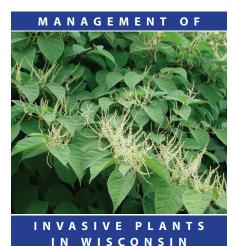
Patch Name	Entire Patch Area (ac)	2021 Average Density (# stems/sq ft)	2022 Average Density (# stems/sq ft)	2023 Average Density (# stems/sq ft)	Density Decrease from 2021-2023 (%)
Pavelski Road	0.019	1.03	0.21	.15	85.44%
Total Acreage	0.019				



Brendon Panke and Mark Renz

Invasive plants can thrive and aggressively spread beyond their natural range, disrupting ecosystems. The Management of Invasive Plants in Wisconsin series explains how to identify invasive plants and provides common management options. Management methods recommend specific timings for treatment, as well as expected effectiveness. For more information, go to: fyi.uwex.edu/weedsci/category/invasive-plants-of-wisconsin.

Japanese knotweed

(Polygonum cuspidatum)

apanese knotweed is an herbaceous perennial, growing up to 10' tall. Hollow, reddish, arching, bamboo-like stems are smooth and stout, and they can persist after plant dies back each year. The base of the stem above each joint is swollen and surrounded by a membranous sheath (ocrea).

Legal classification in Wisconsin:Restricted

Leaves: Alternate, egg-shaped to almost triangular, 4–6" long, 3–4" wide. Dark green on upper surface and pale green on lower surface.

Flowers: Blooms in late summer. Flowers are numerous, highly branched, tiny, creamy white or greenish, and found where the leaf attaches to the stem (axils), near the tips of stems.

Fruits and seeds: Small, winged, triangular fruits carry very small, shiny seeds.

Roots: Plants arising from seed have a taproot up to 6' deep. Stout rhizomes can reach 65' or more from parent plants and give rise to new stalks. Plants arising from seed and rhizome also have fibrous roots.

Similar species: Giant knotweed (*P. sachalinense*) is also invasive, but grows up to 13' tall with larger leaves. The two species are known to hybridize.

Ecological threat:

- Invades upland and lowland sites that are disturbed and undisturbed.
- Poses a significant threat to riparian areas, where it can rapidly spread.
- It tolerates shade, high temperatures, high salinity, and drought.
- It can be transported to new sites as a contaminant in fill dirt or on equipment.
 During floods, it spreads downstream by shoot fragments, rhizomes, or occasionally by seeds. Escapees from neglected gardens and discarded cuttings are common routes of dispersal from urban areas.
- Although reported to not produce viable seed, several studies have shown that populations of knotweed in the United States can produce viable seed that readily germinate and survive in field conditions.







Non-chemical control Removal

Effectiveness in season: < 50%
Season after treatment: < 50%

Pull at least four times a year. Rhizomes of newly established populations can be removed by digging, but care must be taken to remove all rhizomes and perennial roots since very small amounts can resprout. This is not recommended for established populations because of the depth (6' taproot) and width (65' rhizomes) of the root system. Bag all cut or pulled material and dispose of it in a landfill or burn to avoid potential for root material or above-ground tissue to reroot.

Mowing

Effectiveness in season: 50–70% Season after treatment: < 50%

Mow or cut at least four times a year. Mow or cut whenever knotweed reaches 2–3' in height and repeat through the fall. Newly established populations can be controlled after three years, but established populations will only be suppressed. Use a mower that bags cut material or rake and bag cut material after mowing and dispose of it in a landfill or burn it to avoid potential for above-ground tissue to resprout.

Prescribed burning

Effectiveness in season: 50–70% Season after treatment: < 50%

Spring burns can kill germinating seedlings and suppress above-ground growth of established plants, depending on fire intensity. After the fire, established plants will quickly resprout and reinvade; this management method is not recommended unless integrated with other techniques. Fire may benefit other species well-adapted to this management (e.g., prairie grasses), resulting in improved competition with knotweed. A handheld propane torch can be effective for treating seedlings.

Grazing

Effectiveness in season: 50–70% Season after treatment: < 50%

Grazing may reduce shoot densities and height, but will not eradicate populations. Cattle, sheep, horses, donkeys, and goats will feed on Japanese knotweed. Animals prefer the young shoots as they emerge in the spring, but preference declines as stems become woody in summer. If possible, remove last season's stems before grazing since these can deter animals. Although grazing can help reduce the spread into uninfested areas, it has not been found to eliminate populations. Grazing will stimulate the rhizomes to resprout throughout the season; thus, repeated grazing will be required throughout the growing season to effectively suppress populations.

Manipulation of the environment

Effectiveness in season: 50-70% Season after treatment: 50-70%

Mulching or covering with a tarp can slow the spread of knotweed. The tarp must not be taut or the plant will stretch and break the tarp. Watch for sprouts beyond the edge of the mulch or tarp since knotweed sprouts readily from the rhizome.

Populations will need to be covered for at least two years to suppress plants. This technique will rarely eradicate populations.



Chemical control

Pre-emergence

Apply herbicide directly to soil. Use lower rates and narrower bands that are more closely spaced together on smaller plants and where less dense populations are expected and higher rates and broader bands that are more widely spaced apart on larger plants and where denser populations are expected.

tebuthiuron*

Effectiveness in season: 70–90% Season after treatment: 70–90%

Common name: Spike 20P

Rate:

broadcast: 10–20 lb/A (2–4 lb a.i./A) **spot:** 1.12 oz/100 ft² (0.02 oz a.i./100 ft²)

Timing: Apply during late winter or early spring when soil is not frozen. Apply to ground infested with target species in bands 4–10' wide spaced 4–10' apart. Width and spacing will depend on the area and species to be treated.

Remarks: Tebuthiuron is also available as a liquid formulation, Spike 80DF.

Caution: Do not apply directly to water or to areas where surface water is present. Applications can result in bare ground since tebuthiuron is not selective and can remain in the soil for several years, depending on application rate. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. In areas fitting this description, Spike can be used at rates as low as 2.5 lb/A (0.5 lb a.i./A), but partial control should be expected. Any plant with a root system that intercepts the area treated with this herbicide can be damaged or killed. Do not apply more than 20 lb/A (4 lb a.i./A) a year. Do not apply this product more than once a year.

Foliar

Apply directly to individual plants or broadcast across an infested area. Broadcasted foliar applications are typically the most cost-effective treatment in dense infestations. Use lower rates on smaller plants and less dense populations and higher rates on larger plants and denser populations. Absorption of herbicide can be limited with this species, resulting in reduced effectiveness. Including a recommended surfactant at 0.25–0.5% can alleviate any potential reduction in effectiveness. Three seasons of herbicide applications may be required to eradicate an infestation.

2,4-D*

Effectiveness in season: 70–90% Season after treatment: 50–70%

Common name: Many

Rate:

broadcast: 2.0–2.5 lb a.e./A **spot:** For a 3.8 lb a.e./gal product: 4% (0.15 lb a.e./gal)

Timing: For best results, cut twice (in spring when it reaches 3', then again when plant flowers), then spray fall regrowth when it reaches 3'.

Remarks: Spring or summer applications of this herbicide are not effective in controlling this plant, and this herbicide should only be applied in the fall to regrowth.

Caution: Use aquatically labeled product if potential exists for solution to contact surface water. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

aminopyralid*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Milestone

Rate: broadcast: 7–14 fl oz/A

(0.1-0.2 lb a.e./A)

spot: Equivalent to broadcast rates.

Timing: For best results, cut twice (in spring when it reaches 3', then again when plant flowers), then spray fall regrowth when it reaches 3'.

Remarks: 14 fl oz/A can be used as long as less than half of the area is treated. Depending on the volume of solution applied per acre, typical mixtures for spot treatments are 8–16 mL Milestone per gallon of water.

Caution: Do not apply directly to water or to areas where surface water is present. Remains in soil for up to one year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Do not compost treated plants since herbicide can persist through composting process.

glyphosate*

Effectiveness in season: 70–90% Season after treatment: 50–70%

Common name: Roundup

Rate: broadcast: 3.0–8.0 lb a.e./A **spot:** For a 3 lb a.e./gal product: 4–8% (0.12–0.24 lb a.e./gal)

Timing: For best results, cut twice (in spring when it reaches 3', then again when plant flowers), then spray fall regrowth when it reaches 3'. Cut again 30 days after spraying for increased effectiveness.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

imazapyr*

Effectiveness in season: 70–90% Season after treatment: 70–90%

Common name: Arsenal

Rate: broadcast: 48-64 fl oz/A

(0.75-1.0 lb a.e./A)

spot: 0.5–1% (0.01–0.02 lb a.e./gal)

Timing: For best results, cut twice (in spring when it reaches 3', then again when plant flowers), then spray fall regrowth when it reaches 3'.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr*

Effectiveness in season: 70–90% Season after treatment: 50–70%

Common name: Garlon

Rate: broadcast: 64–128 fl oz/A

(2.0-4.0 lb a.e./A)

spot: 1.5–2.25% (0.06–0.09 lb a.e./gal)

Timing: For best results, cut twice (in spring when it reaches 3', then again when plant flowers), then spray fall regrowth when it reaches 3'.

Remarks: Spring or summer applications, of this herbicide are not effective in controlling this plant and applications should only be made in the fall.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Cut stump

Cut stem at or below the second joint from the ground. Apply herbicide solution to the surface remaining rooted in the ground. If cutting between joints, apply 5mL of herbicide into the hollow stem rooted in the ground. Use lower rates on smaller plants and less dense populations and higher rates on larger plants and denser populations.

glyphosate*

Effectiveness in season: 90–100% Season after treatment: 50–70%

Common name: Roundup

Rate: For a 3 lb a.e./gal product: 20–25% (0.6–0.75 lb a.e./gal)

Timing: Apply any time of year when plant is actively growing, although spring applications will likely require retreatment. Wait for 3' of regrowth before retreating.

Remarks: Applications can also be injected directly into the stem. Inject 2–5mL (0.002–0.005 lb a.e.) between ground and the top of the second basal joint (node) from the ground.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr*

Effectiveness in season: 90–100% Season after treatment: 50–70%

Common name: Garlon

Rate: 20–25% in oil (0.8–1.0 lb a.e./ gal)

Timing: Apply any time of year when plant is actively growing, although spring applications will likely require retreatment. Wait for 3' of regrowth before retreating.

Remarks: Applications can also be injected directly into the stem. Inject 1mL of a 50% (0.0004 lb a.e.) solution or 0.5mL (0.0004 lb a.e.) of an undiluted solution between ground and the top of the second basal joint (node) from the ground. Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr + 2,4-D*

Effectiveness in season: 90–100% Season after treatment: 50–70%

Common name: Crossbow

Rate: 4% in oil (triclopyr: 0.04 lb a.e./gal + 2,4-D: 0.08 lb a.e./gal)

Timing: Apply any time of year when plant is actively growing, although spring applications will likely require retreatment. Wait for 3' of regrowth before retreating.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Herbicide information is based on label rates and reports by researchers and land managers. Products known to provide effective control or in common use are included. Those that do not provide sufficient control or lack information for effectiveness on target species have been omitted.

References to pesticide products in this publication are for your convenience and not an endorsement of one product instead of a similar product. You are responsible for using pesticides in accordance with the label directions. Read the label before any application.

This series of fact sheets was created in cooperation with University of Wisconsin-Extension Team Horticulture.

This material is based upon work supported by the Cooperative State Research, Education, and Extension Service,

U.S. Department of Agriculture, under Award No. 2009-45060-06000.

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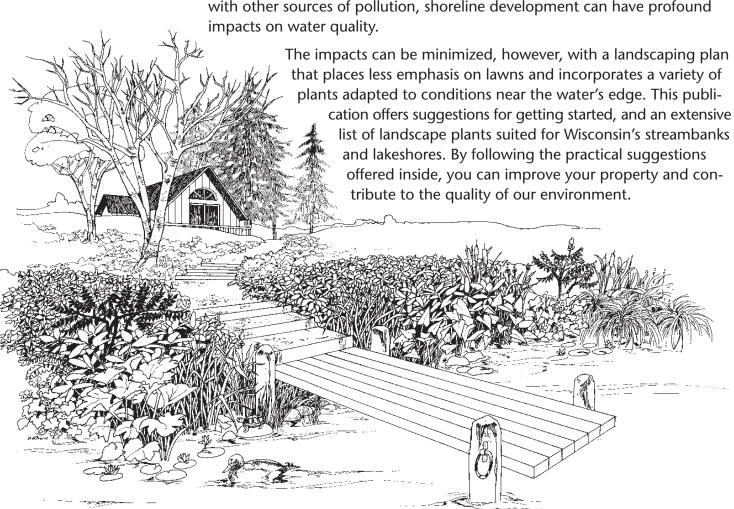
Management of invasive plants in Wisconsin: Japanese knotweed (A3924-11)





isconsin's lakes and streams offer an escape for residents and visitors alike. From northwoods flowages to southeastern glacial lakes laced throughout the state, our waters provide abundant recreational opportunities, as well as a chance to simply get away from the sights and sounds of an urbanizing society.

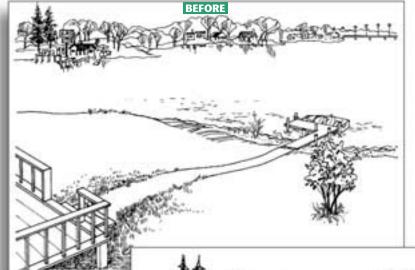
The escape has become so popular that many lakeshores and streambanks are now growing more houses than trees, often with more consequences than meet the eye. Soil exposed during construction can wash into the water, and the development itself permanently alters a portion of the natural land-scape. Buildings and access drives replace vegetation, increasing the amount of storm water runoff and pollutants entering the lake or stream. Owners of the new home often bring with them traditional landscaping ideas centered on the conventional yard. Too often that means manicured lawns extending to the water's edge, along with the fertilizer and pesticide applications that are the norm in the cities and villages left behind. Over time, and combined with other sources of pollution, shoreline development can have profound impacts on water quality.



BEFORE & AFTER: ALTERNATIVES TO THE TRADITIONAL LAWN

rass planted to the water's edge (top illustration) is seldom the best choice, from either an esthetic or water quality standpoint. Why not try an alternative (bottom illustration)? Substituting a variety of plants for at least parts of the lawn has numerous advantages:

- Screens undesirable views while framing good ones.
- Reduces the time spent on lawn maintenance and reliance on fertilizers and other lawn chemicals.
- Helps filter pollutants that wash off roofs, driveways and other hard surfaces.
- Preserves the natural appearance of the shoreline.
- Offers better protection against shoreline erosion and requires less formal repair.
- Provides increased diversity and improved habitat for wildlife.





Protecting the Water During Construction

With development comes bare soil, but careful planning can minimize erosion and the resulting water quality problems.

- The further the construction site is from the lake or stream and the less ground that is disturbed, the better for water quality. Greater setbacks from the water can also help overcome site limitations such as wet soils or steep slopes.
- Indiscriminate removal of trees during construction promotes soil erosion and is also a questionable practice from the standpoint of property values.
 A better alternative is to carefully trim trees to frame views of the lake and screen undesirable views.
- During construction, use filter fabric fences or straw bales as temporary sediment barriers along the shoreline.
- Immediately after construction of any soil-disturbing activity, the soil should be seeded, sodded or planted to natural vegetation and mulched. Once established, the vegetation becomes a permanent sediment filter. A fact sheet on Lawn Establishment (A3434) is available from county UW-Extension offices.

Landscaping for Established Yards

Proper landscape design and selection of plant material can greatly reduce the effects of shoreline development on water quality. Lawns groomed right up to the water's edge can be redesigned to allow a buffer zone along the lake or stream. Banks can be planted to stabilize the soil and eliminate lawn mowing and fertilizing.

Treatments can vary from low-cost, limited alterations to moderate-cost, significant changes. The specific treatment chose depends on the site and desires of the property owner, but here are a few basics:

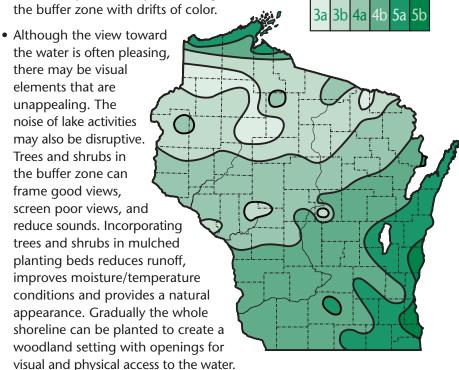
 Leaving a 35-foot (or wider) buffer of unmowed turf along shorelines is the first step in reducing runoff of soil, fertilizer and pesticides. The grasses will grow 12-24" tall before going to seed. Mow the buffer zone's inland edge along a natural-looking curve. Also, use a smooth-flowing curve when mowing pathways through the buffer zone to the water's edge.

- Planting appropriate bulbs, perennial flowers, and groundcovers in the grasses of a buffer zone will add seasonal diversity. Working up small areas and mulching around new plantings will reduce competition from the grasses and reduce runoff of rainfall or melting snow.
- Native plants are best adapted to Wisconsin's climate and blend in well with the natural shoreline landscape.
- Planted through the grass in the buffer zone, native flowers can provide an ever-changing foreground to the view of the water. The buffer zone can be planted to native shore plants and prairie by gradually working up small areas (to reduce potential erosion) and seeding or transplanting shallow water plants or wet prairie grasses and forbs. UW-Extension's Prairie Primer (G2736) provides prairie restoration and maintenance details. Over time, the native plants will spread, filling in

LANDSCAPE PLANT HARDINESS ZONES:

When selecting shoreline landscape plants from the list that follows, be sure they are identified as hardy for your area. While some plants may survive in a sheltered spot north of their recommended zone, it is usually best to plant reliable hardy species.

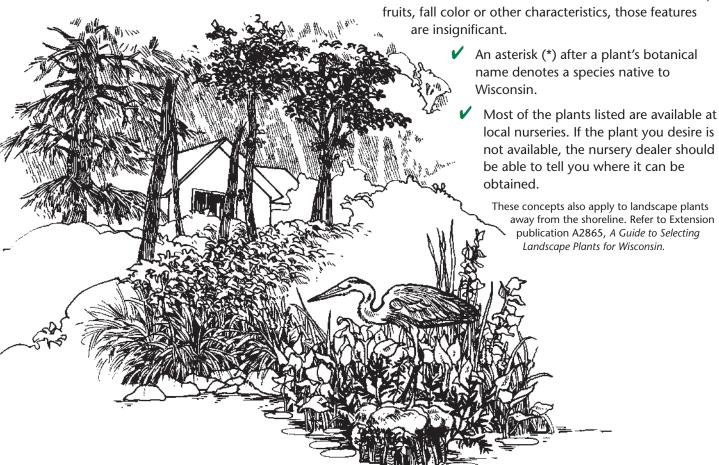
ZONE



A Guide to Shoreline Landscape Plants

he list of plants on the following pages includes most of the better ornamental plant species and cultivars (cultivated varieties) that are usually available for sale in Wisconsin. The list includes the botanical and common names of recommended plants, growth rate (F = fast, M = medium, S = slow), hardiness zone and plant characteristics. When selecting plants, please keep the following points in mind:

- Wisconsin is divided into six zones based on minimum winter temperatures. (See map on previous page.) Always try to select plants that are hardy in your area.
- ✔ Be sure to review all the plant characteristics before you select trees, shrubs and ground covers for your situation. Many plants are sensitive to poorly drained soil conditions. Use only species tolerant of poor drainage in low, wet spots. Where shade is indicated as one of the plant characteristics, it refers to tolerance, not a requirement for shade.
- When selecting plants, one often tends to consider the flower display first. However, it is also important to consider the year-round interest the plant will provide in the landscape. Remember that a flower display often lasts only a week or two, while other interesting features such as the bark or fruits may be noticeable for several months. Where the list includes no mention of flowers,



Evergreen Trees

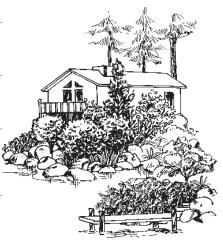
The evergreen trees and shrubs listed on this page are recommended because they generally do well in moist or wet soil conditions. Some do best in sun; others do best in partial or full shade.

PLANT N	GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS	
botanical	common			
Picea glauca*	White Spruce	М	3a	Moist soil; sun.
				Insignificant flowers; fruits are 2" cones; 70' height; light green foliage.
Pinus strobus*	Eastern White Pine	М	3a	Moist soil; sun.
				Insignificant flowers; fruits are 5-8" cones; 75' height; picturesque; soft, green foliage; subject to blister rust.
Thuja occidentalis*	* American Arborvitae	М	3a	Moist soil; partial shade.
				Insignificant flowers; fruits are ½" cones; 40' height; light green, soft, scale-like foliage.
Thuja occidentalis	Techny American	S	3b	Moist soil; partial shade.
'Techny'	Arborvitae			Insignificant flowers; fruits are ½" cones; 20' height; deep green foliage.
Tsuga canadensis*	Canadian	М	3a	Moist soil; shade.
	Hemlock			Insignificant flowers; fruits are ¾" cones; 75' height; soft, feathery foliage.



Evergreen Shrubs

PLANT NA	GROWTH HARDINESS RATE ZONE		PLANT CHARACTERISTICS	
botanical	common			
Juniperus chinensis	Pfitzer Juniper	F	4a	Dry soil; sun.
'Pfitzerana'				No flowers or fruits; 6' height; wide spreading; green foliage.
Juniperus chinensis	Japenese Garden	М	4b	Dry soil; sun.
procumbens	Juniper			No flowers or fruits; 18" height; creeping; blue-green foliage.
Juniperus communis	Oldfield Common	М	3a	Dry soil; sun.
depressa*	Juniper			Insignificant flowers; light green fruits; 4' height; spreading; light green foliage.
Juniperus horizontalis*	Creeping Juniper	М	3a	Dry soil; sun.
				Insignificant flowers; light green to silvery fruit; 4"-18" height; creeping; gray-green to bluegreen foliage.
Taxus cuspidata	Spreading Japanese Yew	М	4b	Moist soil; shade.
'Espansa'				Insignificant flowers; fruits; 6' height; spreading; dark green foliage.
Thuja occidentalis	Hetz Midget	S	3a	Moist soil; half-shade.
'Hetz Midget'	Arborvitae			Insignificant flowers; fruits; 18" height; globe; bright green foliage.
Thuja occidentalis	Woodward Globe	М	3a	Moist soil; half-shade.
'Woodwardii'	Arborvitae			Insignificant flowers and fruits; 6' height; globe; bright green foliage.



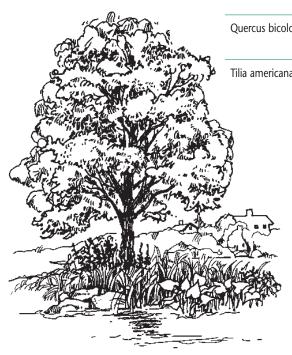
Deciduous Trees

The deciduous trees and shrubs recommended here generally do well in moist or wet soil conditions. Some do best in sun, others do best in partial or full shade.

TALL DECIDUOUS TREES (40-100' HEIGHT)

PLANT NA	MES	GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS
botanical	common			
Acer rubrum*	Red Maple	F	3a	Moist, acid soil; tolerates poor drainage; sun to semi-shade.
				Red flowers; fruits are winged samaras; yellow, orange, or red fall color; salt sensitive.
Acer saccharinum*	Silver Maple	F	3a	Moist soil; tolerates poor drainage; sun.
				Red flowers; fruits are winged samaras; yellowish or no fall color; competitive roots; weak wooded.
Acer saccharum*	Sugar Maple	М	3a	Rich, moist soil; shade.
	3 1			Yellow flowers; fruits are winged samaras; yellow, orange, or red fall color; salt and stress sensitive.
Fraxinus americana*	White Ash	М	3a	Moist soil; tolerates poor drainage; sun.
				Insignificant flowers; fruits are winged samaras; orange to purple fall color; dioecious (male and female plants).
Fraxinus pennsylvanica*	Green Ash	F	3a	Dry to wet soil; tolerates poor drainage; sun.
				Insignificant flowers; fruits are winged samaras; yellow fall color; salt tolerant; weak wooded.
Gleditsia triacanthos*	Common	F	4a	Moist soil; tolerates poor drainage; sun.
	Honeylocust			Dioecious; insignificant flowers; female produces seed pods; yellow fall color; thorns; salt tolerant.
Quercus bicolor*	Swamp	S	4a	Moist to wet soil; tolerates poor drainage; sun.
	White Oak			Insignificant flowers; fruits are acorns; no fall color.
Tilia americana*	Basswood	М	3a	Rich, moist soil; sun or shade.
				Fragrant, tiny white flowers in early summer; nut-like pea-sized fruits; yellowish or no fall color;

salt sensitive.



MEDIUM DECIDUOUS TREES (30-40' HEIGHT)

PLANT N	GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS	
botanical	common			
Alnus glutinosa	European Alder	F	4a	Wet soil; tolerates poor drainage; sun to partial shade.
				Catkins; cone-like fruits; no fall color.
Betula nigra*	River Birch	М	4b	Wet to dry acid soil; tolerates poor drainage; sun. Catkins; small, cone-like fruits; yellow fall color; cinnamon-colored, peeling bark
Betula platyphylla japonica 'Whitespire'	Whitespire Birch	М	3a	Moderate soils; tolerates hot sites; sun. Catkins; small cone-like fruits; yellow fall color; resistant to bronze birch borer.
Ostrya virginiana*	Ironwood	S	3b	Dry to moist soil; shade. Catkins; hop-like fruits; yellowish fall color; elm-like leaves.

LOW DECIDUOUS TREES (15-30' HEIGHT)

PLANT NAMES		GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS
botanical	common			
Alnus rugosa*	Speckled Alder	М	4a	Wet soil; tolerates poor drainage; sun. Catkins; small, cone-like fruits; no fall color.
Amelanchier laevis*	Allegheny Serviceberry	S	3a	Moist soil; partial shade. White flowers; edible red to blue-black fruits; orange to red fall color.
Carpinus caroliniana*	American Hornbeam	S	3b	Moist soil; shade. Catkins; fruits are small nutlets; orange fall color; smooth gray muscle-like trunk.
Cornus alternifolia*	Pagoda Dogwood	М	3a	Cool, moist soil; shade. White flowers; blue-black fruits on red stalks; maroon fall color.
Crataegus species*	Hawthorns	М	4a	Dry to moist soils; sun. White flowers; red fruits; yellow to orange fall color; thorns.
Salix pentandra	Laurel Willow	М	3a	Wet soil; sun. Catkins; insignificant fruits; yellowish fall color; dense habit.

Deciduous Shrubs

These deciduous shrubs are recommended because they generally do well in moist or wet soil conditions. Some do best in sun, others do best in partial or full shade.

TALL DECIDUOUS SHRUBS (8-14' HEIGHT, PLANT 5-7' APART)

PLANT NAM	GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS	
botanical	common			
Cornus racemosa*	Gray Dogwood	F	3a	Dry to wet soil; partial shade to shade. White flowers; white fruits; purple fall color.
Cornus sericea*	Redosier Dogwood	F	3a	Moist to wet soil; tolerates poor drainage; sun. White flowers; white fruits; red twigs; purple leaves in fall.
Euonymus atropurpurea*	Eastern Wahoo	F	4b	Moist soil; shade.
				Tiny purplish flowers; bittersweet fruits; orange to purple fall color.
Hamamelis virginiana*	Common	F	4a	Moist soil; shade.
	Witchhazel			Yellow flowers in October; insignificant fruits; yellow fall color.
Physocarpus opulifolius*	Eastern Ninebark	F	3a	Dry to moist soil, partial shade.
				White flowers; red, capsular fruits; yellowish fall color; shredded bark.
Viburnum dentatum	Arrowwood	F	4a	Moist soil; shade.
	Viburnum			White flowers; blue fruits; maroon fall color.
Viburnum lentago*	Nannyberry	F	3a	Dry to moist soil; sun or shade.
	Viburnum			White flowers; black fruits; maroon fall color.
Viburnum prunifolium*	Blackhaw	F	4a	Dry to moist soil; partial shade.
	Viburnum			White flowers; black fruits; maroon fall color.
Viburnum trilobum*	Cranberrybush	F	3a	Moist soil; shade.
	Viburnum			Lacy, white flowers; persistent, edible red fruits; maroon fall color.
^				maroon fail Color.



MEDIUM DECIDUOUS SHRUBS (5-8' HEIGHT, PLANT 3-4' APART)

PLANT NA	GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS	
botanical	common			
Aronia arbutifolia	Red Chokeberry	F	4b	Wet soil; tolerates poor drainage; shade. White flowers; red fruits; red fall color.
Corylus americana*	American Filbert (Hazelnut)	М	3a	Dry soil; shade. Catkins; fruits are hazelnuts; orange fall color.
llex verticillata*	Winterberry	F	4a	Wet, acid soil; tolerates poor drainage; sun to partial shade. Dioecious; red fruits; yellowish fall color.
Viburnum cassinoides*	Withrod Viburnum	М	4a	Wet, acid soil; tolerates poor drainage; partial sun to shade. White flowers; pink-to-red-to-blue fruits; red fall color.

LOW DECIDUOUS SHRUBS (2-5' HEIGHT, PLANT 2½' APART)

PLANT NA	GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS	
botanical	common			
Amelanchier stolonifera*	Running	М	3a	Dry soil; shade.
	Serviceberry			White flowers; edible red fruits; orange fall color; suckering habit.
Aronia melanocarpa*	Black Chokeberry	М	3b	Wet soil; shade.
				White flowers; black fruits red fall color.
Rhododendron x 'PJM'	PJM Hybrid	S	4a	Moist, acid soil; sun.
	Rhododendron			Lavender flowers; insignificant fruits; evergreen leaves turn purple in fall.
Ribes alpinum	Alpine Currant	F	3a	Dry to moist soil; partial sun to shade.
				Insignificant flowers and fruits; yellowish fall color; good hedge plant.
Spirea japonica	Little Princess	М	4a	Dry to moist soil; sun.
Little Princess	Spirea			Pale pink flowers; insignificant fruits; yellowish fall color; compact habit.
Viburnum acerifolium*	Mapleleaf	М	3a	Moist soil; shade.
	Viburnum			White flowers; black fruits; maroon fall color.
Viburnum opulus	Dwarf European	М	3a	Moist soil; shade.
'Nanum'	Cranberrybush			No flowers or fruits; maroon fall color; twiggy.

Wet Forest Groundlayer Plants

After a shade pattern is established by trees and shrubs, these plants can be incorporated in the ground layer.

PLANT NAN	GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS	
botanical	common			
Amphicarpa bracteata*	Hog Peanut	_	3a	Moist soil; shade.
				Pea-like lilac flowers in late summer; fleshy one-seeded fruit pods; delicate twining vine.
Arisaema dracontium*	Green Dragon	_	4a	Moist soil; shade.
				Green flowers in spring; insignificant fruits; 1-4' height; leaves divided into 5-15 pointed segments.
Aster lateriflorus*	Calico Aster	_	3a	Moist soil; shade.
				White flowers with purple centers in fall; insignificant fruits; 1-4' height; coarsely toothed leaves.
Caltha pulustris*	Marsh Marigold	_	3a	Moist soil; partial shade.
	(Cowslip)			Large yellow flowers in early spring; insignificant fruits; 1-2' height; glossy, roundish leaves; thick hollow stems.
Geum canadense*	White Avens	_	3a	Moist soil; shade.
				White flowers in summer; bristly seed receptacles; 1½-2½¹ height; lower leaves usually divided into 3's.
Impatiens capensis*	Spotted Jewelweed	_	3a	Wet soil; shade. Spotted orange pendulant flowers in summer; ripe seed pods pop when touched; 2-5' height; succluent, juicy stems.
Matteuccia struthiopteris	Ostrich Fern	_	3a	Moist soil; shade.
pensylvanica*				Insignificant flowers and fruits; 4-5' height; large, coarse textured fronds.
Menispermum canadense*	Moonseed		4b	Moist soil; shade.
				Clusters of small white flowers in early summer; black fruits resemble grapes; woody climber; large variable leaves (nearly round to 3-7 shallow lobes).
Mertensia virginica*	Virginia Bluebells	_	3a	Moist soil; shade.
				Nodding trumpet-like blue flowers in spring; insignificant fruits; 1-2' height; smooth strongly veined, oval leaves; succulent stems.
Onoclea sensibilis*	Sensitive Fern	_	3a	Moist soil; shade to sun.
				Insignificant flowers and fruits; 1-2½' height; large leaflets on fronds.
Pedicularis canadensis*	Wood Betony	_	3a	Moist soil; shade.
				Yellow or red flowers in spring; insignificant fruits; $\mbox{$\%$}$ -1' height; long, soft-hairy, often reddish leaves.

(WET FOREST GROUNDLAYER PLANTS – CONTINUED)

PLANT NAMES		GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS	
botanical	common				
Pilea pumila*	Clearweed	_	3a	Moist soil; shade.	
				Small green flowers in leaf axils in late summer; insignificant fruits; ½-1½' height; nettle-like (non-stinging) leaves; smooth translucent stems.	
Ranunculus	Swamp	_	3a	Wet soil; shade.	
septentrionalis*	Buttercup			Yellow flowers in spring; insignificant fruit; 1-3' height; leaves in 3 segments; weak, hollow stems	
Symplocarpus foetidus*	Skunk Cabbage	_	3a	Wet soil; partial shade.	
				Green/purple shell-like sheath covers green flowers in very early spring; insignificant fruit; 1-3' height; large, broad leaves appear after flowers; leaves have fetid odor if crushed.	
Viola pedata*	Marsh Blue Violet	_	4a	Wet soil: shade.	
·				Dark violet flowers in spring; flower stems taller than leaves; insignificant fruits; $\frac{1}{2}$ -1' height; heart-shaped leaves.	



Groundcover & Bankcover Plants

Groundcover and bankcover plants can replace conventional grasses, and the fertilizing and mowing involved.

GROUNDCOVERS

PLANT NAMES		GROWTH HARDINESS RATE ZONE		PLANT CHARACTERISTICS		
	botanical	common				
	Ajuga reptans	Bugleweed or	_	4a	Moist soil; shade.	
		Carpet Bugle			White, red, purple, or blue flowers in late spring; 4-6" height; green to purplish evergreen foliage; ground cover.	
	Arctostaphylos uva-ursi*	Bearberry	_	3a	Dry, acid soil; sun to partial shade.	
					Small, terminal, white flowers in spring; small red berry; 6" height; paddle-shaped, evergreen leaves; trailing shrub; ground cover.	
	Asarum canadense*	Canada	_	3a	Rich, moist soil; shade.	
8		Wildginger			Ground-level, cup-shaped, 3-pointed red-brown flowers in spring; 6" height; large, heart-shaped leaves; ground cover.	
	Convallaris majalis	Lily-of-the-valley	_	3a	Moist soil; shade.	
					Fragrant white flowers in spring; 8" height; dark green foliage; ground cover.	
	Euonymus fortunei	Purpleleaf	_	4b	Moist soil; shade.	
	'Colorata'	Wintercreeper			Insignificant flowers; 6-18" height; evergreen leaves turn purple in winter; only fully hardy in SE Wisconsin, needs shelter from winter sun and wind; ground cover.	
	Hosta cultivars	Hosta or	_	3a	Moist soil; shade.	
		Plantainlily			White or lavender flowers in summer or early fall; 6-24" height; green, blue, gold and variegated leaves; ground cover.	
	Juniperus species	Juniper	_	3-4	Dry soil; sun.	
					Insignificant flowers; some have berry-like fruits; 6-24" height; needled evergreen; ground or bank cover.	
	Lycopodium clayatum*	Running Plne	_	3a	Moist, acid soil: shade.	
					Insignificant flowers; 2-6" height; creeping or erect stems; ground cover.	
	Pachysandra terminalis	Japanese	_	4b	Moist soil; shade.	
		Pachysandra			White flowers in summer; 6-8" height; evergreen foliage; only fully hardy in SE Wisconsin, needs shelter from winter sun and wind; ground cover.	
	Phlox subulata	Moss Phlox	_	3a	Dry, infertile soil; sun.	
					Small clustered, pink or white flowers in spring; 6" height; needle-like, semi-evergreen leaves; ground cover.	
	Potentilla tridentata*	Wineleaf Cinquefoi	l _	3a	Dry soil; sun.	
					White flowers in early summer; 6" height; wine-red fall color; ground cover.	
	Rhus aromatica	Gro-Low	_	3a	Dry soil; sun.	
	'Gro-Low'	Fragrant Sumac			Insignificant flowers; 30" height; fragrant foliage; orange-maroon fall color; ground or bank cover.	
	Sedum species	Sedum or	_	3-5	Dry, infertile soil; sun.	
	\$ cm \$20	Stonecrop			White, yellow, pink, or purple flowers in spring, summer or fall; 2-10" height; succulent plant; ground cover.	



DECIDUOUS BANKCOVER SHRUBS

PLANT NAMES		GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS
botanical	common			
Amelanchier stolonifera*	Running Serviceberry	М	3a	Dry soil; shade. White flowers; edible red fruits; 3-4' height; orange fall color; suckering habit.
Cornus sericea*	Redosier Dogwood	F	3a	Moist to wet soil; tolerates poor drainage; sun. White flowers; white fruits; 8' height; purple fall color; red twigs; spreading habit.
Diervilla Ionicera*	Dwarf Bushhoneysuckle	М	3a	Dry soil; shade.
				Yellow flowers; insignificant fruits; 3' height; mounded habit.
Rhus aromatica*	Fragrant Sumac	F	3a	Dry soil; sun.
				Greenish-yellow flowers; red fruits; 4' height; orange-maroon fall color; fragrant foliage; mounded habit.
Rosa virginiana	Virginia Rose	F	4a	Moist to dry soil; sun.
				Pink flowers; persistent red fruits (hips); 4' height; red stems; suckering habit.
Salix repens var. nitida	Silver Creeping Willow	F	4b	Moist soil; sun.
				Insignificant flowers and fruits; 2' height; silvery foliage; spreading habit.
Symphoricarpos orbiculatus	Indiancurrant Coralberry	М	3b	Dry soil; shade.
				White flowers; pink fruits; 3' height; suckering habit.

EVERGREEN BANKCOVER SHRUBS

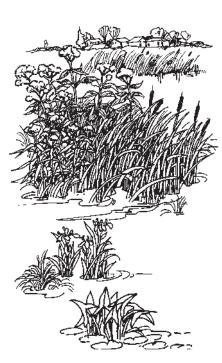
PLANT NAMES		GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS
botanical	common			
Juniperus chinensis Pfitzer Juniper 'Pfitzerana'	Pfitzer Juniper	М	4a	Dry soil; sun.
				No flowers or fruits; 6' height; rich green foliage; wide spreading.
Juniperus chinensis Japanese Garden procumbens Juniper	Japanese Garden	М	4b	Dry soil; sun.
			No flowers or fruits; 18" height; blue-green foliage; creeping.	
)	Oldfield Common Juniper	М	3a	Dry soil; sun to partial shade.
				Insignificant flowers; berry-like blue-green fruits; light green foliage turns brown in winter.
Juniperus horizontalis*	Creeping Juniper	М	3a	Dry soil; sun.
				Insignificant flowers; some have berry-like fruits; variable foliage color; subject to blight disease.
	Calgary Carpet		3a	Dry soil; sun.
	Savin Juniper			No flowers or fruits; 8" height; soft green foliage; low spreading.
Taxus cuspidata 'Espansa'	Spreading Japanese Yew	М	4b	Dry to moist soil; shade.
				Insignificant flowers; red fruits; 6' height; dark green foliage; only fully hardy in SE Wisconsin.

Grasses, Forbs & Aquatics

Most aquatic plants have not been extensively studied for landscape purposes. However, landowners can help establish stable, diverse plant communities by encouraging these plants along the water's edge.

MOIST SHORE AREAS (MOIST TO WET SOILS IN FULL SUN)





(MOIST SHORE AREAS – CONTINUED)

PLANT NAMES		GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS
botanical	common			
Rudbeckia hirta*	Black-eyed Susan	_	3a	Showy, big single yellow flowers with chocolate-colored center disks in summer; 1-3' height; easy to grow.
Sorghastrum nuans*	Indian Grass	_	3a	Flower clusters filled with short, soft, golden- brown hairs; typical grass seed head in fall; 4-8' height; grows rapidly.
Spartina pectinata*	Prairie Cordgrass	_	3a	Flowers and seed heads arranged on one side of stem in fall; 3-5' height; gracefully arching narrow leaves; bright yellow fall color.
Thalictrum dasycarpum*	Meadowrue	_	3a	Delicate white dioecious flowers in spring; 2-5' height; lacy bluish-green leaves.
Veronicastrum virginicum*	Culver's Root	_	3a	White tube-like flowers in mid-summer; 2-5' height; slender, sharp-toothed leaves in whorls of 3-7.
Viola cucullata*	Marsh Blue Violet	_	3a	Violet flowers taller than leaves in spring; 5-10" height.
Zizia aurea*	Golden Alexanders	_	3a	Tiny golden flowers in spring; 1-3' height; doubly compound leaves; red-tinged stems.

SHALLOW WATER TO WET SHORE PLANTS

PLANT NAMES		GROWTH RATE	HARDINESS ZONE	PLANT CHARACTERISTICS
botanical	common			
Acorus calamus*	Sweet Flag	_	3a	Flowers are spadix of small greenish-yellow florets in early summer; 1-4' height; rigid, sword-like leaves; flat, blade-like stem.
Phragmites communis*	Giant Reed Grass	_	4a	Graceful, plumed tan flowers and fruiting heads in late summer; 8-12' height; aggressive once established.
Sagittaria latifolia*	Arrowhead	_	3b	White flowers in whorls of three in summer; 1-3' height; lance-like to broad, arrow-shaped leaves.
Scirpus species*	Bulrushes	_	3-4	Solitary or clustered spikelet flowers in summer; 6-8' height; grass-like leaves at base of plant.
Sparaganium eurycarpum*	Giant Bur-Reed	_	3b	Green to brown flowers; fruits are bur-like balls; 4-6' height; linear iris-like leaves.
Typha latifolia*	Cattail	_	3a	Brown head of tightly packed flowers; fruits are attached to fluffy, cotton-like material; 3-9' height; erect, blade-like leaves.



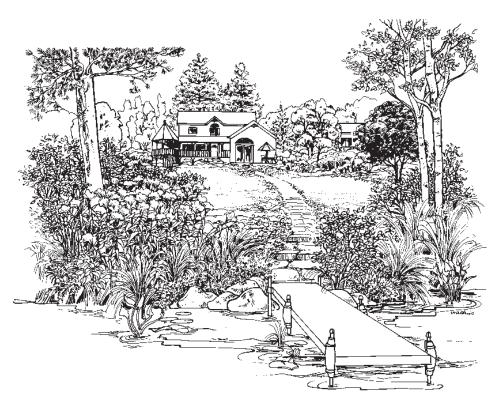
A FEW FINAL THOUGHTS

Some factors affecting shoreline development are beyond an individual's control. The property may have been developed and landscaped long ago; zoning code requirements may offer little flexibility for preserving vegetation on the lot; or options may be limited by surrounding properties. However, there are probably some shoreline landscaping or plant selection tips described inside that can improve both your property and water quality.

If you are proceeding with plans and permits to build, proper construction site practices are summarized in the fact sheet, *Erosion Control for Home Builders* (GWQ001), available in county UW-Extension offices.

Remember, most Wisconsin lakeshores started out being wooded, and such lots today are the ones often commanding high selling prices. If you want to maintain some conventional lawn away from the shoreline, refer to other facts sheets in the *Yard Care and the Environment* series for management suggestions.

If you have any questions about the suitability of a particular plant for your landscaping situation, contact your county UW-Extension office or a local nursery.



This publication is available from county UW-Extension offices or from Extension Publications, 630 W. Mifflin St., Madison, WI 53703. (608) 262-3346.

A publication of the University of Wisconsin–Extension in cooperation with the Wisconsin Department of Natural Resources.

Authors: Dan Wilson and Gary Korb, UW-Extension. Portions of this fact sheet adapted from *Shoreline Landscape Plants* by Thomas Wilson and Dan Wilson, UW-Extension.

Illustrations: Carol Watkins

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Editing and design by the Environmental Resources Center, University of Wisconsin–Extension.



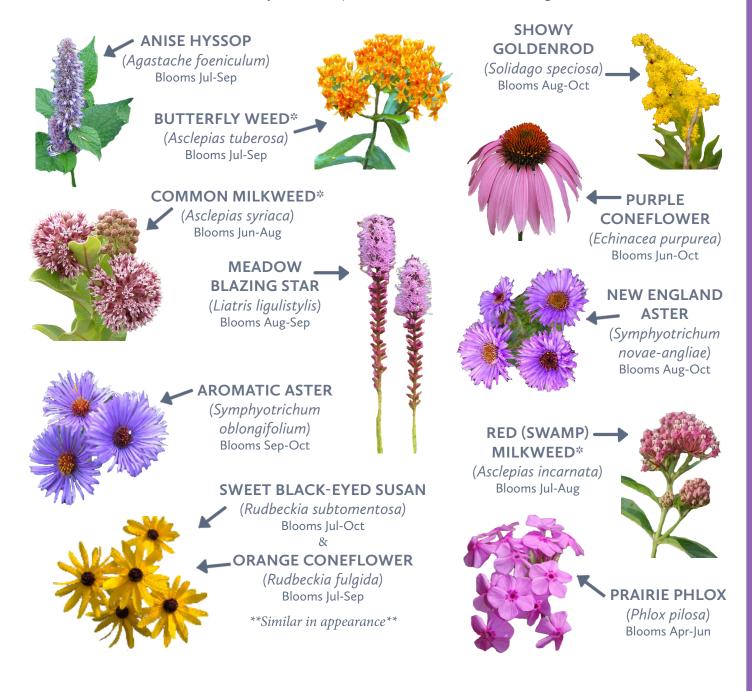
GWQ014 Shoreline Plants and Landscaping DNR WR-461-94 R-09-99-10M-30-S



SUPPORTING OUR MONARCHS

Turn your yard into a monarch oasis! These 12 species are some of monarchs' absolute favorites. Three species of milkweed (a plant on which monarchs 100% depend, denoted by *) are included!

Learn how you can help monarchs at <u>wimonarchs.org</u>.



Many of these flowers need a period of freezing in order to germinate. Scatter seeds in your yard just before a snowfall, or cold stratify and germinate them indoors to give them a jump-start in spring! Bloom times provided by Wisconsin State Herbarium, UW-Madison.

Learn more about how you can create monarch-friendly habitat in your yard and community at **wimonarchs.org**.



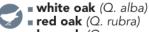
Help nature, plant natives!

GREAT NATIVE TREES, SHRUBS, AND PLANTS FOR BIRDS

Turn your yard into a year-round feeding station for Wisconsin birds by planting native trees, shrubs and plants. By adding one or more of these bird-friendly natives you'll attract more birds and give them the food and shelter they need to raise a family, survive a Wisconsin winter or make the long migration south. A win-win for you and the birds!



- Oak trees (Quercus species) support over 530 species of butterflies and moth caterpillars, more than any other woody plant.
- Many migrating and nesting birds rely on these caterpillars for food, including such favorites as warblers, tanagers, and orioles.
- Acorns are eaten by blue jays, red-headed woodpeckers, and other wildlife.



bur oak (Q. macrocarpa)



Examples of native species for birds.

- Ranging in size from small shrubs to large trees, cherries (Prunus species) host over 450 species of caterpillars that provide food for birds.
- Fruits attract birds from mid-summer to fall, including red-headed woodpecker, rose-breasted grosbeak, bluebirds, and dozens more.

.....



- chokecherry (P. virginia)
- black cherry (P. serotina)
- pin cherry (P. pensylvanica)



- Viburnums (Viburnum species) are fruit-bearing shrubs whose dense structure provides excellent cover during migration and nesting.
- Fruits in fall, winter, and early spring attract robins, waxwings, bluebirds, thrushes, catbirds, and



- highbush cranberry (V. trilobum)
- nannyberry (V. lentago)
- downy arrowwood (V. rafinesquianum)



 Dogwoods (Cornus species) provide good cover and ample clusters of fruit during fall that attract vireos, thrushes, waxwings, sparrows, and others.



- pagoda dogwood (C. alternifolia) gray dogwood (C. racemosa)
- red-osier dogwood (C. sericea)
- silky dogwood (C. amomum)



- Willows (Salix species) host 456 species of caterpillars, second only to oaks. Spring flowers attract small insects that provide a critical food source for early spring migrants
- Dense growth structure of some species forms thickets of cover and offers great nesting sites.







Serviceberry

- Serviceberries (Amelanchier species) are among the first flowering woody plants in spring and provide fruit by early to mid-summer when few other fruit sources are available.
- In spring and summer, these shrubs and small trees attract bird species such as waxwings, flickers, thrushes, vireos, tanagers, and warblers.





Flowers for hummingbirds

 Many colorful, native wildflowers attract hummingbirds and other pollinators like bees and butterflies.



- columbine (Aquilegia canadensis)butterfly milkweed (Asclepias tuberosa)
- cardinal flower (Lobelia cardinalis)wild bergamot (Monarda fistulosa)
- spotted jewelweed (Impatiens capensis)



Native grasses

- Seeds of native grasses provide food for birds in fall and winter like juncos, sparrows, finches, and turkeys.
- Their structure provides cover and potential nesting sites for ground-dwelling birds, including upland game species, meadowlarks, sparrows, and others.



 big bluestem (Andropogon gerardii)

- little bluestem (Schizachyriumscoparium)
- indiangrass (Sorghastrum nutans)



Birch

 Birches (Betula species) host over 400 species of butterfly and moth caterpillars, making them fantastic trees for migrating and resident birds.

 Their seeds are beloved by sparrows and finches, including redpolls and siskins in fall and winter.

 Loose bark hosts insects for woodpeckers, creepers, nuthatches, and chickadees, especially in winter.



paper birch (B. papyrifera)
 yellow birch (B. alleghaniensis)
 in the north

river birch (B. nigra) in the south



Help nature, plant natives!



Learn more ways to get involved in conserving Wisconsin's natural heritage. Go to **dnr.wi.gov** and search "NHC."



Bureau of Natural Heritage Conservation 101 S. Webster St. Madison, WI 53707 608-261-6449

PUB-NH-533

STEPS FOR ADDING NATIVE PLANTS TO YOUR PROPERTY

Our step-by-step guide helps you meet your native landscaping goals whether you live on a city lot or in the country. Even adding a few native plants can make a difference.

STEP 1: DELINEATE & MEASURE PLANTING AREA

This will help you figure out how many plants or seeds you will need. Measure in square feet for small plantings, acres for large areas.

STEP 3: SELECT PLANTS APPROPRIATE FOR YOUR SITE'S CONDITIONS & YOUR GOALS

STEP 2: EVALUATE SITE CONDITIONS

- Soil type: Read the document here
- Soil moisture & drainage:

 Dry soils are extremely well

Dry soils are extremely well-drained, usually with sand, gravel, rocks. Moist soils are regularly damp, only have standing water for short periods, usually loamy. Wet soils remain damp year-round, may have standing water for long periods.

- · Light regime:
 - "Full sun" has > 6 hours sun / day
 "Partial Sun" has 4-6 hours of sun / day
 "Shade" gets < 4 hours of sun / day

References to help you with those selections:

- Home garden:
 - DNR "Native Plants for Beginners"
 - Local native plant nursery or garden center
 - "DNR's Native Plant Recommendations for Landscaping and Natural Community Restoration
- Pollinator habitat:
 - DNR "Native Pollinators" webpage
- Bird habitat:
 - o DNR "Plants for Birds"
 - DNR "Create Habitat" for birds
- Wild game habitat:
 - DNR "Wildlife and Your Land" series
- Stormwater management:
 - DNR Rain Garden information
- Ecological restoration
 - "Prairie Primer" (UW-Extension publication)
 - DNR "Plant Species Composition of Wisconsin Prairies: An Aid to Selecting Species for Plantings and Restorations Based Upon Univ. of Wisconsin-Madison Plant Ecology Lab. Data"
 - "The Tallgrass Restoration Handbook for Prairies, Savannas, and Woodlands,"
 by Stephen Packard and Cornelia F. Mutel. Island Press: Washington D.C., 1997
 - o DNR's "Native Plant Recommendations for Landscaping and Natural Community Restoration"





STEPS FOR ADDING NATIVE PLANTS TO YOUR PROPERTY

STEP 4: DECIDE ON SEEDS, PLANTS OR BOTH

SEEDS

Pros:

- · More cost-effective
- Can be sown throughout the year
- Plants better adapted to local site conditions

Cons:

- Can take 1-3 years for plants to establish and flower
- Weeds/plants that compete with growing seedlings need to be controlled



Pros:

- Immediate gratification
- Rapidly stabilize soils
- Can be installed in spring, summer & fall

Cons:

- More expensive than seeds
- Risk of transplant shock
- Regular watering needed for several weeks after installation.

STEP 5: FIND A SOURCE FOR SEEDS & PLANTS

- See DNR "Wisconsin Native Plant Nurseries" for listing. Place orders over the winter to help ensure you get everything you want.
- Check DNR "Native Plants" website periodically for schedule of native plant sales.
- Connect with local garden clubs, Wild Ones chapters, and neighbors.
- Volunteer with local natural areas to learn how to collect native seed in the wild.

STEP 6: CONSIDER HIRING HELP

See list of Wisconsin Restoration Contractors if you need professional assistance. Some native plant nurseries will also do home garden installations.

STEP 7: KEEP A PLANTING LOG

Create a simple map of your planting showing where, when and what you planted. Observe and note which species were successful and which ones didn't work out.

STEP 8: WINTER EVALUATION

Use your planting log to review and revise your goals as needed, and make plans for expanding and enhancing plantings.

DNR Natural Heritage Conservation Program

Box 7921

Madison, WI 53707

PUB-NH-946

608-261-6449

Homeowner's Guide to Japanese Knotweed Control

Developed by the Northwoods Cooperative Weed Management Area 7/2007



Japanese knotweed (*Polygonum cuspidatum*) is a non-native invasive species that threatens our community. This rapidly growing plant is quick to shade out native species and garden cultivars. It takes over roadsides, residences and community recreation areas, threatens our stream banks and increases fire danger. While the towering stems of the plant look menacing, the real issue is the underground rhizome that can grow lightning fast and invade new areas.

Effective treatment requires a multiple pronged approach that will need more than one attack.

Cutting the knotweed only removes the aboveground portion and only serves to stimulate the belowground rhizome. In some cases weekly mowing can eventually draw down enough of the plant's reserves to kill it.

The best approach to control is through a combination of **cutting** and **herbicide** application. A late spring/early summer treatment followed by an early fall retreatment is needed. Several years of treatment may be needed for older populations. The plant will not resprout from the cut cane, but removal off site may aid in finding and treating resprouts in an infested patch. The area will also be more conducive to revegetation if the cut canes are removed.

You will need:

Loppers
Herbicide (glyphosate concentrate)
Rubber gloves
Long pants, long sleeves, sturdy shoes- not sandals
Spray bottle
Liquid Dye (food coloring or Rit dye works)

Glyphosate concentrate- Glyphosate is a non-restrictive use herbicide. Anyone can purchase and use it. This does not mean that this product is not without some risk if used improperly. As it is a pesticide, you are legally required to read and follow all instructions on the label. This herbicide should not be used in the water and residue or left over chemical should not be allowed in public

waters including household drains. Used gloves can be disposed of in the trash. Contaminated clothing should be washed separately.

The herbicide is considered non-toxic to pets and humans, but as a precaution please keep them out of the area until the herbicide has soaked in. The key to effective herbicide use is the correct dosage or percent active ingredient. Too much and you will only harm part of the plant. Too little and it has limited effect.

Two options are:

Cornerstone (EPA 42750-60-1381) active ingredient glyphosate 41% (2.5 gallons, \$45- Ashland Ag Center on Sanborn Ave)

Round up Concentrate Plus (EPA 71995-29) active ingredient glyphosate 18% (16 oz, \$20- hardware stores)

Step 1: Wearing appropriate safe wear, dilute the **Cornerstone** 1:1 with water in a spray bottle. **If you are using Round up Concentrate Plus use it straight.** Add enough dye so you will be able to tell where you have treated. Label bottle. If diluting, do so over a dry sandy or gravel area. Any spills on grass or desirable plants will kill them.

Step 2: On a day where it will be free of rain for at least 1 hour after treatment, cut the stem of the plant 2- 3 inches above the soil. Wearing rubber gloves, spray **immediately** with herbicide mixture. You will only need to spray the cut rim of the plant stem. The plant will want to seal itself up soon after injury, so there is a window of just a few minutes where the herbicide can be taken up. Overspray will harm surrounding vegetation, please use caution.



Photos: Carmen Chapin

Step 3: You must wait at least 7 days before re-cutting, mowing or disturbing treated stems. The herbicide needs time to move into the belowground structures for an effective kill.

Step 4: After the plant has regrown (early fall), you may use the cut and treat method again. Or you may use a 2% active ingredient solution of glyphosate to spray the leaves. If you choose to use a 2% solution follow the manufacturer's guidance for dilution or call for assistance. Use of a 2% solution, called a foliar spray, requires near complete coverage of the leaves to be effective. Using this method often results in overspray and damage to non-target plants. Please be careful.

For more information contact:

Carmen Chapin, National Park Service, 715-682-0631 Matt Bushman, Chequamegon-Nicolet National Forest, 715-373-2667 www.NorthwoodsCWMA.org

Special thanks to Travel Green Wisconsin, Apostle Islands Realty, Bayfield Regional Conservancy and area volunteers!

Spring Bloomers



Wild geranium

(Geranium maculatum) This lavender-flowered plant grows in most soils and light regimes but will need to be watered if in full sun. Supports bees and is the host plant for several moth species.



Columbine (Aquilegia canadensis) Bright red flowers make this plant a hummingbird favorite!

Successful in most soils and light regimes. Also supports pollinators.



Solomon's seal

(Polygonatum biflorum) The tall arching stems of this plant have little white flowers that turn into pretty blue berries in late summer. Tolerates a variety of soils with partial sun to shade. Supports pollinators and birds.

Help nature, plant natives!

NATIVE PLANTS FOR BEGINNERS

Want to just get your feet wet with introducing native plants into your yard? Here is a list of species that are easy to grow throughout Wisconsin and help provide food and shelter for native wildlife. Try to have at least one species that blooms during spring, summer and fall to maximize benefits for wildlife and the beauty of your yard. Unless otherwise noted, these plants tolerate a broad range of soil types.



Deer resistant plants.



Common milkweed

(Asclepias syriaca)

This monarch caterpillar host needs full to partial sun but can grow in almost any soils and produces lavender flowers. Also supports birds and other pollinators.



(Monarda fistulosa)

This lavender-flowered member of the mint family tolerates a broad range of soils with full to partial sun. Supports hawk moth's, hummingbirds and bees (endangered rusty patched bumble bee shown above).



Culver's root

(Veronicastrum virginicum) This attractive plant produces white spikes of flowers and grows in most soils and light regimes. Supports bees and butterflies.



Maidenhair fern

(Adiantum pedatum)

A perfect accent plant throughout the seasons with delicate fronds arranged in a graceful arc. Prefers medium to moist soils in the shade.











Heart-leaved aster

(Aster cordifolius)

This plant has bright blue flowers and heart-shaped leaves, and tolerates most soils with partial sun to shade. Benefits birds and pollinators.



Little bluestem

(Schizacyrium scoparium)

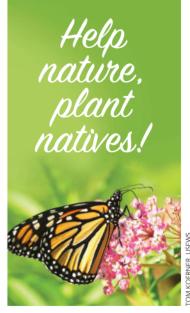
This bunch-forming prairie grass has blue-green leaves that turn red in the fall; fluffy seeds add additional interest and are food for birds. Requires dry to medium moisture with full sun.



New England aster

(Aster novae-angliae)

An orange center surrounded by purple rays describes this lovely plant that grows in a range of soil types with full to partial sun. Supports birds and pollinators.



Monarch on common milkweed.



Find more comprehensive plant guides at **dnr.wi.gov** search "native plants."

Learn more ways to get involved in conserving Wisconsin's natural heritage. Go to **dnr.wi.gov** and search "NHC."



Bureau of Natural Heritage Conservation 101 S. Webster St. Madison, WI 53707 608-261-6449

PUB-NH-532



WISCONSIN NATIVE PLANT NURSERIES

This directory was compiled by the Natural Heritage Conservation Program, Wisconsin Department of Natural Resources. Inclusion in this directory does not imply any endorsement or recommendation by the Wisconsin DNR. Revisions or additions to the directory should be sent to NHC, WDNR, PO Box 7921, Madison, WI 53707 (Attn: Amy Staffen), phoned in at (608) 261-0747, or e-mailed to Amy.Staffen@Wisconsin.gov.

This directory lists companies, individuals, and organizations that may be able to provide you with seed or plants native to Wisconsin or the Midwest. The directory is divided into two major sections, with regional subsections for each of them (click on name to jump to that section):

- 1) Nurseries which primarily carry plant material native to Wisconsin and adjacent states
- 2) Nurseries Which Carry Native Midwestern, Non-Native, and/or Wild-dug Plants

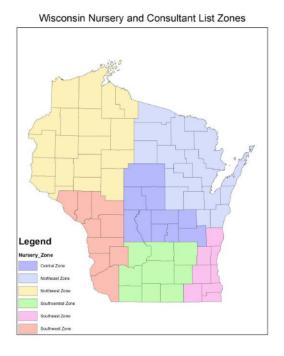
When doing any plantings to restore or recreate a natural area, it is best to obtain seeds or plants from as close to your planting site as possible. Most nurseries are willing to tell you the source of their plants; ask for the source if your intent is to purchase nursery-propagated plants or locally obtained seed. Please note that while Section 1 lists vendors of native plants from Wisconsin or within 100 miles of the border, Section 2 lists vendors of plants native to the Midwest, but not specifically from Wisconsin or the immediately surrounding area.

Nurseries which primarily carry plant material native to Wisconsin and adjacent states

When doing any plantings to restore or recreate a natural area, it is best to obtain seed or plants from as close to your planting site as possible. Most nurseries are willing to tell you the source of their plants; ask for the source if your intent is to purchase nursery-propagated plants or locally obtained seed. All out-of-state nurseries listed are within approximately one hundred miles of Wisconsin.

Click on hyperlinks to jump to the region(s) that suit your needs:

- STATEWIDE
- NORTHWEST WISCONSIN
- NORTHEASTERN WISCONSIN
- CENTRAL WISCONSIN
- SOUTHWESTERN WISCONSIN
- SOUTH CENTRAL WISCONSIN
- SOUTHEASTERN WISCONSIN
- UPPER PENINSULA AND WESTERN MICHIGAN
- EASTERN MINNESOTA AND IOWA (within 50 miles of Wisconsin)
- NORTHERN ILLINOIS AND NORTHWESTERN INDIANA (within 50 miles of Wisconsin)



STATEWIDE

Wisconsin DNR Nurseries specialize in producing native forest trees and wildlife shrub seedlings for conservation plantings to encourage reforestation and restoration in Wisconsin. Orders are accepted beginning in October for the following spring planting season and are filled on a first come basis.

Web: dnr.wi.gov/topic/treeplanting/contact.html

Bareroot Reforestation Nurseries this list contains additional nurseries that provide trees to be used for reforestation purposes in Wisconsin and the surrounding areas.

Web: https://dnr.wi.gov/topic/TreePlanting/nurseries.html

TSB Lakefront Restoration and Diving provides prairie, wetland, and specialty plants and sods. They specialize in native plants and sods for shoreline and prairie restoration projects. Plant products include indidual plugs and sod sold by the square foot. Contact: Andrew Gullickson | Address: 27474 Hwy 40 New Auburn, WI 54757 | Phone: (715) 967-2628 | Email: tsbpond@yahoo.com | Web: https://www.tsblfr.com/

NORTHWEST WISCONSIN

Dragonfly Gardens is a retail outlet of propagated wetland, woodland, and prairie plants and seeds, both native and non-native. They also offer consultation services and site planning with an emphasis on shoreline restoration.

Amery address: 491 State Hwy 46, Amery, WI 54001 | Phone: (715) 268-7660 Email: natives@dragonflygardens.net | Web: www.dragonflygardens.net

Kinnickinnic Natives LLC specializes in growing lady's slippers and local ecotype prairie, woodland, and savanna species from Pierce and St. Croix Counties in Wisconsin and Washington County in Minnesota.

Address: 235 State Road 65, River Falls, WI 54022 | Phone: (715) 222-6910 | Email: kinninatives@gmail.com or Wayne, whuhnke@disshup.us | Web: www.kinninatives.com

Lupine Gardens, LLC is a chemical free native plant nursery that sells both plants and seeds. They sell native plants in addition to non-native plants, medicinal plants, vegetables and heirloom plants. They offer design and installation of native landscapes for private projects, government grant work, etc.

Address: 880 155th Street, Amery, WI 54001 | Phone: (715) 222-6669 Email: lupinegardens@yahoo.com | Web: www.lupinegardens.com

NORTHEASTERN WISCONSIN

Door Landscape and Nursery offers about 150 species of native plants of local and regional ecotype. Many of these are propagated from seed, with an emphasis on Door County natives. They also provide landscape design, installation, consulting, landscape care, and invasive species control services in Door County.

Address: 6329 State Highway 42, Egg Harbor, WI 54209 | Phone: (920) 746-9770

Email: info@doorlandscape.com | Web: www.doorlandscape.com

Hanson's Garden Village is a wholesale and retail grower of native and non-native plants (herbaceous, aquatic and woody). They have an entire division devoted to Northwoods native perennials. Bare root stock is available in early spring. Consulting and design services with an emphasis on lake shore restorations and erosion control are also available.

Address: 2660 County Hwy G, Rhinelander, WI 54501 | Phone: (715) 365-2929 Email: info@hansonsgardenvillage.com | Web: www.hansonsgardenvillage.com

Krueger's Northwoods Nursery specializes in wholesale native plants.

Address: 3682 S. Limberlost Rd., Rhinelander, WI 54501 | Phone: 715-369-3959.

Stone Silo Prairie Garden carries a wide variety of native prairie forbs and grasses from seeds collected in the Upper Midwest.

Address: 2325 Oak Ridge Circle, De Pere, WI 54115 | Mailing Address: 1754 Geneva St., De

Pere, WI | Phone: (920) 713-2879 | Email: kroeningjustin@gmail.com

Web: www.stonesiloprairie.com

CENTRAL WISCONSIN

Hickory Road Gardens is a wholesale grower of native woodland wildflowers. Most plants are sold bare root, and some seed is available.

Phone: (715) 573-4552 or (715) 693-6446 | Address: 2041 Hickory Road, Mosinee, WI 54455.

Email: brayherb@mtc.net

J & J Transplant Aquatic Nursery, LLC specializes in propagating, harvesting, and supplying of emergent vegetation for various environmental and land reclamation projects.

Contact: Kris Malchow | Phone: (715) 256-0059 | Physical Address: W4980 County Road W,

Wild Rose, WI 54984 | Mailing Address: PO Box 227, Wild Rose, WI 54984

Email: jjtransplant@yahoo.com | Web: http://www.jjtransplant.com/

LJ Reas Environmental Consulting Corp. is discontinuing their consulting and nursery business. They will be sending customers to Native Shores Nursery in Neshkoro (see below). Web: www.ljreas.com

Marshland Transplant Aquatic Nursery is a wholesale native shoreline, wetland, prairie and woodland restoration company and the largest wholesale native aquatic-nursery in the Midwest. They also provide consulting, herbicide application, prescribed burns, mowing and planting. Address: PO Box 1, Berlin, WI 54923 | Phone: 1-800-AQUATIC (208-2842)

Email: marshland@centurytel.net | Web: www.marshlandtransplant.com

Native Shores Nursery, LLC produces aquatic plants native to Wisconsin and the Upper Midwest.

Contact: Jack Shead | Address: N545 County Road N, Neshkoro, WI 54960

Phone: (920) 290-2728 | Email: nativeshoresnursery@gmail.com

Nature Works, LLC grows, sell, installs, and maintains a wide-variety of native plant and seed products for restoration and landscaping purposes. They also do native plantings, restorations and invasive species control.

Contact: Ben Bomkamp, Kerstyn Perrett | Address:1719 County Road F, Friendship, WI 53934. Phone or Text: (608) 577-7332 | Email: info@arbormaxx.com | Web: natureworkswi.com

Prairie Nursery has seeds and plants of many native prairie, wetland, and woodland species of wildflowers, ferns, grasses, and sedges, as well as a no-mow lawn blend. They provide an array of consulting services, including site evaluation, planting design, site preparation, planting, and post-planting management for sites of all sizes.

Address: PO Box 306, Westfield, WI 53964 | Phone: (800) 476-9453 Email: cs@prairienursery.com | Web: www.prairienursery.com

SOUTHWESTERN WISCONSIN

Driftless Area Natives LLC is a wholesale and retail plant nursery in Galesville, WI that specializes in over 120 different organically grown plants native to the Driftless Area of southwest Wisconsin and southeast Minnesota. Plants can be ordered online, or via phone/email. Plant pickups or deliveries are available by appointment. Mailing Address: W22747 Fox Coulee Lane, Galesville, WI. | Phone/text: (507) 581-4323 | Email: driftlessareanatives@gmail.com | Web: https://www.driftlessareanatives.com/

SOUTH CENTRAL WISCONSIN

Agrecol offers wholesale and retail customers Wisconsin ecotype native plants and seed mixes for rain gardens, pollinator habitat and lakeshore restoration. The greenhouse is now open to the public Saturdays in May and June.

Address: 10101 North Casey Rd, Evansville, WI 53536 | Phone: (608) 223-3571

Email: ecosolutions@agrecol.com | Web: www.agrecol.com

Applied Ecological Services—See Taylor Creek Restoration Nurseries

Bison Belly Futures specializes in late-maturing, long-lived "fleshy-fruited forbs" (such as goldenseal, green dragon, Jack-in-the-pulpit, Solomon's seal and plume, baneberry) of woodlands and savannas. Five- to seven-year-old plants are available potted or shipped bareroot. Custom propagation is available.

Address: S11793 Hazelnut Road, Spring Green, WI 53588 | Phone: (608) 588-2048

Email: bbf.gigi@earthlink.net

Bluestem Farm provides forest, savanna and prairie plants and consultation services within south central Wisconsin. They specialize in custom propagation of difficult species, including orchids. No mail order, but on site on Sundays or by appointment.

Address: S5920 Lehman Rd., Baraboo, WI 53913 | Phone: (608) 356-0179

Email: bluestem_farm@juno.com | Web: www.bluestemfarm.com

Environmental Consulting Group (EC3) Inc. offers over 100 species of native potted plants. Plants are greenhouse-grown from foundation seed collected throughout Minnesota, Iowa, and Wisconsin, and are available for retail and wholesale customers as well as commercial installers and landscapers. Address: P.O. Box 44281, Madison, WI 53744 | Phone: (608) 497-0955 Email: info@ec3grp.com | Web: www.ec3grp.com

Lone Rock Prairie Nursery is a South-Central Wisconsin / Northern Illinois prairie, savanna, and wetland craft nursery with a focus on Rock County Wisconsin hill prairies, upland savannas, and related outwash plain & sedge meadow communities. Seasonal plants and seed are available to the public Saturdays, May – October at the Janesville Farmers Market, or project propagation as seed and seasons dictate. All nursery proceeds are dedicated to the preservation of Lone Rock Prairie. Address: 13133 W. Dorner Rd, Brodhead, WI | Phone: (608) 876-4255

Email: lonerockprairienursery@gmail.com

Riley Native Plant Nursery sells plants native to Wisconsin. All plants are grown from seed (locally collected when possible) and are sold in the spring and fall. In addition, they sell plants online for local pickup and delivery. Address: 3233 N Riley Circle, Verona, WI 53593 | Phone: (608) 886 9564 | Email: info@rileynativeplants.com | Website: www.rileynativeplants.com

Two Ferns Native Nursery LLC is a women-owned native plant nursery operating on the east side of Madison. They grow native perennial wildflowers and grasses from seed and sell wholesale and retail.

Address: 821 Pulley Dr., Madison, WI 53714 | Phone: (920) 212-6278

Website: www.TwoFernsMadison.com | Email: TwoFernsMadison@gmail.com

White Pelican Farm supplies over 80 kinds of prairie, woodland and wetland native plants. Plants are one-gallon size and field grown from seed collected on site. Purchases can be made online, through Facebook Marketplace and by appointment. White Pelican Farm also has a donation program for school gardens, conservation organizations and governmental agencies involved in native planting and restoration work. Contact Erin Crain (608-432-5578) for more information.

Address: W6628 Patchin Road, Wyocena, WI. Phone: 608-432-5578 Email: whitepelicanfarm@gmail.com Web: https://www.whitepelicanfarm.com/

SOUTHEASTERN WISCONSIN

Prairie Future Seed Company offers over 250 species of native Wisconsin wildflowers, grasses and sedges for prairie, woodland and savannah as plants and seed. Seed is available as individual packets, as a variety of pre-assembled seed mixes (rain garden, butterfly garden, etc.), and as custom seed mixes. Plants are by appointment only at our nursery or through one of our scheduled plant sale fundraisers co-hosted with various non-profit organizations throughout the summer. We also offer natural systems education in the form of educational presentations and a variety of in-house publications available for sale.

Contact: Randy Powers | Address: P.O. Box 644 Menomonee Falls, WI 53052-0644 | Phone: 262-820-0221 | email: storeadmin@prairiefutureseed.com | www.prairiefutureseed.com

Prairie Seed Source provides design and consultation services and sells prairie seeds online.

Address: PO Box 83, North Lake, WI 53064-0083 | Phone: (262) 673-7166

Email: pb9@PrairieBob.com | Web: www.prairiebob.com

UPPER PENINSULA AND WESTERN MICHIGAN

[None available at this date.]

EASTERN MINNESOTA AND IOWA (within 50 miles of Wisconsin)

Ion Exchange specializes in prairie, wetland, and savanna seed and plants native to the Wisconsin, Illinois, and Iowa Driftless areas. They sell wildflowers, grasses, rushes, sedges, seeds, and bare root stock, along with seed mixes, rain garden kits, books and other merchandise. Address: 1878 Old Mission Road, Harpers Ferry, IA 52146 | Phone: (563) 535-7231 or 1-800-291-2143 | Email: hbright@acegroup.cc | Web: https://ionxchange.com/

Landscape Alternatives, Inc. offers nursery-grown prairie, wetland, and woodland plants of ecotype local to the East Central Minnesota region.

Address: 25316 St. Croix Trail, Shafer, MN 55074 | Phone: (651) 257-4460 Email: landscapealt@frontiernet.net | Web: www.landscapealternatives.com

Minnesota Native Landscapes has retail sales of seed and plants for prairies, savannas, forests, wetlands and shorelines, including some trees and shrubs. They also provide harvesting, installation, planning, and restoration management services of any size and will work in western Wisconsin.

Address: 8740 77th St NE Otsego, MN 55362 | Phone: (763) 295-0010 Greenhouse & Production Farm: 14088 Hwy 95 N.E., Foley, MN 56329

Phone: (763) 295-0010 | Email: Info@MNLcorp.com | Web: www.mnnativelandscapes.com

Natural Shore™ Technologies, Inc.'s retail nursery stocks Minnesota Native Plant Brand plants. Plant species are native to Minnesota based on MNDNR plant community lists and are propagated from local seed sources. They provide plants for big commercial and small residential projects and offer wholesale prices for larger projects.

Address: 1480 County Rd 90 Independence, MN | Phone: (612) 703-7581

Email: Rob.1@naturalshore.com or Bill.b@naturalshore.com | Web: www.naturalshore.com

Out Back Nursery and Landscaping offers native Minnesotan container-grown trees, shrubs and perennials for woodlands, floodplains, savannas, wetlands, shorelines, and prairies. All plants are nursery-propagated from seed or cuttings from sources within 300 miles of the Twin Cities.

Address: 15280 110th St South, Hastings, MN 55033 | Phone: (651) 438-2771. Email: sales@outbacknursery.com | Web: http://www.outbacknursery.com

Prairie Hill Wildflowers sells native prairie seeds of grasses and forbs mostly native to Minnesota and Wisconsin.

Address: 8955 Lemond Rd., Ellendale, MN 56026 | Phone: (507) 451-7791

Email: seedman@myclearwave.net

Prairie Moon Nursery carries seeds and plants of prairie, meadow, wetland, savanna, and woodland species native to Wisconsin, Minnesota, Illinois, and Iowa. Seeds are produced on site and from a network of more than 70 seed producers located throughout the upper Midwest. Address: 32115 Prairie Lane, Winona, MN 55987 | Phone: (507) 452-1362 or (866) 417-8156

Email: <u>info@prairiemoon.com</u> | Web: <u>www.prairiemoon.com</u>

Prairie Restorations, Inc. sells nursery propagated native prairie, wetland, woodland, and shoreline plants and seed. They specialize in design, restoration, and maintenance of prairies – including prescribed burns.

Address: 31646 128th Street, Princeton, MN 55371 | Phone: (800) 837-5986

Email: info@prairieresto.com | Web: www.prairieresto.com

Boreal Natives is a subsidiary of Prairie Restorations, Inc. They produce greenhouse seedling plants for woodland, wetland, and shoreline restoration projects throughout northern Minnesota, Wisconsin, and Michigan.

Address: 3943 Munger Shaw Road, Cloquet, MN 55720 | Phone: (218) 729-7001 Email: borrealnatives@prairieresto.com | Web: www.prairieresto.com/boreal_natives.shtml

NORTHERN ILLINOIS AND NORTHWESTERN INDIANA (within 50 miles of Wisconsin)

Blazing Star Nursery provides wetland, woodland, and prairie seeds for northern Illinois as well as soil amendments, foliar fertilizers, enzyme products, and compost treatments. They also provide consultation services for small to medium sized sites.

Address: 2107 Edgewood Dr., Woodstock, IL, 60098 | Phone: (815) 338-4716

Email: tallgrass@blazing-star.com | Web: www.blazing-star.com

Cardno native plant nursery in NW Indiana provides prairie, wetland, and specialty seed mixes. They can also obtain Wisconsin genotype seed for projects in Wisconsin.

Madison office address: 6130 Cottonwood Drive Suite A, Fitchburg, Wisconsin 53719

Phone: (608) 661-2955 | Fax: (608) 661-2961 | Email: dan.salas@cardno.com

Web: http://www.cardnonativeplantnurserv.com/

Country Road Greenhouse is a wholesale grower specializing in plugs of prairie and wetland forbs, grasses and sedges.

Address: 19561 East Twombly, Rochelle, IL 61068 | Phone: (815) 384-3311

Email: crginc@prairieplugs.com | Web: www.prairieplugs.com

Genesis Nursery is a wholesale nursery in northwest Illinois carrying native ecotype seed and plants for prairie, wetland, and savanna species. They also do consultation and restoration.

Address: 23200 Hurd Road, Tampico, IL 61283 | Phone: (877) 817-5325.

Email: info@genesisnurseryinc.com | Web: www.genesisnurseryinc.com

Natural Communities Native Plants offers online retail and wholesale sales of woodland, wetland, and prairie plants, shrubs, trees, seed and seed mixes native to Chicago and the greater Midwest. In addition, they can perform on-site native plant consultations.

Address: 19 Circle Dr, Algonquin, IL 60102; 3333 Warrenville Rd #200, Lisle, IL 60532

Phone: 331-248-1016 | Email: Natives@NaturalCommunities.net | Web: naturalcommunities.net

Natural Garden Natives is a division of **Midwest Groundcovers, LLC** and specializes in local ecotype plants and seed of wetland, prairie and woodland species, available for retail or wholesale. They provide landscape design and construction services.

Mailing address: PO Box 748, St. Charles, IL 60174 | Physical address: 6N800 IL Route 25, St. Charles, IL 60174 | Phone: (847) 742-1790 | Email: mgsales@midwestgroundcovers.com Web: www.naturalgardennatives.com

Pizzo Native Plant Nursery is a wholesale propagator and grower of 350+ local ecotype species for northern IL, southern WI and the upper Midwest region. They also blend their own custom seed mixes.

Address: 10729 Pine Road Leland, IL 60531 | Phone: (815) 981-8000 or (815) 826-0566 Email: kyleb@pizzonursery.com or gracek@pizzonursery.com | Web: pizzonursery.com | Web: <a href="ma

Possibility Place Nursery specializes in growing trees, shrubs, grasses, forbs, sedges, rushes, ferns, and vines native to northern Illinois. Ninety percent of seed used for growing plants is collected in northern Indiana, Illinois, Wisconsin, and Iowa. Retail sales by appointment only. Address: 7548 W. Monee-Manhattan Rd., Monee, IL 60449 | Phone: (708) 534-3988

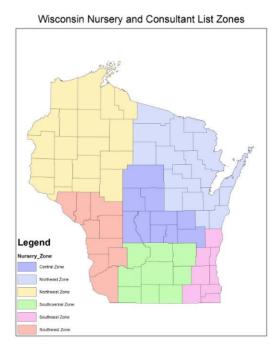
Email: form available on website. | Web: www.possibilityplace.com

Nurseries Which Carry Native Midwestern, Non-Native, and/or Wild-dug Plants

The following companies sell plants native to the Midwest, but not specifically from Wisconsin or the immediately surrounding area. Many of these companies also sell non-native species. If your objective is to use only native species, use discretion in the species you select from these nurseries, or ask for plants which came from your region. The following nurseries may collect from the wild, and where known, this is indicated.

Click on hyperlinks to jump to the region(s) that suit your needs:

- STATEWIDE
- NORTHWESTERN WISCONSIN
- NORTHEASTERN WISCONSIN
- CENTRAL WISCONSIN
- SOUTHWESTERN WISCONSIN
- SOUTH CENTRAL WISCONSIN
- SOUTHEASTERN WISCONSIN
- UPPER PENINSULA AND WESTERN MICHIGAN (within 50 miles of Wisconsin)
- EASTERN MINNESOTA AND IOWA (within 50 miles of Wisconsin)
- NORTHERN ILLINOIS AND NORTHWESTERN INDIANA (within 50 miles of Wisconsin)



STATEWIDE

Pheasants Forever, Inc. provides pre-mixed and bulk native prairie seed that doubles as wildlife feed and cover. Prairie mixes are available for standard sites, in addition to specific mixes for dry to mesic and mesic to wet mesic sites. Mixes are also available that target habitat creation for monarchs, pollinators, honeybees and more. To find a chapter in your area go to: www.pheasantsforever.org

Wisconsin Seed Catalog: https://www.pfhabitatstore.com/store/items/WI/

NORTHWESTERN WISCONSIN

Clearview Nursery sells native and non-native woody plants, perennials, and trees. Call ahead. Contact: Dana Sanft | Address: 6414 Schofield Ave, Weston, WI 54476 | Phone: (715) 241-0654 Email: dksanft@gmail.com | Web: Search "Clearview Nursery Garden Center" on Facebook.

Everwilde Farm, Inc. is a family-owned and operated farm that produces native wildflower and grass seed, although many of the plants labeled as "Midwest Wildflowers" are non-native.

Mailing address: PO Box 40, Sandcreek, WI 54765 | Shipping address: E9311 County Highway

I, Sandcreek, WI 54765 | Phone: (715) 658-0001 or (888) 848-3837

Email: sales@everwilde.com | Web: www.everwilde.com

Hauser's Superior View Farm has a large selection of northern grown perennials some of which are native to Wisconsin.

Address: 86565 County Hwy J, Bayfield, WI 54814 | Phone: (715) 779-5404 Email: <u>info@superiorviewfarm.com</u> | Web: <u>www.superiorviewfarm.com</u>

Paint Creek Nursery & Tree Farm provides quality seedling and transplant native and fruit trees and shrubs to foresters, landowners, and concerned citizens. The bulk of the native stock is grown from seed sources collected in west central Wisconsin.

Address: 3215 N. 140th Ave., Cadott, WI 54727 | Office Phone: (715) 723-2072

Email: info@paintcreeknursery.com | Web: www.paintcreeknursery.com

Wallace-Woodstock Inc. specializes in fruit and nut plants but has some native trees and shrubs in many sizes. Based in western Wisconsin with seasonal outlets in Kewaskum, Lake Geneva, Mauston, Neillsville, and Seymour.

Address: W6291 State Hwy 95 (previously N1831 State Hwy 95), Neilsville, WI 54456

Phone: (888) 803-8733 or (715) 743-2980 | Email: wallace-woodstock@tds.net

Web: www.wallace-woodstock.com

Winter Greenhouse carries native as well as non-native perennials, herbs, wildflowers, water plants, trees and shrubs.

Address: W7041 Olmstead Road, Winter, WI 54896 | Phone: (715) 266-4963 Email: mail@wintergreenhouse.com | Web: www.wintergreenhouse.com

NORTHEASTERN WISCONSIN

Evergreen Nursery Co., Inc., offers wholesale plugs, shrubs, and bare-root and potted trees.

Address: 5027 County Road TT, Sturgeon Bay, WI 54235 | Phone: (800) 448-5691 Email: quality@evergreennurseryco.com | Web: www.evergreennurseryco.com

Leaves Inspired Tree Nursery wholesales native and ornamental non-native trees that can be dug B&B or bareroot. No minimums and orders can be picked up or delivered.

Address: N3489 Minahan Rd, Chilton, WI 53014 | Phone: (262) 709-6100

Email: <u>bill@leavesinspired.com</u> | Web: <u>www.leavesinspired.com</u>

Lodholz North Star Acres, Inc. specializes in nursery-propagated bare-root forestry trees as well as a few shrubs and forbs.

Address: 420 County Road A, Tomahawk, WI 54487 | Phone: (715) 453-2976 or (800) 713-9077 | Email: lodholznsa@frontier.com | Web: www.lodholznursery.com

Swanson's Evergreen Nursery carries evergreen seedlings and transplants.

Address: W7484 Valerio Rd. Niagara, WI 54151 | Phone: (715) 251-1281 or (920) 883-7267

Email: SwansonsEvergreenNursery@gmail.com | Web: www.swansonevergreen.com

CENTRAL WISCONSIN

Kester's Wild Game Food Nurseries, Inc. sells native wetland plants in quantity and native seed as well as non-native species for wildlife plantings. They carry both wild collected and nursery-grown stock.

Address: PO Box 516, Omro, WI 54963 | Phone: (920) 685-2929

Email: pkester@vbe.com | Web: www.kestersnursery.com

Rohde's Nursery carries native and non-native trees and shrubs. They also provide consultation, design, and restoration services.

Contact: Lenn Rohde | Address: N8098 Duck Creek Avenue, Neshkoro, WI 54960

Phone: (920) 293-4374 | Email: rohdesnursery@centurytel.net | Web: www.rohdesnursery.com

Wheeler's Laura's Lane Nursery has transplants and potted plants of both native and nonnative trees and shrubs.

Address: 6581 Laura's Lane, Plainfield, WI 54966 | Phone: (715) 366-2477

Email: llnur@uniontel.net | Web: www.lauraslanenursery.com

Wildlife Nurseries, Inc. specializes in propagated wetland plants and non-native plants that attract wildlife. They also do some consulting.

Address: PO Box 2724, Oshkosh, WI 54902 | Phone: (920) 231-3780

Email: wildlifenurseries@gmail.com

SOUTHWESTERN WISCONSIN

[None available at this date.]

SOUTH CENTRAL WISCONSIN

The Bruce Company carries a number of cultivars of native trees, shrubs, grasses, and forbs.

Address: 2830 Parmenter St., Middleton, WI 53562 | Phone: (608) 836-7041

Email: form available on website. | Web: www.brucecompany.com

Deer Creek Seed Company is a source for DOT mixes, native grasses and wildflower mixes, as well as turf, forage, and wildlife food seed. Note that many species in the "wildflower mixes" are not native. Address: 6115 Pepsi Way, Windsor, WI 53598 | Phone (877) 247-3736 Email: customerservice@deercreekseed.com | Web: www.deercreekseed.com

The Flower Factory has an extensive selection of native, non-native, and ornamental plants, primarily perennials.

Address: 4062 County Rd. A, Stoughton, WI 53589 | Phone: (608) 873-8329

Email: theflowerfactorynursery@gmail.com | Web: www.theflowerfactorynursery.com

J.W. Jung Seed Co. carries a number of native trees, shrubs, vines, grasses and wildflowers. They have mail-order and five Garden Centers in Wisconsin: Madison-North, Madison-South, Randolph, Stevens Point, and Sun Prairie.

Address: 335 S. High St., Randolph, WI 53956 | Phone: (800) 247-5864

Email: <u>info@jungseed.com</u> | Web: <u>www.jungseed.com</u>

McKay Nursery Company grows of a wide selection of landscape plants including native trees, shrubs, perennials, and grasses.

Address: PO Box 185, 750 South Monroe Street, Waterloo, WI 53594 | Phone: (920) 478-2121

Email: info@mckaynursery.com | Web: www.mckaynursery.com

Reeseville Ridge Nursery sells a wide range of native and non-native trees and shrubs. They also specialize in custom propagation of woody plants.

Contact: Darrell Kromm | Address: 512 South Main Street, Reeseville, WI 53579

Phone: (920) 927-3291 | Email: rrn@charter.net | Web: www.reesevilleridgenursery.com

S & S Wildflowers offers seeds for CRP and large projects. They also produce some native grasses and wetland forb plants.

Address: W4401 Hwy 33, Pardeeville, WI 53954 | Phone: (608) 429-3188

SOUTHEASTERN WISCONSIN

Chief River Nursery Co. (Formerly Wali Nursery) specializes in seedlings of shrubs, conifers, fruit trees, and hardwoods.

Address: 976 Ulao Rd. Grafton, WI 53024 | Phone: (262) 377-5330 or (800) 367-9254 (orders)

Email: info@chiefrivernursery.com | Web: www.chiefrivernursery.com

Johnson's Nursery, Inc. is a full-service nursery grower with an extensive line of native Wisconsin woody plants as well as herbaceous forbs and grasses. Most of the plants sold are propagated at the nursery from local ecotype seed sources. Johnson's woody plants range from one-gallon containers to large B&B trees up to 6" in trunk diameter.

Address: W180 N6275 Marcy Rd, Menomonee Falls, WI 53051 | Phone: (262) 252-4988

Email: info@jniplants.com | Web: www.jniplants.com

Milaeger's Gardens carries some prairie grasses and wildflowers in addition to ornamentals. Address: 4838 Douglas Avenue, Racine, WI 53402-2498 | Phone: (262) 639-2040 or (800) 669-1229 | Email: gardenstore@milaegers.com | Web: www.milaegerslandscape.com

Monches' Farm sells field-grown perennials including cultivars of natives. Address: 5890 Monches Road, Colgate, WI 53017 | Phone: (262) 966-2787

Email: <u>zannah@monchesfarm.com</u> | Web: <u>www.monchesfarm.com</u>

Northwind Perennial Farm has an extensive selection of native, non-native, and ornamental plants, primarily perennials. They provide landscape design services and specialize in utilizing native plants in urban settings in SE Wisconsin.

Address: 7047 Hospital Road, Burlington, WI 53105 | Phone: (262) 248-8229 Email: northwind@wi.rr.com | Web: www.northwindperennialfarm.com

Northern Sunset Perennials is a wholesale provider with over 1,300 varieties of perennials, including over 200 Wisconsin and Midwest native species of perennial forbs, ferns and grasses. Based in Milwaukee as a subsidiary of W.&E. Radtke, Inc.

Phone: (262) 253-1412 | Email: info@northernsunset.com | Web: www.northernsunset.com

The Pollinator's Palette is a small demonstration garden with plants primarily for pollinators. They sell native plant seeds and provide consulting and assistance in establishing small pollinator and native gardens. Most species are local prairie or woodland species, some northern Illinois species available.

Address: 2916 King St., Delavan, WI 53115 | Phone: 262-740-2151

Email: ecowings1@yahoo.com | Web: Search "The Pollinator's Palette" on Facebook.

Pleasant View Tree Farm/Nursery has a variety of native trees and shrubs. Address: W1418 E. Van Ess Rd., Oostburg, WI 53070 | Phone: (920) 564-2834 or (920) 980-6027 | Web: Search "Pleasant View Tree Farm" on Facebook.

Prairie Frontier specializes in large planting projects and carries over 100 native and naturalized non-native wildflower and prairie grass seeds. They also have native prairie, meadow, butterfly, and other mixes that contain some non-native species. Mixes and individual species can be purchased in bulk; seeds are generally sold wholesale to developers, landscapers, nurseries, and garden centers or retail through outlet stores or on their website.

Address: W281 S3606 Pheasant Run, Waukesha, WI 53189 | Phone: (262) 544-6708

Email: wildflower@prairiefrontier.com | Web: www.prairiefrontier.com

Shady Acres Nursery offers an extensive line of forbs and grasses, including many natives. Address: 5725 S. Martin Road, New Berlin, WI 53146 | Phone: (262) 679-1610 Email: shadyacresnursery@juno.com | Web: www.shadyacresnursery.com

Windy Oaks Aquatics is a retail and wholesale greenhouse supplying garden centers, landscapers, and the public with aquatic plants, fish, and pond accessories. They also have consultation, installation, and landscaping services. Address: W377 S10677 Betts Road, Eagle, WI 53119 | Phone: (262) 594-3033. Web: Search "Windy Oaks Aquatics" on Facebook.

UPPER PENINSULA AND WESTERN MICHIGAN (within 50 miles of Wisconsin)

Cold Stream Farm sells bareroot trees, shrubs and vines retail and wholesale. Address: 8585 N Stephens Road, Free Soil, MI 49411 | Phone: (231) 464-5809

Email: info@coldstreamfarm.net | Web: www.coldstreamfarm.net

EASTERN MINNESOTA AND IOWA (within 50 miles of Wisconsin)

Knecht's Nurseries carries cultivars of some native trees and shrubs as well as non-native ornamentals.

Address: 1601 Hwy 19 West, Northfield, MN 55057 | Phone: (507) 645-5015 or 1-800-924-5015

Email: info@knechts.net | Web: www.knechts.net

NORTHERN ILLINOIS AND NORTHWESTERN INDIANA (within 50 miles of Wisconsin)

The Growing Place carries native and non-native perennials, annuals, houseplants, vegetables, herbs, trees and shrubs. They offer design services for landscape and containers within a 10 mile radius of either location. Both locations have over an acre of learning gardens and nature-themed items in the gift shop.

Naperville address: 25W471 Plank Road, Naperville, IL 60563 | Phone: (630) 355-4000 Aurora address: 2000 Montgomery Road, Aurora, IL 60504 | Phone: (630) 820-8088

Email: grow@thegrowingplace.com | Web: www.thegrowingplace.com

St. Aubin Nursery is a wholesale grower of native trees and shrubs in North Central Illinois.

Address: 35445 Irene Road, Kirkland, IL 60146 | Phone: (815) 522-3535

Email: info@staubin.com | Web: http://www.staubin.com/



NH0698 2015