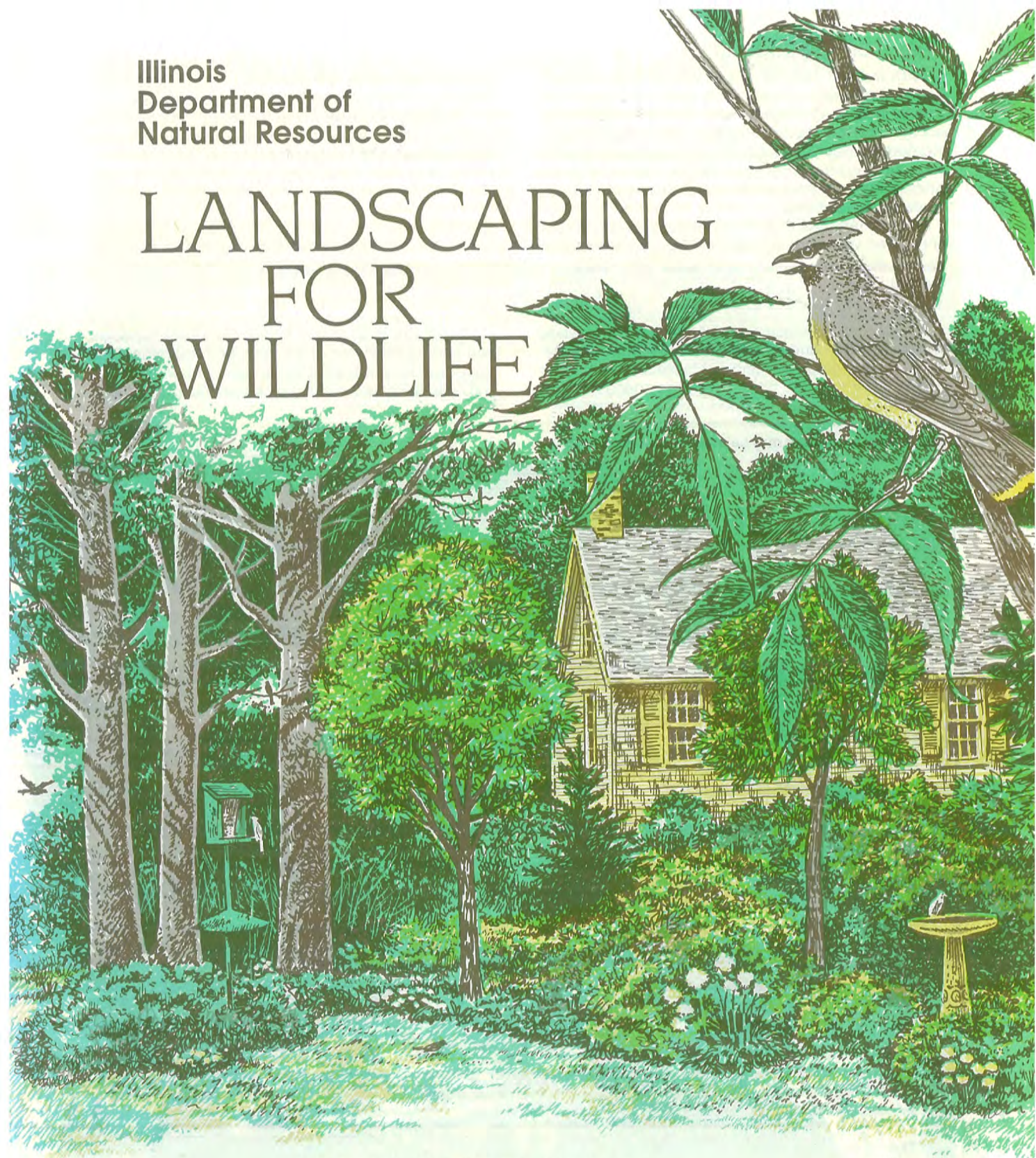


Illinois
Department of
Natural Resources

LANDSCAPING FOR WILDLIFE



Natural Heritage Division
One Natural Resources Way
Springfield, IL 62702



This brochure is made available from donations to the Illinois Wildlife Preservation Fund.

Dear Conservationist:

With the fast pace of today's world many of us enjoy relaxing in and around nature. One of the best ways to bring nature into our lives is to invite wildlife into our own backyards. Adding trees, shrubs, and flowering herbaceous plants can make your home a more pleasing and relaxing place to live. It can also provide a home for songbirds and colorful wildlife which add serenity to our lives.

Natural landscaping, whether large or small, not only gives your yard a more natural appearance and

greater resale value, but will attract wildlife year round. Even if you live in an apartment, you can provide some of the basic elements wildlife needs. I hope this booklet will show you how to attract more wildlife into your backyard.

Illinois Department of Natural Resources

Wildlife Needs

Wildlife has three basic requirements for its survival. These are food and water, protection from the elements and/or predators, and a safe place to raise their young. Providing one or more of these needs will attract wildlife to your backyard.

If your aim is to attract a specific wildlife species, you should be aware of its specific requirements. If your goal is to attract a wide variety of wildlife, you will need to know the broad requirements of most wildlife.

Your wildlife landscape may be as small as a flower box . . .



Or as large as a country estate; but you can provide the necessary ingredients to allow wildlife to survive.



Some Facts About Illinois Native Plants

Almost all plants provide food or shelter in some form for wildlife. Butterfly larvae (caterpillars) feed on plants while the adults feed on floral nectar. Insectivorous (insect eating) birds glean insects off trees or shrubs. Omnivorous birds supplement a diet of insects with seeds, fruits, and young plant buds. Seed eating birds will feed on berries and fruit from your yard.

Throughout this booklet we will emphasize planting native Illinois plants in your yard. Native plant species are naturally adapted to provide cover and food to native Illinois wildlife. They provide more food and cover under extreme drought or cold conditions than less well adapted plants. Naturally adapted plants can be less expensive and easier to maintain in your yard.

While many introduced species may provide valuable food and cover for wildlife, they sometimes crowd out, outgrow, and smother native plants making them undesirable except in well defined situations.

Illinois faces a number of serious problems from these "overly successful" alien plants. Purple loosestrife, brought in from Europe as a garden flower, is over-running wetlands around Chicago, wiping out del-

icate native orchids and threatening other endangered plants. Amur Honeysuckle (*Lonicera maackii*) is destroying the natural understory in forest preserves over the northern two-thirds of Illinois.

The following plants are serious degraders of natural communities and should be avoided by persons concerned about nature conservation:



DNR personnel attempting to eradicate Purple Loosestrife (*Lythrum salicaria*) from a natural area.

DO NOT PLANT THESE EXOTIC PLANTS

Species	Scientific Name	Natural Communities Threatened
Purple Loosestrife	<i>Lythrum salicaria</i>	Open wetlands in North
Japanese Honeysuckle	<i>Lonicera Japonica</i>	Forests & barrens in South
Glossy Buckthorn	<i>Rhamnus frangula</i>	Bogs & wetlands in North & Central
Amur Honeysuckle	<i>Lonicera maackii</i>	Forests in North & Central
Multiflora Rose	<i>Rosa multiflora</i>	Woods & prairies throughout
Autumn Olive	<i>Elaeagnus umbellata</i>	Woods & prairies South & Central
Winged Wahoo, (Winged Euonymus)		
Burning Bush	<i>Euonymus alata</i>	Woods in Central
Silver Poplar	<i>Populus alba</i>	Woods & prairies throughout
Crown Vetch	<i>Coronilla varia</i>	Prairies & dunes throughout

How to Plan Your Backyard Landscape

Where to start? Some people may wish to contact a professional landscape architect to design and develop their yard for immediate results. Others will want to do the planning and planting themselves at a leisurely rate. Whichever method you decide, the first step is to draw up a plan of action.

The best basic plan is a scaled diagram of your property pinpointing all permanent structures, i.e., your house, patio, walkways, powerlines, underground obstructions, existing vegetation. Make copies of this basic plan to provide yourself a pattern for alternative courses of action, or overlay tracing paper to draw in your alternative plans.

During the development of your plans you will need to look at several "human" considerations. For exam-

ple, you will want to allow adequate space for you and your family's backyard activities, volleyball, croquet, or picnics. Privacy may be a major concern such as blocking off the sights and sounds from a busy street. Some plantings may be strategically placed to hide a neighbor's garage or collection of semi-classic cars.

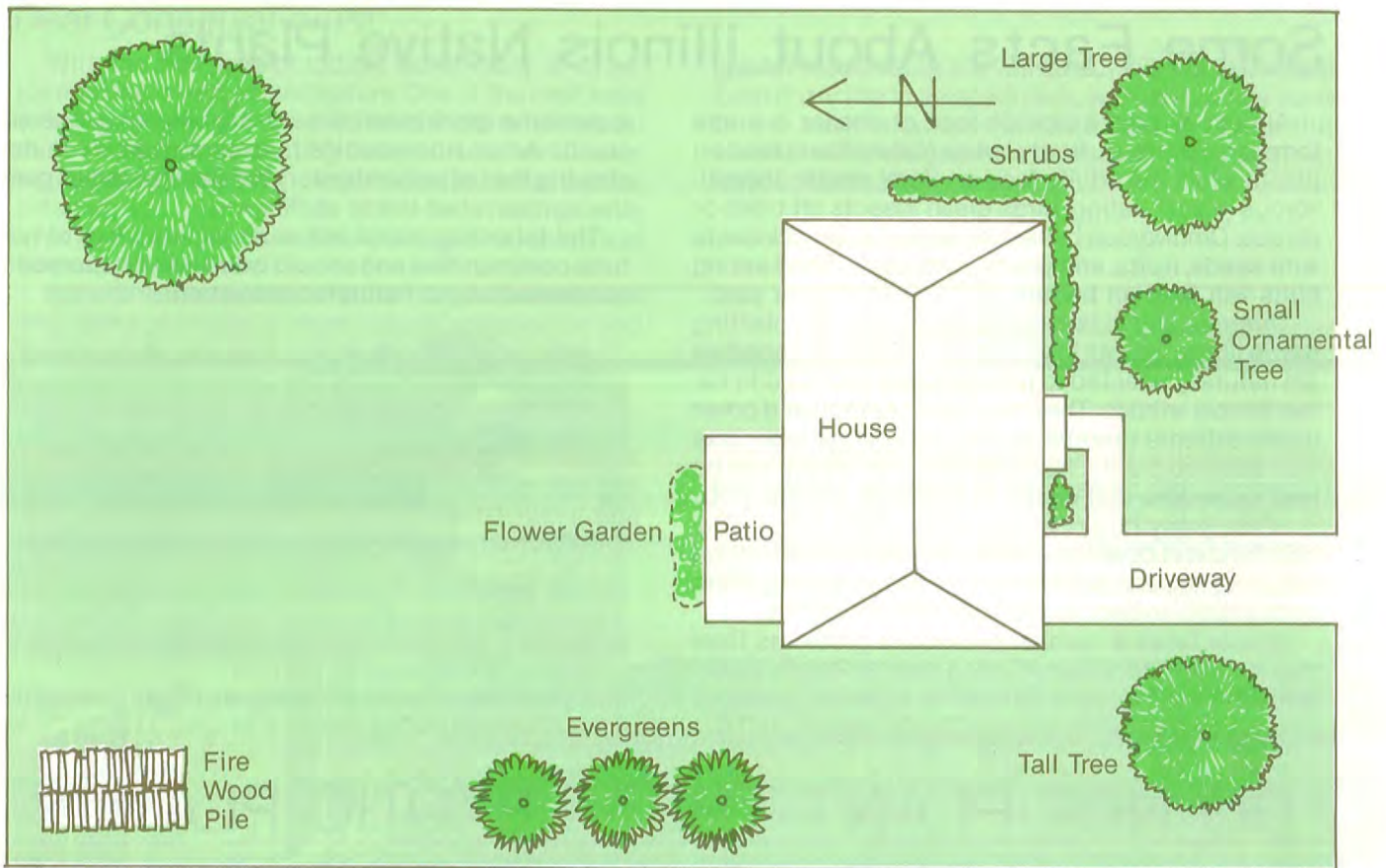
You will also want to look at energy saving aspects of landscaping your property. Winter windbreaks on your northwestern corner will reduce your heating bill. Tall shade trees on the southwestern exposure of your house will decrease summer cooling bills. Evergreens around the base of your house serve as green insulation.

Now that you have resolved your "human" landscaping needs, let's look at fulfilling the needs of wildlife.



For information about attracting butterflies to your yard or about constructing a butterfly garden consult DNR publication *Butterfly Gardens*.





The first step in any landscaping plan is to map out your present yard.

Most Important Needs For Birds:

Food and Water

In planning your yard as a miniature wildlife refuge, your first additions should be installation of bird feeders and a bird bath. Place the feeder in open areas near sturdy vegetation so that you can see them from your window and so that the birds using them can watch for and escape from approaching danger. Refer to the Backyard Bird Feeding segment of the booklet, on page 8, for more information on what and when to feed birds.

You can fulfill critical water needs with a simple bird bath or ground watering device. Size is not important but the edges of the bath should slope gradually. Place some small rocks around the edge so birds can easily and safely get to the water. The water source should be reliable and the water should be fresh and clean. It is important to provide clean, open water in the winter months when most water is frozen and inaccessible to birds. Electric immersion heaters constructed for bird feeders will help birds immensely.

Shelter

The second need which all wildlife has is shelter, both from the elements and from predators.

To attract as many different kinds of wildlife as possible, plant a variety of trees and shrubs in clumps

around open spaces to maximize your yard's benefits to wildlife. Researchers have found that different plant growth forms, grasses, shrubs, and trees, planted around open areas create the "edge effect." The edges attract the greatest variety and numbers of wildlife to the smallest piece of land.

Other useful additions might include intertwining vines on trellises and strategically located flower beds. You will also want to choose plants that flower or produce fruits at different times throughout the summer so that there will always be something blooming or ripening for the birds to utilize.

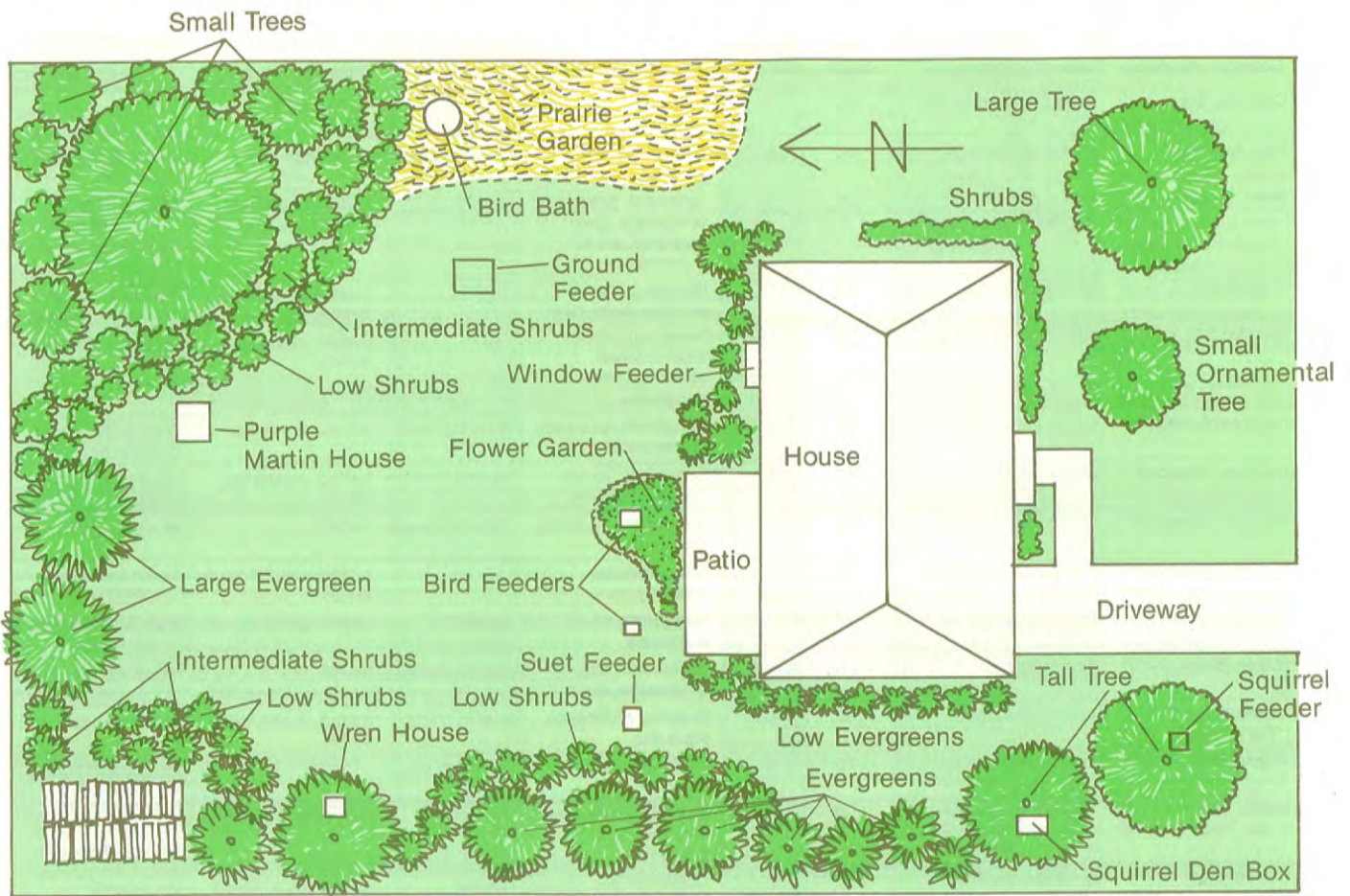
Another technique is to create a "highrise" effect for wildlife. Next to open areas (first story), plant clumps of varying sized shrubs (second story) backed by small to medium sized trees (third story) and finally tall trees (fourth story). This technique allows animals adapted to a variety of habitat to live in close proximity.

Breeding Areas

Fortunately many of the same ideas that went into providing your backyard with food and cover for wildlife also help to provide reproductive areas. There are a number of actions you can take to help wildlife families prosper.

If your backyard lacks mature trees, which provide nests and dens, you can plant trees such as maples





Your final plan may look something like this.

or oaks which will provide good nesting and den sites as they mature. In the meantime, you can fulfill this requirement with den boxes and bird houses. See the DNR booklet entitled *Wood Projects for Illinois Wildlife*.

You can leave some parts of your yard a little ragged, especially in spring and early summer. Unmown grass around bushy shrubs makes ideal nest sites for ground nesting birds.

Native Illinois Tall Trees

Common Name(s)	Scientific Name (For Nurseryman's reference)	Full Height	Regions Where Found	Wildlife Attracted	Food Sources	Planting Form	Native Habitat (Areas where this species is best adapted)
Ash, Blue	<i>Fraxinus quadrangulata</i>	70'	All	Songbirds	seeds	balled	Slopes, moist woods
Ash, White	<i>Fraxinus americana</i>	100'	All	Songbirds	seeds	whips, bare root, balled, seeds	Moist areas, slopes
Basswood, American (*Den Trees)	<i>Tilia americana</i>	80'	All	Eastern chipmunks, songbirds	seeds	balled, seeds	Rich woods
Beech	<i>Fagus grandifolia</i>	100'	S	Songbirds, tufted titmice, squirrels	nuts	balled	Rich woods, moist areas
Birch, River	<i>Betula nigra</i>	75'	S & C	Songbirds	seeds	balled, seedlings, seeds	Moist areas along rivers and streams
Cedar, Eastern Red	<i>Juniperus virginiana</i>	90'	All	Songbirds, esp. evening grosbeaks, cedar waxwings	fruit	balled, seeds	Dry areas
Cherry, Wild Black	<i>Prunus serotina</i>	75'	All	Songbirds, esp. evening grosbeaks, robins, starlings, cedar waxwings, deer	fruit	balled, seedlings, seeds	Most conditions
Chestnut	<i>Castanea dentata</i>	100'	S & C	Woodpeckers, eastern chipmunk	nuts	seedlings	Acid upland; subject to blight
Cottonwood, Eastern	<i>Populus deltoides</i>	100'	All	Songbirds, small mammals, deer	buds	seedlings	Moist areas

Common Name(s)	Scientific Name	Full Height	Planting Regions	Wildlife Attracted	Food Sources	Planting Form	Native Habitat
Cypress, Bald	<i>Taxodium distichum</i>	100'	S	Waterfowl	seeds	balled, bare root, seeds	Wet areas
Elm, American	<i>Ulmus americana</i>	120'	All	Songbirds, esp. finches, squirrels	seeds, buds	seedlings	Moist areas; subject to disease
Gum, Sweet	<i>Liquidambar styraciflua</i>	100'	S	American goldfinch, songbirds, gray squirrels, small mammals	seeds	balled, seedlings	Moist areas
Gum, Sour	<i>Nyssa sylvatica</i>	85'	S	Robins, pileated woodpeckers, deer	fruit	balled, seedlings, seeds	Most conditions
Hackberry	<i>Celtis occidentalis</i> L.	80'	All	Mockingbirds, robins, small mammals, deer, songbirds	fruit	balled, seedlings, seeds	Most conditions
Hickory, Shellbark	<i>Carya laciniosa</i>	100'	S & C	Songbirds, squirrels, chipmunks	nuts & flowers	whips, seedlings	Rich soils, moist conditions
Hickory, Shagbark	<i>Carya ovata</i>	80'	All	Songbirds, wood ducks, squirrels	nuts & flowers	balled, seedlings, seeds	Shaded woods, slopes
Hickory, Bitternut	<i>Carya cordiformis</i>	75'	All	Songbirds, squirrels, chipmunks	nuts & flowers	balled	Most conditions
Kentucky Coffeetree	<i>Gymnocladus dioica</i>	85'	All	Contribute to diversity		balled, seedlings, seeds	Moist areas
Magnolia, Cucumber	<i>Magnolia acuminata</i>	75'	S	Songbirds, small mammals	seeds	seedlings	Rich woodlands
Maple, Black	<i>Acer nigrum</i>	65'	C & N	Songbirds, esp. grosbeaks, deer	seeds, buds	balled	Moist woods
Maple, Sugar (*Den Trees)	<i>Acer saccharum</i>	80'	All	Evening grosbeaks, squirrels	seeds, buds	balled, seedlings, seeds	Moist woods
Maple, Red	<i>Acer rubrum</i>	70'	S	Evening grosbeaks, squirrels	seeds, buds, flowers		Most conditions
Maple, Silver (*Den Tree)	<i>Acer saccharinum</i>	100'	All	Evening grosbeaks, woodpeckers, squirrels	seeds	bare root, seedlings	Moist areas
Oak, Black	<i>Quercus velutina</i>	80'	All	Grackles, jays, brown thrashers, woodpeckers	acorns	seedlings & seeds	Dry woods
Oak, Bur	<i>Quercus macrocarpa</i>	120'	All	(Same as above)	acorns	balled, seedlings seeds	Most conditions
Oak, Northern Red	<i>Quercus rubra</i>	80'	All	(Same as above)	acorns	balled, seedlings seeds	Well drained slopes
Oak, Pin	<i>Quercus palustris</i>	75'	All	(Same as above)	acorns	balled, seedlings, seeds	Moist areas
Oak, White	<i>Quercus alba</i>	100'	All	(Same as above)	acorns	balled, seedlings, seeds	Most conditions
Oak, Swamp White (*Den Tree)	<i>Quercus bicolor</i>	70'	All	(Same as above)	acorns		Moist areas, alluvial soils
Pecan	<i>Carya illinoensis</i>	150'	S & C	Songbirds, squirrels	nuts & flowers	balled, seedlings, seeds	Moist areas, alluvial soils
Poplar, Tulip	<i>Liriodendron tulipifera</i>	100'	S	Songbirds, squirrels	seeds	balled, seedlings	Rich woodlands
Sycamore (*Den Tree)	<i>Platanus occidentalis</i>	+ 100'	All	Songbirds	seeds	balled, seedlings, seeds	Moist conditions
Walnut, Black	<i>Juglans nigra</i>	150'	All	Songbirds, squirrels	nuts	balled, seedlings, seeds	Rich woodlands
Walnut, White (Butternut)	<i>Juglans cinerea</i>	90'	All	Songbirds, squirrels	nuts	balled, seedlings, seeds	Bottomland woods

*These species provide tree cavities for small mammals, woodpeckers, and owls.

Native Illinois Small Trees

Common Name(s)	Scientific Name	Full Height	Planting Regions	Wildlife Attracted	Food Sources	Planting Form	Native Habitat
Apple, Crab	<i>Malus ioensis</i>	30'	All	Songbirds, small mammals, deer	seeds, buds, fruits	seedlings, balled & burlapped	Moist ground (woods, thickets, roadsides)
Ash, Green	<i>Fraxinus pennsylvanica</i>	60'	All	Songbirds, deer	seeds	balled & burlapped, seedlings	Moist ground (streambanks, bottomland forests)
Beech, Blue (also Ironwood, Amer. Hornbeam, Muscletree)	<i>Carpinus caroliniana</i>	30'	All	Songbirds, esp. evening grosbeaks, cardinals. American goldfinches	seeds	seedlings, balled & burlapped	Moist woods, swamps



Common Name(s)	Scientific Name	Full Height	Planting Regions	Wildlife Attracted	Food Sources	Planting Form	Native Habitat
Box Elder (also Ash-leaved Maple)	<i>Acer negundo</i>	60'	All	Songbirds, esp. evening grosbeaks, game birds, squirrels	seeds, buds, flowers	seedlings, seeds	Moist woods, alluvial soils
Buckeye, Ohio	<i>Aesculus glabra</i>	55'	All	Fox squirrels	fruits	seedlings, seeds	Rich woods, alluvial soils
Catalpa, Western (also Indian Bean, Cigar Tree)	<i>Catalpa speciosa</i>	60'	All	Songbirds woodpeckers		seedlings, balled & burlapped	Moist ground, low wood, alluvial soil
Dogwood, Alternate leaved	<i>Cornus alternifolia</i>	20'	N & C	Songbirds, esp. cardinals, robins, evening grosbeaks, rabbits, squirrels, eastern chipmunks	fruit	balled & burlapped	Rich woods (near streams), rocky slopes, thicket
Dogwood, Flowering (also White)	<i>Cornus florida</i>	50'	S & C	Songbirds esp. cardinals, evening grosbeaks, robins, wood thrushes, cedar waxwings, birds, rabbits, squirrels, eastern chipmunks	fruit	seedlings, balled & burlapped	Rocky woods, wooded slopes
Hop Hornbeam (also Ironwood)	<i>Ostrya virginiana</i>	35'	All	Songbirds, small mammals	seeds	balled & burlapped, seeds	Upland woods, slopes near streams
Mulberry, Red	<i>Morus rubra</i>	50'	All	Songbirds	fruit	seedlings	Lowland & upland woods, edges of fields
Persimmon	<i>Diospyros virginiana</i>	50'	C & S	Songbirds, red foxes, deer	fruit	seedlings	Dry woods, bottomland woods, field edges
Plum, Wild (also American)	<i>Prunus americana</i>	20'	All	Songbirds	fruit	seeds, balled & burlapped	Woods, edges of streams, fencerows
Redbud (also Eastern Redbud, Judas Tree)	<i>Cercis canadensis</i>	35'	All	Songbirds	seeds	bare root, balled & burlapped, seeds & seedlings	Rich woods, ravines, fencerows
Sassafras	<i>Sassafras albidum</i>	+ 40'	All	Songbirds	fruit	seedlings, balled & burlapped	Roadsides, old fields, open woods
Sumac, Fragrant (also Aromatic or Lemon Sumac, Polecat Bush)	<i>Rhus aromatica</i>	6'	S & C	Songbirds, small	fruit, bark	balled & burlapped	Open woods, bluffs
Sumac, Shining (also Dwarf or Winged or Wingrib Sumac)	<i>Rhus copallina</i>	35'	All	Songbirds, small mammals	fruit, bark	balled & burlapped	Dry hills, old fields, woodland edges
Sumac, Smooth	<i>Rhus glabra</i>	20'	All	Songbirds, small mammals, deer	fruit, bark		Upland soil, mesic or dry
Sumac, Staghorn (also Curleaf or Velvet Sumac)	<i>Rhus typhina</i>	40'	N & C	Songbirds, small mammals, deer	fruit	seeds, seedlings	Dry soil, sandy ridges
Witch-Hazel	<i>Hamamelis virginiana</i>	25'	N & C		seeds, bark	seeds, seedlings,	Moist or dry woodlands

Native Illinois Shrubs

Common Name(s)	Scientific Name	Full Height	Planting Regions	Wildlife Attracted	Food Sources	Planting Form	Native Habitat
Black Chokecherry	<i>Aronia melanocarpa</i>	12'	All	Songbirds, rabbits, squirrels, deer	fruit	plants, seeds, balled & burlapped	Moist, sandy woods
Bladdernut	<i>Staphlea trifolia</i>	15'	All	Small mammals, deer, insects		seedlings	Moist woods, thickets, rocky slopes, stream banks
Buttonbush	<i>Cephalanthus occidentalis</i>	4-15'	All	Deer, waterfowl	seeds	plants, balled & burlapped	Streams, lake shores, ponds, swamps
Cock-spur Thorn	<i>Crataegus crus-galli</i>	20'	All	Songbirds, waterfowl, deer, small mammals	fruit	seeds, balled & burlapped	Pastures, open woods, thickets, wooded slopes
Dogwood, Gray	<i>Cornus racemosa</i>	10'	All	Songbirds, small mammals, deer	fruit	seeds/bare root	Fencerows, roadsides, streambanks, prairies
Dogwood, Red-twig (also Red Osier Dogwood or Poison Dogwood)	<i>Cornus stolonifera</i>	10'	All	Songbirds, wood ducks, small mammals, deer	fruit	balled & burlapped	Marshes, moist fencerows, swamps, streambanks
False Indigo Bush (also Indigo Bush)	<i>Amorpha fruticosa</i>	15'	All	Insects, songbirds		seeds, seedlings, balled & burlapped	Moist soil, rocky streams, alluvial soils



Common Name(s)	Scientific Name	Full Height	Planting Regions	Wildlife Attracted	Food Sources	Planting Form	Native Habitat
Elderberry	<i>Sambucus canadensis</i>	12'	All	Songbirds, small mammals, deer	fruit	seeds, seedlings, balled & burlapped	Moist soil, open woodlands
Hazelnut	<i>Corylus americana</i>	3-5' Occas. 15'	All	Songbirds, esp. red-bellied woodpeckers, small mammals, deer	nuts	seedlings, seeds, balled & burlapped	Dry or moist woods
Hercules' Club (also Devils' Walking Stick, Angelica-tree)	<i>Aralia spinosa</i>	35'	S	Songbirds, small mammals	fruit	balled & burlapped	Moist or wet woods, bluffs, roadsides
Coralberry, (Buckbrush)	<i>Symphoricarpos orbiculatus</i>	5'	All	Songbirds, esp. robins, deer	fruit	bare root, balled & burlapped	Dry or rocky soil, open woods
Leatherwood	<i>Dirca palustris</i>	+ 6'	All	Songbirds		whole plants	Moist, shady areas along banks or woods
Lead Plant	<i>Amorpha canescens</i>	4'	All	Songbirds		seeds	Dry, sandy prairies, hills, open woods
Ninebark	<i>Physocarpus opulifolius</i>	10'	N	Songbirds		seedlings, bare root	Moist, sandy or rocky soil, shores, slopes, lakesides
Partridge-berry	<i>Mitchella repens</i>		All	Songbirds, red foxes, racoons	fruit	seedlings	Wooded slopes, alluvial soils, thickets
Red Buckeye	<i>Aesculus pavia</i>	25'	S	Songbirds		seeds, seedlings	Rich woods
Shadblow Serviceberry (also Juneberry, Shadbush)	<i>Amelanchier arborea</i>	20'		Songbirds, small mammals, deer	fruit	bare root, balled & burlapped	Wooded hillsides, swamps, streambanks, wet woods
Spicebush	<i>Lindera benzoin</i>	15'	All	Songbirds, esp. woodthrush, veery	fruit	balled & burlapped	Rich, moist woods, streambanks
Sumac, Fragrant (Also Aromatic Sumac)	<i>Rhus aromatica</i>	6'	All	Songbirds, small mammals	fruit, bark	balled & burlapped	Open woods, bluffs
Sumac, Shining (Also Dwarf or Winged)	<i>Rhus copallina</i>	35'	All	Songbirds, small mammals	fruit, bark	balled & burlapped	Dry hills, old fields woodland edges
Sumac, Smooth	<i>Rhus glabra</i>	20'	All	Songbirds, small mammals, deer	fruit, bark		Upland soil, mesic or dry
Sumac, Staghorn	<i>Rhus typhina</i>	40'	N & C	Songbirds, waterfowl mammals, deer	fruit, bark	seeds, seedlings	Dry soil, sandy ridges
Winterberry	<i>Ilex verticillata</i>	9'	All	Songbirds, waterfowl, deer, small mammals	fruit	balled & burlapped, seeds	Wet woods, swamps, edges of streams, ponds
Witch-Hazel	<i>Hamamelis virginiana</i>	25'	N & C	Small mammals, deer	seeds, bark	seeds, seedlings	Moist or dry woodlands

Backyard Bird Feeding

In Illinois, backyard bird feeding is at an all-time high. Whether you put up a small feeder to adorn the brow of a highrise, hang a suet feeder on a shade tree or plant a food patch, you'll be joining thousands of other Illinoisans who are taking to bird feeding as never before. With the continuing loss of natural habitat, individuals of nearly every Illinois wintering species are turning to feeders to help carry them through the cold months in good shape for the upcoming breeding season.

Established bird feeding enthusiasts know that bird-feeders have rewards for people, as well as birds. In urban settings, birds attracted to the backyard represent a link to the natural environment, provide an opportunity to observe bird behavior closely and to take photographs. Watching as species of birds arrive, court, and raise families is an enjoyable way to mark the passage of seasons. It is exciting to observe a rare species stop in for a visit to your bird feeder or raid your crabapple tree. The day to day activities of the birds at a feeder also provide a colorful and endless supply of entertainment.

There is no one way to set up and maintain a successful feeding station. Feeders can be purchased or constructed to meet the needs of every group of bird species. For more information about construction of bird feeders consult DNR publication *Wood Projects for Illinois Wildlife*. Four basic kinds generally are used.

Gravity feeders (Figure 1) allow for continuous feeding and usually have a roof and either glass or plastic sides so the birds can see the food and operators know when it needs to be refilled.

Open shelf feeders (Figure 2) may or may not have roofs and usually do not have sides except for a small rim which keeps the seeds from falling or blowing away. Uncovered feeders allow the birds to see danger and are popular because the birds are quite visible to human observers.

Ground feeders (Figure 3) may or may not be elaborate. Food scattered over a cleared plot of ground constitutes a ground feeder. One advantage of a ground



feeder is that it attracts several species of birds that rarely visit feeders hung from trees, placed on poles or attached to a building.

Suet feeders (Figure 4) commonly consist of either a small wire basket or a large mesh bag in which suet is placed. These feeders either are suspended or permanently affixed to the side of a tree, building or other feeder.

In addition to the four basic types of feeders, an endless variety of specialty feeders have been developed. Examples include pine cones dipped in fat, birdseed logs, strings of peanuts, berries or other tidbits, or open coconut shells stuffed with an assortment of delectables.

Placement of Feeders

Protection from predators and weather should be the major objective in placing any feeder. Feeding birds should be close to a perching spot which affords protection; placement near vegetation away from the house is a good choice.

Visual access to the feeder from the house is desirable for those who enjoy watching the birds and practical for those who are concerned with the maintenance of the feeders.

To attract a diversity of species, place different types of feeders in varying locations. For instance, juncos and cardinals come to feeders near hedgerows; titmice and chickadees visit those in trees; and quail will be found only at those on the ground.

Bird Food

A single food type usually does not provide adequate nutrition for all species of birds. A thoughtful blend of food, developed for the specialized needs of the local birds, should be available. An experimental feeder with several trays of different foods is one way of letting the birds select their own menu preferences. Bakery products may be popular with some birds, but provide little nutritive value. At best, they do a good

job of attracting birds to the feeder where the conscientious operator will offer a range of nutritionally rich foods.

Adventurous feeder operators will find that assorted pieces of fruit, including raisins, can be used to attract mockingbirds, waxwings, robins, and orioles.

Other foods that certain bird species relish include: some vegetables, bakery products, cheese, chopped hard-boiled eggs, coconut meat, pumpkin and squash seeds.

Careful planners can save money by buying each food type separately and in bulk quantities. Bags up to fifty pounds usually are available at feed and grain stores and often through various environmental organizations. Premixed packages may attract some buyers as they usually provide a blend of millets, milo, wheat, sunflowers, and sometimes other ingredients. The cheapest mixtures can be poor quality seed, attracting the fewest number of birds and containing many inedible materials or fillers.

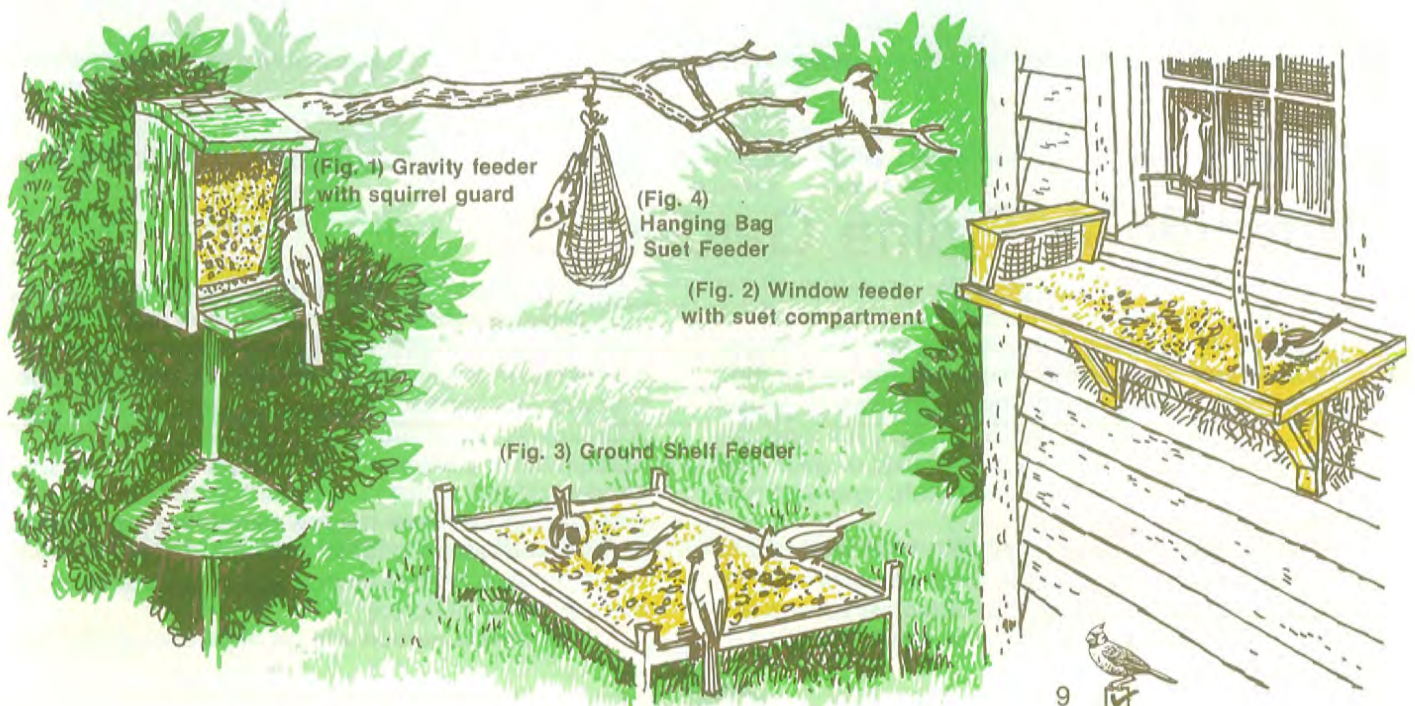
Persons living in the country have access to nuts, seeds, berries, and fruits that can be readily gathered and used in the feeder. If expense is a problem, some of the most expensive items — such as thistle seed (niger) — can be substituted with less costly alternatives, such as crushed sunflower seeds.

Other Food-Related Bird Needs

Avid bird supporters may consider supplying their birds with grit or crushed egg shells which birds use as grinding agents to help digest their food.

Crushed egg shells also act as a needed source of calcium, which is in great demand during the spring months as birds are preparing to lay their eggs.

Don't assume that freezing temperatures curtail a bird's needs for fresh water. An electrical immersion water heater can be obtained rather inexpensively and used to keep water from freezing.



When to Feed

Plan to initiate the operation of your feeding station when the first snows or extreme cold temperatures are expected. Remember that your feeding station may attract more birds than the area naturally supports. Therefore, once feeding begins, food should be available continuously until at least April.

Care and Maintenance

Initially, only a small amount of bird seed should be placed in the feeders since few birds will know that it is there. However, as the season advances, more and more birds will find and utilize the feeders, and more food can be dispensed. Eager operators often over-

stock their feeders and thereby allow excess food to spill, spoil or freeze. Naturally, much of the food that spills onto the ground is eaten by ground feeding birds or other animals, but if an excessive amount of food is spilled, you may wish to modify the feeders or your feeding rate.

When storing feed, keep it in a galvanized metal trash can, or a container that is both weather and rodent proof.

A squirrel guard (Figure 1) or a metal circle placed below the feeder — folding out and down — is useful in discouraging squirrels and other small animals. If you wish to feed squirrels, an ear of corn on a stick, or a special feeder in a different area should be provided.

Preferred Foods of Some Common Illinois Birds

Bird	Winter	Summer
American Goldfinch	Hulled sunflower, black oil sunflower, niger thistle	Mulberry, Thistle Seed, Garden Flower Seeds, Weeds and Conifers
Blue Jay	Peanut kernels and all types of sunflowers	Acorns, cherry, sunflower, wild plum, grains
Brown Creeper	Suet, peanut butter	Insects and larvae
Cardinal	All types of sunflower.	Corn, dogwood, sunflower, berries
Chickadees	Peanut kernels, black and all types of sunflower seeds, suet	Insects and larvae
Dark-eyed Junco	White & red proso millet, canary seed, fine cracked corn	(Not a summer resident)
Eastern Bluebird	(Rare winter visitor)	Insects and larvae
Field Sparrow	White & red proso millet	Garden flower seeds, weed, seeds, grains
Hummingbird	(Not a winter visitor)	Trumpet creeper, Columbine sugar water, nectar
Mockingbird	Suet, peanut kernels	Elderberry Holly

Bird	Winter	Summer
Mourning Dove	Black oil sunflower, cracked corn, white and red proso millet	Grain, garden flower seeds, weeds, corn millet
Pine Siskin	All types of sunflower, niger	(Rare summer visitor), conifers
Purple Finch	All types of sunflower	(Not a summer resident)
Red-breasted Nuthatch	Sunflower seeds and suet	(Not a summer resident)
Rufous-sided Towhee	White proso millet and mixed seeds	Garden flower seeds, grass and weed seeds
Song Sparrow	Sunflowers. Red & white proso millet	Mixed seeds, millet
American Tree Sparrow	Red and white proso millet, fine cracked corn	(Not a summer resident)
Tufted Titmouse	Peanut kernels, all types of sunflower seeds	Acorns, mulberry, sumac, berries and fruit, hackberry
White breasted Nuthatch	All types of sunflower seeds	Attracted to: White oaks
Carolina Wren	Suet, pecan meats	Attracted to: Insects in woodpiles, trees
Woodpeckers	Suet, sunflower seeds	Attracted to: Elm, all oaks, willow, hawthorn, dead trees



Prairie used in landscaping a central Illinois home.



Illinois Sand Prairie



Illinois Mesic Prairie

Planting A Prairie Garden

An alternative to “boring” exotic garden plants is the use of native Illinois plants in your home’s landscaping design. Few prairie plants grace the gardens of this Prairie State, yet such plants offer an exciting alternative to traditional petunias, begonias, or geraniums . . . and you don’t have to pull up your rose garden. Just set aside a margin or corner of your yard that you’re tired of mowing and create your own portion of prairie.

Prairie plants are long-lived perennials resistant to disease, insects, and drought. Once established, they require minimal care. They offer attractive flowers and beautiful foliage — far different from “traditional” landscapes.

How to begin? As with all gardening, begin with a plan. Select a sunny portion of your yard for the prairie itself. A corner of your vegetable garden will do nicely to raise your seedlings up through transplanting age. If you’re looking for immediate results consult with your nursery about securing transplants. (Collection of transplants or plant materials from parks or nature preserves without a permit is prohibited by law.) Do not take transplants from the few remaining prairie remnants in your area. Consider harvesting some specific seeds instead. Help keep our natural heritage alive for our children’s children.

If your prairie garden will be large enough to war-



rant direct seeding, it will require herbicidal treatment. Consult your local DNR Natural Heritage Field Biologist or DNR publication *Illinois Prairie: Past and Future A Restoration Guide*.

Next, look for prairie seed. On page 12 the mailing addresses of a number of businesses which specialize in Illinois genotype seeds are listed. Across Illinois there are active prairie restoration groups which may be able to assist you. In addition, many organizations and nurseries sell a variety of mixed prairie seed packets.

Once you have seed, work up a corner of your garden to prepare a finely tilled seed bed for your prairie plants. A yard square plot should provide sufficient transplant materials for a 10' x 20' plot. Your seeds can be planted in rows or grids. If your seeds are packed separately or are large, place them (3 to 4 per spot) on a 3" grid (about 4 finger widths) in your seed bed. Small seeds or mixed seed packets should be planted in short rows 6" apart so you can spot the "good guys." Cover your seeds with ¼" of fine black soil, pat down the soil and then water it. Your plants will need one growing season to reach suitable size, after that they can be transplanted in the spring or fall.

When transplanting consider using a mulch to improve your plants' survival rate and to reduce future weed problems. Space your transplants 6" to 9" apart depending on the "full grown" size of your plants.

Once your prairie garden is fully established, maintaining it should only entail an occasional weeding. To further discourage weeds and to help highlight your prairie's luxurious growth, mow your prairie in late spring. Mowing just before the start of spring growth will afford wildlife cover and a food source through the winter.

You can also restore a prairie community by direct seeding and bypassing the transplanting step. This gives less control of placing tall and short plants where you want them, but involves less work and gives your prairie a more "natural" appearance.

Professional prairie planters offer the following tips on making your prairie garden a success:

- (a) Remember that a wide diversity of plants will enhance your area for songbirds and all wildlife.
- (b) Match plants to the moisture requirements, soil, and drainage of your own yard.
- (c) Consider avoiding rows, square plantings or pointed corners. Instead, think of using curves, gentle turns, and irregular plantings — like those found in nature.
- (d) Include plants in your plan which will provide continuous color throughout the growing season.
- (e) Place tall plants in the center or back of your prairie landscape. This will keep them from obscuring smaller plants and obscuring their flowers.
- (f) When selecting plants, give your garden more visual appeal by adding plants with interesting foliage, such as rattlesnake master, prairie dock, compass plant, leadplant, and the prairie grasses, dropseed and little bluestem.
- (g) Consider the seasonal aspect of the prairies. Make your garden 3 prairies in 1 by intermingling spring, summer, and fall blooming plants.

Native Illinois Grasses

Common Name(s)	Species Name	Planting Regions	Wildlife Attracted	Food Sources	Planting Form	Native Habitat
Big Bluestem (also Turkeyfoot)	<i>Andropogon gerardii</i>	All	Songbirds, small mammals, deer	seeds, leaves	seeds, seedlings (perennial)	Prairie soils, moist or dry, dry open ground
Little Bluestem	<i>Schizachyrium scoparium</i>	All	Songbirds, deer, small mammals	seeds, leaves	seeds, seedlings (perennial)	Sandy or prairie soils, open woods, dry clearings
Sideoats Grama (also Mesquite Grass or Tall Grama)	<i>Bouteloua curtipendula</i>	All	Songbirds, small mammals, deer	seeds, plants	seeds, seedlings (perennial)	Prairie soils, dry woods, dry hills, bluffs
June Grass	<i>Koeleria macrantha</i>	All	Songbirds		seeds, seedlings (perennial)	Sandy soil, prairies, sandhills, open woods
Reed Canary Grass	<i>Phalaris arundinacea</i>	All	Songbirds, waterfowl	seeds, plants	seeds (perennial)	Fertile, moist lowland, marshy, swampy soils
Indian Grass (also Wood Grass)	<i>Sorghastrum nutans</i>	All	Songbirds		seed, seedlings (perennial)	Prairie, open woods, dry slopes
Prairie Cord Grass (also Slough Grass, Freshwater Cord Grass)	<i>Spartina pectinata</i>	All	Songbirds, waterfowl, marshbirds, shorebirds, deer	seeds, plants	rhizomes, seeds (perennial)	Moist ground, marshes shores, wet prairies, swamps
Rye, Prairie Wild (also Nodding Wild Rye)	<i>Elymus canadensis</i>	All	Songbirds	seeds	seeds, seedlings (perennial)	Roadsides, edges of woods, dry or moist soil in full sun, dry prairies
Prairie Drop Seed (also Northern Drop Seed)	<i>Sporobolus heterolepis</i>	All	Songbirds, small mammals, deer	seeds, plants	seeds (perennial)	Dry soil, dry prairies, dry open ground
Prairie Switchgrass	<i>Panicum virgatum</i>	All	Songbirds, waterfowl, rabbits, deer	seeds, plants	seeds, seedlings (perennial)	Open woods, prairie, dunes, shores, marshes, rocky streambeds

Native Illinois Herbs and Forbs

Common Name(s)	Species Name	Planting Regions	Wildlife Attracted	Food Sources	Planting Form	Native Habitat
Wild Blue Iris	<i>Iris shrevei</i>	All	Waterfowl, marshbirds, shorebirds		roots (perennial)	Variety of soils, wet meadow, marshes, wet open woodlands, wet prairies
Canada Milk Vetch	<i>Astragalus canadensis</i>	All	Quail, small mammals	seeds, pods	roots (perennial)	Infertile soils, slightly acidic, survives cold & drought
Coneflower, Pale Purple	<i>Echinacea pallida</i>	All	Songbirds	seeds	seeds, plants (perennial)	Prairie, mesic or dry, open woods
Coneflower, Purple	<i>Echinacea purpurea</i>	All	Songbirds	seeds	seeds, plants (perennial)	Prairie, mesic or wet, woods, thickets
Compass-plant	<i>Silphium laciniatum</i>	All	Songbirds	seeds	seeds, plants (perennial)	Mesic prairie soil
Clover, Bush	<i>Lespedeza capitata</i>	All	Songbirds, deer	plants	seeds	
Clover, Purple Prairie	<i>Petalostemum purpureum</i>	All	Songbirds	seeds, plants	seeds, plants (perennial)	Dry prairies, sandy or gravelly soils, mesic or dry
Clover, White Prairie	<i>Dalea candida</i>	All	Songbirds		seeds, plants (perennial)	Dry prairies, sandy or gravelly soils
Goldenrod, Showy	<i>Solidago speciosa</i>	All	Songbirds, mammals, deer	plants, seeds	seeds (perennial)	Prairie soils, dry open places, sandy soils
Goldenrod, Stiff (also Rigid Goldenrod)	<i>Solidago rigida</i>	All	Songbirds, mammals, deer	seeds, plants	seeds (perennial)	Prairie soils, dry open places, sandy soils
Smartweed, Marsh	<i>Polygonum punctatum</i>	All	Songbirds, waterfowl, marshbirds, shorebirds	seeds	roots (perennial)	Marshy soil or shallow water, swamps
Smartweed, Giant	<i>Polygonum pennsylvanicum</i>	All	Songbirds, waterfowl, marshbirds, shorebirds	seeds	seeds (annual)	Moist or muddy soils, shallow water areas
Black-eyed Susan	<i>Rudbeckia hirta</i>	All	Songbirds		plants, seeds	Open woods, mesic or dry
Partridge Pea	<i>Cassia fasciculata</i>	All	Upland game birds	food & cover	seeds (annual)	Poor soils, prairies; tolerates drought
Prairie-mimosa (also Illinois Bundleflower,	<i>Desmanthus illinoensis</i>	All	Songbirds	seed	seeds (perennial)	Prairies, alluvial soils
Prairie-dock	<i>Silphium terebinthinaceum</i>	All	Songbirds	seeds	seeds (perennial)	Mesic or dry prairies
Blazing Stars	<i>Liatris sp.</i>	All	Songbirds	seeds	seeds, plants (perennial)	All types of prairies
Butterfly Weed	<i>Asclepias tuberosa</i>	All	Songbirds	seeds	seeds, roots (perennial)	Dry to mesic prairies
Sunflowers	<i>Helianthus sp.</i>	All	Songbirds	seeds	seeds, seedlings (perennial)	All types of prairies
Tick Trefoils	<i>Desmodium sp.</i>	All	Songbirds	seeds	seeds, seedlings (perennial)	Mesic prairies
Tickseed	<i>Coreopsis palmata</i>	All	Songbirds	seeds	seeds, seedlings (perennial)	Wet to mesic prairies

Sources of Native Illinois Prairie Plant Seeds and Publications on Prairies.

Available by Contacting:

Illinois Department of Natural Resources
 DIVISION OF NATURAL HERITAGE
 One Natural Resources Way
 Springfield, IL 62702-1271
 Telephone: 217/785-8774

Disclaimer

This listing of companies and others in this text does not represent an endorsement of those organizations or their products by the Illinois Department of Natural Resources.

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