# A HOMEOWNERS GUIDE TO NATIVE SHORELINE GARDENS









#### 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 contamination 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 call 262-574-2136 or see their website at <a href="http://www.dnr.state.wi.us/">http://www.dnr.state.wi.us/</a>. 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 <a href="http://www.co.walworth.wi.us/">http://www.co.walworth.wi.us/</a>.



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 I

D. Erasei

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  $-\frac{1}{4}$  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 <u>Vegetation Removal Conservation Checklist</u>, 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 it's 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-Mesic**-Dry 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	Genus and species	Common Name	Moisture	Exposure	Blooming Period	Mature Plant
Type			Regime			Height
Sedge	Carex comosa	Bottlebrush sedge		Full sun - Part	May - July	1-2 ft
			WM,W	sun		ļ
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	Summer - early	4-6 ft
				sun	fall	

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 <a href="http://www.botany.wisc.edu/herbarium/">http://www.botany.wisc.edu/herbarium/</a> 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 or 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 <a href="http://clean-water.uwex.edu/">http://clean-water.uwex.edu/</a>.

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.

## **Worksheets for Calculating Plant and Seed Needs**

In the Wisconsin Biology Technical Note: 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

	Table	1. Shoreland Habitat Planting Woodland		· 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. fi

#### **Worksheet 1: Area Calculations**

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

#### **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	Х	0.2 - 0.5	=	1 - 2
Herbaceous Layer- Plants	448 Sq Ft	÷	100	X	50 – 100 plants per 100 sq. ft.	=	224 - 448

http://dnr.wi.gov/org/water/wm/dsfm/shore/documents/NRCSBioTechNote.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	Black Plastic	2 - 3 months				
(eliminate existing vegetation)	Herbicide	3 weeks				
Order Plants	Winter/early spring before planting					
Gather Supplies	2 weeks before planting					
Receive Plant Plugs	Day of planting					

 $<sup>^1</sup>$  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. For a copy of the Wisconsin Manual of Control Recommendations for Ecologically Invasive Plants go to

http://www.dnr.state.wi.us/org/land/er/invasive/manual\_toc.htm, or contact your County Conservation Office.

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 without a doubt the fastest and most cost-effective method. When using any herbicide it is very important to read and follow the directions provided by the manufacturer. Roundup, a chemical, herbicide is non-selective. This means that it will kill any actively growing plant that it comes in contact with. You will need to be very careful when 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 contact water, you must apply for and receive a permit from the WI-DNR.

Timing of herbicide applications 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.

After applying any of these herbicides, wait 14 days for the grass and weeds to die. If there are any green areas after the 14 days, you should spot spray a second application. The dead plant material should be left in place to prevent erosion. Fourteen days after the last herbicide application, you are ready to install your native plants directly through the dead plant material.

#### **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. **Recent study has indicated that mulch from trees and shrubs infected with Verticillium Wilt could cause an infection in your existing trees and shrubs. Even mulch that is several seasons old may still carry this disease. For that reason, we are now suggesting that only mulch that has been heat-treated should be used.** 

#### 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.
- **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
- **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.
- **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 buffer! 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.

#### 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 buffer area. 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, rather then 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.

#### **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.

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Fern	Adiantum pedatum	Maidenhair fern	M,WM	Full shade	NA	1-1/2 ft
Forb	Agastache foeniculum	Lavender hyssop	M	Full- Part	June-Sept	2-4 Ft
_ ,		Nodding wild		Full sun -	- 2 -	1 0 5
Forb	Allium cernuum R Amorpha	onion	М	Part sun Full sun -	July - Aug	1-2 ft
Legume/ Shrub	canescens	Leadplant	D,DM,M	Part sun	June - July	20-40 in
Grass	Andropogon gerardii	Big bluestem**	D,DM,M	Full sun - Part sun	Summer	3-8 ft
Forb	Anemone canadensis	Canada anemone	M,WM	Full sun - Part sun	May - July	1-2 ft
Forb	Anemone patens	Pasque flower	D,DM	Full- Part	April-May	< 1 Ft
Forb	Angelica atropurpurea	Angelica	M,WM,W	Full sun - Part sun	July - October	4-7 ft
	Aquilegia			Full sun-Full		
Forb	canadensis	Columbine	D,DM,M,WM	shade	May-July	2-3 ft
Forb	Arisaema triphyllum	Jack-in-the- pulpet	M,WM,W	Part sun-Full shade	April-June	0.5-3 ft
Forb	Arnoglossum plantagineum	Sweet Indian Plantain	WM	Full sun	July-Sept	2-5 ft
Forb	Artemisia ludoviciana	Prairie Sage	D,DM,M	Full - Part	Aug-Sept	2-4 Ft
Forb	Asarum canadense	Wild ginger	M,WM	Part sun-Full shade	May-June	0.5 ft
Forb	Ascelepias purpurascens	Purple Milkweed	М	Full	June-July	2-3 Ft
Forb	Asclepias hirtella	Tall Green Milkweed	D,DM	Full	June - Aug	1-3 Ft
Forb	Asclepias incarnata	Marsh milkweed	M,WM,M	Full sun	June - Aug	2-4 ft
Forb	Asclepias sullivantii	Prairie milkweed	М	Full sun	June - Aug	2-6 ft
Forb	Asclepias syriaca	Silk (common) milkweed	D,DM,M,WM	Full - Part	June - Aug	3-4 ft
Forb	Asclepias tuberosa	Butterfly milkweed	D,DM,M	Full sun - Part sun	June - August	2-5 ft
Forb	Asclepias verticillata	Whorled milkweed	D,DM,M	Full sun - Part sun	July-Sept	1-2 ft
	Aster					
Forb	drummondii	Drummond's Aster	М	Full - Part	Sept - Oct	2-4 Ft
Forb	Aster ericoides	Heath aster	D,DM,M	Full sun - Part sun	August - October	1-3 ft
Forb	Aster laevis	Smooth aster	DM,M	Full sun - Part sun	August - October	1-3 ft
Forb	Aster lanceolatus (simplex)	Panicled aster	M,WM,W	Full sun	August- October	2-4 ft
Forb	Aster linariifolius	Stiff Aster	D,DM	Full - Part	Sept - Oct	1-2 ft
Forb	Aster novae- angliae	New England aster**	M,WM	Full sun - Part sun	August - October	3-7 ft
Forb	Aster oolentangiensis	Sky-blue aster	D,DM,M	Full sun - Part sun	Aug - Oct	1-2 ft

Disast			B. C.		DI '	Madama Diama
Plant	Genus and	Common Name	Moisture Regime	Evposuro	Blooming Period	Mature Plant Height
Туре	species			Exposure		
Forb	Aster pilosus	Frost Aster	М	Full	Aug - Oct	2-4 Ft
Forb	Aster sericeus	Silky Aster	D,DM,M	Full sun-Part sun	Sept-Oct	2-4 ft
Forb	Aster shortii	Short's Aster	D,DM,M	Part sun - Shade	Sept-Oct	2-4ft
	Astragalus			Full sun -		
Legume	canadensis	Canada milk vetch	М	Part sun	June-Aug	1-4 ft
	Baptisia	Cream False		Full sun -		
Forb	bracteata	Indigo	D,DM,M	Shade	May - June	1-3 ft
		Nodding			August -	
Forb	Bidens cernuus	beggartick	M	Full sun	October	3-5ft
	Blephilia			Full sun -		
Forb	ciliata	Downy Woodmint	D,DM,M	Part sun	June - July	1-2 ft
	Bolboscheoenus			Full sun -	May -	
Sedge	fluviatilis	River bulrush	W	Part sun	September	4-7 ft
	Bouteloua					
Grass	curtipendula	Side-oats grama	D,DM	Full sun	Summer	3 ft
	Bouteloua				Midsummer -	
Grass	hirsuta R	Hairy grama	D,DM	Full sun	fall	3 ft
	Calamagrostis	1 0			May -	
Grass	canadensis	Bluejoint grass	WM,W	Full sun	August	3-5 ft
01000	Campanula	2140,01110 91422	,,,,,,	Part Sun -	July -	3 3 23
Forb	americana l	Tall Bellflower	М	Shade	October	3-6 ft
1012	Caramine	Cut-leaved			0000001	3 0 10
Forb	concatenata	Toothwort	M,WM	Part Sun- Shade	April - May	1 ft
Sedge	Carex bebbi	Bebb's Sedge	WM,W	Full sun	APIII May	1 ft
seage	Calex Debbi	benn a seage	WIVI , W			1 10
Sedge	Carex comosa	Bristly sedge	WM,W	Full sun - Part sun	May - July	1-2 ft
			1		112	
Sedge	Carex hystricina	Porcupine sedge	W	Full sun		1-3 ft
	Carex			Full sun -		
Sedge	Pensylanica	Common Oak Sedge	D,DM,M	Part sun		1-2 ft
Sedge	Carex spengeii	Woodland sedge	WM			
Sedge	Carex stipata	Common Fox Sedge	WM	Full sun		2-3 ft
Sedge	Carex stricta	Tussock sedge	WM,W	Full sun		2-3 ft
seage		Tussock seage	WIVI , W	rull sull		Z-3 IC
Sedge	Carex vulpinoidea	Brown Fox sedge	WM,W	Full sun	May - July	1-3 ft
Seage	+	Brown Fox seage	WI'1 , W	ruii suii		1-3 10
	Cassia		.,	n 11 n .	July -	2 6 6
Forb	hebecarpa	Wild Senna	М	Full - Part	August	3-6 ft
_	Castilleja				April -	
Forb	coccinea	Indian Paintbrush	М	Full- Part	Sept	1-2 Ft
	Chamaecrista	L			<u> </u> _	
Forb	fasciculata	Partidge Pea	D,DM,M	Full- Part	June - Sept	1-3 Ft
n- 1		moot labor l	T.TM T.T	D-11	T1 G :	1 2 5
Forb	Chelone glabra	Turtlehead	WM,W	Full	July - Sept	1-3 Ft
	Coreopsis	Lance-leaf		_ ,,		0.5:
Forb	lanceolata	coreopsis	D,DM,M	Full sun	June-July	2 ft
	Coreopsis			Full sun -	June -	
Forb	palmata	Prairie tickseed	D,DM,M	Part sun	August	1-3 ft
	Coreopsis				July -	
Forb	tripteris	Tall Coreopsis	М	Full - Part	October	3-6 Ft
						1
Legume	Dalea purpurea	Purple prairie clover	D,DM,M	Full sun	July - August	1-2 ft

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Турс	Desmodium		Regime	Lxposure		Height
Legume	canadense	Showy tick- trefoil	M,WM	Full sun	July - August	3-6 ft
педише	Desmodium	Illinois tick	ri, wri	ruii suii	August	3-0 10
Legume	illinoense	trefoil	DM,M	Full sun	July-Aug	3-6 ft
Бедише		CLEIOII	DM, M		July-Aug	3-0 10
Forb	Dodecatheon meadia	Shootingstar	DM M	Full sun - Part sun	May - June	10-24 in
FOLD		<u> </u>	DM,M	Part sun	May - June	10-24 III
T1-	Echinacea pallida	Pale Purple coneflower	24	T-11	T T	2 2 5+
Forb	pallida	coneilower	M	Full sun	June - July	
	T 1			_ ,,	Late spring	
Grass	Elymus canadensis	Canada wild rye	DM M MM	Full sun - Part sun	- early fall	3-5 ft
GLass	Calladelisis	Canada wiid iye	DM,M,WM	Part Sun	Laii	3-5 10
					_	0 5 5.
Grass	Elymus hystrix	Bottlebrush grass	М	Full - Part	June - Aug	3-5 ft
				Full sun -		
Grass	Elymus villosus	Silky Wild Rye	D,DM,M	Part sun		
	Elymus	l			June -	
Grass	virginicus	Virginia wild rye	WM,W	Full sun	October	2-4 ft
	Epilobium				July -	
Forb	angustifolium	Fireweed	D,DM,M	Full - Part	August	1-3 Ft
	Eryngium	Rattlesnake			June -	
Forb	yuccifolium R	master	DM,M	Full sun	August	1 1/2-4 ft
	Eupatorium	Spotted Joe-pye				
Forb	maculatum	weed	W	Full sun	Aug - Sept	3-10 ft
	Eupatorium					
Forb	perfoliatum	Boneset	W	Full sun	Aug - Sept	2-5 ft
	Eupatorium	Purple Joe-		Part sun-		
Forb	purpureum	Pyeweed	M	Shade	Aug-Sept	4-6ft
	Euthamia	Grass-leaved				
Forb	gramninifolia	goldenrod	D,DM	Full - Part	Aug-Oct	1-3 Ft
	Gentiana			Full sun -		
Forb	andrewsii	Bottle gentian	M	Part sun	Aug - Oct	1-2 ft
				Full sun -	August -	
Forb	Gentiana flavida	Cream Gentian	M	Part sun	September	1-2 Ft
	Gentianella			Full sun -	-	
Forb	quinquefolia	Stiff gentian	DM	Part sun	Aug-Oct	2-30 in
	Geranium	3		Part sun -	April,May,J	
Forb	maculatum	Wild Geranium	DM,M,WM	Full shade	une	1-2 ft
				Full sun -		
Forb	Geum triflorum	Prairie smoke	D,DM	Part sun	April-June	6-16 in
	Glyceria	Rattlesnake mana	·	Full sun -	-	
Grass	canadensis	grass	WM,W	Part sun		3-4 ft
		American manna	, , , ,			
Grass	Glyceria grandis	grass	W	Full sun		3-5 ft
	Helenium	J		Full sun-Part	<del>                                     </del>	- 5 10
Forb	autumnale	Sneezeweed**	WM,W	sun	Aug-Oct	2-5 ft
	Helianthus		1111/11			
Forb	divaricuatus	Woodland sunflower	N/	Eull Dows	July - Sept	2 5 5+
Forb			М	Full - Part	pehr	3-5 ft
Dari-	Helianthus	Sawtooth	D.//	Enll Darrh	Aug Cost	4 10 Ft
Forb	grosseserratus	Sunflower**	М	Full- Part	Aug-Sept	4-12 ft
	Helianthus		D DW	Full sun -		1 2 5:
Forb	occidentalis	Western sunflower	U,UM,M	Part sun	July-Sept	1-3 ft
	Helianthus			Full sun -	July -	0.5.
Forb	pauciflorus	Prairie sunflower	ID DM M	Part sun	August	2-6 ft

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
. , p c	Helianthus	Pale-leaved			1 0110 0	11019111
Forb	strumosus	Sunflower	М	Full - Part	July-Oct	2-5 ft
	Heuchera			Full sun -		
Forb	richardsonii	Prairie alum-root	DM,M	Part sun	June-July	2-3 ft
	Hierochloe			Full sun -		
Grass	odorata	Sweet Grass	WM,W	Part sun		1-2 ft
T1-	Hypericum	Great St. John's	M 1774	Tall David	July -	4 6 54
Forb	pyramidatum	wort	M,WM	Full - Part Full sun -	August	4-6 ft
Forb	Iris versicolor	Blue Flag Iris *	W	Part sun	May - July	2-3 ft
	Iris virginica	3		Full sun -	1	
Forb	shrevei	Wild Iris	M,WM,W	Part sun	May - July	2-3 ft
	Juncus torreyi					
Rush	Coville	Torrey's rush	WM,W	Full sun		18-48 in
	Koeleria				Midspring -	
Grass	macrantha	June grass	D,DM,M	Full sun	midsummer	2 ft
Til-	Kuhnia	D-1 1	D DW	Full sun-Part	_	1 4 5-
Forb	eupatorioides	False boneset	D,DM	sun	September	1-4 ft
Legume	Lespedeza capitata	Round-headed bush- clover	DM,M	Full sun - Part sun	August - September	2-5 ft
Degame	capitata	Rough blazing	211/11	Full sun -	August -	2 3 10
Forb	Liatris aspera	star	D,DM,M	Part sun	September	6-30 in
	Liatris	Cylindrical		Full sun -		
Forb	cylindracea	blazing star	D,DM	Part sun	Aug-Sept	8-24 in
	Liatris	Northern Plains				
Forb	ligulistylis	Blazing star	M,WM	Full - Part	Aug-Sept	2-4 ft
Elevelo	Liatris	Prairie blazing	DM M LIM	Full sun -	T] 7a.	1 4 55
Forb	pycnostachya	star Marsh Blazing	DM,M,WM	Part sun	July-Aug	1-4 ft
Forb	Liatris spicata	Star	WM,W	Full sun	Aug-Sept	3-6 ft
	Lilium		,	Full sun -	3 1	
Forb	michiganense	Turk's cap lily	М	Part sun	July-Aug	3-7 ft
	Lilium			Full sun -		
Forb	philadelphicum	Orange cup lily	M	Part sun	June-july	1-3 ft
	Lobelia			Full sun -	July -	0 = 5:
Forb	cardinalis	Cardinal flower	WM,W	Part sun	September	2-5 ft
Forb	Lobelia siphilitica	Great blue lobelia	W	Full sun - Part sun	July-Sept	1-3 ft
1010	Sipililicica	TODETTA	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	rare ban	oury bepe	1 3 10
Forb	Lupinus perennis	Wild Lupine	D	Full sun	May-June	1-2 ft
	Lycopus	_			_	
Forb	americanus	Water Horehound	WM,W	Full	July - Sept	1-2 ft
	Maianthemum	False Solomon's			April -	
Forb	racemosum	Seal	D,DM,M	Full- Part	June	1-3 ft
_ 1	Mertensia	Vierginia		Part sun -		0 0 0 5
Forb	virginica	bluebells	M,WM	Full shade	April, May	0.8-2 ft
Forb	Mimulus ringens	Monkey Flower	Wm, W	Full - Part	June - Sept	1-3 ft
	Mirabilis	110,001	,		- allo bept	
Forb	nyctaginea	Wild Four O'clock	D,DM	Full	June - Sept	1-3 ft
	Monarda			Full sun -	July -	
Forb	fistulosa	Bergamot**	DM,M,WM	Part sun	September	2-3 ft
				Full sun -		
Forb	Monarda punctata	Dotted Horsemint	DM	Part sun	July-Sept	1-3 ft

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Forb	Napaea dioica	Glade Mallow	М	Full - Part	June August	5-8 ft
Forb	Oenothera biennis	Evening primrose	D,DM,M	Full sun - Part sun	August - September	1-5 ft
Fern	Onoclea senibilis	Sensitive fern	M,WM,W	Full sun - Part sun	NA	1-2 ft
Fern	Osmunda cinnamonea	Cinnamon fern	WM,W	Part sun - Full shade	NA	2-4 ft
Fern	Osmunda claytoniana	Interrupted fern	M,WM,W	Part sun - Full shade	NA	3-4 ft
Grass	Panicum virgatum	Switchgrass	D,DM,M,WM	Full sun - Part sun	Summer - early fall	4-6 ft
Forb	Parthenium integrifolium	Wild quinine	М	Full sun	June - September	1 1/2-3 ft
Forb	Pedicularis canadensis	Wood betony	DM	Full sun - Part sun	April-May	5-14 in
Forb	Penstemon grandiflorus	Large-flowered beardtongue	D,DM	Full- Part	May-June	2 - 4 ft
Forb	Phlox pilosa 2	Prairie phlox	DM,M	Full sun - Part sun	May-June	1-2 ft
Forb	Physostegia virginiana Polemonium	Obedient Plant	WM,W	Full sun-Part sun	Aug-Oct	2-3 ft
Forb	reptans	Jacob's ladder	DM,M,WM	Full shade	April,May,J une	1 ft
Forb	Polygonatum biflorum	Solomon's seal	DM,M,WM	Part sun - Full shade	May, June	1-3 ft
Forb	Potentilla arguta	Prairie cinquefoil	D,DM,M	Full sun - Part sun	June-Sept	5-12 in
Forb	Prenanthes alba	Lion's foot	D,DM,M	Part Sun - Shade	Aug-Oct	2-5 ft
Forb	Pulsatilla patens	Pasque flower	D,DM		April-May	6-16 in
Forb	Pycnanthemum virginianum	Mountain mint**	DM,M,WM	Full sun - Part sun	June-Sept	1-2 1/2 ft
Forb	Ratibida pinnata	Yellow cone flower	D,DM,M,WM	Full sun	July - September	3-5 ft
Shrub	Rosa blanda	Smooth Rose	D,DM,M	Full- Part	June - July	1-3 ft
Shrub	Rosa carolina	Carolina Rose	D,DM,M	Full - Part	June - Aug	1-3 ft
Forb	Rudbeckia hirta	Black-eyed Susan	D,DM,M,WM	Full sun - Part sun	July - September	1-3 ft
Forb	Rudbeckia subtomentosa R	Sweet black-eyed Susan	М	Full sun - Part sun	June-Oct	3-4 ft
Forb	Rudbeckia triloba	Sweet Brown-eyed Susan **	M,WM	Full sun-Part sun	July-Oct	4-6 ft
Forb	Ruellia humilis	Wild Petunia	D,DM,M	Full sun	June-Aug	1-2 ft
Grass	Schizachyrium scoparium	Little bluestem	D,DM,M	Full sun	Midsummer - fall	2-4 ft
Sedge	Schoenoplectus acutus	Hardstem Bulrush	W	Full sun - Part sun	May-Sept	4-7 ft
Sedge	Schoenoplectus tabernaemontani	Soft-stem bulrush	W	Full sun		4-7 ft

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
- 7   -	Scirpus		J			
Rush	atrovirens	Green bullrush	WM,W	Full sun		3-5 ft
	Scirpus					
Rush	cyperinus	Woolgrass	WM,W	Full sun		4-6 ft
Forb	Silene stellata	Starry Campion	DM,M,WM	Full sun	Aug-Sept	1-2 ft
	Silphium					
	integrifolium				July -	
Forb	Michx.3	Rosinweed	DM,M	Full sun	September	2-6 ft
	Silphium			Full sun -	June -	
Forb	laciniatum	Compass plant	DM,M	Part sun	September	4-10 ft
	Silphium			Full sun -	July -	
Forb	perfoliatum	Cupplant	M,WM,W	Part sun	September	4-8 ft
	Silphium			Full sun -		
Forb	terebinthinaceum	Prairie dock	M,WM	Part sun	July-Sept	4-10 ft
	Sisyrinchium	Narrow-leaved				
Forb	angustifolium	Blue-eyed Grass	D,DM,M	Full - Part	May - June	< 1 ft
	Sisyrinchium	Prairie Blue-eyed		Full sun -		less than 1
Forb	campestre	grass	D,DM,M	Part sun	May-June	ft
	Solidago			Full sun-Part		
Forb	flexicaulis	Zig-zag Goldenrod	DM,M,WM	sun	Aug-Oct	2-4 ft
	Solidago	Old-field		Full sun -		
Forb	nemoralis	goldenrod	D,DM,M	Part sun	Aug-Oct	6-36 in
_ ,	Solidago					
Forb	ohioensis	Ohio Goldenrod	DM,M,WM	Full sun	July-Sept	3-2 ft
_ ,	Solidago	Riddell's				1 4 6
Forb	riddellii	Goldenrod	WM,W	Full sun	Aug-Oct	1-4 ft
Forb	Solidago rigida	Stiff goldenrod	D DM M	Full sun - Part sun	August - October	1-5 ft
FOLD	Solidago ligida Solidago	Still goldenrod	D,DM,M			1-5 10
Forb	speciosa	Showy goldenrod	DM,M	Full sun - Part sun	July - October	2- 6 ft
FOLD	Sorghastrum	Showy gordeniod	DH, H			2 0 10
Grass	nutans	Indian grass	D,DM,M,WM	Full sun - Part sun	Midsummer - early fall	3-6 ft
Grabb	Spartina	Indian grass	<i>D</i> / <i>D</i> / <i>I</i> /	Tare ban	Midsummer -	3 0 10
Grass	pectinata	Prairie cordgrass	M,WM,W	Full sun	early fall	10 ft
0_000	Sporobolus		11,,		August -	
Grass	cryptandrus	Sand dropseed	D,DM	Full sun	October	3 ft
	Sporobolus	_		Full sun -	Midsummer -	
Grass	heterolepis	Prairie dropseed	D,DM,M	Part sun	early fall	2 1/2 ft
	Tephrosia			Full sun -		
Forb	virginiana	Goat's rue	DM	Part sun	June-July	1-2 ft
	Teucrium				July -	
Forb	canadense	Germander	М	Full - Part	September	1-3 ft
	Thalictrum			Full sun -		
Forb	dasycarpum	Purple meadow-rue	M,WM,W	Part sun	June-July	3-6 ft
	Tradescantia			Full sun -		
Forb	ohiensis	Spiderwort	D,DM,M	Part sun	May - June	8-36 in
				Full sun -		
Forb	Verbena hastata	Blue vervain	W	Part sun	July-Sept	2-6 ft
				Full sun -		
Forb	Verbena stricta	Hoary vervain	D	Part sun	June-Sept	2-6 ft
	Vernonia			_ ,,		
Forb	fasciculata	Ironweed	WM	Full sun	July-Sept	2-6 ft

Plant Type	Genus and species	Common Name	Moisture Regime	Exposure	Blooming Period	Mature Plant Height
Forb	Veronicastrum virginicum	Culver's root	M,WM,W	Full sun - Part sun	June-Aug	2-7 ft
Forb	Viola pedata 4	Bird's foot violet	D,DM	Full sun - Part sun	April-June	4-10 in
Forb	Viola pedatifida 4	Prairie Violet	D,DM,M	Full sun - Part sun	April-June	4-10 in
Forb	Zizia aptera	Heart-leaved golden Alexander	М	Full sun - Part sun	May-June	1-3 ft
Forb	Zizia aurea	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. integritolium Exotic species
- 4. Viola pedata & Viola pedatifida Native ---- Viola odorata Exotic Invasive Species

#### NOTES:

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

- 1. Moisture Regime: D = Dry, DM = Dry-Mesic, M = Mesic, WM = Wet-Mesic, W = Wet
  - <u>Dry Dry Mesic</u> soils include sandy and gravely soils that drain readily and never have standing water even after a heavy rain
  - <u>Mesic</u> 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 amont of water in the subsoil throughout the growing season.
    They may have perions 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 maintanence.
- 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

				Mature		
		Moisture	Light –	Height	N. A	1451 1116
Common Name	Scientific Name	Preferences	Exposure	(feet)	Notes	Wildlife
			Full sun -		Fragrant	Grouse, deer, moose,porcupine, game
Balsam fir	Abies balsamea	wm,m	Full Shade	40 - 75	Evergreen	birds, mice
			Full sun -			Game birds, squirrel,
Red Maple	Acer rubrum	w,wm,m	Part sun	40 - 60	Fast growing	chipmunk, beaver, deer,bear
ited Maple	Acertablani	vv, vv111,111	i ait suii	40 - 00	Fast growing,	,
			Full sun -		weak wood,	Songbirds, deer,
Silver Maple	Acer saccharinum	w,wm	Part sun	75 - 100	shallow roots	racoon,waterfowl, squirrel
		,			Soil stablizer,	'
					neutral to acid	
			Full sun -		conditions, fixes	Rabbit,moose,muskrat,
Specled alder	Alnus incana	w,wm	Part sun	15 - 30	nitrogen	grouse, beaver
					Common on	
American Green			Full sun -		northern	Beaver,deer,game
alder	Alnus viridis	w,wm,m	Part sun	15 - 30	lakeshores	birds,songbirds
					Whiteflowers -	
	<b>.</b>				April - May An	Game
	Amelanchier		Full sun -		excellent	birds,grouse,skunk,fox,
Serviceberry	arborea	wm,m,dm,d	Full Shade	20 -30	landscape tree	racoon
					\\/!-:4 fl	
					White flowers -	
			Full sun -		May Orange fall color Excellent	5
Smooth juneberry	Amelanchier laevis	wm,m,dm,d	Full Shade	20 - 30	landscape plant	Birds,bear,squirrel,chipmu nk,deer,moose
Ciriodai jarioborry	7 timeramental factor	wiii,iii,aiii,a	i dii Gridae	20 00	Blue flowers,	1111,4001,1110000
					May - August;	
					takes 2-3 yrs for	
					transplants to	
					mature;does	
	Amorpha				very well on dry	
Leadplant	canescens	m,dm,d	Full sun	1-3	sandy sites	Butterflies and Bees
					Violet flowers -	
la dinakuaku – Falas			E. II a		May - June Best	
Indigobush; False	Amorpho frutiono	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Full sun - Full Shade	6 12	grown in thicket -	Dirdo amall mammala
indigo	Amorpha fruticosa	w,wm,m	ruii Sriaue	6 - 12	not very showy Pinkish flowers -	Birds,small mammals
					May - June	
					Broadleaf	
	Andromeda				evergreen, found	
Bog rosemary	glaucophylla	w,wm	Full sun	1 - 1.5	in Bogs	Birds,voles
,	- ' '				**White flowers -	
					May Red fall	
					color, Colonial,	Game
	Aronia		Full sun -		may be	birds,grouse,deer,bear,
Black chokeberry	melanocarpa	w,wm,m,dm,d	Full Shade	3 - 6	aggressive	songbirds,rabbit
	Betula		Full sun -		Useful in large	Game birds,
Yellow birch	alleghaniensis	w,wm,m	Part sun	60 - 80	spaces	moose,deer,beaver, squirrel
1 CHOW BILOTI	anognamonoio	**,********	. art buri	00 00	σράσσο	oquiitoi

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ıse,hare,deer,
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oirds,deer,bear,
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re is,

				Mature		
Common Name	Scientific Name	Moisture Preferences	Light Exposure	Height (feet)	Notes	Wildlife
	Colonial Name			(1000)	110100	
Bunchberry	Cornus canadensis	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	Cornus sericea (stolonifera)	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 hazel	Corylus americana Fraxinus	wm,m,dm,d	Part sun- Full shade	8 - 15	**Yellow fall color;edible nuts Can form dense thickets; soil stablizer Burgundy-	Chipmunk,squirrel,jays, grouse,racoon Songbirds,squirrel,
White ash	americana	wm,m	Full sun	60 - 75	orange fall color	turkey,mice,deer
Black ash	Fraxinus nigra	w,wm,m,dm	Full sun	50 - 75	Golden-yelow fall color Found in swamps	Wood duck,birds,deer
Green ash	Fraxinus pennsylvanica	w,wm,m,dm,d	Full sun - Part sun	50 - 75	Yellow fall color Fast growing;weak wood	Wood duck,birds,deer,mice, beaver
Winterberry	llex verticillata	w,wm,m,dm,d	Part sun - Full Shade	3 - 12	persistant fruit	Birds,deer,squirrel,bear,m ice,racoon
Common juniper	Juniperus communis	dm - d	Full sun	1.5 - 6	Evergreen;great on hot, dry slopes	Game birds,deer,moose, songbirds
Tamarack	Larix laricina	w,wm,m	Full sun	40 -80	Yellow fall color;Neutal to acid conditions;decid uous;needle- leaved tree	Grouse,deer,porcupine, hare,squirrel,grouse
Labrador Tea	Ledum groenlandicum	w,wm	Full sun-Part sun	1-4	White flowers- May-June;Acidic conditions;broadl eaf evergreen	Deer, moose, game birds

	I	Moisture	Light	Mature Height		
Common Name	Scientific Name	Preferences	Exposure	(feet)	Notes	Wildlife
Ironwood	Ostrya virginiana	wm,m,dm,d	Part sun	35 - 60	Yellow fall color;dry leaves persist in winter;common understory tree	Grouse,deer,rabbit, game birds,squirrel
Common ninebark	Physocarpus opulifolius	dm - d	Full sun	5 - 10	Upright spreading shrub with stiffly arched branches	Ruffled grouse, songbirds, nesting birds, small mammals
White spruce	Picea glauca	wm - m	Full sun	40 - 75	Evergreen;Pyra midal habit	Squirrel,songbirds, deer,chipmunk
Black spruce	Picea mariana	w,wm	Full sun - Full Shade	30 - 70	Evergreen;grows in sphagnum bogs;acidic soils	chipmunk,deer, songbirds
Red pine	Pinus resinosa	wm,m,dm,d	Full sun - Part sun	120	Evergreen;fast- growing	Squirrel,porcupine, chipmunk,deer, songbirds
White pine	Pinus strobus	wm,m,dm,d	Full sun - Part sun	210	Evergreen;Fast- growing	Squirrel,gamebirds, chipmunk,deer, songbirds
Wild plum	Prunus americana	dm,d	Full sun	10 - 15	Fragrant spring bloom; forms a tall thicket; excellent wildlife plant	Songbirds,deer, chipmunk,bees,small mammals
Pin cherry	Prunus pensylvanica	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	Prunus serotina	wm,m,dm,d	Full sun - Full Shade	75	White flowers- May; Yellow-red fall color;edible fruits	Raccoon,songbirds, gamebirds,hare,mice
Chokecherry	Prunus virginiana	wm,m,dm,d	Full sun - Full Shade	30	White flowers - May; red fall color; edible fruits; fragrant flowers	Squirrel,songbirds, skunk
White oak	Quercus alba	wm,m,dm,d	Full sun - Full Shade	60 - 80	Purplish-red fall color; prized hardwood	Porcupine,raccoon, gamebirds
Swamp white oak	Quercus bicolor	w,wm,m	Full sun - Part sun	75 - 100	Poor fall color, easily transplanted	Wood duck, songbirds,squirrel, deer

		Malations	1.1.1.4			
		Moisture	Light	Height		
Common Name S	Scientific Name	Preferences	Exposure	(feet)	Notes	Wildlife
					Holds leaves in	
					winter; excellent	
	uercus 		Full sun -	50 <b>7</b> 5	for dry sandy	Songbirds,fox,bear,
Northern pin oak elli	lipsoidalis	wm,m,dm,d	Part sun	50 - 75	sites	rabbit,hare
					Corky bark; yellow-brown fall	
					color; this	
					majestic native	
					tree should be	
Qu	uercus				planted more	Chipmunk,moths,mice,
Bur oak ma	acrocarpa	wm,m,dm,d	Full sun	70 - 80	often	beaver,gopher
	•				Red-brown fall	
					color, fast-	
					growing	
			Full sun -		suceptible to oak	Waterfowl, turkey,
Red oak Qu	uercus rubra	wm,m,dm,d	Part sun	150	wilt	muskrat
					Yellow or white	
					flowers- April-	
					June; Not prickly;do not	
					plickly, do not plant near white	
Black currant Rib	bes americanum	wm,m	Full sun	4	piant hear write	
Diaok ourraint 70%	bos americanam	<b>VV</b> 111,111	i dii 3dii	т	ріпо	
					White flowers,	
					May- June;edible	
					fruits;plant in out	Bear,deer,rabbit,game
Ru	ubus		Full sun -		of the way	birds,
Common blackberry alle	legheniensis	wm,m,dm,d	Part sun	1.5-7	places	turtles,songbirds,fox
					VACILITY OF THE STATE OF	
					White flowers, May- June;edible	
					fruits;plant in out	
Black raspberry			Full sun-Part		of the way	Deer deer velchit verse
	ubus occidentalis	wm,m	sun	6	places	Bear,deer,rabbit,game birds,songbirds,fox
(Ziaak sap)	abac coolacticano	,	<b>-</b>	•	**Pussy willow	
					branches in	
					spring;Bank soil	
]					stabilizer; many	
]					different types -	
					Check scientific	Deer, rabbit, grouse,
Pussy willow Sa	alix discolor	w,wm	Full sun	15 - 20	name!	moose, beaver, birds
					**Narrow leaves,	
					deep	
]					green;Spreads by	
]					rhizomes;easily	
					transplanted -	
,						
]					Check scientific	Muskrat, porcupine,

				Mature		
		Moisture	Light –	Height		
Common Name	Scientific Name	Preferences	Exposure	(feet)	Notes	Wildlife
Prairie willow	Salix humilis	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	Salix nigra	w,wm	Full sun-Part sun	35 - 50	Many different types-Check Scientific name! Yellow fall color;Thrives in wet lakeshore soils.	Game birds, squirrel, birds, rabbit
Common elderberry	Sambucus canadensis	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
Red-berried elder	Sambucus pubens	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	Spiraea alba	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	Spiraea tomentosa var. rosea	w - wm	Full sun - Part sun	4	Pink flowers - July;fragrants;us e to prevent erosion at waters edge	Song birds, game birds, waterfowl, small mammals
Snowberry	Symphoricarpos albus	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 arbervita)		w,wm,m	Full sun - Part sun	40 - 60	Evergreen;fibrou s exfoliating bark;great screening tree	Deer, moose, rabbit, red squirrel, song birds

				Mature		
		Moisture	Light	Height		
Common Name	Scientific Name	Preferences	Exposure	(feet)	Notes	Wildlife
					Fragrant flowers-	
					June;yellow fall color;rapid	
			Full sun -		growing shade	Dana annimal ahimmund
Basswood	Tilia americana	wm,m	Part sun	60 - 100	tree	Bees, squirrel,chipmunk, deer, mice
		,			Evergreen,pend	
					ulous	
					brances;acidic	
			Full sun -		soils;shallow- rooted;requires	
Hemlock	Tsuga canadensis	wm,m	Full Shade	75	cool soils	Song birds, deer, squirrel,chipmunk, moose
Tomiook	rouga canadonoio	,	. dii Gridde	. 0	0001 00110	equinoi,empinami, messe
					Cream flowers-	
					June;Orange-red	
					fall color;edible fruit in late	
	Vaccinium		Full sun -		summer;nice	Bear, muskrat, skunk, deer, game birds, song
Blueberry	augustifolium	wm,m,dm,d	Part sun	0.5 - 2	landscape shrub	birds, fox
					Prefers acidic	
	., , ,				soil, begins	Deer,rabbit,upland game
Canada Blueberry	Vaccinium myrtilloides	m,dm,d	Full sun-Part	0.3 - 3	fruiting in third	birds, song birds,
Cariada bideberry	myrulloldes	m,am,a	sun	0.3 - 3	year Black fruit;purple	mammals
					red fall	
					color;many	
			Full sun -		attributes;edible	Song birds, game birds,
Nannyberry	Viburnum lentago	wm,m	Full Shade	15 - 35	fruit	small mammals, beaver
					red fruit holds	
					through winter;fruit can	
			Full sun -		be made into	Birds, mammals,
High-bush cranberry	Viburnum opulus	w,wm,m	Part sun	6 - 16	jelly	grouse,pheasant
					Maroon-purple	Grouse, songbirds,
Downy arrowned	Viburnum	wm m dm d	Full sun - Full Shade	3 - 6	fall color;many attributes	chipmunk, bear, fox, insects
Downy arrowwood	rafinesquianum	wm,m,dm,d	ruli Silaue	3-0	aunbutes	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 contaminates 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. Pickeralweed 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.

Blue Flag Iris (*Iris virginica shrevei*)



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

## 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 <a href="http://www.dnr.state.wi.us/">http://www.dnr.state.wi.us/</a>

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.



## 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://www.klines.org/joanne/

Wisconsin Plant of the Week was developed by a WIDNR employee. The site features a different plant each week. The features provide excellent photos of the plant as well as a detail life history. The archive of past featured plants is listed by scientific name.

#### 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://www.dnr.state.wi.us/forestry/treeid/

Identifies the common trees of Wisconsin by common name, or scientific name.

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 Wwink 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.epa.gov/greenacres/

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 Ferrerriea 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

#### http://clean-water.uwex.edu/pubs/shore.htm

Links to several great publications including Wisconsin Native Plant Sources is a .PDF of a publication developed by the UW-Extension. The publication is up-to-date and lists nurseries and the type of native plants they carry.

## Threatened and Endanger Plants

#### http://www.dnr.state.wi.us/org/land/er/factsheets/

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://www.vth.colostate.edu/poisonous\_plants/report/search.cfm

Guide to Poisonous Plants by Dr. A.P. Knight

#### Shoreline Stabilization Resources

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

#### For Assistance and Permits

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

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

USDA - Natural Resources Conservation Service (Wisconsin) http://www.wi.nrcs.usda.gov/new/default.asp

US Environmental Protection Agency http://www.epa.gov

Walworth County Home page <a href="http://www.co.walworth.wi.us/">http://www.co.walworth.wi.us/</a>

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.

## **Shoreline Stabilization - Erosion Control**

**Bioengineering** 

Coconut Fiberlog – Fiber Matting – Wattles – Fascines Design – Installation – Assist with Permits

#### Benchmark Landscape Management Inc.

Coconut Fiberlog – Fiber Matting – Wattles – Fascines Design – Installation 262-642-7861

#### **Bigelow Landscaping**

Coconut Fiberlog – Fiber Matting – Wattles Design – Installation – Assist with Permits 262-882-5038

#### Bio Technical Erosion Control, LTD

Coconut Fiberlog – Fiber Matting – Wattles – Fascines Design – Installation – Assist with Permits 815-648-2253

#### Botanica Fine Gardens & Landscapes

Coconut Fiberlog – Fiber Matting – Wattles – Fascines Design – Installation – Assist with Permits 262-248-7513

#### Breezy Hill Nursery

Coconut Fiberlog – Fiber Matting – Wattles – Fascines Design – Installation 262-537-2111

#### Bret Achtenhagen's Seasonal Services

Coconut Fiberlog – Fiber Matting – Wattles – Design – Installation – Assist with Permits 262-392-3444

#### **Briarwood Landscape**

Coconut Fiberlog – Fiber Matting - Wattles– Design - Installation 262-749-0445

#### Creative Edge Landscapes LLC

Coconut Fiberlog – Fiber Matting – Wattles – Log Spurs – Design – Installation - Assist with Permits 262-877-2805

#### **EMC2 Landscaping**

Coconut Fiberlog – Fiber Matting – Wattles- Fascines – Polymers- Design – Installation – Assist with Permits 815-904-2777

#### Golden Tree & Landscape, Inc.

Coconut Fiberlog – Fiber Matting – Wattles - Fascines – Design – Installation – Assist with Permits 262-728-8940

#### High Prairie Landscape Supply

Supply Materials – Coconut Fiberlog, Fiber Matting Etc. 262-279-6500

#### J.K. Landscaping Inc.

Installation – Assist with Permits 262-473-7013

#### JNT's Marina, LLC

Coconut Fiberlog – Fiber Matting – Installation 262-473-5960

#### Kruger Landscape & Maintenance

Coconut Fiberlog – Fiber Matting – Design – Installation – Assist with Permits 262-728-3138

#### LJ Reas Environmental Consulting Corp.

Coconut Fiberlog – Fiber Matting – Wattles – Fascines – Soil Wraps - Design – Installation – Assist with Permits Grant writing assistance 920-294-3116

#### Marek Landscaping, LLC

Coconut Fiberlog – Fiber Matting – Wattles – Fascines – Filterxx Soxx - Design – Installation – Assist with Permits 414-272-0242

#### Natural Landscapes, Inc.

Coconut Fiberlog – Fiber Matting – Design – Installation 262-488-5347

#### Paragon Design Group, LLC

Design – Assist with Permits

414-449-1555

#### PTS Landscaping, Inc.

Coconut Fiberlog – Fiber Matting - Design – Installation – Assist with Permits 262-742-2299

#### Scott Byron & Company, Inc

Coconut Fiberlog – Fiber Matting – Design – Installation Assist with Permits 847-689-0266

#### Sunrise Gardens, LLC

Coconut Fiberlog – Fiber Matting - Wattles– Design - Installation 262-949-0811

#### W. H. Major & Sons Inc.

Coconut Fiberlog – Fiber Matting – Wattles – Fascines – Design – Installation 262-363-3115

#### **Z-Scape LLC**

Coconut Fiberlog – Fiber Matting – Wattles – Fascines – Design – Installation 262-279-7960

# Shoreline Stabilization – Erosion Control: Rock Riprap/Hard Armoring

 $Design-Installation-Repair-Assist \ with \ Permits$ 

#### Austin Pier Service, Inc.

Design – Installation - Repair - Assist with Permits 262-275-2615

#### B & J Tree & Landscape Service

Installation 262-248-3653

#### <u>Shoreline Stabilization – Erosion Control con't:</u> Rock Riprap/Hard Armoring

Design – Installation – Repair - Assist with Permits

#### Benchmark Landscape Management Inc.

Design – Installation – Repair – Permits 262-642-7861

#### **Bigelow Landscaping**

Design – Installation - Repair - Permits 262-882-5038

#### Bio Technical Erosion Control, LTD

Design – Installation – Repair - Permits 815-648-2253

#### Botanica Fine Gardens & Landscapes

Design – Installation – Repair - Permits 262-248-7513

#### **Breezy Hill Nursery**

Design – Installation – Repair - Permits 262-537-2111

#### Bret Achtenhagen's Seasonal Services

Design – Installation - Repair - Assist with Permits 262-392-3444

#### Briarwood Landscape

Design – Installation – Repair - Assist with Permits 262-749-0445

#### Creative Edge Landscapes LLC

Design – Installation – Vegetate – Repair –Permits - AJacks 262-877-2805

#### Dependable Pier Service

Installation – Repair – Permits 262-749-8181

#### **EMC2 Landscaping**

Design - Installation - Repair - Assist with Permits 815-904-2777

#### Fine Gardens, Inc.

Design – Installation – Repair – Permits 262-248-2388

#### Golden Tree & Landscape, Inc.

Design - Installation - Repair – Assist with Permits 262-728-8940

#### **Ground Effects Landscape Management**

Installation – Repair 262-763-7422

#### Hase Landscape Company

Design – Installation – Repair - Assist with Permits 262-542-5006

#### High Prairie Landscape Supply

Supply Materials – Rock, Matting Etc 262-279-6500

J.K. Landscaping Inc.

Installation – Repair - Assist with Permits 262-473-7013

#### JNT's Marina, LLC

Design – Installation – Repair – Assist with Permits 262-473-5960

#### Kruger Landscape & Maintenance

Design – Installation – Repair - Assist with Permits 262-728-3138

#### **MJB Services**

Installation – Repair – Assist with Permits 262-495-2751

#### Natural Landscapes, Inc.

Installation - Assist Landscapers with Installation, Management & Monitoring 262-488-5347

#### Paragon Design Group, LLC

Design – Assist with Permits 414-449-1555

#### Preuninger Enterprises

Design – Installation – Repair – Assist with Permits 920- 988-8152

#### PTS Landscaping, Inc

Design – Installation – Repair – Assists with Permits 262-742-2299

#### Reed's Construction LLC

Design – Installation – Repair – Assist with Permits 262-248-2934

#### **Scheel & Associates**

Design – Assist with Permits 262-348-1315

## Scott Byron & Company Inc.

Design – Installation – Repair – Assists with Permits 847-689-0266

#### Sheldon Landscape

Design – Installation – Repair - Assist with Permits 262-248-9415

#### Sunrise Gardens, LLC

Design – Installation – Repair - Assist with Permits 262-949-0811

#### **Svanstrom Construction**

Installatioin – Repair 262-903-5545

#### The Bristol Group, Inc.

Installation – Repair - Assist with Permits 262-857-9191

#### **Ultimate Excavating**

Installation – Repair – Assist with Permits 920-568-0360

## <u>Shoreline Stabilization – Erosion Control con't:</u> Rock Riprap/Hard Armoring

Design - Installation - Repair - Assist with Permits

#### W. H. Major & Sons Inc.

Design – Installation – Repair – Assist with Permits 262-363-3115

#### Walters Pier Service

Installation – Repair – Assist with Permits 262-758-1829

#### Z-Scape LLC

Design – Installation – Repair – Assist with Permits 262-279-7960

#### **General Landscaping**

Design - Installation - Permits

#### B & J Tree & Landscape Service

Design – Installation – Hardscapes- Permits 262-248-3653

#### Benchmark Landscape Management Inc.

Design – Installation –Hardscapes – Water gardens – Permits 262-642-7861

#### **Bigelow Landscaping**

Design- Installation –Hardscapes - Water gardens - Permits 262-882-5038

#### Botanica Fine Gardens and Landscapes

Design – Installation –Hardscapes – Water gardens - Permits 262-248-7513

#### **Breezy Hill Nursery**

Design – Installation –Hardscapes – Water gardens - Permits 262-537-2111

#### Bret Achtenhagen's Seasonal Services

Design – Installation – Hardscapes – Watergardens - Permits 262-392-3444

#### Briarwood Landscape

Design – Installation – Hardscapes – Permits 262-749-0445

#### Creative Edge Landscapes LLC

Design – Installation – Hardscapes – Water gardens - Permits 262-877-2805

#### **Creative Outdoor**

Design – Installation – Hardscapes – Permits 262-203-7118

#### **EMC2 Landscaping**

Design – Installation – Hardscapes – Water gardens - Permits 815-904-2777

#### Fine Gardens, Inc.

Design – Installation – Hardscapes - Water gardens - Permits 262-248-2388

#### Golden Tree & Landscape, Inc.

Design – Installation – Hardscapes - Water gardens - Permits 262-728-8940

#### **Ground Effects Landscape Management**

Design – Installation – Hardscapes 262-763-7422

#### Hase Landscape Company

Design – Installation – Hardscapes - Water gardens - Permits 262-542-5006

#### High Prairie Landscape Supply

Supply Materials – Rock, Hardscapes Etc 262-279-6500

#### J.K. Landscaping Inc.

Design – Installation – Hardscapes - Water gardens - Permits 262-473-7013

#### JNT's Marina, LLC

Hardscapes 262-473-5960

#### Kruger Landscape & Maintenance

Design – Installation – Hardscapes - Water gardens - Permits 262-728-3138

#### LJ Reas Environmental Consulting Corp

Design – Installation – Water gardens - Permits 920-294-3116

#### Marek Landscaping, LLC

Design – Installation – Hardscapes - Water gardens - Permits 414-272-0242

#### **MJB Services**

Design – Installation – Hardscapes – Watergardens – Assists with Permits 262-495-2751

#### Natural Landscapes, Inc

Installation – Watergardens – Assists with Permits 262-488-5347

#### Paragon Design Group, LLC

Design – Assist with Permits 414-449-1555

#### Paul Swartz Nursery

Design – Installation – Hardscapes – Water Gardens – Assist with Permits 262-889-4301

#### **Preuninger Enterprises**

Hardscapes 920-988-8152

#### PTS Landscaping, Inc.

Design – Installation – Hardscapes – Water Gardens – Assist with Permits 262-742-2299

#### General Landscaping con't

**Design - Installation - Permits** 

#### Reed's Construction LLC

Hardscapes – Assist with Permits 262-248-2934

#### Scheel & Associates

Design - Assist with Permits 262-348-1315

#### Scott Byron & Company Inc.

Design – Installation – Hardscapes – Water Gardens – Assists with Permits 847-689-0266

#### Sheldon Landscape

Design – Installation – Hardscapes – Watergardens - Assists with Permits 262-248-9415

#### Sunrise Gardens, LLC

Design – Installation – Hardscapes – Water Gardens – Assists with Permits 262-949-0811

#### **Svanstrom Construction**

Hardscapes – Water Gardens – Assists with Permits 262-903-5545

#### The Bristol Group, Inc.

Design – Installation – Hardscapes – Assists with Permits 262-857-9191

#### The Green Team

Installation – Hardscapes – Assist with Permits 262-742-2097

#### Ultimate Excavating

Installation – Hardscapes 920-568-0360

#### W. H. Major & Sons Inc.

Design – Installation – Hardscapes – Watergardens – Assists with Permits 262-363-3115

#### Z-Scape LLC

Design – Installation – Hardscapes – Watergardens – Assists with Permits 262-279-7960

#### **Native Shoreline Restoration**

Design – Install – Maintain – Native Plants – Native Aquatic Restoration

#### B & J Tree & Landscape Service

Design – Install – Maintain – Native Plants 262-248-3653

#### Benchmark Landscape Management Inc.

Design – Install – Maintain - Native Plants – Native Aquatic Restoration 262-642-7861

#### Bigelow Landscaping

Design – Install – Maintain – Native Plants – Native Aquatic Restoration 262-882-5038

#### Bio Technical Erosion Control, LTD

Design – Installation – Maintain– Native Plants - Native Aquatic Restoration 815-648-2253

#### Botanica Fine Gardens and Landscapes

Design – Installation – Maintain – Native Plants - Native Aquatic Restoration 262-248-7513

#### Breezy Hill Nursery

Design – Installation – Maintain – Native Plants 262-537-2111

#### Bret Achtenhagen's Seasonal Services

Design – Install – Maintain – Native Plants 262-392-3444

#### **Briarwood Landscape**

Design – Install – Maintain – Native Plants 262-749-0445

#### Creative Edge Landscapes LLC

Design – Install – Maintain – Native Plants – Limited Native Aquatic Restoration 262-877-2805

#### **EMC2 Landscaping**

Design – Install – Maintain – Native Plants - Native Aquatic Restoration 815-904-2777

#### Fine Gardens, Inc.

Design – Install – Maintain – Native Plants 262-248-2388

#### Golden Tree & Landscape, Inc.

Design – Install – Maintain – Native Plants – Native Aquatic Restoration 262-728-8940

#### Hase Landscape Company

Design – Install – Maintain – Native Aquatic Restoration 262-542-5006

#### J.K. Landscaping Inc.

Design – Installation – Maintain – Native Plants Permits 262-473-7013

#### JNT's Marina, LLC

Design – Install –Native Plants – Native Aquatic Restoration 262-473-5960

#### Kruger Landscape & Maintenance

Design – Install – Maintain – Native Plants 262-728-3138

#### **Native Shoreline Restoration con't**

Design – Install – Maintain – Supply Native Plants – Native Aquatic Restoration

#### LJ Reas Environmental Consulting Corp.

Design – Install – Maintain – Supplies Native Plants – Native Aquatic Restoration 920 294-3116

#### Marek Landscaping, LLC

Design – Install – Maintain – Supplies Native Plants 414-272-0242

#### MJB Services

Installation - Maintain - Supply Native Plants 262-495-2751

#### Natural Landscapes, Inc.

Design – Install – Maintain – Supplies Native Plants – Native Aquatic Restoration 262-488-5347

#### Paragon Design Group, LLC

Design 414-449-1555

#### PTS Landscaping, Inc.

Design – Install – Maintain – Supplies Native Plants 262-742-2299

#### Reed's Construction LLC

Maintenance 262-248-2934

#### **Scheel & Associates**

Design 262-348-1315

#### Scott Byron & Company Inc.

Design – Install – Maintain – Supplies Native Plants 847-689-0266

#### Sunrise Gardens, LLC

Design – Install – Maintain – Supplies Native Plants – Native Aquatic Restoration 262-949-0811

#### The Bristol Group, Inc.

Design – Installation – Maintenance – Supplies Native Plants 262-857-9191

#### The Green Team

Design - Installation - Maintenance - Supplies Native Plants 262-742-2097

#### Ultimate Excavating

Installation – Maintenance 920-568-0360

#### W. H. Major & Sons Inc

Design – Install – Maintain – Supplies Native Plants – Native Aquatic Restoration 262-363-3115

#### **Tree & Shrub Care**

Planting – Trimming – Cutting – Health Diagnosis – Certified Arborist on Staff – Assists with Permits

#### Arbor Images

Planting - Trimming - Cutting - Health Diagnosis - Tree Injection - Certified Arborist on Staff - Assists with Permits 262-763-4645

#### B & J Tree & Landscape Service

Planting – Trimming – Cutting – Tree Injection – Assists with Permits 262-248-3653

#### Benchmark Landscape Management Inc.

Planting – Trimming – Cutting – Health Diagnosis – Tree Injection – Assists with Permits 262-642-7861

#### **Bigelow Landscaping**

Planting – Trimming – Cutting – Health Diagnosis – Tree Injection – Assists with Permits 262-882-5038

#### Botanica Fine Gardens & Landscapes

Planting – Trimming – Health Diagnosis – Assists with Permits 262-248-7513

#### Breezy Hill Nursery

Planting – Cutting – Trimming – Health Diagnosis – Tree Injection – Permits 262-537-2111

#### Bret Achtenhagen's Seasonal Services

Planting – Trimming – Cutting – Health Diagnosis–Tree Injection- Assists with Permits 262-392-3444

#### Briarwood Landscape

Planting – Trimming - Cutting 262-749-0445

#### Creative Edge Landscapes LLC

Planting – Trimming – Cutting - Permits 262-877-2805

#### EMC2 Landscaping

Planting – Trimming – Cutting – Health Diagnosis–Tree Injection- Assists with Permits 815-904-2777

#### Fine Gardens, Inc.

Planting – Trimming – Cutting – Health Diagnosis – Assists with Permits 262-248-2388

#### Golden Tree & Landscape, Inc.

Planting – Trimming – Cutting – Health Diagnosis – Assists with Permits 262-728-8940

#### Ground Effects Landscape Management

Planting – Trimming – Cutting – Health Diagnosis 262-763-7422

#### Tree & Shrub Care (con't)

Hase Landscape Company

Plant

262-542-5006

J.K. Landscaping Inc.

Planting – Trimming – Cutting – Assists with Permits

262-473-7013

JNT's Marina, LLC

Trimming – Cutting

262-473-5960

Kruger Landscape & Maintenance

Planting - Trimming - Cutting - Assists with Permits

262-728-3138

LJ Reas Environmental Consulting Corp

**Planting** 

920-294-3116

Marek Landscaping, LLC

Planting - Trimming - Cutting - Health Diagnosis - Tree

Injection - Assists with Permits

414-272-0242

**MJB Services** 

Planting – Cutting – Trimming

262-495-2751

Natural Landscapes, Inc.

Cutting – Trimming – Assisting with Permits

262-488-5347

Paul Swartz Nursery

**Planting** 

262-889-4301

PTS Landscaping, Inc.

Planting – Cutting – Trimming – Assist with Permits

262-742-2299

Reed's Construction LLC

Trimming - Cutting - Assist with Permits

262-248-2934

Scott Byron & Company Inc.

Planting - Cutting - Trimming - Health Diagnosis - Tree

Injections - Assist with Permits

847-689-0266

Sheldon Landscape, Inc.

Planting – Cutting – Trimming – Health Diagnosis – Assist with

Permits

262-248-9415

Sunrise Gardens, LLC

Planting - Trimming - Cutting - Permits

262-949-0811

The Bristol Group, Inc.

Planting - Trimming - Cutting - Permits

262-857-9191

The Green Team

Planting - Trimming - Cutting - Permits

262-742-2097

W. H. Major & Sons Inc.

Planting - Cutting - Trimming - Health Diagnosis - Tree

Injection

262-363-3115

Z-Scape LLC

Planting - Trimming - Cutting - Permits

262-279-7960

**Ponds** 

Design - Construction - Permits - Maintenance

Benchmark Landscape Management Inc.

Design - Construction - Permits - Maintenance

262-642-7861

Bigelow Landscaping

Design - Construction - Permits - Maintenance - Permits

262-882-5038

Botanica Fine Gardens & Landscapes

Design - Construction - Maintenance- Permits

262-248-7513

Breezy Hill Nursery

Design - Construction - Maintenance- Permits

262-537-2111

Brett Achtenhagen's Seasonal Services

Design - Construction - Maintenance- Permits

262-392-3444

Creative Edge Landscapes LLC

Design – Construction – Maintenance – Assists with Permits

262-877-2805

EMC2 Landscaping

Design - Construction - Maintenance - Assists with Permits

815-904-2777

Fine Gardens, Inc.

Design - Construction - Maintenance - Assists with Permits

262-248-2388

Golden Tree & Landscape, Inc.

Design - Construction - Maintenance - Assists with Permits

262-728-8940

Hase Landscape Company

Design - Construction - Assists with Permits

262-542-5006

J.K. Landscaping Inc.

Design - Construction - Maintenance - Assists with Permits

262-473-7013

MJB Services

Design - Construction - Maintenance - Assists with Permits

262-495-2751

#### Ponds con't

Design - Construction - Permits - Maintenance

#### Natural Landscapes, Inc.

Design – Construction – Maintenance – Assists with Permits 262-488-5347

#### Paul Swartz Nursery

Design – Construction – Assist with Permits 262-889-4301

#### PTS Landscaping, Inc.

Design – Construction – Maintenance 262-742-2299

#### Sunrise Gardens, LLC

Design - Construction - Maintenance - Assists with Permits 262-949-0811

#### **Svanstrom Construction**

Design - Construction - Maintenance - Assists with Permits 262-903-5545

#### W. H. Major & Sons Inc.

Design – Construction - Maintenance 262-363-3115

#### **Z-Scape LLC**

Design – Construction - Maintenance 262-279-7960

#### **Additional Services**

#### Arbor Images

Landscape Material Supply - Mulch Supply, Paver & Block supply, Topsoil, Decorative Stone – Custom Rustic Furnature – Sawmill 262-763-4645

#### Austin Pier Service, Inc.

Piers – Boatlifts- Construction & Maintenance 262-275-2615

#### B & J Tree & Landscape Service

Lawn Care 262-248-3653

## Benchmark Landscape Management Inc.

Lawn care – Soil Testing – Noxious Weed Control – Sprinkler or Irrigation Installation – Snowplowing – Ice Control – Low Voltage Lighting – Natural Signage, Playground Installation – "LEED" Standard Compliance – Prescribed Burns 262-642-7861

#### Bigelow Landscaping

Lawn care – Soil Testing - Noxious Weed Control – Prescribed Burns – Property Management 262-882-5038

#### Bio Technical Erosion Control, LTD

Stormwater Best Management Practice Design & Installation - Raingardens – Bioswales - Stream Corridor Enhancement & Management - Grant Writing 815-648-2253

#### Botanica Fine Gardens & Landscapes

Noxious Weed Control, Rain Gardens, Lawn Care – Soil Testing - Prescribed Burns & Permits 262-248-7513

#### **Breezy Hill Nursery**

Lawn Care – Soil Testing – Noxious Weed Control 262-537-2111

#### Bret Achtenhagen's Seasonal Services

Lawn care – Noxious Weed Control 262-392-3444

#### Briarwood Landscape

Lawn Care – Excavating - Prescribed Burns 262-749-0445

#### Creative Edge Landscapes LLC

Noxious Weed Control – Stormwater Management –Woodland Restorations – Ornamental Design, Installation, Maintenance – Lighting - Prescribed Burns, 262-877-2805

#### **Creative Outdoor**

Fireplaces - Firepits – Patios – Sidewalks 262- 203-7118

#### Dependable Pier Service

Pier Service – Spring Install & Fall Removal – New Piers Built 262-749-8181

#### **EMC2 Landscaping**

Lawn Care – Soil Testing – Prescribed Burns – Noxious Weed Control - Prairie, Wetland & Natural Area Design, Installation & Maintenance – Rain Gardens – Green Roofs – Permeable Pavers

815-904-2777

#### Fine Gardens, Inc.

Creation/Construction of Wildlife Habitats – Bi-monthly Garden Care – Landscape Refinement/Renewal/Renovation 262-248-2388

#### Golden Tree & Landscape, Inc.

Lawn Care – Prescribed Burns - Outdoor Kitchens & Fireplaces – Patios - Brick Driveways – Flagstone Walkways 262-728-8940

#### **Ground Effects Landscape Management**

Lawn Care – Soil Testing – Noxious Weed Control 262-763-7422

#### Hase Landscape Company

Prescribed Burns 262-542-5006

#### J.K. Landscaping Inc.

Lawn Care 262-473-7013

#### Kruger Landscape & Maintenance

Lawn care – Soil Testing - Noxious Weed Control – Porous Pavement – Permeable Pavers - Raingardens Landscape Lighting 262-728-3138

#### Additional Services con't.

#### LJ Reas Environmental Consulting

Grant Writing, Grow Native Plants, Coordinate Shoreline Restoration Projects, Coordinate Educational Workshops regarding Natural Shoreline Restoration & Bioengineering, Raingardens – Design, Construction & Maintenance, Educational Speaker 920- 294-3116

#### Marek Landscaping, LLC

Soil Testing – Prescribed Burns – Grant Writing -Hydroseeding – Filtrexx – Walls – Erosion & Sediment Control 414-272-0242

#### **MJB Services**

Lawn Care- Soil Testing - Prescribed Burns - Property Management – Event Planning 262-495-2751

#### Natural Landscapes, Inc

Rain Gardens – Noxious Weed Control – Prescribed Burns - Prairie & Wetland Restoration – Invasive Plant management – Land Management & Consultation 262-488-5347

#### Paul Swartz Nursery

Lawn Care 262-889-4301

#### PTS Landscaping, Inc

Garden Center – Concrete – Excavation – Lawn Care – Soil Test 262-742-2299

#### Reed's Construction LLC

Pier Construction – Installation & Removal – Boat Lifts 262-248-2934

#### **Scheel & Associates**

Outdoor Landscape Lighting 262-348-1315

#### Scott Byron & Company Inc.

Lawn Care – Noxious Weed Control 847-689-0266

#### Sunrise Gardens, LLC

Noxious Weed Control – Prescribed Burns - Rainwater Recycling System – Sustainable Landscape Design 262-949-0811

#### **Svanstrom Construction**

Full Service Construction Company 262-903-5545

#### The Bristol Group, Inc.

Lawn Care- Noxious Weed Control 262-857-9191

#### W. H. Major & Sons Inc.

Lawn care – Soil Testing – Noxious Weed Control – Excavation & Grading – athletic Field Installation & Maintenance – Equine Riding Arenas – Silt Fence Installation – Sandbag installationResidential, Commercial & Municipal Work 262-363-3115

Walters Pier Service
Pier Construction
262-758-1829

Z-Scape LLC Lawn Care - Soil Testing 262-279-7960

#### **Landscaper Contact Information**

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

Burlington, WI <u>www.arborimagesinc.com</u> Bill Murray, Kevin Remer <u>arborimagesinc@sbcglobal.net</u> 262-763-4645 Fax 262-763-5090

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

Walworth, WI <u>www.austinpierserviceinc.com</u>
Darrell Frederick , Mike Austin
<u>Aps-inc@verizon.net</u>
262-275-2615 Fax 262-275-3301

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

Lake Geneva, WI www.bandjlandscape.com
Dale Castleman bj.tree@att.net
262-248-3653 Fax 262-248-0340

#### Benchmark Landscape Management, Inc.

East Troy, WI <u>www.benchmarkwisconsin.com</u>
Paul Hahlbeck & Lisa Brockman <u>paul@benchmarkwisconsin.com</u>
262-642-7861

#### **Bigelow Landscapes**

Darien, WI Ron Bigelow <u>bigelowlandscaping@sharontelephone.com</u> (262) 882-5038 (Fax) 262-882-1179

#### **BioTechnical Erosion Control, LTD**

Harvard, IL <u>www.naturalshorelines.com</u> Randy Stowe <u>CPESC750@yahoo.com</u> 815-648-2253

#### **Botanica Fine Gardens & Landscapes**

Lake Geneva, WI <u>www.botanicawisconsin.com</u> Danniel Ward-Packard <u>botanicamail@gmail.com</u> John Packard 262-248-7513 Fax 262-248-0619

#### Breezy Hill Nursery

Salem, WI www.breezyhillnursery.com
Jerry Epping or Mike Schierl
contact@breezyhillnursery.com
262-537-2111 Fax 262-537-3434

#### Bret Achtenhagen's Seasonal Services LTD.

Mukwonago, WI <u>www.seasonalservices.com</u>
Bret Achtenhagen <u>bret@seasonalservices.com</u>
262-392-3444 Fax 262-392-3445

#### **Briarwood Landscape**

Elkhorn, WI

Shane Dunham <u>briarwoodshane@yahoo.com</u> 262-749-0445 Fax 262-742-2914

#### Landscaper Contact Information con't.

#### **Creative Edge Landscapes LLC**

Twin Lakes, WI <u>www.creativeedgelandscapes.com</u>
Robert Livingston; Corinne Krebs
<u>homehq@charterinternet.com</u>
262-877-2805 Fax 262-877-4074

#### **Creative Outdoor**

Lake Geneva, WI Patrick & Heather Burns <u>burnsh1004@gmail.com</u> 262-203-7118

#### **Dependable Pier Service**

Whitewater, WI Roscoe Merit roscoeone@yahoo.com 262-749-8181

## EMC<sup>2</sup> Landscaping

Hebron, IL <a href="http://emc2landscaping.com/">http://emc2landscaping.com/</a> J.P. Robson or Gillian Hanks <a href="mailto:emc2landscaping@charter.net">emc2landscaping@charter.net</a> 815-904-2777 Fax 815-361-0707

#### Fine Gardens, Inc.

Lake Geneva, WI http://www.finegardensinc.com/ Jim Weikel jim@finegardensinc.com 262-248-2388 Fax 262-248-7374

#### Golden Tree & Landscape, Inc.

Delavan, WI <u>www.goldentreelandscaping.com</u>
Tom & Angela Good <u>goldentreelandscape@yahoo.com</u>
262-728-8940 Fax 262-728-8981

#### **Ground Effects Landscape Management**

Burlington, WI Jeff Osmolak grnd.fx@sbcglobal.net 262-763-7422

#### **Hase Landscape Company**

Waukesha, WI <a href="http://www.haselandscape.com">http://www.haselandscape.com</a> Robb Nowak <a href="https://www.haselandscape.com">thepros@haselandscape.com</a> 262-572-5006 Fax 262-542-2115

#### **High Prairie Landscape Supply**

Genoa City, WI <a href="http://www.high-prairie.com/">http://www.high-prairie.com/</a>
Dennis Habenicht <a href="https://dhabenicht@high-prairie.com/">dhabenicht@high-prairie.com/</a>
262-279-6500 Fax 262-279-0249

#### J.K. Landscaping Inc.

Whitewater, WI Jenni & Jeff Kimps 262-473-7013 Fax: 262-248-8307

#### JNT'S Marina, LLC

Whitewater, WI <a href="http://jntsmarinepros.com/">http://jntsmarinepros.com/</a> Jeff & Nicole Widner <a href="wids1960@ameritech.net">wids1960@ameritech.net</a> 262-473-5960 Fax: 262-473-5963

#### **Kruger Landscape & Maintenance**

Delavan, WI <a href="http://www.krugerlandscape.com/">http://www.krugerlandscape.com/</a> Kevin Kruger <a href="mailto:Krugerlandscape@hotmail.com">Krugerlandscape@hotmail.com</a> 262-728-3138 fax 262-728-3144

#### LJ Reas Environmental Consulting

Green Lake, WI <u>www.ljreas.com</u>
Lisa J. Reas <u>ljreas@charter.net</u>
920 – 294-3116 (fax) 920-294-3116

#### Marek Landscaping, LLC

Milwaukee, WI <u>www.mareklandscaping.com</u> Rob Holly <u>rob@mareklandscaping.com</u> 262-272-0242 fax 414-272-0243

#### **MJB Services**

Elkhorn, WI <u>www.mjbservice.com</u> Kathy Krubert <u>kkrubert@yahoo.com</u> Mike Boyd 262-495-2751 Fax 262-495-2267

#### Natural Landscapes, Inc

Oconomowoc, WI <a href="http://www.naturallandscapesinc.com/">http://www.naturallandscapesinc.com/</a> Keir Peckham <a href="heterogeneous accession-com/">heterogeneous accession-com/</a> 262-488-5347 Fax: 262-431-4402

#### Paragon Design Group, LLC

Milwaukee, WI http://www.paragondg.com/ Brian J. Boeding brianb@paragondg.com 414-449-1555 Fax 414-449-2425

#### **Paul Swartz Nursery**

Burlington, WI www.paulswartznursery.com
Mike Olson, Ross Swartz info@paulswartznursery.com
262-889-4301 (fax) 262-889-8361

#### **Preuninger Enterprises**

Fort Atkinson, WI Richard Preuninger 920-988-8152 Fax 920-563-0295

#### PTS Landscaping, Inc

## **Prairie Tree Landscape Center**

Elkhorn, WI www.prairie-tree.com Laura Vos info@prairie-tree.com 262-742-2299 Fax 262-742-3494

#### **Reeds Construction LLC**

Lake Geneva, WI <a href="http://www.reedsconstructionllc.com/">http://www.reedsconstructionllc.com/</a> Jeff or Jon Reed <a href="mailto:info@reedsconstructionllc.com">info@reedsconstructionllc.com</a> 262-248-2934 Fax 262-248-3537

# <u>Scheel & Associates – Landscape Architecture & Low Voltage Lighting</u>

Lake Geneva, WI Steve Scheel slsla587@huges.net 262-348-1315 Fax 262-348-1316

#### **Scott Byron & Company Inc.**

Lake Bluff, IL www.scottbyron.com
Jim Callahan jcallahan@scottbyron.com
847-689-0266 Fax 847-689-0277

#### **Sheldon Landscape**

Lake Geneva, WI <u>www.sheldonlandscape.com</u> Don Sheldon, Hillary, Rick <u>don@sheldonlandscape.com</u> 262-248-9415

#### **Landscaper Contact Information con't**

#### Sunrise Gardens, LLC

Darien, WI http://www.sunrisegardensllc.com/ Adam Sandberg adam@sunrisegarensllc.com 262-949-0811 Fax: 262-882-1067

#### **Svanstrom Construction**

Lake Geneva, WI Tom Svanstrom <a href="mailto:swede@wi.rr.com">swede@wi.rr.com</a> 262-903-5545 Fax 262-203-5139

#### The Bristol Group, Inc

Bristol, WI <a href="http://www.thebristolgroup.com/">http://www.thebristolgroup.com/</a> Dan Huber <a href="https://dan@thebristolgroup.com">dan@thebristolgroup.com</a> 262-857-9191 Fax: 262-857-9098

#### **The Green Team**

Elkhorn, WI <a href="http://www.elkhornplantlady.com/">http://www.elkhornplantlady.com/</a> Jena Ehlen <a href="ehlenjena000@yahoo.com">ehlenjena000@yahoo.com</a> 262-742-2097 Fax 262-742-2097 (by request)

#### **Ultimate Excavating**

Fort Atkinson, WI Marc 920-568-0360

#### W. H. Major & Sons Inc.

Mukwonago, WI Bill Major whm@centurytel.net 262-363-3115 Fax 262-363-4190

#### **Walters Pier Service**

Elkhorn, WI Greg Walters <u>waltpiersvc@live.com</u> 262-758-1829

#### **Z-Scape LLC**

Genoa City, WI Steve Zlotnick, Angie Hall <u>z-scape@genevaonline.com</u> 262-279-7960 Fax 262-279-7960 Note: These contractors and landscapers have voluntarily attended the 2010 Walworth County Lakeshore Landscapers training, which provides information on Walworth County and State shoreland regulations. This list is provided for informational purposes only. This list does not imply recommendation or endorsement by Walworth County.