

# The Gardeners' Gazette

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## The Perennial Issue

### The New Perennial Style

The New Perennial Style or “new wave movement” has been around so long (since the 80s and 90s) that it is probably no longer “new.”

Founded more or less by the “godfather” of the movement, Dutch garden designer Piet Oudolf, the movement has been advanced in the writings of Oudolf and Noel Kingsbury, a UK garden designer and others. The “godmother” of the movement is another Dutch designer, Mien Ruys. In his Designing with Plants, 1999, Oudolf refers to her as his first influence. She is, also, said to be inspirational in the work of the American designers Wolfgang Oehme (born in Germany) and James van Sweden who both are usually counted among the new perennialists. Ultimately, the movement can be traced back to the “naturalistic” garden designs of William Robinson’s “wild” garden.

While the movement has no manifesto, it advocates the use of grasses, meadow and prairie plants and a rather restricted palette of other plants chosen for their structure, their nativeness, their sustainability and their “compatibility” with their natural growing culture. Advocates design with these plants in public parks and spaces where plants are laid out in massed naturalistic “drifts” that look their best in late summer.

Based on theoretical and some very practical work matching plants to habitats and testing their behavior under controlled growing conditions (i.e., ecologically appropriate gardening), the movement parallels the native plant movement but avoids the dead-end of the “natives only” purists. [See “Notes” on the Website for an example of Kingsbury’s theoretical work.]

Others in the movement like Dan Pearson and Beth Chatto (both in the UK) are also exponents of the “right plant in the right place” rule, looking to nature for aesthetic inspiration and matching or putting plants together (in “plant communities”) that like to co-exist in similar habitats (= the ecological emphasis). A new wave perennials garden is, then, “an enhanced nature” without a lot of human control, not forcing plants to live in contradictory soil and site conditions.

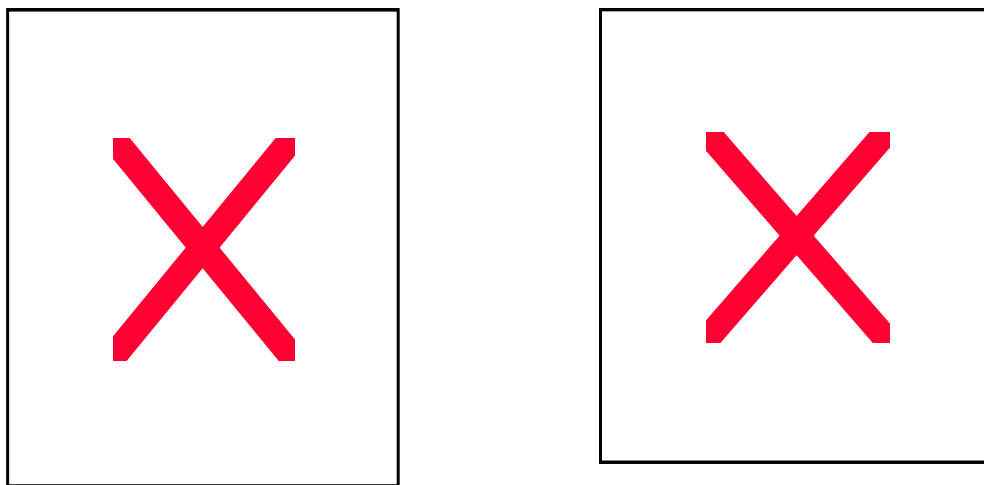
(continued on page two)



Oudolf Garden  
Pensilvania Park  
Andrew Lawson

For example, Oudolf's garden in Pensthorpe in Norfolk, England, uses purple schemes of echinacea, monardas, bronze fennel and astilbes, intermingled with golden grasses. He has developed wildflower meadows in large spaces next to people's homes. He designed the prairie sections of the Lurie Garden in Millennium Garden in Chicago (along with Gustafson Guthrie Nichol, Frank Gehrey, and Jacqueline van der Kloet) and, most recently, the High Line, a long-abandoned 1.5 mile elevated railway in Manhattan. Of the latter, he says, "It will tell a story as you walk along, from a woodland idea into a meadow, from monocultures into more complex layering." [See pictures in "Notes".]

Developed in reaction to bedding schemes in public spaces and the "ubiquitous American lawn," the keywords of the New Perennials Movement are "nature," "the naturalistic garden," "ecology," "the wild garden," "natives," "romantic," "open border," "minimum maintenance" and "sustainability."



The movement's interest in **nature** is as inspiration, source of plant knowledge, and how plants exist in time and space. Clearly, the movement is reacting to formal gardens, to public bedding schemes, to the lack of diversity, and to the "lined out" garden. Hence their use of plants with a wild character—i.e., natural plants over hybrids. In that their ancestry is John Ruskin and William Robinson. Like Robinson's use of the "wild garden," the movement looks for nature-inspired planting patterns, for naturalistically occurring plant and grass combinations. Clearly this is an idealized, aesthetic version of **nature**.

In a series of books, Oudolf and Kingsbury (together and separately) have focused on perennials in the wild/in nature because of their "time scale"—i.e., unlike trees and shrubs, perennials develop quickly, forming decent clumps in three years. Wild plant communities "are a source of inspiration," so the authors study nature for ideas both aesthetic and practical. Suitability of plant to site conditions-- an issue for other garden designers like Beth Chatto in her books on gravel and dry, veriscape planting-- is also important because we need to know "how garden plants behave ecologically," how they spread themselves around, how long they survive, etc.

Not all garden situations are favorable: "urban and many other environments are so unnatural that the best solutions for planting are dictated by not what is 'native' but by what grows best in an artificial setting" [Oudolf & Kingsbury, Planting Design, p 18]. But the wildflower meadow or prairie is difficult to emulate in the garden, and it's not always possible to use grasses and flowering perennials in a relaxed and naturalistic way. Oudolf and Kingsbury say you can have plantings which are "naturalistic in appearance" and ecological in the "way they function" but are artificial. Here, "**ecology**" refers to process; that is,

(continued on page ten)

## Master Gardener Profile

Nancy Bell '04



“Was Nancy Bell busy this past year?” She sure was. She developed an “Edible Plants” program for the Copeland Seminar, sponsored by DNS and Mt. Cuba in April, 2009. This was primarily a description of the plants involved and became the kernel of something much more involved. In September, 2009 she introduced a two-hour MG workshop again emphasizing the edible plants involved. She began to see that she needed not just to focus on the plants but how they're used in the landscape for their ornamental qualities. Just for a change, in October of 2009, she gave a talk on “New and Unusual Plants for 2010” in the Garden Class at the Academy of Life Long Learning.

The lure of the edible plant topic called. The next logical step, she discovered, was to include edible plants in landscapes other than a vegetable garden. So, she began to develop the “Edible Landscape” talk, which she gave to the Garden Class at the Academy in February, 2010 and to the MG Monthly Meeting in March, 2010. How to use edible plants with landscape value became the topic of a talk she gave to the Today's Horticultural Symposium at Longwood in February. She then further developed her materials into an “Edible Landscape Design” six-hour course which she will lead in July at Longwood. The course fully expands on the topic begun months earlier. It will include discussion of edible plant materials, but also include the history of edible gardens (like the French potager garden described elsewhere in this issue) and their designs, how edible plants bring in beneficial predators, especially if the edibles are native plants, etc.

In March, she was also in Chicago giving a talk on American Beauty Native Plants to a group of growers who were interested in developing and marketing the mid-West American Beauty Native Plant branded line being developed at Gateway and Northcreek Nurseries locally and the Pride's Corner Nursery in Connecticut. Since joining Gateway Gardens in Hockessin in March of 2007, she has moved from being the shrubs expert to the go-to person in herbaceous plants. She is now in charge of ordering and managing the American Beauty line of perennials, shrubs and trees, as well as giving advice, doing diagnostic work, and lending expertise on woodies.

In the summer of 2007 she began taking courses in the Longwood Certificate Program, beginning in the Certificate of Merit Program, and then moving into the new Certificate of Merit Program in Ornamental Horticulture. She is almost finished with Certificate #1, is starting Certificate #2 and is half way through a third program: lately she has decided to also do the Certificate of Merit in Landscape Design.

And, on 27 March of 2010, she began her very successful Saturday morning call-in gardening talk show on station WDEL 1150 A.M. The radio show has been a mixed pleasure for Nancy. There's a lot of preparation for the program (about 5 hours) because she has to be ready to talk for forty minutes if no one calls in (which has happened a couple of times). She enjoys talking to people, anticipates problems people are going to call in about, but knows she won't be able to “know” everything. She is committed to the program until June 12th and will return after a summer hiatus in September and October for 8 weeks.

She is doing what she can, given this rigorous 40+ hour schedule of work, classes, and radio host, to keep up her Master Gardener obligations, as recently as April 14th serving as Chief Cashier at Ag Day. She looks forward to the fall and time to develop new workshop topics. Nancy is devoted to native plants, birding, ballroom dancing, her 2 cats and 2 dogs, and her certified wildlife habitat backyard. *≠ Bob Deming*

## Greenhouse Production of Microgreens

Carrie J. Murphy

[Editor's Note: this is an excerpt from Carrie Murphy's 2006 MA Thesis in the Plant & Soil Sciences Department. For the complete thesis, visit <http://ag.udel.edu/nccmg> ]

Microgreens have been defined as salad crop shoots harvested for consumption within 10 to 20 days of seedling emergence. Microgreens are not to be confused with sprouts, or baby lettuce that we consume in Mesclun mixes. Microgreens are more mature than sprouts but less mature than baby lettuce that provides variety to the popular Mesclun mixes. In addition, sprouts do not need light to grow, while microgreens are most often grown in the dark until they germinate, at which time they are then exposed to light in order to grow and develop properly.

The term "microgreen" covers an endless number of salad greens, some more common than others, including table beet and swiss chard (*Beta vulgaris*), spinach (*Spinacia oleracea*) and ever more exotic greens, exotic in the sense that these greens have never been consumed in such a style. These exotic microgreens include the foliage of pea plants (*Pisum sativum*), mint (*Mentha* sp.), red amaranth (*Amaranthus* sp.), fennel (*Foeniculum vulgare*), chrysanthemum (*Dendranthema/Chrysanthemum* sp.), and many more. Their bright colors, interesting textures, delightful taste, and charming nature garnish the plate, and their high antioxidant capacity makes them healthful foods that introduce important vitamins, minerals, and enzymes to your meal.

Epidemiological studies have shown consistently that diets high in fruits and vegetables may contribute to maintenance of health and possibly reduce risk of chronic ailments such as coronary heart disease, cataract, cancer, diabetes, and Alzheimer's disease. Fruits and vegetables rich in pigments such as anthocyanins, betalains, or carotenoids are potent sources of antioxidants, with table beets being rich in betalain and folic acid. It has been shown that supplementation of natural antioxidants, through a balanced diet containing enough fruits and vegetables, could be the most effective in protecting the body against various oxidative stresses. It was shown in cowpea (*Vigna unguiculata*) that plant population density affected the dietary value (e.g. protein, carbohydrate, fiber) of the harvested foliage. Varying the plant population density (through seeding rate) may affect the dietary value (including antioxidant activity) of microgreen crops.

There are numerous references available as guides to raising salad crops to maturity, but to my knowledge, there is no scientific literature available that addresses how to grow and harvest microgreen crops (e.g. growth media, optimum conditions, and seeding rates). The proposed research in this thesis examines several aspects (seed treatments, growth media, and fertilization) that might decrease the time and cost associated with microgreen production.≠

Photo shows table beet,  
Amaranth, and arugula



## What's the Buzz?

What is decimating my clumping river birch “Heritage”?

The problem is that the top four feet of a seven-foot, five-year-old river birch is being stripped of bark and stems, and the branches are dying. First noticed by me last September, I found upon inspection very large, yellow-jacket type insects effectively girdling the branches, which showed mandible chew marks on the inner wood.

The first solution was not to panic and to try to be “scientific.” I called the Master Gardener Phone Line and then delivered both branch and insect specimens to the Diagnostic Team. I also did research at home and in the Master Gardener office. Then I went to Lowes and read all the available pesticide/insecticide labels. I bought something.

I began treatment with the least offensive choice, a pheromone trap. The insects were not interested. Next, I tried the “hot shot” chemical spray. This killed individual insects, but since we could not find the nest, it didn't solve the problem. Finally, I tried the chemical drench/spray to make the entire tree unpalatable. Conclusion: no deterrent, no solution.

The next phase of the plan was to identify the insect. It is the European hornet (*Vespa crabro germana*), introduced to New York in the 1800s, and presently found in all of the Northeast and working its way south and west, as far as Ohio. It looks like a yellow jacket. It is 1½ inches long, relatively non-aggressive, but with a painful sting that is potentially allergic. And, the paper-like nests can have over 400 workers who like to chew lilac, birch, boxwood, willow, ash and poplar. They will kill shrubs by stripping the tender bark, which is not eaten but masticated for building material.

All activity stopped, however, with the onset of cold weather around Halloween, and it should not resume until summer when newly hatched workers will find this already stressed tree.

The permanent cure is to find the nest and destroy it. Nests are in trees or in the ground. But after a search, I did not find it—neither by following insects back home nor when the trees were bare. The hope is the queen will relocate.

And, they are fierce! While transporting the four trapped insects to the Cooperative Extension office, they ate through three of the four layers of plastic ZipLoc bag they were in.

This infestation is a difficult problem to prevent. It was discovered by monitoring. The damage was readily assessed, the identification was slow, but an effective plan of control has yet to be determined.

References: Kaufman's Field Guide to Insects of America, 2000; Garden Insects of North America, 2004; PCA Illinois Pest Control Association, IPM in Schools, Yellow Jackets [<http://www.ipeaonline.org/schools>]; Dave's Garden [<http://davesgarden.com/guides/bf/go/902>]; UD Cooperative Extension, Info IPM “Blue Pages” fact sheet publications, Dewey M. Caron.≠ [*Jane Adams* ]

## Useful Info?

Looking for a dwarf clematis to put in your container this year? Raymond Evison ([www.evisoncllematis.com](http://www.evisoncllematis.com)) has developed a line of dwarf, bushy “patio clematis.” Multistemmed plants flower from spring through late summer and come in purple-banded with red, lilac, and mauve. Ten years in the breeding program, the plants reach 3-4,' but their flowers are large and are produced on both last year's stems and new growth. They need a companion to lean on, lots of water, cool roots, and excellent drainage. Prune 12” above the soil level before new growth appears, according to the breeder. [Source: Garden Design (May 2004): 16]

## The Potted Potager

The potager garden, also known as a kitchen or door garden, goes back a long way. The ancient Egyptians made potagers in their temple grounds as did medieval monks in their monastery gardens. Londoners in the 17th century grew their vegetables and herbs in kitchen gardens, as did the French, who brought it to a fine art. In colonial America, the kitchen garden was essential, and in today's "green" and economically tight times, potagers make sense.

The concept is a simple one: a small, enclosed, intensively cultivated plot close to the home, where vegetables, fruits and herbs are grown for the household's use. We can take this one step further and do it in containers, which takes a little more attention than planting in the ground but is easy, nevertheless, to provide a good growing environment.

Vegetables and herbs need at least six hours of sunlight a day; leafy vegetables can make do with 3-4 hours. In our climate, some shade at midday in the summer is a good idea. Putting the containers on caddies facilitates moving them into a shady area when necessary and also keeps them off the floor. The potager should be close to a water supply.

Containers: must be large enough to hold the mature plant's root system, have drainage holes, and be kept off the ground on feet, bricks, or whatever for drainage and air circulation. Wooden, clay, or plastic containers all have their pros and cons. The best are made from various high-tech plastics. They are durable, light weight and really look like antique terra-cotta or cast concrete. Unfortunately, they are also really expensive.

Potting Soil: should be loose, well-draining with lots of organic matter. Any high-quality, commercial potting soil will work. To give plants a good start, mix a slow-release, balanced fertilizer (like Osmocote) into the potting soil along with a handful of greensand. Add sand, or perlite, or even gravel and a handful of lime to pots containing herbs from the Mediterranean—they need a very, well-drained alkaline soil.

Potted Vegetable Plants: need daily watering and frequent fertilizing. To make it simple, use a balanced fertilizer (such as 12-12-12) and add a nitrogen booster for leafy plants and a phosphorus booster for flowering plants. Or use a mix of liquid kelp and fish emulsion.

Now comes the fun part, mixing and matching the plants. For example, to create a Tea Garden, put a shrubby lemon verbena in a lightweight pot (it will need to be taken indoors in the winter), underplant with Roman Chamomile. Pot up a Stevia underplanted with lemon thyme (this pot will also need to be taken in for the winter. Pot up a quartet of mints—spearmint, peppermint, lemon and apple mints (in separate pots). Add a Monarda (aka Bergamot), Bee Balm or Oswego Tea; these will add lovely flowers to the Tea Garden and the fragrance and taste of Earl Grey Tea.

So. Grow a cuppa! sit back and enjoy your potager.

*Carmela Simons ≠*

[ for a list of vegetables, herbs and flowers suitable for containers and a list of cool-season vegetables, edible flowers, a bibliography and sources for seeds and plants, see Carmela's list in the NOTES section listed separately on the Website with the Gazette ]

## Tips

Hellebore: tips from John Massey. "Hellebores hate windy sites." Grow them among shrubs, ideally on a slope (so you can look up into the flower), with plenty of moisture when they flower, perfect drainage, prepare the soil well with plenty of old manure or compost. [quoted in Nosey Parker's column in BBC Illustrated issue 146 (February, 2009)]

## Book Review by Anne Boyd

The Brother Gardeners: Botany, Empire and the Birth of an Obsession, by Andrea Wulf.

Alfred A. Knopf New York 2009

What was one of the most coveted cargoes arriving in London in 1720? It was seeds and cuttings of *Magnolia virginiana*, kalmia, tulip poplar, and other plants native to our region.

This book describes the amazing leaps in botanical exploration and understanding during the 18<sup>th</sup> century in England. It describes John Bartram and his partnership with the British businessman and plant enthusiast Peter Collinson who was responsible for many of the successful introductions of plants and trees from the mid-Atlantic region. The author has, however, included much more than a joint biography of Bartram and Collinson. She begins with the state of gardens in England in 1715 (largely “turf and topiary, not a large collection of flowers or shrubs”) and follows developments in horticultural science such as Linnaeus’ classification system and the popularization of gardens staged to show off the wide variety of plants from all over the world that seized the imagination of the British gardener and set the style of informal border plantings that we still follow today.

I wish she had included much more about John Bartram because his travels around the East Coast are responsible for the discovery of many plants. The remnants of Bartram’s garden and his stone house still exist not far from the Philadelphia airport (please see the related article on p. 9). His is the oldest botanical garden in the United States, and it’s practically in our backyard!

As a biography of Bartram, this book will leave you unsatisfied. It does, however, pack a lot of information in relatively few pages, stretching from Thomas Fairchild’s 1715 experiment with purposeful hybridization for augmenting floral characteristics to Joseph Banks and his famous expedition with Captain Cook including the discoveries in Australia’s Botany Bay. I found it somewhat amusing that events that did not directly relate to the author’s story, such as the American Revolution, received hardly a mention.

Utility as well as beauty was the watchword for these horticulturalists. Still, it was an interesting mental challenge for a native plant purist like me to comprehend the excitement that newly imported plants generated overseas. Plants we take for granted like goldenrod were valued for their color and novelty.

Of course all this commerce in exotic plants was done with little concern for the effects they might have in the landscape and the consequences for the ecosystems into which they were introduced. I think that discussion or at least acknowledgement of these issues would have added a moral dimension to the book, but this is all past history, and I did learn a lot from this book.

Andrea Wulf writes in fluent English with an occasional clunker thrown in, such as “they . . . under cover of darkness, abseiled from a cabin window into a dinghy.” Would I recommend this book? Yes, as a general history of a period of intense advancement in horticulture and quick portraits of many interesting plantsmen. The last third of the pages consist of notes, bibliography, and an interesting glossary with information on plants and their introduction to Britain. The book is available at the Newark Free Library and UD Morris Library. ≠

[From an essay by Andrea Wulf: “The Royal Horticultural Society has even diagnosed a new national affliction: plant bereavement. According to them, English gardeners go through the typical stages of grief— shock, denial, anger, depression, and acceptance. Apparently their telephone advisory service deals with trauma caused by damaged shrubs and blossomless flowers as often as giving horticultural advice.”]

Our Master Gardeners are a group of diverse, talented, caring and energetic souls. While we are familiar with what they do as volunteer educators for our organization, this recurring column will help us get to know each other better by showing what they do as **MASTER GARDENERS AFTER HOURS**

### **Julie Allen-Artist**

Julie's creativity takes many forms, but one of her favorites is as the designer of original art dolls. She has been a member of the Ditzie Dolls Club of Elkton, MD since 2004. She attended a demonstration workshop and was immediately hooked by the imaginative spirit and enthusiasm of the group.

Her delightful creations are mixed-media figures constructed on wire armatures. The doll club often presents challenges for the members by selecting a topic or theme, choosing a color scheme or requiring use of a particular fabric in the creation d'jour. It is then that the ideas run wild. The Ditzie Dolls often put their artistic talents to good use by raising funds for various charitable organizations.

The University of Wisconsin Oshkosh was the source of Julie's formal education in art and biology, but her ingenious artistic spirit can only be innate. At a recent group exhibition in Perryville, MD everyone in attendance eventually had a smile on their face!



### **A Note on Natives**

Usually, native plants are most likely to succeed because they tolerate drought and resist insects and disease---but, these desirable qualities can apply to other plants as well. For example, Rose of Sharon (*Hibiscus syriacus*) is heat and drought tolerant; so is yellow rose of Texas (*Kerria japonica*). And, some natives, like flowering dogwood (*Cornus florida*) which require consistent moisture but perfect drainage, is susceptible to borers and foliage diseases.

### **Tidbit**

The EPA states that homeowners dump about 134 million pounds of pesticides each year on their lawns, homes, gardens—three times more per acre than the average farmer applies—endangering birds, wildlife, and water.

## Bartram's Garden

John Bartram (1699-1777) was a self-taught farmer/botanist who studied plants in their natural environment, first gathering them from his immediate surroundings in Pennsylvania, Delaware, Maryland and Virginia, and later (by 1754), with his son William, from Connecticut to the Carolinas to Florida. He sent seeds, plants, and cuttings to horticulturalists and naturalists in colonial North America and, beginning in 1733, through his agent Peter Collinson, to Great Britain and Europe. Collinson was a cloth merchant, plant collector, and amateur botanist. By the middle of the 18th century, he helped Bartram set up a subscription for Bartram's 5-guinea "boxes," which contained seeds of 105 species that were kept in separate cloth bags labeled with a number that referred to the enclosed list (Wulf, 137). By 1750, Bartram averaged about 20 five-guinea boxes a year, sometimes more. And Collinson distributed the American species to the English aristocracy.

To support his growing nursery business, Bartram brought plants, cuttings and seeds of trees, shrubs, and herbaceous plants back to his terraced garden and, on his 200-300 acre plantation, created "natural" microclimates for them. He developed a pump to send water from the Schuylkill River to his plantings. Called "the most natural botanist in the world" by Linneaus, Bartram became botanist for the King of England. A chapter is devoted to him in J. Hector St. John de Crevecoeur's 1782 Letters from an American Farmer and, with Ben Franklin, he helped found the American Philosophical Society (1743).

William Bartram's one page 1783 broadside Catalogue of American Trees, Shrubs, and Herbaceous Plants, published after his father's death, is an encyclopedia of plants that John and William collected and grew in their own garden over a period of almost 50 years. It was the first American commercial undertaking and probably the earliest surviving American nursery catalog. It even included plants that did not yet have scientific names.

Bartram and his son also sent ornamental samples to botanists around the world, experimented in plant breeding through cross pollination, and introduced about 200 new species into cultivation. Many of the plants can be seen today at the Chelsea Physic Garden in London and at Painshill Park in Surrey, England. All of these played an "important role in the development of the English landscape garden (Pioneers, p. 17), marking the beginning of the "modern or natural style of garden design."

In her recent book The Brother Gardeners [reviewed elsewhere in this issue], Andrea Wulf states that "the English landscape garden had its roots in America [primarily through Bartram's boxes] . . . which furnished the groves and shrubberies that would later be imitated everywhere in Europe and in America herself (p. 4)." England had no fall or winter "color" until it started planting American plants, especially trees and shrubs.

The Dukes of Bedford, Norfolk, and Richmond imported thousands of trees and shrubs initially called "exotics," And, when the 30-year-old Lord Petre died in 1742--his garden at Thorndon was a prime site for Bartram's subscription plants-- some 200,000 "exotics" went on the block and were contested for by the three Dukes. Although there were earlier plant collectors in America than Bartram--John Tradescant the Younger visited Virginia in the 1630s--Bartram's influence on landscape design, on botanical diversity, and on the botanical revolution world-wide was enormous. [*Dioscorides*]

*References:* "Bartram's Garden Catalogue of North American Plants, 1783," in Journal of Garden History, vol. 16, no.1 (January-March 1996), de Crevecoeur, J. Hector St. John; Letters from an American Farmer, Albert E. Stone, editor, Penguin, 1986; Therese O'Malley, "John Bartram" entry in Charles A. Birnbaum & Robin Karson, eds. Pioneers of American Landscape Design, McGraw-Hill, 2000, pp. 16-19; Andrea Wulf, The Brother Gardeners: Botany, Empire & the Birth of an Obsession, Borzoi, 2008. ≠

how the planting functions when “ecological processes are allowed a larger role.”

Oudolf and Kingsbury approach natural or ecological planting design through a focus on plant ecology so as to isolate a low-maintenance plant selection process within the context of naturalistic design, wildlife gardening, and growing native species. Hence, they talk about the relationship of climatological factors (rain, cold, heat, drought, etc.) to plant selection. Their emphasis is upon how climate factors limit plant selection. As an example of this emphasis, they isolate three types of plant survival strategies:

**Competitors:** these thrive in “high-resource” environments—e.g., good light, moisture, nutrients with a long growing season.

**Stress-tolerators:** require low resources—shade, drought, poor soil, waterlogging, etc.

**Ruderals/pioneers:** these “live fast, die young”—adaptable, they grow rapidly, have showy flowers, and seed profusely.

As we learn about plant behavior and plant survival, we begin to gain a better understanding of how plant selection is related to plant maintenance. And, as we look at the three types of survivor plants in their “wild habitats,” we gain even more knowledge about how “nature” inspires planting styles like the meadow, the short- and tall-grass prairies, tall-herb flora, woodland floor, and wetland habitats.

As part of their design process, Oudolf and Kingsbury deal with the relationship of gardens to their surroundings, especially their “space.” Their goal is to meld gardens into the surrounding “natural” space as well as develop “more levels of complexity to engage the eye” and develop levels of attention and engagement. Hence, for them, borders should not be linear beds at the edges of lawns, but should be something one plunges into, along irregular, curving paths where one “walks through” the garden. Using, again, a restricted palette of plants that combine well together, planted en masse, the garden should be able to be looked over, looked up at, seen from above, providing long perspectives, and being seen down through. Of course, choosing plants that will allow for these key viewpoints is crucial, and their several books provide ample illustrations of what they are talking about. [See some pictures of various “new perennial” gardens in the “Notes” on the Website.] The critical elements of the “right plant in the right place/space” and paying attention to environmental/climate conditions play into a sustainable practice that does not require extensive irrigation, annual fertilizing, keeping plants under cover in the winter, extended maintenance, and interfering with nature.

Finally, Oudolf and Kingsbury (and other “new perennialists” of course) believe garden design involves processes not end results because it deals with living things that change and need managing. Their concern is with how plants interact with other plants, based on sound principles of “succession,” the natural, ecological process that plants are involved in—either woody plants (taking more years to develop, above ground plants) or herbaceous plants (below ground development which reach height and form quickly). Their extensive knowledge of plants and plant selection—from short-lived annuals, biennials, and short-lived perennials to long-lived perennials, shrubs and trees—is the basis of their understanding of a natural perennial style of garden design. ≠ *Editor*

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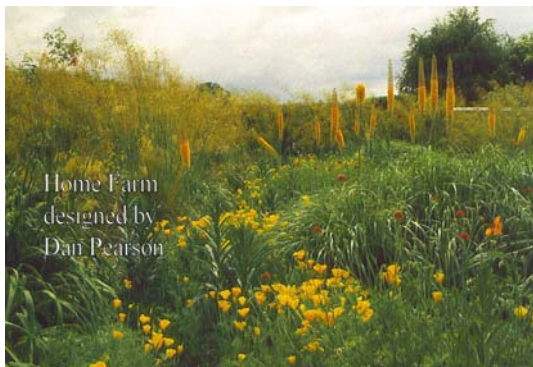
Piet & Noel Kingsbury. Designing with Plants. Timber, 1999; Oudolf, Piet & Noel Kingsbury.

Planting Design: Gardens in Time & Space. Timber Press, 2005.

## POEM

By Nature's laws that still keep us alive?  
Let us enlighten, then, our earthly burdens  
By going back to school, this time in gardens  
That burn no hotter than the summer day.  
By birth and growth, ripeness, death and decay,  
By goods that bind us to all living things,  
Life of our life, the garden lives and sings.  
The Wheel of Life, delight, the fact of wonder,  
Contemporary light, work, sweat, and hunger  
Bring food to table, food to cellar shelves.  
A creature of the surface, like ourselves,  
The garden lives by the immortal Wheel  
That turns in place, year after year, to heal  
It whole. Unlike our economic pyre  
That draws from ancient rock a fossil fire,  
An anti-life of radiance and fame  
That burns as power and remains as doom,  
The garden delves no deeper than its roots  
And lifts no higher than its leaves and fruits.

[Wendell Berry]



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**Deadlines for articles in our quarterly issues are the second of each of these months: February, May, August, October**

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## On Meadows

John Greenlee is the master of ornamental grasses as evidenced by his book The American Meadow Garden: Creating a Natural Alternative to the Traditional Lawn (Timber press, Fall 2009). Greenlee develops the concept of ‘designed meadows,’ rather than prairies—the former have a “sense of place,” the latter convey “vastness.” Meadow making involves: **planting**—seeds are cheaper, but installed plants make meadow reach maturity faster, mix grasses and perennials, and keep weeds under control; **site**—there’s more than one type of meadow depending on soil type, moisture conditions and hardiness zone; **maintenance**—maintaining a meadow (or prairie) requires long-term commitment and regular input, annual mowing, controlled burns, and keeping woody plants from getting established. [summarized from an article “Living Green” by Jenny Andrews in Garden Design no. 159 (May 2009):42-45]