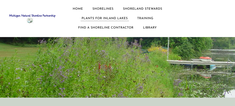


Why Native Plants?

One of the most important components of a natural shoreline are the plants.

The MNSP recommends the use of Michigan native plants for many reasons including:

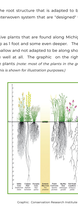
- Plants that have local origins are more desirable ecologically than a plant grown from another U.S region even though they may share the same scientific name.
- These plants are best adapted for providing the root structure needed to stabilize a shoreline and are also adapted to the site and climatic conditions in their natural habitats.
- There are many animals, birds, fish and other wildlife that are dependent upon specific plants for their survival.

> “While many non-native plants used in a homeowners’ landscape are not harmful, some, called invasive non-native, become serious problems. These plants easily spread to native habitats and displace native species because they have competitive advantages and no natural biological controls to keep them in check. Invasive non-native plants provide little benefit to wildlife because native animals are adapted to use native plants, not the foreign invaders.”

Native plant root structure:
The plants that naturally occur at your lakeshore have the root structure that is adapted to being at the lakeshore. These plans have a fairly dense and strong interwoven system that are “designed” to stand up against waves and hold the soil in place.

The graphics below illustrate the root depth of some native plants that are found along Michigan’s inland lakes. As you can see some of the root systems go as deep as 1 foot and some even deeper. The root depth of turf grass varies as well but generally turfgrass is very shallow and not adapted to be along shorelines thus it cannot hold the soil in place against wave action very well at all. The graphic on the right illustrates Kentucky Blue grass root depth compared to other native plants *(note: most of the plants in the graphic on the right would not necessarily naturally be found at the lake edge. This is shown for illustration purposes)*

Graphic: J.F. Ness



Graphic: Conservation Research Institute adapted by

Top of the Rock Watershed Council

MNSP Recommended Plant List

Don’t know what plants you should plant where? The MNSP has helped to make these decisions easier by creating a plant list. The plants are organized into the different areas of the shoreline where they are the most successful and do “the work” they were designed to do the best.

MNSP Plant List Criteria:

Although, there are many more plants native to Michigan the plants on this list were chosen because they are:

1) Native to Michigan
2) Not listed as threatened or endangered.
3) Generally broadly adapted - meaning that they are not extremely fussy as to where they grow.
4) Broadly distributed naturally around the state.
5) Currently on the market or could easily be brought into the market.

Four Different Zones:

The First zones are plants that are associated with aquatic and wetland habitats. The fourth zone has plants associated with an upland (dry) habitat. The plants have been placed in each category based on their suitability for the water levels and other variables such as wave action. However, once these plants have been planted they may “move” into a different area. This is because natural conditions at each particular site are highly variable, and each plant will find specific areas most suitable for their growth.

1) **“Below the Water Level”:** These are the plants that are found in the aquatic zone. Use these plants for planting areas within the lake.

2) **“Between the Water Level and the Ordinary High Water Mark”:** These plants like it wet but do not like to actually be in the lake. They can handle frequent water level changes ranging from being flooded for extra days at a time to being dry for short periods of time. These plants are also the best ones to withstand the energy from wave action and ice push.

3) **“Above the Ordinary High Water Mark”:** These plants are still considered wetland plants but they are typically further from the lake edge. They like the soil to be consistently moist and they can handle a small amount of flooding. They do not like the constant stress that comes from waves and ice.

4) **“Upland Plants”:** These plants like dry conditions. This section was included to provide homeowners with native plant suggestions to use in the remaining part of the landscape to allow for opportunities for a comprehensive landscape design.

Additionally, information on the amount of light, plant height, bloom time and color, special adaptive features and the preference level to siltation. Siltation refers to soil particles building up in a particular area. This plays into our plants often requiring reduced growth or reproduction. A “high” on the plant matrix indicates that a particular plant has a high level of tolerance to siltation.

BELOW THE WATER LEVEL

BETWEEN THE WATER LEVEL

ABOVE THE WATER LEVEL

UPLAND

There are a variety of options for plant stock but generally they come in 1 gal pots and 1 gal plug flats. One plug flat cost ranges from $75-$100 depending on the nursery and species. Planting recommendations are generally 1 plug per square foot.

100 square foot of a planting area = 100 plants

Where can I find Michigan Native Plants?

Finding sources of native plants can be a bit challenging but they do exist! There are many local greenhouses that are beginning to carry native plants.

However, be aware that many times the plants may not have come from MI native plant stock and/or they may be cultivars of a specific plant.

> “Note: The Michigan Department of Environment Great Lakes and Energy’s bio-engineering permit does require the use of Michigan native plants below the ordinary high water mark when doing work that requires a permit.”

Are you a Greenhouse growing Michigan Native Plants?

To be listed on this site as a grower or supplier:
1) must be growing or supplying Michigan native plants that are not specifically “cultivars” or “nativars” of a species or sourced from another region. *A nursery does not have to solely be growing all Michigan native plants. Note: There are some species that a Michigan genotype no longer exists and where that is applicable growers typically indicate it.

2) have information on a website or social media page about the Michigan native plants being grown/available.

Contact: Julia Kirkwood kirkwood@michigan.gov 269-312-2760

Central Michigan

wildtype® Native Plants | ecological services
info@wildtypenativeplants.com

A founding member of the MNSP and instructor for CNSP Training.

DESIGNS by NATURE LLC
Native Plant Nursery & Landscape Design

GO Grow Plant Natives, LLC

Southeast Michigan

Lovinger Farms

East Michigan Native Plants

Native Land Nursery

Native Restoration Solutions

Upstart Native Plant Nursery

FERAL FLORA

The Native Plant Nursery LLC

Tridgeon Native

Southwest Michigan

Hidden Savanna Nursery
Home Place for Pollinators & Natives

West Michigan

Note: Trees and shrubs

ALPHA NURSERIES, INC

Designs By Nature - West, LLC
Joe Nalu, Owner/Licensed Grower

Note this grower does not have a website. The link is to his e-mail. Information can also be found on the Native Plant Guild's website

Northern Lower Peninsula

BIRDSFOOT NATIVE NURSERY

Cold Stream Farm

Misty Ridge Greenhouse
Native Plants & Pollinator Habitat

PAUL GRAVES NURSERY
Big Rapids, Michigan
Native Plants & Trees

Otsego Conservation District Native Plant Nursery

BLACK CAP FARM
Mesick, MI

Guler’s Gardens
Traverse City

Upper Peninsula

Lovelace Nursery Inc.
Note: trees and shrubs

MESSER NURSERY

DESIGNS BY NATURE
Native Plants

Wildflower Association of Michigan

The Wildflower Association of Michigan encourages the preservation and restoration of Michigan's native plants and native plant communities. They list sources of native plants and have a business directory on their website. Some grow plant stock and others provide provide seed. They typically have catalogs online.

Native Plant Guild

The Native Plant Guild is an alliance of local businesses and organizations that offers West Michigan a variety of ecological landscaping services.

From planning, design, installation and maintenance to providing Michigan native seed and plants, these professionals work together to promote stewardship of our land and waters as they establish, restore, and preserve natural landscapes.

Sources of Seed

Michigan Wildflower Farm
Seeds & Plants
Helping customers & Michigan ecosystems thrive

Native Connections

Nativescape
Native Plants & Pollinator Habitat

A founding member of the MNSP and instructor for CNSP Training.

Find out more about Native Plants

Plants for Stormwater Design
Information on 131 plants used for proper stormwater management design. Very useful for Urban landscape designers, installation practitioners, and stormwater managers.

USDA Plant Database
Plant database with information regarding each species listed for vascular plants, mosses, liverworts, hornworts, and lichens.

USDA/NRCS Plant Materials Technical Note – No. 1
Plant Species with Rooting Ability from Live Hardwood Materials for use in Soil Bio-engineering Techniques

MSUE Native Plant Site
Michigan State University Native plants and Ecosystem Services website to encourage the use of natural plants in communities and agriculture. This site has a plant selection tool to get you started on finding some plants for your site.

Michigan Natural Features Inventory (floristic quality assessment)
Analysis to help understand what proper plants should be in the area or used in a new construction site.