
From Lawn to Wildflower Meadow

by
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Let the truth be told: converting my lawn to a wildflower meadow did not spring from a deep-seated admiration of nature's flora resulting in a modest attempt at imitation. No, the motivation sprang from pure expediency, necessitated by a struggle for existence. Read on to discover the history and methods of my madness.



Gracing the Wildflowers - Grace Xue Rayman (age 3)

Honeoye Falls, New York

In the Beginning, There Was the Lawn

When I was a kid living on a quiet residential street in Philadelphia with a hundred other kids—maybe it wasn't so quiet—everyone had a front porch that overlooked a postage-stamp front lawn. The back yards were similar in size. Everyone knows the lawn's relationship to an important male rite of passage—a boy grows up when he's big enough to mow the lawn. We grew up a lot faster in those days because we got to use push mowers instead of today's gasoline-powered monsters. At six years of age I was big enough to mow the front and back in half an hour. My father paid me ten cents a week for the effort.

Another reason we grew up more quickly had to do with the fact that we had the run of the streets in the neighborhood; there were a lot of social adjustments to be made before kids called themselves friends. Today's parents frown on the techniques we used for creating social order out of chaos.

As I grew older and the houses in which I lived grew proportionately larger to hold all the stuff I'd accumulated, the lawn surrounding the house grew as well. A half hour of mowing easily increased to two or more hours—I never did buy a tractor to mow just a half acre of lawn. In a concession to expediency, however, I did purchase any number of gasoline powered mowers that claimed to be self-propelled—in the sense that if I pushed hard enough, the things would go by themselves.

Deer Are Not Especially Literate

When I got sensible about this lawn business at sixty or so years of age, I reasoned that a two-hour hike in the hills behind my house would be a lot more enjoyable than pushing a self-propelled mower around, so I began to think of ways to obviate what seemed like a lifetime of necessity. Fortunately for me at the time, the local deer population was growing exponentially and eating everything in sight.

One spring, I'd planted a three-foot wide row of Marigolds along the driveway. I'd read that deer were not supposed to eat Marigolds. The deer in my area had not read this and proceeded to eat their way down the driveway on a nightly basis.

Not one to stand idly by while my plants were being devoured by illiterate herbivores, I thought I might spoil their appetites by over-seasoning the salad. I

ground up a jar of hot chile pepper flakes, added a bottle of Tobasco sauce, and stirred the flaming mixture into a gallon or two of water. Then I sprinkled the brew from hell over the Marigolds that evening.

Next morning not a Marigold had been eaten—all the blossoms were dead, keeled over, their tongues hanging out (actually it was their little stamens or pistils or whatever the hell you call them). *Odoicoileus virginianus* had never gotten a chance to sample the goods; they don't eat dead flowers. It took about a week for new buds to form and begin to blossom



Meanwhile, I covered the entire sixty-foot row of Marigolds with chicken wire staked at four-foot intervals. At the end of the week not a blossom or bud had been violated—they were all still under an inch of wire.

The Marigolds, sensing that the game's momentum had shifted in their favor, rose to the occasion. They grew blithely through the wire and blossomed in the open air, free of their cage. But all I noticed, as I drove to work each day, was that the Marigolds seemed to have stopped growing just below the wire mesh. A closer inspection at the end of the week revealed the sad truth: their lives had been short-lived, as each and every one of them, who had dared choose freedom over safety, had been eaten alive—ghastly beheaded during an unimpeded gastronomic feast by my cloven-hooved neighbors. Drat: maybe if I sprayed the plants with deer repellent or used mothballs; that might work.

I put on another layer of wire and lay mothballs from the top to the bottom of the driveway. So what if I couldn't stand to walk in the front yard any longer—neither would the deer. Steady rain took care of the mothballs, and the damn foolhardy plants shot up between the wire again. You could see beady little eyes watching from the nearby woods waiting for their opportunity to strike. And they did.

Up went another layer of chicken wire. Now a four-foot high fence appeared where it didn't make a whole lot of sense. Fortunately, from a distance, it took on the appearance of a hedge.

About this time, the Marigolds decided they'd had enough and gave up the ghost. Only their scraggly remains clung obstinately to the fence as fall approached. The fence itself reminded one of a POW camp with its multiple layers of wire and posts. I swear I could hear the deer laughing as I hiked through their woods.

Don't Build It and They Won't Come

The hikes gave me ample opportunity to think of ways to deter the deer, but I was still inside the box. Only when I observed the deer eating in the fields surrounding our neighborhood did I realize the error of my ways. I had laid out the perfect desert table for them. All they had to do was show up, invitation or no. The goodies were lined up one right next to the other. They could even choose between bud or blossom. But suppose I grew an entire field of flowers, I thought. Suppose it looked like the wildflower meadow I was walking through at this very moment. Why, the deer would have to work for their meal. and I would be providing a much better reason for

them to visit my neighbors' yards where the table was still being set.



So the truth is out—my wildflower meadow does not spring from a deep-seated admiration of nature's flora, and a modest attempt at imitation, but from pure expediency and the generous contributions of my neighbors.

Decisions Decisions

Imitation being the sincerest form of flattery, I thought it would please mother nature to no end if I just let my entire lawn—roughly a half acre—go to seed, so to speak. And it did: each blade of grass grew into a graceful three-foot stalk with a seedhead of two or more inches. The grasses swayed to the strains of familiar music “Oh beautiful for spacious skies for amber waves of grain...” I expected, of course, that the local wildflowers would accompany their fellow grasses in this return to nature. I was looking forward to the company of OxEye Daisies, Queen Anne's Lace, Bull Thistle, Orange Hawkweed, Black-Eyed Susans, Goldenrod, Milkweed, Common Mullein, Birdsfoot Trefoils, Cinquefoils, Yarrow, Daisy Fleabane, Common Fleabane, Red Clover, Crown-Vetch, Bachelor's Button, and None-so-Pretty.

Nothing. The grasses stood for awhile and then fell over into a huge impenetrable mat. The deer slept on it. The impression it gave was that the house was unoccupied, made worse by the fact that it also needed a coat of paint and new shingles on the roof. I expected to be broken into any

night. I could just hear my night callers exclaiming “Sorry to bother you, old chap, but it didn't appear as if anyone were living here.”



My son, a landscaper by trade, showed up with a huge field mower which sucked the mildewing hay off the ground, masticated it, and blew it into a container that we continually emptied into the garden out back. When we were all done, the compost lay more than a foot thick on the 700 square foot garden¹. Then I went down to Sears and bought the largest rototiller they had in stock and attacked the lawn. The tines were set to 9 inches deep, and I went over the entire area two or three times. I plowed a twenty foot perimeter—about a quarter acre altogether—around the front and sides of the house. This area is now known to my wife and me as “the meadow.”

If you are looking to start a meadow yourself, then you can approach it in this same fashion. It’s very satisfying to dig up all that lawn which has been the source of so much work, if not attention, over the years. What’s left when you’re done are long furrows with your boot prints firmly implanted in them.

Now my unkempt lawn had turned into a plowed field. Everyone in the neighborhood was waiting for spring to see what sort of crop I’d planted. “Big garden,” they would say half jokingly, whenever they caught me outside.

There are other ways to start. Christopher Lloyd in his most beautiful book, “Meadows”—now out of print and too expensive to buy on a whim (even

used)—has two primary recommendations. One is to remove all the topsoil: four to eight inches of it depending on the quality of the soil; the other is to kill every living plant in sight using Roundup over a two-year period. Neither of these options appealed to me.

An article² by Virginia A. Smith describes one landowner as having hired a landscape design firm to “do” her three-quarters of an acre meadow for a cost of \$6,000. That would be a little too rich for my blood even prorated to one-quarter of an acre. Ms. Smith didn’t give the details of the methodology, but she praised the results.

A couple of things you want to watch out for when you’re running that tiller across the lawn: the phone company and the cable company figured out a long time ago that it’s a heck of a lot cheaper to repair busted wire a couple of inches below ground than it is to dig it out of a two-foot deep trench. I managed to miss the TV cable, but got the phone company wire pretty good on the first go around. Best to call all the utility people and have them come out and flag the property before you begin. You don’t want to hit a gas line or a 240 volt electrical conduit (ours is buried). They provide the flagging service free of charge in my neighborhood.

Now that I had my plowed field, I needed some seeds—no trusting to luck or nature or anything of that sort. A search of the web turned up a company

1. For those readers who are really quick to point out errors in logic, the garden is enclosed by an eight-foot high fence.

2. *How to Grow a Rainbow*, Rochester Democrat and Chronicle, August 23, 2008.



called American Meadows which sells a variety of wildflower seeds suitable for a northeastern climate (and a number seed packages suitable for other climates). I was surprised to discover that American Meadows is located only a few miles from my original home in Vermont. Since that house was already located in the middle of a meadow¹, there was no reason to involve myself in the lawn conversion business at the time.

The seeds arrived—all two pounds of them—in cloth sacks filled with a mix of annuals and perennials. I hand sowed them over the ground in the fall after the first frost. I also added a couple of packages of wild poppies to the original mix.

Instead of merely scattering the seeds—they tend to blow away in the wind—I mixed them with a goodly amount of relatively dry potting soil before tossing them to their fate. Then I lightly raked the surface to cover the seeds so they wouldn't just blow away or get eaten by birds or deer.

Nothing grew that winter, but come spring, around the middle of May here, the annuals began to make their appearance. We saw at various times, albeit briefly: Baby's Breath, Wild Cosmos, Red Poppies, California Poppies, Baby Blue Eyes, None-so-Pretty, Bachelor's Button and Rose Mallow. These

last the dyslexic deer seemed to like the best, probably confusing them with Marshmallow. One could follow the deer's tracks in the muddy soil from one end of the meadow to the other as they carefully sought out their immobile prey. What was missing, of course, were the tall grasses in which the nascent plants could conceal themselves from view until they were ready to bloom. Or at least make themselves difficult to find.

Fighting Fire With—What Else?—Water

A nice big dog would have been a good solution, but they require more attention than kids, so that was not a viable option for deterring the deer.

Deer spray works if you don't mind the smell of rotting coyote blood. However, we have been using a new brand on the market as of late that is a mix of garlic and capsaicin. Now your flowers will smell a bit like a garden salad, but the deer won't touch the plants you've sprayed—until the following night.

As an alternative, my son the landscaper, recommended motion-activated sprinklers. He had heard about them, had never installed them himself, but he thought we might like to give them a try. That's how we discovered a device known as the "ScareCrow²." It's essentially a sprinkler head, mounted on a passive infrared sensor, which controls a valve connected to a hose. It sprays water whenever an animal

1. *Pasture* would be a more accurate term, but an explanation would require another article the size of this one.

2. From CONTECH Intelligent [ha!] Animal Control, <http://www.contech-inc.com>

passes in front of the detector. The spray lasts for a few seconds and shoots out about thirty feet. The device works well. I can attest to that, as it makes no distinction between a deer and a human being, especially when I forget to turn the water off. Conversely, it doesn't work at all, with predictable results, when I forget to turn the water on.

As of this writing we own 13 of these things that carefully create a line of fire designed to protect the entire meadow from deer or unsuspecting UPS personnel trying to deliver a package to the door when we are away on vacation (or are sleeping late).

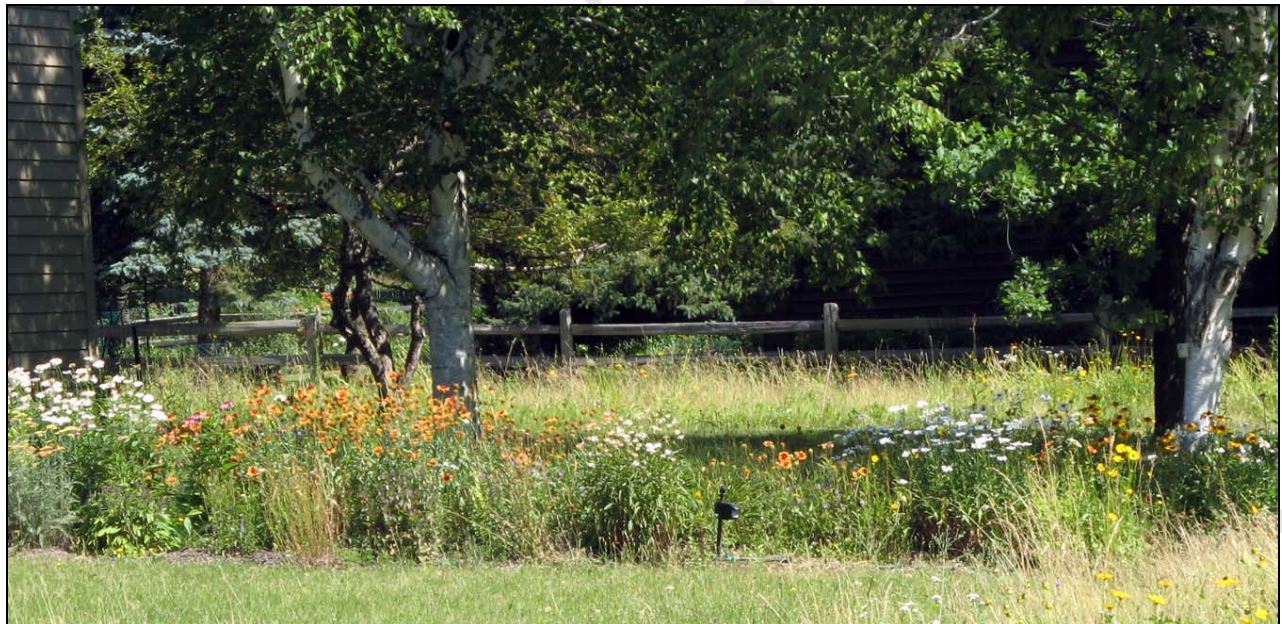
The ScareCrows are battery operated. I leave the individual units turned on all the time. The single

otherwise rose bushes along the cedar fence live in these year round, venturing out only in summer.

The Climax Meadow

After a few years—I've been at this for at least seven—my meadow has taken on distinct characteristics. Some of it has to do with my cultivation practices, but a lot of it has to do with the native species of wildflowers and the microclimate of my neighborhood.

If you live in a neighborhood surrounded by woods and fields as I do, expect a lot of the plants that grow out there to make their way into your own little plot. These are not always welcome.



nine-volt battery lasts about two to three weeks under these conditions. You must check these every two weeks to assure reliable operation. Ants and spiders love to set up nests in the battery compartment, so wear a light pair of gardening gloves when changing the batteries. Again, I've found a two-week rotation for all the batteries to be the optimum cycle to assure close to 100 percent reliability of service. Note that the deer will always find the units that have ceased functioning.

My last line of defense is a cylinder-shaped cage which I make out of ordinary vinyl-covered wire fencing. These are very effective at allowing plants to grow to maturity and blossom. It's difficult to see the green-colored cages from a distance. My wild or

Our small subdivision of 17 homes was built on the site of a former esker: since removed to supply an insatiable demand for gravel. The strip-mining of the gravel left a huge depression where the esker formerly stood, and removed any topsoil in which plants could grow: ideal conditions for erosion. The subdivision builder brought in heterogeneous fill (not topsoil) to cover the bottom of the depression; then planted Crown Vetch on all the steep sides.

With its dense mat of roots, Crown Vetch (*Securigera varia*) is very good at halting erosion and the growth of most anything else on the same turf. Once it got into my meadow, I found myself on my hands and knees pulling it out by the roots from three fairly large areas that it had usurped. I can't eradicate it

entirely using this method, but I have managed to contain it.

Our back yard of about half an acre is a natural meadow that runs up a hill about 80 feet in height. (It is one side of the old gravel pit.) It faces south-east and can get quite hot and dry in the summer. The only plants that grow there are Crown Vetch and some very tall grasses. I suspect that if I left my meadow alone, it would revert to these plants, and one other—yellow (and white) sweet clover (*Melilotus officinalis*), which doesn't compete well on the hill, but can be found in profusion in the fields surrounding the area. And it loves my meadow. The plant has a taproot which can extend 18 inches or more into the soil and has many lateral

This plant will take over an area and can live in harmony with Crown Vetch. It is a prolific seeder, and if you let it, one plant can produce hundreds of seedlings the following spring. Since it is a biennial you have two years to extricate it, but you would be best served by attacking it in the first year in the early spring. Because of its leaf structure, it is very easy to identify (as is Crown Vetch). See the Missouri DOC article cited above for its visual (and other) characteristics as well as those of Crown Vetch.

What does grow in my meadow nowadays are a number of perennials. From early to mid-spring OxEye Daisies and Blue Flax, dominate. From mid spring to early summer, bright yellow Lance-leaf Coreopses are in profusion, followed quickly by



roots.. It is nearly impossible to extract by hand. I normally use a pickaxe while on my hands and knees—great for building abdominal muscles. There is a very nice description of yellow clover on the Missouri Department of Conservation website:

<http://mdc.mo.gov/landwater-care/invasive-species-management/invasive-plant-management/white-and-yellow-sweet-clover-c>

Shasta Daisies. About mid July Indian Blanket literally covers many areas of the meadow. Rudbeckia of all sorts soon make their appearance with a heavy concentration of Black-Eyed Susans and Gloriosa Daisies. By the end of July, the amusing Purple Coneflowers are one of the main attractions. August brings a profusion of natural wild flora, in particular Queen Anne's Lace and Yellow Hawkweed.

One wildflower that is doing well and continues to spread slowly through the meadow on its own is Perennial Lupine. When nothing much is going on in the early spring, these guys are sending up big purple spikes from a plant that looks more like a bush. Regal in nature, it commands attention, but it's well worth the space it takes up, and is not reluctant to share that space with other plants. It remains on stage holding our audiences' attention until the other wildflowers are able to make their appearance.

Cultivation

I help my meadow along by carefully gathering the seeds that form on the stalks of the existing plants, storing them until after the first frost, then sowing them after the meadow is cut and cleared of all the fallen plant material. I cut the meadow with a weed whacker leaving about two inches of plant material above ground. Then I rake the fallen material (with lots of help from my wife Ann) into rows, which I pitch into a wheel barrow and haul off to the garden.

Common grasses have worked their way back into the meadow. There is no keeping them out, except by rototilling. I don't want to pursue that course because it would destroy all the perennials that have taken years to establish. The existing perennials compete favorably with the grass. To add new perennials I grow them in the garden or in protected flower beds, and transplant them into the meadow when conditions are favorable. Many of the perennials are biennial so you've got to have patience, space, and be sure to exercise a bit of care when doing this.

Except for an occasional "weeding," the meadow requires relatively little work during the growing season. It requires much less water than my patches of lawn do during a dry spell, and requires no fertilization. In fact, fertilizing the meadow would give the advantage to the grasses and they certainly would take it.

One of the nice things about a meadow is that if it doesn't work out, you can always mow it. Presto! You've got your lawn back. In my case, however, it has worked the other way, and I've gradually converted more and more lawn into meadow. Of note is the fact that after the meadow is cut in the early fall, it looks very much like a lawn until the next spring, when the magic begins all over again.

Some Additional Benefits

As the summers have gotten hotter and drier over the past few years, and the neighbors' lawns have suffered brown out, the meadow has stayed green and colorful. It is always a welcome sight when walking or driving down the road to the house.

Kids with their parents often stop while my wife and I are working outdoors and ask if they can pick some flowers: a request which we are always happy to oblige.

The meadow attracts numerous birds looking for seeds and insects; flocks of Goldfinches are not uncommon. Accompanying the birds are an array of butterflies. The swallowtails that frequent the meadow are stunningly beautiful.



The sight most amazing to me, however, is the glow over the meadow of an evening in June. Hundreds of fireflies illuminate the otherwise dark night and provide entertainment rivaling even the stars above.

When the meadow appears “spent” for the season, the flower stalks with their emptied seed pods remain. Colored anywhere from orange red to dark brown, they make beautiful dried “flower” arrangements. I gather them just before scything the meadow in October.

Aesthetics

If you are planning to convert part or all of your lawn to a wildflower meadow, keep in mind that the result will not look like a flower garden: it will look like a meadow. Before you start, I suggest you take a walk in a real meadow and look around. Then imagine a part of that “field” surrounding your home. Compared to what you are accustomed to and may have been for many years, and taking into consideration the lawn and flower beds that your neighbors spend many hours maintaining, your meadow is going to appear—at first glance—downright unkempt. There will be periods when it just looks like a field, and calling it a meadow will not change that—only when the wildflowers are in bloom can you assign it the “wildflower meadow” appellation.

The “worst” times are in the early spring and late summer when nothing seems to be happening. But appreciating your meadow in all seasons is an acquired taste. After a few years its changing appearance will become an expected part of the natural cycle of things. I can only hope that you will learn from and enjoy the experience as much as I have.

