Michigan Native Garden Design

for the birds!

Michigan's native flora and fauna are important, interconnected parts of our state's natural heritage. From the haunting call of a Common Loon across a serene inland lake, to a Kirtland's Warbler singing atop a scraggly jack pine, Michigan's birds depend on the state's unique native plants for food, shelter, and nesting. As urban and suburban development spreads across the landscape, birds and the unique ecosystems they depend on are steadily being pushed out. But it doesn't have to be that way! Planting a native garden in your yard, no matter the size, provides a little patch of Michigan habitat that will support birds, butterflies, pollinators, and other wildlife. The designs featured in this booklet represent our state's natural diversity and are intentionally crafted to support birds while providing an orderly space, composed with traditional landscape ideals. Native gardens don't have to be "wild" or "weedy"; native gardens can be planted with clean aesthetics and ecological function. Now more than ever, it is important that we welcome Michigan's native flora back into our landscape and with it, we invite birds, pollinators, and other wildlife to thrive alongside us.

Ruby-throated Hummingbird at cardinal flower
Kristin Cart[2]

Why do birds need native plants?

Broadly speaking, birds need food, water, and suitable places to take shelter and reproduce. Native plants are critical to providing a landscape filled with nutritious insect food, berries, nectar, seeds, and nuts that support birds throughout the year. Perhaps the most critical service that native plants provide birds is providing insects for baby birds. Nearly all landbirds (96%) feed their chicks insects, and most insects have very specific relationships with a certain species or family of plants. The example of monarch caterpillars and milkweed is not the exception – it's the norm! By providing a diverse garden of native plants, you will be supporting a healthy insect population, which will feed the next generation of birds.

Pileated Woodpeckers in a dead snag
Mick Thompson[2]

Carolina Chickadee with a caterpillar for its brood
Douglas Tallamy[2]

How to use this guide

Each design featured in this booklet was donated by the business or organization listed on each page. If you seek site-specific recommendations or installation assistance, please reach out to these generous donors!

In the top corner of each design page is a Michigan symbol indicating which broad region of the state that particular garden was designed for. However, most of the species in this booklet have a statewide range, so with a little modification, any of these designs can work for your yard.

These designs are meant to inspire and start the wheels turning on your own bird-friendly yard transformation. While these gardens feature species selected for a specific region, site condition, or ecological purpose, any of the species may be swapped out depending on your needs or local availability. Your local native plant nursery may have helpful substitution suggestions.

Site Selection

The key to a successful native garden is planting the right plants in the right place. Before bringing native plants into your landscape, take time to research what conditions your yard provides then select plants that thrive in those conditions. In this section are some tips to get you started.

Pine Grosbeak in staghorn sumac
Rejean Turgeon[2]

Consider the local site conditions

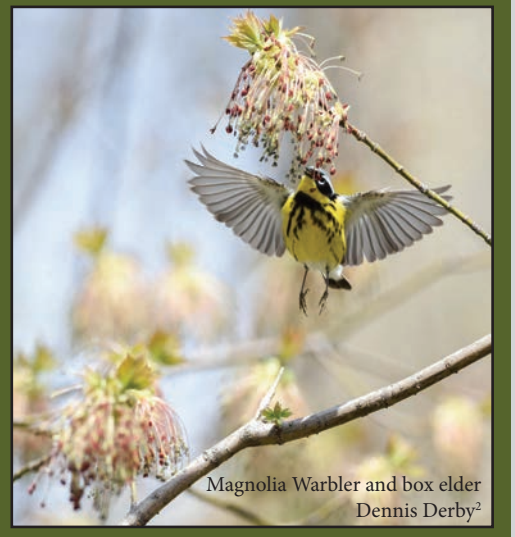
While this booklet gives broad, regional suitability suggestions, your local site conditions are the best guide to selecting the right plants for your garden. Take a soil sample in to your local conservation district. Observe the amount of sunlight and precipitation your site receives throughout the day and notice how this changes with the seasons. Look up a pre-settlement vegetation map from Michigan Natural Features Inventory to see what natural community likely existed before the land was altered.

Take inventory

Identify what currently grows nearby. If you only have a lawn of turf, you can skip this step! Otherwise, walk around your yard or area and take note of the trees, plants, or water sources nearby. Any naturally occurring plant species are good indicators of site conditions and can hint at what other species may thrive. Reach out to local experts at your conservation district, Wild Ones chapter, or land conservancy for advice.

Beware of the native critters

If your area has a healthy white-tailed deer population, (do you live in Michigan? Then the answer is yes!) you may want to select species that are less desirable to herbivores. Plant species with thorns, fuzzy leaves, or toxins are less likely to be browsed. Use a non-toxic deterrent, like Liquid Fence, and apply frequently during the first year or two of young growth.



Magnolia Warbler and box elder
Dennis Derby[2]

Easy Slope Shoreline Garden


Lobelia siphilitica
Julie Makin[1]


Asclepias incarnata
Michigan Audubon


Mimulus ringens
Alan Cressler[1]

Symbol	Scientific Name	Common Name
1	*Carex stricta*	Tussock sedge
2	*Carex lacustris*	Lake sedge
3	*Asclepias incarnata*	Swamp milkweed
4	*Symphyotrichum puniceum*	Swamp aster
5	*Eupatorium altissimum*	Boneset
6	*Mimulus ringens*	Monkey-flower
7	*Lobelia siphilitica*	Great blue lobelia

Design Notes

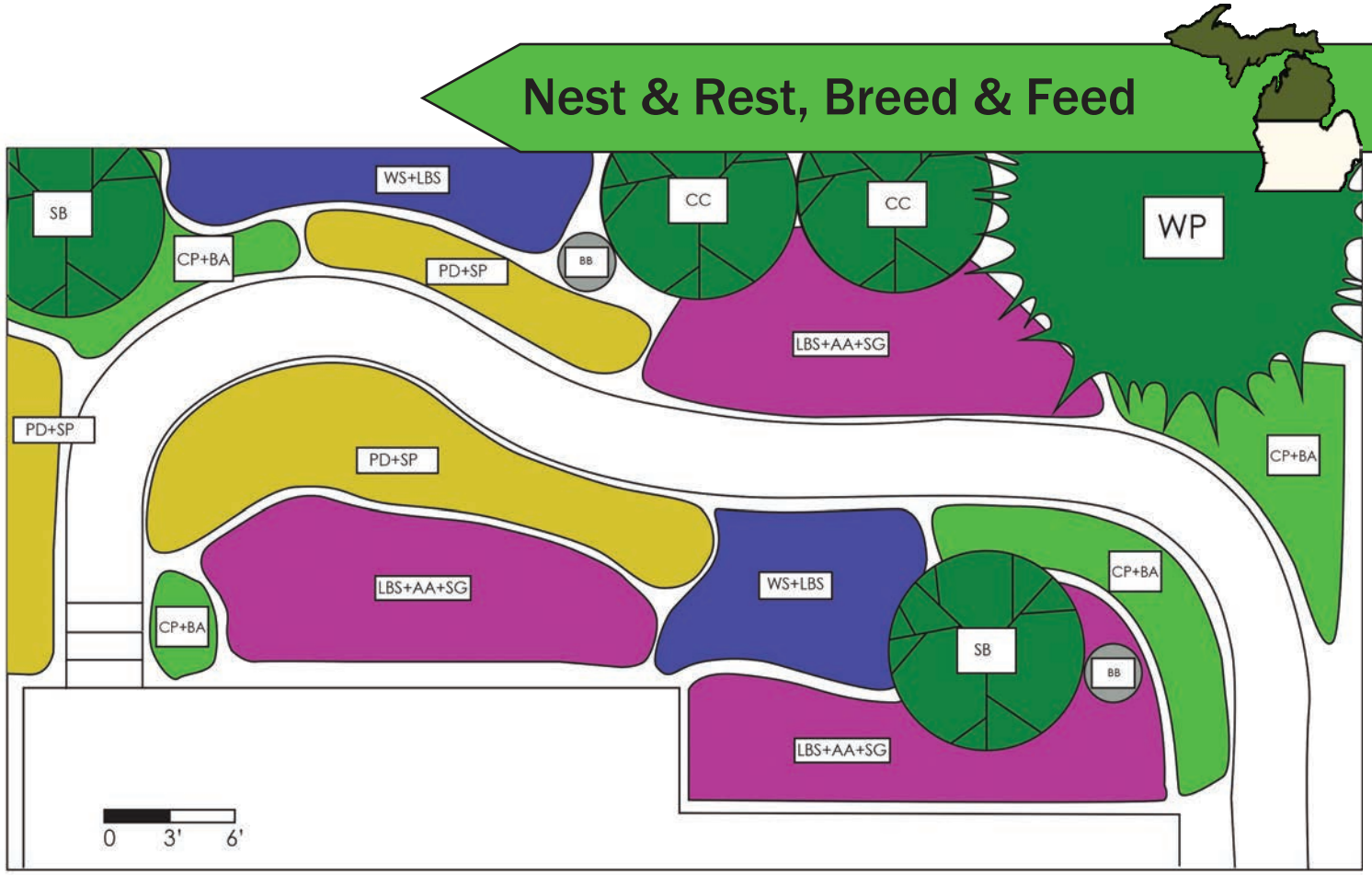
Native shoreline plantings provide important habitat for birds, pollinators, and wildlife while preventing erosion along the lakeshore. The plant species chosen are ones specific for two zones, either below or above the ordinary high water mark (OHWM). This garden provides a variety of colors throughout the growing season at variable heights and textures, all with a managed look. This garden is suitable for a site with a gradual slope that remains wet for much of the year and is typically flooded during high water, but may have an occasional dry period.

Design by MSU Extension
in collaboration with the
Michigan Natural Shoreline Partnership
http://www.mishorelinepartnership.org/

Schizachyrium scoparium
Joseph A. Marcus

Solidago speciosa
Michigan Audubon

Nest & Rest, Breed & Feed



Design Notes

This design provides nesting materials, fruiting shrub cover, larval host plants, and late-season seeds to meet the major needs of birds. The plants are suited to the northern and northwest Lower Peninsula and the central Upper Peninsula, on sites with sandy soil and ample sun.

Design by Jared Aslakson
Plantwise, LLC
Ann Arbor, MI
www.plantwiserestoration.com/

PlantWise
Native Landscapes and Ecological Restoration

Symbol	Scientific Name	Common Name
AA	*Symphyotrichum urophyllum*	Arrow-leaved aster
BA	*Eurybia macrophylla*	Big-leaved aster
BB	*Avem lavari*	Bird bath
CC	*Prunus virginiana*	Choke cherry
LBS	*Schizachyrium scoparium*	Little bluestem
PD	*Sporobolus heterolepis*	Prairie dropseed
PS	*Carex pensylvanica*	Penn sedge
SB	*Amelanchier* sp.	Serviceberry
SG	*Solidago speciosa*	Showy goldenrod
SP	*Antennaria howellii*	Small pussytoes
WP	*Pinus strobus*	White pine
WS	*Helianthus occidentalis*	Western sunflower

Berry Good Shrub Garden

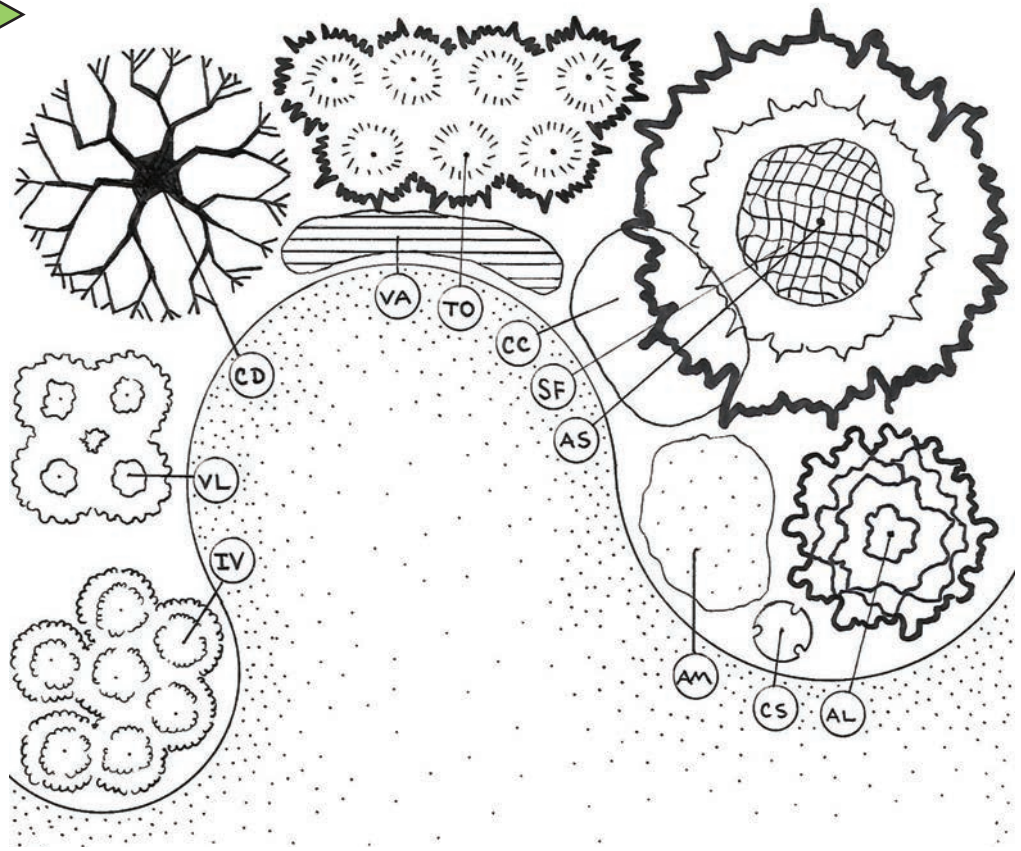

Amelanchier laevis
Thomas L. Muller[1]


Ilex verticillata
Julie Makin[1]


Solidago flexicaulis
R.W. Smith[1]


Cornus canadensis
Julie Makin[1]

Design by Christopher Hart
Hartscapes
hartscapesplants@gmail.com



Symbol	Scientific Name	Common Name
AL	*Amelanchier laevis*	Allegheny serviceberry
AM	*Aronia melanocarpa*	Black chokeberry
AS	*Acer saccharum*	Sugar maple
CC	*Cornus canadensis*	Bunchberry
CD	*Crataegus douglasii*	Black hawthorn
CS	*Cornus sericea*	Red-twig dogwood
IV	*Ilex verticillata*	Michigan holly
SF	*Solidago flexicaulis*	Zig-zag goldenrod
TO	*Thuja occidentalis*	White cedar
VA	*Vaccinium angustifolium*	Lowbush blueberry
VL	*Viburnum lentago*	Nannyberry

Design Notes

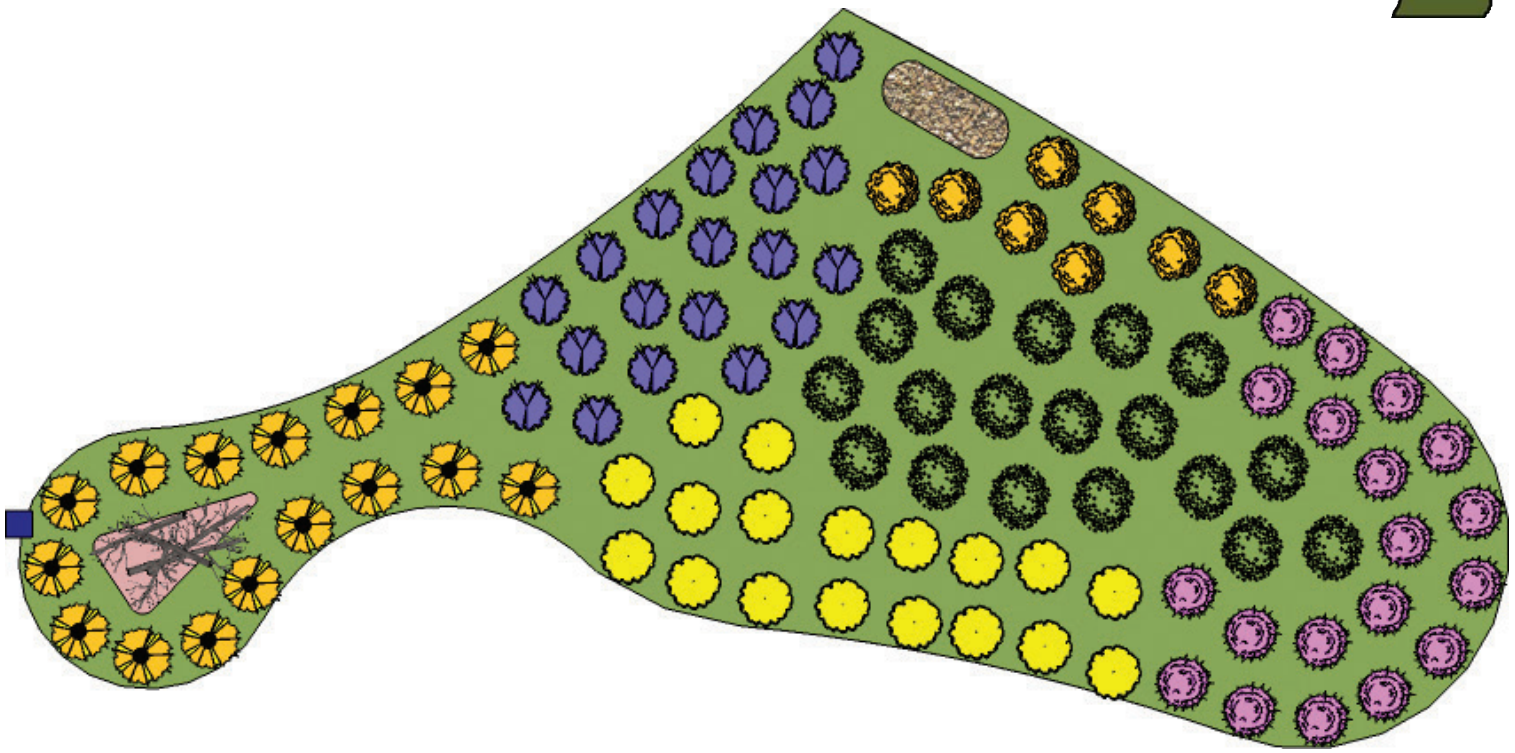
These species can be found in the Upper Peninsula in most counties. They prefer moist sites but are well adapted to climate changes. There are species here for sun and shade. *Amelanchier*, black chokeberry, and nannyberry produce purple fruits late spring through fall. White cedar provides shelter and nesting sites. A sugar maple is a larval host. Ground birds will be delighted with red-fruited bunchberry, lowbush blueberries, and zig-zag goldenrod seeds. Black hawthorn has hard, red, apple-like fruit and glossy leaves. Michigan holly provides winter and spring food for migratory birds. In autumn, yellow and fiery orange-scarlet in the maple, serviceberry, blueberries, *Aronia* and hawthorn will cast a glow while bunchberry scorches the ground with maroon.

Sunny Bird Garden


Monarda fistulosa
Michigan Audubon


Ascelpias tuberosa
Michigan Audubon


Rudbeckia hirta
Michael Dana[1]



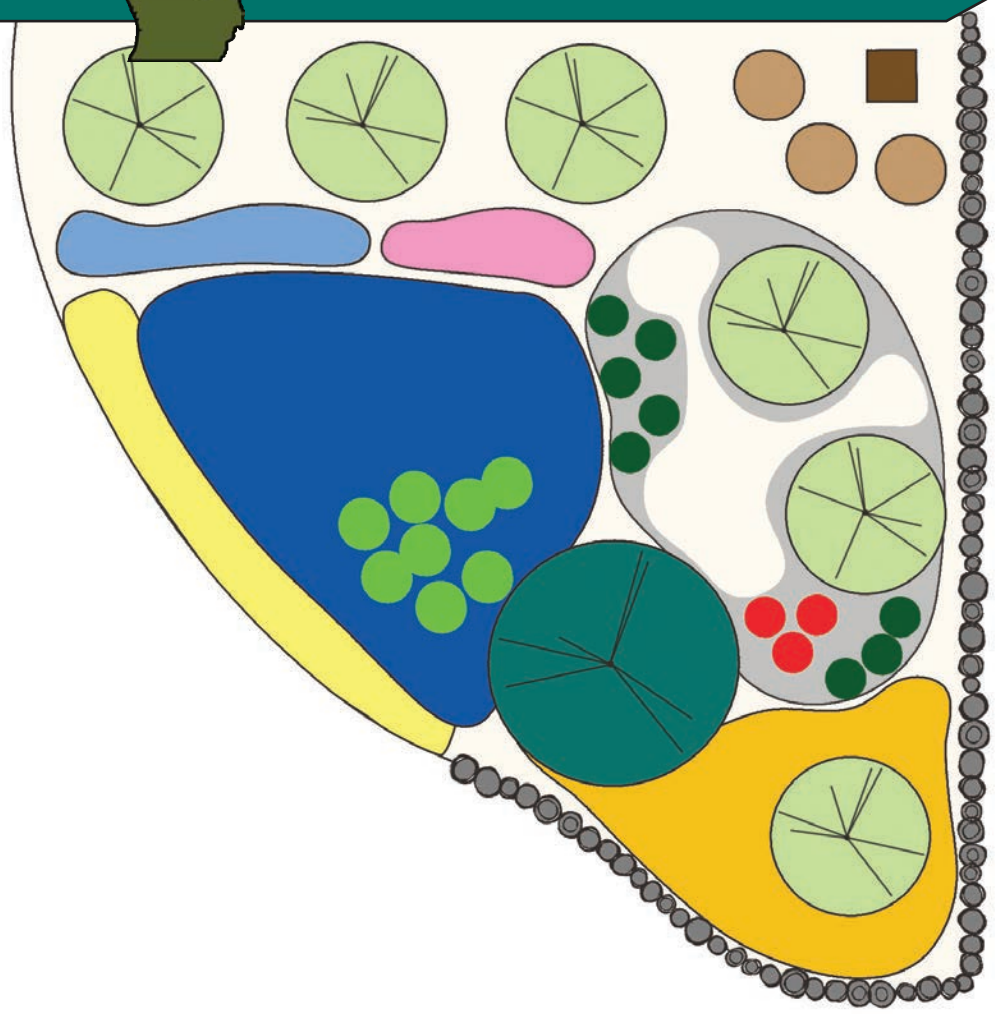
Design Notes

This bird garden is designed to increase wildlife diversity and habitat on the property while creating an attractive oasis for the homeowner. Plant species are chosen based on multiple criteria including native status, bird foraging opportunities, aesthetic value, and suitability for site conditions. The garden shape is designed to accommodate both existing and planned walking paths, as well as to create some visual interest. Within the bird garden is a nest box, seen in blue at the western end of the drawing, and a small sandy gravel pile for bird nesting, foraging and bathing at the northern end of the garden. A brush pile in the garden near the nest box provides places for birds to nest, perch, and hide from predators.

Symbol	Scientific Name	Common Name
	Rudbeckia hirta	Black-eyed Susan
	Andropogon gerardii	Big bluestem
	Echinacea purpurea	Purple coneflower
	Monarda fistulosa	Beebalm
	Heliopsis helianthoides	False sunflower
	Asclepias tuberosa	Butterfly-weed

Design by Natural Community Services
Southfield, MI
https://www.naturalcommunityservices.com/

Suburban Pond Oasis




Lobelia cardinalis
Julie Makin[1]


Caltha Palustris
R.W. Smith[1]


Nymphaea odorata
Ray Mathews[1]


Fragaria virginiana
Alan Cressler[1]

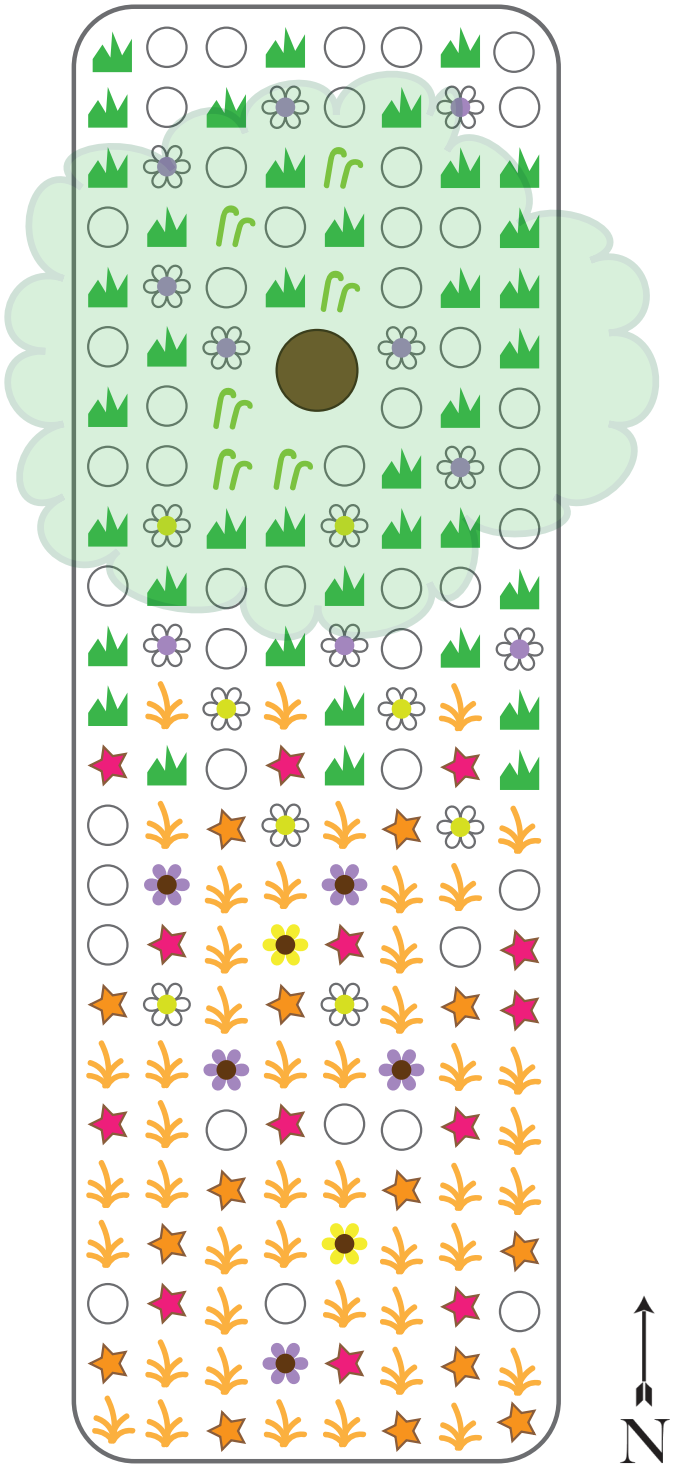
Symbol	Scientific Name	Common Name
	Panicum virgatum	Switch grass
	Cornus sericea	Red-osier dogwood
	Betula nigra	River birch
	Nymphaea odorata	Sweet-scented waterlily
	Carex vulpinoidea	Fox sedge
	Lobelia cardinalis	Cardinal flower
	Rudbeckia fulgida	Black-eyed susan
	Caltha palustrus	Marsh-marigold
	Iris virginica	Southern blue flag
	Asclepias incarnata	Swamp milkweed
	Fragaria virginiana	Wild strawberry
		Pond
		Rain garden basin

Design Notes

Tucked in the back corner of a ¼-acre suburban lot, a 100-square-foot pond is the focal point of this garden which teems with wildlife. At various times of the year the pond is full of toads, green frogs, tree frogs, tadpoles, and water-breeding insects. Typical suburban birds, including ducks, visit to drink or to pluck insects, seeds, and berries from the surrounding all-native vegetation. The northeast corner could be an ideal location for a Northern Flicker, House or Carolina Wren, or Eastern Screech-Owl box. This garden will do well in full to part sun and on medium to wet soils.

Design by Drew Lathin
Creating Sustainable Landscapes, LLC
Novi, MI
https://www.creatingsustainablelandscapes.com/

Lawn Extension Garden



1 inch = 2 feet

N

Design Notes

The lawn extension, or hellstrip, can be a difficult place for plants. It's incredibly hot and dry in midsummer, piled with snow and salt in winter, and plants must be fairly short to not impede drivers' views for safety. They are often chock-full of tree roots, walked on, and driven over. All of this limits the number of plants that will not only survive, but look good in the heat of summer! You'll find this mix of native plants will provide blooms from spring through autumn, seeds for feeding, and look good through the heat. All plants can be plugs (with the exception of the solomon's seal which is usually found in 1-gallon containers) to save money, are intended to be planted 9-12" on center, and the design can be easily modified to fit your actual conditions. If you don't already have a mature tree, try planting a swamp white oak or hackberry, both of which are great larval host trees that will tolerate compacted soils.

Symbol	Scientific Name	Common Name
	Allium cernuum	Nodding wild onion
	Asclepias tuberosa	Butterfly-weed
	Eurybia macrophylla	Big-leaved aster
	Carex pensylvanica	Penn sedge
	Echinacea pallida	Pale coneflower
	Euphorbia corollata	Flowering spurge
	Helianthus occidentalis	Western sunflower
	Phlox pilosa	Sand phlox
	Polygonatum commutatum	Giant solomon's seal
	Sporobolus heterolepis	Prairie dropseed

Echinacea pallida
R.W. Smith[1]

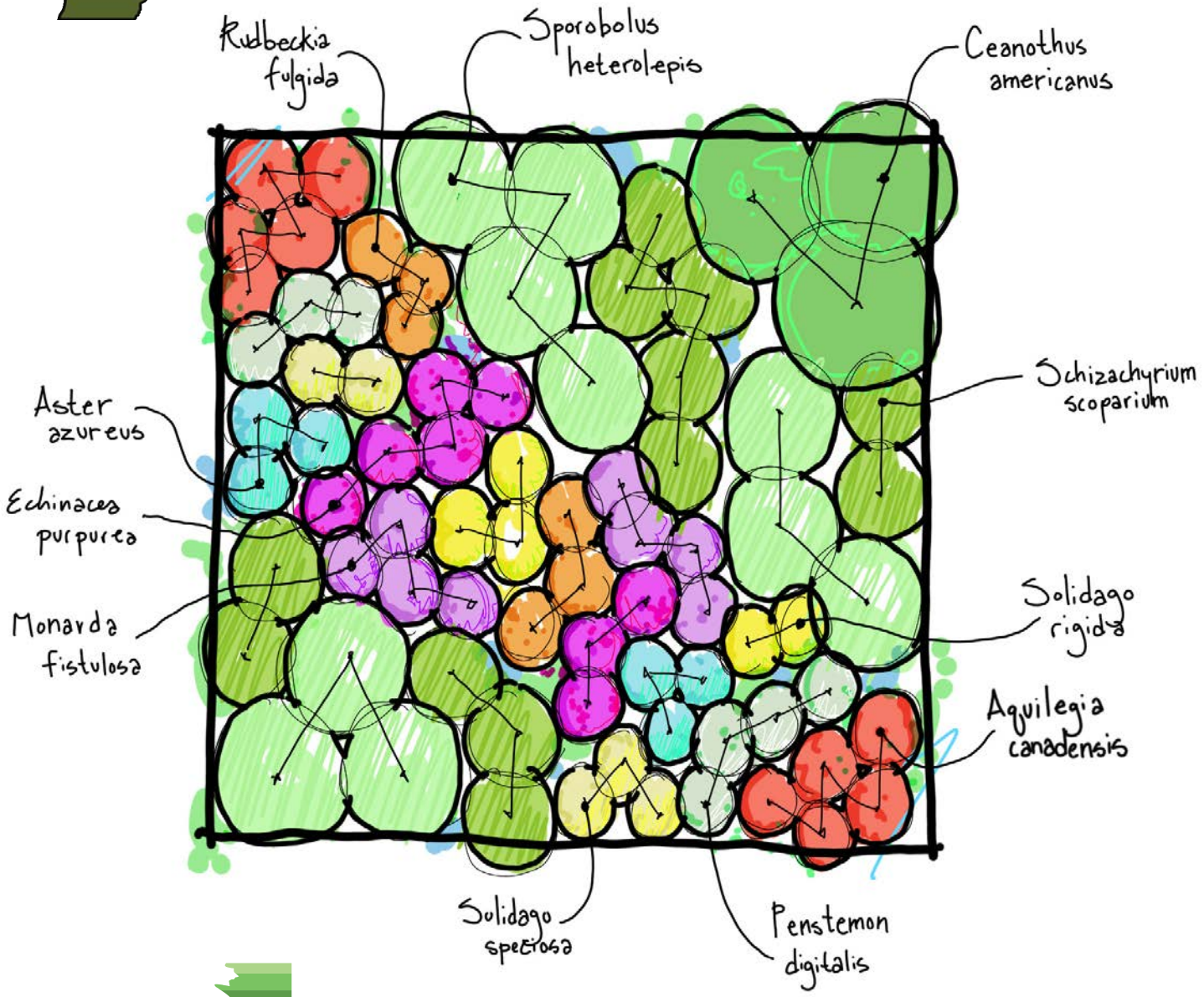
Allium cernuum
Michigan Audubon

Euphorbia corollata
Alan Cressler[1]

Phlox pilosa
Lee Page[1]

Design by Matt Demmon
Feral Floral
Ann Arbor, MI
matt@feral-flora.com

Low-profile Garden



Rudbeckia fulgida
Michigan Audubon

Penstemon digitalis
Jim Hewitt, Michigan Audubon

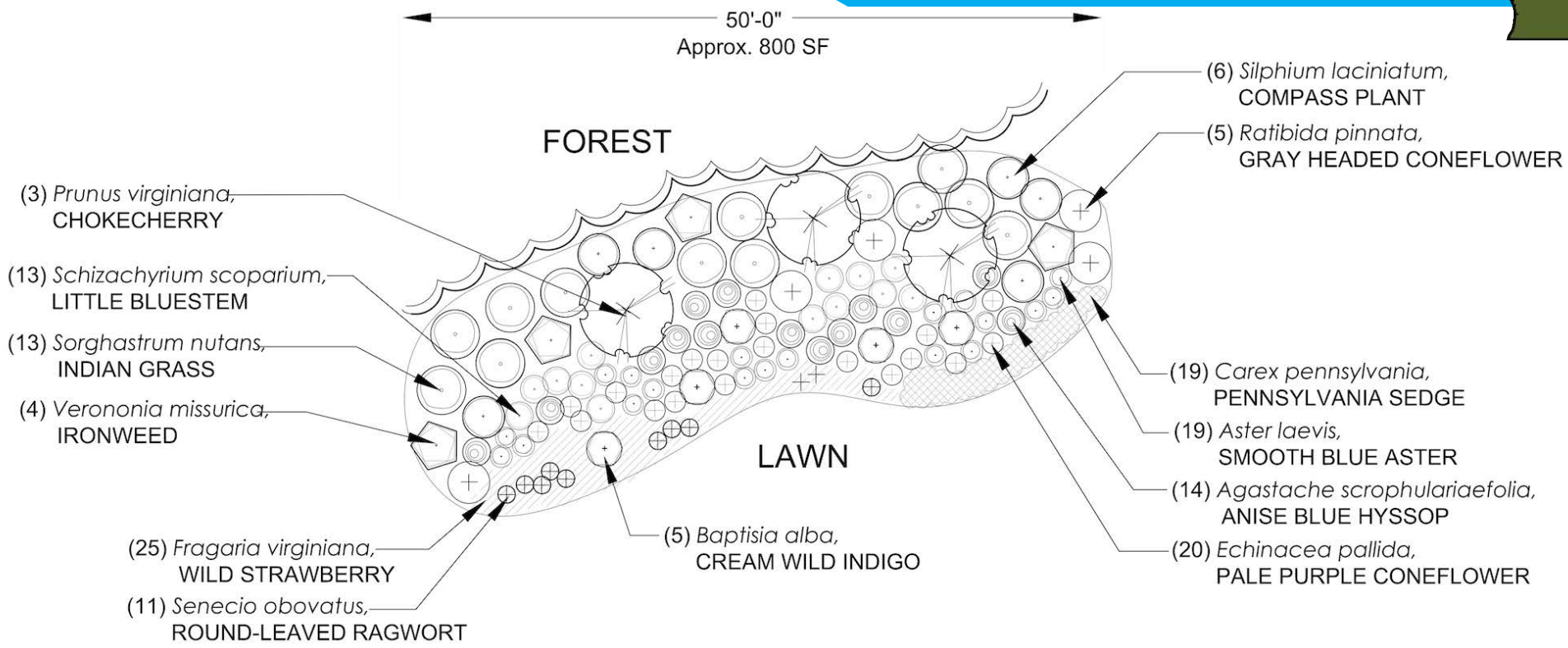
Design Notes

This is a low-profile (2-4') native garden for areas that do not receive full sun, and receive consistent moisture throughout the year. Native grasses provide cover and hug flowering species which provide year-round interest for birds, and humans. This is an example of a 100 square foot (10'x10') garden. It can be increased by repeating similar patterns.

NATIVEDGE
ECOLOGICALLY INSPIRED DESIGN

Design by Native Edge
Grand Rapids, MI
www.nativedgeco.com

Forest Edge Bird Biohabitat



Design Notes

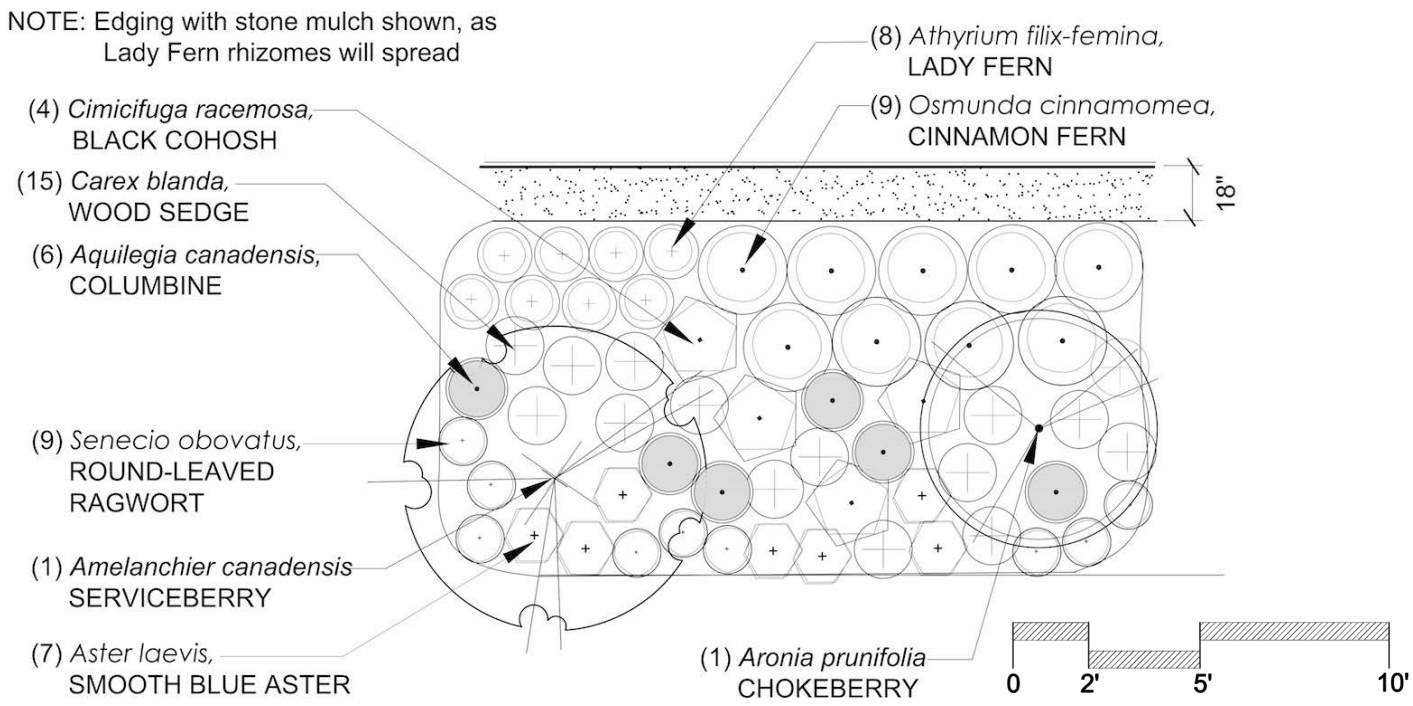
As space and interest allow, a sizable planting bed can be a transition zone between a lawn area and the adjacent woods. In this native design, birds can find insects for their young from spring through late summer, especially from the choke cherry (*Prunus virginiana*). According to Doug Tallamy, professor of entomology at University of Delaware, *Prunus* species which can be host to over 450 species of *Lepidoptera* caterpillars. Other food sources for birds depicted in this design include: fruit from the wild strawberry in summer, and a plethora of seeds from each of the grasses and wildflowers from late summer to winter.

Design by Rebecca Marquardt
Revery
Ada, MI
www.reverystudio.com


Silphium laciniatum
Andy and Sally Wasowski[1]


Sorghastrum nutans
Michigan Audubon

Shady Foundation Garden



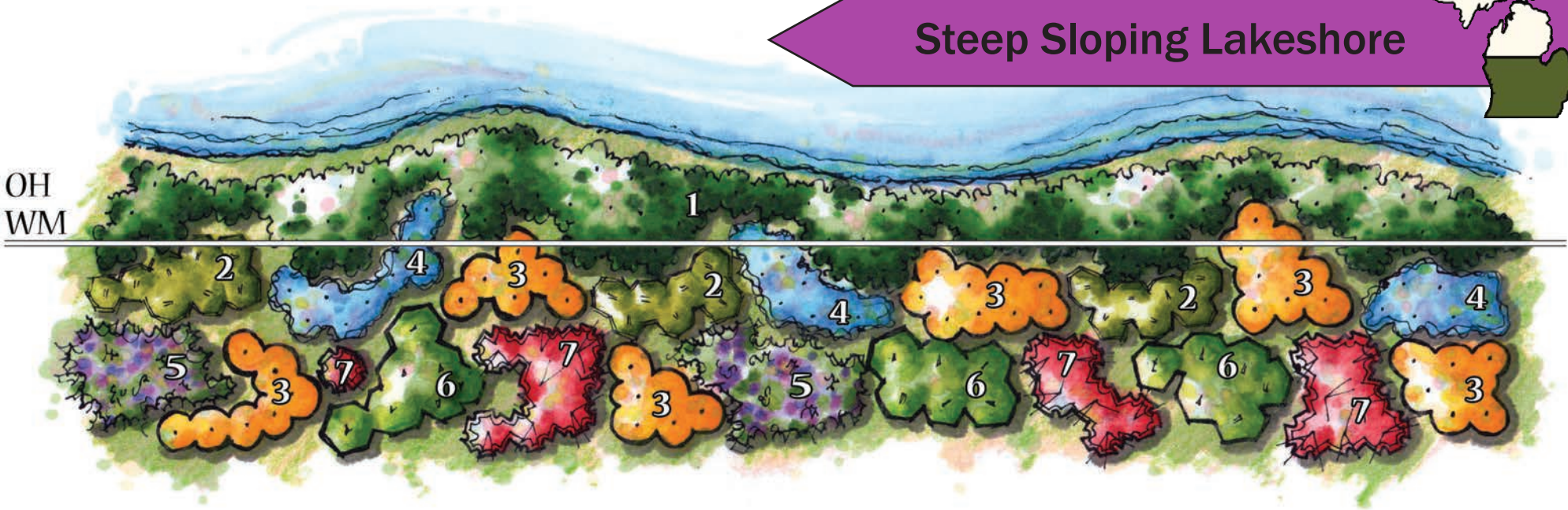
Design Notes

This design is perfect for the north side of a one-story home, or other conditions where the edge closest to the foundation is primarily in shade while the furthest section receives direct sun at least four hours of the day. Round-leaved ragwort (yellow flowers), columbine (reddish), serviceberry and chokeberry (both white) are some of the earliest blooming natives in early May, bringing insect activity for the birds and important pollination services. The bloom of the black cohosh in mid- to late summer will rise up through the grass-like sedges like white wands against a backdrop of ferns. Smooth blue aster will bloom into October, just about the time the serviceberry and chokeberry are peaking with fall color of yellow-apricot and crimson. This design is for part-shade to shade medium soils.

revery

Design by Rebecca Marquardt
Revery
Ada, MI
www.reverystudio.com

Steep Sloping Lakeshore




Liatris spicata
Julie Makin[1]


Anemone canadensis
R.W. Smith[1]


Chelone glabra
Stefan Bloodworth[1]


Onoclea sensibilis
Lee Page[1]

Design Notes

Native shoreline plantings provide important habitat for birds, pollinators, and wildlife while preventing erosion along the lakeshore. The plant species chosen are ones specific for two zones, either below or above the ordinary high water mark (OHWM). The native plants provide a variety of colors throughout the growing season at variable heights and textures, all with a managed look. This garden is suitable for a site with a steeper slope where soils are moist most of the year, but prolonged flooding is infrequent. The narrow width reflects the faster transition from wet to dry soil conditions.

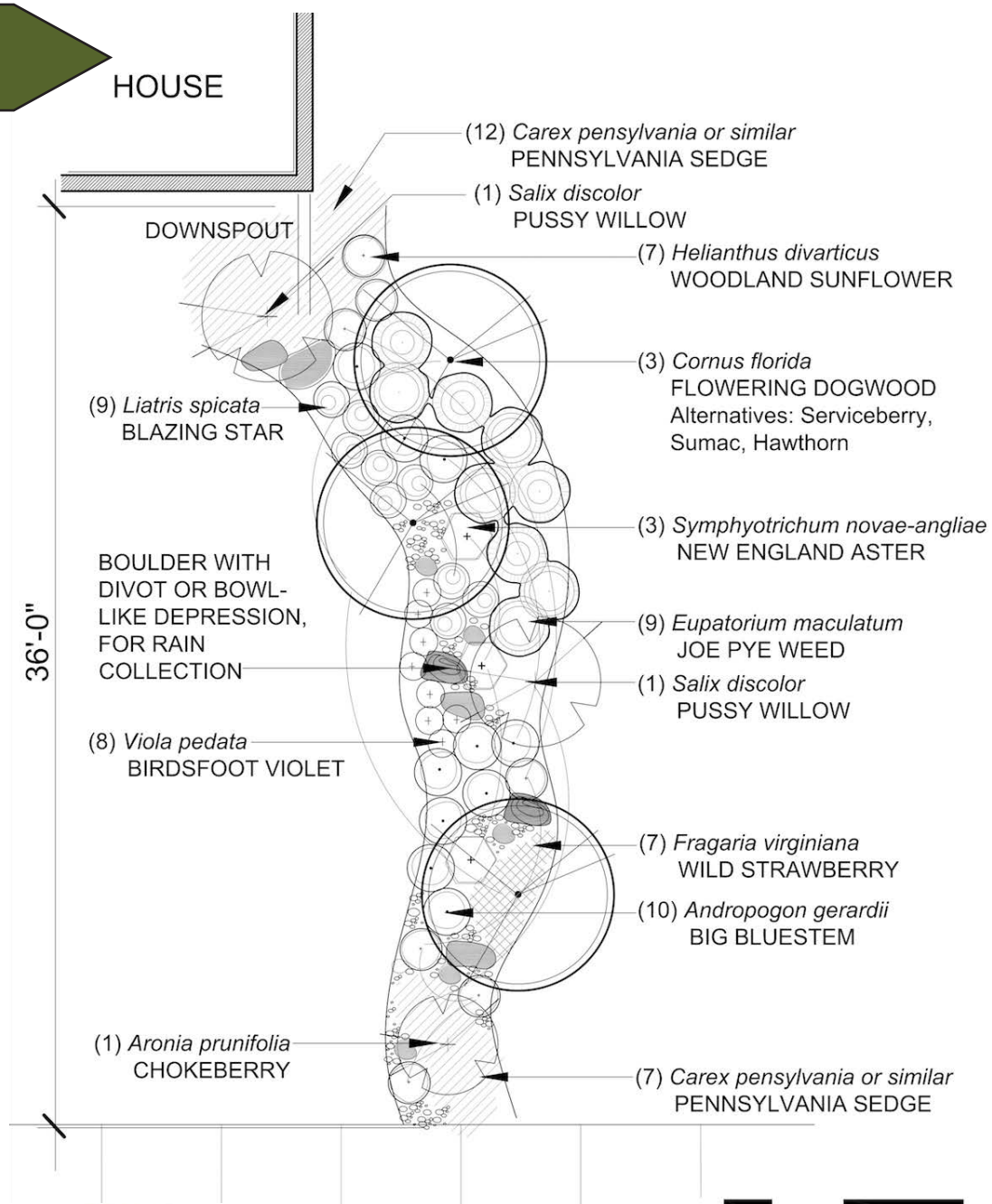
Symbol	Scientific Name	Common Name
1	*Juncus effusus*	Soft-stemmed rush
2	*Calamagrostis canadensis*	Blue-joint grass
3	*Zizia aurea*	Golden Alexander
4	*Onoclea sensibilis*	Sensitive fern
5	*Liatris spicata*	Marsh blazing-star
6	*Anemone canadensis*	Canada anemone
7	*Chelone glabra*	Turtlehead

Design by MSU Extension
in collaboration with the
Michigan Natural Shoreline Partnership
http://www.mishorelinepartnership.org/

Sweeping Bioswale

Design Notes

Using native vegetation to slow down, capture and clean stormwater is referred to as bioinfiltration; rain gardens and bioswales are commonly used bioinfiltration practices found at the residential scale. Bioswales differ from rain gardens in that they convey stormwater from a high point to a low point. In this design, the downspout from the house is directed towards the bioswale which includes small boulders and landscape stone to help dissipate the velocity and direct the flow of rainwater. Water meanders through rocks and a diverse ensemble of vegetation, where rainwater is allowed to infiltrate into the ground to a greater extent than if this were simply a turf-grass swale as is typical of many developed landscapes. The volume of stormwater that flows over the sidewalk will be significantly reduced and the quality of the water will be improved. All the plants chosen provide a food source for birds whether in the form of insects, fruit or seeds. This design is for sun to part-sun, dry to medium soils.



revery

Design by Rebecca Marquardt
Revery
Ada, MI
www.reverystudio.com

Summers-Knoll School Rain Garden


Physostegia virginiana
R.W. Smith[1]


Geranium maculatum
James C. Baugh[1]


Symphyotrichum novae-angliae
Jim Hewitt, Michigan Audubon

Design Notes

This design was created for an elementary school rain garden so plants were selected to maximize bloom time when school is in session. The garden provides varied textures, especially for special education students. Butterflies, other pollinators, and birds will find good habitat within this garden. These plant species will grow well in part sun and seasonally wet conditions. The design was meant to receive input from a curb drain, depositing water onto the strawberry-covered berm on the right side.

Symbol	Scientific Name	Common Name
Dark blue	*Iris virginica*	Southern blue flag
Light blue	*Lobelia siphilitica*	Blue lobelia
Purple	*Symphyotrichum novae-angliae*	New England aster
Pink	*Physostegia virginiana*	Obedient plant
Light green	*Carex hystericina*	Porcupine sedge
Light purple	*Geranium maculatum*	Wild geranium
Dark green	*Fragaria virginiana*	Wild strawberry

Design by Washtenaw County Water Resources Commissioner's Office
Rain Garden Program
www.ewashtenaw.org/raingardens

Resources

Michigan native plant growers, seed producers, and retailers

Michigan Native Plant Producers Association www.mnppa.org

Plants:
Designs by Nature, Laingsburg, MI
Hidden Savanna Nursery, Kalamazoo, MI
Native Plant Nursery, Ann Arbor, MI
Wildtype Native Nursery, Mason, MI

Seeds:
Michigan Wildflower Farm, Portland, MI
Native Connections, Three Rivers, MI

Distributors & Retailers:
Conservation Districts
Wild Ones Chapters
Go Beyond Beauty (List of nurseries in northwest MI)
Specialty Growers, Howell, MI
Van Atta's Garden Center, Haslett, MI

Ask for native plants at your local nursery. Even if they don't supply them now, by asking for natives you are wielding your power as a consumer to change the industry for the future!

Books

Bringing Nature Home
by Douglas W. Tallamy

Landscaping with Native Plants of Michigan
by Lynn M. Steiner

Birdscaping in the Midwest
by Mariette Nowak

A Field Guide to the Natural Communities of Michigan
by Joshua G. Cohen, Michael A. Kost, Bradford S. Slaughter, and Dennis A. Albert

Online

Bringing Nature Home, www.bringingnaturehome.net
Go Beyond Beauty, Northwest MI, www.habitatmatters.org
Michigan Native Plants Database, www.nativeplant.com
Saving Birds Thru Habitat, www.savingbirds.org
Wildflower Association of Michigan, www.wildflowersmich.org/

Eastern bluebird with an insect for its brood
Douglas Tallamy[2]

MICHIGAN audubon
2310 Science Parkway, Suite 200
Okemos, MI 48864
www.michiganaudubon.org

Mi Bird-Friendly COMMUNITIES
Learn more about the Mi Bird-Friendly Communities program by visiting:
www.michiganaudubon.org/bfc

Thank you!

Thank you to the landscape designers who generously donated their time and expertise demonstrated in these layouts. Any reader looking for design assistance, please give your business to the organizations featured in these pages.

NFWF

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Audubon

Thanks also to the incredible photographers who shared their works for educational purposes. Photo credits:

[1]Ladybird Johnson Wildflower Center, Austin, TX
[2]National Audubon Society
Jim Hewitt and Michigan Audubon

Lady Bird Johnson Wildflowercenter The University of Texas at Austin

Cover photos:
American goldfinch, brown thrasher, ruby-throated hummingbird: Will Stuart[2]
Landscapes: Douglas Tallamy[2]
Wilson's warbler: OHfalcon72[2]

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