



**'Go native'
to sustain
songbirds
and other
wildlife
in your
garden**



Saint Paul
Audubon Society

 Audubon MINNESOTA

A guide to
insect-attracting
native plants
for Central
Minnesota

**Why plant
insect-
attracting
native plants?**

MANY OF US ARE JUSTIFIABLY PROUD of our properties, whether we're backyard gardeners, farmers or hobby

farmers, managers of corporate properties or school grounds, or oversee public spaces. Our landscapes sustain us as we look over our living handiwork. But it's time to think of our gardens and landscapes as having another role: as places to sustain songbirds and other wild creatures. As the human population grows, there's less and less room for wildlife. Our gardens and landscapes now are vitally important to preserving and sustaining nature's diversity—birds, bees, butterflies and others.

The key is native plants. These are adapted to local conditions and generally require less maintenance and fewer resources, such as water and fertilizers, than non-natives. For the last decade there has been a

strong trend toward the use of native plants in planning landscapes both large and small. And now people are discovering another reason to plant natives—they attract native, leaf-eating insects. Sound crazy? Please read on:



Some of the most welcome visitors to our landscapes are the birds that pass through on migration or raise their young here or live here all year. But most landscapes, even those with many bird feeders, offer little to sustain birds. Properties filled with hybrids and exotic plants are putting our songbirds on a starvation diet. It's like throwing a party without providing any snacks for your guests.

Here's why: most non-natives are imports from Europe and Asia or are hybrids of the plants that grew here naturally, and many of us are still choosing these for our properties. Why is this a problem? Living things rely on plants, either directly or indirectly, for food. Caterpillars eat plant leaves and many adult insects drink flower nectar and gather pollen. These insects are a major source of food for birds and other wildlife. In fact, 96 percent of songbirds raise their young by stuffing them with high-protein insects and spiders.



Most of our native insects need native plants to survive – they simply don't recognize non-natives as food. They evolved to feed on only a few kinds of plants, and it takes thousands of years for them to adapt to a new food source. So in order to have insects for our birds, we need to offer the plants insects recognize, and this means natives.

What exactly are native plants? These are the plants that were growing here back in the 1850s, before European settlers began to arrive and make major changes in the existing habitat – plowing the prairie, cutting down forests and introducing plants from the home country.

More and more of us are beginning to recognize the value of native plants. We know they are best suited to local conditions, and generally don't require large doses of fertilizer and water to survive in local soils. The checks and balances of the natural world keep native plants from becoming invasive plants.

But we're starting to recognize an even more important role for native plants: as a food source for insects, which, in turn, nurture birds and other wildlife. And some natives are better insect hosts than others. This booklet highlights native trees, shrubs, flowering plants and grasses that are all-star insect attractors.

What kinds of birds need insects?

Nearly all songbirds rely on insects – and spiders – during spring, summer and fall. Parent birds – cardinals, bluebirds, orioles, to name a few – stuff caterpillars and spiders down their youngsters' throats to help them grow quickly. Many small birds, hummingbirds in particular, need spider webbing to construct their nests. Even winter's resident birds – chickadees, woodpeckers, nuthatches – rely on hibernating insects and spider eggs hidden in tree bark and stone walls to help them survive the cold.

I see insects on my non-native flowers and bushes...

Yes, but you're seeing adult insects looking for the pollen or nectar in the blossoms. For example, if we plant a garden to attract butterflies, we've only done half the job. A butterfly bush is a good source of nectar for butterflies (the adult form), but we should also plant the plants that support butterfly caterpillars. Otherwise we're offering a banquet with a sign: "No kids allowed." Studies show that native plants support 35 times more insects than non-natives do.

My garden can't really be this important, can it?

Indeed it can be. More and more research shows that we don't have enough wild places left to keep wildlife thriving. The populations of many kinds of migratory birds have dropped precipitously over the last 50 years, and the major reason is loss of habitat. It's up to urban and suburban gardeners and farmers and other landowners to fill in the gap. As more and more of us include natives in our yards and gardens, and our neighbors do, too, we'll begin to create habitat corridors. These will be critical to the survival of the birds and other animals we love.

Does this mean I have to dig out all the non-natives in my garden?

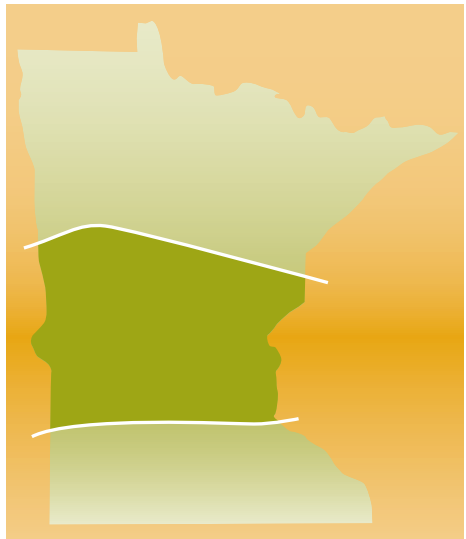
Not at all. Annuals are a welcome addition to many gardens, since their nectar nourishes butterflies and bees, and their pollen is important to bees. But as you make decisions about which perennials to plant in spring, summer and fall, please consider native plants first. These require much less maintenance and water and fertilizer than non-natives. And they're so important to the web of life that each of us is working to create on our property.

Where can I find native plants?

Planting natives is becoming a strong trend in the gardening world, and more and more nurseries and garden centers are offering native plants for sale. In fact, a number of nurseries now specialize in native plants. Buy plants and seeds from local native plant nurseries. These plants are adapted to our area and have evolved with the local insects and animals, forming the base of the food web. See the back of this booklet for help with selecting native plants.

Between the lines

This booklet is designed for residents within the broad central belt of Minnesota, the area between the lines in the map at right. All plants listed are well represented in appropriate native habitats within these boundaries. Many grow naturally outside the boundaries, as well.



Natives are the best choice

Native plants attract native insects that help spiders, frogs, toads, lizards, bats, foxes, raccoons, bears and birds survive. And many creatures that don't consume insects themselves live on wildlife that do, for example, Cooper's hawks that prey on songbirds.

Most insects in their larval form are extremely specialized, able to feed on very few kinds of native plants. And not all native plants are equally supportive – some are better than others in offering meals to insects and spiders. Among the all-stars are the oak and black cherry trees, host to hundreds of kinds of insects in the spring. Check these pages to find natives that host high numbers of native insects. Choose from these native plants to ensure that your property has high value to wildlife.

The numbers listed for larval insects refer to butterfly and moth larvae that find the leaves of each plant attractive as a food source. Many adult insects feed on plants' flower nectar and pollen, or make meals from the leaves, as well.



Tree choices

Bur Oak

Quercus macrocarpa
Grows 60 to 110 feet tall, crown spreads 60 to 80 feet.
Prefers full sun and dry to moist soil.
Attracts 518 larval insects.
Acorns valuable to wildlife.
Fall color: yellow.



White Oak

Quercus alba
Grows 60 to 95 feet tall, crown spreads 60 to 80 feet.
Prefers full sun and moist to dry soil.
Attracts 518 larval insects.
Acorns valuable to wildlife.
Fall color: red.



Black Cherry

Prunus serotina
Grows 50 to 98 feet tall, crown spreads 30 to 50 feet.
Prefers full sun to part shade, dry to moist soil.
Attracts 429 larval insects.
Black fruit has wildlife value.
Fall color: yellow to orange.



Red Maple

Acer rubrum
Grows 50 to 95 feet tall, crown spreads 40 to 50 feet.
Tolerates full sun to part shade, wet to moist soil.
Attracts 287 larval insects.
Seeds eaten by wildlife.
Fall color: red.



Sugar Maple

Acer saccharum
Grows 60 to 108 feet tall, crown spreads 40 to 50 feet.
Grows in partial to full shade, moist soil.
Attracts 287 larval insects.
Seeds eaten by wildlife.
Fall color: yellow to red.



White Pine

Pinus strobus
Grows 60 to 130 feet tall, spreads 35 to 55 feet.
Grows in full sun to light shade, dry to moist soil.
Attracts 191 larval insects.
Cones are wildlife food source.
Evergreen.



Hackberry

Celtis occidentalis
Grows 50 to 105 feet tall, crown spreads 50 to 75 feet.
Tolerates full sun to part shade, moist to wet soil.
Attracts 41 larval insects.
Purplish berries valuable to wildlife.
Fall color: yellow.



Tall shrub choices

Chokecherry

Prunus virginiana
Grows 15 to 25 feet tall, 12 to 15 feet wide.
Tolerates full sun to part shade, moist to dry soil.
Attracts 429 larval insects.
White flowers, May to June.
Purple-black fruit.
Fall color: yellow-orange.



Wild Plum

Prunus americana
Grows 10 to 20 feet tall, 15 to 35 feet wide.
Prefers full sun, dry to moist soil.
Attracts 429 larval insects.
White flowers, May to June.
Red-purple fruit.
Fall color: yellow.



Fireberry Hawthorn

Crataegus chrysocarpa
Grows 6 to 18 feet tall, 5 to 12 feet wide.
Needs full sun and moist to dry soil.
Attracts 150 larval insects.
White flowers in May.
Red berries.
Fall color: brown.



American Hazelnut

Corylus americana
Grows 6 to 15 feet tall, 6 to 12 feet wide.
Tolerates full sun to part shade, dry to moist soil.
Attracts 124 larval insects.
Yellow flowers, March to May.
Edible nuts.
Fall color: yellow to red.



Red-osier Dogwood

Cornus sericea
Grows 5 to 13 feet tall, 6 to 12 feet wide.
Prefers full sun, moist to wet soil.
Attracts 115 larval insects.
White flowers, May to August.
White berries.
Fall color: maroon.



Serviceberry

Amelanchier interior
Grows 15 to 39 feet tall, 10 to 15 feet wide.
Prefers full sun to part shade, moist to dry soil.
Attracts 119 larval insects.
White flowers, April to June.
Red-purple berries.
Fall color: yellow to red.



Nannyberry

Viburnum lentago
Grows 12 to 25 feet tall, 8 to 12 feet wide.
Tolerates full sun to part shade, moist to wet soil.
Attracts 97 larval insects.
White flowers, May to June.
Blue-black berries.
Fall color: maroon red.



Pagoda Dogwood

Cornus alternifolia
Grows 10 to 25 feet tall, 20 to 25 feet wide.
Grows in partial to full shade, moist to dry soil.
Attracts 115 larval insects.
White flowers, May to July.
Blue-black berries.
Fall color: red.



Low shrub choices

Highbush Blackberry

Rubus allegheniensis
Grows 3 to 10 feet tall, 6 to 12 feet wide.
Tolerates full sun to part shade, dry to moist soil.
Attracts 151 larval insects.
White flowers, May to June.
Black berries.



Red Raspberry

Rubus idaeus (var. *strigosus*)
Grows 3 to 5 feet tall, 6 to 12 feet wide.
Tolerates full sun to part shade, dry to moist soil.
Attracts 151 larval insects.
White flowers, May to June.
Red berries.



Lead Plant

Amorpha canescens
Grows 2 to 4 feet tall, 2 to 3 feet wide.
Full sun, moist to dry soil.
Attracts 23 larval insects.
Purple flowers, June to July.
Hairy seed pods, August to October.



Vine choices

Wild Grape

Vitis riparia
Grows 35 to 80 feet.
Tolerates full sun to part shade, moist to dry soil.
Attracts 72 larval insects.
Dark purple grapes.
Fall color: yellow.



Woodbine

Parthenocissus vitacea
Grows 50 to 72 feet.
Tolerates full sun to full shade, prefers moist soil.
Attracts 32 larval insects.
Dark blue berries.
Fall color: red.



Virgin's Bower

Clematis virginiana
Grows 8 to 16 feet.
Tolerates full sun to full shade, moist soil.
Attracts 6 larval insects.
White flowers, July and August.
Showy seed plumes in fall.



Flowering perennial choices

Gray Goldenrod

Solidago nemoralis
Grows 1 to 3 feet.
Full to part sun, dry soil.
Attracts 112 larval insects.
Blooms August to October.



Showy Goldenrod

Solidago speciosa
Grows 2 to 4 feet.
Full to part sun, moist to dry soil.
Attracts 112 larval insects.
Blooms August to October.



Large-leaved Aster

Aster macrophyllus
Grows 8 to 18 inches.
Part to full shade, moist to dry soil.
Attracts 105 larval insects.
Blooms August to October.



Silky Aster

Aster sericeus
Grows 6 inches to 2 feet.
Full to part sun, dry soil.
Attracts 105 larval insects.
Blooms August to October.



Wild Strawberry

Fragaria virginiana
Grows 6 inches.
Full sun, dry to moist soil.
Attracts 75 larval insects.
Blooms April to June.
Red berries.



Prairie Violet

Viola pedatifida
Grows 6 inches.
Sun to part shade, dry soil.
Attracts 27 larval insects.
Blooms May to June.



Wild Geranium

Geranium maculatum
Grows 1 to 2 feet.
Part sun to shade, prefers moist soil.
Attracts 23 larval insects.
Blooms May to June.



Blue Flag Iris

Iris versicolor
Grows 2 to 3 feet.
Full to part sun, grows in shallow water to wet soil.
Attracts 12 larval insects.
Blooms June to July.



Butterfly Weed

Asclepias tuberosa
Grows 1 to 2 feet.
Full sun, dry, well-drained soil.
Attracts 12 larval insects.
Blooms June to September.



Columbine

Aquilegia canadensis
Grows 2 to 3 feet.
Part to full shade, moist to dry soil.
Attracts 12 larval insects.
Blooms May to July.



Swamp Milkweed

Asclepias incarnata
Grows 3 to 4 feet.
Full sun, wet to moist soil.
Attracts 12 larval insects.
Blooms June to August.



Whorled Milkweed

Asclepias verticillata
Grows 8 to 20 inches.
Full sun, well-drained, dry soil.
Attracts 12 larval insects.
Blooms June to August.



Michigan Lily

Lilium michiganense
Grows 3 to 5 feet.
Full to part sun, wet to moist soil.
Attracts 11 larval insects.
Blooms June to August.



Large-flowered Beardtongue

Penstemon grandiflorus
Grows 18 inches to 4 feet.
Full sun to part shade, dry soil.
Attracts 8 larval insects.
Blooms May to June.



Wild Bergamot

Monarda fistulosa
Grows 3 to 4 feet.
Full sun to part shade, dry to moist soil.
Attracts 7 larval insects.
Blooms July to August.



Meadow Blazing Star

Liatris ligulistylis
Grows 24 to 42 inches.
Full sun, wet to moist soil.
Attracts 4 larval insects.
Blooms July to August.



Rough Blazing Star

Liatris aspera
Grows 18 to 36 inches.
Full to part sun, dry soil.
Attracts 4 larval insects.
Blooms July to September.



Bloodroot

Sanguinaria canadensis
Grows 6 to 9 inches.
Full sun-spring, shade-summer, moist soil.
Attracts 2 larval insects.
Blooms in May.



Grass choices

Prairie Cordgrass

Spartina pectinata
Grows 4 to 6 feet.

Full to part sun, wet to moist soil.
Attracts 13 larval insects.



Little Bluestem

Schizachyrium scoparium
Grows 18 to 36 inches.

Full to part sun, dry soil.
Attracts 6 larval insects.



Additional Minnesota native plant choices

Many other native plants make good choices for many kinds of settings. The following are a few other possible choices.

Other perennial choices

Zig-zag Goldenrod

Solidago flexicaulis
1 to 3 feet.

Part sun to shade, moist soil.
Attracts 112 larval insects.
Yellow flowers, Aug.-Sept.

Heart-leaved Aster

Aster cordifolius
2 to 4 feet.

Part sun to part shade, moist soil.
Attracts 105 larval insects.
Blue flowers, Sept.-Oct.

Meadowsweet

Spirea alba
4 to 5 feet.

Full to part sun, wet to moist soil.
Attracts 86 larval insects.
White flowers, June-Sept.

Stiff Sunflower

Helianthus pauciflorus
4 to 5 feet.

Full to part sun, dry to moist soil.
Attracts 73 larval insects.
Yellow flowers, July-Aug.

Joe-pye Weed

Eupatorium maculatum
2 to 7 feet.

Full sun, wet to moist soil.
Attracts 40 larval insects.
Pink flowers, July-Sept.

Northern Bedstraw

Galium boreale
12 to 30 inches.

Full to part sun, dry to moist soil.
Attracts 18 larval insects.
White flowers, June-July.

Tall Meadow Rue

Thalictrum dasycarpum
3 to 6 feet.

Full sun to part shade, wet to moist soil.
Attracts 13 larval insects.
Cream flowers in June.

Stiff Tickseed

Coreopsis palmata
1 to 2 feet.

Full to part sun, dry, well-drained soil.
Attracts 6 larval insects.
Yellow flowers, June-July.

Great Blue Lobelia

Lobelia siphilitica
20 to 30 inches.

Full to part sun, wet to moist soil.
Attracts 4 larval insects.
Blue flowers, July-Oct.

Other grass choices

Big Bluestem

Andropogon gerardii
3 to 6 feet.

Full to part sun, moist to dry soil.
Attracts 11 larval insects.

Indian Grass

Sorghastrum nutans
4 to 6 feet.

Full to part sun, dry to wet soil.
Attracts 9 larval insects.

Native plant information sources

The Minnesota Department of Natural Resources

is a good source for information, at www.dnr.state.mn.us/gardens/nativeplants/index.html. Learn more about the benefits of growing native plants, and get help with choosing plants, suppliers and landscapers. The site also offers garden designs.

The University of Minnesota Extension Service web page at

www.extension.umn.edu/distribution/horticulture/DG7447.html has extensive information. Click on Maintaining a Sustainable Landscape and/or Native Plant List.

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