BIBDIVERSITY Coloring Book

The Amazing Variety of Plants and Animals in Lake County, Illinois











INTRODUCTION

Biodiversity, short for "biological diversity," refers to the variety of life forms on Earth.

Biodiversity keeps our air and water clean, regulates our climate, and provides all plants and animals (including humans) with food, shelter, clothing, medicine, and other useful products.

At your Lake County Forest Preserves, we are working to preserve and restore the habitats that our native wildlife and plants need to survive and thrive. We are also here to help you enjoy the many wonderful creatures that live all around us.

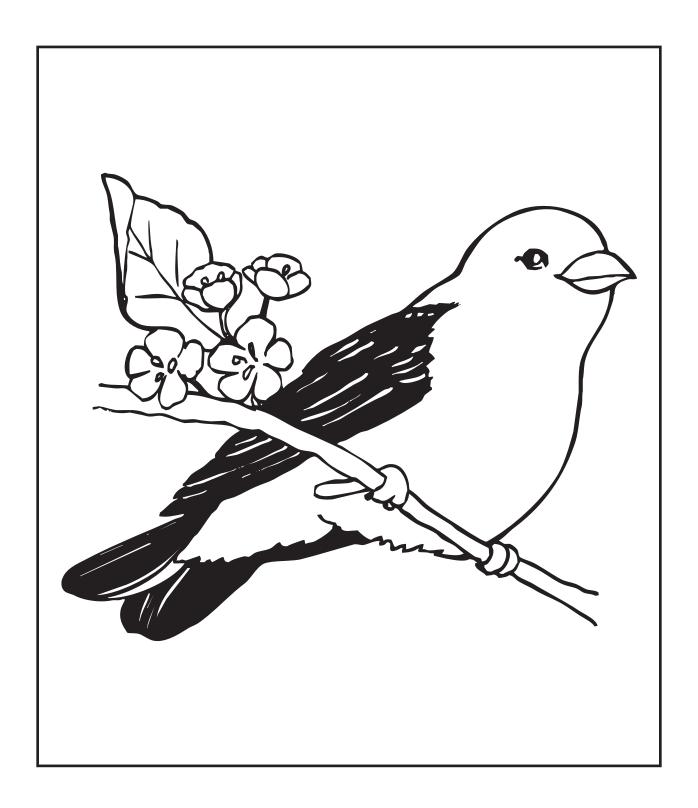
The Midwest was once covered by natural communities such as prairies, savannas, woodlands and wetlands. Human development of the land and non-native, invasive species have greatly affected these communities. Only fragments of the original habitats have survived to current day, jeopardizing biodiversity in Lake County.

The lands surrounding Lake Michigan contain some of the greatest biodiversity in the world. Living in the islands of habitat nestled between the human dwellings are thousands of native animal and plant species. Native species are those that have evolved in this region of the country. The species in Lake County, Illinois make up some of the rarest natural communities on Earth.

Learn more about your Forest Preserves and native plants and animals by visiting www.LCFPD.org or by calling 847-367-6640.

All illustrations in the book's interior (except pages 27, 28, 33 & 35) were featured in the Lake County Forest Preserve District's FREE monthly newsletter, Horizons. These illustrations were created by Laura D'Argo.

Original illustrations © 1996-2006 Laura D'Argo 847-303-5361; www.lauradargo.com



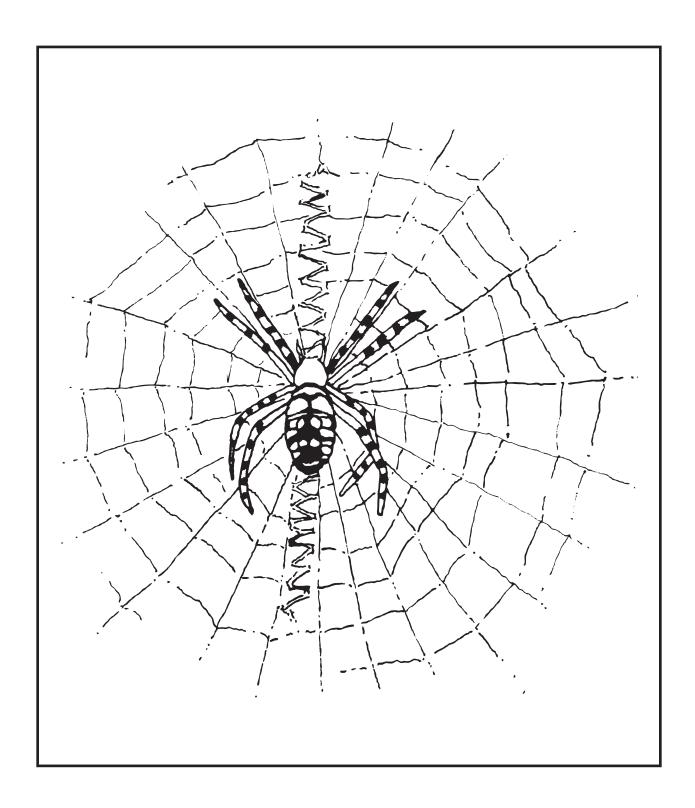
scarlet tanager (Piranga olivacea)

Males of this species have a striking red body and black wings. Even though the males are brightly colored, these birds can be difficult to see as they hunt for beetles and caterpillars high in the tree canopy. Scarlet tanagers can remain motionless for periods of time, hiding in the dense leaves.



New England aster (Symphyotrichum novae-angliae)

This plant can grow to be four feet tall. New England aster blooms in late summer to fall and its purple flowers can last up to two months. It is commonly found in prairies, open areas in woodlands, and along rivers and lakes. The flowers are often visited by long-tongued bees, bee flies, and butterflies.

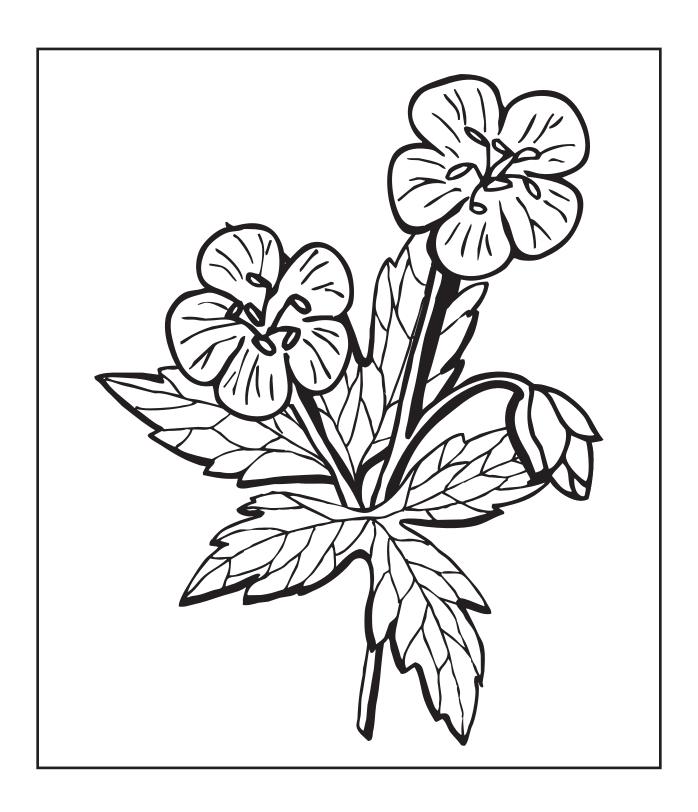


black and yellow Argiope (Argiope aurantia)

This species prefers sunny areas among flowers, shrubs and tall plants. As is true in many spider species, females of this species grow to a much larger size than males. Like other orb-weavers, this species has three claws on each foot, one more than most spiders. Orb-weavers use this third claw to help handle the threads while spinning their web.

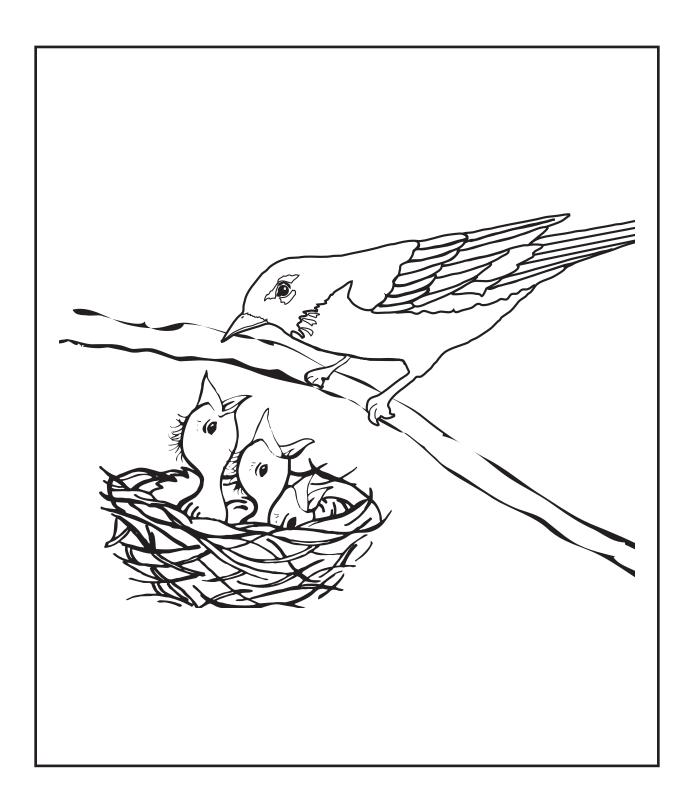


downy woodpecker & goldenrod gall (*Picoides pubescens* & *Solidago spp.*) This downy woodpecker is seen looking for a tasty treat in the gall of a goldenrod stem. Galls are caused when a goldenrod gall fly lays its eggs in the stem, the eggs hatch and the larvae eat the inside of the stem. A chemical in the saliva of the larvae causes the plant to grow abnormally, creating a ball-shaped "gall" in which the larvae will live.



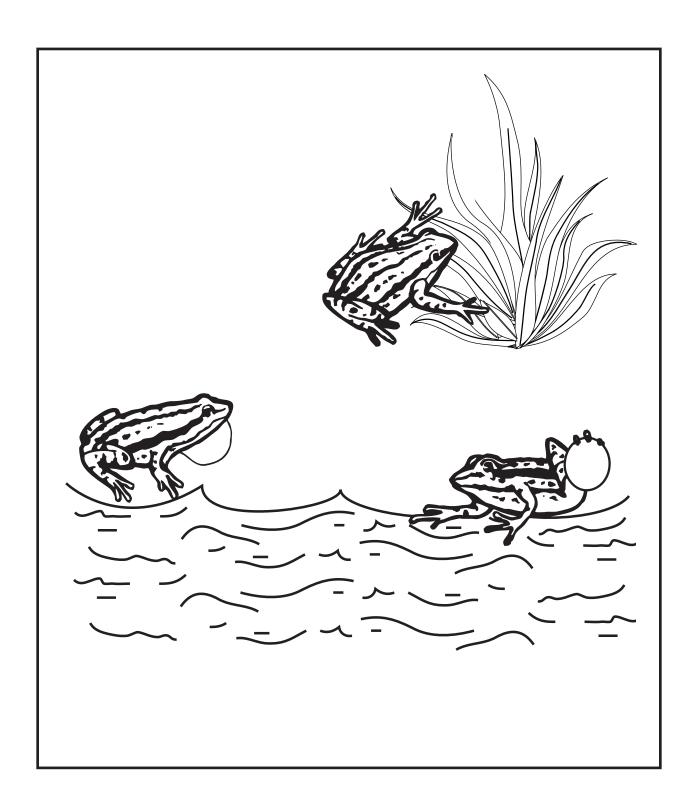
wild geranium (Geranium maculatum)

This plant can grow to be one and a half feet tall. Wild geranium blooms in late spring to early summer. The petals are pale purplish pink and have fine lines running across their surface that act as nectar guides for its pollinators. In late summer its seed pods will pop open, curling upward and backward to fling the seeds away from the mother plant.



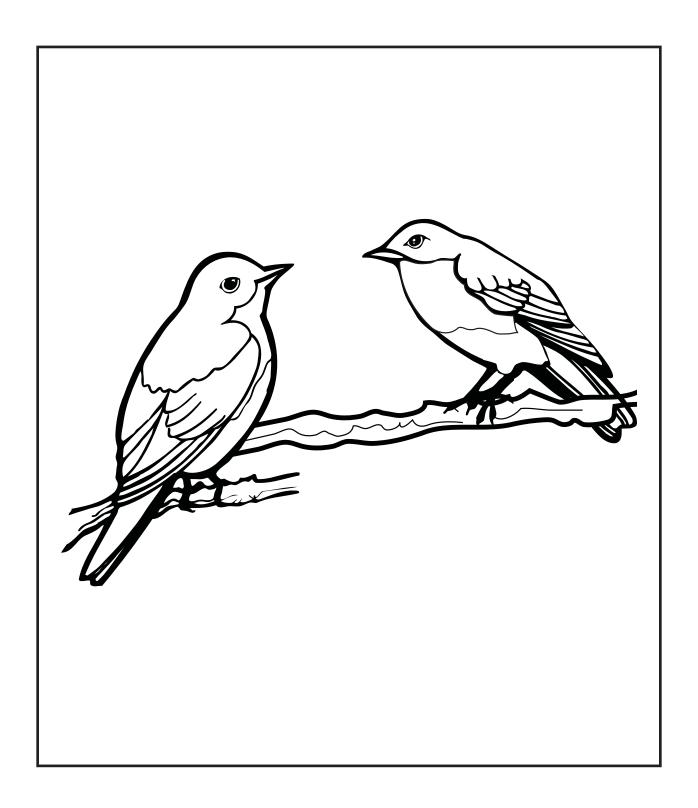
American robin (Turdus migratorius)

The American robin has a gray upper body and head with an orange belly. During the breeding season, the adult males grow distinctive black feathers on their heads. This bird is commonly seen pulling up worms on lawns. Its natural home is in deep, mature forests, but it is seen in many habitats because of its tolerance to areas developed by humans.



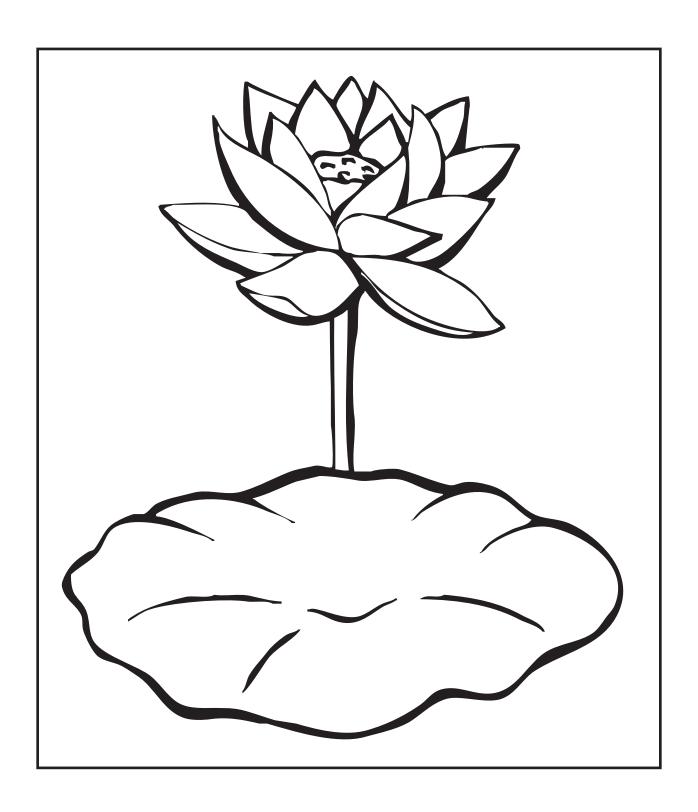
chorus frog (Pseudacris triseriata)

This frog is the size of a penny and has three dark lines down its back. Chorus frogs are usually the first species to begin singing in early spring. Their call is a vibrating "prreeep", which sounds like someone running their fingernail across the teeth of a comb. They can be found in woodlands, prairies and roadside ditches.



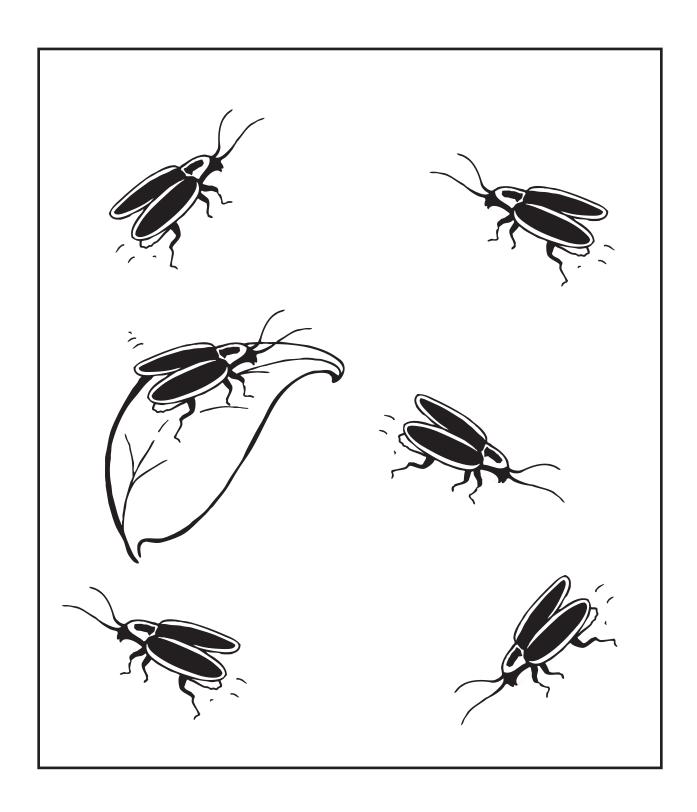
eastern bluebird (Sialia sialis)

The eastern bluebird is found in open woodlands, savannas and fields. Adult males are bright blue on top and have an orange throat and breast. The population of this species declined during the early to mid-1900s due to habitat loss and nest predators. Recently, the popularity of bluebird nest boxes across the country has led to increased populations in many areas.



American lotus (Nelumbo lutea)

The leaves of this species are circular and can grow to be as large as three feet across. American lotus blooms in July, producing a large, pale whitish-yellow flower. Its usual habitat is stagnant lakes and ponds with no tree cover. This plant has seeds and a large root that were used as a food source by Native Americans.



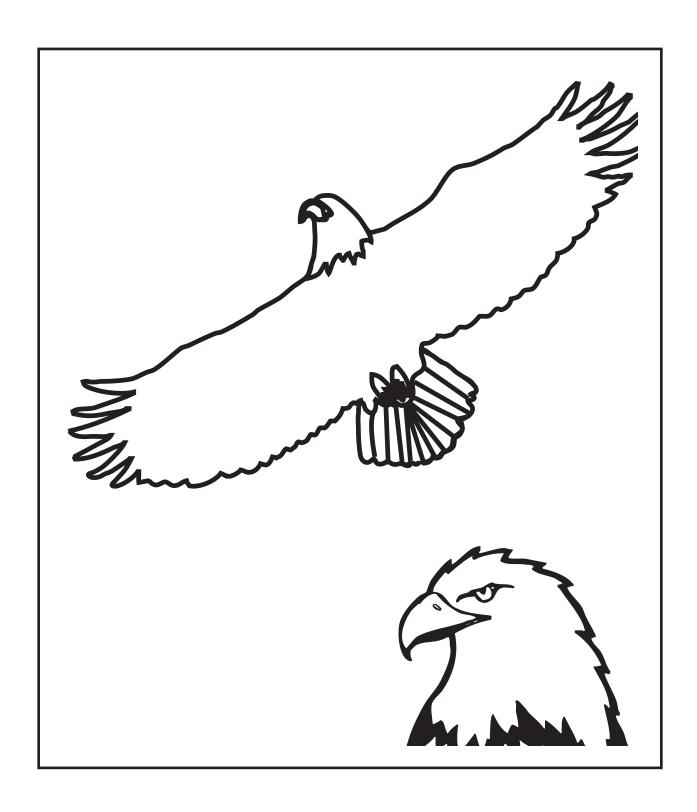
fireflies (Family Lampyridae)

Fireflies, also known as lightning bugs, are a type of beetle. Fireflies can be found in forest clearings and large fields. A chemical called luciferin is combined with oxygen and an enzyme to produce light in special cells of their abdomen. Males and females use these light to find each other. Each species has a different number, length and pattern of light flashes!



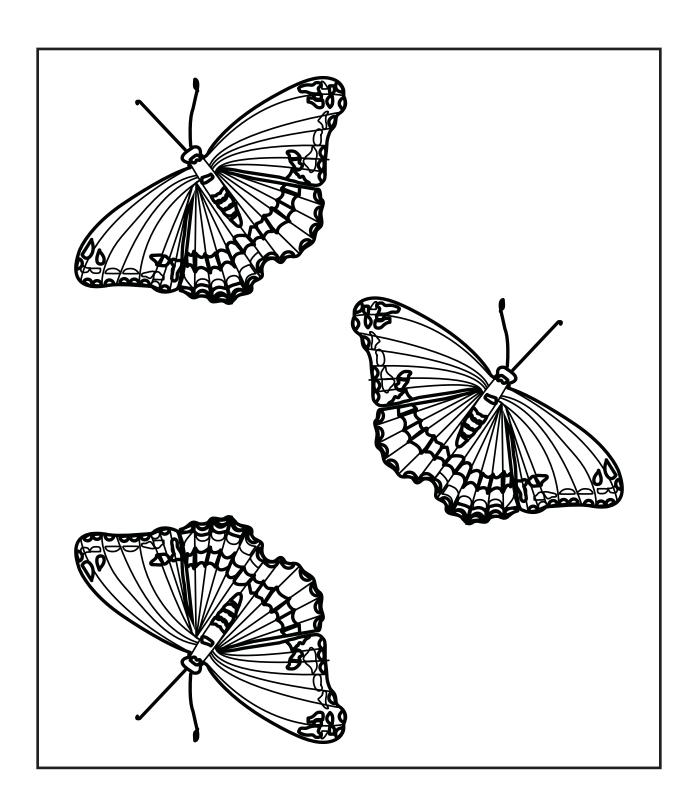
bloodroot (Sanguinaria canadensis)

Bloodroot gets its name from the blood-red juice that can be extracted from the reddish-orange root. The juice from the root was used as a body paint and dye by Native Americans. Due to the fleshy appendages, the seeds are often distributed by ants. This is a common method of seed distribution for woodland wildflowers, because there is less wind in wooded areas.



bald eagle (Haliaeetus leucocephalus)

The bald eagle, our national bird, is the only eagle unique to North America. At one time, the word "bald" meant "white," not hairless. Before 1995, the bald eagle was listed as endangered under the Endangered Species Act in 43 of the 48 lower states. In July of 1995, the U.S. Fish and Wildlife Service upgraded the status of bald eagles in the lower 48 states to "threatened."



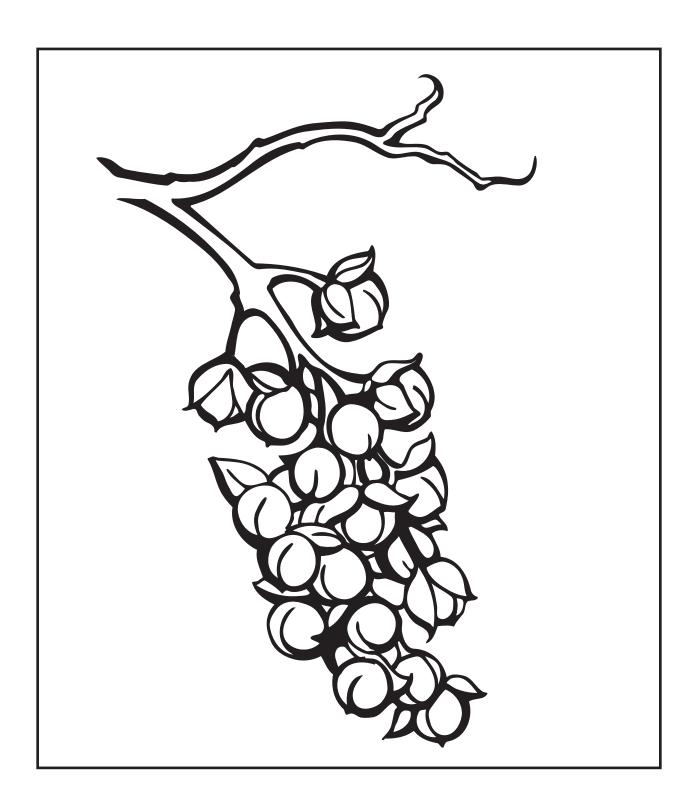
red-spotted purple (Limenitis arthemis)

This butterfly's upper wings are blue and black with iridescence on the edge of the hindwing. The underside is dark brown and has three reddish-orange spots near the base of the hindwing. Adults of this species get their nectar from decaying fruit and animals, as well as tree sap. Food sources for red-spotted purple caterpillars include black cherry, willow and cottonwood trees.



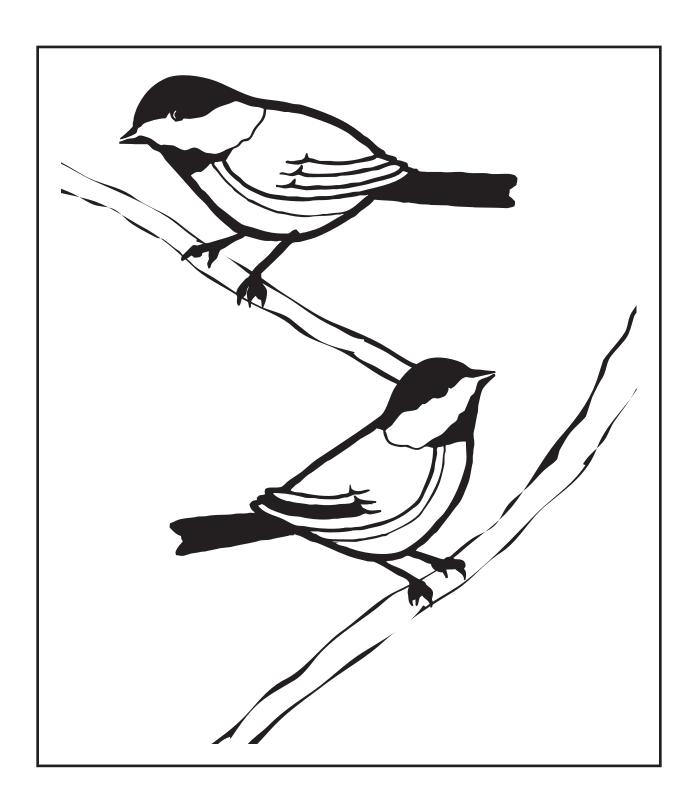
northern cardinal (Cardinalis cardinalis)

The brilliantly colored northern cardinal has the record for popularity as a state bird in the United States. It holds this title in seven states, including Illinois. This common bird is a winter fixture at bird feeders throughout the eastern United States. Males of this species are bright red with a tuft on their heads, a black mask and a large orange beak.



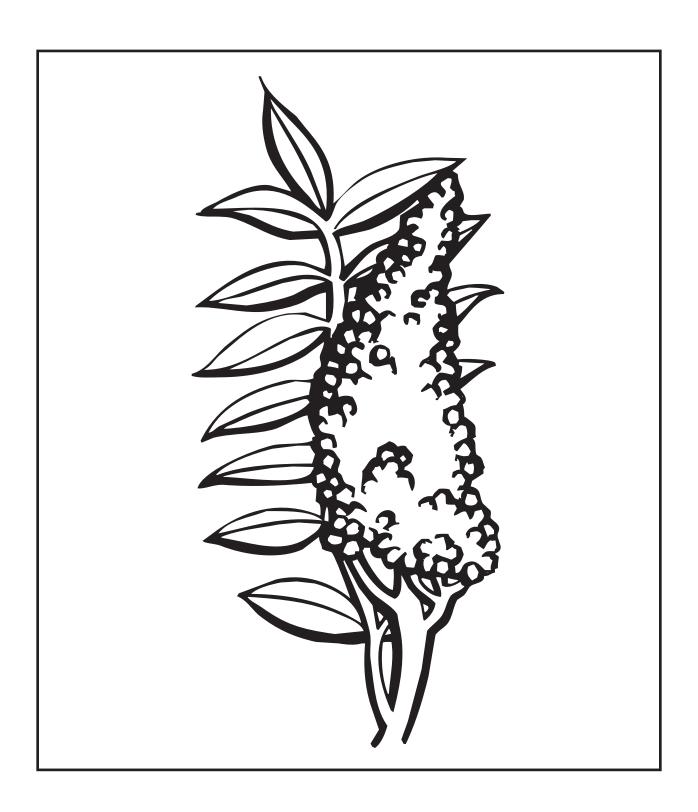
American bittersweet (Celastrus scandens)

American bittersweet is one of the most ornamental of our hardy northern vines. This climbing woody vine is found growing in thickets, along fence rows, and near streams. As the seed ripens in the fall, the outside of the seed capsule turns bright reddish-orange. Due to over collection of these fruiting branches for decorations, this species is not found as commonly as it once was.



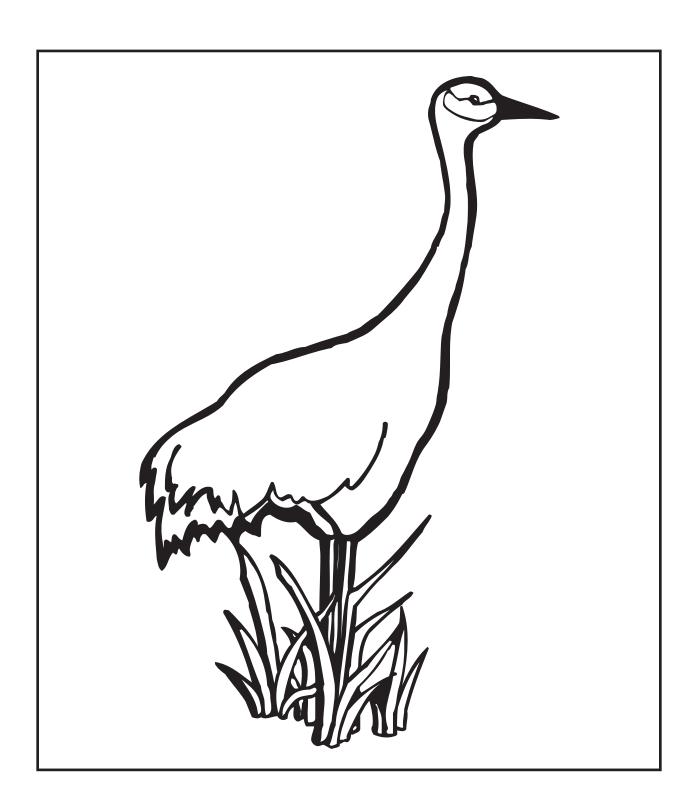
black-capped chickadee (Poecile atricapilla)

This species is one of the most familiar birds in North America. The black-capped chickadee is a frequent visitor to bird feeders. It can be seen out flying on even the harshest winter days, a behavior which many people admire. This bird hides seeds and other food items for later use. Each item is stored in a different spot and these birds can remember thousands of hiding places.



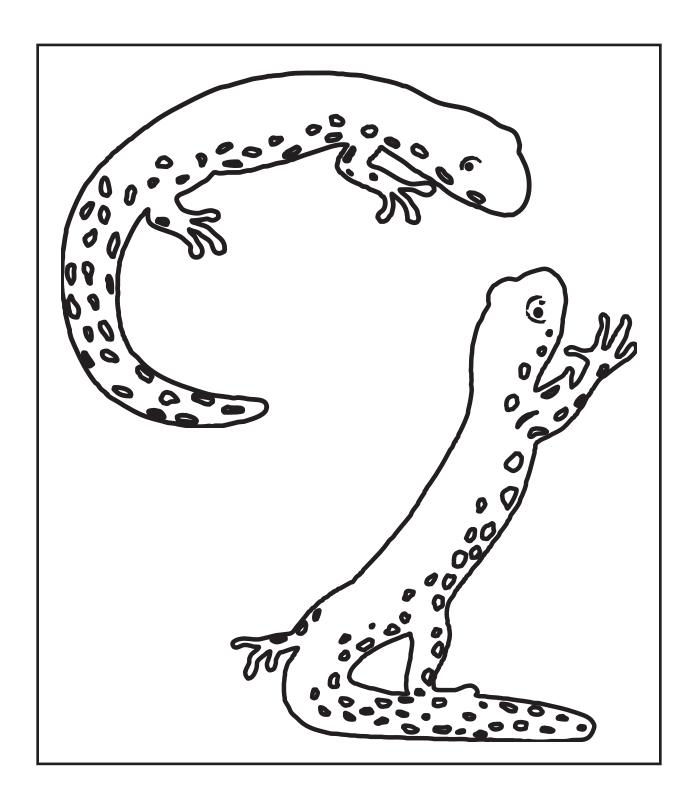
smooth sumac (Rhus glabra)

Smooth sumac is a large shrub with thick, open-spreading limbs. It often grows in masses, forming a thicket which provides good cover for nesting birds and other wildlife. In late summer this species forms dense clusters of dark red fruits (seen above). These fruit clusters were used by Native Americans to make a lemonade-like drink. The leaves and roots were used for dyes.



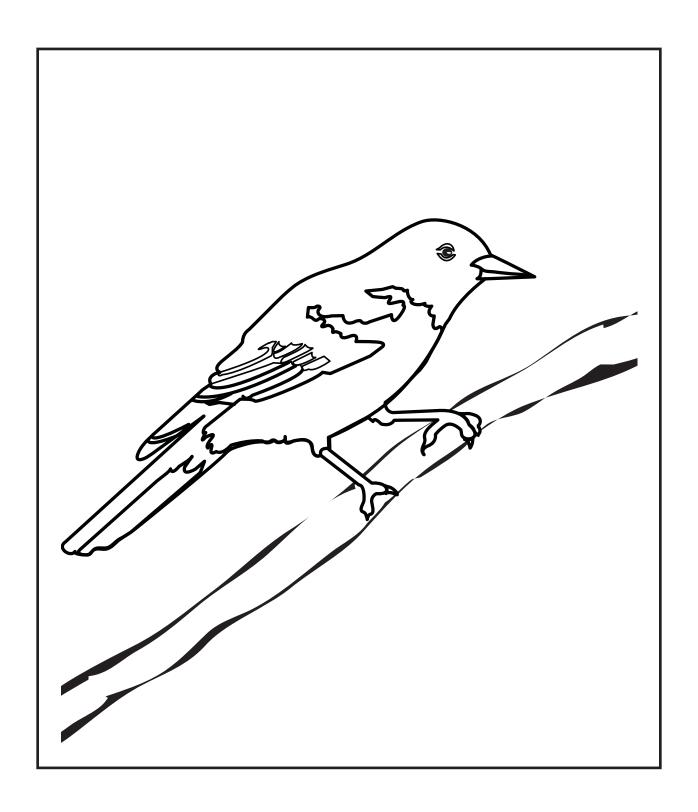
sandhill crane (Grus canandensis)

The sandhill crane is a tall gray bird found in grasslands and wetlands. This is a very large bird with a red forehead, white cheeks, and tufted feathers over its rump. This species feeds mostly on grains and seeds, some insects, and small vertebrates. Sandhill cranes group together in huge numbers during migration. More than 30,000 cranes have been counted in some areas!



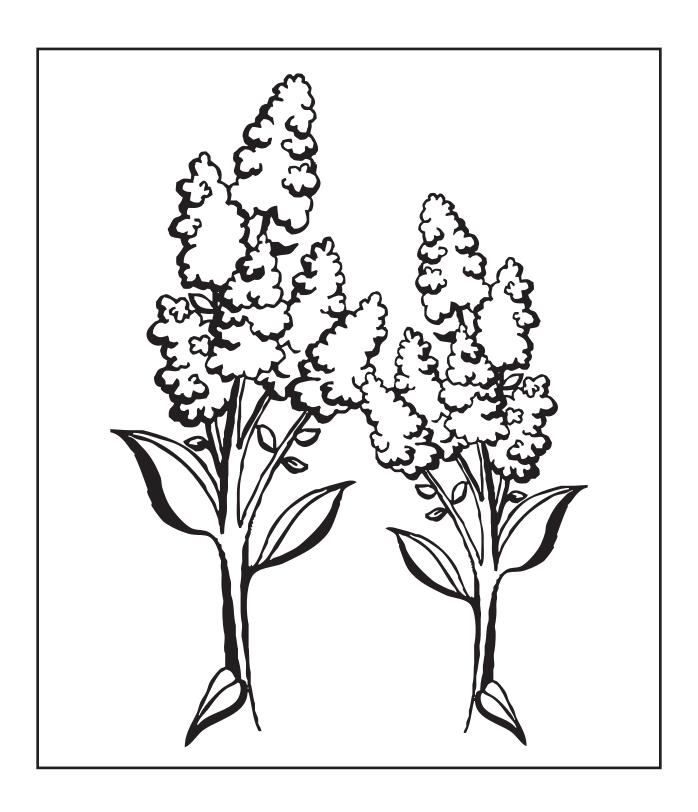
blue-spotted salamander (Ambystoma laterale)

This salamander is usually found in moist woodland areas with access to fishless spring ponds. Their diet includes insects, spiders and worms. As their name suggests, this species is black with pale blue spots on the sides, limbs, belly and tail. When danger is sensed, this salamander lashes its tail back and forth and produces a noxious secretion from two glands at the base of its tail.



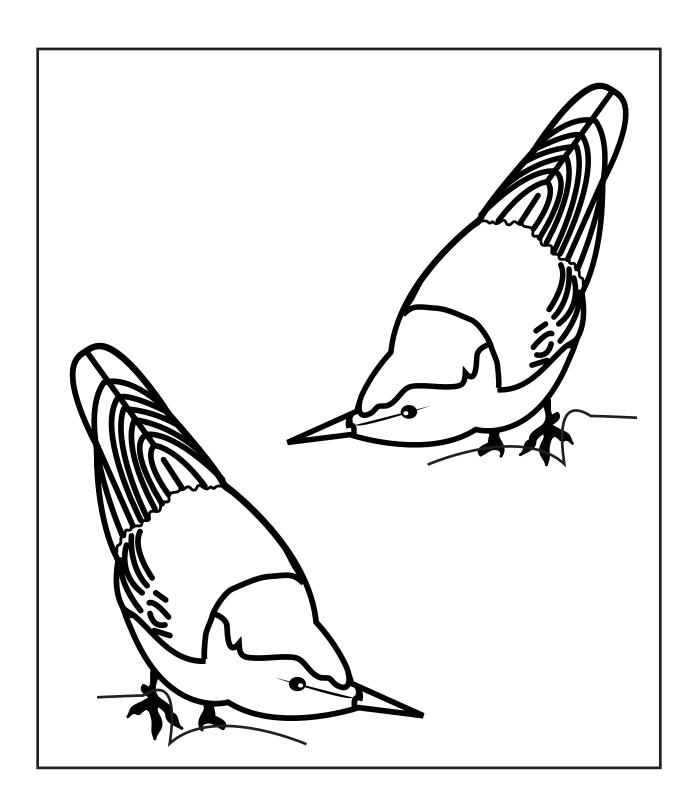
Baltimore oriole (Icterus galbula)

Due to its brilliant orange and black plumage, this species' arrival is eagerly awaited by bird watchers each spring. The Baltimore oriole prefers open areas with tall trees, which has made it a common inhabitant of parks and neighborhoods. This species weaves intricate hanging nests using various plant fibers, vines, string, paper and other materials.



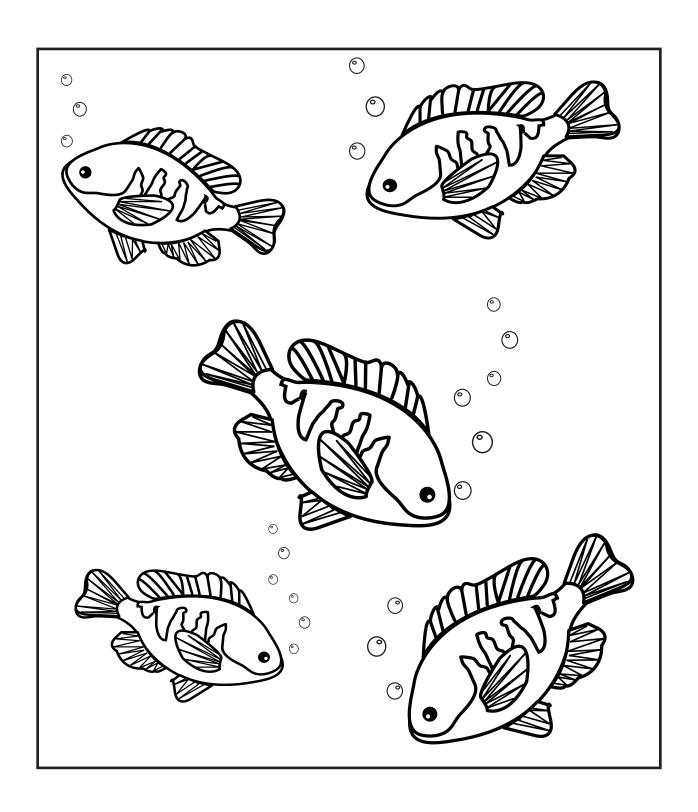
goldenrod (Solidago spp.)

Goldenrod has the ability to crossbreed with other plants. Because of this unusual ability, there are at least 130 different species of goldenrod in the United States alone. These plants are found along roadsides and in open fields with stems that grow to heights of three to seven feet. Its yellow flowers, which generally appear in August and September, form in large clusters.



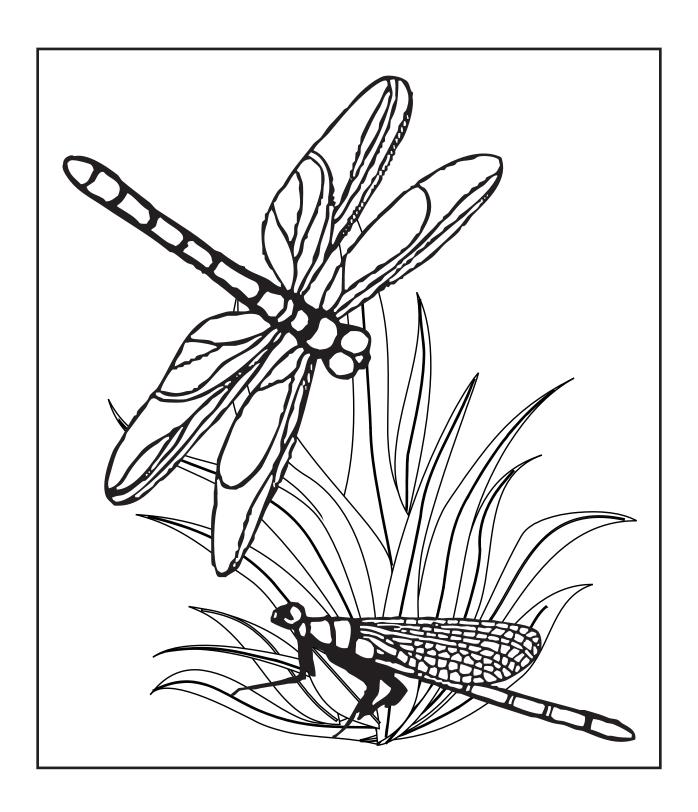
white-breasted nuthatch (Sitta carolinensis)

This is a common bird in woodlands and forested neighborhoods. The white-breasted nuthatch can be seen hopping headfirst down the trunks of trees in search of insects for food. This species visits bird feeders and will take seeds off to the side of a tree, where it wedges them into a crevice to hammer them open. This bird has a black cap, white breast and bluish-gray wings.



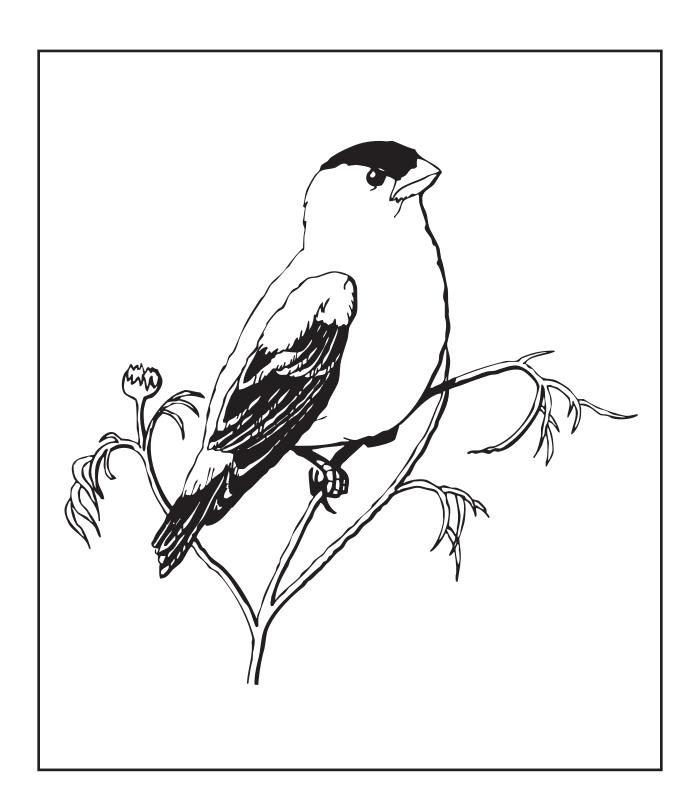
bluegill (Lepomis macrochirus)

This species gets its common name, bluegill, from its bright blue chin and gill covers. Most bluegills are olive in color with bright green and brownish reflections; older fish often have a purplish hue. Their small mouth size limits the size of food they can eat. Bluegills primarily eat insects, but larger adults have been known to consume crayfish, snails, small fish and fish eggs.



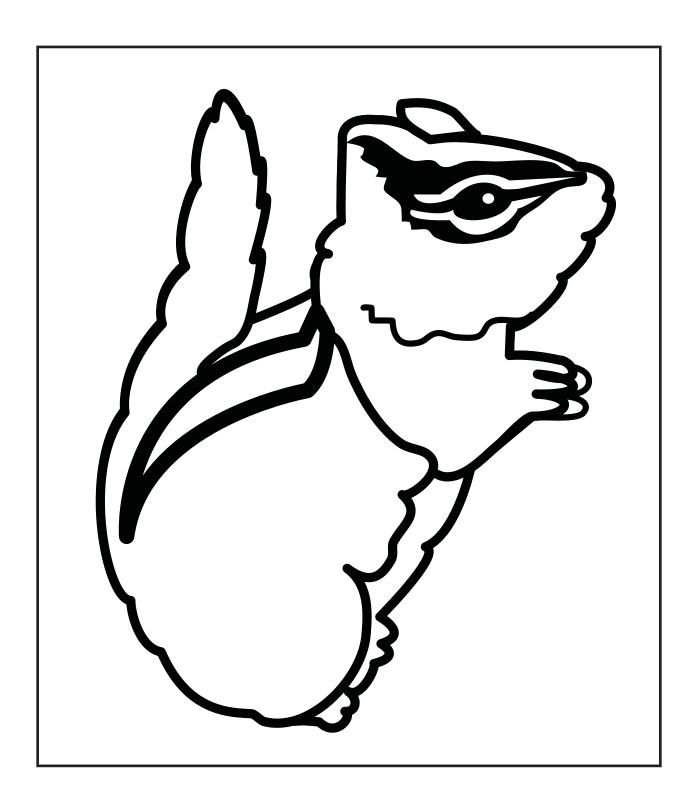
dragonflies and damselflies (Order Odonata)

There are about 6,500 living species of dragonflies and damselflies. Adults of these species are often brightly colored and are flying predators that hunt by sight. They are usually found near fresh water, such as ponds and rivers. A visible difference between these two insects is that dragonflies hold their wings flat and damselflies hold them up together above their backs.



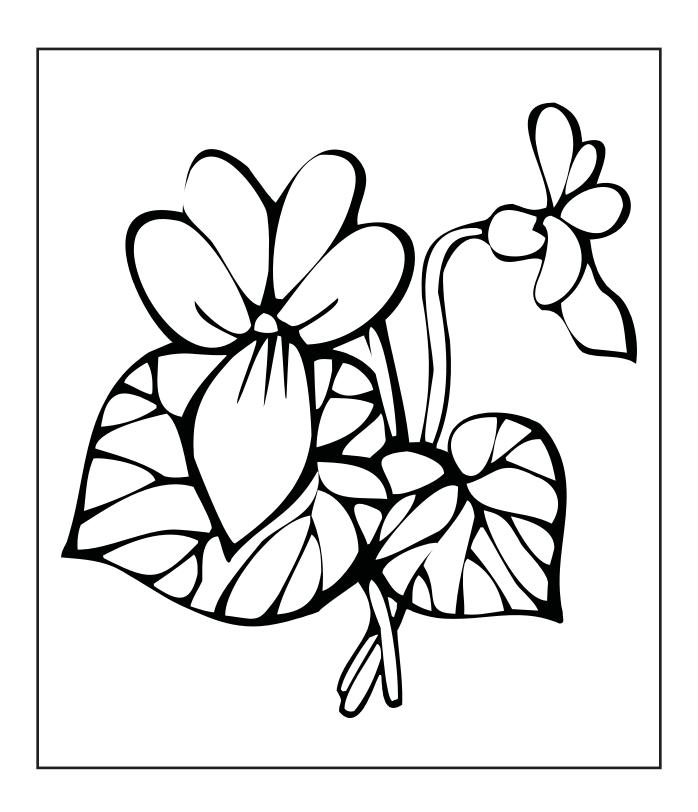
American goldfinch (Carduelis tristis)

The American goldfinch is a familiar and commonly seen bird. This species is often seen in open fields and visiting bird feeders. It uses thistles by eating the seeds and using the downy seed tufts to line its nest. In summer the males are bright yellow with a black cap and the females are a dull olive color. This bird is one of the latest nesting birds, usually starting in late June or early July,



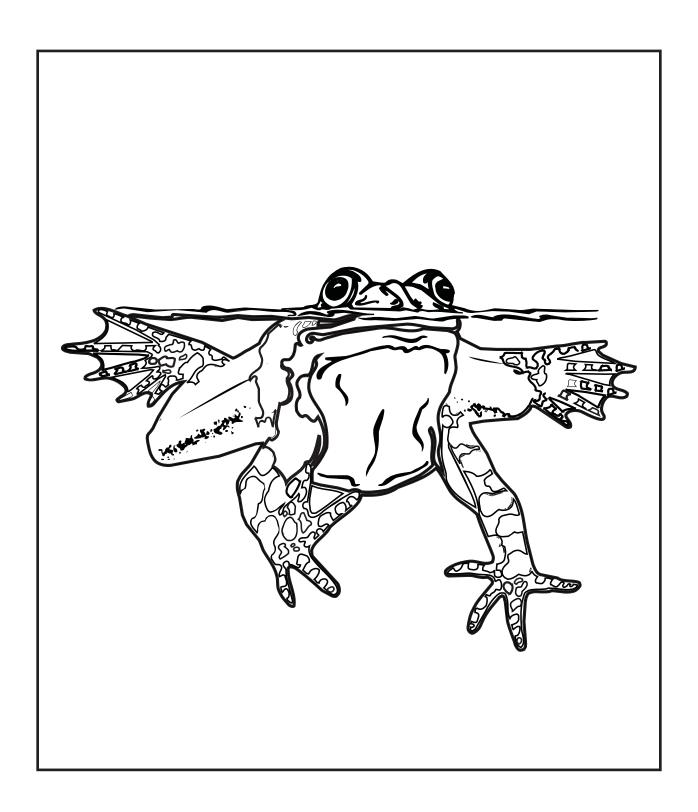
eastern chipmunk (Tamias striatus)

The eastern chipmunk has reddish-brown fur on its back and sides and white fur on its stomach. It has two white stripes bordered by black on its sides and one black stripe down the center of its back. These markings mimic dead leaves on the forest floor and serve as camoflauge, protecting it from predators. This species also has cheek pouches that it uses to store and carry food.



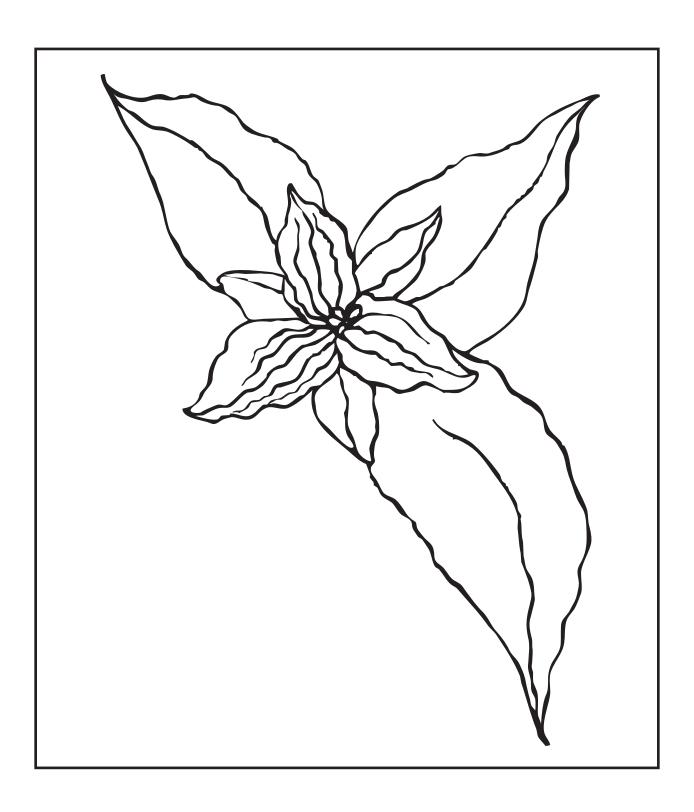
common yellow violet (Viola pubescens eriocarpa)

Common yellow violet is a woodland wildflower that is found in nearly all areas of central and northern Illinois. Unlike common blue violet, this species is not seen as often in yards and other disturbed areas. The nectar and pollen of the flowers attract many species of bees. The seeds are eaten by various upland gamebirds, including the northern bobwhite and wild turkey.



green frog (Rana clamitans)

This frog is found near permanent bodies of water, but it prefers heavily vegetated shorelines. Green frogs range in color from greenish-brown to yellowish-green. They are generally brighter in front with small irregular black spots, and males often have a bright yellow throat. Tadpoles of this species grow large and usually take two summers to develop. Listen for the green frog's call, a banjo-like "twang" that begins in late May.



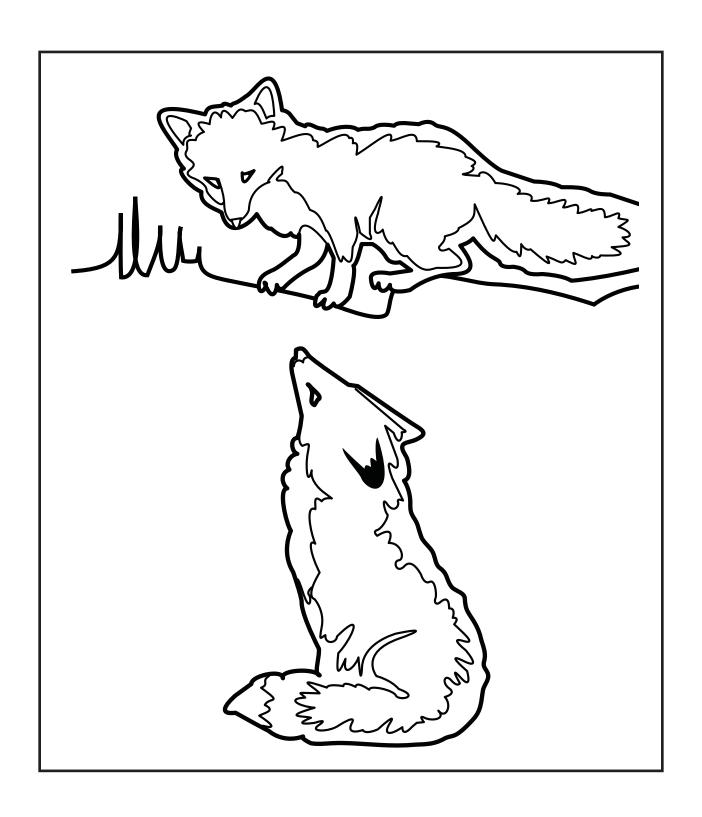
great white trillium (Trillium grandiflorum)

Great white trillium is a beautiful spring woodland wildflower whose name literally means "three parted". This species has three petals, three sepals and three leaves. Its root was used by Native Americans as a medicine. With age or after pollination, the flower droops into a slightly nodding position, and the bright white petals usually turn pink in color.



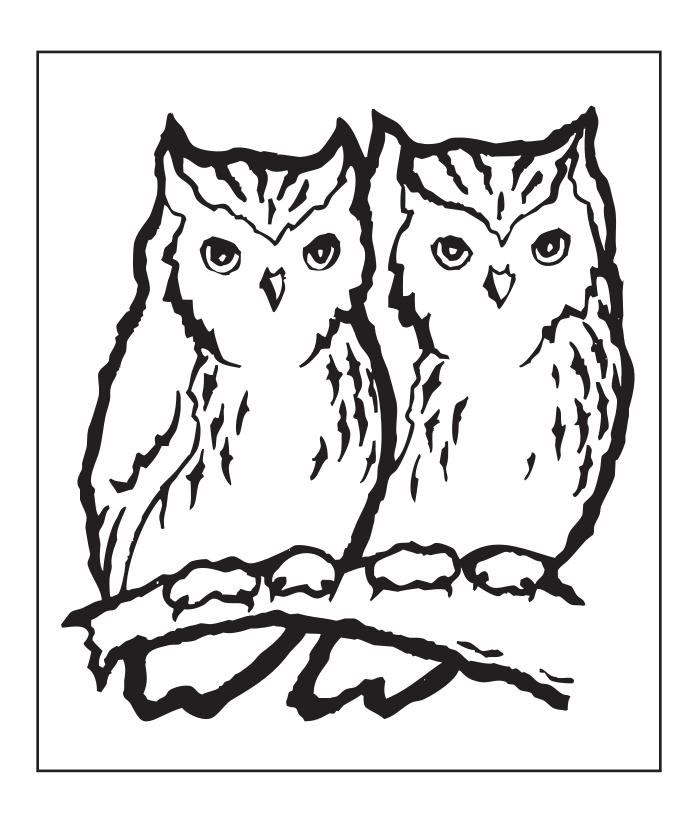
cardinal flower (Lobelia cardinalis)

Cardinal flower grows well in wet, shady habitat. The shape of the flowers allows only hummingbirds to access the nectar for food. Therefore, they are the only pollinators of this plant. The common name "cardinal" and species name "cardinalis" were chosen for the flower's color, reminiscent of the red robes worn by cardinals of the Catholic church.



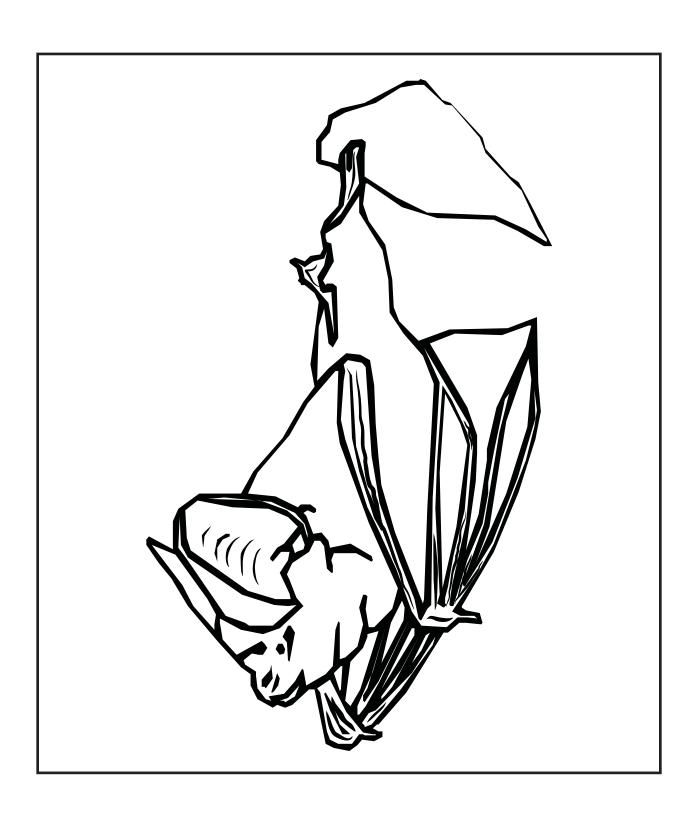
red fox (Vulpes vulpes)

Red foxes are found in woodlands, brushlands and old fields throughout most of the United States. It can be difficult to spot this species, as it is shy and primarily nocturnal. They are omnivorous, eating corn, fruits, acorns, insects, birds and small mammals. This species can be identified by its reddish fur and the white tip on the end of its tail.



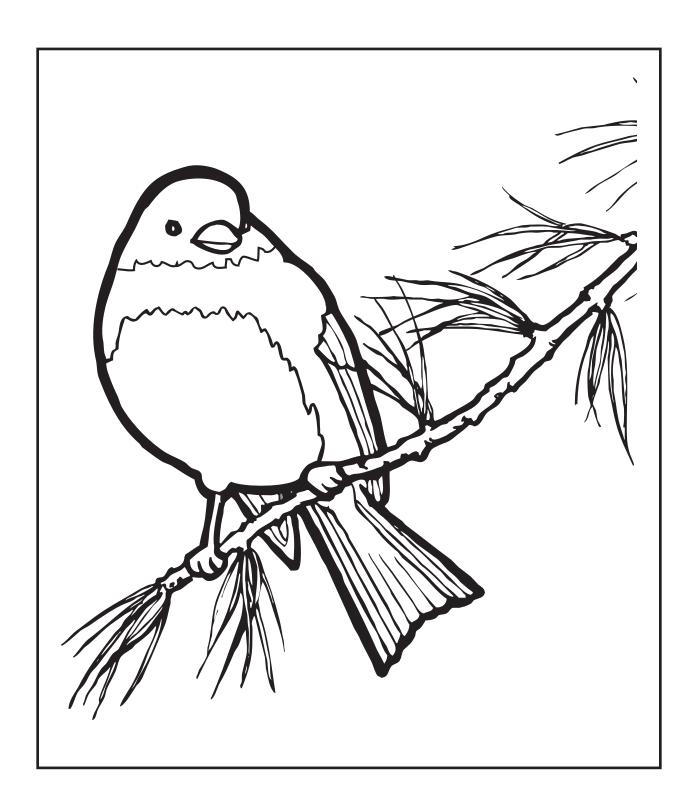
eastern screech owl (Otus asio)

This small "eared" owl is common in woodlands and suburban areas. Screech owls come in two different colors, a red form and a gray form. They have two calls, a descending whinny and a whistled trill of one pitch, neither is a screech as its name implies. The trill is used by members of a pair or a family to keep in contact with each other.



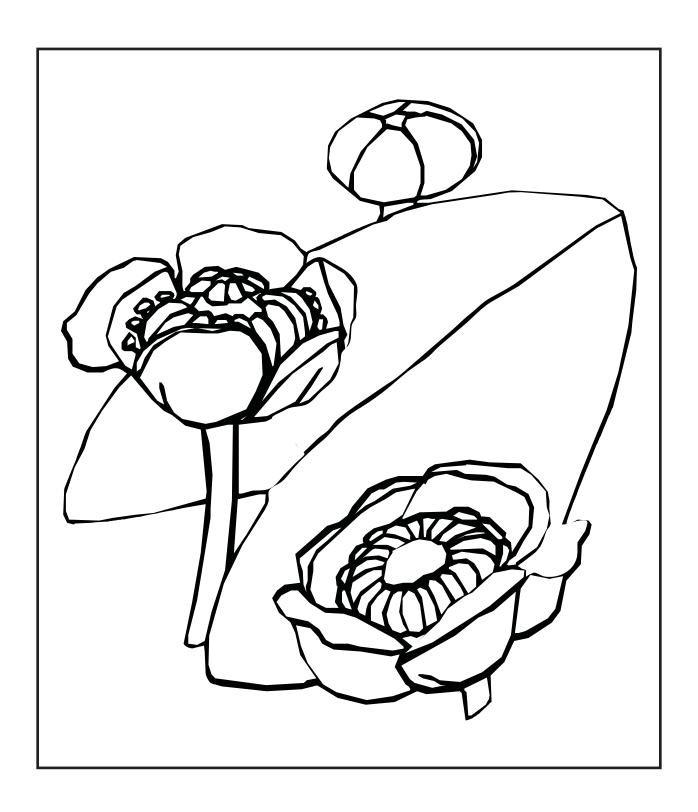
little brown bat (Myotis lucifugus)

This species is about three and a half inches long. Its fur is glossy brown on the back and a grayish-brown on the belly. These bats begin searching for food after sunset, flying ten to twenty feet above ground in search of flying insects. Their flight is guided by echolocation, a process of emitting sounds and using them to determine the distance to the object.



dark-eyed junco (Junco hyemalis)

The dark-eyed junco is commonly seen as a winter visitor at bird feeders. Its body has a plain pattern and the color can vary from gray to brown. This species can be identified by its dark hood, white outer tail feathers and white belly. There are fifteen described races of dark-eyed junco, and five identified subspecies.



yellow pond lily (Nuphar lutea)

Yellow pond lily, or spatterdock, is a rooted, floating-leaved plant with bright yellow flowers commonly seen in lakes and ponds. In early spring its leaves are below the surface and look like lettuce growing on the lake bottom. By late spring the dark green, heart-shaped leaves float on the water's surface or stand above the water as summer progresses.