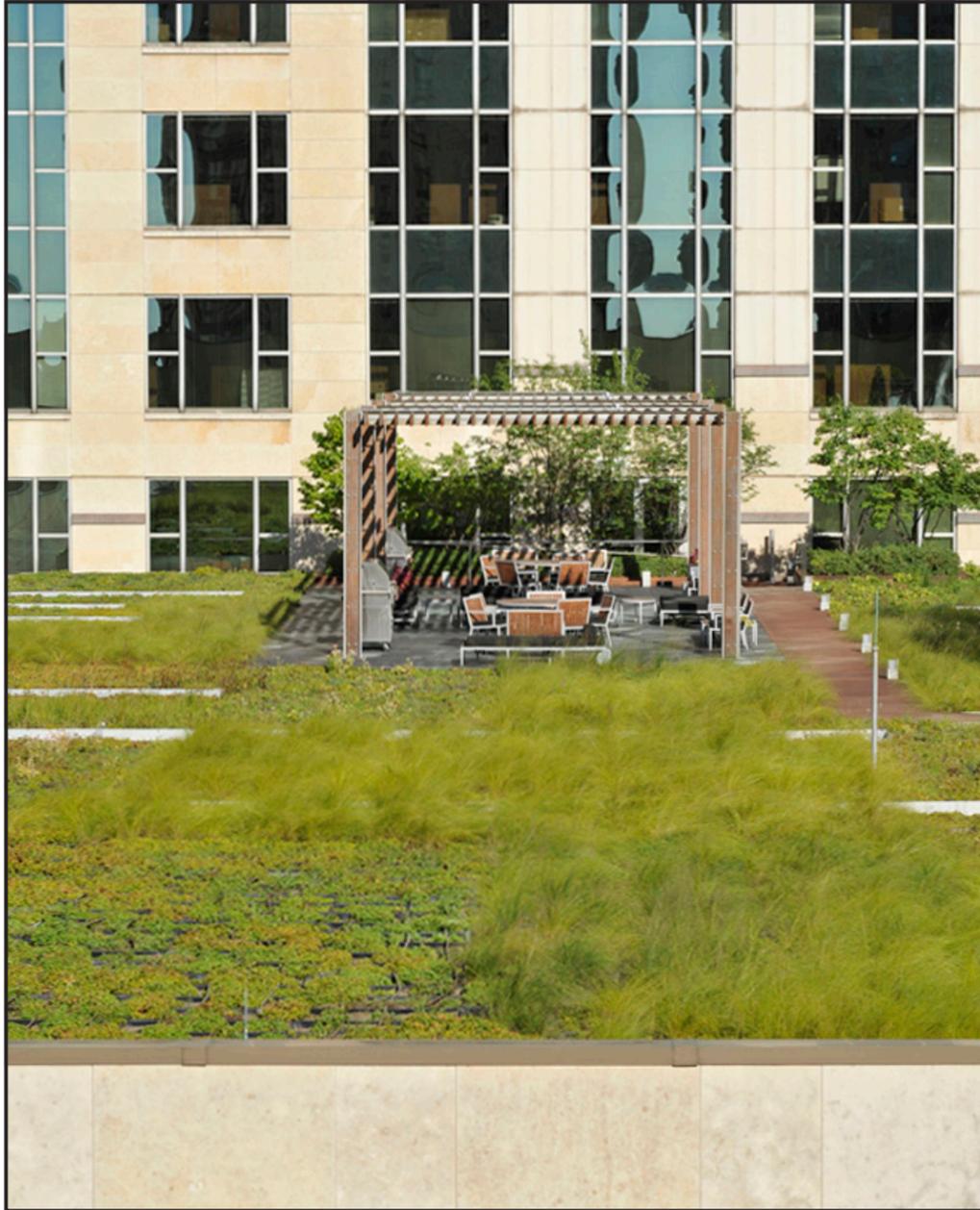
*Colour Schemes for the Flower Garden*, was a recipe book and technical explanation of how to repeat her romantic and painterly style plant combinations. After the success of *Colour Schemes*, she also wrote more than twenty other books on the crafts and architecture of her beloved Surrey. Her books contain whole treatises on roses, lilies, and woodland plants. She wrote books to encourage children to garden, a catalog of the best artifacts to collect for the garden, how to arrange cut flowers, and more. She also tried her hand at photography, painting, quilting, woodworking, pottery, and other arts and crafts. Jekyll was woman of deep experience who had a true passion for the decorative arts, and she was perpetually interested in how her ideals and theories of beauty could be transferred to her love and livelihood—gardening and garden-making. She was also noted for being generous with those who took the time to come see her.

Jekyll and Robinson fostered a new set of ideas that traveled the world and appealed to both the wealthy and the poor alike. To embrace the naturalistic style of planting, all that was needed was a passion for plants and an impulse to arrange them in a pleasing way that reflected a romanticized view of nature. Many contemporary garden designers and landscape architects continue to interpret this approach today.

Two major creative infusions of ideas have evolved the original tenets of naturalistic planting: creating multiseason gardens and making them more ecologically sensitive. Jekyll thought a garden should be arranged by season, and created a collection of garden rooms made for rotating interest throughout the calendar year. Pamela Schwerdt (1931–2009) and Sibylle Kreutzberger—the female gardening couple Vita Sackville-West hired to garden for her at her beloved Sissinghurst in Kent—later changed that notion. Although these two brilliant British gardeners are not well known outside their own country, many have experienced their work at Sissinghurst, which

*Aster divaricatus* and Christmas ferns spill over cleft bluestone walls along the edge of the outdoor amphitheater at the National Cathedral in Washington, D.C., by Michael Vergason. The planting creates an effective transition between the architectural space and the woodland that surrounds it.

The naturalistic style pioneered by Gertrude Jekyll and William Robinson continues to be relevant to modern practitioners like Michael Vergason at the National Cathedral in Washington DC. Vergason uses native plants here in this historical style.



Hoerr Schaudt planted sedum and prairie dropseed in Mondrian-esque configurations for this roof garden in Chicago, making it a treat for all those in adjacent buildings to gaze upon.



LEFT: *Calamagrostis* is remarkably hardy—it performs equally well in zone 8 or zone 5. Here it serves as one of the more vertical elements among the plants chosen for a green roof.

BELOW: Sedums in gray, pink, coral, red, and purple, along with *Allium schoenoprasum* 'Forescate'—a perennial as opposed to a bulbous variety—and feather reed-grass *Calamagrostis x acutiflora* 'Karl Foerster' create a cubic pattern that is compelling to look down on from higher in the building.



be taught to manage individual species; plants in drifts or masses are easily understood by the viewer; and, finally, graphic planting is a perfect counterpoint to the bold form of modern and contemporary architecture.

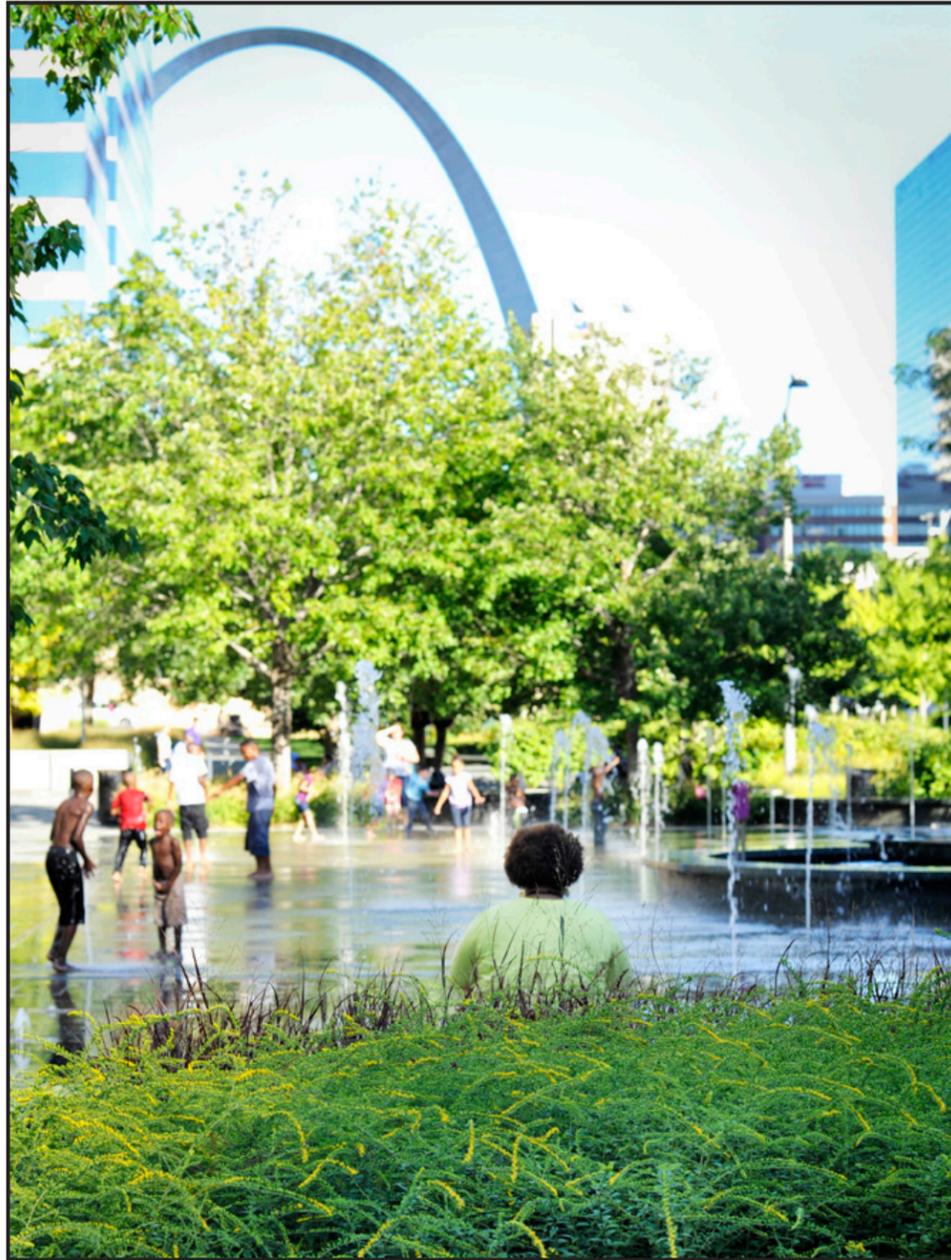
Piet Oudolf, a contemporary Dutch garden designer best known for his work on the High Line in New York and at the Lurie Garden at Millennium Park in Chicago, used yew sculpted into wave forms as a terminus and focal point in his personal garden, Hummelo, near Arnhem in the Netherlands. This was an exciting use of a large block of plants to create movement simultaneously and in three dimensions. By thinking of hedges in this way, the opportunities for design are only limited by our imagination.

Wirtz International, a Belgian landscape design firm run by Jacques Wirtz and his two sons, Martin and Peter, has a different vocabulary but works to create equally striking effects. They are renowned for their use of clipped hornbeams, beech trees, yews, boxwood, and other plants in a similarly graphic manner to create a dizzying array of different shapes and forms. They have led a movement to reimagine clipped forms in the modern garden.

The firm Oehme, van Sweden, located in Washington D.C., was founded by James van Sweden (1935–2013), and Wolfgang Oehme (1930–2011), in 1977. Together they popularized the New American Garden, a landscape design style that eschews manicured lawns and foundation plantings but promotes naturalistic landscapes planted in a graphic style; these often explode exuberantly with grasses and wildflowers. For example, most of a garden might be planted in a graphic style, but near intensively used areas more complex or naturalistic sections might be planted, which promotes

From *Graphic Planting Design*, pp. 110–111.

On this roof garden Hoerr Schaudt interprets a graphic style of planting with the use of drought-tolerant plants that are native and non-native to the midwest and create a lush habitable place.

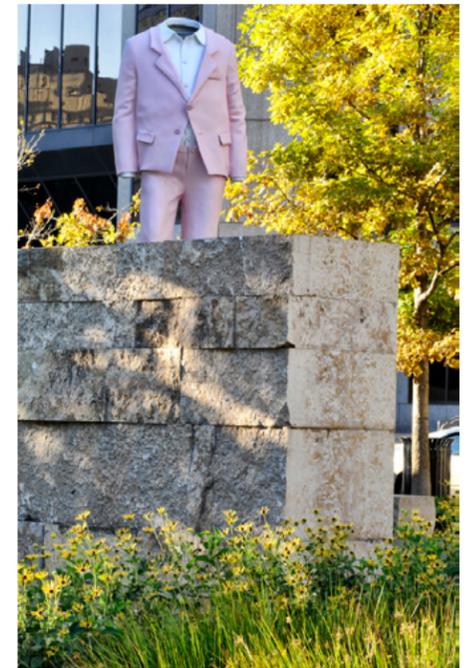


Solar Cascade goldenrod is one of the very best varieties on the market. Here in St. Louis's Citygarden, Nelson Byrd Woltz used it to add late-summer interest behind a popular interactive water feature.

From *Graphic Planting Design*, pp. 118-119.

are in fact selections of various prairie plants. Though the planting motif is distinctly modern, the reference to the character of native plants is apparent. The design uses big blocks of flowering perennials to visually excite and, as described previously, the block or graphic planting has the benefit of being an easier style to maintain. The park is a fantastic intersection of art, strong built forms, interactive features, and a masterful use of plants to make a compelling landscape that the residents of St. Louis have embraced and use fully. It is exciting to see beautifully detailed structures like the water feature, which references the Mississippi River, and sculptures by Tom Otterness, Tony Smith, and others, energized and integrated with the exquisite use of plants—the living part of the gardens—to attract diverse visitors.

Gustafson Guthrie Nichol (GGN), is an award-winning firm headquartered in Seattle. Their landscape for the Bill and Melinda Gates Foundation represents an evolution of the graphic style of planting. The landscape is conceived in blocks but, rather than designating a single species for each area, the designers have introduced two or more



ABOVE: Nelson Byrd Woltz has melded the surrounding prairie with the historic fabric of St. Louis in Citygarden. This interactive art park is planted in a bold block style, which is low maintenance and holds interest in every season. *Rudbeckia subtomentosa* 'Henry Eilers' along with a gold-variegated rush, capture the warm light of late September and provide a setting for the sculpture *Big Suit* by Erwin Wurm.

LEFT: The delicacy of Black-eyed Susans is enhanced by a limestone wall; their blooms soften the approach to a monumental sculpture by Mark di Suvero.

At CityGarden in St. Louis, Thomas Woltz groups native and exotic plants in dynamic patterns to create this multi-dimensional and much used park while using a plant mix that is durable and is low water use.



Scarlet and yellow gaillardias feature prominently in the Simpson Prairie, near Crawford, Texas, at midsummer. It is not a long-lived perennial, but seeds in great profusion to quickly colonize a landscape.

Installing plugs is more expensive, but these plants establish more rapidly so maintenance costs during establishment are proportionately less. A hybrid approach is to seed the major species and add plugs for diversity. It is critical to understand that this is a lengthy process; otherwise impatient owners will perceive the meadows as “weedy” and will be displeased with progress during the establishment phase.

It does take gardening experience and a deep knowledge of natural systems and the plants in those systems to understand how to plant in this style. One of the masters was the late gardening writer Christopher Lloyd, owner of Great Dixter in East Sussex, England. Lloyd was not stringent about the use of solely native plants. For maximum aesthetic interest, he used plants from various regions around the world that shared a similar ecology. He also established many rare and difficult species in meadows by seeding and plugging over several decades. The meadows at he created are biologically rich and can be considered the pinnacle of the form.

Meadows seeded as a design feature tend to be composed primarily of grass matrices and the more vigorous perennial species, simply because they germinate and establish quickly. A ratio of 60 percent grasses to 40 percent forbs is a good rule of thumb. The time of seeding is critical and varies by region. Germination depends on rainfall and stratification needs of the various species used. Some seeds will not germinate unless they go through a cold period, i.e., winter. Most grasses will germinate as long as there is ample water and critical temperatures. Cool-season grasses need a lower soil temperate to germinate. Lawns are typically cool-season grasses, which is why they are sown in spring and fall. Warm-season grasses need warmer soil temperatures and are typically sown in early and late summer. If a meadow is sown in late summer, however, it is important to give it time to establish so it will survive the following winter. Yarrows and coneflowers, goldenrods, milkweeds, and joe-pye weeds are easy to establish through seeding. Baptisias and most bulbous perennials are difficult to seed and therefore are often added as plugs once the primary plant community is established from seed.

It is critical to understand the ecology of the site being worked with when selecting appropriate species. Most seeded meadows fail because plant selection was not thoroughly understood and poor or no germination was achieved; if weeds invade, no

Meadows are a popular design strategy; they require an in-depth knowledge of locally native plants and take years to establish. This project in Crawford Texas by Mike Williams is stunning and sensitive to the local environment.



Little more than eighteen months after planting, the Native Plant Garden at the New York Botanical Garden, designed by Oehme, van Sweden, was impressively grown in. The central water feature filters storm water and creates additional habitats for a broad range of plants; the overall space is striking as well as educational.



ABOVE: The Native Plant Garden's topography rolls up and down; it hosts different moisture levels that in turn create a series of microclimates; Oehme van Sweden used this fact as an opportunity to incorporate a surprising number of individual ecologies.

RIGHT: *Carex plantaginea*, asters, maidenhair ferns, and other plants native to New York's woodland glades line a walk of pervious paving at the NYBG. The plants create strong contrasts between areas of sun and areas of shade, which keeps the eye dancing across the landscape and creates a feeling of comfortable seclusion.

line between ecological restoration and landscape design with the project, the remnant of an original prairie, and balances diversity with aesthetics. Increasing plant diversity over time allows a landscape to flower through a period of months to provide continuous color, again attracting visitors.

An institution created to entice the masses from the outset, the visitor center at the Brooklyn Botanic Garden in New York, designed by Weiss/Manfredi Architects and HMWhite, is surrounded by imaginative meadow plantings. The roof is planted with a tall-grass meadow, an unexpected feature for New York that attracts attention as soon as visitors approach and one that works well as a foil to the contemporary architecture. The metaphor of the wild coming to the city is immediately apparent. The tall grasses move in the wind and animate the structure throughout all four seasons. In addition, the plants manage storm water runoff from the structure and site.

At another city institution, the New York Botanical Garden, the renowned firm of Oehme, van Sweden demonstrates how a variety of ecologies can coexist on one 3.5-acre site. Their Native Plant Garden gives visitors a complete experience of the diversity of meadow plants found in the Northeastern United States. More than 100,000 individual plants were used to create an extraordinary variety of microclimates. The



The Native Plant Garden at the New York Botanical Garden designed by Oehme van Sweden is a superlative example of water management, artful detailing, and stunning use of native plants that implies nature in an urban setting in the Bronx.



From *Ecological Planting Approaches*, pp. 162-163.

CHAPTER

5

# *Ecological* PLANTING APPROACHES

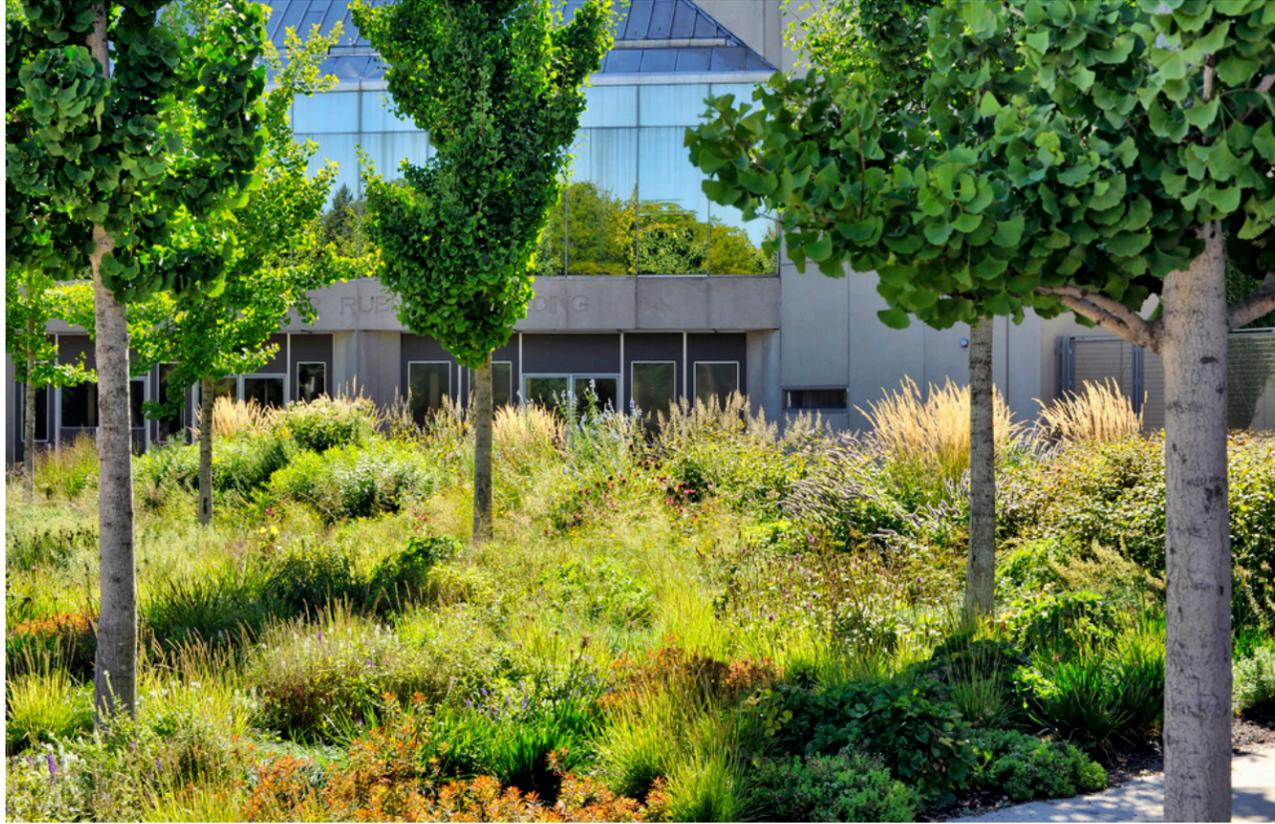
"Persistence and determination alone are omnipotent."

CALVIN COOLIDGE

Planting styles based on the idea that plants should be arranged by their native ecologies were first proposed by German and Dutch landscape designers, and arrived in America only after works by their early proponents were published in English. Karl Foerster (1874–1970) was one of the earliest to initiate and promote these concepts, which have had immeasurable influence on garden design ever since. His core goals were to reduce maintenance and management in finished gardens, to limit the need for applications of fertilizer, and to reduce excessive water usage. Ecological plantings are not always based on

an exclusive use of native plants; more often, interest is added by grouping plants from the same ecologies but different countries or continents. An example of this would be combining moor grass from Eurasia, coneflowers from North America, and knotweed from Asia—all are meadow plants. The same approach can be applied to perennials, trees, shrubs, or bulbs. Plants from similar habitats simply require fewer resources to manage if placed in a garden setting that replicates their native environment. This all sounds logical in hindsight with our now-ingrained ecological sensitivities, but it was a revolutionary theory for its time.

Karl Foerster pioneered ecological planting between the World Wars in Potsdam, Germany. His style has come forward through Piet Oudolf at the High Line and Millennium Park.



A grid of fastigate ginkgos give structure to the planting at the Art Institute of Chicago by Northwind Perennial Farm. The dominant grass is *Calamagrostis x acutiflora* 'Karl Foerster,' but there is also red-flowering *Euphorbia griffithii* in the foreground. Perennials are mixed, as in Foerster's own garden, though here the plants are arranged into large groups to suit the scale of the institutional space.

Richard Hansen and Friedrich Stahl wrote a very comprehensive book, *Perennials and Their Garden Habitats*, originally published in German in 1981, that includes dozens of site assessments and formulas for specific planting applications. It is a compendium of keen observation, clear illustrations, tables and lists of plants to be used together, and information on soil conditions, light, water regimens, and maintenance protocols. It is essentially a textbook filled with formulas for a modern planting style. Piet Oudolf has also published many books in English now, with Henk Gerritsen and



LEFT: A mass of *Calamintha nepeta* shows up prominently in the late-season garden at the Art Institute of Chicago. Here it is mixed with grasses, perennial alliums that flowered earlier in the season, and a few coneflowers.

RIGHT: *Coreopsis tripteris* is a little-known but excellent hardy perennial for the garden. Here it is used with Russian sage and *Calamagrostis x acutiflora* 'Karl Foerster,' a durable and visually striking cultivar.



The ecological style employed at the Chicago Art Institute utilizes plants from different parts of the world, but from the same ecologies. This style is easier to maintain and uses fewer resources.

**RIGHT:** Weathered-steel retaining walls suggest terraces; Ron Lutsko planted both native and exotic perennials around them that reference the native plants just beyond, on the knoll.

**BELOW:** The retaining walls become risers for the stairs at the entry of this home near Sun Valley, Idaho, designed by Allied Works Architecture. A mix of yarrow, grasses, penstemon, and alders provide a demure but sophisticated welcome.



three-quarters of an acre but receives in excess of half a million visitors a year, and perennials thrive in dense communities. The firm created a strong framework of woody plants to define and form space, but layered in thousands of flowering shrubs, perennials, and bulbs to cover every square foot of the garden, maximizing the limited planting area. In most areas of the garden, we achieved five to eight flowering cycles of various plants in the course of a season, ten in a few places. Due to the intense visitation numbers and the corresponding expectation that the garden will constantly be in bloom, the firm also planted violas, pansies, and ornamental cabbages and kales among the permanent plants for winter and early spring interest. It is a plant-dense garden, with flowers to view in every week of the year.

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**RIGHT:** Strongly rectilinear concrete forms are softened by chokecherry and the bright *Penstemon eatonii*. A cove of cottonwood edges the composition at the garden's perimeter.

**BELOW:** Ron Lutsko used the durable and lovely moonshine yarrow along the entry steps; it is exceptionally hardy and dependable in cold, rugged mountain climates like those of Idaho, Montana, and Wyoming.



Emphasis was placed on using perennials because they have a longer flowering season than shrubs and bulbs. Careful selection of the flower colors has been considered to accentuate and visually support the glass art, either through complementary associations or contrasting colors. The art is fully integrated into the plantings; the combinations of organic and inorganic elements are very much intended to play off each other. Since many of the glass forms are derived from nature—saguaro cactus, eel grass, marlins, herons, snake heads and more—the resulting dialogue between forms is rich.

Ron Lutsko, who is based in San Francisco, has created ecological gardens based on native meadow plantings as well. This requires a base knowledge of various ecological systems, and both have taken on

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From *Ecological Planting Approaches*, pp. 188-189.

On this residential project, penstemons native to the region are mixed with long known garden plants to acknowledge the native landscape in an artful way.



From *Ecological Planting Approaches*, pp. 194-195.

**OPPOSITE:** A plank bridge delves through a copse of river birches and a mixed ground cover of wood ferns and Louisiana iris, linking two lawns in this garden by Jeffrey Carbo. The loose woodland plantings seem all the more lush thanks to the crisp stone retaining walls.

summer- and autumn-flowering plants. Plugs helped the area to mature quickly and now that it is established, it requires less maintenance than the lawn that was in the space previously—and it's far more interesting to look at.

In Louisiana, Jeffrey Carbo combines a modern framework with deft planting design adapted to extremely humid summer heat. He, like many designers represented here, is adept at moving between several planting styles and at selecting the most appropriate for the project at hand. A modernist at heart, his strong, rational, and well-detailed built forms are paired with complex plantings that feel welcoming and intimate. He is adept at combining trees, shrubs, perennials, and grasses to create immediately recognizable associations or, equally, in displaying plants in a sparer and more sculptural way. Shade is important in the South, so trees are often grouped into bosques and underplanted with diverse collections of ferns, sedges, and grasses to create woodlands that are, above all, refreshing.

#### ENVIRONMENTAL STEWARDSHIP MEETS SHEER BEAUTY

What Karl Foerster pioneered in Germany in the mid-twentieth century is here to stay. As garden design moves toward celebrating plants first and built forms second, and as awareness of the necessity of environmental stewardship continues to seat itself deep in the collective cultural psyche, the ecological planting style begins to look increasingly compelling. This style of planting allows designers to explore the diverse plant offerings today's global connectivity provides while helping to conserve resources for tomorrow. Environmental considerations are the single biggest driver causing professional landscape architects and designers to learn more about new plants again and to develop new and inspiring ways of using them, and the gardens are benefiting. As an appreciation for design in general has spread to the masses, the demand for well-crafted and intriguingly detailed gardens—public and private—has increased. Plants used in an attractive way can make people celebrate local ecology, leading to increased curiosity about the environment as a whole and perpetuating the cycle of good environmental governance.

This artfully designed bio-swale by Jeffrey Carbo creates a beautiful transition between two garden spaces by managing and improving water quality. The design seamlessly blends built features with masterful planting.



From *Seasonal and Temporary Plantings*, pp. 208-209.

an intensive design. Offering temporary display design services also gives landscape designers the opportunity to stay in front of their clients on a regular basis—an effective business development strategy.

We add tropical plants annually for sheer drama and impact to Graeme Hardie's garden in Nutley, New Jersey, for example. Over the past twenty years, seasonal plantings have been created that reference both his South African heritage and his exuberant and joyful demeanor. The section of the garden where we do this is framed by the house's cobalt blue walls and is barely 40 feet square. The garden is planted with more than 80 percent temperate perennials and woody plants overall, but the extensive use of containers on the terraces and the tender plants mixed into the beds in one area near the house give it the impression of a tropical retreat. It's just something different for the owner to experience.

#### INSTITUTIONAL AND CIVIC ADAPTATIONS

Marco Polo Stufano—a former director of horticulture at Wave Hill in New York City who influenced an entire generation of professional gardeners during his 34-year tenure there—was a contemporary torchbearer for the use of tender perennials in both containers and bedding schemes. For years, the refined horticulture happening at Wave Hill was considered the gold standard for public horticulture due to his sophisticated use of plants and the incredible variety of common and rare plant varieties he planted both in the ground and in containers. Each year at Wave Hill, one kidney-bean-shaped bed is always filled with flowering tropical plants as an exuberant celebration of summer. This particular bed is often bolder in pattern than the rest of the Robinsonian-style garden; it is planted as an effective counterpoint to the rest of the landscape and visitors flock to it.

Botanical and public gardens have known for decades that changes in seasonal plantings will entice paying visitors to return again and again. The constituents' expectation for variety in plant collections must be met. It would take a prohibitive amount of money and effort to change permanent plants out annually. However, it is possible to change containers and areas of beds devoted to temporary plantings

Hoerr Schaudt designs the median planters that grace Michigan Avenue in Chicago. Castor beans, hot pink petunias, silver *Plectranthus*, milkweed, zinnias, and other unexpected species create an energized atmosphere for this premier tourism-and-shopping district.

On Michigan Avenue, Chicago's most noted shopping district, Douglas Hoerr demonstrates how annual planting schemes raise property values, enhance a critical retail district, and delight tourists.