

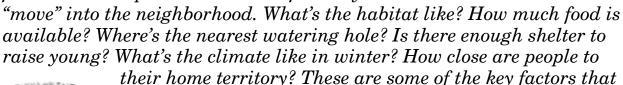
 $a\ series\ about\ managing\ your\ land\ for\ wildlife$

Wisconsin Wildlife Primer*

Wildlife Habits and Habitat

*Primer \prim•ar\ n. 1: a small book for teaching children to read. 2: a small introductory book on a subject.

If you're looking for a new house, it is important to know what features you want for your "dream home" and what its ideal location will be. You have to ask yourself: Where do I want to live in the world? Do I want to live in the city, the suburbs or the country? How many rooms does my family need? How close will I be to the grocery store, work, the mall and the doctor? Animals also look for certain features when searching for a home in a particular area before they



determine where wildlife will live in Wisconsin, and whether they'll choose your land as a suitable "home."

As a landowner interested in attracting wildlife to your property, you'll need to know what kinds of wildlife live in your

part of Wisconsin, what they eat, what type of habitat they prefer and what they need for nesting or denning. This publication gives you basic information about the needs of some of Wisconsin's most common wildlife. It is merely a quick-reference chart listing the food, habitat, nesting sites, and distribution of these animals in Wisconsin. Use it to start looking for wildlife already present on your land and then develop project plans to attract animals native to your region.

You'll also need to assess whether your land currently has the appropriate food, water,

shelter and space to attract wildlife, or whether you can adequately enhance your property's ability to attract wildlife by incorporating minor habitat modifications. For assistance in creating a wildlife management plan for your property, please refer to **Putting Pen to Paper** in this series. Be sure to read **Calling All Wildlife** to gain an understanding of some fundamental concepts in wildlife management. And, for an idea of what kind of trees, shrubs and vines you can plant to attract wildlife, read So. What Should I Plant? The more information you have, the better you'll understand the habits and habitat of the wildlife you want to attract.



Wisconsin's Wildlife Heritage: A Wildlife Wonderland

Wisconsin has historically been rich in wildlife resources. Wisconsin's earliest European explorers recorded a great abundance and variety of wildlife in the forests, wetlands and grasslands of the state. From 1700 to 1800, the prairies and savannas of southern Wisconsin teemed with elk, bison, wolves, cougars and white-tailed deer. The mixed conifer hardwoods in northern Wisconsin provided habitat for



American (pine) marten, moose, deer and small populations of woodland caribou. The state's central forests were home to millions of passenger pigeons—populations so dense people reported that the birds literally "blocked the sun from the sky" during migration.

Europeans had an impact on wildlife even before they settled this land. By supplying horses and firearms to the native Americans, they helped these original people become more efficient hunters. The native Americans as well as American cavalry stationed at such outposts as Prairie Du Chien undoubtedly caused the extirpation of the herds of bison and elk which roamed southwest Wisconsin. The last bison was reported to have been shot in the early 1830s. The early lumberjacks who logged the northwoods each winter also impacted the population of one of Wisconsin's largest hoofed mammals in the 1800s, the moose. Moose prefer young forests with lush vegetation. As the mature forests were logged it created better moose habitat. However, not only did it create better moose habitat, it also created better white-tailed

deer habitat. Since deer carry a parasitic brain worm which is deadly to moose, the moose population declined. This, together with unregulated hunting, caused moose to disappear from Wisconsin by the early 1900s.

As these large grazers vanished, the wolf and cougar populations declined as well, since their food source had disappeared. In order to maintain a toehold in Wisconsin, the remaining large predators had to turn to alternative food sources—domestic livestock. Farmers couldn't afford the loss of even one calf or lamb to a hungry wolf or wild cat so in 1865 the state legislature passed a \$5 bounty for each dead wolf that hunters brought in. The story was similar for cougars. By 1960, the timber wolf was declared extirpated from Wisconsin; and even though reports of cougar sightings still trickle in, wildlife biologists believe most of these are unfounded or are the result of an escaped or released captivebred cougar.

When European settlers began flooding into the state in the early and mid 1800s, unregulated hunting and trapping, as well as farming and logging operations quickly altered the native landscape and its wildlife populations. Wetlands were drained, the prairies and savannas were plowed under, and northern forests were clearcut. Despite the disappearance of the larger mammals from Wisconsin's landscape, other wildlife continued to flourish throughout the state from the early to mid 1800s. Trappers found abundant fisher, American (pine) marten and beaver populations; and hunters saw no end to the flocks of passenger pigeons, prairie chickens, sharp-tailed grouse, ducks and geese. But the harvest of early hunters and trappers went unregulated. No one saw a need to impose bag limits because the wildlife populations appeared so limitless. Not surprisingly, it wasn't long before unregulated trapping of marten, fisher and wolverine lead to their extirpation from the state by the early 1900s. Beaver and other furbearer populations were also drastically reduced and were nearly



eliminated from the state by 1900. Market hunting caused the seemingly endless flocks of waterfowl to plummet; and the widespread destruction of passenger pigeon nests by market hunters interested in shipping barrels of squab to eastern markets spelled doom for this native bird.

The early settlers wielded a double-edged sword against Wisconsin wildlife. Not only did their unregulated hunting and trapping cause wildlife populations to decline, but their swelling population created such drastic land use changes that wildlife lost the habitat they needed to survive. The wild turkey and Carolina parakeet populations dramatically declined due to loss of habitat. Civilization was expanding from the south and the climate and habitat types of the north prevented the northward retreat of these native birds. Sharp-tailed and ruffed grouse lost out in the south due to overgrazing and "clean" farming though they still maintain a foothold in the north. The draining of marshes, in addition to market hunting, caused waterfowl populations, including the trumpeter swan, to drop dramatically. Poultry farmers and commercial fishing interests often shot hawks, owls and fish-eating birds since these birds preyed upon fish, game and domestic fowl.

Although many types of native wildlife populations suffered as European settlers continued to change the landscape of Wisconsin, others actually increased. They thrived in the habitats which farming and logging provided. White-tailed deer populations in the thick northern forests were originally moderately low, and they remained low during the logging heyday because of intense exploitation. But as the forests resprouted with lush, young growth and as early farming provided a good mix of field and forest, the deer numbers swelled. When central Wisconsin farms grew perennial crops of bluegrass as a seed source, prairie chickens thrived. But it wasn't long before these habitats were altered and the prairie chicken populations dropped. Still other wildlife, such as covotes, crows, blackbirds, and alien house sparrows, starlings and rodents, prospered all too well by their association with people.

Hunters and early conservationists began noticing the exploitation of Wisconsin's natural resources around the 1870s. They slowly worked toward regulating the use of natural resources as they enacted laws to protect wild-life populations and forest land. Wildlife management was considered increasingly necessary since people had greatly altered natural landscapes. But the needs of wildlife frequently conflicted with many human land uses. In 1908, Governor James O. Davidson appointed the Wisconsin Conservation

Commission to manage the "basic natural resources and related problems." He had been inspired during a Governor's conference held by President Theodore Roosevelt in which the president stressed the need for "conservation" which is defined as the wise use of our natural resources.

With an enlightened view of conserving our natural resources, new farming practices were put into action to prevent soil erosion, loggers replanted many acres of forest, and industry began controlling environmental pollution. Educational efforts began as conservation wardens met with school classes, farming interests and public groups. In 1935, the state legislature ordered the teaching of "conservation of resources" in schools. It was finally recognized that careful planning and management could provide for the future welfare of wildlife in Wisconsin.

People began to take an interest in what was happening to wildlife, and this led to the study of wildlife and their habitats. Aldo Leopold, one of the founding fathers of the wildlife management profession, took up a leadership role as his followers began to study wildlife populations and conduct research to understand and manage wildlife populations.

Efforts to restore some populations of extirpated wildlife were undertaken throughout the 1900s by reintroducing them





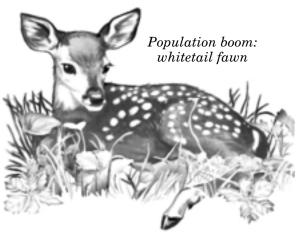
into their former haunts. Some stocking attempts were successful, others were failures. To date, successful restocking includes: the wild turkey, trumpeter swan, American (pine) marten and fisher. An experimental reintroduction of elk was initiated in northern Wisconsin in 1995, and is currently being evaluated.

Other animals, such as the wolf and moose, were not reintroduced, but have found their way here from neighboring Minnesota, Michigan, and Canada. The wolf population continues to grow and spread, but the moose populations may be limited by the presence of a parasitic brain worm transmitted by white-tailed deer.

Today, Wisconsin supports over 650 different types of mammals, birds, reptiles, amphibians and fish, as well as countless millions of invertebrates. We truly live in a wildlife wonderland.

Not All Native

Not all Wisconsin wildlife is native. People have wittingly or unwittingly introduced a number of "exotics" or "aliens" to our state. Some of these, like ring-necked pheasant, Hungarian partridge, rainbow trout and brown trout are considered useful because they occupy drastically altered ecosystems that can no longer support such natives as the prairie chicken and brook trout. They provide hunters with food and outdoor recreation. Others, like carp, zebra mussel, ruffe, mute swan, starling, house sparrow, pigeon, Norway rat and house mouse, are considered pests. A recent exotic animal, the stone marten, in southeastern Wisconsin may also have negative impacts yet to be discovered. Nevertheless all are part of Wisconsin's tapestry of wildlife.



Mammals

Mammals, those warm-blooded animals that have hair and nourish their young with milk, are important to many of us. Seventy mammals are native to the state; at least 4 are extinct.

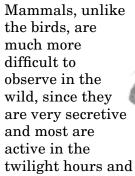
Mammals are valuable to people in a number of ways. Game mammals, such as whitetailed deer, black bear, gray and fox squirrels and cottontail rabbit provide many hours of healthy recreation in the field as hunters pit their skill against the native wits of these mammals. Venison and most wild game meat is low in fat and highly nutritious. The furbearers—beaver, muskrat, mink, otter, bobcat, coyote, red and gray foxes, raccoon and fisher—provide a source of income for trappers as well as a source of fur for people's clothes. All mammals are fun and interesting to watch in the wild, though some can be a real nuisance and cause damage to crops, orchards, bee hives, livestock and our homes. Rodents, skunks, opossums, woodchucks, beaver, deer, covote and bear fit into this category.

But mammals, like birds, reptiles, amphibians, fish and invertebrates, are important regardless of human values. Different animals are found in different regions of the state because they fit into the scheme of things. Each plays a particular role, fills a certain niche within their natural community. They are dependent upon the very community of which they are a part and members of that community are dependent upon them. Nature has established a dynamic equilibrium between each type of wild animal and other plants, animals and non-living features of those natural communities. If these natural communities are left undisturbed by people, they ultimately work to the benefit of all.

The ranges of Wisconsin's mammals vary from a "toe hold," such as that of the spotted skunk or white-tailed jackrabbit on our western border, to a statewide presence such as that of the white-tailed deer or red fox. A mammal's range is not always constant or permanent. Progressive expansion or shrinkage may be noted as a result of changes to the habitat, either by people or by the changes wrought by nature (wild fires, tornadoes, changes in climate). Usually the meat-eating mammals require larger territories than similar-sized plant-eating mammals. Some mammals, including a few

bats, migrate when winter arrives. Some such as ground squirrels and woodchucks hibernate in underground dens. Others, like skunks or raccoons, sleep during extreme winter conditions. The remainder stay active all winter. These include rabbits, red fox, coyotes and white-tailed deer.

Many smaller mammals provide a food supply for carnivores. But even small mammals prey on insects. Bats, for instance, are beneficial as they help keep the mosquito populations down in areas where we live and recreate. Small burrowing mammals such as moles, shrews, and mice play an important role in developing the fertility of the soil. Combined with the actions of earthworms. fungi and bacteria, they help aerate the soil, manufacture humus and build up leaf mold. Many mammals act as scavengers or "cleanup crews" to help recycle dead plants and animals. Beaver assist many other animals when they construct dams which create small ponds and wetlands along streams.





White-footed Mouse

generally after dark. Mammals are best "observed" by following their tracks in the snow in winter. Although many mammals will rarely be seen, tracking allows you to learn much about mammal behavior. In addition to tracks, mammals leave behind abundant signs such as droppings, bark chewings, grass tunnels, trails, tree rubs and ground scrapes. If you are careful, quiet, and determined, you can have good results by standing along a woodland or grassland wildlife trail in the early morning, late afternoon, or even on a bright moonlit night. Mammals leave abundant characteristic signs. Tracks in the snow, droppings, bark chewings, grass tunnels, trails, and tree rubs all give clues to the type of animal that lives there. It's fun to learn these signs and to become a seasoned observer. Use field guides to mammals, such as Allen Kurta's Mammals of the Great Lakes Region (University of Michigan Press), or James Halfpenny's Mammal Tracking in North America (Johnson Books, Boulder), for more complete information.

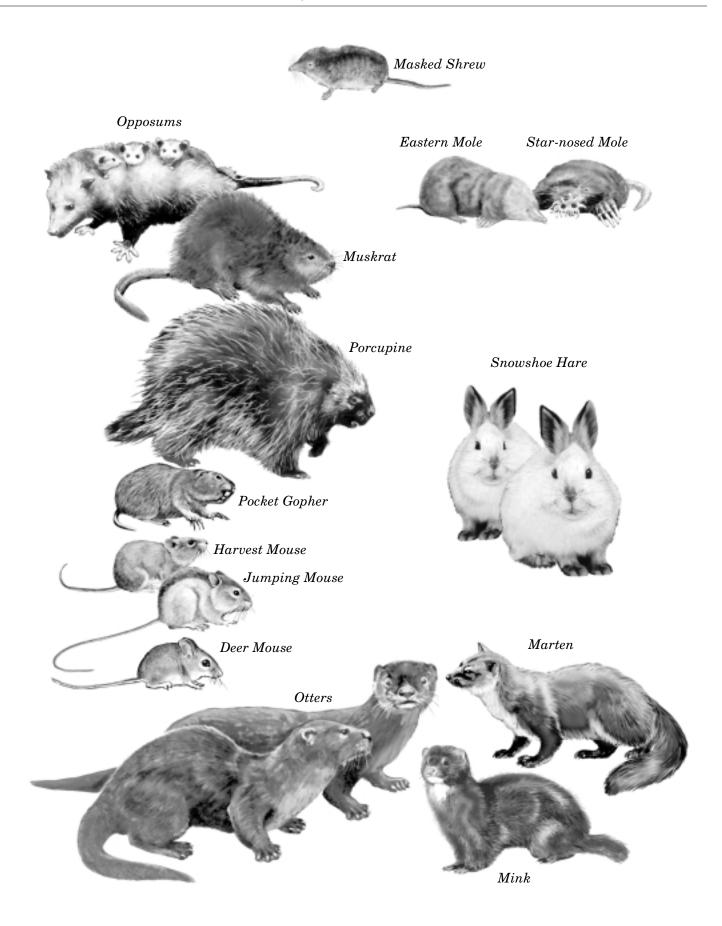


Red fox

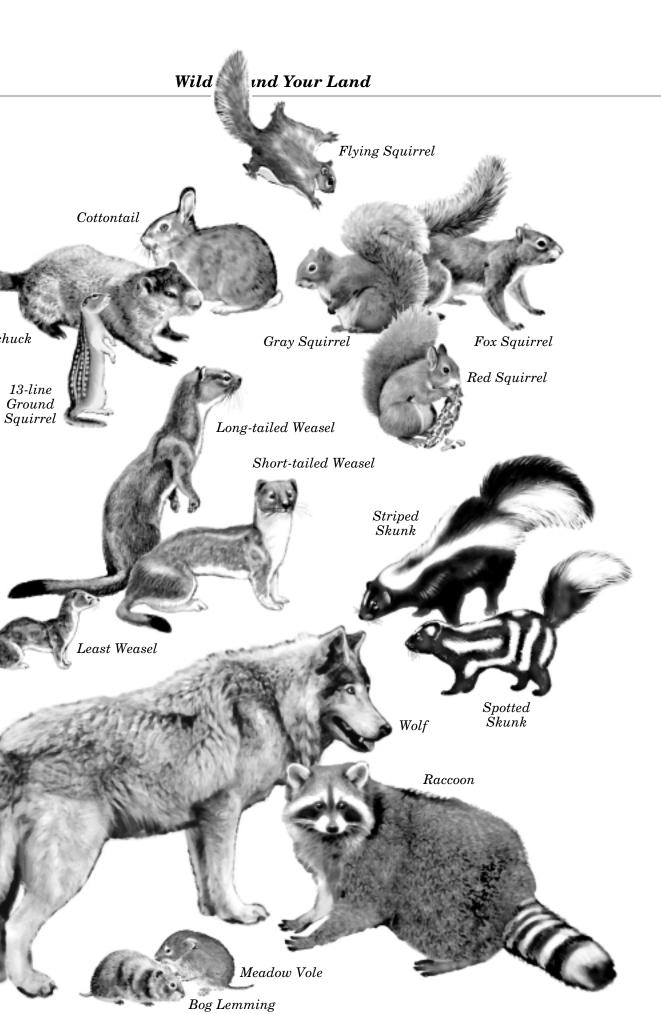


Mammal	Food	Habitat	Den Site	Distribution
Badger	Ground squirrels, mice, pocket gophers, bird eggs	Grassland, savanna and farmland	Underground dens in sandy fields, pastures, hilltops	Northwest, west
Bats (7 kinds; Little Brown Bat is common)	Moths, mosquitoes and other night-flying insects	Agricultural areas, forests; flies over lakes, fields and woods Rural towns, cities	Daytime: under barn boards or siding in rural towns or farms; under loose bark or in tree cavities in forested areas; caves. Night roosts: under porch awnings, behind shutters, barns. Winter: caves, attics, inside walls	Statewide, more common south
Black Bear	Berries, acorns, insects, fish, carrion, fawns, bird eggs, honey, nuts	Forest	Makes dens in hollow, downed trees, in upright dead trees, or beneath the ground	Northern third and central forest
Beaver	Bark and twigs of aspen, cottonwood and willow; roots, grasses	Wetlands and rivers	Lodges made of saplings, partially underwater, or dens built into stream banks. Note: Protect large ornamental trees with hardware cloth	More common north, southwest, Mississippi River
Bobcat	Small mammals, especially snowshoe hares; some deer in winter	Forest; wilder sections of brushy northern forest, especially areas with swamps and rocky outcrops	Dens in trees or under rocky outcrops	Northern third; sightings reported in Baraboo Hills, Vernon, Richland and Crawford counties. Uncommon
Eastern Chipmunk Least Chipmunk	Seeds, nuts, acorns, berries, insects, bird eggs, young mice, bulbs	Northern forests of mixed evergreens and deciduous trees and southern woodlands	Dens in underground burrows, rock piles, rock walls, house foundations. Note: Protect flower bulbs with wire mesh	Eastern is found statewide. Least in north and central conifers
Coyote	Mice, rabbits, squirrels, carrion, fawns and ground-nesting birds	Farmland, newly cut over forested areas, woodland edge. Note: Populations spreading into urban areas	Lives in underground dens at base of cliff or under a stump	Statewide but more common in the north. Not common in wolf habitat
White-tailed Deer	Broad-leaf plants, acorns, fungi, field corn, apples, alfalfa; in winter, twigs, especially hemlock, white cedar	Border areas between forest and clearings, wetlands, tamarack and cedar swamps, even urban areas	Hides fawn in thickets or dense grassy areas. Northern herds seek shelter in conifer stands called "deer yards"	Statewide
Fisher	Snowshoe hares, voles, squirrels, carrion, mice, porcupines	Forest of dense conifers or mixed deciduous and conifer forests	Dens in tree cavities; seeks shelter in hollow logs, rock piles and abandoned beaver lodges	North and expanding into central
Gray Fox Red Fox	Mice, rabbits, pheasants, wild grapes and other berries and fruit, snakes, turtles, woodchucks, grass- hoppers, carrion	Red fox prefers farmland, mixed woodlands; gray fox prefers forests to open brush land	Dens in hollow logs or trees or under rock piles. May use deserted woodchuck burrows in hillsides or may dig their own burrow	Red Fox found statewide; Gray Fox found southern third

Mammal	Food	Habitat	Den Site	Distribution
Pocket Gopher	Roots, bulbs and rhizomes; clover, alfalfa, grass, dandelion, plantain, mullein, dock	Prairie, savanna, and scrub lands where soil is loose or sandy	Builds extensive underground tunnels. Look for mounds of dirt without entrance hole	West of Wisconsin River, northwestern half
Snowshoe Hare	Fresh twigs and bark of young trees and shrubs such as pine, alder, aspen, willow, hazelnut, birch, cedar, spruce and sumac, grasses, clover, berries	Brushy woodlands, swamps and heavy forests especially with dense evergreens	Hides in dense forest cover such as low- hanging evergreen branches	Snowshoe, north; White-tailed jackrabbit, western border
American Pine Marten	Voles, mice, squirrels, rabbits, small birds, nuts, fruits	Mature forests of dense evergreens or conifer- hardwood mix	Creates den in hollow logs and tree cavities. Note: Rarely seen	Northern third RARE
Deer Mouse Western Harvest Mouse White-footed Mouse	Seeds, insects, berries, nuts, corn, small grains, soybeans	Forest, grassland, old fields, woodland edge, grain bins	Build small, grassy nests lined with fur, feathers, and plants. May be found on the ground, in wood piles, under old stumps or logs, in holes in trees, inside walls of houses	Statewide, except Harvest Mouse is restricted to southwest
Woodland Jumping Mouse Meadow Jumping Mouse		Woodland Jumping, conifer forest or woodland; Meadow Jumping, forest edge and moist meadows	Hibernate in underground nests; summer nests of leaves and grass near surface or in dense vegetation	Meadow found statewide; Woodland in northern half
Mink	Muskrat, rabbits, mice, squirrels, snakes	Wetlands and forested streams	Burrows into banks of lakes, marshes, rivers	Statewide
Star-nosed Mole Eastern Mole Shrews (5 kinds)	Insects, earthworms, small animals, little vegetable matter	Grasslands, woodlands and wetlands	Moles burrow underground; Shrews build small nests of dry leaves and grasses under old logs, hollow stumps or under piles of grass or brush	Eastern Mole, south and west; Starnosed Mole, north and central; Masked and Shorttail shrews, statewide
Muskrat	Roots of cattails, arrow- heads, water lilies, rushes; periodically eats frogs, turtles, fish, crayfish, mussels	Marshes, ponds, slow streams, banks of larger rivers	Builds dens in banks or a hut of mud, cattail and bulrush	Statewide
Opossum	Carrion, small birds, frogs, mammals, fish, eggs, insects, fruits	Woodlands, hardwood swamps, farmland, hedgerows	Dens in tree cavities, burrows, or hollow logs	Southern half
River Otter	Fish, crayfish, birds, small mammals	Rivers, streams and lakes	Creates dens in stream banks with underwater entrance or builds den in hollow logs	Statewide, most abundant in northern half
Porcupine	Bark and twigs of pines and maples	Forests	Hides in trees, brush, caves, and rock crevices in forests with some evergreens. Note: Can be destructive to trees	Northern and central



Woodchuck



Mammal	Food	Habitat	Den Site	Distribution
Cottontail Rabbit	Raspberries and other briars, dandelions, plantain, clover, fruit; in winter, tree bark, dried corn	Forest, farmland with forest and grassland edges	Seeks shelter in dense shrubs, briars, and brush piles in sparse woodlands and farmlands. Note: Protect ornamental fruit trees and shrubs from rabbits in winter and early spring	Statewide
Raccoon	Frogs, fish, shellfish, small mammals, birds, eggs, reptiles, insects, fruit, field and sweet corn, nuts	Forest edge and farmland	Dens in hollow trees or logs, especially those near water. Note: Protect your sweet corn crops with electric fencing	Statewide
Striped Skunk Spotted Skunk	Insects, small mammals, eggs, snakes, crayfish, poultry	Farmland, woodland edge, brush along streams and ditches	Burrows among tree roots. Seeks shelter in abandoned buildings or under porches	Striped, statewide Spotted, no recent records
Fox Squirrel Gray Squirrel	Nuts, seeds, buds, fungi, bird eggs, corn	Hardwood forests, or small woodlots interspersed with farmland	Nests in hollow trees or builds leaf nests high in branches	Gray Squirrel, state- wide; Fox Squirrel, statewide except northeast
Southern Flying Squirrel Northern Flying Squirrel		Forests with large den trees	Nests in old woodpecker holes, sometimes in attics	Southern, southern half Northern, northern half
Thirteen-lined Ground Squirrel Franklins Ground Squirrel	Seeds, leafy material, insects, eggs	Grasslands, prairie, lawns	Underground burrows for raising young and hibernation	Thirteen lined, state- wide; Franklins, western
Red Squirrel	Pine nuts, seeds, berries, sap, mush- rooms, insects, bird eggs, fledgling birds	Forests with pine, fir, hemlock; some mixed hardwood forests	Dens in tree cavities, old woodpecker nests	Northern two-thirds
Voles (5 kinds, Meadow Vole is common) Lemmings	Grasses, sedges, roots, bulbs, clover, plantain, dandelion, goldenrod, yarrow, insects; in winter, bark on young trees and shrubs	Low, moist grasslands, forest, bogs for some kinds	Build nests of dry grasses and sedges under debris or in underground tunnels. Note: Protect young saplings with wire mesh	Statewide
LeastWeasel Short-tailed Weasel Long-tailed Weasel	Mice, voles, insects, small birds, chipmunks	Longtail, shorttail: forest, brush land, prairies; Least: meadows and fields	Dens in abandoned mole runs, or beneath a rock pile, wood pile or in abandoned buildings	Statewide
Gray or Timber Wolf	Deer, beaver, snowshoe hares, small mammals	Pack territories cover 20–110 square miles in dense expanses of forests	Den in 6–12 foot deep holes, hollow logs, or caves	Northwest and central
Woodchuck	Grass, clover, plantain, apples, insects, snails, crops, weeds, garden vegetables	Farmland, edges of brushy forests or creeks	Burrows in ground, wood piles, stone walls, old stumps, foundations of abandoned buildings; multiple entrances to den	Southern half

Birds

Birds, like mammals, are warm-blooded and come in all shapes and sizes. However, they are covered with feathers and have hollow, porous bones which allow all Wisconsin birds—even the heaviest wild turkey—to fly. They also lay eggs, which they must incubate for a period of several weeks to a month. They tend to be more active during the daylight and therefore are fairly easy to observe.

About 400 different kinds of birds have been observed and recorded in Wisconsin. Since birds are very active and have high body temperatures they must keep their internal fires stoked by consuming a lot of food daily. Some consume nearly their body weight in food each day. Many birds eat seeds, some eat fruit. Some insect-eating birds devour about 3,000 insects every 24 hours. Birds of prey consume large quantities of mice, voles and other rodents, large insects, and other birds. Each type of bird has a certain habitat preference. Some tolerate a wide variation in habitat while others are very specific in their habitat needs. For this publication, Wisconsin

Trumpeter Swan

Tundra Swan

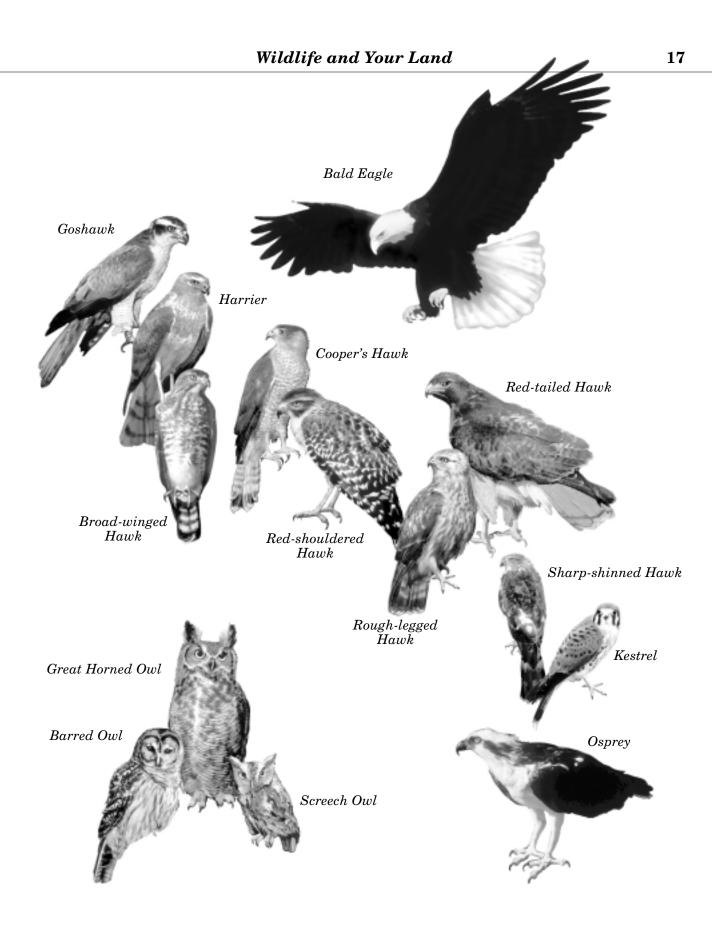
birds are grouped into several categories with only representative examples listed:

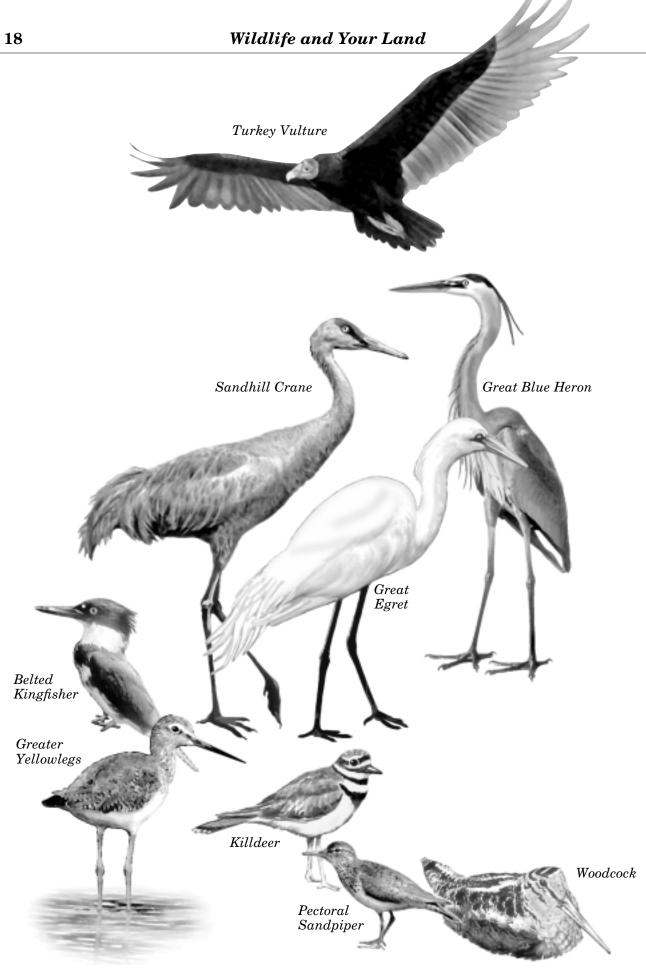
Birds of Prey Marsh and Shore Birds Waterfowl Upland Game Birds Migratory Songbirds Resident Birds

You can enhance your land for different types of birds. Putting out bird feeders wellstocked with sunflower seeds, thistle seed and suet is one easy way of attracting birds to your property. But don't forget that they need water and shelter, too. So plan on installing a year-round birdbath and either build or purchase a variety of nest boxes. If you have an old field, pasture, or wet meadow you can enhance it for grassland sparrows, ring-necked pheasant, bobwhite quail, eastern bluebird, and such warblers as yellow warbler or yellowthroat. If you live in the southern part of the state and have a woodland, consider planting oaks to encourage wild turkeys. In mature woodlands, leave snags for hawks, owls, woodpeckers, chickadees and many other cavity nesting songbirds. If you own or border a wetland, consider planting a minimum of 5 acres of dense, permanent grass cover to encourage mallard nesting. Also, be sure to leave snags, old oaks and willows as sources of nesting cavities for woodducks.

Birds of Prey	Food	Habitat	Nest Site	Distribution
Bald Eagle	Suckers, northern pike, muskellunge, bullheads, carp; occasionally geese and ducks; carrion such as deer, small livestock, waterfowl, fish during winter	Large rivers, lakes, reservoirs; found in concentration near dams along the Mississippi and Lower Wisconsin rivers	Roost and nests in large trees, often white pine. Nest is 4 feet in diameter and 3 feet deep	Northern one-third in spring and summer; rare in southeast, south central and eastern Wisconsin. Number of occupied territories has increased from 108 in 1973 to 645 in 1997
Northern Goshawk	Ruffed grouse, quail, ducks, chipmunks, red squirrels, snowshoe hare, poultry, mice, weasels, small hawks, owls, crows, doves, blue jays, thrushes, shrews, grasshoppers and caterpillars	Mixed hardwood and coniferous forests	Builds stick nest. Prefers large hardwood trees 30–40 feet above ground; frequently selects birch, aspen, maple, and beech for nesting trees; occasionally selects juniper, pine, spruce and fir. May build on top of old hawk nest	Northern one-fourth, and south into central Wisconsin
Northern Harrier (formerly Marsh Hawk)	Rodents and other small mammals, amphibians, snakes, birds, insects, fish	Wetlands, marshes, open fields, meadows	Nests on the ground in tall grasses in a meadow or swamp near water	Statewide; uncommon winter resident south
Broad-winged Hawk	Small mammals such as young rabbits, red squirrels, chipmunks, mice, moles, shrews; also snakes, frogs, lizards, small fish, larvae of large moths and butterflies, beetles, grasshoppers and crickets, crayfish; hunts from perch in woodlands or while flying over treetops or open meadows	Deciduous woodlands and mixed coniferous hardwoods around lakes, streams and swamps	Builds stick nests in birch, elm, maple, basswood or other deciduous trees, pine, hemlock; from 25–90 feet above ground; occasionally 3–10 feet above ground	Statewide, but uncommon summer resident west and central. Often seen in large numbers during fall migration
Cooper's Hawk	Northern flicker, quail, ring-necked pheasant, ruffed grouse, mourning dove, blue jay, ducks, least bittern, American crow, blackbirds, poultry, rabbits, squirrels, chipmunks, snakes, mice, grasshoppers, crickets and bats	Mixed, deciduous and sometimes coniferous forests, or along river edges in deciduous woods. Also, pine plantations in southeast Wisconsin	Builds stick nest with "cup" lined with bark flakes, occasionally rimmed with green tree springs in main crotch or on a horizontal limb. Nests 20–60 feet above ground in deciduous or coniferous trees; occasionally uses old crow nests or same nest from previous year, but typically builds a new nest in same area	Statewide but uncommon. Watch for it near birdfeeders in winter in southern third of state
Red-shouldered Hawk	Primarily amphibians, reptiles, fish and crayfish, but also insects, small birds and small mammals	Mature river bottom forests and wooded margins of marshes, often close to cultivated fields	Builds nests of mossy twigs and branches, lined with bark strips, bits of oak leaves and lichens in deciduous trees averaging 80–95 feet tall	Statewide but uncommon summer resident; uncommon winter resident south

Birds of Prey	Food	Habitat	Nest Site	Distribution
Red-tailed Hawk	Primarily small mammals such as rabbits; also birds, reptiles, and some insects	Woodland edge in variety of open habitats including pasture, field, meadow and swampy areas	Builds nests of sticks in tops of large deciduous trees, usually 35–90 feet above ground	
Rough-legged Hawk	Primarily small mammals	Grasslands, open marshes and fields	Doesn't nest in Wisconsin but nests primarily on cliffs along river bluffs	Statewide in winter only
Sharp-shinned Hawk	Small birds up to pigeon size; also small mam- mals, reptiles and insects	Coniferous and deciduous forests, conifer plantations and conifer swamps	Nests primarily in conifers, usually 30–35 feet above ground. Nest is a compact platform of twigs, sometimes lined with smaller twigs or bark strips	Northern half
American Kestrel	Insects such as grasshoppers, crickets and beetles; also mice and other small mammals, birds, lizards, toads, frogs and small snakes; hunts from a perch or while hovering over areas with short grassy cover	Forest openings, marshes, grasslands, farmland, woodland edges. Commonly seen on utility wires	Nests in nest boxes and tree cavities; nest sites are usually along streams, ponds or forest edges, normally 10–35 feet above ground	Statewide
Osprey	Primarily fresh panfish; also frogs, snakes, ducks, crows and small mammals	Lakes, rivers, marshes and reservoirs	Nest site is near or in water atop dead or living trees, power poles, old eagle, gull or great blue heron nests, artificial nesting structure; nest site may be used by same pair year after year	Northern two-thirds in summer
Barred Owl	Variety of birds, mice and other small mammals, fish, frogs, salamanders, snakes, crayfish and large insects	Oak and mixed deciduous and coniferous forests bordering lakes, steams, swamps, marshes or wet meadows	Nests 18–50 feet above ground in tree cavities, hollows in top of broken tree stub or nests of crows and squirrels	Statewide
Great Horned Owl	Rabbit, squirrels, skunk, woodchuck, opossum, gopher, geese, turkey, pheasant, quail, mice, rats, weasels, mink, crow, crayfish, reptiles, amphibians, fish and large insects	Farm woodlots, open coniferous, deciduous or mixed woods, riverbottom forests, marshes, swamps, large city parks and orchards	Nests up to 70 feet high in large trees, usually in the nests of red-tailed hawks, osprey, bald eagles, heron or crow. Sometimes nests in tree cavities	Statewide
Eastern Screech Owl	Mice and other small mammals, grass- hoppers, locusts, moths, beetles and other insects, spiders, fish, crayfish, salamanders, reptiles, songbirds	Variety of wooded habitats, especially open woods adjacent to meadows, marshes or fields. Also, orchards and shade trees in towns and cities	Nests 5–35 feet high in tree cavities, abandoned woodpecker holes; also nests in wood duck nest boxes	Statewide, except rare in north





Nest Site

Habitat

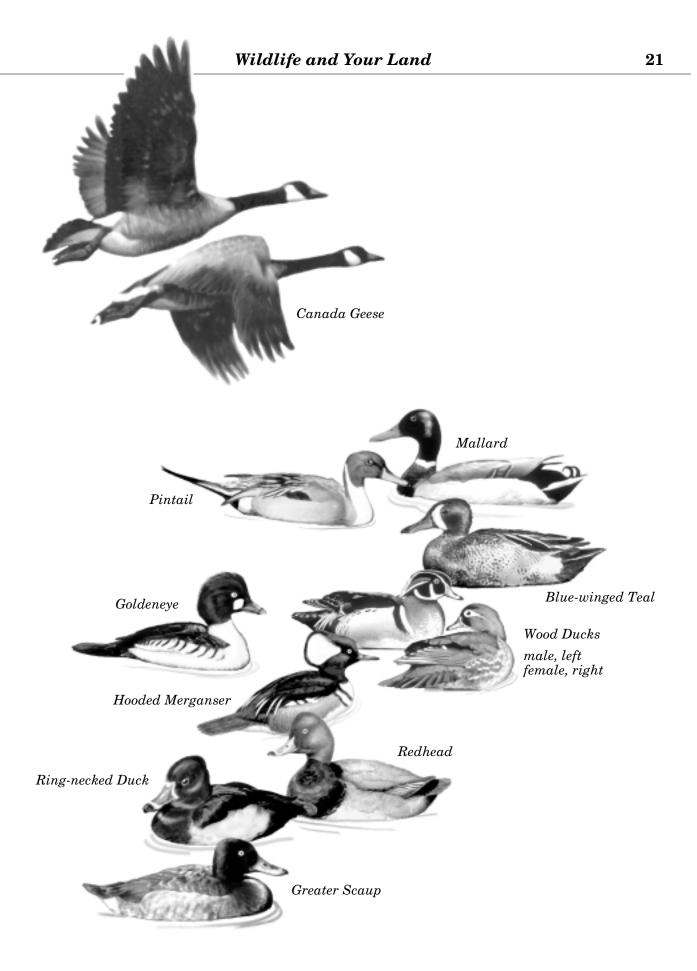
Birds of Prey

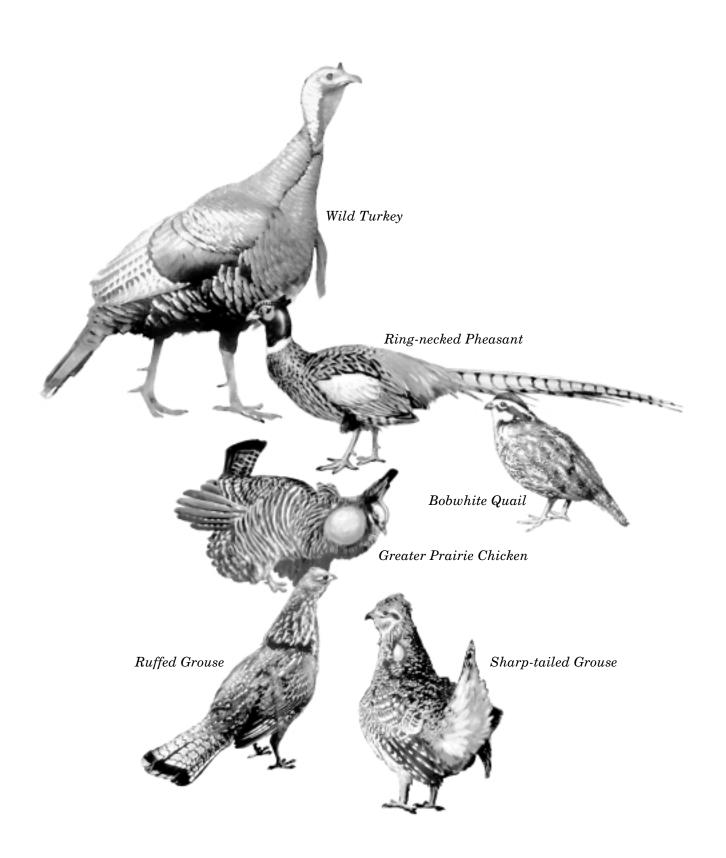
 \boldsymbol{Food}

Distribution

Turkey Vulture	Fresh or decayed carrion, including almost all wild and domestic animals; frogs, snakes, birds and fish	Hilly, forested regions with exposed perches. Shaded nest sites on cliffs and in mature trees	Lays egg directly on the ground beneath fallen trees or tumbled boulders, in piles of discarded brush, logs and/or rocks or in abandoned buildings, in small caves, on rock ledges, in hollow logs and in large hollow trees. Nearly every site is isolated from disturbance by people	Statewide
Marsh and Shore Birds	Food	Habitat	Nest Sites	Distribution
Sandhill Crane	Mice, frogs, insects, roots, shoots of grains, grasses, seeds	Grasslands, sedge meadows, marshes, farmlands, bogs, sloughs, lakes, ponds, river deltas	Nests on mound of emergent vegetation, grass, moss, or mud among rushes, sedges and other tall, dense vegetation	Statewide with heaviest nesting concentrations in central Wisconsin
Great Egret	Fish, insects, frogs, crayfish, salamanders, snakes, snails and small mammals	Marshes, river bottomlands, shallow lakes, bays and streams	Builds large stick nests in trees 1–40 feet above ground	Statewide
Great Blue Heron	Fish, crayfish, frogs, salamanders, snakes, insects, leeches and small mammals	Common in marshes, rivers and streams, bottomlands	Builds large stick nest in trees often above 50 feet	Statewide
Belted Kingfisher	Small fish, frogs, insects, crayfish, mollusks and mice	Edges of lakes, ponds, rivers and streams	Burrows 3–6 feet into a stream bank near water, 1–3 feet from top of bank; builds a nest cavity often lined with disgorged food pellets	Statewide
Sandpipers, Plovers and other shorebirds (Pectoral and Spotted Sandpipers, Greater and Lesser Yellowlegs, Piping and Semi- palmated Plovers, Killdeer, Sanderling)	Small crustacea, aquatic worms and other aquatic invertebrates found in mud, wet sand or floating in water	Muddy and sandy shorelines. Some occur in open fields and meadows	Nest on ground. Most do not build nests. Need isolated areas free from disturbance of humans or pets	Some statewide, others restricted, others only migrate through the state
American Woodcock	Insects, earthworms	Damp woods	Nest on ground, spectacular courtship flights on early spring evenings	Statewide, can be seen in large numbers during fall migration

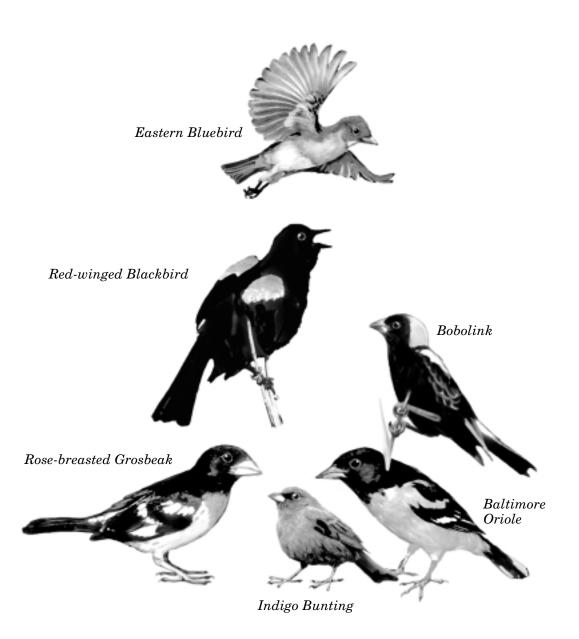
Waterfowl	Food	Habitat	Nest Sites	Distribution
Canada Goose	Corn, small grains, alfalfa, seeds, grasses, sedges, berries, crustaceans, small mollusks, large insects	Farmlands, lakes, rivers, marshes; frequent urban areas, especially parks and golf courses	Builds nest of grasses and feathers on ground in marshy areas. Note: Can be a nuisance in agricultural and urban areas	Statewide, especially Horicon Marsh, Grand River Marsh, Pine Island, Crex Meadows, Theresa Marsh
Dabbling Ducks (13 kinds including Pintail, Shoveler, Gadwall)	Seeds, aquatic vegetation, insects, grain, grasses, sedges	Wetlands, shallow, weed-filled waters	Do not commonly nest in Wisconsin, but need protection of marsh vegetation and shallow, open water	Statewide
Blue-winged Teal	Duckweed, grasses, smartweed, sedges, wild rice, corn, invertebrates	Wetlands in farmland	Nests in short grass around edges of wetlands, especially in ungrazed fields, semipermanent shallow potholes surrounded by hayfields or grasslands	Southeast and east- central
Mallard	Pondweeds, smartweeds, bulrushes, millet, wild rice, insects, mollusks	Marshes, ponds, rivers and farmlands	Nests primarily in upland grasses, yet can be found nesting in cattails	Statewide
Wood Duck	Acorns, nuts, water lily seeds, beetles, bugs, spiders	Forested wetlands	Nests in old woodpecker holes in old trees or in wood duck nest boxes set 15 feet above ground, over water	Statewide
Diving Ducks (20 kinds, including Scaup, Goldeneye, Bufflehead, and Ruddy Duck)	Aquatic plants, insects, crayfish, small fish, mollusks, grasses and sedges	Most prefer larger lakes and rivers; a few prefer small lakes, ponds and sloughs; rarely come to land	Many diving ducks do not nest in Wisconsin	Statewide, especially Lake Michigan, Mississippi River, Lake Winnebago
Redhead	Submerged leaves, seeds and stems of aquatic plants such as sago pondweed, wild celery, algae, and wild rice	Open waters of lakes and rivers	Nests primarily in prairies and parklands of the U.S. and Canada; migrates through Wisconsin in spring and fall; winters in lakes, coastal bays and inland marshes along the Atlantic and Gulf of Mexico	Statewide
Ring-necked Duck	Submerged leaves, seeds and stems of aquatic plants such as sago pondweed, wild celery, algae, and wild rice	Open water of lakes near woodlands	Nests on the ground by water in clumps of tall plants in shallow water	Northern third
Scaup (Greater or Lesser)	Aquatic plants, insects, crayfish, small fish and mollusks	Large, open water lakes and rivers	Doesn't nest in Wisconsin, most abundant in spring and fall migration	Statewide
Mergansers (3 kinds: Common, Hooded and Red- breasted)	Fish	Wooded lakes and streams, large rivers such as Mississippi	Common and Hooded mergansers nest in tree cavities; Red-breasted nests on the ground	Statewide, common along Mississippi River in March and early April





Upland Game Birds	Food	Habitat	Shelter	Distribution
Greater Prairie Chicken	Seeds, berries, insects, grain, buds, leaves, tender vegetation	Large expanses of open grasslands with some shrubs and wet marsh areas	Nests on ground	Only in isolated spots in central Wisconsin
Ruffed Grouse	Aspen buds and catkins, hazelnuts, acorns, catkins, berries, wild grape, clover, insects	Forests with varying ages of aspen and alder thickets	Nests on the ground in thick young aspen stands	Statewide, restricted areas in south
Sharp-tailed Grouse	Seeds, berries, insects, buds, leaves and tender vegetation	Scrub oak, barrens, earliest stages of forest succession with openings and scattered thickets	Nests on ground	Northwest
Ring-necked Pheasant (Non-native)	Corn, grains, weed seeds and insects	Farmland with hayfields, grasslands and wetlands intermixed	Builds nest on ground in tall, dense grasses	Southern half
Bobwhite Quail	Wild grape, bittersweet, sumac, corn, soybeans, grasshoppers, crickets, beetles	Farmlands interspersed with brushy areas, grassy marshes, hedgerows or thickets of hazel, raspberry, grapevines, willow and elderberry	Nests on ground. Live in groups called "coveys"	Southwest
Wild Turkey	Acorns, insects, berries, seeds, alfalfa, corn. leaves, catkins, nuts	Farmland interspersed with oak-hickory woodlands	Nests on ground in dense cover	Southwest, southern counties, some northeast counties, and some northwest counties

Migratory Songbirds	Food	Habitat	Nest Sites	Distribution
Northern Oriole (Formerly Baltimore Oriole)	Blackberries, blueberries, elderberries, grapes, pears, peas, caterpillars, ants, beetles, spiders, grasshoppers, bugs, wasps; at feeders: orange halves, small trays of grape jelly, mealworms, broken walnuts, apple slices, suet and bread	Open deciduous woods, forest edges, parks, residential areas, farmlands, orchards, river bottoms, upland hardwoods	Weaves an intricate pouch-like nest, which hangs pendulously 25–30 feet at the tip of branches of elm, cottonwood, birch, boxelder, aspen, oak, maples, willows or apple trees; Nest is built with milkweed down, dog hairs, weed fibers, wool and yarn or any other fibrous material	Statewide
Red-winged Blackbird	Ants, beetles, canker- worms, caterpillars, grasshoppers, grubs, weevils, snails and spiders; barley, bristlegrass, canary- grass, corn, millet, oats, peanuts, ragweeds, wheat, crabgrass and sunflowers	Cattail marshes, wet meadows, swamps, pastures, hedgerows, grasslands, field edges, roadside ditches	Weaves nest in cattails, rushes, sedges, reeds or bushes, near or over water, usually no more than 3 feet above ground	Statewide
Eastern Bluebird	Spiders, wasps, caterpillars, worms, beetles, grubs, crickets, grasshoppers, weevils, ants, centipedes, cutworms, snails, sowbugs, blackberries, blueberries, cherries, cotoneaster, Virginia creeper, dogwoods, elderberries, chokeberries, eunoymus, poison ivy, raspberries, service berries; at feeders: dried currants, raisins, peanuts, peanut butter, pecans, bread, cake, pitted dates, dried figs	Woodland edges, orchards, gardens, meadows, cemeteries, golf courses, pastures	Builds nest in bluebird nest boxes, rotten fenceposts, natural tree cavities, old woodpecker holes; most attempt to re-nest and produce a second brood	Statewide, but uncommon south and east
Bobolink	Insects and seeds of weeds and grasses	Hayfields, open grasslands, old fields, pastures, sedge and grass meadows	Builds nests in a slight natural hollow or scrape in the ground in dense stands of alfalfa, clover, timothy, or weeds	Statewide
Indigo Bunting	Insects, seeds of herbs and grasses, elder- berries, blueberries, blackberries, straw- berries	Forest edges, open brushy fields, roadside thickets	Builds a cup of dried grasses and plant fibers 1–12 feet above ground in crotch of a bush, shrub or low tree, or in a tangle of berry vines	Statewide
Rose-breasted Grosbeak	Seeds, grains, insects and small invertebrates	Deciduous or mixed second-growth woods, swamp and stream borders, old orchards, suburban trees, edges of woods and pastures	Builds a flimsy nest of small twigs, weed stems and plant rootlets in the fork of a deciduous tree or shrub at 4–15 feet above ground	

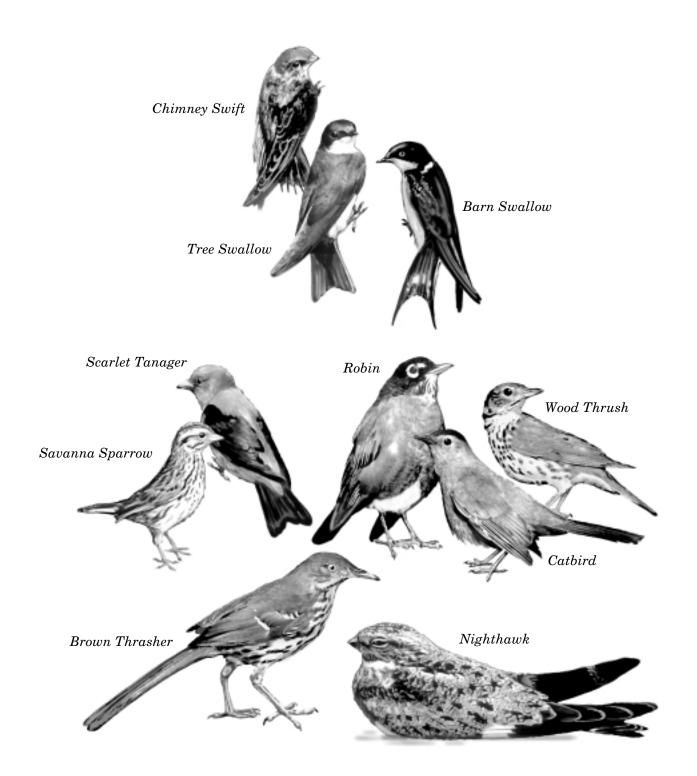




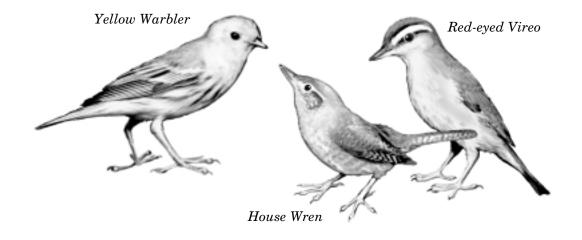


Migratory Songbirds	Food	Habitat	Nest Sites	Distribution
Ruby-throated Hummingbird	Flower nectar and pollen from: cardinal flower, columbine, coralberry, buckeye, scarlet runner beans, bee balm (monarda), evening primrose, gladiolus, hibiscus, honeysuckle, lilies, butterfly weeds, morning glory, nasturtium, petunia, phlox, snapdragon, thistle, trumpet creeper, weigela, zinnia, hosta, coral bells; hummingbird feeders filled with red-colored sugar water; very small insects attracted to nectar and sometimes flying insects attracted to uneaten prey at hawk nests	hardwood forests, meadows, woodland edges and clearings, orchards, backyard gardens	Builds tiny nest in branches the size of walnut halves, typically 10–20 feet above the ground; often near or sometimes directly over water or near woodland trails on a horizontal branch; Nest is made of spider silk and plant down and covered on outside with lichens	Statewide
Dark-eyed Junco	At feeder: black oil sunflower seeds, white proso millet, cracked corn, corn, grain sorghum, peanuts, peanut butter, old bakery goods such as wheat or corn bread and pie crusts, broken walnuts, wheat, oatmeal, pumpkin seeds; In the wild: amaranth, crabgrass, barnyard grass, bristle grass, canary grass, dropseed, goosefoot, wild hemp, oats, petunia, ragweed, switchgrass, wheat, lamb's quarters, chickweed, purslane, wild sunflower, pine seeds; weevils, beetles, flies, moths, grasshoppers, ants, spiders	Coniferous or mixed forests, and forest edges. In winter at suburban and rural bird feeders	Commonly builds compact nest of grasses, rootlets, and moss on the ground, concealed beneath weeds and grasses; occasionally may place nest up to 8 feet above ground in shrubs or trees Breeds in boreal forest and conifer plantations in northern counties	Statewide in winter
Purple Martin	Flying insects, some ground insects and spiders	Farmlands, parks, suburban yards, preferably near water; also marsh edges, lake shores, meadows near pools and open, cut-over woodlands near water	Nests in colonies in purple martin houses or sets of hanging gourds set 15–20 ft. above ground; sometimes in hollow tree cavities	Statewide, but more numerous in eastern and southeastern Wisconsin
Eastern Meadowlark Western Meadowlark	Mainly insects in summer; seeds of waste grain, weeds and grasses in winter	Open grasslands including hayfields, meadows, pastures, prairies; Eastern prefers pastures	Builds nest in a natural hollow or scrape on the ground. Weaves a loose dome-shaped roof over nest	Statewide

Migratory Songbirds	Food	Habitat	Nest Sites	Distribution
Nighthawk Whip-poor-will	Flying insects	Nighthawks found in cities on gravel rooftops, railroad right-of-ways, sand dunes; sandy rural areas, plowed fields, plains, remote blacktop areas; whip-poor-wills found in open hard- woods or mixed oak and pine forests	Neither bird builds nests; nighthawks lay eggs on gravel rooftops or on bare ground; whip-poor-wills lay eggs on ground on dead leaves	Statewide
American Robin Thrushes	Earthworms, wild berries and fruit such as crabapples, apples, cherries, elderberries, blackberries, blueberries, cranberries and a variety of insects and spiders	Deciduous or mixed coniferous-deciduous forests, also riverbottom forests; robins very common in suburban yards, parks	Robins build nest of mud and grass in deciduous or coniferous trees or shrubs, on nest platforms in open garages, church ledges or abandoned buildings	Some statewide, a few restricted to northern forests
Grassland Sparrows	Insects, weed seeds, spiders	Habitat types vary among species, but generally include pastures, hayfields, open grasslands, marshes, grassy dunes, wet meadows, prairies	Build nests of grasses low to or on the ground	Statewide
Barn Swallow	Flying insects	Farmsteads with barns and outbuildings, open grasslands, open forests, lakeshores	Builds mud nests on rafters of old barns or buildings; sometimes under bridges or in culverts	Statewide, but leaves state in August
Tree Swallow	Flying insects; wild berries and seeds in cold weather when insects are scarce	Open woodlands and farmlands near ponds, streams and lakes; also river bottomlands, beaver ponds, wooded swamps and marshes where dead trees stand in or near water	Builds nest of grasses in bluebird nest boxes, tree cavities and abandoned woodpecker holes about 3–15 feet above ground	
Chimney Swift	Flying insects including beetles, flies, ants, bugs; sometimes caterpillars hanging from tree branches	Cities, towns and farms	Builds nest on walls of chimneys, silos, old wells or in little-used garages, barns and shacks; sometimes in tree hollows or stumps	Statewide
Scarlet Tanager	Variety of insects and other small inverte- brates; also some wild fruits	Mature oak forests, bottomland hardwood forests, groves, parks, orchards	Builds a small, flimsy cup on horizontal oak, maple or elm limb about 8–15 feet above ground	Statewide
Brown Thrasher Gray Catbird	Insects, spiders, worms, small invertebrates, berries and fruits	Brushy woods, woodland edges and thickets, near suburban or rural homesteads, dry marsh edges, roadside shrubs, abandoned fields and fencerows	Thrashers build bulky nest from 1–3 feet above the ground but sometimes on the ground under tangled thickets. Catbirds build nests 2–10 feet above ground in dense willow and alder thickets, lilac and berry bushes or in small trees bordering streams	Statewide

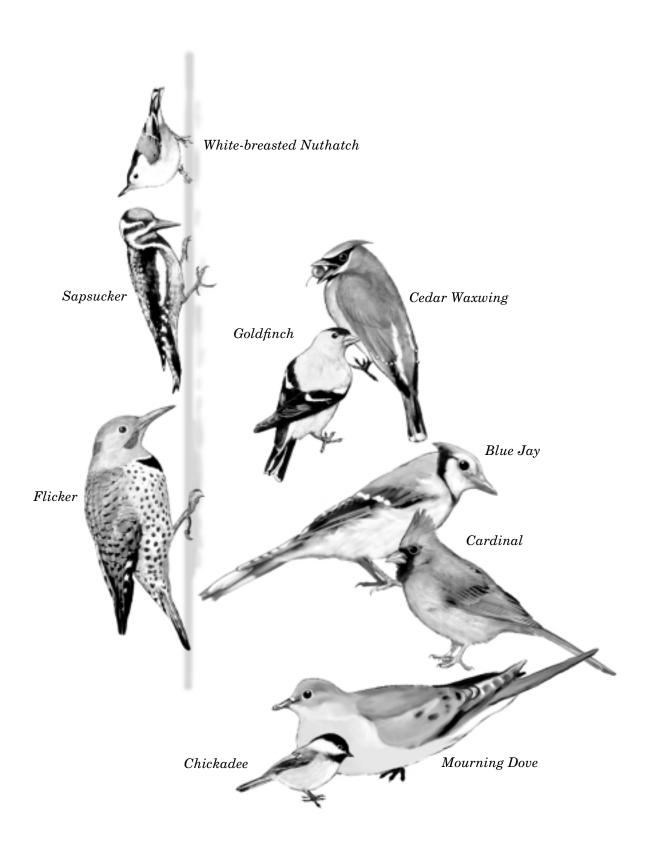


Migratory Songbirds	Food	Habitat	Nest Sites	Distribution
Vireos (7 kinds, red- eyed vireo typical; a few are rare)	Small insects and caterpillars	Woodlands, deciduous thickets, brambles, undergrowth, open mixed northern hardwood-coniferous forests, mature wet forest, second-growth woods and residential areas	Weaves nests of bark strips, cobwebs, fine grass high in tree tops	Red-eyed Vireo and Warbling Vireo found statewide, others restricted or not as common
Warblers (37 kinds, yellow warbler typical, several are rare)	Small insects, small invertebrates; occasionally may eat seeds and berries particularly during colder seasons when insects are not common	Variety of forest types and river bottomland habitats. Each kind of warbler has its own specific habitat requirements	Weaves small, round, cupped nests of grasses and other plant fibers, placed from ground level to tops of trees, depending on the type of bird	Few statewide, most restricted during nesting season to northern and northeastern counties; some restricted to floodplain forests
House Wren	Insects, small invertebrates	Woody vegetation in suburban and rural areas; frequents woodland edges, open forests and clearings	Wrens build nests in tree cavities, fenceposts, stumps, abandoned woodpecker holes or nestboxes with openings preferably 1 inch in diameter	Statewide

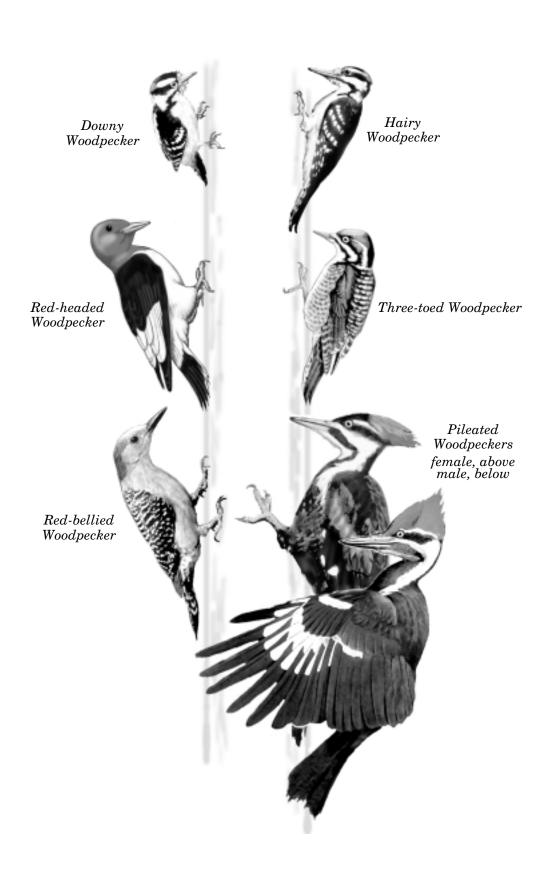


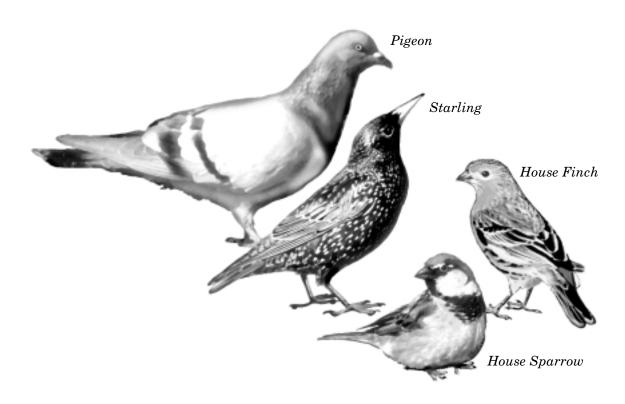
Resident Birds	Food	Habitat	Nest Site	Distribution
Northern Cardinal	At feeders: gray-stripe and black oil sunflower seeds, safflower seeds, and peanut hearts, bread, cantaloupe seeds, peanut butter, pumpkin seeds, squash seeds, watermelon seeds, dried apples and raisins; In the wild: cedar berries, cherries, blackberries, elderberries, grapes, mulberries, raspberries, plums, strawberries, viburnum, blueberries, barley, bristlegrass, buckwheat, corn, hazelnut, hackberries, millet, oats, ragweed	Thickets, forest edges, groves, suburban gardens, parks, small rural and urban woodlots, farmsteads, urban backyards, open swamps	Builds loose-knit, but bulky, nest of twigs, vines, bark strips, grasses and places it in dense shrubbery of conifer tree or small deciduous tree or vine/briar tangle; generally less than 10 feet high	Statewide
Black-capped Chickadee	At feeders: black oil sunflower seeds, peanuts, peanut butter, pumpkin seeds, suet, old bread and doughnuts; In the wild: insects such as moth eggs, katydids, spiders, caterpillars, beetles, flies, wasps; also blueberries, blackberries, wild cherries and seeds from goldenrod, ragweed, hemlock; fat from dead animals such as whitetailed deer during fall and winter	Deciduous and coniferous forests, rural woodlands, suburban and rural areas with mature trees and orchards; favors edge	Excavates hole about 4–10 feet above ground in very soft, rotting wood of dead tree such as aspen, paper birch, yellow birch, willow, basswood, maple or white ash; or builds nest in fence post; will use existing cavities or bird houses; nest cavities frequently lined with rabbit fur	Statewide
Mourning Dove	Insects, grain, birdseed, snails, fruits, nuts; feeds primarily on weed seeds and winter grains, sunflowers, sorghum, ragweed, millet, barnyard grass, California poppy, canary grass, foxtail, bristlegrass, wild hemp, Japanese millet	Open mixed woods, Christmas tree farms, orchards, suburban areas, farmlands, wood edges, church and cemetery sites	Builds a platform of loosely woven sticks on horizontal branches in shrubs and trees, especially conifers about 10–25 feet above ground	
Northern Flicker	Primarily ants; also beetles, caterpillars, cockroaches, grasshoppers, crickets, wild berries, red cedar, plums, hawthorn, hackberry seeds, corn, acorns, oats ragweed, rye, wheat; at feeders: suet, peanut butter, raisins and apples	Farm groves, urban backyards, orchards, open deciduous and coniferous forests, parks and savannas	Excavates a nesting cavity in living tree, dead tree, utility pole, fencepost or side of building 2–60 feet above ground	Statewide, but uncommon winter resident in southern Wisconsin; rare winter resident in central Wisconsin

Resident Birds	Food	Habitat	Nest Site	Distribution
American Goldfinch	Weed seeds from ragweed, dandelion, goldenrod, chickweed; some insects such as aphids, caterpillars, plant lice; at feeders: thistle (niger) seed, finch mix, black oil sunflower seed, cracked nut meats, millet seeds	Mixed woodlands, meadows, weedy fields, farmland, urban backyards, fencerows, orchards, pastures with scattered trees, edges of forest and swamp	Builds nest of thistle and cattail down late in summer; places nest in upright branches or horizontal limbs of a wide variety of trees and shrubs usually about 5–15 feet above ground	Statewide
Blue Jay	At feeders: gray-stripe sunflower seeds, safflower seeds, peanuts, peanut butter, pumpkin seeds, squash seeds, suet, bread, crackers, raisins, apples; In the wild: blueberries, cherries, elderberries, strawberries, service berries, grapes, mulberries, plums, choke cherries, acorns, sumac seeds, corn, oats, wheat, buckwheat, sorghum, nuts, hazelnuts, pine seeds, insects, animal and plant matter	Variety of wooded habitats, farms, parks, cities and suburbs	Builds bulky nest of twigs, bark, leaves, mosses and plant fibers about 10–25 feet above ground and hidden in crotch of conifer or deciduous tree; also nests occasionally in shrubs	Statewide
White-breasted Nuthatch Red-breasted Nuthatch	At winter feeders: black-oil sunflower seeds, safflower seeds, suet; also eat acorns; red-breasted pries open conifer cone scales and removes seeds for much of its food; In spring and summer: beetles, ants, spiders and other invertebrates; sometimes white- breasted uses nectar feeders that have been placed for Baltimore orioles	White-breasted prefers deciduous and mixed woodlands, urban and rural yards; red- breasted prefers conifer forests	Nests in old woodpecker holes about 5–50 feet above the ground (white-breasted) or about 15 feet above ground (red-breasted), birdhouses (rarely birdhouses for red- breasted)	White-breasted, state-wide;Red-breasted, north
Yellow-bellied Sapsucker	Cambium and tree sap and insects attracted to the sap pits, which it drills in a regular series of pit-like holes in trees; flying insects, acorns; will visit feeders for suet, peanut butter, cracked walnuts, fruits; will also drink at nectar feeders	Deciduous, coniferous and mixed deciduous-coniferous forests, especially with aspen. Can be found during migration in orchards, parks, farmlands, or woodlands	Excavates cavity in live or dead trees from 3–35 feet above ground; especially favor aspen infected with fungus	Statewide, but uncommon during summer in central and southwest Wisconsin; uncommon in winter in southern Wisconsin; rare in central Wisconsin
Cedar Waxwing	Wild fruits and berries, particularly red cedar berries, insects	Open woods, orchards, farmland	Builds nest of loosely woven grasses and fibers placed on horizontal limb of a tree 4–50 ft. above ground	Statewide



Resident Birds	Food	Habitat	Nest Site	Distribution
Downy Woodpecker	Insects including wood- boring beetle larvae and ants; wild berries, sumac seeds, corn; At feeders: sunflower seed, suet, peanuts, peanut butter, meat scraps, cracked pecans, cheese	Urban areas, farmsteads, small woodlots, boreal/hardwood forests, orchards, bottomlands	Excavates hole 8–18 inches deep in living or dead trees, stump, fencepost, or in rotting wood often 10–30 feet above ground	Statewide
Hairy Woodpecker	Beetles, ants, aphids, millipedes, spiders, caterpillars, insect larvae, cherries, apples, mulberries, blackberries, service berries, poison ivy berries, dogwood, choke cherries, acorns, corn, hazelnuts; At feeders: sunflower seed, suet, broken walnuts, peanuts	Farmlands with woodlots, swamps, hardwood and coniferous forests, orchards, urban areas	Excavates nest cavities in dead or living trees with decayed heartwood from 5–30 feet above ground	Statewide
Three-toed Woodpecker	Insects and wood-boring larvae of moths and beetles, fruits, acorns, tree cambium	Northern tamarack- spruce bogs and fir forests, burned areas and swampy forests with dead trees	Excavates cavity from 5–12 feet above ground in live or dead pine, spruce, aspen and cedar	Northern boreal/conifer forests
Pileated Woodpecker	Carpenter ants, wood- boring beetles and other insect larvae, sumac seeds, wild fruit, acorns; At feeders: suet	Mature hardwood forests, groves of large hardwood trees, mature forests near rivers and lakes	Excavates large, deep cavities with oblong entrances in very large trees at least 16 inches in diameter, 25–50 feet above ground	Statewide, but more common in north- central and southwest
Red-bellied Woodpecker	Wood boring beetles, crickets, ants, grasshoppers, insect larvae; several wild fruits, seeds, acorns, hazel and hickory nuts; At feeders: suet, orange halves, apples, peanuts, peanut butter, sunflower seed, shelled corn	Deciduous forests, parks, orchards, gardens, backyards	Excavates nest cavities about 13–40 feet above ground in dead oak, birch, maple, apple and butternut trees; tree stumps, utility poles and wooden buildings	Fairly common in western and southern Wisconsin; uncommon in northern and eastern Wisconsin
Red-headed Woodpecker	Beetles, ants, caterpillars, bugs, honeybees, acorns, beechnuts, apples, corn, berries; At feeders: suet, sunflower seeds	Prefers mature oak woodlots, farmland woodlots, orchards, mixed hardwood forests	Excavates cavities usually about 20–30 feet above ground in trees; sometimes excavates cavities in fence posts	Statewide, but uncommon winter resident in southern and central Wisconsin





Non-native Birds	Food	Habitat	Nest Sites	Distribution
House Finch	Weed seeds such as wild mustard, mullein, pigweed, chickweed, aphids, caterpillars, sunflowers, thistle seed and finch mix	Farms, cities, parks, open woods, adapts to human dwellings	Builds nest of twigs, grasses and debris placed in tree cavities, bird boxes and building ledges	Southern half. Native to Southwestern U.S., but were shipped illegally to New York as "Holly- wood Finches;" the species has since escaped and spread to new territories
Pigeon (Rock Dove)	Seeds, waste grain, insects, fruit	Farmland, cities	Roosts in old buildings, barns and under bridges or cliffs; Droppings can deface buildings and sidewalks	Statewide. Native to the Old World north of the equator
House Sparrow	Seeds in wild and at bird feeders, insects, bread, old bakery goods	Around human dwellings	Builds ball of grasses, weeds, trash placed in bluebird houses, porch rafters, holes in walls, awnings, behind shutters; competes with bluebirds and tree swallows in nestboxes	Statewide. Native to Eurasia and North Africa
Starling	Insects, grubs and other lawn pests, mulberries and other berries	Around human dwellings, especially in farm country; cities, suburbs, orchards, parks, gardens	Fills cavities in trees or birdhouses with a mass of grasses, corn husks, cloth, feathers; competes with purple martins in birdhouses	Statewide. Native to Eurasia

Reptiles and Amphibians

Reptiles and amphibians, collectively known as "herptiles" or "herps" for short, are coldblooded animals unlike the warm-blooded mammals and birds. The reptiles include snakes, lizards and turtles; amphibians include frogs and salamanders. Most snakes, all lizards and some turtles prefer to live on land. Most turtles prefer a life in or near water. However, all amphibians must lay their eggs in water or very damp habitats. Therefore, wetlands—from marshes, swamps and moist woodlands to lakes, streams, ponds and temporary pools—are essential to the survival of amphibians. Many reptiles, on the other hand, are not as dependent on wetlands as are the amphibians. Because the thick, hard scales which cover reptilian bodies provide protection from drying air and sun, most Wisconsin snakes and lizards live far from water. Still, aquatic turtles and water snakes are very dependent on wetlands.

Amphibians are also different from reptiles in that they go through a metamorphosis, or change in body shape. Just think about frogs in their early tadpole stage. Lastly, all Wisconsin herptiles are silent creatures except for the unique vocalizations of the frogs. Who has not appreciated hearing the jingling of spring peepers or the trilling of toads on a warm spring night?

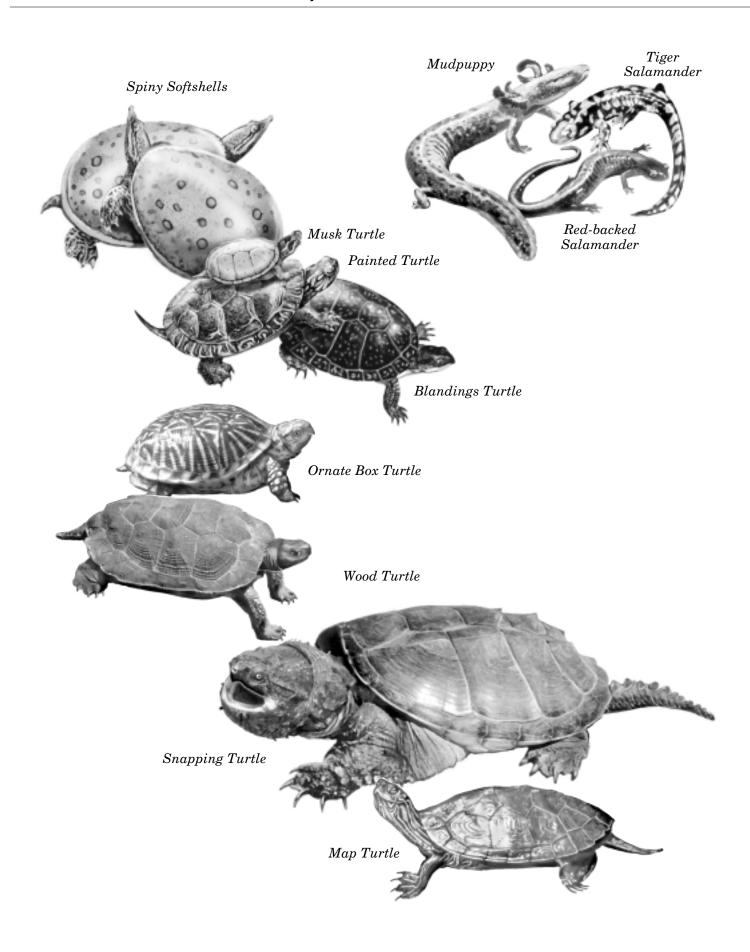
Herps are very beneficial to people. Several kinds of snakes, for instance, consume large quantities of rodents each year. Only two, fairly rare kinds of snakes are poisonous: the timber rattlesnake found in the rugged bluff country along the Mississippi and Lower Wisconsin Rivers, and the Massasauga, a shy, retiring rattler of the swamps. Frogs and toads also do their best to reduce the supply of insects including mosquitoes, black flies, and other pesky flying insects. As with birds and mammals, herps are important in their own right. Both reptiles and amphibians

serve as food for other, larger animals, so all play a critical role in the circle of life and the cycles of nature.

Landowners don't often think of attracting reptiles or amphibians to their property. These cold-blooded, "slimy" or "scaly" creatures just don't seem to have the aesthetic appeal that the "warm fuzzy" birds and mammals have. Nevertheless, since this group of animals plays an invaluable role in the ecological scheme of things on the Wisconsin landscape, you may want to plan some projects to encourage their presence. You could, for instance, restore a wetland on your property where one once existed and may have been filled in or plowed under. Or, consider improving your woodland by leaving downed timber on the woodland floor, especially in moist lowland woods where salamanders and some frogs would benefit. Your property's biodiversity and overall natural health will be greatly increased.

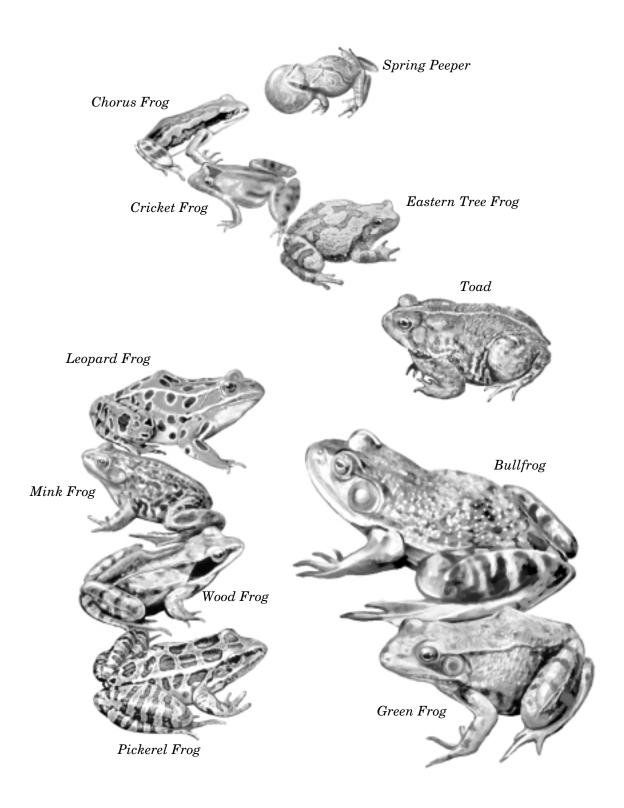
Read more about reptiles and amphibians in *Natural History of Amphibians and Reptiles in Wisconsin* by Richard Carl Vogt, published 1981 by the Milwaukee Public Museum and Friends of the Museum.

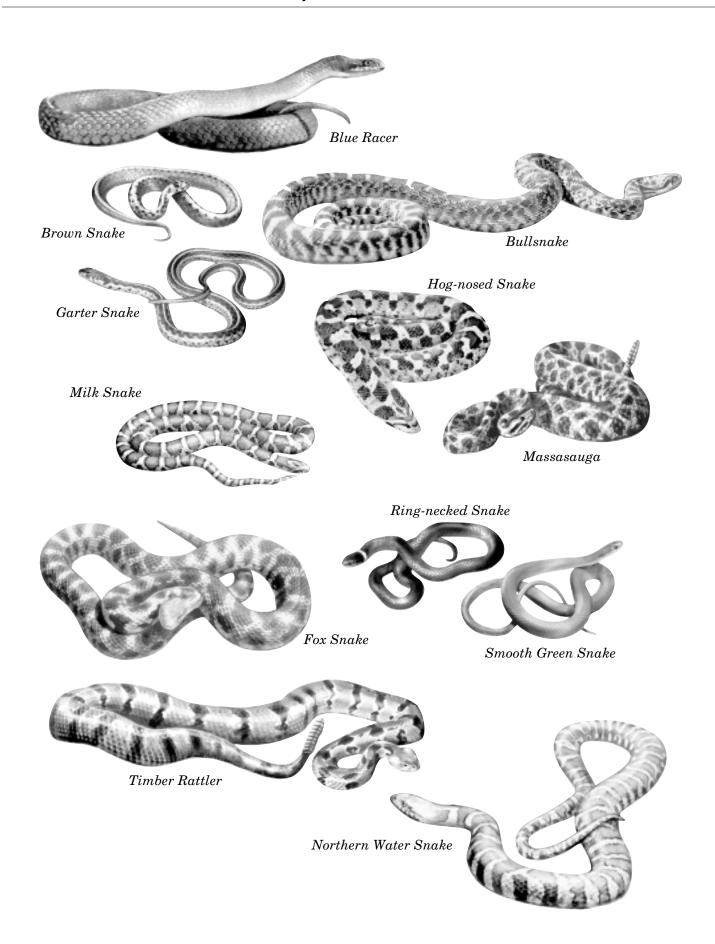




Turtles	Food	Habitat	Shelter	Distribution
Blandings Turtle	Prefers crayfish, insects, earthworms, vegetation, berries	Shallow, weedy bays of rivers, lakes and marshes	Seeks shelter inside shell or on marsh bottom or in submerged vegetation	Statewide except for six north-central counties, THREATENED
Ornate Box Turtle	Insects, cactus and other succulent plants, berries	Dry, sandy floodplain, prairies adjacent to the lower Wisconsin River	Hibernates in self- excavated or mammal burrows; hides under bushes or in burrows	Southwest and south- central, ENDANGERED
Map Turtles (3 kinds)	Fish, insects, snails	Lakes, rivers with slow to moderate current	Hide in deep areas under sunken logs, occasionally in aquatic vegetation; hibernate behind logs and rocks on riverbottom	Mostly restricted to south-central, southwest and west
Musk Turtle	Insects, fish, carrion in water	River backwaters and lakes	Retreats to bottom or hides in dense submerged vegetation	Southern one-fourth and along Mississippi from La Crosse south
Painted Turtle (2 subspecies)	Aquatic vegetation, snails, crayfish, insects, fish, carrion, tadpoles	Ponds, shallow lakes, and slow moving rivers	Burrows or lays on bottom during winter; hides in dense submergent vegetation	Statewide
Snapping Turtle	Insects, crayfish, mollusks, worms, leeches, fish, frogs, birds, aquatic plants	Lakes, rivers, creeks, ponds and marshes	Stays on muddy bottoms of ponds in dense aquatic vegetation	Statewide
Soft-shelled Turtles (2 kinds, Spiny is most common)	Fish, crayfish, aquatic insect larvae	Primarily rivers, large lakes and reservoirs	Hide in sandy or muddy bottoms; nest near waters edge	Primarily western two- thirds, abundant in the Black, Chippewa, Mississippi, and Wisconsin rivers
Wood Turtle	Insects, earthworms, berries, vegetation	On land or water near fast moving streams in forested areas	Hibernates under cut banks or in deeper pools with at least moderate current	Primarily northern two-thirds, THREATENED
Salamanders	Food	Habitat	Shelter	Distribution
Mudpuppy	Worms, and other aquatic invertebrates, insects, small fish	Bottoms of rivers and lakes during every stage of life cycle	Hides amongst rocks on bottom of rivers and lakes	Statewide
Red-backed Salamander	Small insects and insect larvae	Damp litter and rotted logs in woodlands, sphagnum bogs	Hides under logs and leaf litter, in sphagnum moss or under ground	Northern half
Tiger Salamander	Earthworms, cricket nymphs, grasshoppers, moths, flies, spiders, beetles, cicadas	Breeds in prairie ponds, marshes, kettle potholes, lakes, woodland ponds, farm ponds	Spends much of the year underground in woodlands; migrates to breed on first rainy nights associated with frost-out	Central, southeastern and northwestern

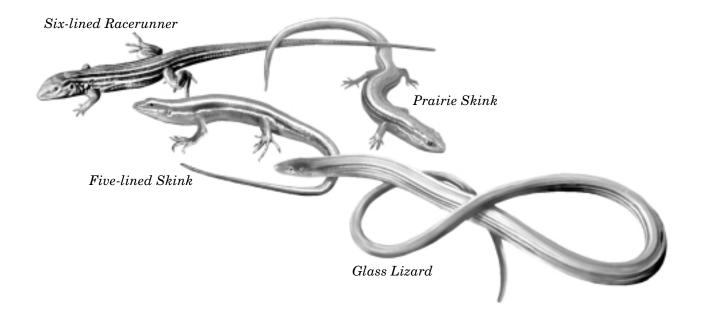
Frogs	Food	Habitat	Shelter	Distribution
Bullfrog	Insects, small fish, other frogs, small turtles	Permanent bodies of water	Hides in shoreline vegetation or in submerged vegetation	Statewide but patchy
Western Chorus Frog	Mites, midges, caterpillars, spiders, beetles, ants, spiders	Prairies, marshes, riverbottom forests, woodland pools near shallow or temporary water or semi-open areas	Hides under vegetation, climbs on shrubs and grasses; hibernates under rocks, logs and ground litter	Statewide
Blanchards Cricket Frog	Small insects, invertebrates	In or near permanent water with submerged plants and low, gradient shorelines with low, sparce vegetation	Leaps in zigzag pattern to escape predators; rapidly jumps into water and then back to land; may hide under submerged vegetation	Extreme southwest, ENDANGERED
Green Frog	Insects, invertebrates	All types of permanent water; prefers tall shoreline vegetation, including brush	Near waters edge riparian areas; hides in shoreline vegetation or in debris on lake bed	Statewide
Northern Leopard Frog	Insects, invertebrates	Breeding: lakes, streams, rivers, ponds; Foraging: fields and wet prairies	Often found far from standing water during the summer; hibernates under water	Statewide
Mink Frog	Insects, invertebrates	Lives at or near the edges of bogs associated with lakes and streams	Hides under sphagnum mats or in emergent vegetation; flees across the water surface and dives	Northern third to half
Pickerel Frog	Insects, invertebrates	Cool, clear waters of spring-fed lakes and streams	Takes shelter in shoreline vegetation and in the water; often hides in water cress; breeds in warmer adjacent ponds or backwaters	Scattered statewide except extreme north- central counties
Spring Peeper	Small insects	Wooded areas with temporary or semi- permanent ponds, swamps and marshes	Hides under damp leaf litter, under logs and bark	Statewide
Eastern American Toad	Earthworms, mealworms, garden insects	A variety of habitats wherever there are insects, moisture and shallow waters for breeding	Breeds in water anywhere; burrows under leaf litter, under logs or in loose soil	Statewide
Eastern Treefrog Copes Treefrog	Small insects, invertebrates	Eastern: forest interior and edges; Copes: oak savannas, woodland or brushy field edges	Eastern: hides in trees and under bark; Copes: hides on underside of leaves in brush or in leaf litter; both breed in temporary and permanent ponds	Statewide
Wood Frog	Insects	Lowland hardwood forests and other large tracts of moist woods	Hides among forest floor leaf litter	Nearly statewide except for extreme south central counties

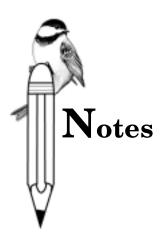




Snakes	Food	Habitat	Shelter	Distribution
Blue Racer	Racerunners and other lizards, snakes, frogs, insects, small birds, rodents	Open fields, open oak woodlands, dry rocky southwest facing slopes, dry prairies, oak savannas	Seeks shelter under flat rocks or in limestone crevasses, or in mammal burrows	Southern half
Brown Snakes (2 kinds, Red-bellied and Northern are both common)	Earthworms, small insects, invertebrates	Dry to slightly moist areas such as surface leaves on open woodland floors, southern lowland hardwood forest, marshes, old fields, under rubbish or vacant lots	Hibernate in deserted anthills, rock crevasses and building foundations	Statewide
Bullsnake	Mostly rodents, sometimes ground nesting birds and eggs	Loose sandy soil in dry prairies, oak savannas, pine barrens, and oak openings; south and west slopes in bluffs along Wisconsin and Mississippi rivers	Hibernates in deep rock fissures on SW exposed hills, burrows of pocket gophers or ground squirrels; seeks summer shelter in dense ground cover, flat rocks and mammal burrows	Southwest and West
Garter Snakes (5 kinds, Eastern is most common)	Frogs, insects, salamanders, earth- worms, small fish, small mammals	Lake, creek and river margins, grassy fields, sedge meadows, bogs, wet prairies and hillsides	Hides underground, under logs, in foundations and under a variety of litter	Statewide for Eastern Garter Snake only
Eastern Hog-nosed Snake	Toads, frogs, large insects	Open fields, hillsides, especially open sandy areas, also southern lowland hardwood forest near rivers during summer months	Seeks shelter in its own burrows which it makes in sand or else seeks shelter in abandoned rodent burrows	Statewide except for northcentral counties
Massasauga Rattlesnake	Small rodents, small birds, frogs	Marshy areas, bogs, lowland hardwood forests and more open swamps with sunny, dry open fields nearby	Hibernates in mammal burrows, especially crayfish burrows	West and West-central, ENDANGERED
Milk Snake	Mostly rodents, often other snakes, including rattlesnakes	Moist forest edges near open woods and grasslands; also woodlots and pastures near streams and rivers	Hibernates in foundations or other buried rock structures; found under boards and logs in summer	Southern two-thirds
Fox Snake	Mostly small rodents, sometimes small birds	Marshes, farmlands, open moist woodlands, southerly exposed slopes of bluffs	Found in trees and hide in the holes of oak and hickory; hibernates underground in natural rock structures, rocklined dug wells and deep rock foundations; in summer, often hides under boards and pieces of metal	Statewide

Northern Ring-necked Snake Prairie Ring-necked Snake	Small salamanders, earthworms, small snakes, lizards	Northern: Moist deciduous forests; Prairie: Southwest facing bluffsides along Wisconsin and Mississippi rivers	Both: Hide under rocks, bark, fallen trees; Northern: hides in logs or leaf litter by day, forages at night; Prairie: by day, basks on dry prairie hillsides	Northern: northern third Prairie: southwest
Smooth Green Snake	Insects, earthworms, small invertebrates	Open grassy fields and grassy woodlots	Found under logs or metal	Mostly statewide, except along extreme western counties and southwest
Timber Rattlesnake	Primarily rodents and other small mammals	Rocky, open or wooded hillsides and nearby fields and lowlands, oak woodlands	Found along bluffs associated with the Mississippi and Wisconsin rivers	West and southwest
Northern Water Snake Queen Water Snake	Frogs, salamanders, fish, crayfish, larger invertebrates	Borders of creeks, rivers and lakes	Takes refuge in the water	Northern: statewide RESTRICTED Queen: extreme southeast ENDANGERED
Lizards	Food	Habitat	Shelter	Distribution
Western Slender Glass Lizard	Insects, small lizards, small snakes, bird eggs	Open meadows, dry mesic prairie, oak savanna with sandy soils	Hides in sedge clumps and animal burrows	West and central, ENDANGERED
Six-lined Racerunner	Insects, small invertebrates	Dry sandy areas in open fields and on rocky hillsides	Hides in brush, grass clumps, and its own burrows	Southwest
Five-lined Skink Northern Prairie Skink	Insects, small invertebrates	Dry, sandy areas in open fields and oak and pine barrens	Hides in stumps, rotting logs, slab and sawdust piles; may climb trees and low brush to forage and escape predator	Prairie: northwest Five-lined: central and northeast









Wildlife and Your Land Staff: Mary K. Salwey, Project Director; Janet L. Hutchens, Project Assistant; Todd Peterson, Chief, Public Service and User Program Section. Editorial assistance by Robert Hay, Cold-blooded Species Manager; Sumner Matteson, Avian Ecologist; Scott Craven, UW-Extension; Adrian Wydeven, Mammalian Ecologist; and Keith Warnke, Upland Wildlife Ecologist. Graphics and layout by Kandis Elliot. Published by the Bureau of Wildlife Management, Wisconsin Department of Natural Resources, P. O. Box 7921, Madison, WI, 53707.

