Managing and Creating Natural Habitat in Your Yard

Easy Steps to Invite Wildlife into Your Life
Need: If you have paid any attention to the news recently, you may have heard of sharp decreases in the number of birds, insects and amphibians over a very short period of time. Most of these losses are due to actions by mankind, particularly from the destruction of natural habitat for agriculture and development, and by the use of pesticides to kill unwanted insects. Without efforts to lessen these impacts, we can expect that we’ll continue to see fewer and fewer birds, insects, frogs and other animals, and the color, sounds and joy they provide us. On a brighter note, the number of monarch butterflies overwintering in Mexico have increased recently, and this is at least partly due to a widening effort by people to provide more food (milkweed) in their yards to offset some of the available milkweed lost in agricultural fields. You can be part of the movement to help our animal friends by taking action in your own yard.

Benefits - By managing your yard in a more natural way, and even adding habitat of one form or another, you will observe these benefits:

- More color and interest in your yard throughout the year from plants and animals that live in or visit your yard or business property
- Less work and expense to maintain your yard – less mowing and other yard maintenance
- More educational opportunities for your children in your own yard – studies have shown that kids who get out in nature gain many personal and developmental benefits (https://childmind.org/article/why-kids-need-to-spend-time-in-nature/). If you bring nature closer to them, they’re
more likely to get outdoors and develop an interest in the life you bring near.

- Relaxation for you – studies have also shown that spending time in nature reduces stress, and promotes a greater sense of well-being. If you don’t have the time to go someplace to experience nature, by enhancing or adding nature in your own yard you can enjoy it just outside of your door.

- Employees gain the same benefits from taking a quick walk outside in nature near their workplace, or having lunch at a picnic table near woods or wetlands. These opportunities can increase their job satisfaction and productivity and reduce their stress levels.

**Easy Ways to Increase Wildlife Habitat in Your Yard**

**Allow some Untidiness**

Many insects, spiders, centipedes and other tiny creatures make their homes in natural leaf litter that accumulates underneath trees and shrubs in woods, or in long grass and standing dead wildflowers in meadows. Some moth, butterfly and other insects drop their eggs or larvae from the trees into the fallen leaves where they overwinter until they emerge the following spring. Some tiny insects overwinter in the stalks of wildflowers.

When you clear your yard of all of the wildflowers, grasses and leaves that naturally accumulate, you may be creating a very clean look, but you’re removing those homes and possibly killing adult and young insects in the process. Many birds feed on those insects. In fact, over 90% of songbirds feed their young insects and caterpillars found in natural areas which are high in energy and protein the baby birds need to be healthy and grow. Other birds search through the grass and leaves for seeds as food for themselves.

When you clear your yard of all of the wildflowers, grasses and leaves on the ground, you also:
• deprive yourself and your children the opportunity to see little birds foraging on the ground for seeds and nuts or feeding their young in a nest nearby

• lose the opportunity to see wildflowers grow among the trees in the spring and fall

• have fewer butterflies and birds calling your yard home

• remove seeds and nuts that could develop into young plants to sustain the habitat over a long period of time

• remove a natural fertilizer provided when leaves break down and form rich humus that benefits plants and helps to absorb rain water

• lose winter interest from fluffy seed heads and snow and ice clinging to the seed heads, grasses and shrubs

So, in conclusion,

let your yard be a little untidy, at least in some areas, and put a bench or chair at the edge or in the middle of the natural area to get a better look and listen to the nature around you.

Leave Snags in your Woods

If you happen to have a dead tree in your yard, instead of having it cut to the ground, leave the trunk for wildlife. You can cut off the top, but leave the bottom 10-15 feet of the trunk (or a height that won’t threaten your house, deck or pool). Snags like this are valuable resources for animals like woodpeckers that bore holes in them, and the animals that live in holes in the trunk. By leaving these vertical structures, you can benefit a variety of wildlife without any additional work on your part.

Plant a Butterfly Garden

Butterfly gardens are gardens filled with plants that provide food for butterflies and other pollinators. They have a lot of colorful, blooming flowers that create nectar and pollen for the adults throughout the growing season. They should also have some plants that are what is called larval host plants – plants
whose leaves are eaten by caterpillars to grow and become butterflies.

You can start small to see how you like it and enlarge it over time to add different plants which will attract different butterflies. The larger your garden is, the more birds and butterflies you’ll have. Sunny areas of your yard will get you the best results.

Some butterfly gardens also attract hummingbirds. Bees will also come to your butterfly garden, but as we discuss later, the bees are there for the nectar and pollen in the flowers, not for you.

The City of Novi has a number of butterfly garden designs you are free to use, as well as a video about butterfly gardens. They can be found on the city’s Beautification Commission website at https://cityofnovi.org/Government/Boards-and-Commissions.aspx#Beautification.

**Plant More Plants Native to Michigan in Your Yard**

Studies have shown that caterpillars are often completely dependent on native species to grow. The more caterpillars you have, the more butterflies you’ll have, and the more birds that feed their young caterpillars will also visit your yard. Resources on native plants and where you can buy them are provided at the end of this document.

**Build a Rain Garden**

Rain gardens are gardens in a slight depression that accumulate and hold water for a short time (a day or two) until the water seeps into the ground. The plants adapt to being wet and somewhat dry. A mix of bushes, flowers, sedges, grasses and other
plants can be planted to use the water and increase the infiltration of rain water into the ground. By doing this, the rain gardens help protect nearby streams and rivers from flooding rain events that can cause the streambed to erode, and they keep the plants healthy.

Add a rain garden or two near your downspouts (at least 10 feet away from the building) or in areas of your yard that are frequently wet and you’ll improve the color and interest in your yard, remove those areas from mowing, and help to save the animals that live in the streams nearby.

**Save Your Natural Woods**

If you’re lucky enough to have natural woods in your yard, you have a nature gold mine. Birds naturally come to your yard, rain water seeps into the ground and sounds are absorbed by the foliage. When you leave the ground in a natural condition, you will have no maintenance requirements and you’ll have a plethora of natural sights and sounds throughout the year. The only maintenance you need to worry about is to remove the invasive species as much as possible. By doing that you’ll encourage the naturally occurring wildflowers to flourish and you’ll have a variety of woodland-loving songbirds visiting your yard throughout the year.

**Create Natural Buffers for Lakes, Ponds, Wetlands or Streams**

If you let your grass and other plants grow tall for a distance of at least 25 feet from the edge of a water feature, it will trap fertilizers that create algae problems in the water, and will allow plants that naturally grow along the water’s edge to get established and add to your yard’s beauty without any additional work on your part. You could also add wildflower plantings along the edge to add color. Once you do these things you will almost immediately
find that your yard is much more vibrant and interesting.

Mini Meadows/Prairies

Mini meadows, at their simplest, can be areas of lawn that you stop mowing. At first you may have more dandelions than you’d like, but as the grass gets longer and stays longer, that will be less of a problem. Crickets, lightning bugs and other little creatures will make their homes in the more protected areas and you won’t waste time and money mowing it. If you want to get more color in the area than just long grass, you can seed it with a native seed mix with wildflowers that attract more birds and butterflies. To get even better results, completely kill or remove the grass from the area of yard you want to convert before seeding. Good instructions of how to prepare a yard for re-seeding can be found at [https://www.michiganwildflowerfarm.com/ten-steps/](https://www.michiganwildflowerfarm.com/ten-steps/).
Fears

Many people are resistant to encouraging nature in their yard due to fears about what it might bring. Let’s address some of those here.

Bees. Bees are scary to many people because some of them sting. But, did you know that not all bees can sting? Only females can sting, and even then, many species will not sting at all, while those that do will generally only do so if they’re threatened. Merely being near one will not get you stung. If you’re near a flower, the bees are much more interested in getting nectar or pollen from it than in doing anything to you. Even if they land on you, unless you do something to scare or provoke it, it is much more likely to lick you, or just land on you and then fly away than to sting you.

Wild animals. Here in Novi, most of the wild animals that live here are completely harmless. The only poisonous snake in Michigan, the Massassauga rattlesnake, is rare and likes habitats where people generally aren’t likely to be—swampy areas, old fields with a high water table and occasionally open woods. They are very timid and are much more likely to slither away from you than to try to bite you. As with bees, they are only likely to bite if they are threatened or provoked. Garter snakes are much more common in Novi and are not poisonous or aggressive. They mostly eat reptiles, amphibians and small rodents.

Coyotes are around Novi, but are also not a threat to humans. They generally eat birds, small mammals, reptiles and amphibians. They have been known to bother small dogs on occasion so keep an eye on your pets when they’re outside. In any case, if you maintain or increase the natural areas in your yard, you will not be increasing the limited danger posed by these animals and the
**Invasive Species—ID and Management Tips**

Invasive species are species that do not naturally occur in an area and can overtake naturally occurring species to change a habitat. They can be plants or animals, but we’ll just talk about some of the invasive plant species that are common in Novi, and how to get rid of them. By removing them, you will enhance the natural habitat for the natural creatures that want to live there, and increase the view from your house into woods or other natural areas nearby.

**Barberry** is a relatively small shrub that is sold for landscaping because of its bright fall colors, and tolerance of dry conditions. Birds eat its bright berries and spread the seeds to nearby woods where they can form thickets of pokey shrubs, crowding out native plants that would normally live there. Dense stands of it are found to have greater populations of deer mice and ticks which can carry the Lyme disease bacteria. Due to this invasive behavior, they are prohibited from being planted on commercial sites or new residential developments in Novi.

**Removal** – If a shrub isn’t too big, you can pull it (wear gloves and thick covering for your arms), but if it is too big, you can cut the shrub 2-4” above the ground and brush the cut stump with an 18-21% glyphosate solution within 1 hour of cutting. This is best done in late summer through early winter. Throw the branches with seeds in your garbage, not in a compost pile or in the woods.

**Buckthorn** is a small to medium-sized tree that grows in lightly shaded woods and open areas nearby. Its seeds are spread by birds. Common buckthorn has small thorns but glossy buckthorn does not. They both form dense cover within the woods, shading out the plants that are normally found in the woods – sedges and grasses, wildflowers, native shrubs and young saplings of the canopy trees. Their leaves also change the nutrient levels in the soil, making conditions that are less favorable for the original plants and more for buckthorns. Woods that are
densely populated with buckthorn often have little or nothing growing on the ground level.

**Removal** – If a tree isn’t too big, you can pull it but plants ½” diameter or larger generally have root systems too large to be pulled. Smaller plants can be killed by spraying the leaves with a 2% solution of Glyphosate or Triclopyr. Plants 1” diameter or larger should be killed by cutting the tree at about 2-4” above the ground and brushing the cut stump with a 20% glyphosate solution (mixed with water) within 1 hour of cutting or a 12.5% solution of Triclopyr (mixed with fuel oil or RV antifreeze) also applied within one hour of cutting. This is best done in late summer through early winter. If the plants are near open water, you should use a formulation of Glyphosate that is safe for use in those situations, such as Rodeo, because the chemicals can kill amphibians living there.

**Garlic Mustard** is a small, edible plant that grows to about 18-24” in height, with dainty white flowers at the top that bloom in May-June. Each plant can put out thousands of seeds which can stay viable in the soil for about 5 years and are spread by animals accidentally carrying the seed in their paws (or boots).

**Removal** - The best way to remove this plant is through persistent pulling while it’s blooming or just before, over a number of years. It’s a fun project for kids. Just make sure to bag up the weeds you pull and put them in your garbage, not your compost pile as the heat in your compost is not likely to get high enough to kill the seeds.

**Asian Honeysuckle species** are small to medium-sized shrubs that also grow in lightly-shaded woods and open areas nearby. Its seeds are also spread by birds which eat the bright red fruits.

Honeysuckle and common buckthorn are often found together and can form dense stands that develop leaves earlier than the native plants and keep them longer, so they shade out plants that need the sun.

**Removal** – The steps for removal of honeysuckle are the same as those for buckthorn described above.
**Oriental Bittersweet** is a vine that winds its way around a bush or tree up into the canopy, and slowly choking off the tree as the vine gets thicker and the tree gets wider. You can easily spot it in the fall when its bright orange berries are visible. The Oriental bittersweet berries come out of points along the vine at the base of the branches while the native Bittersweet’s fruit only come out at the end of the branches.

**Removal** – As with the others mentioned earlier, you can pull it, finding a bright orange root, or for thicker vines, cut it and paint the cut stump with a 25% concentration solution of either glyphosate or triplicopyr. The cut stump method should be done in late summer through early winter for the best results.

**Phragmites australis** is a large reed that grows in damp areas and can spread via seeds and runners to take over an area, blocking out other species that are naturally found around wetlands and the edges of lakes and ponds. It can reach heights of 10-15 feet.

**Removal** – In order to kill Phragmites, herbicides are necessary. Cutting them down or even burning them does not kill the plants as the extensive root system below ground is protected from the fire. Glyphosate chemicals are most commonly used. If you’re near standing water, you’ll need a permit from the state’s Department of Environment, Great Lakes & Energy (MDEGLE) to use the chemicals and the work would need to be done by a licensed pesticide applicator. It is an effort worth doing, as studies have shown that large stands of Phragmites are a fire hazard and stands of it can decrease your property value.
Privet is another medium to large shrub that spreads into woods via birds. It is commonly used for hedges and can also spread to form thickets in wooded areas.

Removal — As with the other woody invasive plants discussed above, you can pull small plants, or use the cut-stump method with a 25% solution of glyphosate or Triclopyr for larger plants.

CONCLUSION

If you will maintain the habitat you do have in a natural condition, and add habitat in one or more of the forms described above, you’ll be pleased with the added sights and sounds you’ll be adding along with it. Feel free to contact the City Landscape Architect, Rick Meader, with any questions you may have at 248-735-5621 or rmeader@cityofnovi.org.

RESOURCES

Butterfly Resources:
Southeast Michigan Butterfly Association
https://www.sembabutterfly.org/

List of Butterfly Plants Native to Michigan
https://tinyurl.com/rf9ltpo

Native Plants
Native Plant Database
http://www.nativeplant.com/plants/search/input

Native Plant Regional Lists
https://tinyurl.com/rhhr7ad

Native Plant Nurseries
Hidden Savanna Nursery
Kalamazoo, MI (plants)
http://www.hiddensavanna.com/

Michigan Wildflower Farm
Portland, MI (seeds)
https://www.michiganwildflowerfarm.com/

Wildtype
Mason MI (plants)
www.wildtypeplants.com

Rain Gardens
The Nature Conservancy
www.natureworkseverywhere.org/resources/rain-garden/

Washtenaw County
https://www.washtenaw.org/647/Rain-Gardens