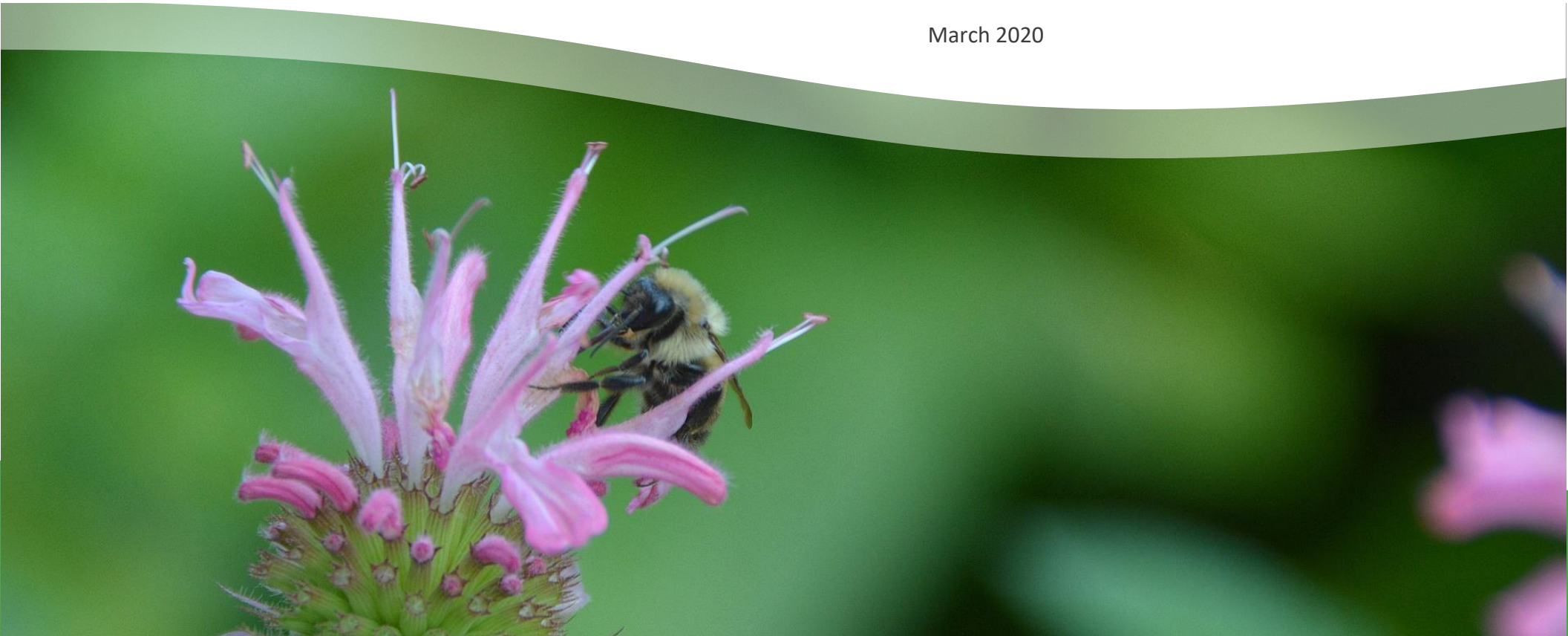
Gardening with Native Plants:

A Guide for Michigan's Upper Peninsula

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About this Guide

This guide is designed to help gardeners in Michigan's Upper Peninsula increase their use of plants that are native to the local landscape and suitable to our area's unique growing conditions. It is intended to provide a quick overview of the topic, with supporting links to sources for additional reading.

This Guide was developed as a volunteer project for the Michigan State University Extension Master Gardener program. Visit the MSU Extension page to learn more about this program and about gardening in Michigan. Important help in developing this guide was provided by Brian Black of Bay College. Visit the Bay College Greenhouse webpage to learn more about its annual plant sale and view additional resources for Upper Peninsula native plant gardening.

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Gardening with Native Plants

What is a Native Plant?

A plant (or animal) is called “native” when has been present in a given place for a long enough period of time that it has adapted to the physical environment and developed complex relationships with other organisms in an ecological community (wildflower.org).

The term “adapted” is also sometimes used to indicate plants that might be native to other parts of the northern Great Lakes region (although perhaps not the UP) and would generally expected to fare well given current and expected future climate conditions. An example of an adapted species might be the purple coneflower (*Echinacea purpurea*) which is native to portions of Wisconsin and Lower Michigan; although it is not native to the UP, it performs well in UP gardens where it has been introduced.



Native plant garden at the Ottawa National Forest’s Visitor Center in Watersmeet, MI. Photo by Sue Trull, USDA Forest Service.

Designing Your Native Plant Garden in Five Steps

Are you interested in gardening with native plants? Here are five basic steps to get started developing your garden. More details on each of these ideas are found in this guide.

1. **Decide what benefits you want from your garden.** There are lots of reasons to select native and adapted plants for gardening. Consider all these great benefits and decide which are the most important to you.
2. **Assess your site.** All plants are happier and healthier when they are well-matched to local conditions. Get to know your garden site so that you can select the plants that are most likely to thrive.
3. **Select plants for your garden.** Use your list of desired benefits and the site assessment to select plants that best fit both criteria. Find the right plant for the right place, and don't fight the site.
4. **Establish your garden.** It's finally time to roll up your sleeves and install your garden! If possible, plant in spring or fall when conditions are cool and moist and plants are better able to handle transplanting.
5. **Maintain and enjoy!** Perennial gardens can take a few years to get going, but they are often relatively low maintenance once they take root. Tend new plantings, and enjoy the insects, birds, and other wildlife that also enjoy the space!



*Dense blazing star (*Liatris spicata*), native to southern Wisconsin and Michigan. Image by A Different Perspective via PixaBay.*

Benefits of Native Plant Gardening

There are many good reasons to garden with native plants, whether that means adding some native plants to an existing garden or creating a new area just for these species.

Native plants support a greater diversity of wildlife than non-native species. Because native plants have co-evolved with the other plant and animal species present in a particular area, they serve as an important part of the food web in a natural community. Plants provide food for many species, especially insects that make use of leaves, pollen, nectar, and other plant parts. These insects then provide critical food sources for birds and other wildlife that people want to see in their gardens. Non-native plants are often less preferred food sources and may not provide the same quality of food to local wildlife. This is why gardens that benefit birds, pollinators, and monarch butterflies feature native plants. At the same time, many native plants are resistant to deer browse.

Native plant gardens can supplement natural habitats where they are threatened. Some natural communities are threatened because of past or current loss or degradation of these ecosystems from human activities. When individual plants or entire ecosystems are at risk, planting gardens that contain these species can provide an important way to help maintain plant populations across the landscape. Likewise, nature-friendly gardens can provide important habitat for other species that may be at risk.

Native plants are adapted to local environmental conditions and generally require less upkeep. Although all gardens require some level of maintenance, native plant gardens often require less intervention because once established. Many native plants have deep roots, which can reduce the need for watering. If planted in the proper location where the plants are well-suited to local conditions, there may be less need for fertilization or winter protection. In fact, some native plants perform so well that garden maintenance may have to focus on keeping some vigorous plants in check. When used in place of lawn, native plant gardens can decrease the effort required for mowing and lawn maintenance, while increasing habitat for a variety of wildlife.

Gardening with native plants and nature-friendly practices can improve the quality of the environment. The lower levels of inputs needed to maintain native gardens can provide important environmental benefits. The use of native plants in landscapes can reduce the air and noise pollution created by mowers and other yard equipment. Native plant gardens can be maintained using fewer fertilizers, herbicides, and pesticides, which reduces the negative impacts associated with these damaging chemicals. The deep roots of native plants create more opportunities for water to seep into the ground; this prevents groundwater runoff, minimizes soil erosion, and protects water quality.

Native plants contribute to a sense of place. Many people chose to live in the UP because they enjoy the landscape and its unique mix of woods and water. This aesthetic is because the local plants that are indigenous to this area provide the scenery that we all enjoy. Promoting plants that are native to this region can make your garden "feel" more like the UP while benefiting your local neighborhood. Gardening with native plants can also be a way to appreciate how people have interacted with our local landscape for thousands of years, such as by growing and picking berries and other fruits.

Native plants are beautiful.
The diversity of native plants allows for dramatic and eye-catching gardens. Native flowers come in a variety of showy colors and forms, and the use of different species can allow for color throughout the growing season. Native plants can also be selected for other visual qualities, including the texture of leaves and bark, colorful fruits and seeds, and interesting forms. Native plant gardens can be designed to echo the seasonal progression of the local landscape, from vibrant spring greens to bright summer rainbows to autumnal yellows, oranges, and reds.

Many native plants are more resistant to deer browse than introduced species.
Some native plants are not palatable to the deer and other critters that can often menace home gardens. Gardeners can carefully select native flowers and grasses that deer are reluctant to eat, which can reduce frustration and the cost of new plants. Selecting deer-resistant plants can also reduce the effort and cost of sprays, repellents, fences, and other methods of deterrence.

Ten Tips for Native Plant Gardening

1. **Select plants that are native and well adapted to your local landscape.** Choose species and genotypes that are from closer to your home when possible or from the Upper Midwest when local varieties are not available. Avoid digging up or disturbing wild plants.
2. **Match plants to the unique conditions of your garden location.** Plants that have suitable sun and soils will grow better and require less upkeep (except perhaps pruning).
3. **Minimize use of pesticides and herbicide**s. Use organic sources of fertilizer when additions are needed, although native plants often require less soil amendments when plants are well-matched to their site.
4. **Design gardens to grow and change over time.** Succession is a natural process where plant communities change over time.
5. **Keep things "messy."** Leaving dead plant material in place over the winter helps retain important habitat for insects and other beneficial life. This also helps to retain soil moisture and suppress weed germination.
6. **Promote all types of diversity to support ecosystem biodiversity.** Planting not only a variety of plant species, but also planting species with different traits (such as flower color, shape and bloom time) will enhance the value of your garden to wildlife.
7. **Add habitat features to support even more wildlife.** Let your creativity go to work here-- this could include water features or houses designed for bees, bats, toads, or birds.
8. **Use natural mulch for weed control, such as leaves or shredded wood.** Avoiding wood barrier fabric and leave a few patches of bare soil for ground-nesting bees.
9. **Promote natural ecosystems and processes.** Reduce disturbance in natural areas. Reduce lawn area to increase the quality of land for people and wildlife.
10. **Turn traditional gardening challenges into opportunities.** For example, a rocky area can be used to feature local plants in an interesting way.

Assessing Your Garden Site

Because a garden is a home for your plants, it's important to assess your garden from the perspective of what plants need to grow and flourish. The following is a short list of factors to consider as you decide where to place a new garden or re-evaluate the merits of an existing garden:

Sunlight

- How many hours of sunlight does the area get per day?
- Does the area receive direct sunlight, or is the light dappled from tree cover?
- Does the area receive morning sunlight, or warmer and drier afternoon sun?

Climate

- What does your plant hardiness zone, and what does it tell you about the severity of your winter?
- How long is your growing season?
- Are you subject to late spring frosts or early snowfalls?
- Does your garden area have a unique microsite, making it noticeably cooler or warmer than surrounding areas?
- Is the areas prone to any extreme weather, such as strong winds or heavy snowfalls?

Soils

- Are your soils predominantly sand, silt, or clay, or a mix of all three?
- Does your soil drain easily and become dry soon after a rain?
- Does your soil have a lot of nutrients available to support plant growth?

A soil test is a valuable way to learn more about your garden soils and can provide information to help you select the plants that will do best in your garden.

Other Environmental Factors

- Is there easy access to water or irrigation?
- Does the existing vegetation give you clues about the natural community of this area?
- Do you have to account for the movement of people or vehicles in this space?
- Are there obstructions, such as overhead lines or belowground utilities, to avoid

Selecting Native and Beneficial Plants

For those who live here, the UP is a special place full of natural beauty—but also a place that creates unique challenges for living and gardening.

Perhaps first and foremost is the cold climate and short growing season that is common across all UP gardens. Average winter lows vary from -10°F (plant hardiness zone 5b, figure at right) in areas where Lakes Michigan and Superior moderate winter temperatures to -30°F (zone 4b) in the most interior portions of the UP (USDA 2012). The growing season length likewise varies, from approximately 70 to 150days per year, depending on location (Sommers 1977). Average annual precipitation ranges from under 30 to more than 38 inches per year (MSU), and snowfall varies widely from less than 60 inches to more than 150 inches of snow falling areas subject to the greatest lake-effect snowfall (GLISA).

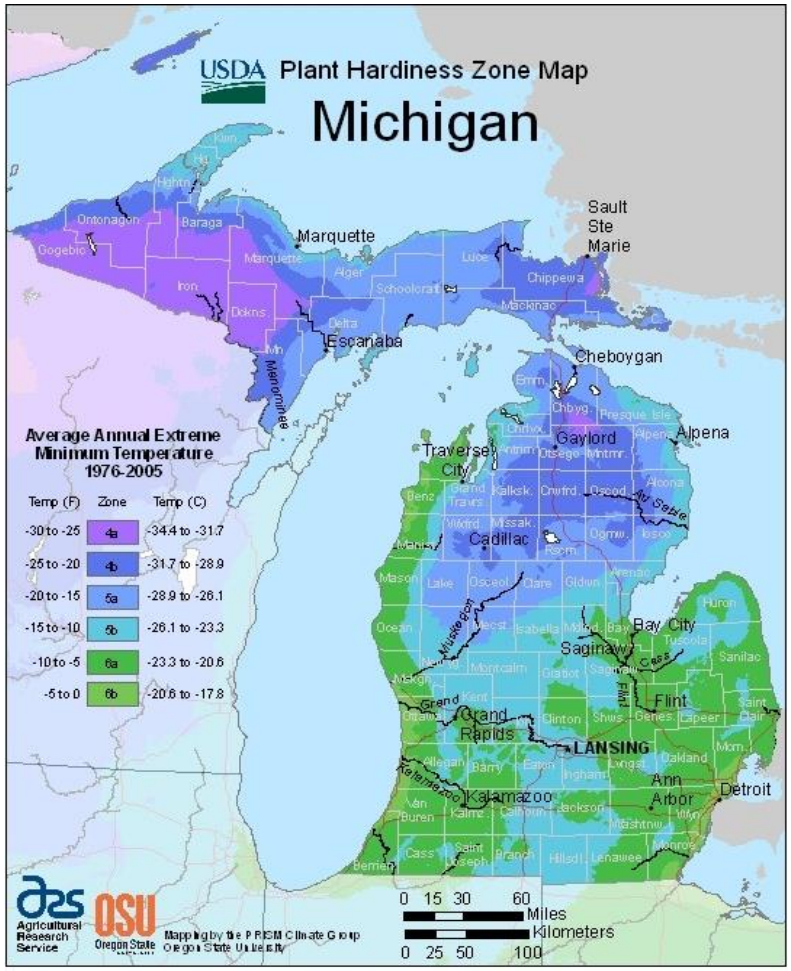


Figure: Plant Hardiness Zones are based on the average winter minimum temperatures for a given area and are helpful in plant selection. An interactive map is available at https://planthardiness.ars.usda.gov/PHZMWeb/

Another unique characteristic of the UP is the natural landscape. Despite massive changes to the landscape over the past 200 years, the UP remains 84 percent forested and largely undeveloped (Pugh 2017). The scenic and wild backdrop to UP living is what encourages many people to live in and visit the area: Great Lakes shorelines, expansive forests, rocky cliffs, and an abundance of streams, lakes, and waterfalls. Native plant gardeners can use the natural landscape as inspiration from their gardens by drawing in elements of our region's natural communities and facilitating natural ecosystem processes.

Natural Communities of Michigan's Upper Peninsula

The natural landscape of the upper peninsula had changed significantly over time. The Precambrian bedrock that is found across parts of the western UP is at least 3.5 billion years old, while the eastern UP was covered by an ancient sea on an off for hundreds of millions of years (MSU). These differences in geological history have important consequences for growing plants, as the limestone-derived soils more common in the eastern UP are substantially less acidic. A series of glaciers covered the UP and Upper Midwest with ice more than a mile thick, which only receded 10,000 years ago. Plants have established and reestablished themselves in this area since that time, forming the different plant "communities" that we recognize as being native to our region. Each natural community has a unique and distinctive assemblage of plants that are suited to the combination of climate, sun, soil, water and other environmental conditions that occur in a particular area.

Natural communities can provide a useful starting point for determining which native plants to select for your gardening or landscaping project. The Michigan Natural Features Inventory describes each of the many natural communities found in Michigan, including plant species common to each community. These lists of species can serve as a reference for selecting plants, although not all native plants will be available for purchase or suitable for cultivation/garden use.

There are many natural communities that occur across the UP. Here are examples of some groupings of natural community types common across the UP (MNFI):

- **Boreal forests** are found across much of the UP, particularly in areas closer to the Great Lakes. These forests are dominated by conifer species such as black spruce, white spruce, and balsam fir, and may include a variety of northern deciduous species.
- **Northern forest** types are common across much of the UP, with plant communities that vary based on soil moisture and other soil conditions. *Dry northern forests* typically occur on sandy soils where jack pine and red pine are the most common tree species. *Mesic northern forests* occur on more moist (mesic) loamy sands or sandy loams and often contain a mix of tree species that include sugar maple, red maple, yellow birch, and eastern hemlock. *Dry-mesic northern forests* have conditions that are in between these two types. White pine is common on these intermediate sites, and many other species may occur including red maple, eastern hemlock, and red oak.
- **Pine barrens** are found in scattered conditions across the UP on sandy, droughty soils. The hot and dry conditions result in more open conditions with scattered trees, typically jack pine and sometimes northern pin oak.
- **Wetlands** have consistent water saturation that creates distinctive soils, and the combination of water and soils can limit what plants naturally occur on these sites. Wetlands with limited movement of water into and out of the system, such as occurs in depressions, will tend to create more acidic conditions and may include acid-tolerant plants such as sphagnum moss, ericaceous shrubs, and spruce and fir trees. Ecosystems with richer soils may include northern white cedar, while those with greater water exchange will vary widely depending on how water moves in the system.
- **Primary communities** include cliffs, rocky and sandy lakeshores, and bedrock glades, and these communities are often subject to extreme conditions on account of rocky or shallow soils and, for some times, exposure to sun and wind.

Increasing Native and Beneficial Plants

The purpose of this booklet is to increase the use of native and beneficial plants in UP gardens, but that doesn't mean that non-native plants need to go by the wayside. Rather, the addition of native plants into any landscape can be helpful, even if other plants are left in place. The overall goal then becomes to increase the abundance of plants that "add" to a garden by providing a range of benefits (food for pollinators, shelter for wildlife, protection of water resources) and reduce the dominance of those that disrupt natural ecosystem processes.

When designing a native plant garden or working to make a more "nature-friendly" garden or landscape, the following framework can be helpful:

- **Avoid** plants that are known to be invasive species because these can cause serious harm to natural ecosystems. Many of the biggest offending species are not native to this region, and because they lack natural predators here, they are able to outcompete our native species and reduce the diversity and quality of ecosystems. Plants like buckthorn and barberry were once introduced as landscape plants, but have since expanded beyond gardens to dominate many natural areas.
- **Maintain** nonnative species in your garden that are "well-behaved" and do not exhibit aggressive characteristics that will allow them to spread out of control. A wide variety of common garden species are happy to stay within the confines of a garden where they are tended and cared for. Fortunately, the vast majority of garden plants are not invasive.
- **Promote** native and beneficial plants that are well-adapted to your local conditions. Many of these species, as described elsewhere in this document, can provide a wide range of benefits for monarchs, pollinators, birds, and other wildlife.

Finding Native Plants

Every plant is native to somewhere, and so it is important that when talking about native plants, it's important to provide a geographic qualifier—that is, specify that a plant is native to the Upper Peninsula, to Michigan, or elsewhere (NRCS). The geographic area to which a plant is native is called its natural range (UMD).

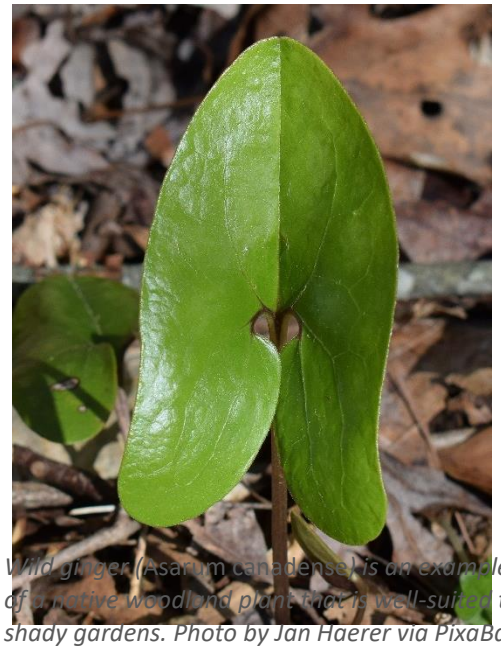
The cold climate and short growing season typical of the UP means that there are many plant species that are native to areas farther south in Wisconsin and Michigan that are not found in the UP. Some of these species, which have a native range that extends to within a few hundred miles of the UP border, may be suitable for use in UP plant gardens, particularly as climate change creates conditions that may be more suitable for these species. As always, it's important to ensure that any of these plants that are native to more southerly locations are well-adapted to your site and do not have any invasive or problematic tendencies.

Several lists identify plant species that are native to various parts of the Midwest:

- Pollinator Plants in the Great Lakes Region (Xerces Society)
- Monarch Nectar Plants in the Great Lakes Region (Xerces Society)
- Native Plant Search Tool (Michigan State University)
- Upper Peninsula and Regional Native Plant Lists (Michigan State University)
- Native Plant Finder (National Wildlife Federation)

Regional lists can include species that are native to a broad region, such as the Great Lakes, but not your local landscape. The following resources can be used to find more detail on a particular plant's native range.

- USDA Plants Database - provides the native range for nearly all plant species found in the US
- University of Michigan Herbarium Records - includes a search that displays counties where a plant has been collected, showing general distribution across the state



Wild ginger (Asarum canadense) is an example of a native woodland plant that is well-suited to shady gardens. Photo by Jan Haerer via PixaBay.

Avoiding and Eliminating Invasive Plants

An invasive species is generally defined by having two characteristics. First, an invasive species is generally not native to the area in question, originating on a different continent (often) or from another region of North America. Second, invasive species cause harm through some form of economic or environmental damage or as a threat to human health (or a combination of these things). Most non-native species, including many popular gardening plants, do not cause damage and are thus not invasive species. However, the invasive species that do exist can be very aggressive and spread rapidly, which allows them to displace native species and disrupt natural ecosystems (MIPN, MNFI/MSU).

Some landscape plants have turned out to be damaging invasive species, and for that reason, it is important for gardeners to avoid planting these species and do what can be done to remove them and reduce their spread.

There are many good resources available to help identify invasive plant species:

- The Midwest Invasive Species Network provides many resources including an explorer of the distribution of invasive species and detailed training modules to help identify many species.
- The Michigan Invasive Species Coalition provides many resources on invasive species, as well as links to Michigan's Cooperative Invasive Species Management Areas that provide support across the state.
- *A Field Identification Guide to Invasive Plants in Michigan's Natural Communities* provides photographs and details on many of the most common invasive species.
- Best Control Practice Guides provide additional details for the identification and management of common invasive species.



*Invasive species like this Japanese knotweed (*Fallopia japonica*) at the Apostle Islands National Lakeshore in Wisconsin can take over natural ecosystems. Photo by Damon Panek, National Park Service.*

The Midwest Invasive Plant Network provides a list of common invasive species and potential alternatives for gardens (* added to indicate species that are not native to the UP):

Invasive Landscape Species	Ecological Threat	Native Landscape Alternative
Asian honeysuckles *(Lonicera maackii, L. morrowii, L. tatarica, L. x bella, L. japonica)*	Shrubs and vines that invade forest & woodland under-stories. A vine, *L. japonica* can smother native plants.	Wild honeysuckle, a vine *(Lonicera dioica)* or twinberry, a shrub *(L. involucrata)*
Burning bush *(Euonymus alatus)*	A shrub that invades prairie margins & woodland under-stories	Eastern wahoo* *(Euonymus atropurpureus)*
Callery/Bradford pear *(Pyrus calleryanna)*	A small tree that invades prairies, utility & transport right-of-ways, open woodlands, forest margins	Redbud* *(Cercis canadensis)*
Chinese silvergrass *(Miscanthus sinensis)*	A grass that invades disturbed sites, utility & transport right-of-ways, grasslands, and wet woodland margins	Little bluestem *(Schizachyrium scoparium)*
Dame's rocket *(Hesperis matronalis)*	A perennial flower that invades utility & transport right-of-ways, wet woodlands, forest margins	Garden phlox *(Phlox paniculata)*
Japanese barberry *(Berberis thunbergii)*	A shrub that invades savannas, open-to-closed canopy forests, woodland margins	Ninebark *(Physocarpus opulifolius)*
Norway maple *(Acer platanoides)*	A medium-sized tree that invades forests, displaces native trees and under-story plants	Sugar maple *(Acer saccharum)*
Orange daylily *(Hemerocallis fulva)*	A perennial flower that invades transport right-of-ways, meadows, woodland edges	False sunflower *(Heliopsis helianthoides)*
Privets *(Ligustrum obtusifolium, L. vulgare)*	A shrub that invades disturbed sites, woodland edges, riparian forests	Blackhaw* *(Viburnum prunifolium)*
Ribbon grass/reed canary grass (*Phalaris arundinacea)*	A grass that invades wetlands, transport right-of-ways, disturbed grasslands	Common oak sedge *(Carex pensylvanica)*
Siberian elm *(Ulmus pumila)*	A medium-to-large tree that invades disturbed prairies and stream banks	Basswood *(Tilia americana)*
Wintercreeper *(Euonymus fortunei)*	A creeping vine that invades forest openings and margins, can smother native plants and trees	Wild ginger *(Asarum canadensis)*

Finding Plants for Your Garden

Finding locally-suitable planting material is papain the greatest challenge to native plant gardening in the up. Native plants are hard to find unless you order seeds plants through the Internet or mail. Even then, they probably won't be locally-adapted genotypes.

- **Local Nurseries:** Check your locally-owned and operated nurseries to see whether they have native plants in stock. If so, these will be the most locally-adapted and suitable to your local conditions. However, it is likely that small nurseries in the UP will have a very limited selection available. Create demand and encourage your local growers by asking them to raise native plants.
- **Mail or Internet Orders:** Until more local options are available, many gardeners will need to purchase plants from regional nurseries specializing in native plant species. There are several companies that have a good selection with websites and/or catalogs that contain a great deal of information. For native plant “purists”. the plants sold by these nurseries are not likely to be local genotypes and will include many species that are native to more southerly parts of the Lake States but not necessarily the UP.
- **Grow Your Own:** Growing your own native plants will require more time, energy, and patience, but you’ll have more knowledge about the source of your plants and will know that they are locally-adapted to the conditions where you garden. More details are provided later in this document.
- **Plant Rescues:** Sometimes plants are “doomed” to be lost as a result of development, such as when someone builds a new house or building. With permission from the landowner, you may be able to collect these plants and relocate them to a new home.



There are currently limited sources of native garden plants available for purchase in the UP, so you may want to grow your own from seed. Photo by Maria Janowiak

Responsible Collection of Native Plants

Native plant gardening can benefit natural communities by providing additional habitat to support pollinators and supplement the number and diversity of wild populations. For that reason, it's extremely important that you collect plant material carefully and in a way that avoids harm to natural populations.

- **Do not collect rare, threatened, or endangered species**. A list of these species is available at: https://mnfi.anr.msu.edu/species/plants
- **Do not collect prohibited species.** It is illegal to collect some wild plants, such as club mosses and all trillium species, in Michigan. A list of prohibited plants is available at: www.canr.msu.edu/hrt/uploads/534/79846/08-Wildflowers-protected-in-Michigan.pdf
- **Respect land ownership and always ask for permission**. Ask for permission for collecting on private lands, and recognize that there may be rules for collecting seeds or plants on public lands.
- **Collect from large, healthy populations, and only collect a small portion**. Work carefully to minimize disturbance to source populations.
- **Verify that any nursery plants that you purchase are from cultivated populations.** Avoid purchasing plants that have signs of being collected from the wild and placed into pots.



Ask permission to collect seeds, and only do so from healthy plant populations. Photo from njaus via PixaBay.

Growing Your Own Native Plants

Want to grow your own plants? Here are a few ideas to get started:

Seed

Most gardeners are familiar with growing plants from seed. Seeds can be purchased from some native plant nurseries, or seed can be collected from healthy populations of cultivated or wild plants. Seeds should be collected in dry weather, dried further indoors if needed, cleaned, and stored in a cool, dry place. Some plant seeds require stratification—a period of chilling, often with adequate moisture—in order to successfully germinate. Seeds can be sown directly into a prepared bed (with subsequent weeding of undesirable species) or started in containers and then later transplanted outside. The Prairie Moon Nursery provides planting details with seed germination codes and instructions for all its plants.

Divisions

Many plants will increase in size over time, and larger plants can be divided into several smaller plants. In fact, many plants will grow more vigorously once they have been divided and have more room. Division is best done in spring to early summer, or in late summer prior to dormancy. If possible, divide plants on a cloudy or rainy day and plant into new locations quickly to prevent roots from drying. Divided plants can be potted up for later use.

Root and Rhizome Cuttings

Many plants can be effectively propagated from portions of rhizomes (horizontally-growing underground stems) and roots because these tissues contain cells capable of growing a complete plant. Cuttings can be taken in late winter or early/mid-spring when plants have the most energy stored below ground. Sections can be cut, about 2 inches long, and planted into pots of soil mix or compost, maintaining any top portions in an upward orientation.

Cuttings should be maintained in relatively warm conditions (at least 50-60°F) indoors or in a cold frame and watered as needed until ready for transplanting. This method will be most suitable for species that send out strong rhizomes, such as milkweed or thimbleberry.

Stem Cuttings

Some plants can be propagated from vigorously growing portions of the stem. Cuttings of semi-mature (green) wood can be taken from the current year's growth during midsummer. Cuttings should be a few inches in length and include at least one set of buds. Green wood cutting require a relatively high degree of control on moisture and light conditions during hotter summer months to prevent cuttings from drying out or becoming moldy. Hardwood cuttings can be taken in late fall after plants have gone dormant. These cuttings can be potted up or planted into outside propagation beds in the fall and allowed to grow until new leaves and roots form, and then transplanted. Stem cuttings is most suitable for woody shrubs, such as highbush cranberry, ninebark, red-osier dogwood, and willow.



Stem cuttings from native shrubs.
Photo by Maria Janowiak.

Establishing and Maintaining Your Garden

Prepare the Space

The process to get a new area ready for a native plant garden is the same as any other garden. After you have selected the location (see the section Assessing Your Garden Site), you'll want to prepare the garden by thoroughly removing any weeds or competing vegetation before you get started. Making extra effort up front to have clean garden soils will go a long way to ensuring a successful garden. Generally, soil amendments are not needed when native plants are well-matched to the soil conditions in your garden, although adding some compost can help add organic matter to soils where it is lacking.

Planting Your Garden

Planting will be most successful if it is done in spring or fall to take advantage of cooler and moister conditions. Try to avoid planting on a hot, sunny day if possible. Dig holes that are roughly the same depth as your pot, so that you are keeping the plant at the same soil level as it was when potted. Water plants well immediately after planting, and continue watering plants regularly as they take root in their new homes. For the first few months after planting, give plants a deep watering whenever the soil begins to dry out.



Planting a demonstration garden at the Chippewa National Forest in northern Minnesota. Photo from USDA Forest Service.

Cover the area with 3-4 inches of mulch. Mulch is highly recommended as a way to help control weeds and retain soil moisture. Options for mulch include leaves, sawdust, wood chips, or clean, weed-free straw. Tree bark chips are not recommended as they contain compounds that can be toxic to herbaceous plants. Together, regular watering and using mulch can be essential to good establishment.

Maintaining Your Native Plant Garden

Although native plant gardens may require less upkeep than other gardens, they still require regular tending to ensure plants are healthy and looking good. Weed control will be most important to ensure that your garden doesn't become overrun with undesirable plants. Regular watering should not be necessary once plants are established, unless there is an extended drought. It is not necessary to deadhead flowers after they have bloomed, as leaving them will allow them to form seed heads that serve as food for wildlife or a seed source for you to grow more plants. Plants will naturally die back in the fall once cold conditions arrive. Leaving dead plant material in place until spring is beneficial for insects and other wildlife, so there is no need to clean garden beds up before winter.



An Upper Peninsula garden featuring prairie plants native to central Wisconsin, about 8 years after establishment. Photo by Maria Janowiak.

Additional Resources: Gardening for...

Pollinators: The best way to support pollinators is to provide a variety of sources of pollen and nectar throughout the growing season. This includes selecting flowers with a variety of shapes, as different types of pollinators are attracted to different floral shapes.

- Attracting Beneficial Insects with Native Flowering Plants (Michigan State University Extension)
- Pollinator Conservation Resources for Great Lakes Region (Xerces Society)
- Important Plants for Pollinators (Prairie Nursery)
- Seven Pollinator-Friendly Practices (Prairie Nursery)

Monarchs: Monarch caterpillars feed only on milkweed plants, while adults feed on a variety of nectar plants. Thus, it is important to provide these plants in order to support all stages of the monarch lifecycle.

- Gardening for Monarchs (Monarch Joint Venture)
- Smart Gardening to Support Monarchs (Michigan State University Extension)



A very hungry monarch caterpillar on a milkweed plant. Photo from USDA Forest Service.

Birds: There are a great many birds out there, and each species has its own plant preferences. For example, different bird species may rely on seeds, nectar, or insects as their primary food source. Include a variety of plants in your garden to improve overall bird diversity, and research your favorite bird species to determine what you can plant in your garden to improve its habitat specifically.

- 10 Plants for a Bird-Friendly Yard (Audubon)
- Michigan Native Plants for Bird-Friendly Landscapes (Michigan Audubon)

Wildlife: All wildlife, including the ones above, need the same four things to survive: food, water, cover, and safe places to raise their young. You can make improvements to your garden to ensure that it offers all of these things, such as by providing a source of water if there is not a natural source nearby.

- Garden for Wildlife (National Wildlife Federation)
- Backyard Management (Michigan Department of Natural Resources)

Deer Resistant Species: Many gardeners enjoy wildlife— until critters start eating their plants! In areas where deer are a known issue, planting species that are less palatable can often be easier than trying to deter deer with fences, repellents, or other devices.

- Deer-resistant Plants for Landowners (Michigan State University Extension) - includes some natives
- Deer-Resistant Plants for Mid-Michigan (Wild Ones Red Cedar Chapter)

