9-1998

Iowa Winter Birds -- Iowa Wildlife Series

Iowa Association of Naturalists

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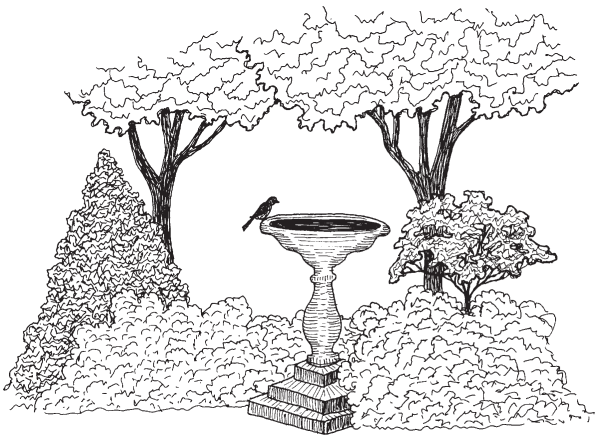

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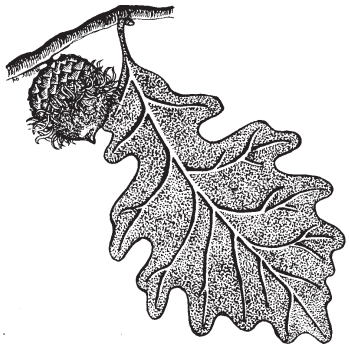

Iowa Association of Naturalists

The Iowa Association of Naturalists (IAN) is a nonprofit organization of people interested in promoting the development of skills and education within the art of interpreting the natural and cultural environment. IAN was founded in 1978 and may be contacted by writing the Conservation Education Center, 2473 160th Rd., Guthrie Center, IA 50115, 515/747-8383.

Iowa Wildlife Series

Students need to be knowledgeable about and appreciate local wildlife in order to better understand the natural environment. The Iowa Association of Naturalists has created this series of booklets to offer a basic understandable overview of Iowa wildlife. These booklets will assist educators in teaching students about Iowa wildlife. The six booklets in this series are:

Iowa Mammals (IAN-601)
Iowa Winter Birds (IAN-602)
Iowa Nesting Birds (IAN-603)
Iowa Reptiles and Amphibians (IAN-604)
Iowa Fish (IAN-605)
Iowa Insects and Other Invertebrates (IAN-606)

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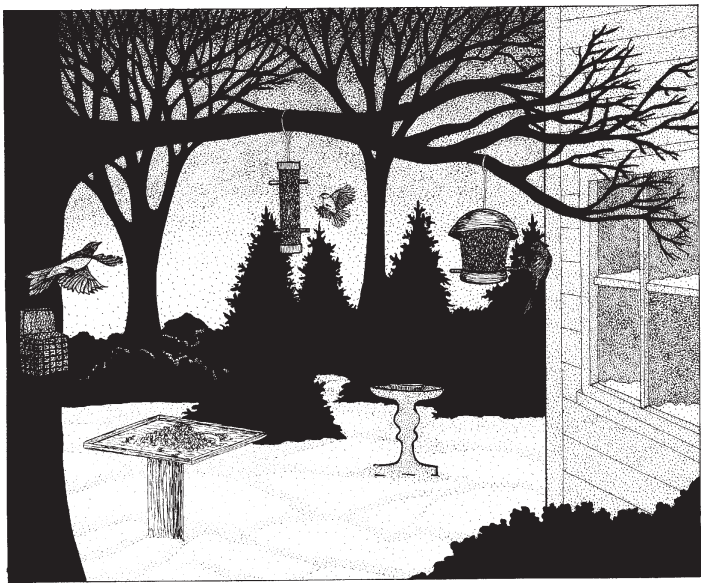
Iowa Winter Birds

Birds in winter

"Birds, not rooted to the earth, are among the most eloquent expressions of life."

Roger Tory Petersen

It's 7 a.m. on a January morning The outdoor thermometer reads zero. Gusty winds make the kitchen window creak and whine. Outside the window, wisps of snow float ghost-like over the ground and form a haze surrounding the rising sun. The small evergreen planting is blanketed on one side by the windblown snow. Steam rises off a heated pan of water placed in the center of the arc of evergreen sentries. Birdfeeders of numerous designs and sizes dangle motionless, blocked from the wind by the trees and house.



Here they come. The first is a bright patch of red which lights up a black sunflower feeder. Next comes a small bird sporting a black cap and bib. Another swoops down and clings to the underside of a suet feeder. Others arrive, dancing around the birdbath and fluttering around the feeders and tree branches. What moments ago was a lifeless

landscape of cold and snow suddenly has been transformed into a lively and theatrical morning display of life in winter. Birds are one of winter's greatest attractions.

Winter residency

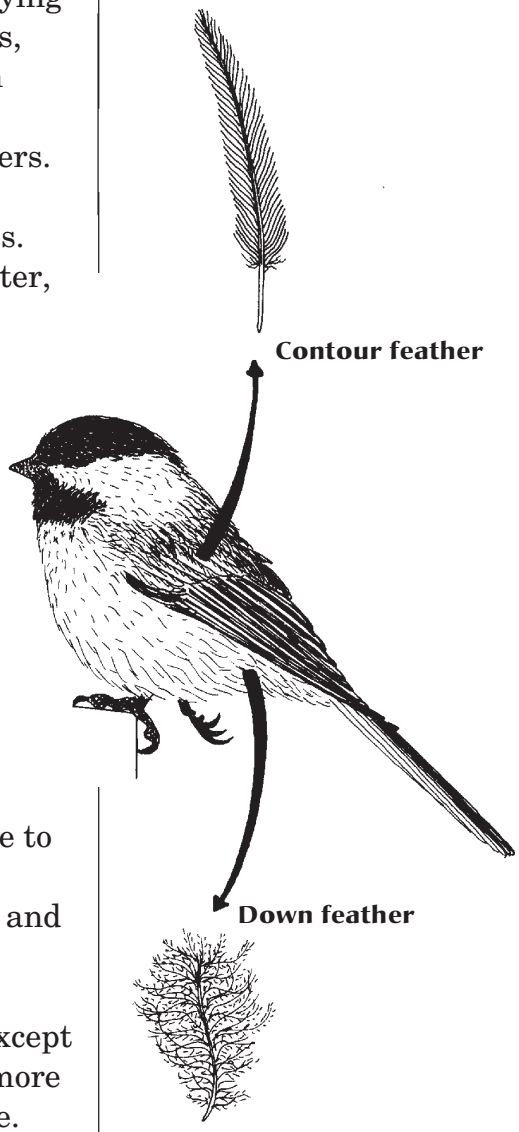
As winter arrives in Iowa, many wild animals depart or hibernate. Birds which feed on non-dormant insects and worms or need open water migrate as the food disappears and the water freezes. But many birds, especially those that feed on seeds or dormant insects, remain in Iowa. Covered with great feathery insulation and equipped with a high metabolism that burns like a small furnace, these species are able to endure Iowa's sometimes brutal winters. They exist wherever there is accessible food, adequate shelter, and a ready source of water. Where these requirements are met, birds are often the most visible and animated spectacles of winter.

Keeping warm and fed

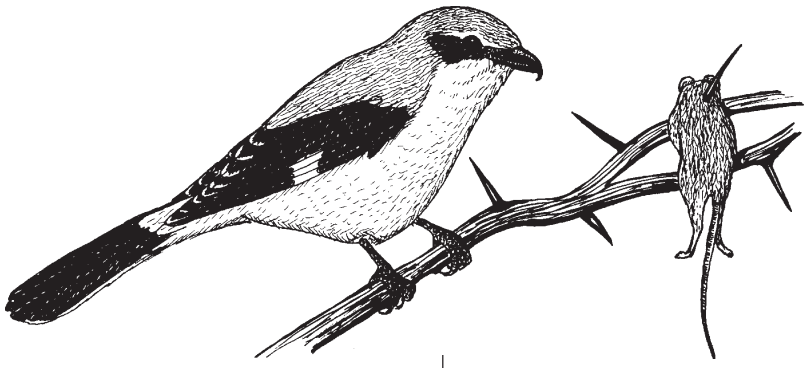
Birds have many special adaptations for survival throughout the year. The most important adaptations for birds in winter are those that allow them to stay warm and obtain food.

Birds are defined as animals with feathers. These feathers are key to a bird's survival in winter. Great feathery insulation keeps birds warm as the mercury sinks below zero degrees. The most efficient insulating feathers are the small fluffy feathers, called **down**, that grow close to the bird's body. The visible **contour feathers** cover most of the down, determine much of the outward

appearance of the bird, and assist in the bird's ability to shut out the wind and repel water. The contour feathers also provide the bird's identifying colors. A variety of specialized contour feathers, including various wing and body feathers each with its own name, are important identifying characteristics used by experienced birdwatchers. These characteristics sometimes differ among juveniles, males, or females of the same species. Many birds **molt** prior to the beginning of winter, losing and replacing many of their contour feathers. In some cases, birds change color and look very different after molting. Goldfinches are brilliant yellow and black in summer and less conspicuous olive-green in winter. These changes sometimes confuse bird watchers trying to identify birds in winter.



Food is a constant necessity for birds in winter. Although feathers provide great insulation, food fuels a bird's metabolic furnace to produce heat and energy. Birds have a high metabolism that allows them to be very active and produce body heat. But this high metabolism requires a lot of food. For their weight, birds require more food than any other vertebrate except shrews. In general, the smaller the bird, the more frequently it must eat to keep warm and active. Chickadees and nuthatches, for example, must eat almost constantly in winter in order to survive. Some birds store their food. Blue jays store acorns, hazelnuts, and other foods almost everywhere. It is common to see nuthatches, titmice, woodpeckers, and other birds fly off with bits of suet or seeds from a birdfeeder and tuck them in the crotches and crevices of branches and bark. Often this stored food is raided by marauding chickadees, brown creepers, and other birds searching for food.

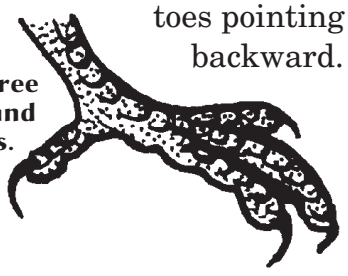


A predatory bird known for storing its food is the northern shrike. This robin-sized bird feeds on insects, mice, and small birds which it often impales on thorns or the barbs of fences or stuffs in the crotches of shrub and tree branches. Shrikes may return up to eight months later to feed on the dried corpses.

Culinary tools

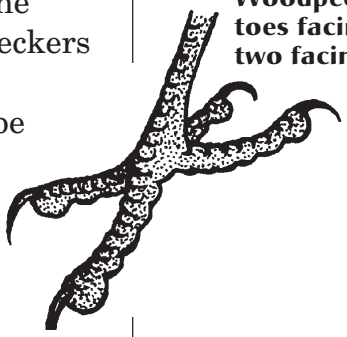
Birds use a variety of specialized tools to obtain food. They generally use fantastic eyesight to find food while perched or high in flight. Owls listen for the movement of mice and other prey, using their excellent hearing to locate food on dark woodland nights. Although most birds have a poor sense of smell, turkey vultures are an exception, using their fine olfactory sense while searching for rotting carcasses. In addition to these important senses, birds have wonderfully adapted feet and beaks that allow them to obtain and eat their food.

Feet help feed a bird by allowing it to move along the ground; perch on branches, stems of flowers, and twigs; climb along bark and branches; or snatch and kill prey. Most birds belong to the group of birds called passerines that have three toes pointing forward and one pointing backward. The rear toe is usually long and strong and important for keeping a bird on its perch. Some birds, such as chickadees and nuthatches, have long, curved toes that



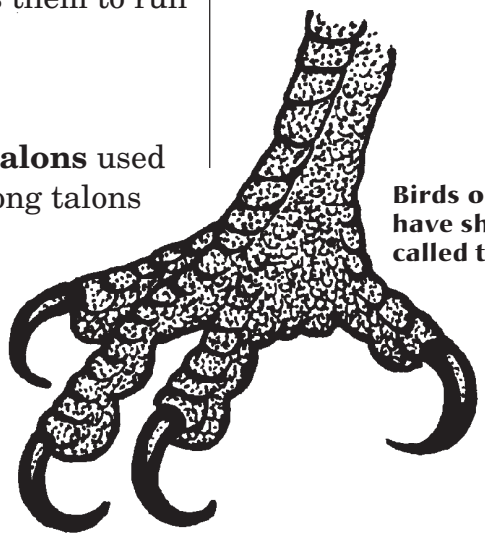
Passerine birds have three toes pointing forward and one pointing backwards.

allow them to grab important footholds on the undersides of branches and feeders. Woodpeckers have two toes facing forward and two facing backward, although the backward toes can be swung forward while climbing. Woodpeckers, brown creepers, nuthatches, and other birds which climb vertically on trees use their stiff tail feathers to prop themselves against tree trunks or branches. Turkeys, pheasants, and other ground-feeding birds spend much of their time walking and scratching through the snow for food. Their strong feet have a shorter rear toe that allows them to run along the ground more effectively.



Woodpeckers have two toes facing forward and two facing backward.

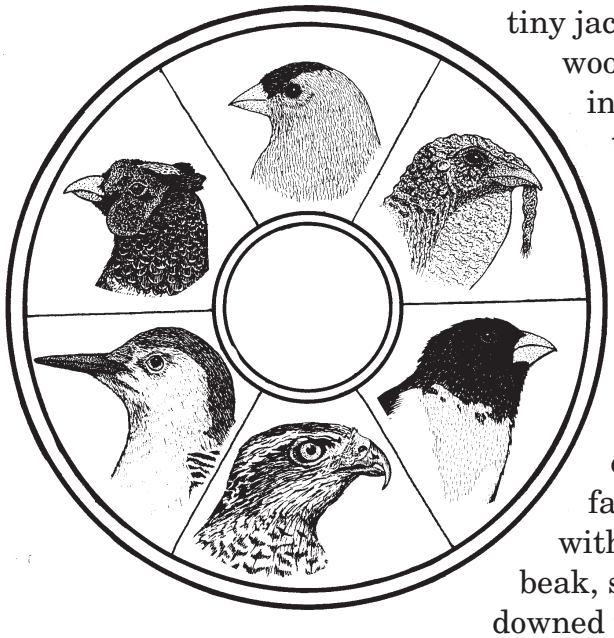
Birds of prey have sharp claws called **talons** used to capture and kill their prey. The strong talons of hawks, owls, and eagles can close with tremendous force, instantly snatching their food and piercing it with razor-sharp nails.



Birds of prey have sharp claws called talons.

Winter birds have tough, temperature-resistent feet. The feet have little circulation and nerve endings and no soft muscle, only tough tendons. The mourning dove is a rare exception. Historically not a common winter resident in Iowa, mourning doves have expanded their winter range across Iowa and suffer greatly from frostbit and lost toes during the winter.

A bird's beak is adapted to the food it eats. Finches have conical beaks superbly designed for cracking open seeds. Goldfinches and pine siskins eat the softer-shelled seeds of thistles and other flowers. Grosbeaks can crack through the hardest shells and can even split open cherry pits. Woodpeckers have beaks and skulls that work like



tiny jackhammers to probe and dig deep into the wood of trees while searching for dormant insects. The northern flicker also uses its tongue to lick up ants and other insects from their hiding places. Pheasants, turkeys, and other ground-feeders have beaks that can eat a variety of nuts, grains, and insects. Pointed, hooked beaks allow birds of prey to rip through meat and skin. Usually the beak is not the weapon of the kill but only a tool for eating. An exception is the peregrine falcon which knocks its prey from the air with fisted talons and, using a special notched beak, surgically snaps the neck vertebrae of its downed victim.

Iowa's winter birds

Birds that remain in Iowa throughout winter are those which can eat available seeds, dormant insects, and smaller birds and mammals. They include a variety of small songbirds and woodpeckers, jays and crows, upland game birds, and birds of prey. They also include some non-native birds introduced from Europe.

It is difficult to categorize some bird species as winter birds. Some are not consistent winterers. For example, longspurs migrate south through Iowa and, in some years, remain throughout winter. In other years, however, longspurs just keep moving south. Some Iowa nesting birds normally considered to winter in the south, such as robins, occasionally remain in Iowa all winter.

Ducks, geese, herons, and other water birds may take up winter residence below river dams or in other areas of open water.

Songbirds and woodpeckers

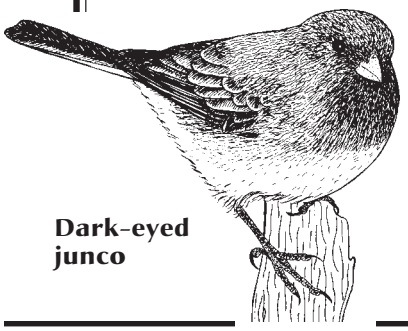
Some very small birds have a large capacity for survival. When winter winds and deep snow drive most larger animals into hiding, tiny birds flutter around tree branches, freeze-dried flower heads, and backyard birdfeeders. They are seen everywhere - in natural areas, roadsides, weedy patches, and towns. The birds constantly feed, stoking their tiny internal furnaces to counter the cold wind. Because they must continually eat during the day, small birds such as chickadees, nuthatches, finches, sparrows, and woodpeckers are easy to attract to birdfeeders.

Jays and crows are large, vocal birds that live year-round in Iowa and are very visible during the winter months. Both have reputations for being very aggressive and picking fights with other birds. At birdfeeders, they may knock food from platform feeders and may chase off other birds. However, if there are several feeders, there is usually room for all. Crows are famous for mobbing and following hawks and owls with their cawing resonating through the cold air.

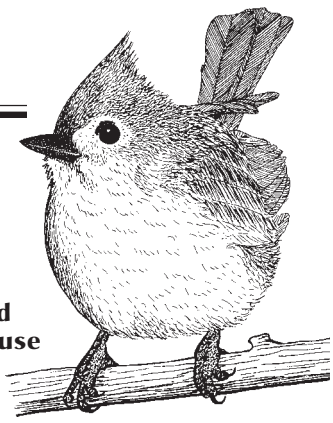
Twenty common Iowa winter songbirds and woodpeckers are listed here. Refer to a field guide for more detailed lists, descriptions, ranges, and behaviors.

Common Iowa songbirds and woodpeckers

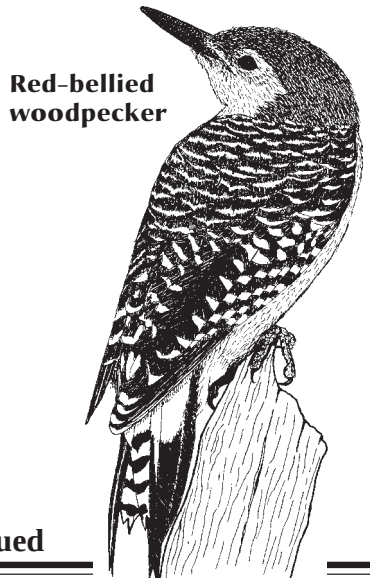
Species	Characteristics	Residency
Northern cardinal	Males are bright red with crested head feathers and a black bib surrounding the thick beak. Females are olive-brown. Length: 7.5”	year-round
Cedar waxwing	A yellow-brown bird with a prominent black mask and bib and a yellow band on the end of the tail. Males have crested head feathers and dabs of red on the wing tips. Length: 6”	year-round
Blue jay	A larger songbird with a blue head and back and white breast. The call of the blue jay is a loud piercing “jaaaaaaaay,” sometimes confused with the screech of a red-tailed hawk. Length: 10”	year-round
Purple finch	Males are raspberry-red, especially near the head, with brown wings. Distinguished from house finches by the absence of streaks on the breast. Length: 5.5”	winter
American goldfinch	Males are bright yellow in summer and olive-colored in winter. Both sexes have black wings with white side-bars throughout the year. Length: 4”	year-round
Pine siskin	A heavily-streaked brown and white bird with patches of yellow on the wings and near the tail. Flight and behavior is similar to the goldfinch. Length: 4”	year-round
Black-capped chickadee	A small gray-white bird with a black head and bib and a small black beak. Climbs vertically on tree trunks and branches. Length: 4.5”	year-round
Tufted titmouse	A small gray bird with crested head feathers and large black eyes. Length: 5.5”	year-round
White-breasted nuthatch	A small gray bird with a black cap and white neck and breast. Red-breasted nuthatches are less common. Climbs vertically and along undersides of branches. Length: 5”	year-round
Brown creeper	A brown and white bird so greatly resembling the shading of tree bark that it is nearly invisible when climbing on tree trunks. It has a sharp, slightly curved beak. Length: 5”	winter

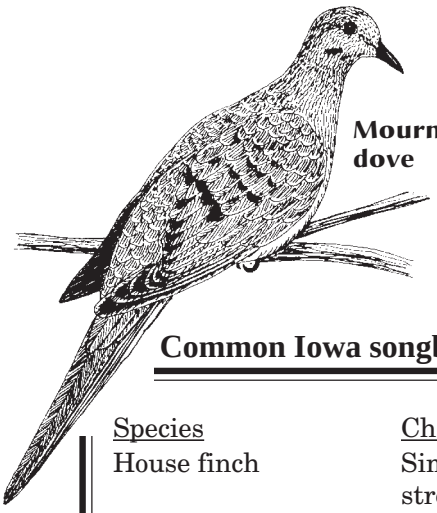


Dark-eyed junco



Tufted titmouse





Common Iowa songbirds and woodpeckers continued

Species	Characteristics	Residency
House finch	Similar in appearance to the purple finch but has streaks on the sides of the breast and less red throughout the body. Length: 6”	year-round
Dark-eyed junco	A slate-gray bird with a white breast and black eye. Often feeds on the ground. Length: 5”	winter
American tree sparrow	A rusty-capped sparrow with a prominent black mark on the breast. Length: 5.5”	year-round
Downy and hairy woodpeckers	Black and white woodpeckers with all white breasts and black eye stripes. The males have a red patch on the back of the head. Hairies are larger (length: 7.5”) than the more common downies (length: 5.5”).	year-round
Red-headed woodpecker	A brightly-colored bird with an all-red head, white breast, and black and white wings. Length: 7.5”	year-round
Red-bellied woodpecker	A medium-sized woodpecker with black and white barring on the wings and back and red feathers on top of the head and neck. Length: 8.5”	year-round
American crow	A large, vocal black bird with a large black beak. In winter, crows often are seen flying and roosting in flocks. Length: 17”	year-round
Mourning dove	A slim gray and brown dove, more lightly colored near the head. The tail is long and tapered and shows white edges when the bird is flying. Length: 10.5”	year-round
House (English) sparrow (non-native)	A non-native bird which is actually a European finch. The male is easily identified by its black bib. Females resemble native sparrows. Length: 5”	year-round
European starling (non-native)	A dark-colored, non-native bird with white speckles covering the breast, a long thin bill, and a jilting walk. Length: 6”	year-round

Upland game birds

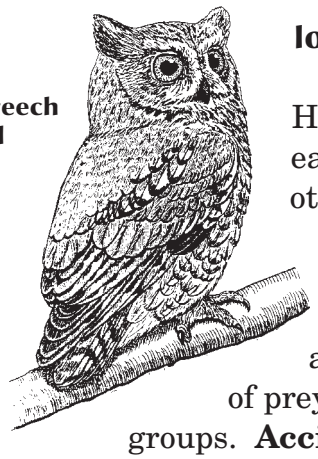

Northern bobwhite

Turkey, grouse, quail, partridge, and pheasant are strong-legged birds capable of running and flying. They are often sought by Iowa hunters. Grouse and turkeys are more common in woodlands, while quail, partridge, and pheasants are more commonly found in grassy or shrubby areas. The wild turkey is a reintroduced species that vanished from the state due to over-hunting by pioneer settlers and early market hunters. After several failed attempts at restoring turkey populations in Iowa, wild turkeys were successfully reintroduced in the 1970s. Ring-necked pheasants are non-native birds which were released at the turn of the century. Today, pheasants are the most popular game bird in Iowa. Common Iowa game birds are listed here. Refer to a field guide for more detailed lists, descriptions, ranges, and behaviors.


Ruffed grouse

Iowa game birds

Species	Characteristics	Residency
Wild turkey	A large dark bird with a dark, metallic brown body and a naked head. Distinctive beard feathers are found on the breast of males and occasionally on females. Length: 34”	year-round
Ring-necked pheasant (non-native)	Males are especially colorful with a dark head, white neck-ring, and prominent red eye patch. The body may have various colors of brown, red, and gold. Females are mottled brown. Both sexes have long pointed tails. Length: 27”	year-round
Northern bobwhite	A short, stocky bird with a short tail. Males have a bright white throat and eye line. The body is mottled with brown and white. Length: 8”	year-round
Gray partridge	A gray bird with a rusty fan-shaped tail. Gray partridge are slightly larger than bobwhites and often are found in flocks. Length: 10”	year-round
Ruffed grouse	Uncommon except in northeast Iowa. Ruffed grouse are brown birds with white breasts and distinctive broad tails with a black tail band. Males produce a drumming sound by beating their wings. Length: 14”	year-round

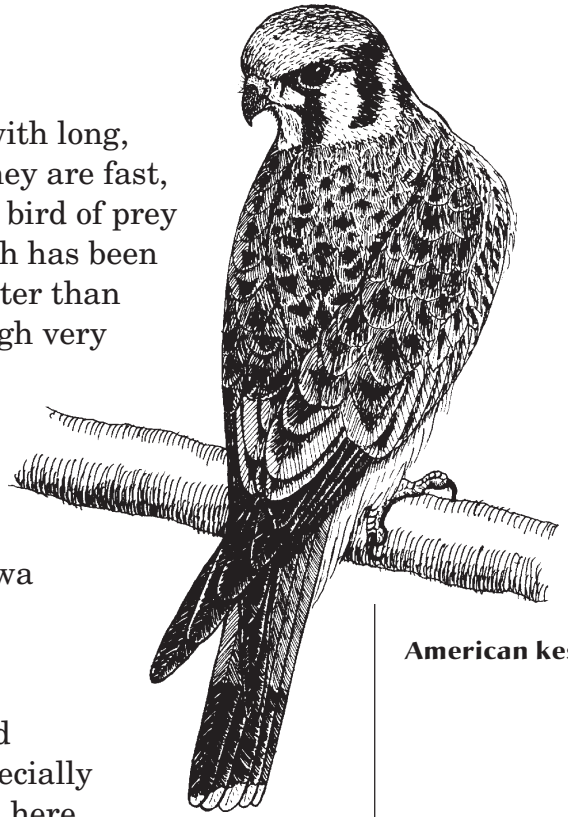


Screech owl

Iowa birds of prey

Hawks, falcons, owls, and eagles are birds which hunt other animals. They are easily identified by their sharp talons and sharp, hooked beaks. Hawks are the most common birds of prey and are divided into two groups. **Accipiters** are hawks with long tails and short wings that are more common in wooded areas. **Buteos** are hawks that soar with large, broad wings and broad, fanned tails. The largest buteos are the eagles. Once rare in Iowa, bald eagles are now commonly seen during the winter, especially below dams or other areas of open water where they search for fish and other food. Golden eagles are rarely seen in Iowa.

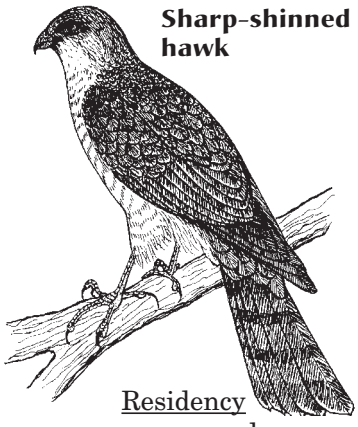
Falcons are birds of prey with long, pointed wings and tails. They are fast, powerful fliers. The fastest bird of prey is the peregrine falcon which has been clocked diving at speeds faster than 200 miles per hour. Although very rare in Iowa, recent reintroduction attempts have been somewhat successful. Peregrines are migratory birds and normally are not seen in Iowa during the winter.



American kestrel

Common birds of prey found year-round in Iowa and especially during the winter are listed here. Refer to a field guide for more detailed lists, descriptions, ranges, and behaviors.

Barred owl



Sharp-shinned hawk

Iowa birds of prey

Species	Characteristics	Residency
Owls		
Eastern screech owl	A small rusty brown or gray owl with feather tufts or "horns." Song is a wavery trill. Length: 8.5"	year-round
Barred owl	A medium to large owl with distinctive brown bars on the breast, no feather tufts, and dark eyes. Song is a raucous hooting sometimes sounded phonetically as "Who cooks for you?" Length: 17"	year-round
Great horned owl	A large owl with feather tufts and fine horizontal barring on the breast. Colors may vary but most are brown. Call is a series of low muffled hoots. Length: 20"	year-round
Hawks and eagles		
Red-tailed hawk	A common buteo of fields and woodland edges. Varies in color but adults have a distinctive red tail. Wingspan: 48"	year-round
Rough-legged hawk	A buteo with a distinctive black tail band and wing tips. Similar in size to a red-tailed hawk but is more commonly seen hovering. Wingspan: 50"	year-round
Sharp-shinned hawk	A small accipiter with a mottled breast and a narrow square-cut tail with distinct black stripes. The less common and larger Cooper's hawk is similar but has a more rounded tail. Wingspan: 21"	year-round
Bald eagle	A large, dark bird that often is seen soaring with flat outstretched wings. Adults attain their distinctive white head and tail feathers when they are approximately five years old. Juveniles are all dark and at a distance sometimes are confused with turkey vultures which are about the same size but fly with their wings bent back in a "V" and have a smaller head. Wingspan: 80"	year-round
Falcons		
American kestrel	A small, colorful, blue-gray bird with a rusty back, white cheeks, and black "whisker" stripes. Common along roadsides. Wingspan: 21"	year-round

Attracting winter birds

"How can you expect the birds to sing
when their groves are cut down?"

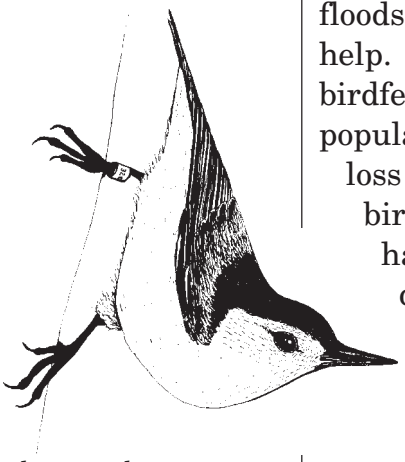
Henry David Thoreau

Winter birds have the same general habitat needs as all wildlife. They are constantly in search of adequate supplies of the right types of food; available structure and materials that provide shelter from the weather and predators; accessible and adequate supplies of water; and enough space to find these necessary resources without exposing themselves to danger. By creating sheltered feeding and watering stations, people can provide basic bird habitat requirements and bring the exciting and lively spectacle of winter birds to their backyards.

Why feed birds?

Birds depend on constant sources of food to help them stay warm and active throughout winter. Therefore, they are relatively easy to attract to properly-filled and maintained birdfeeders. Millions of people across the United States feed birds. There are two main reasons why these people spend their time and money providing food for birds. They want to help birds find food and survive, especially during winter, and they want to attract birds to areas where they can see and enjoy them up close.

Some individual birds do benefit from backyard birdfeeders. In harsh winters, more chickadees, titmice, and other small birds may survive due to properly-placed and maintained feeders. As a whole, however, birdfeeders do not determine the survival of a bird species. Birds that visit your backyard habitat likely have been coming to that type of habitat for thousands of years and have been able to survive severe winters, droughts, floods, and other natural disasters without human help. And many bird species do not visit birdfeeders. Habitat loss affects species populations to a far greater extent than would the loss of birdfeeders. Even where feeders exist, birds rely on a variety of food sources in their habitat. If birds were to become overly dependent on food from a feeder, however, there would be a real danger once the feeder ran empty or was removed.



White-breasted nuthatches are common visitors to winter birdfeeders.

Most people who feed birds in winter do so for enjoyment. They like to see animated life in the dead of winter. They are interested in the challenge of attracting as many bird species as possible. They may count the number and species of birds, making note of their special behaviors and habits. The number of bird species in a particular backyard varies depending on the habitat being provided. But even an average backyard is likely to be visited on a regular basis by 10 to 20 species of birds.

Birdfeeders are a great introduction to the world of birds. There is a lot to learn about bird behavior by watching birds at a feeder or in the wild. Birdfeeding is a national pastime which has become economically important. Nationally, we spend $2.7 billion annually on birdseed and $831 million on feeders, birdbaths, and birdhouses.

Food for thought

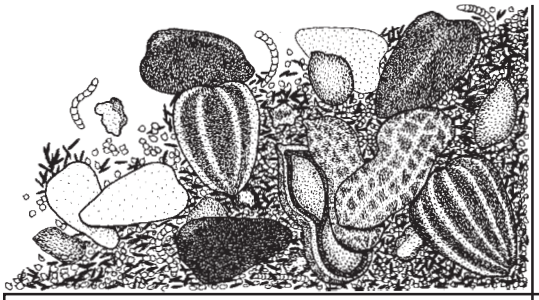
Different species of birds have different requirements for food. People provide the right types of food at their birdfeeders by mimicking the wild foods birds eat. Wild foods available to birds during the winter include dry seeds and nuts, insect larvae and eggs, and live and dead animals. These are the important groceries for which the birds are shopping.

A variety of birds, especially those that normally eat insect larvae or small animals, are attracted to suet feeders or meal worms placed on a platform feeder. Suet is beef fat that can be obtained from a grocery store meat counter or purchased as suet cakes at stores that sell bird food. Meal worms may be purchased from bait stores to provide a special treat for birds. Suet and worms offer birds high-energy, high-fat foods perfect for a winter diet.

The greatest variety of winter birds are seed-eaters, and birdseed is the most common food used in winter birdfeeders. Stores that sell bird feed carry a variety of seeds, the most common being black and striped sunflower, safflower, niger thistle, and millet. Peanuts, acorns, cracked corn, and other foods also are used to feed birds. Different species of birds prefer different types of seeds, and a variety of seeds and feeders will attract the greatest variety of birds. If only one birdfeeder is available, fill it with black sunflower seed. Black sunflower is an inexpensive food that is preferred by the greatest number of bird species. Some stores feature commercial birdfeed mixes. Consumers should look carefully at these mixes for the presence of fillers that birds will not eat. One common filler is red millet, a cheap seed which birds do not like to eat. Some basic seed preferences for winter birds are listed here.

Birdfeed preferences of common winter birds

√ = most preferred • = somewhat preferred



	Black oil sunflower	Striped sunflower	Safflower	White millet	Niger thistle	Cracked corn	Peanuts	Suet and meal worms
Quail and pheasant	•			•		√		
Mourning dove	√		•	√				
Red-bellied woodpecker	•	•						√
Downy woodpecker	•							√
Hairy woodpecker	•							√
Blue jay	√	√					√	
Black-capped chickadee	√							√
Tufted titmouse	√	•					√	•
White-breasted nuthatch	√	•	•					√
European starling						√	•	√
Northern cardinal	√	√						
American tree sparrow	√			√	•			
Dark-eyed junco	•			√	•	•		
Purple finch	√		•		√			
House finch	√		•		√			
Pine siskin	√	•			√			
American goldfinch	√				√			
House sparrow	√			√		•		

Birdfeeders

There are many feeders to choose from when looking for the best way to present food to birds. The five basic feeder designs include hanging thistle feeders, hanging sunflower feeders, peanut feeders, tray or platform feeders, and suet feeders. Each of these feeders is designed to offer specific types of food to specific types of birds. A good feeder should allow easy access to birds, protect food from moisture, and prevent seed from being blown, kicked, or washed out of the feeder.

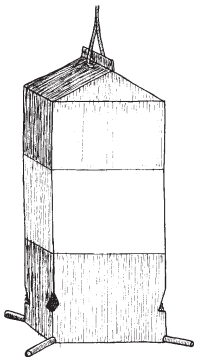
Hanging **thistle feeders** and **sunflower feeders** are long, cylindrical feeders with holes large enough to allow seeds to be available to birds without the seeds spilling out of the feeder. Thistle feeders have very small holes, while sunflower feeders have holes a quarter-inch or larger to accommodate black or striped sunflower, hulled sunflower, and safflower seeds. The feeders hang from a tree, post, or eaves, and birds perch on small pegs below each hole. Some birds such as starlings may be discouraged by the movement of a hanging feeder.

Peanut feeders may be hung or attached to a tree trunk or post. Shelled or unshelled peanuts are distributed through a wire mesh.

Platform and **hopper feeders** usually are stationary feeders placed on the ground, a ledge, post, or level surface. Seeds are poured directly onto a platform tray or are poured into a hopper which serves as a reservoir that feeds the seeds into the tray. Usually the hopper is enclosed and keeps the seed dry and safe from other animals. A platform feeder may be filled with a variety of seeds. Wire hardware cloth or a plastic mesh over the seed tray helps keep seeds from being kicked out by birds or squirrels.

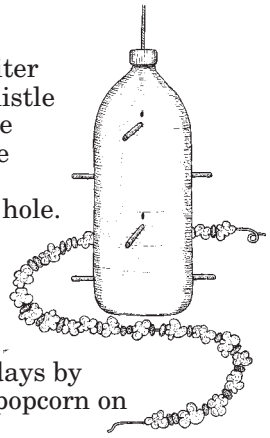
Suet feeders are often as simple as an onion sack full of suet hanging from a tree branch. Woodpeckers, nuthatches, and other suet eaters are capable of hanging upside down and on the sides of plastic mesh or metal hardware cloth. Commercial suet feeders may be made of more durable plastic or metal cages designed to hold store-bought suet cakes.

There are many inexpensive ways to make your own birdfeeders. Feeding birds may be as simple as throwing leftover bread crumbs onto the snow or decorating a snowman with raisins, peanuts, and sunflower seeds. Five easy ideas for making your own birdfeeders are described here.

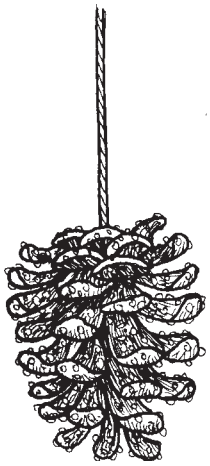


• Cut four triangles above the bottom corners of a half-gallon milk carton. Poke sticks through the bottom to provide perches.

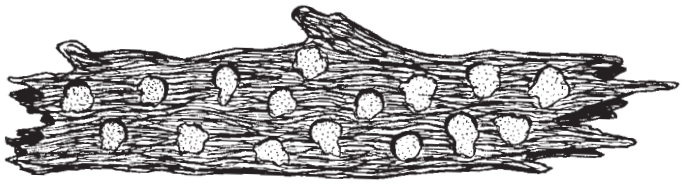
• Transform a plastic two-liter pop bottle into a hanging thistle or sunflower feeder. Cut the desired sized holes and poke sticks through the bottle to provide perches below each hole.



• Decorate for the holidays by stringing peanuts and popcorn on knotted string.



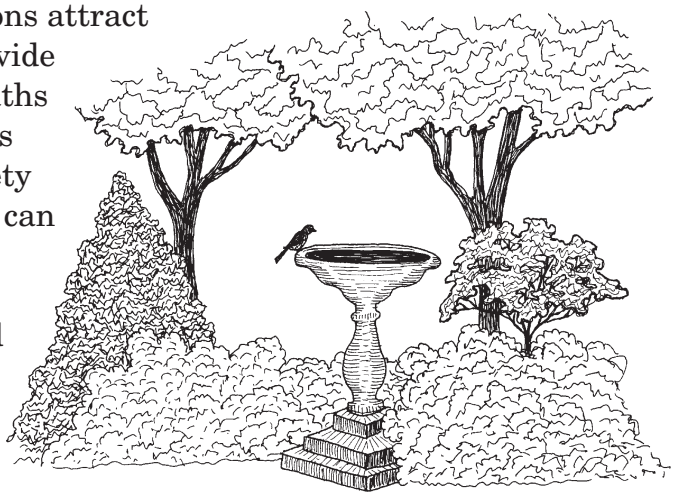
• Smear a peanut butter and cornmeal mixture or melted suet on a pine cone and then roll the pine cone in a tray of bird seed. Attach a string to the pine cone and hang it in an accessible place.



• Drill holes into a section of a dead tree branch or log. Fill the holes with suet or peanut butter.

Water

Water is a basic habitat requirement for all birds which is often lacking in the frozen winter landscape. Dripping water, running water, steaming water, and water reflections attract birds like magnets. People can provide birds with water by creating birdbaths or fountains. It may be as simple as filling a pan of water daily. A variety of more elaborate heated birdbaths can be purchased at birdfeeder stores. Birds are more likely to use a birdbath that is close to shelter and perches and is kept clean and free of ice.



Shelter and landscaping

Birds search for places with the types of plants that provide them with food and shelter. These plants differ for different species of birds. For example, woodpeckers generally are attracted to areas with larger trees and shrubs, while goldfinches need shrubs and grasslands. Cedar waxwings and grosbeaks eat berries on small trees, shrubs, and vines, while chickadees and nuthatches probe along the bark of trees and shrubs for insect larvae. A variety of trees, shrubs, vines, and wildflowers attract the greatest variety of birds.

When landscaping a yard to attract birds and other wildlife, consider the types of food and shelter the plants will provide. Evergreens such as red cedar and white pine provide leafy shelter year-round. Dogwoods, hawthorns, and crabapples provide birds with fruit through fall and into winter. Dried seed heads of sunflowers, thistles, and other flowers are natural birdfeeders. More complete lists of plants and the birds they attract are

available from the Iowa Department of Natural Resources, your local county conservation board, and county extension office. See the Useful Resources section at the end of this booklet.

Unwanted guests

Birds are not the only wildlife looking for food during winter. Many people enjoy attracting and feeding other wildlife such as squirrels and deer. However, sometimes these animals can become unwanted guests.

Squirrels have an especially bad reputation for being unwelcome dinner guests at a birdfeeder station. They are persistent in their attempts to raid any feeder to which they can gain access. Squirrels may chew through plastic and wood feeders, empty platform feeders by eating and clawing out the seeds, and scare birds off the feeder perches. A host of products have been designed to keep squirrels off feeders, but none are effective in all situations. Squirrel baffles are smooth, round barriers which squirrels cannot climb on or over. They are designed to keep squirrels from climbing down the wire of a hanging feeder or up the pole of a mounted feeder. Some tray feeders have a platform that can support the light weight of perched birds but will tip down under the weight of a squirrel. Sometimes squirrels can be partially lured away by providing corn or other inexpensive foods on the ground separate from the birdfeeding area.

Some guests at a birdfeeder station are not interested in the seed as much as the birds that are eating the seed. House cats and sharp-shinned hawks are the two most common predators attracted to birdfeeders. Feeders and birdbaths

are less likely to be "cat feeders" if they are elevated off the ground. And birds find safety from hawks when there is plenty of shelter provided by nearby trees and shrubs. When a hawk appears, the birds can quickly take cover until the hawk leaves.

Certain songbirds may be unwanted guests. Some non-native birds, such as house (English) sparrows and European starlings, use the same types of tree cavities sought by nesting bluebirds, tree swallows, and other native birds. In spring, they often arrive in an area in great numbers and quickly inhabit the available nesting sites. House sparrows also arrive at winter feeders in great numbers. House sparrows can be fed inexpensive cracked corn away from the feeders where native birds are preferred. Platform and ground feeders are more likely to be overrun by sparrows and squirrels than will hanging feeders. And starlings are unlikely to stay at any feeder which is free-moving.

European starlings often are considered unwanted guests at birdfeeders.

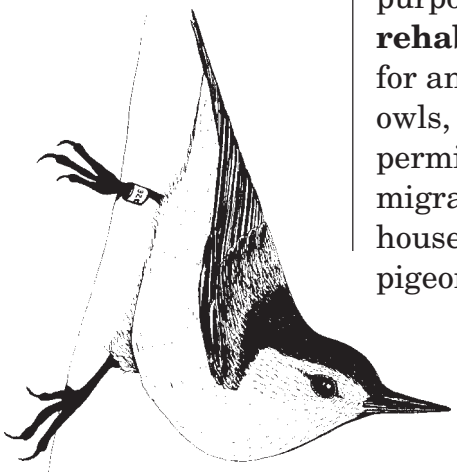
Bird protection

"To band a bird is to hold a ticket in a great lottery."

Aldo Leopold

All native birds are protected by Iowa law. With the exception of game birds, it is illegal to kill birds for sport or food. It also is illegal to keep eggs, nests, or feathers from birds or to keep them as pets. All native nongame birds are protected by state and federal laws. However, special permits may be obtained by certain agencies and organizations, including schools and

nature centers, to collect salvaged feathers and nests and birds killed in accidents. The most common state permits issued to schools and nature centers are educational project permits, wildlife salvage permits, and wildlife rehabilitation permits. An **educational project permit** allows the permittee to possess certain types and numbers of live animals for educational purposes. A **wildlife salvage permit** allows permittees to salvage birds and other animals which have died from accidents or natural causes for educational purposes. Some nature centers have **wildlife rehabilitation permits** that allow them to care for and release injured wildlife, including hawks, owls, and other birds. In addition to these state permits, federal permits are required for all migratory birds. This includes all birds except house sparrows, starlings, upland game birds, and pigeons.



Banded white-breasted nuthatch

Keeping an eye out for the birds

People have a fascination with birds. Whether at our feeders, darting among bushes and trees, creeping around tree trunks, or probing our lawns, birds are an important part of our lives. Many people across the state identify themselves as birdwatchers. Some belong to groups such as the National Audubon Society or Iowa Ornithologists' Union. Many others enjoy birds on their own, in their own backyards, and in nearby wildlife areas.

There is much to be learned by watching birds. Bird banding is a method used by some bird watchers to determine the status of individual birds. Birds are caught in long nets and quickly collected. Their age, weight, and other information

are recorded. A lightweight, coded metal bracelet is carefully placed around a leg of each bird before it is released. By keeping careful record of birds caught and re-caught, both professional and amateur ornithologists learn a lot about birds.

Amateur bird watchers also are involved in voluntary bird surveys. Spring breeding bird surveys are conducted annually through the Iowa Department of Natural Resources Wildlife Diversity Program. The National Audubon Society sponsors annual Christmas bird counts. And the Iowa Ornithologists' Union coordinates winter birdfeeder surveys in January. Individuals and classes can join in the survey by contacting the organizations and requesting survey forms.

Keep an eye open for birds. Watch their behavior. What are they doing? What are they eating? How do they move around and find their food and water? What plants do they seem to like the best? How many and what types of birds do you see? There are more than 9,000 species of birds on Earth. Four hundred species have been sighted in Iowa. How many species are left for you to discover?

Useful resources

An Illustrated Guide to Attracting Birds; Susan Warton, editor; Sunset Publishing Corporation, Menlo Park, CA; 1994.

The Audubon Society Encyclopedia of North American Birds; John K. Terres; Alfred A. Knopf, Inc., New York, NY; 1980.

The Birdfeeder Book; Donald and Lillian Stokes; Little, Brown and Company, Boston, MA; 1987.

Birds At My Feeder; Bobbie Kalman and Glen Loates; Crabtree Publishing Co., New York, NY; 1987.

Birds In Iowa; Thomas H. Kent and James J. Dinsmore; privately published, Ames, IA; 1996.

Birds of the Backyard; Video narrated by George Harrison; Company for Home Entertainment, Suffield, CT; 1989.

Birds of North America; Robbins, Bruun, Zim, and Singer; Golden Press, New York, NY; 1966.

Birdwatching; Bob Hume; Random House, Inc., New York, NY; 1993.

Feeding Wild Birds In Winter; Clive Dobson; Firefly Books, Ltd., Ontario, Canada; 1981.

IAN Booklet Series; Iowa Association of Naturalists; ISU Extension Service, Ames, IA.

- **Iowa's Nesting Birds** (IAN-606); Iowa Wildlife Series; 1998.
- **Keeping Iowa Wildlife Wild** (IAN-402); Iowa Wildlife and People Series; 1996.
- **Iowa Biodiversity** (IAN-407); Iowa Wildlife and People Series; 1996.
- **Adapting To Iowa** (IAN-408); Iowa Wildlife and People Series; 1996.
- **Iowa Woodlands** (IAN-202); Iowa's Biological Communities Series; 1993.
- **Iowa Prairies** (IAN-203); Iowa's Biological Communities Series; 1993.
- **Iowa Wetlands** (IAN-204); Iowa's Biological Communities Series; 1993.
- **Iowa Waterways** (IAN-205); Iowa's Biological Communities Series; 1993.
- **Iowa Habitat Loss and Disappearing Wildlife** (IAN-101); Iowa Environmental Issues Series; 1998.

The Iowa Breeding Bird Atlas; Laura Spess Jackson, Carol A. Thompson, James J. Dinsmore, Bruce L. Ehresman. John Fleckenstein, Robert Cecil, Lisa M. Hemesath, and Stephen J. Dinsmore; University of Iowa Press, Iowa City, IA; 1996.

Landscaping For Wildlife; Minnesota Department of Natural Resources; Minnesota's Bookstore, St. Paul, MN; 1987; 1-800-657-3757.

North American Birdfeeder Handbook; Robert Burton; Dorling Kindersley Publishing, Inc., New York, NY; 1992.

A Teacher's Activity Booklet About...Iowa Birds; Linda R.F. Zaletel; Iowa Ornithologists' Union and Iowa Conservation Education Council, Ames, IA; 1997.

Woodworking For Wildlife; Minnesota Department of Natural Resources; Minnesota's Bookstore, St. Paul, MN; 1992; 1-800-657-3757.

Iowa Winter Birds is one in a series of six booklets that are part of the *Iowa Wildlife Series*. The booklets in the series include:

Iowa Wildlife Series

Iowa Mammals	(IAN-601)
Iowa Winter Birds	(IAN-602)
Iowa Nesting Birds	(IAN-603)
Iowa Reptiles and Amphibians	(IAN-604)
Iowa Fish	(IAN-605)
Iowa Insects and Other Invertebrates	(IAN-606)

The Iowa Association of Naturalists also has produced five other booklet series that provide readers with a clear, understandable overview of topics concerning the Iowa environment and conservation. The booklets included in each of the other five series are listed below.

Iowa's Natural Resource Heritage

Changing Land Use and Values	(IAN 501)
Famous Iowa Conservationists	(IAN 502)
Iowa's Environmental Laws	(IAN 503)

Iowa Wildlife and People

Iowa Wildlife Management	(IAN-401)
Keeping Iowa Wildlife Wild	(IAN-402)
Misconceptions About Iowa Wildlife	(IAN-403)
State Symbols of Iowa	(IAN-404)
Iowa Food Webs and Other Interrelationships	(IAN-405)
Natural Cycles In Iowa	(IAN-406)
Iowa Biodiversity	(IAN-407)
Adapting To Iowa	(IAN-408)

Iowa Plants

Iowa's Spring Wildflowers	(IAN-301)
Iowa's Summer and Fall Wildflowers	(IAN-302)
Benefits and Dangers of Iowa Plants	(IAN-303)
Iowa's Trees	(IAN-304)
Seeds, Nuts, and Fruits of Iowa Plants	(IAN-305)
Iowa's Mushrooms and Other Nonflowering Plants	(IAN-306)
Iowa's Shrubs and Vines	(IAN-307)

Iowa's Biological Communities

Iowa's Biological Communities	(IAN-201)
Iowa Woodlands	(IAN-202)
Iowa Prairies	(IAN-203)
Iowa Wetlands	(IAN-204)
Iowa Waterways	(IAN-205)

Iowa Environmental Issues

Iowa Habitat Loss and Disappearing Wildlife	(IAN-101)
Iowa Air Pollution	(IAN-102)
Iowa Water Pollution	(IAN-103)
Iowa Agricultural Practices and the Environment	(IAN-104)
People, Communities, and Their Iowa Environment	(IAN-105)
Energy In Iowa	(IAN-106)
Iowa Waste Management	(IAN-107)

These booklets are available to download via PDF on the ISU Extension Store:

store.extension.iastate.edu

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