

Stop Being a Slave to Your Lawn - Native Plants Are Better

Hi, I'm Park Naturalist Dave Crawford, stationed at Minnesota's Wild River State Park, on the beautiful St. Croix River. State parks maintain a lot more acres of natural landscape than lawns, but parks aren't the only places where you can enjoy a natural setting and the fascinating wildlife that such a setting attracts. You can create spaces around your own home or in your own neighborhood where you can experience the enjoyment of observing nature, even if it's on a small scale.

Why should you care about changing the way you care for your lawn?

Do you like to sit or play or have barbecues on your lawn? Maintaining a lawn gives you a good place to play or walk or relax.

But, do you like to mow lawns? Apply fertilizer? Water the grass and pay the resulting bills? Pull weeds? Rake leaves? Maintaining a lawn is a lot of work.

Do you feel at least a little embarrassed if your lawn looks bad compared to the house down the road? Maintaining a lawn can be a real worry if you're concerned about what the neighbors think. NOT maintaining a lawn means you've maybe got a thick skin like an elephant and don't care what the neighbors think.

Would you like to see birds up close? Chipmunks? Rabbits? Butterflies? You may remember that you used to see a lot more birds, butterflies, caterpillars, and so on years ago than you do now. Do you wish that you or your kids would get more chances to see this kind of wildlife up close? Maintaining a lawn isn't the best way to keep in touch with wildlife - in fact, it's almost a sure way to get rid of wildlife. It doesn't provide what most wildlife needs to survive.

Having at least some mowed grass around your house that you can use for touch football and barbecues is a good thing. You can't beat a mowed lawn for being able to stand up to a lot of wear and tear, unless you want to pave your yard with green cement. But there are some real costs involved in keeping your entire yard neatly groomed to look like a green carpet.

First, your lawn makes you into a slave. Grass grows, so you have to mow it to keep it from getting too tall for your neighbors to put up with. Grass needs sunlight, so if you have a shady yard, you've got a constant struggle to keep grass alive. Grass needs lots of water, so you'd better be prepared to pay high water bills, or electric bills if you run your own well. If you don't water your lawn, it turns brown. If you do water it, it grows faster and you have to mow more often. And if you want your grass to be really green, you need to feed it. Of course, the more fertilizer you use, the faster your grass grows, and there you are out in the hot sun mowing again. Then there's dandelions, and crabgrass, and all the other weeds that came to this continent along with mowed lawns. Did you know that mowed lawns are not native to this continent? Big areas of short, green grass are part of the landscape of Europe, not North America, and the grasses that we grow in our lawns are not from North America either - they were imported from other continents. To control the weeds that came with them, you either spend hours on your knees digging them out, or you use weed-killing chemicals that are hazardous enough to make your dog turn the same shade of green you're trying to get in your grass.

Second, your lawn makes you into a bad citizen of Planet Earth. If you pour water on a driveway and measure how much runs off compared to how much soaks in and replenishes soil moisture, and then do

the same test on a mowed lawn, you'll find that lawns don't hold water much better than driveways do. That means the free water you get from rain is mostly wasted, because most of it runs off instead of soaking into the ground where plants can use it. It also means that all the rain and sprinkler water that runs off your lawn carries anything that's on the lawn with it into storm sewers and ditches and eventually into lakes and rivers. That includes fertilizers which cause algae to clog rivers and lakes, insecticides which kill fish and the insects they feed on, and weed-killers that are harmful to animals and kill aquatic plants that many animals depend on. Even if you don't fertilize your lawn, the runoff contains nutrients from decaying leaves and grass clippings which will cause algae blooms in lakes and rivers.

For all the bad things you may have heard about farm chemicals polluting lakes and rivers, lawn chemicals are at least as big a problem, and one which we don't really need, since lawn care has nothing to do with keeping food on our tables.

Because mowed lawns don't absorb water, lawns are a poor place to try and grow anything besides grass. Trees and shrubs, which provide valuable shade to keep your house cool and provide shelter and nest sites for wildlife, are hard to keep healthy in an environment where most of the rainfall doesn't soak into the soil.

Another way that lawns make you into an environmental bad guy is what happens when you mow them. Gas lawnmowers emit 15 pounds of carbon dioxide for every gallon of gas burned. (*The Ecology and Culture of Water, J.M. Patchett and G.S. Wilhelm, 1997.*) The pollution output of one of these mowers in one average year is equal to driving a car 3100 miles. (*Mills-McCarthy and Associates, "Net Energy and CO2 Reduction From Electric Mowing", 4/20/93*)

Finally, lawns themselves are directly harmful to the environment. A lawn is a very unfriendly ecosystem. It contains only one or two species of grass and not much else. This artificial landscape doesn't provide good habitat for animals that need food, water, places to nest, and places to hide.

The 25 million acres of mowed lawns in the United States are NOT good places to go birdwatching, hunt for caterpillars and butterflies, enjoy wildflowers, or watch chipmunks or rabbits or frogs. As lawns increase, wildlife habitat declines. But there's no reason we can't make a little room for wildlife around our homes, and every reason to want to, because people like seeing wild animals, and people - kids in particular - learn a lot from seeing wild animals and natural environments.

A lawn also fails at a very important ecological task - surviving Minnesota's climate. In a complex ecosystem with many species of plants, there are some that are able to withstand drought, others that withstand floods, others that do well no matter how hot it gets, and others that do best when it's cooler. If conditions are bad for one set of plants in an ecosystem, the rest of the plants will keep things going until conditions get better. A lawn, with one kind of grass, can't do this without a lot of help from humans.

The next question is, why should you care about using **native** plants in your home or business landscape? Are native plants better? A native plant species is one which evolved on this part of this continent. It wasn't brought here by people. A species that was brought here by people is called an alien, or an exotic.

Alien or exotic species are not necessarily bad. Do you eat corn flakes? Corn was brought here from Mexico. Do you eat rice? That came from Asia. Wheat? Europe. Most of our crop plants came from somewhere else, and they are useful species to have as sources of food. Do you like tulips? Lilacs? Petunias? Marigolds? These are all plants brought from other continents. They're attractive, enjoyable to grow, and provide at least some food for bees and butterflies.

But there **are** many alien species that are problems. Have you seen purple loosestrife? Purple loosestrife is an alien species which was introduced as a garden plant. It's gorgeous, with bright purple flowers. It also is capable of producing several million seeds per plant per year, so it can spread really fast. It grows very well in wet soil, so it can take over wetlands by outnumbering the native plants that

ducks, blackbirds, fish, muskrats, and turtles depend on, and make the wetland into an ecosystem that has nothing in it but purple loosestrife.

Native plants can generally be relied on not to become the kind of problem that aggressive alien plants are because they have existed as part of a community with the plants and animals around them for thousands of years. They don't get out of line and take over an entire ecosystem. What's more, they are beautifully adapted to local conditions. They're better at surviving drought, floods, freezing, anything our climate can throw at them. That doesn't mean you can plant a shade-loving native in a sunny spot and expect it to do well, but it does mean that a native plant placed in the habitat it likes will survive with little or no attention.

Native plants are also the absolute best plants to provide for the needs of native animals. Native plants have existed as part of the habitat of the animals that eat them, hide in them, nest in them, and pollinate them for thousands of years. If you want to do a favor for wildlife AND get the enjoyment of seeing more butterflies, birds, and other neat critters, native plants are a good idea.

Now that you know this, what can you do to change?

You don't have to get rid of your whole lawn. A lawn is a good way to grow something that can be walked on, sat on, and played on. But that doesn't mean that every square inch of your yard has to be dedicated to mowed grass. If you don't want to make a big change all at once, you can plant a little at a time - maybe a five by ten foot butterfly garden one year, a cluster of berry-producing native shrubs for wildlife food and nesting the next year, and so on. You can hire someone to do this, or you can do it yourself with advice from a nursery that sells native plants, or with a book like [Landscaping For Wildlife](#), available from the Minnesota Department of Natural Resources. If you have lakeshore property, take a look another book from the Minnesota DNR, [Lakescaping For Wildlife](#). Or check out Minnesota DNR's Website. A good place to start is www.dnr.state.mn.us/gardens/nativeplants/index.html

The most important thing to consider is what you want your yard to be like. Determine how much mowed lawn you want to keep, and where you'd like it to be. Look for areas where lawn mowing is difficult, around trees and buildings, for instance, and plan to replace grass there with low-maintenance native plants. Observe which areas get a lot of sun, and which areas get a lot of shade, and plan which kinds of plants will work best in each area.

Look at what's already present in your yard that you can add to. If you have a hedge or a clump of shrubs or trees that already provides shelter and nest sites, consider making it bigger. If you have a natural low spot, consider making it into a pond or a garden for moisture-loving plants. If you have an area of sandy soil, native prairie plants should do well there with little care. If you want to take advantage of the runoff from your gutters and downspouts, think about putting in a rain garden.

Watch and learn which species of wildlife use your yard or the neighborhood already, find out what they eat, what they need for nest sites or shelter from predators. Learn the same about the needs of wildlife that you don't see, but that you'd like to attract. Once you know what certain species really like, you can provide it. Remember that every species of animal needs food, water, shelter, and space, all in the right arrangement. The arrangement is important. If you provide bird food in your yard, but the nearest tree or shrub for birds to perch in is on the other side of the yard, birds may not want to cross all that open, unprotected space to get to the feeder. Or if you're trying to get birds to nest, and you put up a bird house out in the open, it's more likely to attract bluebirds or swallows, but if it's in the edge of a woods or thicket, you're more likely to have wrens or chickadees, because different bird species have different preferences for the arrangement of a landscape they might live in.

Be sure you include a location where animals can get water, and try to incorporate more than one, since different animals will be attracted to different kinds and locations of water sources.

When you're deciding which plant species to add, you need to plan on using plants which are suited to the sun, soil, and moisture conditions of the spots where you want them. You need to decide which ones will be best to attract the kind of attention, either from wildlife or from humans, that you intend.

Perhaps the most important aspect of choosing plants is to use species that are native to the location where you are doing the planting. You could use plants from the eastern or western U.S., but remember that local wildlife has become adapted to local plants over the course of thousands of years. It's going to work best to give them access to those species of plants. Using locally-produced natives also improves survival and minimizes care. You could obtain butterfly weed, a Minnesota native, from as far away as New Jersey, where it's also native. But New Jersey butterfly weed, even though it's the same species we have here, won't bloom at the same time as local butterfly weed, when local butterflies are looking for it, and won't survive winters as well.

Finally, a great reason to choose local native species is that we're steadily losing all of the wonderful regional and local differences that make it fun to go and see other parts of the state and the country. If you go to northern Minnesota - you go to see northwoods habitat and wildlife and scenery, not to see the same growing green rugs that you spend so much time mowing at home. Even from one spot in the Twin Cities to another there used to be tremendous differences in the landscape, from open prairies to partly shaded oak savannas to wildlife-rich wetlands, and deeply shaded maple forests. Preserving this variety by making your yard look like a part of the local landscape instead of looking like just another mowed lawn makes sense, for the sake of providing the variety that humans want in their lives.

One really important thing to be aware of when you start changing the way your yard looks is that people who live near you, and who haven't heard what you're learning here, aren't going to always accept those changes with enthusiasm. You have the right to re-landscape your yard, but it would be nice if the neighbors thought it was a good thing just like you do. It's important that you talk to them, let them know what you're doing and why you're doing it. It's important that you plan the changes with care, so that you avoid any fears on the part of neighbors that you're going to turn your yard into a jungle of voracious weeds. It helps if you make changes gradually. Do a small area, put a border of landscape timbers or garden edging around it, make it look neat, and then show the neighbors the best flowers when they start to bloom, and the butterflies that come to get nectar. If you talk to them and show them what a good thing this is, you can get them to do it too, and then you get not just the pleasure of looking at wildflowers and wildlife in your yard, but everywhere in the neighborhood. If you play your cards right, you'll have your neighbors coming to you to ask you, "What's that plant, and where can I get some? And how did you get all those birds to come to your yard while I have hardly any in mine?"

Here's a vision for the future - neighborhoods and rural landscapes where wildlife is welcome, habitat is preserved, and humans find opportunities for fascination and discovery

Parks and preserves can't keep enough habitat intact to keep wildlife from slowly fading from the landscape. Individual landowners who care for natural habitat can make a real difference, and get real benefits from it through the thrill of observing native plants and animals close up, and through maintaining home landscapes that are easier to take care of and better for the health of Planet Earth.

Remember, visit www.dnr.state.mn.us/gardens/nativeplants/index.html for useful tips on using native plants in your landscape.