

# A HOMEOWNERS GUIDE TO NATIVE SHORELINE GARDENS



Lake Comus 2003



Williams Bay 2004



## A Homeowners Guide to Native Shoreline Gardens

Owning lakefront property can be one of the most rewarding experiences in a person's life. It can also be one of the most frustrating experiences. There are many issues related to owning lakefront property that even experienced homeowners do not know how to deal with. Some of these problems; erosion of the shoreline, loss of leisure time because of lawn maintenance, or having 25 Canada Geese take up residence on your shoreline making it unusable, are all common complaints. There is, however, a very easy and fairly inexpensive answer that will help solve all of problems mentioned above. A **shoreline garden**, filled with native grasses, wildflowers, trees and shrubs will help protect your shoreline from erosion, take less time and money for maintenance, protect the lake from contaminated storm water runoff and deter Canada Geese! Since most lakeshore landowners are extremely interested in protecting the water quality of their lake and their property value, a shoreline garden can be a small investment with a big payoff. As you begin planning your native shoreline garden, you may wish to consider enhancing the benefits of your shoreline garden by extending it out into the shallow water area. Native near-shore aquatic plants, will help protect your shoreline by dissipating wave energy, stabilize sediments and create important wildlife habitat.

Many people ask why we always suggest native plants for a shoreline garden. There are actually several reasons. Native plants evolved in Wisconsin and therefore are more likely to survive the extreme weather conditions in Wisconsin. The extensive root system of native plants will strengthen and stabilize your soil, which will help protect it from erosion. Native plants also provide important food and habitat for birds, amphibians and insects.

**Please be aware that any work below the ordinary high water mark, such as erosion control measures and planting native aquatics, require a permit from the Wisconsin Department of Natural Resources. In addition, every county in Wisconsin has adopted and enforces shoreland zoning ordinances for the protection of our waterbodies. These ordinances include (but are not limited to) controls on any vegetation trimming, killing or removal, land disturbance, standards that regulate setbacks for structures from waterways, and wetland protection. Before starting any project, please contact your county zoning department and the Wisconsin Department of Natural Resources (DNR) to find out if you will need a permit.** For more information about the WI DNR regulations please consult the DNR website at <http://dnr.wi.gov/permits/water/>. For additional information about Walworth County Shoreland Zoning regulations, Land Disturbance and Erosion Control please contact the Walworth County Land Use and Resource Management Department at 262- 741-4972 or see our website at <http://www.co.walworth.wi.us/>.



City of Delavan Arboretum  
2001 Before Native Shoreline Garden Planted



City of Delavan Arboretum  
2003 After Native Shoreline Garden Installed

## Planning A Native Shoreline Garden

### Creating A Plan

1. To create a plan for a native shoreline garden start with a base plan of the property. You can either draw your own or you can use a copy of the plot plan that you received when you purchased your home.
2. Items you will need to create your base site plan:  
A. Completed plot plan      **OR**      a sheet of graph paper  
B. Engineer's Scale    c. Pencil with HB lead    D. Eraser      F. 100 foot tape measure

#### **IF YOU START WITH A PLOT PLAN**

Plot plans are usually small drawings drawn to scale. You should find this scale on the drawing [1"=20'] means that 1inch on the paper is actually 20 feet in real life.

To use this for your base plan you will need to enlarge it while retaining a known scale. Here is what you need to do.

Take the original to a photocopy store.

1. Make a photocopy of the original.
2. On the copy (to not mark on the original), draw a dark 1 inch long line in the center using an engineer's scale. If the original scale was 1 in. = 20ft., label your line 20ft.
3. Ask the store to make you an enlarged copy that will fit on a 24in x 36in sheet of paper. Make sure they know that it must be to scale. A scale of 1 in. = 10ft is usually the best.
4. Check the scale of the enlarged drawing by measuring the line that you drew in the middle of the smaller copy. Even though the 1in line you drew on the smaller copy will be longer on the enlarged copy, the proportions should still be the same. Using the side of the engineer's scale that matches the scale you requested, measure the line. If the original (smaller) drawing had a scale of 1 in = 20ft, the 1in. line you drew represented 20ft. If you asked for the enlargement to be at a 1 in = 10ft scale, the line you drew should now measure 2 inches.

5. Go to step 3 on IF YOU START FROM SCRATCH

#### **IF YOU START FROM SCRATCH**

Use a large sheet of graph paper – ¼ inch (in) grid works nicely and will allow you to draw with one of several scales (1in = 4 ft, 1in = 8 ft, 1in = 16 ft etc). You will need to measure the size of the site you will be drawing in order to determine which scale will work the best for the size paper you have.

1. Once you have the outside dimensions of your site, draw them to scale on your graph paper.
2. Measuring at right angles from property lines, measure all structures on site. Draw these structures on the graph paper.
3. Measuring at right angles from the corner of a structure, measure landscape features (trees, shrubs). Draw these features on the graph paper.
4. Your Base Plan is now complete. Make 2-3 copies so that you can plan your buffer without marking on the original.
5. Draw in the rough outline of your buffer area on the copy. Note approximate size.
6. Make notes of different soil, moisture and light areas – give approximate sizes – this information will be used later to determine the number of plants you need to obtain.

**Note:** See Vegetation Removal Conservation Checklist, which can be found on the Walworth County Website, to learn what must be included on a conservation plan when a Walworth County permit is required. For additional questions please contact your Walworth County Zoning Officer at (262) 741-4972.

## Selecting Native Plants for Native Shoreline Garden

Before you can select the plants for your native shoreline garden, you need to take a close look at site conditions such as soil, sun exposure, and soil moisture. You may also need to take into consideration any areas with wind and wave extremes. It is very possible that you will find several different types of conditions within your planting area, these are called microclimates. While there are some native plants that will grow well under a wide range of conditions, many plants have more specific requirements.

### **Soil Texture**

Soil texture refers to the size of the soil particles. It is very rare to find a soil composed of a single soil texture. The four basic classifications are sands, silts, clays and loams, although there is a wide range of each type with varying proportions of each component. The soil texture will affect the movement of water and air, root penetration, and workability of the soil. Different plants, native and nonnative will grow best in the soil texture they are adapted to so it is important to know what soil texture you will be planting in.

**Sandy Soils:** Sandy soils have the largest particle sizes. Generally, they drain readily, are low in nutrients, more acidic than loams and clays and easy to work. Sandy soils will feel gritty and will fall apart when formed into a ball.

**Clay Soils:** Clay consists of very small, tightly packed soil particles, which feel sticky and plastic-like when wet. Slow to drain, clay soils have a high water holding capacity, however when they do dry, clay soils can be extremely hard. They are rich in nutrients and can be very productive. Clay soils can be formed into a ribbon if wet, the longer the ribbon the more clay content.

**Silt Soils:** Silt soil particles are intermediate in size between clay and sand and feels silky when wet. It has average nutrients and drainage ability. Silty soils will not form a ribbon when wet and have a floury appearance when dry.

**Loamy Soils:** Loams are considered the best soils because they are composed of a mix of sand, silt and clay. They combine to give the best of fertility and moisture-holding capacity with good drainage. Easier to work than clay and better consolidated than sands, loamy soils make an excellent growing medium. Loam will feel somewhat gritty. It will hold its shape if formed into a ball when wet but breaks apart easily.

If you have doubts about your soil type you may wish to have the soil tested. *Soil testing is highly recommended to assess the soil pH, fertility, organic material as well as soil type.* For assistance with obtaining a soil test contact your County Extension office <http://www.uwex.edu/>, County Conservation office, <http://www.co.walworth.wi.us/> or the state lab, <http://uwlab.soils.wisc.edu/>.

### **Soil Moisture**

Once you have determined your soil type, you should have an idea of the moisture conditions on your planting site. However, you will also need to consider if you have areas that pool water during the year or areas that tend to be very dry. When choosing plants from the native plant lists you will need to match your conditions with plant moisture preferences.

**Wet-Wet Mesic** – these soils have a generous amount of water in the subsoil throughout the growing season. They may have periods of standing water in the spring or fall.

**Mesic soils** include well-drained loams and clays. These soils may have standing water for short periods after a hard rain.

**Dry- Dry Mesic** - soils include sandy and gravelly soils that drain readily and never have standing water, even after a heavy rain.

### **Light Exposure**

**Full Sun** = at least 8 hours of sun per day

**Part sun** = at least 4 hours of sun per day

**Full Shade** = no direct sun

**Note:** Afternoon sun is more intense than morning sun so if a plant prefers shade, it may do well with some morning sun but afternoon sun will probably kill it.

Once you have determined site conditions of your planting area you can begin choosing native plants. If there are undeveloped sites around your lake, you may also wish to identify the natives that are growing there. Try to find areas that have similar conditions to those on your shoreline. As you are observing what native plants are growing, take note of whether they are growing in large groupings or more spaced out? This information will help you space the same type of plants in your own buffer.

When looking at the list of native plants in this publication, start by considering plants that are listed for moisture preferences and light exposure that match your site conditions.

Plant Type	Genus and species	Common Name	<i>Moisture Regime</i>	<i>Exposure</i>	Blooming Period	Mature Plant Height
Sedge	Carex comosa	Bottlebrush sedge	WM,W	Full sun - Part sun	May - July	1-2 ft
Forb	Echinacea pallida * R	Purple coneflower *	M	Full sun	June - July	2-3 ft
Grass	Panicum virgatum	Switchgrass	D,DM,M,WM	Full sun - Part sun	Summer - early fall	4-6 ft

Once you have found plants on the native plant list that match the site conditions of your site, look in a plant identification guide, nursery catalog, or the Wisconsin State Herbarium website at <http://www.botany.wisc.edu/herbarium/> to find out what each plant looks like. You will want to consider the mature height, when it blooms, and if it has any poisonous parts (important for children and animals). Please note that some native plants can be quite aggressive and should be planted with other aggressive plants so that they do not become a nuisance and take over the entire area.

### Plants vs. Seeds

Seeding is not recommended for areas less than 15 feet from the water due to erosion associated with open soil. Seeds are certainly more economical, especially for very large sites. Plant plugs will have a higher initial cost than seeds, however, using plant plugs will allow you to see results the first season. If you plant seeds you should expect to wait at least 3-4 seasons before your planting will start looking good. In addition, when you seed an area, the mulch layer must be light enough so you can see the soil, otherwise the seeds will not germinate. The light layer of mulch does not give adequate protection against weeds or drying of the soil, so expect to spend a lot more time watering and weeding. When you use plants for your native garden, a 2-3 inch layer of mulch will provide good moisture and weed protection from the start. Certainly, seeding can be successful, it is the method used by farmers when they retire a field and plant a prairie restoration. Just be advised that a seeded buffer will take a good deal more time and effort. If the area is very large, and therefore the cost of plants quite high, consider breaking the buffer into sections. You can plant a section each year and spread the cost over several years.

If you decide to use seed, be sure that you purchase only Pure Live Seed (PLS) from a reputable dealer. **Do not** purchase any of the boxed wildflower mixes sold at many retail stores. These “mixes” can be full of non-native invasive species. Whether you buy seeds or plants, **ALWAYS** use the scientific name, not the common name. You will find that common plant names can be the same for entirely different plants so in order to be sure that you get the native plant you want always use the scientific name.

### Where to buy

There are several native plant sources which are listed in the Wisconsin Native Plant Sources by Gretchen Messer, University of Wisconsin-Extension <http://clean-water.uwex.edu/>.

Many of the sources in this publication are close enough for a visit. You can also call and request a catalog from many of the companies listed. In order to obtain species that are truly native to the area it is best to always order by the scientific name and to purchase plants from nurseries within a 200 mile range of your site.

### How Many Plants Do I Need?

In order to determine how many plants you will need to purchase, use the following plant density worksheet, which was taken from the U.S. Department of Agriculture Natural Resources Conservation Service shoreland restoration standards. The woodland has a nearly complete canopy of trees while the barrens/prairie and wetland are more open. Plant numbers are to be calculated based on the area in square feet to be reestablished and the appropriate density. The area to be reestablished should be calculated for each layer.

## Conservation Plan Assistance Plant Calculation Worksheets for Calculating Plant and Seed Needs

In the Wisconsin Biology Technical Note 1: Shoreland Habitat, you will find two pages used for calculating plant and seed requirements. Make copies of those pages and using this example, fill out those sheets. Submit those calculations with the conservation plan. NOTE: Keep copies for your reference.

### Worksheet 1: Area Calculations

	Woodland		Wetland or Barrens/Dry Prairie/Wet Prairie	
Layer	Minimum Number of Species	Density	Minimum Number of Species	Density
Trees	2	0.5 –5 per 100sq. ft.	0	0-0.2 per 100 sq. ft.
Shrubs	3	1-4 per 100 sq. ft. If clumped, maintain min. 2 foot spacing	2	0.2-0.5 per 100 sq ft. If clumped, maintain min. 2 foot spacing
Herbaceous Cover <sup>1</sup>				
Plant Plugs	3	25-75 plants per 100 sq. ft.	5	50-100 plants per 100 sq. ft.

### Worksheet 1: Area Calculations

	Total Area of Shoreland Habitat (Square Ft) length x width of shoreyard		Total Area of Viewing/Access Corridor View Corridor can be 30% of shoreline length – max 40 ft  Note – The altered area = 8 ft		Total Area of Existing Layer to Preserve as is and/or Natural Recovery Zone In this example – only 8 ft total was being altered – The rest is left “as is” 35 ft – 8 ft = 27 ft		Total Area to be Planted
Tree Layer	80 ft x 35 ft = 2800 sq ft	-	24 ft x 8 ft = 192 sq ft	-	27 ft x 80 = 2160 sq ft	=	448 Sq Ft
Shrub Layer	80 ft x 35 ft = 2800 sq ft	-	24 ft x 8 ft = 192 sq ft	-	27 ft x 80 = 2160 sq	=	448 Sq Ft
Herbaceous Layer-Plants	80 ft x 35 ft = 2800 sq ft	-	24 ft x 8 ft = 192 sq ft	-	27 ft x 80 = 2160 sq	=	448 Sq Ft

### Worksheet 2: Plant Densities

	Total Area To Be Planted From worksheet 1		Density Factor From Table 1, (page 4)		Plant Densities from Table 1 (page 4)		Total Plants
Tree Layer	448 Sq Ft	÷	100	x	0 - 0.2	=	0 - 1
Shrub Layer	448 Sq Ft	÷	100	x	0.2 – 0.5	=	1 - 2
Herbaceous Layer- Plants	448 Sq Ft	÷	100	x	50 – 100 plants per 100 sq. ft.	=	224 - 448

<https://efotg.sc.egov.usda.gov/treemenuFS.aspx> or <https://efotg.sc.egov.usda.gov/references/public/WI/Biology-TN-1.pdf>

## Preparation Schedule for Walworth County

The following planting dates are provided by U.S. Department of Agriculture Natural Resources Conservation Service. They are approximate dates, which can be affected year to year by weather and soil conditions.

### Approximate Planting Dates

**Plant plugs:** May 1 – Oct 1

Planting will be most successful earlier in year. Later plantings may require more frequent watering because of increased temperatures and decreased rainfall. Very late plantings may succumb to early frost or freeze/thaw problems

**Bare-root Trees and Shrubs:** Any time soil is not frozen and before leaf-out, or after leaves fall. Evergreens are not inclined toward problems associated with late planting. However, deciduous trees and shrubs establish best if planted in spring

**Potted Trees and Shrubs:** Spring thaw – October 1

**Seeded Herbaceous Covers:** Spring May 1 – June 30 <sup>1</sup>

Table 2 Preparation Table		
Site Preparation (eliminate existing vegetation)	Black Plastic	2 - 3 months
	Herbicide	3 weeks
Order Plants	Winter/early spring before planting	
Gather Supplies	2 weeks before planting	
Receive Plant Plugs	Day of planting	

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<sup>1</sup> Spring seeding tends to favor native warm-season grasses over forbs unless forb seed has already been stratified (stratification is the process of placing seeds in moist sand at 32 – 41 for one to four months. Seeding is not recommended for areas less than 15ft up from the lake shore due to erosion associated with open soil. Fall seeding is not recommended for lakeshore buffers due to the erosion associated with open soil.

## Site Preparation

**Before you begin** this phase of the project, make sure that you will be able to obtain the plants you desire in a timely manner (refer to the Preparation Schedule) and that you have received any required permits (State and/or County)

Site preparation is one of the most important steps in establishing a successful shoreline buffer. If you do not eliminate all the existing lawn grasses and weeds before you plant your native plants, you will spend unending hours trying to pull them later. Some invasive weeds are very difficult to eradicate. Reed canary grass, Purple loosestrife, Crown vetch and Common buckthorn may take an entire season to eliminate. Additional information and recommendations for control of invasive plants can be found at <http://dnr.wi.gov/topic/invasives/Control.html>

Luckily, eliminating lawn grasses and common weeds is not as difficult or time consuming. There are several methods to choose from, each with its own positive and negative aspects.

### Herbicides

Using herbicides is a fast and cost-effective method to kill weeds. However, it is important to know and understand herbicide use and the associated laws. For instance, when using any herbicide the law requires that label directions are followed exactly. Roundup is a commonly used herbicide. It is non-selective, which means it will kill any actively growing plant that it comes in contact with. There are also herbicides that are selective, for example, those that target broadleaf plants. When considering herbicides it is important to do your homework and use the best chemical for the job. You will also need to be very careful if you apply Roundup or any other herbicide so that it does not end up in the lake, either by direct spray or by wind drift. If you feel that the herbicide may come in contact with the water, contact the Department of Natural Resources Aquatic Plant Coordinator to discuss the use of Rodeo. Rodeo has the same active ingredient as Roundup, but it is nontoxic to fish. ***Before using any herbicide that will, (or may) contact water, you must apply for and receive a permit from the WI-DNR.***

Timing of herbicide application is extremely important. Do not apply when rain is forecast within the next 24 hours. Do not apply on windy days, since vegetation you wish to preserve may be damaged by herbicide drift. Plants must be actively growing for the Roundup and other glyphosate herbicides to be effective. To encourage growth, mow grass and allow it to grow several inches before application. The dead plant material should be left in place to prevent erosion.

### Black Plastic

If the area is not too big, and you are willing and able to take the extra time, smothering weeds and grass with a layer of black plastic is a good alternative to using herbicides. Black plastic spread over vegetation eliminates light and creates heat that kills existing plants and seeds. First, prepare the site by mowing, weed whacking or trimming vegetation to be removed. If the soil is dry, water thoroughly. This will increase the weed killing effectiveness. After the site is prepared, lay down black plastic (3.5mil or thicker). Overlap the plastic at least 6 inches if using more than one piece. Staple in place at one-foot intervals with 4in or longer, 11 gauge or heavier u-shaped metal staples. Place heavy objects (tires, bricks, logs, boards etc) over the plastic. All seams and edges must be firmly anchored to exclude light. Leave the plastic in place for 4-6 weeks during spring and summer. Make sure that there is no sign of living vegetation before removing it. Remove plastic, but leave dead vegetation in place.

### Mulches

After the existing lawn grasses and weeds have been killed either with black plastic or herbicides, you will want to put down a fairly thick layer of mulch (2-3 inches). Mulch will help hold in moisture while slowing down weed growth. Make sure that the mulch does not contain any weed seeds. Shredded hardwood or weed free straw are good mulch materials to use. *Do not use* hay or marsh hay since they will contain weed seed.

### Soil Amendments

The addition of fertilizer, black dirt, or peat moss is not needed for a lakeshore buffer planting. In fact, these soil amendments will have several negative affects. Additional, unneeded fertilizer will cause excess weed growth in your buffer and in the lake.

## *Live Plug Planting Techniques*

1. **Before your plants arrive make sure that you have completed your site preparation.**
2. **Be ready to water.** Watering plant plugs is critical to their success. Be ready with a sprinkler before you begin to plant. Water seedlings immediately after they are planted.
3. **Plan to place live plants in ground soon after you receive them.** If you must keep them a few days before planting, keep them in an area with partial sun such as on the east side of a building or under a deciduous tree. Do not leave them in a dark area for long periods; this will weaken plants. Water to keep packs moist once or twice a day depending on the wind and temperature
4. **Plant in the cool hours of the day.** Your plants will have a greater survival rate if planted on a cool day or during the morning or evening hours.
5. **Plan your planting scheme.** Spacing of 12-18” between plants is recommended. For a more natural look, plant species in groups of 3-5. Lay plants out where you plan to plant but do not remove plugs from containers until ready to actually put in hole.
6. **Dig holes for your plants.** Move mulch aside before digging hole. Make sure the holes for the plants penetrate the dead grass and are deep enough to accommodate the root mass. A bulb planter or “bulb planter auger drill bit” for planting works well.
7. **As you are ready to plant each plug** – carefully remove the plug from the container by turning the plant upside down in your hand and gently squeezing the container until the root mass comes out. Gently tease the root tips away from the root mass to encourage good root growth. Place the plant in the hole. Replace soil, tamp down gently, and replace mulch being careful to keep mulch ½” away from stem of plant.
8. **Water.** Don’t forget this important step to give your plants a good start! Plan to water daily for the first two months. See the Long Term Care and Maintenance section to learn more about weeding.



**Terrace Park During Planting  
Delavan, WI. 2001**

## Maintenance of Native Shoreline Gardens

**Proper site maintenance during the first two years is one of the most important steps for a successful shoreline garden!** Regular maintenance during the first few years after planting will give native plants a competitive advantage over weeds. After they are established, the large plants will be able to out-compete most weeds. After the buffer is effectively established, less maintenance will be required.

### First Season

#### **Watering:**

Plantings need supplemental watering the first year of establishment because their root systems are small and unable to reach the moisture and nutrients they require. For the first year, the plantings will need approximately 1 inch of water per week. As the surface soil dries, roots begin to reach deep to find required moisture. A thick layer of mulch will help to hold the moisture in the soil for a longer period.

Do not water frequently in small amounts, as this will cause the roots to stay near the surface. Watering in the early mornings is best. If it does not rain put a sprinkler out for an hour or two to soak the ground well. It may only be necessary to water 1 to 2 times per week. Be sure to water cautiously to avoid erosion on steep slopes.

#### **Weeding:**

Diligent weeding throughout the first season is important to give your plantings the best competitive edge. Keep a careful eye on invasive species such as Buckthorn, Honeysuckle, Reed Canary Grass, and Purple Loosestrife. Pull them when they are small because they are extremely difficult to eradicate once they become established. Look for weeds every 2-3 weeks and hand pull any weeds you may find. Mulching between plants also helps to inhibit weed growth. Only pull plants you can identify. Try labeling the plants with plant markers. This will help you distinguish between the desired plants and a weed.

If Buckthorn/Ash/Honeysuckle or any other aggressive tree/shrub species are removed through cutting, you will need to keep a careful eye out for any newly emerging/fast growing shoots. The stumps should be treated with an herbicide at the time of removal. However, these species are extremely difficult to effectively kill upon initial treatment and may need to be marked with a stake or flag (for identification and location purposes), cut back, and then retreated with an appropriate herbicide.

#### **Fall Care:**

Standing dried vegetation should be left in place, rather than cut and raked. This acts as a buffer to protect the lake from blowing leaves. The standing dried vegetation also provides interest in the winter landscape, as colorful grasses and seed heads peek out of the snow, and provide food and cover for many different birds and mammals.

#### **Fertilizing:**

*Native plantings should not be fertilized.* Fertilization actually encourages weeds. Native plants have evolved in our native soils and are generally able to find the nutrients they require without supplemental fertilization. In fact, native plants actually look better without fertilizing. Fertilization can cause the root systems to stay shallow and the tops to become floppy. Additionally, fertilizers can end up washing into the lake and encourage algae/aquatic plant blooms.

#### **Problems with plant Survival:**

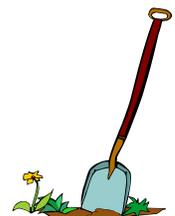
On very disturbed or eroded sites, the soil may have been altered to such an extent that it is no longer conducive to plant growth. In these cases, fertilization may be necessary. If this is the case, carefully and conservatively apply a No-Phosphorus fertilizer such as Safe-Green. In addition, some of the installed plants may die due to weather related problems. If this occurs, you will need to replace them. When selecting plants for replacement, look to the plants that are doing well in the buffer area and to other native plants that are growing in nearby areas with similar soil, sun and moisture conditions to those conditions on the spot you are to plant.

### Second Season:

During the second season, the overall maintenance tasks begin to ease

#### **Watering:**

Watering is necessary only during long dry periods. If some plants continually seem to be struggling, reevaluate the plant species chosen for that particular spot. It may be necessary to replant those spots with species that are better accustomed to the specific limiting conditions. Careful initial plant selection should prevent this problem.



**Spring Care:** Springtime is the best time to tend your shoreline garden. Start by cutting back the dried vegetation from the previous year's growth to within 1-2 inches of the ground. This will bring a neat appearance to the planting, but can be skipped if that is not a concern. You can leave the clippings in place as mulch, remove them or use them for compost. Additional mulch may be added if necessary.

**Weeding:**

Springtime is the best time to do a thorough weeding. Weeds are young and the ground is usually quite soft, making the task much easier. This again will give native plants a competitive edge over invading weeds. Be careful to thoroughly remove the entire root system of invading weeds. Also, be especially aware of new tree/shrub seedlings that you may want to leave in place. Scout for weeds once every 3-4 weeks and again hand pull only the species that you can identify as weeds.

You really must become familiar with both the plants that were planted and the invaders in order to know which plants to pull. Other desirable native species may naturally come into your garden on their own, and some study may be required to become familiar with the new, desirable plants.

**Fall Care:**

Standing dried vegetation should be left in place throughout the fall, winter and early spring until spring maintenance is conducted.

**Long Term Maintenance (3 years and beyond)**

Both upland and lakefront plantings are continually susceptible to invasion by non-native plants. As with any garden, controlling this problem is necessary in order to achieve a beautiful and diverse planting.

**Spring Care:**

Begin each season by cutting dried vegetation and conduct a thorough weeding. Add mulch if needed.

**Weeding:** Walk through your plantings once per month after spring cleanup to scout for and pull weeds and invading species.

**Watering:** Generally, no watering should be necessary after the second season of growth except for times of drought.

**Fall Care:** Leave dried vegetation standing in the fall.

Wisconsin Native Plants

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Fern	<i>Adiantum pedatum</i>	Maidenhair fern	M,WM	Full shade	NA	1-1/2 ft
Forb	<i>Agastache foeniculum</i>	Lavender hyssop	M	Full- Part	June-Sept	2-4 Ft
Forb	<i>Allium cernuum R</i>	Nodding wild onion	M	Full sun - Part sun	July - Aug	1-2 ft
Legume/ Shrub	<i>Amorpha canescens</i>	Leadplant	D,DM,M	Full sun - Part sun	June - July	20-40 in
Grass	<i>Andropogon gerardii</i>	Big bluestem**	D,DM,M	Full sun - Part sun	Summer	3-8 ft
Forb	<i>Anemone canadensis</i>	Canada anemone	M,WM	Full sun - Part sun	May - July	1-2 ft
Forb	<i>Anemone patens</i>	Pasque flower	D,DM	Full- Part	April-May	< 1 Ft
Forb	<i>Angelica atropurpurea</i>	Angelica	M,WM,W	Full sun - Part sun	July - October	4-7 ft
Forb	<i>Aquilegia canadensis</i>	Columbine	D,DM,M,WM	Full sun-Full shade	May-July	2-3 ft
Forb	<i>Arisaema triphyllum</i>	Jack-in-the-pulpet	M,WM,W	Part sun-Full shade	April-June	0.5-3 ft
Forb	<i>Arnoglossum plantagineum</i>	Sweet Indian Plantain	WM	Full sun	July-Sept	2-5 ft
Forb	<i>Artemisia ludoviciana</i>	Prairie Sage	D,DM,M	Full - Part	Aug-Sept	2-4 Ft
Forb	<i>Asarum canadense</i>	Wild ginger	M,WM	Part sun-Full shade	May-June	0.5 ft
Forb	<i>Asclepias purpurascens</i>	Purple Milkweed	M	Full	June-July	2-3 Ft
Forb	<i>Asclepias hirtella</i>	Tall Green Milkweed	D,DM	Full	June - Aug	1-3 Ft
Forb	<i>Asclepias incarnata</i>	Marsh milkweed	M,WM,M	Full sun	June - Aug	2-4 ft
Forb	<i>Asclepias sullivantii</i>	Prairie milkweed	M	Full sun	June - Aug	2-6 ft
Forb	<i>Asclepias syriaca</i>	Silk (common) milkweed	D,DM,M,WM	Full - Part	June - Aug	3-4 ft
Forb	<i>Asclepias tuberosa</i>	Butterfly milkweed	D,DM,M	Full sun - Part sun	June - August	2-5 ft
Forb	<i>Asclepias verticillata</i>	Whorled milkweed	D,DM,M	Full sun - Part sun	July-Sept	1-2 ft
Forb	<i>Aster drummondii</i>	Drummond's Aster	M	Full - Part	Sept - Oct	2-4 Ft
Forb	<i>Aster ericoides</i>	Heath aster	D,DM,M	Full sun - Part sun	August - October	1-3 ft
Forb	<i>Aster laevis</i>	Smooth aster	DM,M	Full sun - Part sun	August - October	1-3 ft
Forb	<i>Aster lanceolatus (simplex)</i>	Panicled aster	M,WM,W	Full sun	August-October	2-4 ft
Forb	<i>Aster linariifolius</i>	Stiff Aster	D,DM	Full - Part	Sept - Oct	1-2 ft
Forb	<i>Aster novae-angliae</i>	New England aster**	M,WM	Full sun - Part sun	August - October	3-7 ft
Forb	<i>Aster oolentangiensis</i>	Sky-blue aster	D,DM,M	Full sun - Part sun	Aug - Oct	1-2 ft

Wisconsin Native Plants

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Forb	<i>Aster pilosus</i>	Frost Aster	M	Full	Aug - Oct	2-4 Ft
Forb	<i>Aster sericeus</i>	Silky Aster	D,DM,M	Full sun-Part sun	Sept-Oct	2-4 ft
Forb	<i>Aster shortii</i>	Short's Aster	D,DM,M	Part sun - Shade	Sept-Oct	2-4ft
Legume	<i>Astragalus canadensis</i>	Canada milk vetch	M	Full sun - Part sun	June-Aug	1-4 ft
Forb	<i>Baptisia bracteata</i>	Cream False Indigo	D,DM,M	Full sun - Shade	May - June	1-3 ft
Forb	<i>Bidens cernuus</i>	Nodding beggartick	W	Full sun	August - October	3-5ft
Forb	<i>Blephilia ciliata</i>	Downy Woodmint	D,DM,M	Full sun - Part sun	June - July	1-2 ft
Sedge	<i>Bolboscheoenus fluviatilis</i>	River bulrush	W	Full sun - Part sun	May - September	4-7 ft
Grass	<i>Bouteloua curtipendula</i>	Side-oats grama	D,DM	Full sun	Summer	3 ft
Grass	<i>Bouteloua hirsuta R</i>	Hairy grama	D,DM	Full sun	Midsummer - fall	3 ft
Grass	<i>Calamagrostis canadensis</i>	Bluejoint grass	WM,W	Full sun	May - August	3-5 ft
Forb	<i>Campanula americana 1</i>	Tall Bellflower	M	Part Sun - Shade	July - October	3-6 ft
Forb	<i>Caramine concatenata</i>	Cut-leaved Toothwort	M,WM	Part Sun- Shade	April - May	1 ft
Sedge	<i>Carex bebbi</i>	Bebb's Sedge	WM,W	Full sun		1 ft
Sedge	<i>Carex comosa</i>	Bristly sedge	WM,W	Full sun - Part sun	May - July	1-2 ft
Sedge	<i>Carex hystricina</i>	Porcupine sedge	W	Full sun		1-3 ft
Sedge	<i>Carex Pensylvanica</i>	Common Oak Sedge	D,DM,M	Full sun - Part sun		1-2 ft
Sedge	<i>Carex spengeii</i>	Woodland sedge	WM			
Sedge	<i>Carex stipata</i>	Common Fox Sedge	WM	Full sun		2-3 ft
Sedge	<i>Carex stricta</i>	Tussock sedge	WM,W	Full sun		2-3 ft
Sedge	<i>Carex vulpinoidea</i>	Brown Fox sedge	WM,W	Full sun	May - July	1-3 ft
Forb	<i>Cassia hebecarpa</i>	Wild Senna	M	Full - Part	July - August	3-6 ft
Forb	<i>Castilleja coccinea</i>	Indian Paintbrush	M	Full- Part	April - Sept	1-2 Ft
Forb	<i>Chamaecrista fasciculata</i>	Partidge Pea	D,DM,M	Full- Part	June - Sept	1-3 Ft
Forb	<i>Chelone glabra</i>	Turtlehead	WM,W	Full	July - Sept	1-3 Ft
Forb	<i>Coreopsis lanceolata</i>	Lance-leaf coreopsis	D,DM,M	Full sun	June-July	2 ft
Forb	<i>Coreopsis palmata</i>	Prairie tickseed	D,DM,M	Full sun - Part sun	June - August	1-3 ft
Forb	<i>Coreopsis tripteris</i>	Tall Coreopsis	M	Full - Part	July - October	3-6 Ft
Legume	<i>Dalea purpurea</i>	Purple prairie clover	D,DM,M	Full sun	July - August	1-2 ft
Legume	<i>Desmodium canadense</i>	Showy tick-trefoil	M,WM	Full sun	July - August	3-6 ft

Wisconsin Native Plants

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Legume	<i>Desmodium illinoense</i>	Illinois tick trefoil	DM,M	Full sun	July-Aug	3-6 ft
Forb	<i>Dodecatheon meadia</i>	Shootingstar	DM,M	Full sun - Part sun	May - June	10-24 in
Forb	<i>Echinacea pallida</i>	Pale Purple coneflower	M	Full sun	June - July	2-3 ft
Grass	<i>Elymus canadensis</i>	Canada wild rye	DM,M,WM	Full sun - Part sun	Late spring - early fall	3-5 ft
Grass	<i>Elymus hystrix</i>	Bottlebrush grass	M	Full - Part	June - Aug	3-5 ft
Grass	<i>Elymus villosus</i>	Silky Wild Rye	D,DM,M	Full sun - Part sun		
Grass	<i>Elymus virginicus</i>	Virginia wild rye	WM,W	Full sun	June - October	2-4 ft
Forb	<i>Epilobium angustifolium</i>	Fireweed	D,DM,M	Full - Part	July - August	1-3 Ft
Forb	<i>Eryngium yuccifolium</i> R	Rattlesnake master	DM,M	Full sun	June - August	1 1/2-4 ft
Forb	<i>Eupatorium maculatum</i>	Spotted Joe-pye weed	W	Full sun	Aug - Sept	3-10 ft
Forb	<i>Eupatorium perfoliatum</i>	Boneset	W	Full sun	Aug - Sept	2-5 ft
Forb	<i>Eupatorium purpureum</i>	Purple Joe-Pyeweed	M	Part sun- Shade	Aug-Sept	4-6ft
Forb	<i>Euthamia graminifolia</i>	Grass-leaved goldenrod	D,DM	Full - Part	Aug-Oct	1-3 Ft
Forb	<i>Gentiana andrewsii</i>	Bottle gentian	M	Full sun - Part sun	Aug - Oct	1-2 ft
Forb	<i>Gentiana flavida</i>	Cream Gentian	M	Full sun - Part sun	August - September	1-2 Ft
Forb	<i>Gentianella quinquefolia</i>	Stiff gentian	DM	Full sun - Part sun	Aug-Oct	2-30 in
Forb	<i>Geranium maculatum</i>	Wild Geranium	DM,M,WM	Part sun - Full shade	April, May, June	1-2 ft
Forb	<i>Geum triflorum</i>	Prairie smoke	D,DM	Full sun - Part sun	April-June	6-16 in
Grass	<i>Glyceria canadensis</i>	Rattlesnake mana grass	WM,W	Full sun - Part sun		3-4 ft
Grass	<i>Glyceria grandis</i>	American manna grass	W	Full sun		3-5 ft
Forb	<i>Helenium autumnale</i>	Sneezeweed**	WM,W	Full sun-Part sun	Aug-Oct	2-5 ft
Forb	<i>Helianthus divaricatus</i>	Woodland sunflower	M	Full - Part	July - Sept	3-5 ft
Forb	<i>Helianthus grosseserratus</i>	Sawtooth Sunflower**	M	Full- Part	Aug-Sept	4-12 ft
Forb	<i>Helianthus occidentalis</i>	Western sunflower	D,DM,M	Full sun - Part sun	July-Sept	1-3 ft
Forb	<i>Helianthus pauciflorus</i>	Prairie sunflower	D,DM,M	Full sun - Part sun	July - August	2-6 ft
Forb	<i>Helianthus strumosus</i>	Pale-leaved Sunflower	M	Full - Part	July-Oct	2-5 ft
Forb	<i>Heuchera richardsonii</i>	Prairie alum-root	DM,M	Full sun - Part sun	June-July	2-3 ft

Wisconsin Native Plants

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Grass	<i>Hierochloa odorata</i>	Sweet Grass	WM, W	Full sun - Part sun		1-2 ft
Forb	<i>Hypericum pyramidatum</i>	Great St. John's wort	M, WM	Full - Part	July - August	4-6 ft
Forb	<i>Iris versicolor</i>	Blue Flag Iris *	W	Full sun - Part sun	May - July	2-3 ft
Forb	<i>Iris virginica shrevei</i>	Wild Iris	M, WM, W	Full sun - Part sun	May - July	2-3 ft
Rush	<i>Juncus torreyi Coville</i>	Torrey's rush	WM, W	Full sun		18-48 in
Grass	<i>Koeleria macrantha</i>	June grass	D, DM, M	Full sun	Midspring - midsummer	2 ft
Forb	<i>Kuhnia eupatorioides</i>	False boneset	D, DM	Full sun-Part sun	August - September	1-4 ft
Legume	<i>Lespedeza capitata</i>	Round-headed bush-clover	DM, M	Full sun - Part sun	August - September	2-5 ft
Forb	<i>Liatris aspera</i>	Rough blazing star	D, DM, M	Full sun - Part sun	August - September	6-30 in
Forb	<i>Liatris cylindracea</i>	Cylindrical blazing star	D, DM	Full sun - Part sun	Aug-Sept	8-24 in
Forb	<i>Liatris ligulistylis</i>	Northern Plains Blazing star	M, WM	Full - Part	Aug-Sept	2-4 ft
Forb	<i>Liatris pycnostachya</i>	Prairie blazing star	DM, M, WM	Full sun - Part sun	July-Aug	1-4 ft
Forb	<i>Liatris spicata</i>	Marsh Blazing Star	WM, W	Full sun	Aug-Sept	3-6 ft
Forb	<i>Lilium michiganense</i>	Turk's cap lily	M	Full sun - Part sun	July-Aug	3-7 ft
Forb	<i>Lilium philadelphicum</i>	Orange cup lily	M	Full sun - Part sun	June-july	1-3 ft
Forb	<i>Lobelia cardinalis</i>	Cardinal flower	WM, W	Full sun - Part sun	July - September	2-5 ft
Forb	<i>Lobelia siphilitica</i>	Great blue lobelia	W	Full sun - Part sun	July-Sept	1-3 ft
Forb	<i>Lupinus perennis</i>	Wild Lupine	D	Full sun	May-June	1-2 ft
Forb	<i>Lycopus americanus</i>	Water Horehound	WM, W	Full	July - Sept	1-2 ft
Forb	<i>Maianthemum racemosum</i>	False Solomon's Seal	D, DM, M	Full- Part	April - June	1-3 ft
Forb	<i>Mertensia virginica</i>	Vierginia bluebells	M, WM	Part sun - Full shade	April, May	0.8-2 ft
Forb	<i>Mimulus ringens</i>	Monkey Flower	Wm, W	Full - Part	June - Sept	1-3 ft
Forb	<i>Mirabilis nyctaginea</i>	Wild Four O'clock	D, DM	Full	June - Sept	1-3 ft
Forb	<i>Monarda fistulosa</i>	Bergamot**	DM, M, WM	Full sun - Part sun	July - September	2-3 ft
Forb	<i>Monarda punctata</i>	Dotted Horsemint	DM	Full sun - Part sun	July-Sept	1-3 ft
Forb	<i>Napaea dioica</i>	Glade Mallow	M	Full - Part	June August	5-8 ft
Forb	<i>Oenothera biennis</i>	Evening primrose	D, DM, M	Full sun - Part sun	August - September	1-5 ft

Wisconsin Native Plants

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Fern	<i>Onoclea senibilis</i>	Sensitive fern	M, WM, W	Full sun - Part sun	NA	1-2 ft
Fern	<i>Osmunda cinnamomea</i>	Cinnamon fern	WM, W	Part sun - Full shade	NA	2-4 ft
Fern	<i>Osmunda claytoniana</i>	Interrupted fern	M, WM, W	Part sun - Full shade	NA	3-4 ft
Grass	<i>Panicum virgatum</i>	Switchgrass	D, DM, M, WM	Full sun - Part sun	Summer - early fall	4-6 ft
Forb	<i>Parthenium integrifolium</i>	Wild quinine	M	Full sun	June - September	1 1/2-3 ft
Forb	<i>Pedicularis canadensis</i>	Wood betony	DM	Full sun - Part sun	April-May	5-14 in
Forb	<i>Penstemon grandiflorus</i>	Large-flowered beardtongue	D, DM	Full- Part	May-June	2 - 4 ft
Forb	<i>Phlox pilosa</i> <b>2</b>	Prairie phlox	DM, M	Full sun - Part sun	May-June	1-2 ft
Forb	<i>Physostegia virginiana</i>	Obedient Plant	WM, W	Full sun-Part sun	Aug-Oct	2-3 ft
Forb	<i>Polemonium reptans</i>	Jacob's ladder	DM, M, WM	Full shade	April, May, June	1 ft
Forb	<i>Polygonatum biflorum</i>	Solomon's seal	DM, M, WM	Part sun - Full shade	May, June	1-3 ft
Forb	<i>Potentilla arguta</i>	Prairie cinquefoil	D, DM, M	Full sun - Part sun	June-Sept	5-12 in
Forb	<i>Prenanthes alba</i>	Lion's foot	D, DM, M	Part Sun - Shade	Aug-Oct	2-5 ft
Forb	<i>Pulsatilla patens</i>	Pasque flower	D, DM		April-May	6-16 in
Forb	<i>Pycnanthemum virginianum</i>	Mountain mint**	DM, M, WM	Full sun - Part sun	June-Sept	1-2 1/2 ft
Forb	<i>Ratibida pinnata</i>	Yellow cone flower	D, DM, M, WM	Full sun	July - September	3-5 ft
Shrub	<i>Rosa blanda</i>	Smooth Rose	D, DM, M	Full- Part	June - July	1-3 ft
Shrub	<i>Rosa carolina</i>	Carolina Rose	D, DM, M	Full - Part	June - Aug	1-3 ft
Forb	<i>Rudbeckia hirta</i>	Black-eyed Susan	D, DM, M, WM	Full sun - Part sun	July - September	1-3 ft
Forb	<i>Rudbeckia subtomentosa</i> R	Sweet black-eyed Susan	M	Full sun - Part sun	June-Oct	3-4 ft
Forb	<i>Rudbeckia triloba</i>	Sweet Brown-eyed Susan **	M, WM	Full sun-Part sun	July-Oct	4-6 ft
Forb	<i>Ruellia humilis</i>	Wild Petunia	D, DM, M	Full sun	June-Aug	1-2 ft
Grass	<i>Schizachyrium scoparium</i>	Little bluestem	D, DM, M	Full sun	Midsummer - fall	2-4 ft
Sedge	<i>Schoenoplectus acutus</i>	Hardstem Bulrush	W	Full sun - Part sun	May-Sept	4-7 ft
Sedge	<i>Schoenoplectus tabernaemontani</i>	Soft-stem bulrush	W	Full sun		4-7 ft
Rush	<i>Scirpus atrovirens</i>	Green bullrush	WM, W	Full sun		3-5 ft
Rush	<i>Scirpus cyperinus</i>	Woolgrass	WM, W	Full sun		4-6 ft
Forb	<i>Silene stellata</i>	Starry Campion	DM, M, WM	Full sun	Aug-Sept	1-2 ft

Wisconsin Native Plants

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Forb	<i>Silphium integrifolium</i> Michx. 3	Rosinweed	DM, M	Full sun	July - September	2-6 ft
Forb	<i>Silphium laciniatum</i>	Compass plant	DM, M	Full sun - Part sun	June - September	4-10 ft
Forb	<i>Silphium perfoliatum</i>	Cupplant	M, WM, W	Full sun - Part sun	July - September	4-8 ft
Forb	<i>Silphium terebinthinaceum</i>	Prairie dock	M, WM	Full sun - Part sun	July-Sept	4-10 ft
Forb	<i>Sisyrinchium angustifolium</i>	Narrow-leaved Blue-eyed Grass	D, DM, M	Full - Part	May - June	< 1 ft
Forb	<i>Sisyrinchium campestre</i>	Prairie Blue-eyed grass	D, DM, M	Full sun - Part sun	May-June	less than 1 ft
Forb	<i>Solidago flexicaulis</i>	Zig-zag Goldenrod	DM, M, WM	Full sun-Part sun	Aug-Oct	2-4 ft
Forb	<i>Solidago nemoralis</i>	Old-field goldenrod	D, DM, M	Full sun - Part sun	Aug-Oct	6-36 in
Forb	<i>Solidago ohioensis</i>	Ohio Goldenrod	DM, M, WM	Full sun	July-Sept	3-2 ft
Forb	<i>Solidago riddellii</i>	Riddell's Goldenrod	WM, W	Full sun	Aug-Oct	1-4 ft
Forb	<i>Solidago rigida</i>	Stiff goldenrod	D, DM, M	Full sun - Part sun	August - October	1-5 ft
Forb	<i>Solidago speciosa</i>	Showy goldenrod	DM, M	Full sun - Part sun	July - October	2- 6 ft
Grass	<i>Sorghastrum nutans</i>	Indian grass	D, DM, M, WM	Full sun - Part sun	Midsummer - early fall	3-6 ft
Grass	<i>Spartina pectinata</i>	Prairie cordgrass	M, WM, W	Full sun	Midsummer - early fall	10 ft
Grass	<i>Sporobolus cryptandrus</i>	Sand dropseed	D, DM	Full sun	August - October	3 ft
Grass	<i>Sporobolus heterolepis</i>	Prairie dropseed	D, DM, M	Full sun - Part sun	Midsummer - early fall	2 1/2 ft
Forb	<i>Tephrosia virginiana</i>	Goat's rue	DM	Full sun - Part sun	June-July	1-2 ft
Forb	<i>Teucrium canadense</i>	Germander	M	Full - Part	July - September	1-3 ft
Forb	<i>Thalictrum dasycarpum</i>	Purple meadow-rue	M, WM, W	Full sun - Part sun	June-July	3-6 ft
Forb	<i>Tradescantia ohioensis</i>	Spiderwort	D, DM, M	Full sun - Part sun	May - June	8-36 in
Forb	<i>Verbena hastata</i>	Blue vervain	W	Full sun - Part sun	July-Sept	2-6 ft
Forb	<i>Verbena stricta</i>	Hoary vervain	D	Full sun - Part sun	June-Sept	2-6 ft
Forb	<i>Vernonia fasciculata</i>	Ironweed	WM	Full sun	July-Sept	2-6 ft
Forb	<i>Veronicastrum virginicum</i>	Culver's root	M, WM, W	Full sun - Part sun	June-Aug	2-7 ft
Forb	<i>Viola pedata</i> 4	Bird's foot violet	D, DM	Full sun - Part sun	April-June	4-10 in
Forb	<i>Viola pedatifida</i> 4	Prairie Violet	D, DM, M	Full sun - Part sun	April-June	4-10 in

Wisconsin Native Plants

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Forb	<i>Zizia aptera</i>	Heart-leaved golden Alexander	M	Full sun - Part sun	May-June	1-3 ft
Forb	<i>Zizia aurea</i>	Golden Alexander	M, WM	Full sun - Part sun	May-June	1-3 ft

**Caution:** When ordering please make sure that you are ordering the correct plant, by scientific name and that you receive what you ordered. Some genus have species or variations that are exotic species which may be either prohibited or restricted in Wisconsin (NR 40). Other plants have prohibited or restricted look-a-likes  
Examples:

1. *Campanula americana* - Native ----- *Campanula rapunculoides* - Restricted Invasive Species
2. *Phlox pilosa* - Native ----- *Hesperis matronalis* - Restricted Invasive look-a-like species
3. *Silphium integrifolium Michx.* - Native ---- *Silphium integrifolium Michx. var. integrifolium* - Exotic species
4. *Viola pedata* & *Viola pedatifida* - Native ---- *Viola odorata* - Exotic Invasive Species

**NOTES:**

**This list is not exhaustive. For additional ideas request a catalog from a Wisconsin Native Plant Nursery.**

1. **Moisture Regime: D = Dry, DM = Dry-Mesic, M = Mesic, WM = Wet-Mesic, W = Wet**

**Dry - Dry Mesic** soils include sandy and gravelly soils that drain readily and never have standing water even after a heavy rain

**Mesic** soils include well drained loams and clays. These soils may have standing water for short periods after a hard rain

**Wet - Wet Mesic** soils have a generous amount of water in the subsoil throughout the growing season.

They may have periods of standing water in spring and fall. These may include clay, clay/loams and and peat soils

2. **Exposure** - Full Sun = 8 hours of sun per day, Part Sun = 4 hours of sun per day, Shade = No direct sun

3. **See Wisconsin Native plant Sources** for nurseries that grow nearest you.  
<http://clean-water.uwex.edu/pubs/pdf/home.lonative.pdf>

4. **For a healthy, diverse and interesting planting** choose a minimum of (3) grass species and a minimum of (5) Forb (wildflower) species.

5. **For best results** carefully follow directions for site preparation and site maintenance.

7. **For best results** include native trees and shrubs on your site.

8. **Most of the plants** listed are native to Walworth County per WI State Herbarium. \* = plants native to Wisconsin but not considered native to Walworth County. However, these plants have been used extensively throughout the state for prairie and shoreland restoration

9. \*\* = **These plants can be aggressive** and should be planted with other aggressive species so that they do not take over your planting

**Wisconsin Native Trees and Shrubs**

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Balsam fir	<i>Abies balsamea</i>	w,m,m	Full sun - Full Shade	40 - 75	Fragrant Evergreen	Grouse, deer, moose, porcupine, game birds, mice
Red Maple	<i>Acer rubrum</i>	w,w,m,m	Full sun - Part sun	40 - 60	Fast growing	Game birds, squirrel, chipmunk, beaver, deer, bear
Silver Maple	<i>Acer saccharinum</i>	w,w,m	Full sun - Part sun	75 - 100	Fast growing, weak wood, shallow roots	Songbirds, deer, racoon, waterfowl, squirrel
Speckled alder	<i>Alnus incana</i>	w,w,m	Full sun - Part sun	15 - 30	Soil stabilizer, neutral to acid conditions, fixes nitrogen	Rabbit, moose, muskrat, grouse, beaver
Serviceberry	<i>Amelanchier arborea</i>	w,m,m,d,m,d	Full sun - Full Shade	20 - 30	White flowers - April - May An excellent landscape tree	Game birds, grouse, skunk, fox, racoon
Smooth juneberry	<i>Amelanchier laevis</i>	w,m,m,d,m,d	Full sun - Full Shade	20 - 30	White flowers - May Orange fall color Excellent landscape plant	Birds, bear, squirrel, chipmunk, deer, moose
Viburnum trilobum	<i>American Highbush cranberry</i>	w,m,m	Full sun - Part sun	10 - 13'	Attractive white flower clusters in May & bright orange fruits in fall	Late winter food for songbirds, pheasant, wild turkey, whitetail deer
Leadplant	<i>Amorpha canescens</i>	m,d,m,d	Full sun	1-3	Blue flowers, May - August; takes 2-3 yrs for transplants to mature; does very well on dry sandy sites	Butterflies and Bees
Indigobush; False indigo	<i>Amorpha fruticosa</i>	w,w,m,m	Full sun - Full Shade	6 - 12	Violet flowers - May - June Best grown in thicket - not very showy	Birds, small mammals
Bog rosemary	<i>Andromeda glaucophylla</i>	w,w,m	Full sun	1 - 1.5	Pinkish flowers - May - June Broadleaf evergreen, found in Bogs	Birds, voles
Black chokeberry	<i>Aronia melanocarpa</i>	w,w,m,m,d,m,d	Full sun - Full Shade	3 - 6	**White flowers - May; Red fall color; Colonial, may be aggressive	Game birds, grouse, deer, bear, songbirds, rabbit

Wisconsin Native Trees and Shrubs

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Yellow birch	<i>Betula alleghaniensis</i>	w,wm,m	Full sun - Part sun	60 - 80	Useful in large spaces	Game birds, moose,deer,beaver, squirrel
River birch	<i>Betula nigra</i>	w, wm,m,dm,d	Full sun	50 - 70	Golden-yellow fall color, Bronze exfoliating bark	Songbirds,moose, hare
Paper birch	<i>Betula papyrifera</i>	wm,m,dm,d	Full sun - Part sun	40	Yellow fall color, Prefers cool soil, shallow roots	Songbirds,moose, hare
Bog birch	<i>Betula pumila</i>	w - wm	Full sun - Part sun	6	Acid conditions, found in bogs	Songbirds,moose,hare, porcupine
American hornbeam	<i>Carpinus caroliniana</i>	wm,m,dm,d	Full sun - Full Shade	20 - 30	Yellow, red, orange fall color Beautiful	Game birds, deer,rabbit,squirrel
Shagbark hickory	<i>Carya ovata</i>	wm,m	Full sun-part sun	60 - 100'	May live to be 200-300 years old	Nuts for wide variety of wildlife
New Jersey tea	<i>Ceanothus americanus</i>	dm - d	Full sun - Part sun	2-3	White flowers - July Taprooted, do not try to transplant; fragrant	Butterflies,hummingbird,turkey,rabbit,deer
American bittersweet (See Note 4)	<i>Celastrus scandens</i>	wm,m,dm,d	Full sun - Part sun	20 +	Orange red fruits in fall poisonous vine	Songbirds,gamebirds, rabbit,squirrel
Hackberry	<i>Celtis occidentalis</i>	wm,m,dm,d	Full sun - Part sun	60 - 100	Yellow fall color; corky bark Edible fruits; a medium to fast growing, long-lived tree	Game birds, squirrel,racoon, songbirds,deer
Buttonbush	<i>Cephalanthus occidentalis</i>	w,wm	Full sun - Part sun	6 - 12	White flowers - August Withstands seasonal inundation	Hummingbirds,deer, duck,birds,beaver

Wisconsin Native Trees and Shrubs

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Eastern redbud	<i>Ceris canadensis</i>	wm, m, dm	Full sun - Part sun	30'	Magenta-pink to lavender flowers in spring before leaves emerge	Butterflies & hummingbirds enjoy the nectar
Leather-leaf	<i>Chamaedaphne calyculata</i>	w,wm	Full sun	1 - 4	White flowers - April - June Acidic soil; broadleaf evergreen, pond margins; forms thickets	Grouse,hare,deer, moose,moths
Silky dogwood	<i>Cornus amomum</i>	w,wm,m,dm,d	Full sun - Part sun	6 - 12	Yellow-white flowers - June Not showy; use in mass plantings	Songbirds,deer,bear, skunk,squirrel,mice
Bunchberry	<i>Cornus canadensis</i>	w,wm,m,dm,d	Full sun - Full Shade	0.2 - 0.6	White flowers - May - July;red berries; acidic soils; attractive low ground cover	Songbirds,gamebirds
Red-osier dogwood	<i>Cornus sericea (stolonifera)</i>	w,wm,m,dm,d	Full sun - Full Shade	6 - 12	**White flowers-May - June;red twigs - winter Can be aggressive	Songbirds,gamebirds, deer,beaver,rabbit
American hazelnut	<i>Corylus americana</i>	wm,m,dm,d	Part sun-Full shade	8 - 15	**Yellow fall color;edible nuts Can form dense thickets; soil stablizer	Chipmunk,squirrel,jays, grouse,racoon
American witch hazel	<i>Hamamelis virginiana</i>	wm, m, dm	Full sun - Full Shade	15-20	Fragrant spidery 1" flowers late Sept - Nov.	Deer do not show interest in this tree
Shubby St.John's Wort	<i>Hypericum prolificum</i>	wm, m, dm	Full sun-part sun	2-4'	Yellow blooms for 2 months	Attracts bees
Winterberry	<i>Ilex verticillata</i>	w,wm,m,dm,d	Part sun - Full Shade	3 - 12	Red berries-fall & winter; Yellow fall color; Acidic soil	Birds,deer,squirrel,bear,m ice,racoon
Common juniper	<i>Juniperus communis</i>	dm - d	Full sun	1.5 - 6	Evergreen;great on hot, dry slopes	Game birds,deer,moose, songbirds

Wisconsin Native Trees and Shrubs

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Tamarack	<i>Larix laricina</i>	w,wm,m	Full sun	40 -80	Yellow fall color;Neutral to acid conditions;deciduous;needle-leaved tree	Grouse,deer,porcupine, hare,squirrel,grouse
Labrador Tea	<i>Ledum groenlandicum</i>	w,wm	Full sun-Part sun	1-4	May-June;Acidic conditions;broadleaf evergreen	Deer, moose, game birds
Spicebush	<i>Lindera benzoin</i>	wm, m, dm	Part sun - Full Shade	5 - 10	Long lived, nicely shaped shrub	Over 20 species of birds, deer, rabbits, racoons eat leaves & fruit
Ironwood	<i>Ostrya virginiana</i>	wm,m,dm,d	Part sun	35 - 60	color;dry leaves persist in winter;common understory tree	Grouse,deer,rabbit, game birds,squirrel
Common ninebark	<i>Physocarpus opulifolius</i>	dm - d	Full sun	5 - 10	spreading shrub with stiffly arched branches	Ruffed grouse, songbirds, nesting birds, small mammals
White spruce	<i>Picea glauca</i>	wm - m	Full sun	40 - 75	Evergreen; Pyramidal habit	Squirrel,songbirds, deer,chipmunk
Black spruce	<i>Picea mariana</i>	w,wm	Full sun - Full Shade	30 - 70	Evergreen;grows in sphagnum bogs;acidic soils	Squirrel,porcupine, chipmunk,deer, songbirds
Red pine	<i>Pinus resinosa</i>	wm,m,dm,d	Full sun - Part sun	120	Evergreen;fast-growing	Squirrel,porcupine, chipmunk,deer, songbirds
White pine	<i>Pinus strobus</i>	wm,m,dm,d	Full sun - Part sun	210	Evergreen;Fast-growing	Squirrel,gamebirds, chipmunk,deer, songbirds
American Sycamore	<i>Plantanus occidentalis</i>	wm,m,dm,d	Full sun - Part sun	75-90'	Rapid growth, tolerates wet & compacted soils	Seeds eaten by wildlife; hollows of old trees nesting sites for birds & animals
Wild plum	<i>Prunus americana</i>	dm,d	Full sun	10 - 15	Fragrant spring bloom; forms a tall thicket;excellent	Songbirds,deer, chipmunk,bees,small mammals

Wisconsin Native Trees and Shrubs

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Pin cherry	<i>Prunus pensylvanica</i>	wm,m,dm,d	Full sun - Part sun	10 - 30	White flowers-May; Yellow-red fall color;colonial; beautiful winter silhouette;fruit used in jellies	Deer,rabbit,moose, bear,chipmunk
Black cherry	<i>Prunus serotina</i>	wm,m,dm,d	Full sun - Full Shade	75	White flowers-May; Yellow-red fall color;edible fruits	Raccoon,songbirds, gamebirds,hare,mice
Chokecherry	<i>Prunus virginiana</i>	wm,m,dm,d	Full sun - Full Shade	30	White flowers - May; red fall color; edible fruits; fragrant flowers	Squirrel,songbirds, skunk
White oak	<i>Quercus alba</i>	wm,m,dm,d	Full sun - Full Shade	60 - 80	Purplish-red fall color; prized hardwood	Porcupine,raccoon, gamebirds
Swamp white oak	<i>Quercus bicolor</i>	w,w,m,m	Full sun - Part sun	75 - 100	Poor fall color, easily transplanted	Wood duck, songbirds,squirrel, deer
Northern pin oak	<i>Quercus ellipsoidalis</i>	wm,m,dm,d	Full sun - Part sun	50 - 75	Holds leaves in winter; excellent for dry sandy sites	Songbirds,fox,bear, rabbit,hare
Bur oak	<i>Quercus macrocarpa</i>	wm,m,dm,d	Full sun	70 - 80	Corky bark; yellow-brown fall color; this majestic native tree should be planted more often	Chipmunk,moths,mice, beaver,gopher
Red oak	<i>Quercus rubra</i>	wm,m,dm,d	Full sun - Part sun	150	Red-brown fall color, fast-growing susceptible to oak wilt	Waterfowl, turkey, muskrat
Black currant	<i>Ribes americanum</i>	wm,m	Full sun	4	Yellow or white flowers- April-June; Not prickly;do not plant near white pine	

Wisconsin Native Trees and Shrubs

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Common blackberry	<i>Rubus allegheniensis</i>	wm,m,dm,d	Full sun - Part sun	1.5-7	May-June;edible fruits;plant in out of the way places	Bear,deer,rabbit,game birds, turtles,songbirds,fox
Black raspberry (Black-cap)	<i>Rubus occidentalis</i>	wm,m	Full sun-Part sun	6	White flowers, May-June;edible fruits;plant in out of the way places	Bear,deer,rabbit,game birds,songbirds,fox
Pussy willow	<i>Salix discolor</i>	w,wm	Full sun	15 - 20	**Pussy willow branches in spring;Bank soil stabilizer; many different types - Check scientific name!	Deer, rabbit, grouse, moose, beaver, birds
Sandbar willow	<i>Salix exigua</i>	w,wm	Full sun	4.5 - 9	**Narrow leaves, deep green;Spreads by rhizomes;easily transplanted - Check scientific name!	Muskrat, porcupine, beaver, deer squirrel
Prairie willow	<i>Salix humilis</i>	w,wm,m,dm,d	Full sun - Part sun	3 - 9	**Dull yellow fall color;Suitable for wide range of habitats; Check Scientific name!	Muskrat, porcupine, beaver, game birds
Black willow	<i>Salix nigra</i>	w,wm	Full sun-Part sun	35 - 50	types-Check Scientific name! Yellow fall color;Thrives in wet lakeshore soils.	Game birds, squirrel, birds, rabbit
Common elderberry	<i>Sambucus canadensis</i>	w,wm,m,dm	Full sun - Full Shade	3 - 12	White fragrant flowers-June-July;dark berry clustes, spreads by rhizomes;easy to transplant;edible fruit	Song birds, game birds, deer, mice, insects, chipmunk

Wisconsin Native Trees and Shrubs

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Red-berried elder	<i>Sambucus pubens</i>	wm - m	Part sun - Full Shade	8 - 10	White flowers - May - June; red fruits-summer; flowers and ripe fruit edible; all other parts poisonous	Song birds, game birds, insects, rabbit, squirrel, moose
Meadowsweet	<i>Spiraea alba</i>	w,wm	Full sun - Part sun	2 - 5	White flowers-July-Sept; Orange fall color; fragrant; use to prevent erosion at waters edge	Deer, song birds, butterflies, moth, insects
Steeplebush	<i>Spiraea tomentosa var. rosea</i>	w - wm	Full sun - Part sun	4	Pink flowers - July; fragrant; use to prevent erosion at waters edge	Song birds, game birds, waterfowl, small mammals
Snowberry	<i>Symphoricarpos albus</i>	dm - d	Part sun - Full Shade	3 - 6	Pink flowers; white fruit-Sept-Nov; forms extensive colonies	Song birds, upland game birds, small/large mammals
Northern white cedar (Eastern arbutus)	<i>Thuja occidentalis</i>	w,wm,m	Full sun - Part sun	40 - 60	Evergreen; fibrous exfoliating bark; great screening tree	Deer, moose, rabbit, red squirrel, song birds
Basswood	<i>Tilia americana</i>	wm,m	Full sun - Part sun	60 - 100	Fragrant flowers-June; yellow fall color; rapid growing shade tree	Bees, squirrel, chipmunk, deer, mice
Hemlock	<i>Tsuga canadensis</i>	wm,m	Full sun - Full Shade	75	Evergreen, pendulous branches; acidic soils; shallow-rooted; requires cool soils	Song birds, deer, squirrel, chipmunk, moose
Blueberry	<i>Vaccinium augustifolium</i>	wm,m,dm,d	Full sun - Part sun	0.5 - 2	Cream flowers-June; Orange-red fall color; edible fruit in late summer; nice landscape shrub	Bear, muskrat, skunk, deer, game birds, song birds, fox

## Wisconsin Native Trees and Shrubs

Common Name	Scientific Name	Moisture Preferences	Light Exposure	Mature Height (feet)	Notes	Wildlife
Canada Blueberry	<i>Vaccinium myrtilloides</i>	m, dm, d	Full sun - Part sun	0.3 - 3	Prefers acidic soil, begins fruiting in third year	Deer, rabbit, upland game birds, song birds, mammals
Nannyberry	<i>Viburnum lentago</i>	wm, m	Full sun - Full Shade	15 - 35	Black fruit; purple-red fall color; many attributes; edible fruit	Song birds, game birds, small mammals, beaver
High-bush cranberry	<i>Viburnum opulus</i>	w, wm, m	Full sun - Part sun	6 - 16	red fruit holds through winter; fruit can be made into jelly	Birds, mammals, grouse, pheasant
Downy arrowwood	<i>Viburnum rafinesquianum</i>	wm, m, dm, d	Full sun - Full Shade	3 - 6	Maroon-purple fall color; many attributes	Grouse, songbirds, chipmunk, bear, fox, insects

**Notes:**

1. Moisture Preferences: w = wet, wm = wet-mesic, m = mesic, dm = dry mesic, d = dry
2. Exposure: Full Sun = at least 8 hours per day, Part-Sun = at least 4 hours per day, Shade = no direct sun
3. Always order by scientific name.
4. Caution: American bittersweet (*Celastrus scandens*) is a great native; **Oriental bittersweet (*Celastrus orbiculatus*) is an invasive species that has been restricted in Wisconsin (NR40) and therefore is illegal to plant.**

## Native Aquatic Vegetation

Native lakeshore buffers are quickly becoming an accepted method to control erosion on the shoreline and prevent sediments and contaminants from entering the lake. These native plantings along the shoreline also provide important wildlife habitat, create privacy screening and discourage Canada Geese from your shoreyard.

The addition of near-shore native aquatic plants to create an aquatic buffer zone will also provide many benefits. Naïve aquatic vegetation will not only protect your shoreline from erosion by dissipating waves, they also help stabilize sediments, and provide essential food and habitat for fish, insects and waterfowl.



Derek Anderson

### **Common Arrowhead (*Sagittaria latifolia*) and Stiff Arrowhead (*S. rigide*)**

Also known as duck potato. Arrowhead grows in water depths from very shallow to 3ft. and generally reach a mature height of 2-3ft.

Arrowhead provides shoreline erosion protection and food for waterfowl.

### **Pickerelweed (*Pontederia cordata*)**

Grows in water depths from a few inches to 3ft; tolerates a variety of sediments but rich mud sediments are best. Pickerelweed is a source of food for waterfowl, insects and muskrats and is important habitat for fish. Can be aggressive.



Michael Clayton

### **Hardstem bulrush (*Schoenoplectus acutus*)**

Grows in water up to 7 ft deep; prefers firm substrate with good water movement in the root zone. It is a food source for waterfowl, marsh birds and muskrats and it provides habitat for young fish and invertebrates. Grows 3-10 ft tall

### **Softstem bulrush (*Schoenoplectus tabernaemontani*)**

Grows in water up to 6 ft deep; prefers soft substrates; does not withstand heavy wave action. Provides food for waterfowl, marsh birds, upland birds. Provides habitat for fish and invertebrates and nesting material for waterfowl and marsh birds. Mature height up to 10ft.



Robert W Freckmann

### **Three-square bulrush (*Schoenoplectus pungens*)**

Grows in water up to 3ft deep. Provides food and cover for waterfowl. Mature height 2-9 ft. **River Bulrush (*Bolboschoenus fluviatilis*)** tolerates part shade, grows 2-6 ft.



Kenneth Sytsma

### **Blue Flag Iris (*Iris virginica shrevei*)**

Can be found on wetlands, lake and stream edges. Provides food for waterfowl and other wildlife. Exhibits showy 2 ½ - 3" lavender - blue flowers from May to July.

### **Common Bur-reed (*Sparganium eurycarpum*)**

Can grow on moist shorelines and in water up to 3ft. deep. Provides food for waterfowl and deer. Provides habitat and nesting sites for waterfowl and shorebirds. This is an aggressive plant and plantings should be monitored.



Robert W. Freckmann

A permit is required from the WI DNR before planting any (including native) aquatic plants in any water of the state. WI State Statute 23.24 prohibits introducing any nonnative aquatic plant into waters of the State. Penalties range from \$389.50 to \$2,643.00. Chapter NR 40 also prohibits or restricts many aquatic invasive species. For more information please see <http://www.dnr.state.wi.us/>



# Native Garden Resources

## *Plant Identification and Photos*

<http://botany.wisc.edu/herbarium/>

Vascular Plants of Wisconsin is produced by the Herbarium, Department of Botany, UW-Madison. This probably is the best and most complete site for Wisconsin plants. Searches can be easily done by scientific name. The results give a detailed description and most have a photo and distribution map. Also available is a link to "Key to the Conifers of WI" and "WI State Herbarium Projects".

<http://plants.usda.gov>

This covers plants found throughout the United States. You are able to search by common or scientific name. The search produces photos, life history and range maps. Another feature lists literature references specific to the plant. This site is sponsored by the USDA-Natural Resources Conservation Service.

<http://dnr.wi.gov/education/educatorresources/treeid.html>

Also provides a simple key for easy identification. Search produces photos of the fruit, leaves and bark as well as life information. The Wisconsin Department of Natural Resources developed the site.

<http://www.sustland.umn.edu/>

Sustainable urban Landscape Information Series – Shoreland Design. Teaches basic landscape design techniques. Explains how to create a design, choose plants, install & maintain a native shoreland garden.

**Wildflowers and Weeds**, by Booth Courtenay and James Zimmerman, paperback

**Plants of the Chicago Region**, by Floyd Wink and Gerould Wilhelm.

**Field Guide to Wildflowers of Northeastern and North-Central North America**, by Roger Peterson

**Audubon Society Field Guide to North American Wildflowers; Eastern Region**, by William A. Niering, Alfred A. Knopf, Soft Cover

**Newcomb's Wildflower Guide**, by Lawrence Newcomb. Little. Paperback

**Field Guide to Trees and Shrubs**, by George A. Petrides. Houghton., paperback

**Field Guide to Ferns**, by Roger Tory Peterson, Paperback

**Wildflower Handbook, 2<sup>nd</sup> ed.** National Wildflower Research Center staff

**Wildflower Meadow Book**, by Laura C. Martin. 2<sup>nd</sup> ed. East Woods Press

## Landscaping with Natives

<http://www.nwf.org/backyardwildlifehabitat/>

National Wildlife Federation site. Describes how to develop a wildlife friendly backyard. It also describes in depth information on attracting: butterflies, bees, hummingbirds, frogs, and beneficial insects.

<http://www.extension.umn.edu/garden/yard-garden/landscaping/native-plants-for-sustainable-landscapes/> Native Plants for Sustainable Landscapes

<https://archive.epa.gov/greenacres/web/html/index.html>

Green Landscaping With Native Plants describes how to turn turf into habitat and offers many tips and reasoning why areas should return to their natural states. There are also photos of restoration successes around the Great Lakes area. This site is provided by the EPA.

**Landscaping for Wildlife**, by C. Henderson, Minnesota Dept of Natural Resources, 1987

**Tallgrass prairie**, by John Madson

**Wildflowers in your Garden; A Gardener's Guide**, by Viki Ferrerria 1993

**Natural Habitat Garden**, by Ken Druse, Clarkson & Potter Inc publisher 1994

**Landscaping with Native Trees**. By Guy Sternberg

**Restoring the Tallgrass Prairie**, by Shirley Shirley University of Iowa Press 1994

**Prairie Restoration for Beginners**, by R. C. Ahrenhoerster, Prairie Seed Source, PO Box 83, North Lake, WI 53064

## *Sources of Native Plants*

**Links to several great publications including Wisconsin Native Plant Sources**

<http://dnr.wi.gov/files/pdf/pubs/er/er0698.pdf> Native Plant Nurseries in Wisconsin

<http://clean-water.uwex.edu/pubs/pdf/nativeplants.pdf> Wisconsin Native Plant Sources

<http://www.ipaw.org/portals/ipaw/documents/The%20Solution/NativePlantNurseries.pdf>

## *Threatened and Endanger Plants*

<http://dnr.wi.gov/files/pdf/pubs/er/er001.pdf>

Threatened and endangered species of Wisconsin (also known as NHI-National Heritage Inventory) is found on the WIDNR website. A complete list of WI threatened & endangered, vertebrate and invertebrate species can be found by county. There is also a list of special concern, rare, endangered and threatened species and natural communities of Wisconsin available. There is a link to the Fish and Wildlife Service national list of Threatened & Endangered Species.

## ***Poisonous Plants***

<http://wssa.net/wssa/weed/poisonous-plants/> Weed Science Society of America

## **Shoreline Stabilization Resources**

**A Soil Bioengineering Guide for Streambank and Lakeshore Stabilization FS-683 October 2002**  
<http://www.fs.fed.us/publications/soil-bio-guide/> To receive a FREE copy of this publication

**The Landowner's Guide to Controlling Shoreline Erosion**  
<http://www.ljreas.com/>

## **For Assistance and Permits**

**Wisconsin Department of Natural Resources** <http://www.dnr.state.wi.us>

**Wisconsin Association of Lakes (WAL)** [http:// www.wisconsinlakes.org](http://www.wisconsinlakes.org)

**USDA – Natural Resources Conservation Service (Wisconsin)**  
<http://www.nrcs.usda.gov/wps/portal/nrcs/site/wi/home/>

**US Environmental Protection Agency** <http://www.epa.gov>

**Walworth County Home page** <http://www.co.walworth.wi.us/>

**Walworth County Lake Association** <http://www.walworthcountylakes.org>

## **Helpful Resources**

**How to Manage Small Prairie Fires**, by Wayne Pauly. Available at the McHenry County Defenders office, 132 Cass Street, Woodstock.

**Prairie Propagation Handbook**, by Harold W. Rock, Milwaukee County Dept of Parks, Recreation and Culture

**Controlling Deer Damage in Wisconsin** Craven, S. and Hygnstrom, S. (1996) , (G3083) University of Wisconsin-Extension. Madison, WI. [<http://www.uwex.edu/ces/pubs/pfd/G3083.PDF>]

**Lakescaping for Wildlife and Water Quality** Henderson, C., Dindorf, C. and Rozumalski, C. (1998). Minnesota Department of Natural Resources, Section of Wildlife, Nongame Wildlife Program. St. Paul, MN. 176pp

***Shoreland Restoration: A Growing Solution***, (A fifteen-minute video that provides instructions for planting native trees, shrubs and seedlings) To obtain a copy call: 1-800-947-7827. Ask for GWQ032.

***The Living Shore***, (A seventeen-minute video about shoreline buffer zones\_ To obtain a copy call 1-800-876-8630. Ask for VH7129

**Wetland Restoration Handbook for Wisconsin Landowners** by Thompson, A. and Luthin, C. (2000). Wisconsin Department of Natural Resources, Bureau of Integrated Sciences Services. Madison, WI 108 pp.

# Walworth County 2017 Lakeshore Landscaper Services Resource List

## **Agrecol (Envirolok, LLC)**

Evansville, WI [www.agrecol.com](http://www.agrecol.com)  
Charles Graham [Charles.graham@agrecol.com](mailto:Charles.graham@agrecol.com)  
(608) 223-3571

## **Arbor, Earth & Stone LLC**

Waterford, WI [www.arborearthandstone.com](http://www.arborearthandstone.com)  
Jason Dolphin, Kimberly Migazzi [arborearthandstone@gmail.com](mailto:arborearthandstone@gmail.com)  
(262) 514-2039 Fax (262) 514-3449

## **Arbor Images Tree & Shrub Care**

Burlington, WI [www.arborimages.com](http://www.arborimages.com)  
Brian Rainer [arborimagesinc@sbcglobal.net](mailto:arborimagesinc@sbcglobal.net)  
(262) 763-4645

## **Austin Pier Service, Inc.**

Walworth, WI [www.austinpier.com](http://www.austinpier.com)  
Tyler Frederick [tyler@austinpier.com](mailto:tyler@austinpier.com)  
(262) 275-2615 Fax (262) 275-3301

## **B & J Tree & Landscape Service Inc.**

Lake Geneva, WI [www.bandjlandscape.com](http://www.bandjlandscape.com)  
Dale Castleman, Blake Castleman [bj.tree@att.net](mailto:bj.tree@att.net)  
(262) 248-3653 Fax (262) 248-0340

## **Botanica Fine Gardens and Landscapes**

Lake Geneva, WI [www.botanicawisconsin.com](http://www.botanicawisconsin.com)  
Daniel Ward-Packard [botanicamail@gmail.com](mailto:botanicamail@gmail.com)  
(262) 248-7513

## **Breckenridge Landscape (Prairie Tree)**

New Berlin, WI [www.breckenridgeland.com](http://www.breckenridgeland.com)  
Craig Olsen, JoAnn Mack [info@breckenridgeland.com](mailto:info@breckenridgeland.com)  
(262) 364-1719

## **Bigelow Landscapes**

Darien, WI  
Ron Bigelow [Rbigelow@gmail.com](mailto:Rbigelow@gmail.com)  
(262) 949-3325

## **Breezy Hill Nursery**

Salem, WI [www.breezyhillnursery.com](http://www.breezyhillnursery.com)  
Steve Peters [speters@breezyhillnursery.com](mailto:speters@breezyhillnursery.com)  
(262) 620-3345

## **Creative Edge Landscapes**

Twin Lakes, WI [www.creativeedgelandscapes.com](http://www.creativeedgelandscapes.com)  
Robert Livingston, Corinne Livingston  
[contact@creativeedgelandscapes.com](mailto:contact@creativeedgelandscapes.com)  
(262) 877-2805 Fax (262) 877-4074

## **Dresen Landscaping**

Franksville, WI [www.dresenlandscaping.com](http://www.dresenlandscaping.com)  
Jeff Exner [dresenland@yahoo.com](mailto:dresenland@yahoo.com)  
(262) 886-4700 Fax (262) 886-3704

## **Earth Exchange, Inc.**

Burlington, WI [www.earthexchangeinc.com](http://www.earthexchangeinc.com)  
Alison Wagner, Haley Wagner [earthexchange@tds.net](mailto:earthexchange@tds.net)  
(262) 534-4035

## **Evergreen Landscape**

Delavan, WI  
Juan Lopez [evergreendel@sbcglobal.net](mailto:evergreendel@sbcglobal.net)  
(262) 728-7758 Fax (262) 728-4025

## **Flora Favours**

Elkhorn, WI  
Tom Olechowski [flora@elknet.net](mailto:flora@elknet.net)  
(262) 742-3342

## **Formecology, LLC**

Evansville, WI [www.formecology.com](http://www.formecology.com)  
John Gishnock III [john.g@formecology.com](mailto:john.g@formecology.com)  
(608) 882-6656

## **Ground Effects Landscape Management**

Burlington, WI  
Jeff Osmolak [jeff.grndfx@gmail.com](mailto:jeff.grndfx@gmail.com)  
(262) 763-7422

## **JNT Parkside Marina**

Whitewater, WI [www.jntsmarinepros.com](http://www.jntsmarinepros.com)  
Nicole Widner [jntparksidemarina@yahoo.com](mailto:jntparksidemarina@yahoo.com)  
(262) 473-5028 Fax (262) 473-5063

## **Liquid Escapes, LLC**

Eagle, WI  
Jerry Buscher  
(414) 313-5154

## **LJ Reas Environmental Consulting**

Green Lake, WI [www.ljreas.com](http://www.ljreas.com)  
Lisa J. Reas [ljreas@charter.com](mailto:ljreas@charter.com)  
(920) 291-7787

## **M & E Tree Service**

Elkhorn, WI [www.elkhornarborist.com](http://www.elkhornarborist.com)  
Mike Vant [emutree@hotmail.com](mailto:emutree@hotmail.com)  
(262) 215-8749

## **Mariani Landscape**

Lake Bluff, IL [www.marianilandscape.com](http://www.marianilandscape.com)  
Chad Swanson, Ian Bruskev [cswanson@marianilandscape.com](mailto:cswanson@marianilandscape.com)  
(847) 815-1039

## **McCormack + Etten / Architects, LLP**

Lake Geneva, WI [www.mccormacketten.com](http://www.mccormacketten.com)  
(262) 248-8391 Fax (262) 248-8392

## **Midwest Construction Products**

Fox River Grove, IL [www.midwestconstruct.com](http://www.midwestconstruct.com)  
Al Nimmo [al@midwestconstruct.com](mailto:al@midwestconstruct.com)  
(847) 421-7249 or (800) 532-2380 Fax (847) 639-2275

## **MPC Property Management, LLC**

Burlington, WI [www.mpcpm.com](http://www.mpcpm.com)  
Carissa Pezewski [carissa@mpcpm.com](mailto:carissa@mpcpm.com)  
(262) 671-0545 Fax (262) 611-4191

## **Nierman Landscape & Design, Inc.**

Woodstock, IL [www.niermanland.com](http://www.niermanland.com)  
Tom or Jacob [nierman@niermanland.com](mailto:nierman@niermanland.com)  
(815) 337-8873

## **Paragon Design Group, LLC**

Milwaukee, WI [www.paragondg.com](http://www.paragondg.com)  
Brian J. Boeding [brianb@paragondg.com](mailto:brianb@paragondg.com)  
(414) 449-1555

These contractors have attended the 2017 Walworth County Lakeshore Landscaper's training. This list is provided for informational purposes only and does not imply recommendation or endorsement by Walworth County.

# Walworth County 2017 Lakeshore Landscaper Services Resource List

## **Pett Construction, Inc.**

Eagle, WI  
Wayne Pett  
(262) 594-2166

## **Ultimate Excavating, Inc.**

Fort Atkinson, WI [www.ultimateexcavating.com](http://www.ultimateexcavating.com)  
Marc Garlock [mglockz@aol.com](mailto:mglockz@aol.com)  
(920) 650-1135

## **Prairie Rock Landscapes Inc.**

Johnsburg, IL  
Craig Langohr [Prairierock@hotmail.com](mailto:Prairierock@hotmail.com)  
(815) 482-5876

## **Van Zelst Inc**

Wadsworth, IL [www.vanzelst.com](http://www.vanzelst.com)  
David Greibe [dgreibe@vanzelst.com](mailto:dgreibe@vanzelst.com)  
(847) 623-3580

## **R. H. Batterman & Co., Inc.**

Beloit, WI [www.rhbatterman.com](http://www.rhbatterman.com)  
Ryan Rudzinski [rudzinski@rhbatterman.com](mailto:rudzinski@rhbatterman.com)  
Kristen Belongia [kbelongia@rhbatterman.com](mailto:kbelongia@rhbatterman.com)  
(608) 365-4464

## **Wachtel Tree Science**

Merton, WI [www.healthytrees.com](http://www.healthytrees.com)  
Keith Glaznap [kglaznap@wachteltree.com](mailto:kglaznap@wachteltree.com)  
(920) 253-8107

## **Reed's Construction, LLC**

Lake Geneva, WI [www.reedsconstructionllc.com](http://www.reedsconstructionllc.com)  
Jeff Reed [michele@reedsconstructionllc.com](mailto:michele@reedsconstructionllc.com)  
(262) 248-2934 Fax (262) 248-3537

## **Reesman Company, The**

Burlington, WI [www.reesmans.com](http://www.reesmans.com)  
Dave Kmetz, JR Reesman [davek@reesmans.com](mailto:davek@reesmans.com)  
(262) 342-1425

## **Rieck, Renee**

Landscape Designer  
Elkhorn, WI  
(262) 392-1227

## **Scheel & Associates**

Lake Geneva, WI  
Steve Scheel [scheelandassociates@gmail.com](mailto:scheelandassociates@gmail.com)  
(262) 348-1315

## **Stonetree Landscaping**

Woodstock, IL [www.stonetreelandscapes.net](http://www.stonetreelandscapes.net)  
Greg Johnson [stonetreelandscapes@yahoo.com](mailto:stonetreelandscapes@yahoo.com)  
(815) 337-8200

## **Strand Builders, LLC**

Whitewater, WI  
Bob Strand  
(262) 472-9495

## **Sullivan Legal Services**

Palmyra, WI  
Mike Sullivan [mts2jms@att.net](mailto:mts2jms@att.net)  
(414) 702-7762

## **Sunrise Gardens LLC**

Darien, WI [www.sunrisegardensllc.com](http://www.sunrisegardensllc.com)  
Adam Sandberg [adam@sunrisegardensllc.com](mailto:adam@sunrisegardensllc.com)  
(262) 882-0811

## **Thelen Total Construction**

Elkhorn, WI [www.thelenconstruction.com](http://www.thelenconstruction.com)  
Jim Gage [jim@thelentotalconstruction.com](mailto:jim@thelentotalconstruction.com)  
(262) 723-3588

## **TLC Landscaping**

East Troy, WI  
Martin Zacher, Todd Eddy [martin@tlcquality.com](mailto:martin@tlcquality.com)  
(262) 642-4727

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