CREATING BIRD-FRIENDLY HABITAT

A Native Plant Guide For Central Minnesota

Transform your yard using native plants to support birds, insects, and other wildlife

AUDUBON
CHAPTER OF MINNEAPOLIS

Utilize this guide to restore your backyard or acreage into an ecologically sound habitat. Incorporate plants from every layer to construct a three-dimensional structure brimming with food, shelter, and nesting sites for birds. Habitat restoration not only benefits birds, insects, and mammals but also enriches your experience of observing wildlife.

Birds rely on insects: 96% of bird species rear their young on exclusive insect diets, and the majority of adult songbirds' diet consists of insects. Yards featuring ornamental and many cultivars fail to provide these essential insects, as these plants cannot support insect populations. Minimize or eliminate the use of ornamental and cultivar plants. Manage invasive plants that can outcompete native species and disrupt ecosystems and habitats. Replace these types of plants with native plants and watch your yard become a haven of insect and avian diversity.

Focus on plant diversity, and also be sure to include “keystone species” (highlighted in yellow in this guide) in each layer. These are the plant species that are the heavy hitters, supporting vast numbers of insect species.

Both birds and insects thrive in untidy environments; avoid removing leaves from the ground (refrain from mulching leaves) and cutting back plant stalks at the end of the growing season. Adult insects, along with insect eggs, larvae, and cocoons overwinter in these organic materials. Removing them creates an ecological trap that significantly harms insect populations and in turn bird populations.

KEY

	Keystone Plant
F	Full sun
P	Part Sun
S	Shade
D	Dry
Me	Medium
Mo	Moist
W	Wet
#	Suitable for container

Trees support the largest numbers of caterpillars and other insects. Trees are crucial for birds. Think long term and plant those saplings! Even small trees provide benefits to insects and birds.

CANOPY LAYER CHOICES													
Scientifc Name	**Common Name**	**Height**	**Sun**	**Moisture**	**Soil Type**	**Bloom Time**	**Berry/Nut**	**Seed**	**Nectar /Sap**	**Insect**	**Caterpillar**	**Nest Material**	**Notes**
QUERCUS													
Quercus Alba	White Oak	60-80'	F	D, Me	Tolerates most, acidic	May	•				318		cavity nest site
Quercus bicolor	Swamp White Oak	50-60'	F	Mo	Tolerates most, acidic	May	•				318		cavity nest site
Quercus macroarpa	Bur Oak	60-80'	F	D, Me	Sandy Loam, Clay	May	•				318		cavity nest site
Quercus muehlenbergii	Chinquapin Oak	40-60'	F	D, Me	Rocky, Loam	May	•				318		cavity nest site
Quercus rubra	Red Oak	60-80'	F,P	D, Me	Sandy Loam	May	•				318		cavity nest site
SALIX													
Salix amygdaloides	Peachleaf Willow	30-50'	F	W	Loam	May-Jun			•		355	•	cavity nest site
Salix nigra	Black Willow	35-50'	F	Mo, W	Tolerates Most	May-Jun			•		355		cavity nest site
PRUNUS													
Prunus serotina	Wild Black Cherry	50-60'	F,P	D-Me	Loam	May-Jun	•				339		Nesting sites, cavity nesting fast growth
BETULA													
Betula alleghaniensis	Yellow Birch	60-70'	F,P	Me	Sand, Loam	May	•		•		329		Nesting sites
Betula nigra	River Birch	50-60'	F,P	Me	Tolerates Most	Apr-May	•		•		329		
Betula papyrifera	Paper Birch	50-60'	F,P	D, Me	Sand, Loam	Apr-May	•		•		329		
POPULUS													
Populus balsamifera	Balsam Poplar	60-70'	F	Me, Mo	Sand, Loam	Apr-May		•			300		Cavity Nest
Populus deltoides	Cottonwood	75-100'	F	D, Me, Mo	Tolerates Most	Apr-May					300		Cavity Nest
Populus grandidentata	Bigtooth Aspen	50-60'	F	Me, Mo	Sand, Loam	Apr-May					300		Cavity Nest
Populus tremuloides	Quaking Aspen	40-50'	F	Me, Mo	Tolerate Most	Apr-May		•			300		Cavity Nest
ACER									•	•			
Acer rubrum	Red Maple	60'	F,P	Me, W	Tolerate most	Apr-May			•	•	226		Nesting site/cavity nest
Acer saccharinum	Silver Maple	60-80'	F,P	Me,Mo	Tolerate most	Mar-Apr			•	•	226		Nesting site/cavity nest
Acer saccharum	Sugar Maple	60'	F,P	Me	Well-drain, loamy, sandy over clay	Apr-Jun			•	•	226		Nesting site/cavity nest, syrup
Acer saccharum nigrum	Black Sugar Maple	60-75'	F,P	D, Me, Mo, W	Well-drained, calciferous	Apr-May			•	•	226		Nesting site/cavity nest

Enhance bird species diversity by planting a diverse array of trees in the canopy layer. Consider leaving dead trees and tree snags intact where safe to do so, as they offer significant benefits to birds.

CANOPY LAYER CHOICES													
Scientifc Name	**Common Name**	**Height**	**Sun**	**Moisture**	**Soil Type**	**Bloom Time**	**Berry/Nut**	**Seed**	**Nectar /Sap**	**Insect**	**Caterpillar**	**Nest Material**	**Notes**
CARYA													
Carya cordiformis	Bitternut Hickory	50-75'	F, P	D, Me, Mo	Loam, sandy clay	May-Jun	•	•	•		153		Nesting site
Carya ovata	Shagbark	50-75'	F, P	D, Me, Mo	Sand, Loam, Clay	May-Jun	•	•	•		153		Nesting site
CONFIFEROUS CHOICES													
JUNIPER													
Juniperus virginiana	Eastern Red Cedar	45'	F, P	D, Me	Sand, Silty clay	Apr-May	•				26		Nesting site
PINUS													
Pinus resinosa	Red Pine	75'	F	D, Me	Sandy	Jun		•		•	200		Nesting site/cavity nest
Pinus strobus	White Pine	65-75'	F	Me	Sand, Loam, Clay	Jun		•		•	200		Nesting site/cavity nest
Pinus banksiana	Jack Pine	50'	F	D, Me	Sandy	May-Jun		•		•	200		Nesting site/cavity nest
UNDERSTORY TREE CHOICES													
SALIX													
Salix bebbiana	Bebb's Willow	10-20'	F,P	Dry, Me, Mo, W	Loam, sand/clay tolerant	May-Jun		•	•		355		Nesting site
PRUNUS													
Prunus pensylvanica	Pin Cherry	20-35'	F,P	Me, Mo	Loam	May-Jun	•				339		Nesting site/cavity nest
Prunus virginiana	Common Chokecherry	20-35'	F,P	D, Me	Loam, tolerates most	May-Jun	•				339		Nesting site/cavity nest
Prunus americana	American Plum	20-35'	F	D, Me	Loam	May	•				339		Nesting site/cavity nest, thicket forming
CARPINUS													
Carpinus caroliniana	Blue Beech (Musclewood)	20-30'	F-S	Me, W	Loam, Clay	Apr-may		•			126		Slow growing
CORNUS													
Cornus alternifolia	Pagoda Dogwood	15-20'	F-S	Me	Loam	May-Jun	•				106		
AMELANCHIER													
Amelanchier arborea	Downy Serviceberry	15-25'	F,P	D, Me	Well-drained	Apr-May	•			•	94		
Amelanchier laevis	Allegheny Serviceberry	15-25'	F,P	Me	Clay, Loam, Sand	Apr-May	•			•	94		
Amelanchier interior	Inland Serviceberry	15-30'	F,P	Me, Mo	Well-drained loam, sand tolerant	May-Jun	•			•	94		
MALUS													
Malus ioensis	Praire Crab	20-35'	F	D, Me, Mo	Tolerates most	Apr-May	•		•	•	237		Cavity nest, Beware red leaf cultivars!

The shrub layer provides crucial nesting sites and cover. Plant dense hedgerows to maximize the benefits.

SHRUB STORY PLANT CHOICES													
Scientifc Name	**Common Name**	**Height**	**Sun**	**Moisture**	**Soil Type**	Bloom Time	**Berry/Nut**	**Seed**	**Nectar**	**Insect**	**Caterpillar**	**Nest Material**	**Notes**
SALIX													
Salix discolor	Pussy Willow	15-20'	F	W	Clay, loam, sand	Apr-May		•		•	355	•	Nesting site
Salix humilis microphyllus	Prairie Willow	3-6'	F	D, Me, Mo, W	Clay, loam, sand	Apr-May		•		•	355	•	Nesting site
Salix lucida	Shining Willow	12-18'	F	W	Tolerates most, loam	May-Jun		•		•	355	•	Nesting site
Salix petiolaris	Slender Willow	6-12'	F,P	W	Tolerate most	Apr-May		•		•	355	•	Nesting site
VIBURNUM													
Viburnum lentago	Nannyberry Viburnum	12-20'	F,P	Me	Loam, tolerates most	May-Jun	•			•	153		Nesting site
Viburnum rafinesquianum	Downy Viburnum	6-8'	F,P	D, Me	Clay, loam, sand	May-Jun	•			•	153		Nesting site
Viburnum trilobum	American Highbush Cranberry	6-10'	F-S	Me, W	Loam, organic peat	May-Jun	•			•	153		Nesting site
VACCINUM													
Vaccinum angustifolium	Lowbush Blueberry	1-2'	F, P	Me	Sand, Loam	May-Jun	•			•	234		Nesting site
RUBUS													
Rubus allegheniensis	Highbush Blackberry	3-6'	F,P	D, Me	Sandy loam, clay	May-Jul	•				127		Nesting sites
Rubus idaeus canadensis	Northern Rapsberry	3-6'	F,P	Me	Sandy/clay loam	May-Jul	•				127		Nesting sites
Rubus occidentalis	Black Raspberry	3-5'	F,P	D, Me, W	D-Mo	May-Jun	•				127		Nesting sites
Rubus parviflorus	Thimbleberry	4-6'	P	Me, W	alkaline	Jun-Jul	•				127		Nesting sites
CORYLUS													
Corylus americana	American Hazelnut	6-12'	F,P	D, Me, Mo, W	Well drained, gravelley loam to heavy clay	May	•	•		•	127		
Corylus cornuta	Beaked Hazelnut	6-12'	P,S	D, Me, Mo, W	Well drained, gravelley loam to heavy clay	May	•	•		•	127		

If possible, aim for least 50-70% of your plant biomass to constitute native plants. Remember though, any native planting is beneficial. Even just one tree can have an impact.

SHRUB STORY PLANT CHOICES													
Scientifc Name	**Common Name**	**Height**	**Sun**	**Moisture**	**Soil Type**	Bloom Time	**Berry/Nut**	**Seed**	**Nectar**	**Insect**	**Caterpillar**	**Nest Material**	**Notes**
ROSA													
Rosa carolina	Carolina Rose	2-3'	F, P	D, Me, Mo	Sand, Loam	May-Jun	•			•	101		Nesting site
Rosa blanda	Meadow Rose	3-6'	F, P	D, Me	Clay, Loam, Sand	Jun-Jul	•			•	101		Nesting site
Rosa palustris	Swamp Rose	5-8'	F, P	Mo		Jun-Jul	•			•	101		Nesting site
CORNUS													
Cornus sericea	Red-twigged Dogwood	6-12'	F,P	Me, W	Tolerates most	May-Aug	•				95		Nesting site
Cornus rugosa	Roundleaf Dogwood	6-10'	P,S	D, Me	Well-drained, sandy, loamy, rocky	May-Jul	•				95		Nesting site
Cornus amomum	Silkydogwood	6-12'	F	Me, W	Tolerate most	Jun-Jul	•				95		Nesting site
Cornus racemosa	Grey Dogwood	8-12'	F,P	D, Me	Tolerates most	Jun-Jul	•				95		Nesting site
Cornus stoloifera	Red Osier Dogwood	6-10'	F,P	Me, W	Tolerates most	Jun-Sept	•				95		Nesting site
AMELANCHIER													
Amelanchier alnifolia	Saskatoon Serviceberry	8-10'	F,P	Me, W	Loam	May	•			•	94		
Amelanchier sanguinea	sand (Roundleaf) Serviceberry	6-8'	F,P	Me, W	Sandy loam	May	•			•	94		
SAMBUCUS													
Sambucus canadensis	American Elder	8-10'	F	D, Me, Mo, W		Jun	•			•	33		Nesting site
SYMPHORCARPOS													
Symphoricarpos albus	White Snowberry	3-4'	F,P	D, Me, Mo, W	Clay, Limestone, loam, sand	May-Jul	•			•	21		Nesting site
Symphoricarpos occidentalis	Wolfberry	2-4'	F,P	Me	Tolerates most	Jun-Jul	•			•	21		Nesting site
Symphoricarpos orbiculatus	Red Snowberry / Coralberry	3-4'	F,P	D, Me, Mo, W	Loam, tolerates most	May-Jun	•			•	21		Nesting site
RIBES													
Ribes americanum	American Black Currant	3-6'	F,P	Me, W	Tolerates most	May-Jun	•			•			
Ribes cynosbati	Pasture (Prickly) Gooseberry	3-6'	F,P	Me	Tolerates most	Jul-Aug	•			•			
Ribes missouriensis	Missouri Goosberry	3-6'	F-S	D, Me	Tolerates most	Apr-Jun	•			•			

Bird habitat benefits many species of mammals and insects as well. Your habitat will serve as crucial habitat for pollinators, butterflies, and many other beneficial insects that will control pests.

HERB LAYER PLANT SELECTIONS													
Scientifc Name	**Common Name**	**Height**	**Sun**	**Moisture**	**Soil Type**	Bloom Time	**Berry/Nut**	**Seed**	**Nectar**	**Insect**	**Caterpillar**	**Nest Material**	**Notes**
ASTER													
Aster laevis	Smooth Aster	2-4'	F	D, Me	Clay, Loam, sand	Aug-Oct		•			105		Survives freeze for blooms into Nov.
Aster sericeus	Silky Aster	1-2'	F,P	D, Me	Sandy, Rocky	Aug-Oct		•			105		
Aster macrophyllus	Big Leaf Aster	1-2'	P,S	D, Me	Clay, Loam, sand	Aug-Sep		•			105		
Aster azureus	Skyblue Aster	2-3'	F,P	D, Me	Loam, sand	Aug-Oct		•			105		
Aster novae-angliae	New England Aster	3-6'	F,P	Me, W	Clay, Loam, sand	Aug-Oct		•			105		
Aster divaricatus	White Woodland Aster	2-4'	P,S	D, Me	Clay, Loam, sand	Aug-Sep		•			105		
SOLIDAGO													Does NOT cause allergies
Solidago flexicaulis	Zig Zag Goldenrod	1-3'	P,S	D, Me	Clay, Loam, Sand	Aug- Sep		•		•	88		
Solidago speciosa	Showy Goldenrod	2-4'	F	D, Me	Loam, Sand	Aug-Sep		•		•	88		Non-rhizome speader
Solidago rigida	Stiff Goldenrod	3-5'	F	D, Me	Clay, Loam, Sand	Aug-Sep		•		•	88		Non-rhizome speader
HELIANTHUS													
Helianthus occidentalis	Western Sunflower	2-3'	F	D, Me	Loam, Sand	Jul-Aug		•			58		
Helianthus divaricatus	Woodland Sunflower	4-6'	P	D, Me	Clay, Loam, Sand	Jul-Sep		•			58		
Helianthus pauciflorus	Stiff Sunflower	2-6'	F	D, Me	Clay, Sand, Gravel	Jul-Sep		•			58		
ECHINACEA													
Echinacea angustifolia	Narrow-Leaved Coneflower	2-3'	F,P	D	Well-drained	Jun-Jul		•	•	•	•		
Echinacea pallida	Pale Purple Coneflower	3-4'	F,P	D, Me	Clay, Loam, Sand	Jun-Jul		•		•	•		
Echinacea purpurea	Purple Coneflower	3-4'	F,P	D, Me	Sand, Loam	Aug-Sep		•		•	•		Native to WI and IA
COREOPSIS													
Coreopsis lanceolata	Lanceleaf Coreoposis	1-2'	F	D, Me	Sand, Loam	Jun-Jul		•			4		#
Coreopsis rosea	Rose Coreopsis	1-2'	F	Me, Mo	Sand, Loam	Jul-Sep		•			4		
RUDBECKIA													
Rudbeckia hirta	Black Eyed Susan	1-3'	F,P	D, Me, Mo	Clay, Loam, Sand	Jun-Sep		•			15		Biennial- readily self sows

The herb layer provides seeds for many species of songbirds during fall and through the winter months. Be sure to leave your stalks and seedheads for birds and the insects that hibernate within the plant stems for winter.

HERB LAYER PLANT SELECTIONS													
Scientifc Name	**Common Name**	**Height**	**Sun**	**Moisture**	**Soil Type**	Bloom Time	**Berry/Nut**	**Seed**	**Nectar**	**Insect**	**Caterpillar**	**Nest Material**	**Notes**
LIATRIS													
Liatris ligulistylis	Meadow Blazing Star	3-5'	F	Me, Mo	Loam	Aug-Sep		•	•	•	7		#
Liatris aspera	Rough Blazing Star	2-3'	F	D, Me	Loam, Sand	Aug-Sep		•	•	•	7		#
Liatris pycnostachya	Prairie Blazing Star	3-5'	F	Me, Mo	Clay, Loam, Sand	Jul-Aug		•	•	•	7		#
ASCLEPIAS	Milkweed, Common												
Asclepias syriaca	Common Milkweed	2-4'	F,P	D, Me	Clay, Loam, Sand	Jun-Aug		•	•	•	11	•	
Asclepias incarnata	Red/Swamp Milkeed			Mo, W	Clay, Loam, Sand	Jun-Jul		•	•	•	11	•	#
Asclepias sullivantii	Sullivant's Milkweed	3-4'	F	Me	Clay, Loam	Jun-Aug		•	•	•	11	•	
Asclepias speciosa	Showy Milkweed	2-4'	F	D, Me	Clay, Loam, Sand	Jun-Aug		•	•	•	11	•	Less Aggressive than common but somewhat less appealing to wildlife
Dalea													
Dalea candida	White Prairie Clover	1-2'	F	D,M	Loam, Sand	Jul-Aug		•		•	1		Nitrogen fixer
Dalea purpurea	Purple Prairie Clover	1-2'	F	D,M	Clay, Loam, Sand	Jul-Aug		•		•	1		Nitrogen fixer
MONARDA													
Monarda didyma	Red Beebalm	3-5'	F,P	Me, Mo	Clay, Loam, Sand	Jun-Aug			•	•	10		
Monarda fistulosa	Bergmot	2-5'	F,P	D, Me, Mo	Clay, Loam, Sand	Jul-Sept		•	•	•	10		
PENSTEMON													
Penstemon digitalis	Smooth Penstemon	2-3'	F,P	Me., Mo	Clay, Loam, Sand	Jun-Jul		•	•		8		
Penstemon hirsutus	Hairy Beardtongue	1-2'	F,P	D, Me	Loam, Sand	May-Jun		•	•		8		
Penstemon grandiflorus	Beardtongue	2-4'	F	D	Gravel, Sand	May-Jun		•	•		8		
RATIBIDA													
Ratibida pinnata	Yellow Coneflower	3-6'	F	D, Me, Mo	Clay, Loam, Sand	Jul-Sep		•			2		
SILIPHIUM													
Silphium laciniatum5	Compass Plant	5-8'	F	D, Me		Jul-Sep		•	•	•	5		Leaves follow sun
Silphium perfoliatum	Cup Plant	6-8'	F,P	Me, Mo	Loam	Jul-Sep		•	•	•	5		Cups hold water for birds, frogs. Spreads aggressively
LOBELIA													
Lobelia siphilitica	Great Blue Lobelia	1-4'	F,P	Me, Mo	Clay, Loam, Sand	Jul-Sep			•	•	4		
Lobelia cardinalis	Cardinal Flower	2-4'	F,P	Mo, W	Loam, Sand	Jul-Aug			•	•	4		#, blooms when male hummingbird begin migration
AQUILEGIA													
Aquilegia canadensis	Columbine	1-3'	F-S	D, Me	Loam, Sand	May-Jun			•	•	10		

Plant densely and diversely within the herb layer to maximize benefits to the largest numbers of birds and insects. Native plants are accustomed to competition and will perform better with some crowding.

HERB LAYER PLANT SELECTIONS													
Scientifc Name	**Common Name**	**Height**	**Sun**	**Moisture**	**Soil Type**	Bloom Time	**Berry/Nut**	**Seed**	**Nectar**	**Insect**	**Caterpillar**	**Nest Material**	**Notes**
AGASTACHE													
Agastache foeniculum	Lavender Hyssop	2-4'	F,P	D, Me	Loam, Sand	Jul-Sep		•	•	•	3		
CIRSIUM													
Cirsium discolor	Field Thistle	6'	F,P	Me		Aug-Oct		•	•		•	•	
FRAGARIA													
Fragria virginiana	Wild Strawberry	3-6"	F,P	D	Loam, Sand	Apr-Jun	•			•	67		>50 bird species eat berries
EUTROCHIUM 2													
Eutrochium maculatum	Joe-Pye Weed	4-6'	F, P	Me, W	Loam	Jul		•		•	2		
Eutrochium purpureum	Sweet Joe-Pye Weed	4-6'	F, P	Me	Clay, Loam, Sand	Jul-Sep					2		
IMPATIENS													
Impatiens capensis	Orange Jewel Weed	4'	F, P	Me, Mo		Jul-Sep		•	•		•		Annual
Vines													
Lonicera dioica	Red Vine Honeysuckle	5-10'	P,S	D, Me, Mo		May-Jun	•		•	•		27	
GRASSES													
Bouteloua curtipendula	Sideoats Grama	2-3'	F	D, Me	Loam, Sand	Aug-Sept		•		•	4	•	
Sporobolus heterolepis	Prairie Dropseed	2-4'	F	D, Me	Loam, Sand	Aug-Sept		•		•	3		#
Andropogon gerardii	Big Blue Stem	5-8'	F	D, Me, Mo	Clay, Loam, Sand	Aug- Oct		•		•	11	•	Ground nesting
Carex radiata	Eastern Star Sedge	1-2'	P,S	Me, Mo	Loam, Sand	May-Jun		•		•			

NATIVE PLANT RESOURCES

Seed, Potted Plants, Bare Root

Local:

Outback Nursery: Hastings, MN
Landscape Alternatives: Shafer, MN
Blu Prairie Plant Nursery: Watertown, MN
Shelterwood Gardens: Minnetrista, MN
Natural Shore Technologies: Independence, MN

Online:

Prairie Nursery WI
Prairie Monn Nursery MN
Glacial Ridge Growers MN (order online Twin Cities pick up site)

SOURCES EMPLOYED TO GENERATE THIS GUIDE

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https://nativeplantfinder.nwf.org/
https://www.minnesotawildflowers.info
https://www.prairienursery.com/
https://www.prairiemoon.com/
http://www.outbacknursery.com/?page=welcome

How to Prevent Window Collisions

Actions to take at night

- Turn off all unnecessary lighting and draw your curtains.
- Use downlighting outdoors when safety requires lighting. Upward lighting draws birds in.
- Always turn off unnecessary lighting and use timers.

Make your Windows Visible to Birds

Glass must be treated in a way that visually breaks up the reflections and presents a visual cue to birds that it is an impassable obstacle. To be most effective, the visual cue must be applied to the outside of the window.

Solutions

Acopian BirdSavers: Long-lasting hanging cords
Feather Friendly: Long lasting adhesive markers installed in strips or sections
ABC Bird tape: Durable translucent tape

Other Solutions

Insect Screens: Leave those screens on year round
DIY art: White paint, applied to outside of window following 2X2 rule (no more than 2" of space between patterns)
Decals: Spaced no more than 2" apart applied to outside of window.

See https://abcbirds.org/solutions/prevent-home-collisions/ for more information.