

Transcending the Garden: The American Prairie Experience

Ecological Gardening with North American Flowers and Grasses



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With more than 40 years of experience in the research and establishment of native plant communities, Neil is an internationally recognized pioneer in the use of North American plants in contemporary landscapes. He is a regular keynote speaker on topics such as establishing prairie meadows, designing with native plants, and the benefits of converting resource-intensive landscapes into self-sustaining ecological sanctuaries.

From Whence This Prairie in My Yard?

A Short History of Prairie Landscaping in the US

Naturalistic gardening is becoming increasingly popular in the United States. There are numerous reasons for this rise to prominence.

First, gardening in harmony with Nature is partly founded in the new environmental ethic that has developed in the last 30 years. Reacting against the pervasive use of chemicals in the landscape and the incessant howl of lawnmowers, people have sought an alternative to the manicured carpet of lawn that was mandated by a century-old unspoken social compact. The answer for many has become the American Prairie.

This recent conversion to landscaping with prairie plants, which were almost universally considered “weeds” until only a decade ago, also possesses a strong utilitarian component. A prairie landscape requires only a fraction of the maintenance devoted to more traditional lawns and gardens. Long-term costs are therefore lower. Fertilizers are seldom necessary for success with prairie natives. Pesticides are discouraged,



as they can harm the birds, bees and butterflies that the prairie is so adept at supporting. And watering is not a requirement to keep the prairie green. The deep-rooted prairie plants obtain moisture from the lower reaches of the soil profile, with some plants having roots ten to fifteen feet deep. Others simply enter a temporary dormancy during dry periods, waiting to resume growth with the advent of the next rain.

These hardy, climatically-adapted denizens of the prairie require no special protection from the -40 degrees C. of winter. Summer temperatures of 40 degrees C. are common, with frequent periods of extended drought. The plants of the American Prairie evolved in the demanding continental climate of mid-North America. If they could not weather the endemic heat, drought, and cold, they simply would not persist there.

The prairie provides us with a model ecosystem that we can literally transplant into our yards. The prairie represents a distinct *plant community*, an assemblage of plants that, by their association, define the community. The prairie occurs as many different plant combinations, responding to soil and climate changes across its range, from east to west and north to south. At any location within the prairie continuum across the central US, the plants that occur regionally, or were once known to occur, can be selected for use in a prairie meadow landscape.

The first efforts at restoring the American Prairie as a functioning natural plant community were undertaken at the University of Wisconsin in Madison in the 1930's. At that point in history, the once vast Eastern Tallgrass Prairie was all but extinct. One hundred years earlier, this prairie type had covered hundreds of millions of acres, stretching from Texas north into Manitoba (Canada), and from Nebraska and Kansas east to Ohio. In a few short decades in the late nineteenth century, the Eastern Tallgrass Prairie was plowed up and converted into some of the richest farmland in the world.

Aldo Leopold, the great ecologist and conservationist, was so aghast at the destruction and imminent demise of the prairie that he decided to try and "put some of it back together" at the newly-created University of Wisconsin Arboretum. Assisted by numerous staff members and laborers, seeds and plants were gathered from small prairie remnants that had escaped the plow. With experimentation in planting and management techniques, they began to have success. Soon other universities and colleges began their own prairie restorations, modeling their prairie communities on the local flora of their regions. By the 1970's many Midwestern institutions of higher learning had examples of prairie restorations on their campuses.

These examples of prairie restorations were largely inspired by the desire to preserve the local plants and their genetic diversity, as well as to create outdoor teaching facilities. The thought of using prairie plants as an alternative landscape for homeowners and businesses began to emerge in the 1970's as more people became exposed to these restored plant communities.

With the recent rise in environmental consciousness, people have re-examined their use of toxic chemicals in the environment. Most home-owners did not have to look very far. A veritable witch's brew of dangerous herbicides, insecticides, and fungicides were amply stocked in many suburban



American garages and garden sheds, and applied, often in vast quantities, onto the adjacent outdoor living space. The damage done to wildlife by DDT, and the recently-discovered potential that many lawn and garden chemicals may cause cancers and mutations, fueled the move away from using chemicals in the landscape in the 1970's.

But what was to be the alternative to a neatly clipped monoculture of turfgrass? If one were to allow the lawn to grow unchecked, the typical result is a wild, unkempt froth of grass, weeds, and, eventually, a forest of brambles and invasive trees. Hardly the choice of the status-conscious suburban homeowner.

The cost to convert a large lawn to an extensive perennial garden would be significant. The monthly maintenance costs alone might rival the mortgage payment. Large mass plantings of shrubs can be attractive alternative, but often complicate mowing between them, and have a tendency to be invaded by unwanted woody plants and weeds.

The under-valued and nearly extirpated prairie suddenly emerged as a solution to this lawn and garden conundrum. The prairie is neither lawn nor garden. It is an assemblage of plants that, with a little help, will do the lion's share of the work in the landscape for the gardener. Not only will it eliminate the need for watering and the application of most chemicals, it will also do most of the weeding for you. How can this be, you ask? A landscape that weeds itself? Truly revolutionary!

We have now arrived at the heart of the prairie style of landscape design. The style is copied directly from Nature, and natural plant communities are used as the model for the prairie landscape. "Improved" cultivars are generally not utilized in the prairie.

Preservation of the broad gene pool for each species is a primary goal, so that the plants will retain their competitiveness and ability to evolve and adapt as the conditions around them change.

The plants in the prairie meadow are not being actively "gardened." Rather, they are managed in a general sort of way. The prairie seeds that are sown to establish the meadow must germinate and thrive with little if any assistance. The young seedlings must first compete with fierce weeds in the early years, and then must vie with the even fiercer fellow prairie plants as the planting matures. The plants must survive the vagaries and extremes of the weather with little or no outside help. It is truly a war out there in the prairie meadow.

Once established, though, the prairie is a self-regenerating system. Many prairie plants are prolific seeders, while others expand their territory by vegetative means. Some individual plants can live for many decades. Once established and properly managed, a prairie meadow will outlive the person who plants it. This ability to regenerate itself as a healthy, functioning plant community makes the prairie an extremely stable, yet surprisingly dynamic landscape.

Ultimately, the creation of a prairie meadow becomes a "Joint Venture with Nature." The gardener defines the content of the meadow by selecting a variety of flowers and grasses that are best adapted to the site's planting conditions. Then conditions for their establishment and growth are created by removing competing weedy vegetation, and enhancing the soil conditions if necessary through the addition of organic matter or green manures.



Once the seeds are planted, the meadow will begin to develop and evolve on its own. The actual final composition of the prairie depends upon the whim of the weather, the specific soil conditions, predation by plant-eating wildlife and seed-consuming soil organisms, and a host of other factors. As the prairie matures, many plants may seed and expand wildly. The look and composition of the meadow may have little resemblance to the original landscape plan. This is especially true if certain species were originally planted in restricted locations of the meadow, but later begin to roam about, free of the gardener's meddlesome hand.

Thus, the prairie meadow has a life of its own, and exists not merely as a construct of human design. Control of the prairie meadow is greatly reduced when compared to the garden. Its direction and evolution are largely ceded to natural forces. Our role as prairie meadow caretakers is to encourage the prairie flowers and grasses to flourish on their own terms, while assisting in the battle against undesirable, aggressive weeds that may attempt to invade the meadow from time to time.

Another primary goal of prairie restoration is the encouragement of a diversity of animal life. This includes not only bees, birds, and butterflies, but also bugs, rodents, snakes, and the host of other creatures. By encouraging bugs, we provide food for baby birds. Rodents and snakes feed hawks and owls. Instead of excluding "undesirable" animals as we do in our traditional lawn and garden landscapes, in the prairie we encourage Nature to produce and revel in her diversity and bounty.

Ultimately, we become stewards of our prairie meadows. Rather than tell a friend about the new selection of rose one has successfully grown, the prairie gardener may inform them of their efforts to grow an endangered species. Or perhaps they might expound on the unusual species of moth that visited a specific plant in the prairie. The preservation of plant and animal biodiversity in the prairie landscape is often more important than matters of garden design to the ardent prairie restorationist and steward.

This approach to gardening represents a revolution in the way most Americans interact with their home landscapes. Instead of mowing everything in sight to within an inch of its life and then repeatedly spraying any weed that has the temerity to resist our efforts, the prairie gardener encourage dozens of different plants and animals to use their property as their home. For a culture founded on the conquest, exploitation, and control of the land, it is a truly radical concept to tear out our lawns and devote them to raising bugs, mice, and snakes. And we pay good money to plant a wild array of free-ranging flowers and grasses that our not-so-distant forebears went to great lengths to eliminate.

Historical Influences on Present Day Gardening Styles

Beyond the compelling savings in time, money and environmental damage, the roots of modern prairie landscaping go back further, deep into the American psyche, and into our historical experience with this uniquely American landscape.

The galvanizing image of the American Experience remains today the concept of the freedom of the wide open spaces of the frontier. This has a strong emotional resonance for many Americans. The



vast open spaces of the prairie signify freedom in its purest form. Unencumbered by the trappings of civilization, government, and society, the prairie can serve as a personal retreat from the pressures of an increasingly artificial world. The openness, the freedom of movement, and the sheer simplicity of the prairie landscape has a strong attraction for many people.

To go “Out West” to the prairies and mountains of the western US is a time-honored tradition for adventurers and vacationers. The romantic image of prairies with fields of flowers and waving grasses stretching off into the horizon is a powerful one indeed. The potential to re-create this effect in one’s own personal living space has a very real and strong attraction.

Historically, Americans have borrowed their landscape styles from their cultural roots: Europe, and to a lesser degree, the Far East. Witness the use of English, Japanese, Mediterranean, and Teutonic styles in American gardens. It could be argued that the modern American naturalistic style actually originates from English predecessors such as Capability Brown, Gertrude Jekyll, and William Robinson. Indeed, American gardening is greatly indebted to, and strongly influenced by English landscape designers and styles. The human need to re-create Nature in our living spaces has been with us for centuries. Our desire to connect with plants and animals in a natural setting must surely be deeply rooted in the genetic code.

Nevertheless, the move to gardening with native prairie plants of Midwestern America springs from more than the simple need to create a leafy refuge from the stresses of the world, or to merely save on long-term maintenance costs. In fact, the prairie is anything but a shady, private garden retreat. It is a bright, open, and windswept landscape, with no protection from the elements, and no escape from the prying eyes of the world.

So why are people planting these wild prairie meadows? The original motivation for prairie restoration came from a few people’s concern for the fate of an endangered plant community. Thus, the root motivation for prairie restoration is not that of creating something only for me: rather, it is to create something for Nature as well. The goal is to give something back, and to restore the wholeness of what has been destroyed.

Prairie restoration is typically an unselfish act of love for the Earth, and for all life, rather than merely an indulgence of a few selected plants that are expropriated for one’s own needs and desires.

Herein is the difference between *gardening* and *restoration*. It is true that people often plant wildflowers purely for their own personal enjoyment, or because they want a flower garden without all the work. Nevertheless, a large percentage of people also plant native prairies as a way of returning something back to the Earth. The process of establishing and restoring a natural plant community is a significant and very personal act of helping to heal our increasingly scarred planet.

The restoration of natural ecosystems for the sake of preservation represents something of a departure from historical gardening. Nurturing is certainly an important part of gardening, and people truly love their plants. However, the inclusion of a broad range of plants and animals in a restored prairie ecosystem, including certain creatures commonly found loathsome by society at large, but important to other forms of life, represents an ecological maturity that transcends simple



gardening. This is the quiet revolution in the American garden that is occurring today, one person at a time, plant by plant.

Deep down, most of us understand that we are inextricably connected to all life on this tiny globe. Our health is directly linked to the general health of the planet. When we destroy a forest, a prairie, or a wetland, we harm ourselves, ecologically and emotionally. Living in a world without access to wilderness is an inconceivable notion for many Americans. Life without a regular means of connecting to the Earth is hardly a life at all. Witness the pathology of many modern urban centers. Those without refuge in Nature live a crowded, brutal existence. The inclusion of wild places in our living spaces serves a deep psychic need for connection to the natural world.

America Grows Up

One last factor that has helped fuel the recent natural landscape movement is the fact that the United States is a relatively young country. Only recently have we begun to mature as a culture. There has never been an American “gardening style.” Only as America matures and develops as a society is it able to evaluate its roots, and say, “This is an American garden.”

American landscape models are now being inspired by the native landscapes of our various regions, rather than strictly by our European parent countries. With this new cultural maturity comes the confidence to throw off the parental mantle, and express our own uniqueness. It is this very stage of young adulthood that Americans are experiencing in their gardening styles.

We no longer have an inferiority complex that our gardens could not possibly measure up to those of the English, French or Italian. We now have our own gardens, which are uniquely American, and must be interpreted within their own context. Inspired by the wilderness of the vast continent that we so quickly vanquished and brought under our mercantile heel, we have just now come to appreciate the natural world that we so willingly and righteously destroyed, all in the name of civilization and commerce.

And now to preserve our civilization, we must preserve the “wild gardens” from which our nation was carved. The prairies, meadows, and woodlands are our connection to our cultural and ecological heritage. It was the vast richness of the prairie soil that has provided us with such abundance, and helped to fuel the American industrial revolution of the nineteenth century by freeing up labor formerly devoted to subsistence farming.

With the breaking of the American prairie came the opening of the Golden Age in America. As a nation, we owe a tremendous debt to the prairie. We have only recently begun to appreciate that debt. And only now are we beginning to give something back to the prairie that has provided us with such immense wealth and opportunity.

As the seeds of future prairies are sown, so will our future well-being be secured.

