State of Illinois
Illinois Department of Natural Resources

Illinois' State Symbols

Illinois Department of Natural Resources

Using this Activity Book - For the Educator

The *Illinois' State Symbols* activity book from the Illinois Department of Natural Resources (IDNR) is designed to supplement your curriculum in a variety of ways. For more information about other educational materials available, contact the IDNR Division of Education (217/524-4126; dnr.teachkids@illinois.gov) or visit http://www.dnr.illinois.gov/publications.

What is a symbol?

A symbol is something that represents something else. Illinois has several State Symbols. Each of these symbols represents the entire state of Illinois. For instance, the white oak is the Official Illinois State Tree. The white oak was selected over all the other tree species in the state because the people voting for it felt that this large, strong tree was a good representative of our state.

If you could name your own State Symbol, what would it be? Write its name in the space below and draw a picture of it.

My State Symbol: _____

RESOURCES

Illinois Department of Natural Resources. 1999. *Biodiversity of Illinois, Volume I: Aquatic Habitats* CD-ROM. Illinois Department of Natural Resources, Springfield, Illinois.

Illinois Department of Natural Resources. 2000. *Biodiversity of Illinois, Volume II: Woodland Habitats* CD-ROM. Illinois Department of Natural Resources, Springfield, Illinois.

Illinois Department of Natural Resources. 2001. *Biodiversity of Illinois, Volume III: Prairie and Edge Habitats* CD-ROM. Illinois Department of Natural Resources, Springfield, Illinois.

Secretary of State. 2015. *Illinois Handbook of Government 2015-2016.* Illinois Secretary of State, Springfield, Illinois. 124 pp.

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Illinois' State Symbols

The Official State Symbols of the State of Illinois are designated by acts of the General Assembly. On the pages to come, you will see and learn about some of our natural resources State Symbols. On this page, you'll find a list of the rest of the State Symbols.

The Great Seal: The current version of the State Seal was authorized in 1867. It shows an eagle holding a banner in its beak. The banner has the state motto, "State Sovereignty, National Union" written on it. The words, "Seal of the State of Illinois" and "Aug. 26, 1818," are in a circle around the edge of the seal. August 26, 1818, is the date that the first Illinois Constitution was signed.

State Flag: There have been two versions of the State Flag. The first was adopted in 1915. The State Flag was changed in 1970. Its design has an exact replica of the Illinois State Seal on a white field with the word "Illinois" below the seal.

State Song: *Illinois* is the title of the State Song. Its words were written by Charles Chamberlin, and the music is by Archibald Johnston.

State Slogan: Since 1955, Illinois has had an Official State Slogan, "Land of Lincoln." Illinois owns a copyright for the exclusive use of the phrase, "Land of Lincoln."

State Dance: In 1990, the square dance became the Official American Folk Dance of the state. This dance has been known since the 1600s and is still popular today.

State Snack Food: Popcorn became the Official Snack Food of the state in 2003. Elementary school students from Joliet used a class project to promote this designation.

State Fruit: The GoldRush apple was named the Illinois State Fruit in 2007. Elementary students from Woodlawn lobbied for the inclusion of this category.

State Vegetable: Sweet corn was designated as the State Vegetable in 2015. Elementary school students from Chatham worked with a local legislator to propose this category for a vote in the General Assembly.

State Pie: In 2015, a law was passed by the legislature and signed by the Governor naming "pumpkin pie" as the State Pie. It honors the pumpkin industry in the state that is prevalent in the Morton area.

State Tartan: The State Tartan of Illinois is the Illinois Saint Andrew Society Tartan. Its designation was signed into law in 2012.

STATE ANIMAL
white-tailed deer

STATE ANIMAL

white-tailed deer

(Odocoileus virginianus)

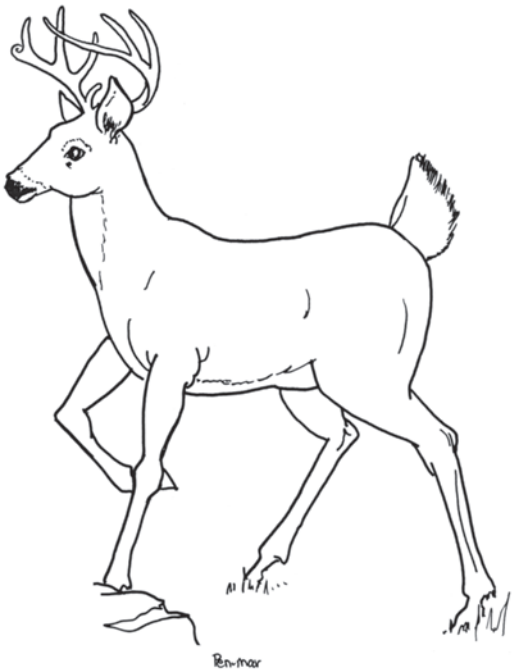
The white-tailed deer was selected by schoolchildren as Illinois' State Animal in 1980.

In Illinois' early days, Native Americans and settlers depended on the white-tailed deer. They used its meat for food and made clothing and many other items from other parts of the animal. By the mid-1800s, the white-tailed deer was nearly eliminated from the state due to unrestricted hunting. After many years, the Illinois Department of Conservation (now the Department of Natural Resources) used wildlife management practices to increase the deer population. Today, the white-tailed deer is found in all Illinois counties.

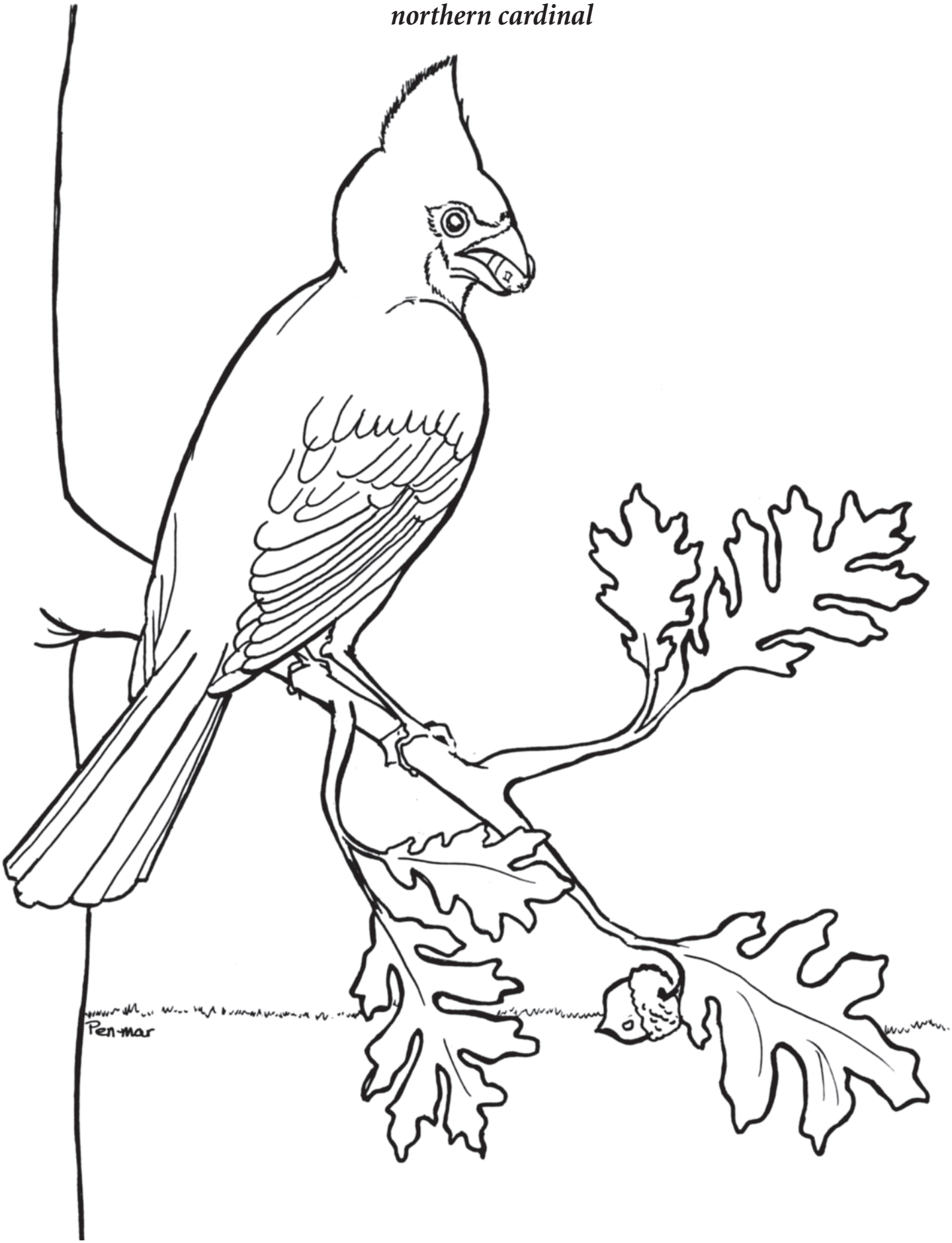
The coat of the white-tailed deer is red-brown in summer and gray-brown in winter. The belly, throat and area around the nose are white. The lower side of the tail is also white. The deer raises its tail to show the white part as a warning when danger is near. That's why it is called "white-tailed." A young deer (fawn) has a red-brown coat with white spots. The spots disappear after about six months.

The white-tailed deer lives in forested areas, thickets and even cities. It is active mainly at dusk, dawn and at night. It eats a variety of plant materials including twigs, acorns, garden plants, grain and fruits. Deer chew their cud, that is, they can bring up from the stomach food that they chewed once and swallowed to be chewed and swallowed again. Some plant parts are hard to digest, and chewing cud helps to speed up the digestive process.

The male deer (buck) begins growing antlers each spring. At first the antlers are covered with a velvety skin. By early fall, this "velvet" has been rubbed off, and the antlers are hard and smooth. After breeding occurs in late fall and early winter, the antlers fall off. The female deer, called a doe, gives birth to one to three fawns in late spring.



STATE BIRD
northern cardinal



STATE BIRD

northern cardinal

(Cardinalis cardinalis)

Illinois was the first of seven states to select the northern cardinal as its State Bird. The cardinal was chosen in 1929. Illinois schoolchildren voted for the State Bird. The other candidates were the bluebird, meadowlark, bobwhite (quail) and oriole. The cardinal is also the State Bird of Indiana, Kentucky, North Carolina, Ohio, Virginia and West Virginia.

The male cardinal is bright red with black around the beak and eyes. The female is pale gray-brown with a faint red tinge. Both the male and female can be identified by the large, pointed crest on the head. A cardinal has a thick beak, too. The average length of an adult cardinal is about eight inches.

Cardinals live in Illinois all year. It is a beautiful sight to see a bright red cardinal against a snowy background in winter. They live in forest edges, thickets, parks, gardens and suburban areas. Cardinals are even found in our large cities.

In spring, the female and male work together to build the nest of grasses, bark, vines, sticks and other plant materials. Cardinals make their loose, cup-shaped nest in shrubs, bushes and thickets. The nest is usually placed from three to 20 feet above the ground. The female lays two to five pale, blue-white eggs. The eggs have red-brown speckles. Cardinals can raise more than one brood in a year.

The cardinal feeds on insects, grains, fruits and seeds. Both the male and female sing. Its songs include "wit-cheer, cheer, cheer, cheer"and "birdy, birdy, birdy."

STATE TREE
white oak

STATE TREE

white oak

(Quercus alba)

In 1908, Illinois schoolchildren voted for the State Tree. They could select from native oak, maple and elm. The native oak was chosen as the State Tree. There are many kinds of oak in Illinois, so a special vote was taken in 1973 to pick the type of oak for the State Tree. Schoolchildren voted to make the white oak the Official State Tree of Illinois.

The white oak can be found in every county in the state. It grows best in upland areas and on slopes. It is not a tree that grows well in wet soil. An average white oak grows to 100 feet in height and three feet in diameter. A white oak can live for 350 to 400 years. Its leaves are bright green on top and pale green on the bottom. Each leaf has seven to nine rounded lobes. The white oak has gray-white bark and green-brown acorns. It gets the name "white oak" from the light appearance of the bark. It is an excellent shade tree because of its thick leaves and wide-spreading branches. In the fall, the leaves of white oak trees turn colors before they fall off. They may be red, gold, brown, yellow or purple. Sometimes you can find all of these colors on the same tree!

The white oak is an important tree to people and wildlife. Settlers in the Illinois territory used its acorns to feed pigs and its wood to build homes. The ship, the *U.S.S. Constitution*, was built with white oak wood. It was called "Old Ironsides" because cannonballs were rumored to have bounced off of the hard, white oak wood during a battle in the War of 1812. Today, white oak wood is used to make many objects, including chairs, tables, cabinets and fences. Deer, wild turkey, songbirds, squirrels and other animals all live in or around the white oak and feed on its acorns.

STATE FLOWER
violet

STATE FLOWER

violet

(Viola sp.)

Illinois was the first of four states to choose the violet as its State Flower. It was selected by schoolchildren in 1908. The violet is also the State Flower of New Jersey, Rhode Island and Wisconsin.

You might think that all violets have purple flowers. There are several kinds of violets, though, and you can find violets with yellow, white, blue-violet, lilac-purple and even green flowers!

Violets are found growing in all kinds of locations, from prairies and lawns to woods and wetlands. The flowering time of the violet depends on the species, but most bloom in the spring.

Cottontails (rabbits) eat the entire violet plant. Other species, like mice, wild turkeys and mourning doves, eat only the seeds.

One violet species is nicknamed "Johnny jump-up," and many others have been the subject of poems and nursery rhymes. They have also been called "nature's vitamin pill." Violets are high in vitamin A and, ounce for ounce, contain more vitamin C than oranges!

STATE INSECT
monarch butterfly

STATE INSECT

monarch butterfly

(Danaus plexippus)

The monarch was chosen in 1975 to be Illinois' State Insect. Third grade classes in Decatur originally suggested the species.

This insect can be found statewide in Illinois. It lives in weedy areas, roadsides, fields, pastures and marshes. It feeds on the nectar of flowers.

The monarch undergoes metamorphosis in its life cycle. Metamorphosis means to change in form. The egg is the first stage in the cycle. From the egg emerges the second stage, the caterpillar or larval form. The monarch caterpillar has black, yellow and white stripes. As it develops, the caterpillar molts (sheds its skin) as many as four times while growing to its full length of about two inches. The third stage in the life cycle is the chrysalis (pupa). You can sometimes find this beautiful shiny, green protective case hanging from the bottom of a milkweed leaf. The chrysalis has gold speckles on it, too. Inside the chrysalis, the monarch is undergoing a final change. Soon the chrysalis splits open as the adult monarch pushes its way out. The male monarch has bright orange and black wings. There are white spots in the wing border. The female is dull orange and black. The entire metamorphosis process in monarchs takes about one month. Three or four generations of monarchs are produced each year.

The monarch caterpillar eats only milkweed plants. Milkweed plants contain some chemicals that are taken into the caterpillar's body. These chemicals make the caterpillar taste really bad to birds and other animals that try to eat it. Most monarch caterpillars escape predators in this manner. The chemicals also help to protect the adult monarch, because it also tastes bad to other animals.

The monarch is the only species of butterfly that flies to warmer climates (migrates) for winter. In the fall, if you are lucky, you can see entire trees covered with migrating monarchs. These insects gather in one place, like on a tree, to spend the cool fall night before flying on again the next morning after the temperature begins to rise. Migrating Illinois monarchs fly to Mexico and sometimes to coastal areas in the southern United States. The monarchs that return in the spring are not the same ones that left in the fall. The returning migrants are offspring from the migrating monarchs.

STATE FISH
bluegill

STATE FISH

bluegill

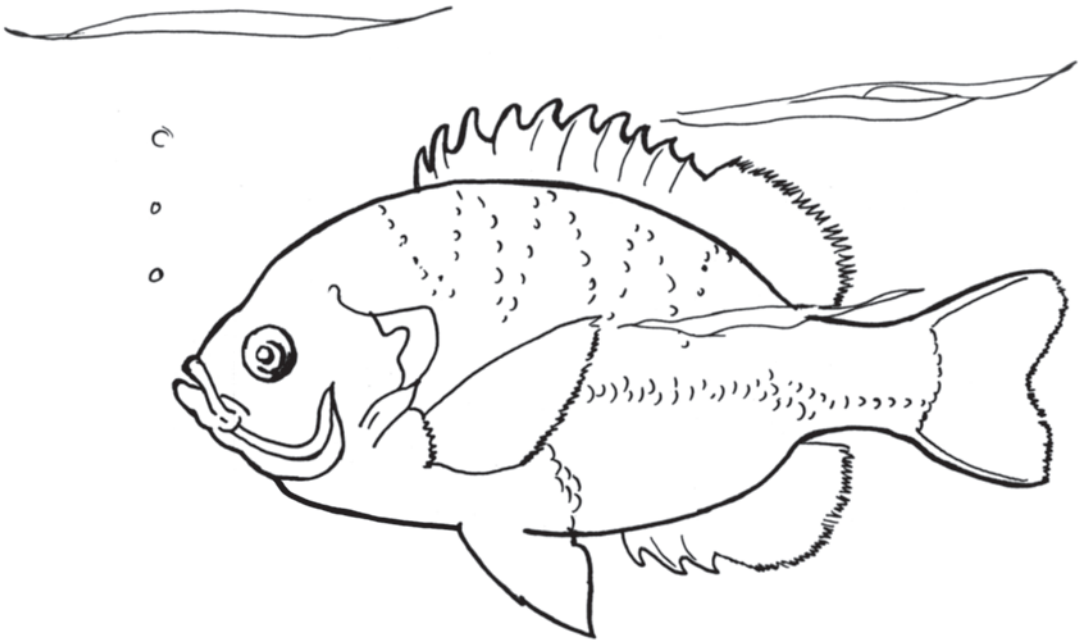
(Lepomis macrochirus)

The bluegill was elected the State Fish in 1986 by Illinois schoolchildren. Its name refers to the bright blue gill covers found on many males of this species. People sometimes call it "bream" or "brim."

An adult male bluegill is pale blue to green-yellow, while the female and young bluegill are gray-green. Most bluegill have six to eight dark-colored bands on each side. When breeding, the male bluegill turns bright orange on the throat and belly. He builds a nest in the sand or gravel by fanning his fins over the bottom to make a depression. The nest is usually built in water about two feet deep near shore. A female can deposit from 2,000 to 67,000 eggs in the nest. Eggs hatch in five to 10 days. The male stays at the nest and guards the eggs.

The diet of a bluegill is made up mostly of insects and their immature forms. Large bluegill may also eat small crayfish, fishes and snails.

Bluegill live about five to six years. Adult bluegill are about eight inches long and weigh about one-half pound. The bluegill can be found throughout Illinois living in lakes, ponds, swamps, creeks and rivers. It prefers warm, clear water with plenty of aquatic plants. These fish swim in a group of about 20 to 30 individuals and are active mainly in the evening and early morning.



STATE PRAIRIE GRASS
big bluestem

STATE PRAIRIE GRASS

big bluestem

(Andropogon gerardii)

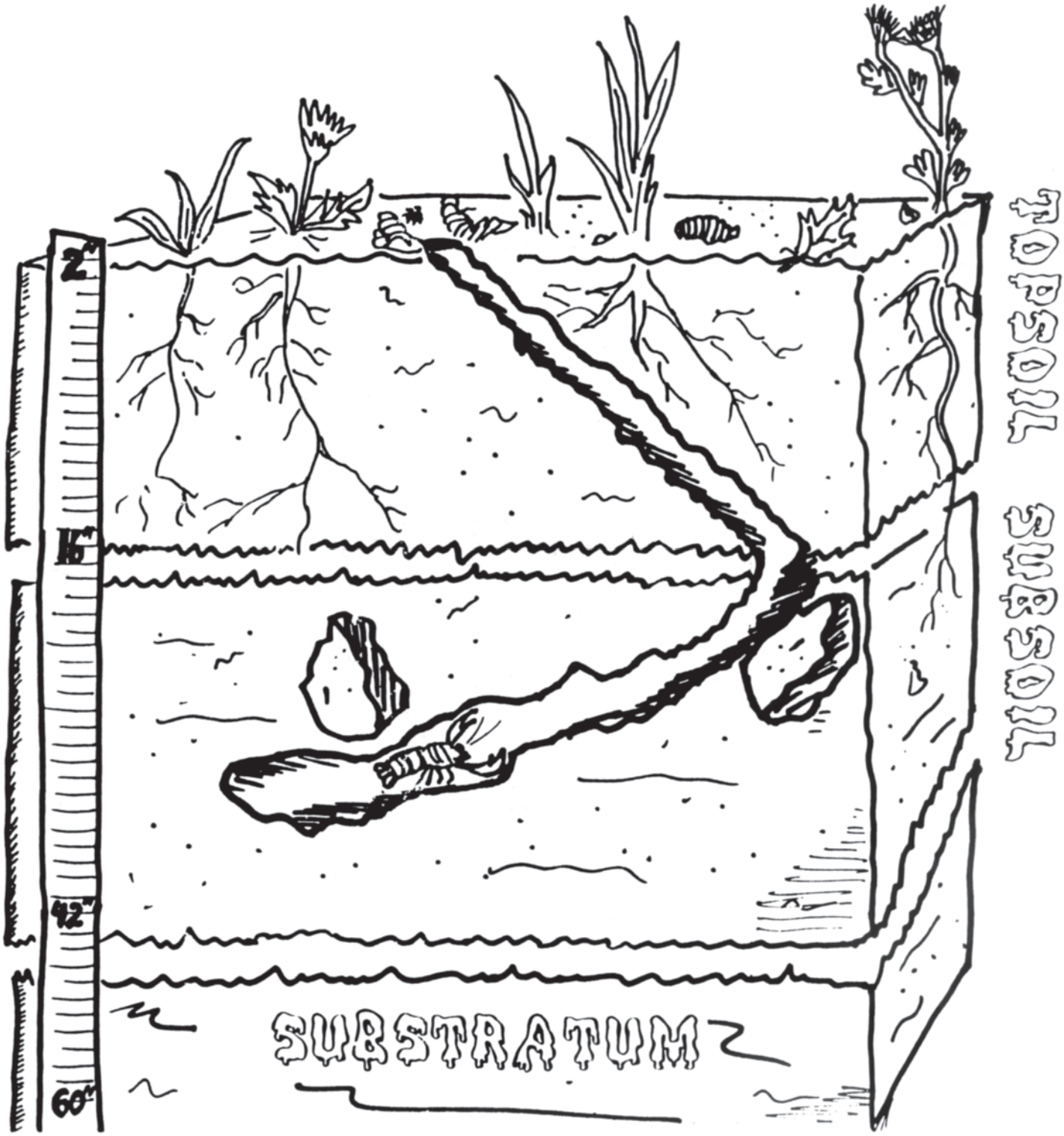
Big bluestem was named the Official State Prairie Grass in 1989.

This native plant grows statewide in moist soils and lowlands. It was the most abundant grass in the prairies that once covered most of Illinois. Today, big bluestem is sometimes grown in pastures as food for livestock.

Spring growth begins in April. The plant's leaves are long and narrow. Its flowering structure grows in three finger-like branches. They look a little like a turkey's foot, so sometimes this plant is called "turkey-foot" grass. It gets its "bluestem" name from the flower stalks which have blue-green stems that turn yellow or bronze in the fall. It blooms from July through September. The fruit produced by this plant is a grain.

Big bluestem is Illinois' tallest prairie grass. Its upright, smooth stems may grow to eight feet tall. Pioneers said that it was as tall as a man on horseback. Its roots can grow as deep as the plant is tall. These deep roots help the plant survive when there is little moisture in the ground.

STATE SOIL
drummer silty clay loam



STATE SOIL

drummer silty clay loam

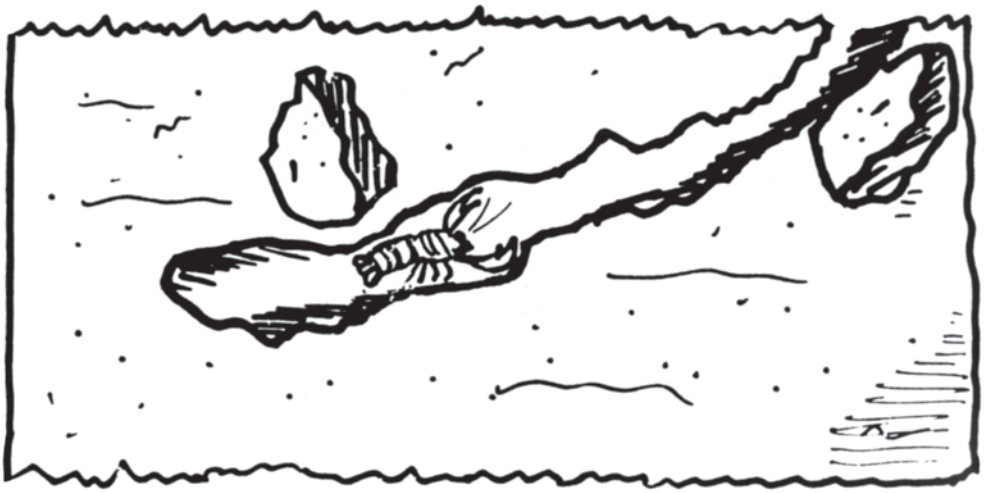
(fine-silty, mixed, superactive, mesic type Endoaquoll)

Drummer silty clay loam is a rich, fertile prairie soil that was declared the Illinois State Soil in 2001. This dark, deep soil was first identified in Ford County in 1929. It can be found in 1,500,000 acres of land in Illinois. Drummer is one of the most fertile and productive soils in the world. Drummer soils formed in 40 to 60 inches of loess (wind-deposited silty materials) and the underlying deposits left behind by glaciers that moved across the state 25,000 years ago.

The topsoil of drummer silty clay loam is about 16 inches deep and is very dark brown to black in color. One reason for the large layer of topsoil is the prairie vegetation that grew above it. As deep roots from the prairie grasses died and decomposed, they left behind nutrients and organic matter in the soil.

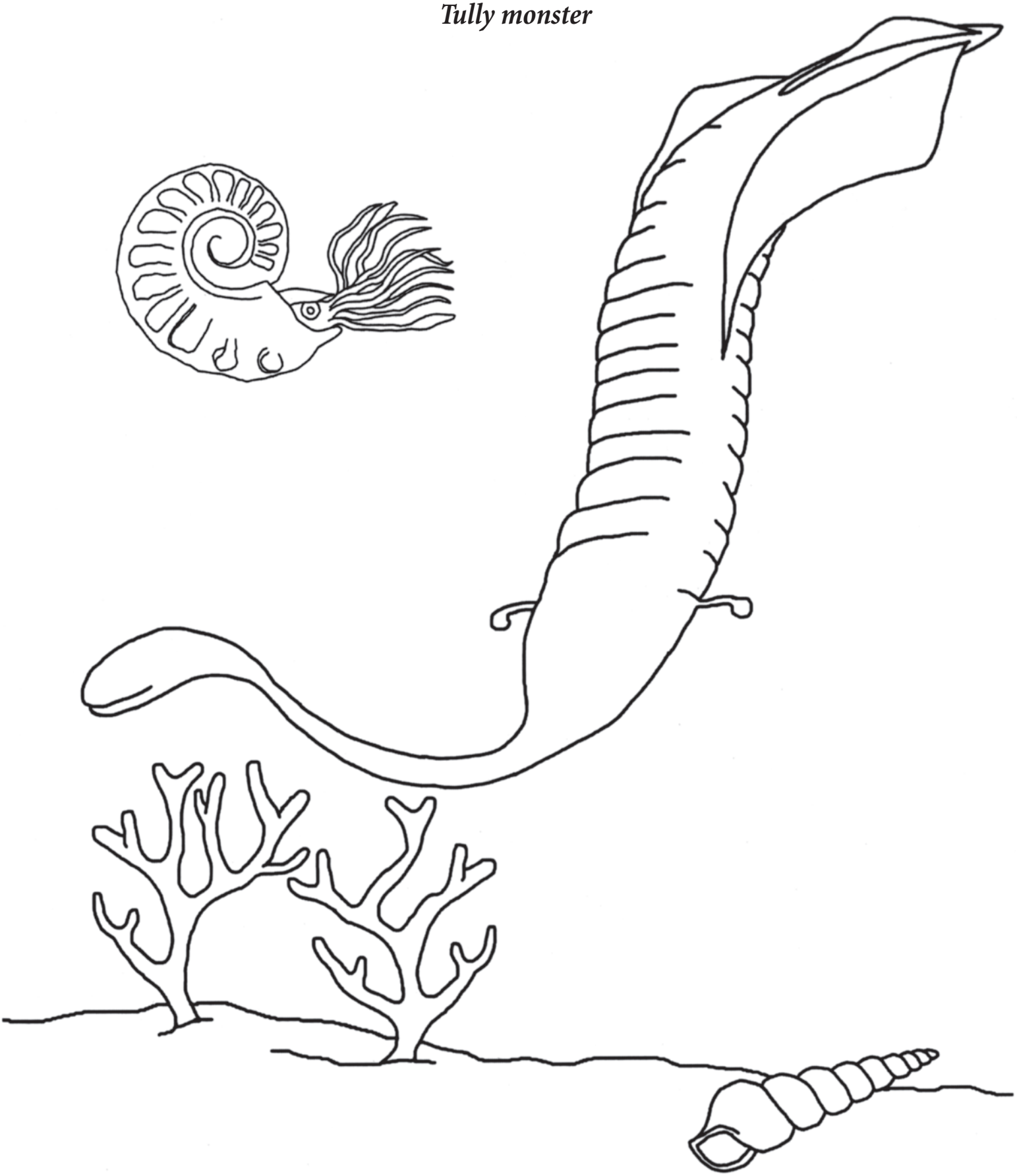
The subsoil layer is more than two feet thick. This layer is gray-brown and has more clay particles in it than did the topsoil layer. The gray color comes from moisture that is locked in the soil.

The bottom layer, or substratum, starts three and a half to five feet below the surface. This layer is dark gray with spots or "mottles" of other colors and is made up mostly of soil material called loam. Few plant roots can penetrate this soil.



source: Natural Resources Conservation Service

STATE FOSSIL
Tully monster



STATE FOSSIL

Tully monster

(*Tullimonstrum gregarium*)

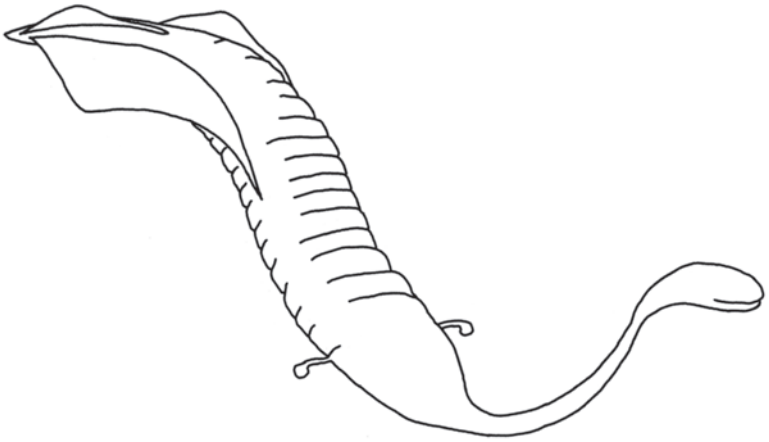
Tully's common monster, also known as the Tully monster, was selected as Illinois' State Fossil in 1989. The first Tully monster fossil was discovered in 1958 by Francis Tully. Fossils of the Tully monster have been found only in Illinois.

The Tully monster was a soft-bodied animal. Its fossils are found in ironstone concretions, which are red-brown, rounded stones commonly found in rock removed from coal mines. This strange creature lived about 300 million years ago during the Pennsylvanian Period. It swam in the tropical ocean that covered Illinois at that time. Its sleek, tapered body and large tail fins imply that it was an active swimmer, perhaps a carnivore (meat-eater). Its segmented body was flexible and round or oval in shape. The body was about one foot in length.

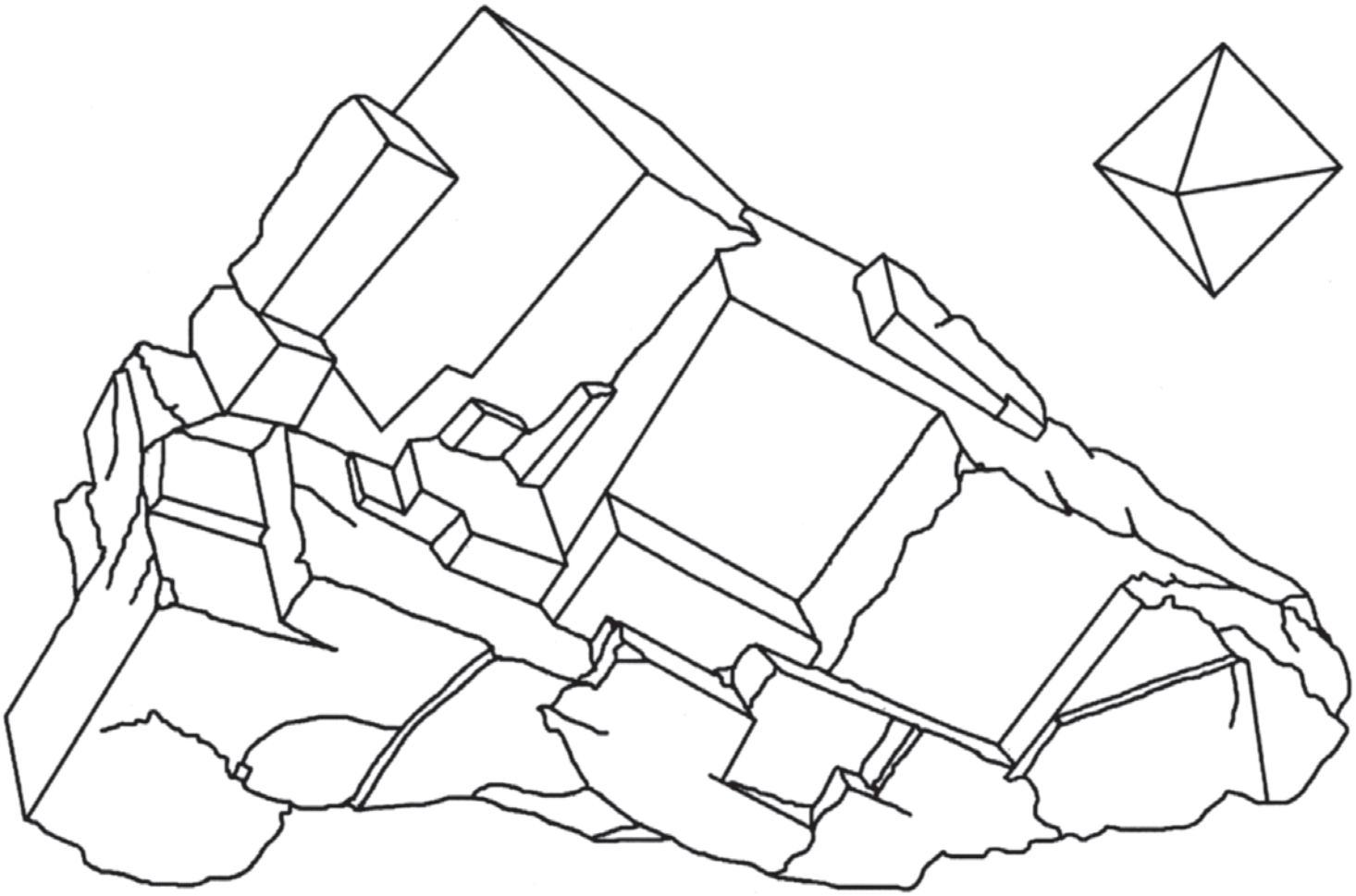
The Tully monster had two eyelike projections on stalks. At the front of the body was an "arm" that ended in a mouthlike structure with eight to 14 sharp projections. The "arm" and projections may have been used for catching prey and bringing it to the mouth.

This animal is a mystery. Although it was an invertebrate, an animal not having an internal skeleton, scientists don't really know exactly what kind of animal it was. It may be related to snails, slugs and other mollusks.

This drawing of a Tully monster shows it swimming through the ancient tropical Illinois ocean, searching for food. Beneath it, looking like small, bare trees, are two colonies built by tiny animals called bryozoans and a gastropod (snail) shell. In the background swims a cephalopod *(Metacoceras sp.)*, a relative of the squid and octopus.



STATE MINERAL
fluorite



STATE MINERAL

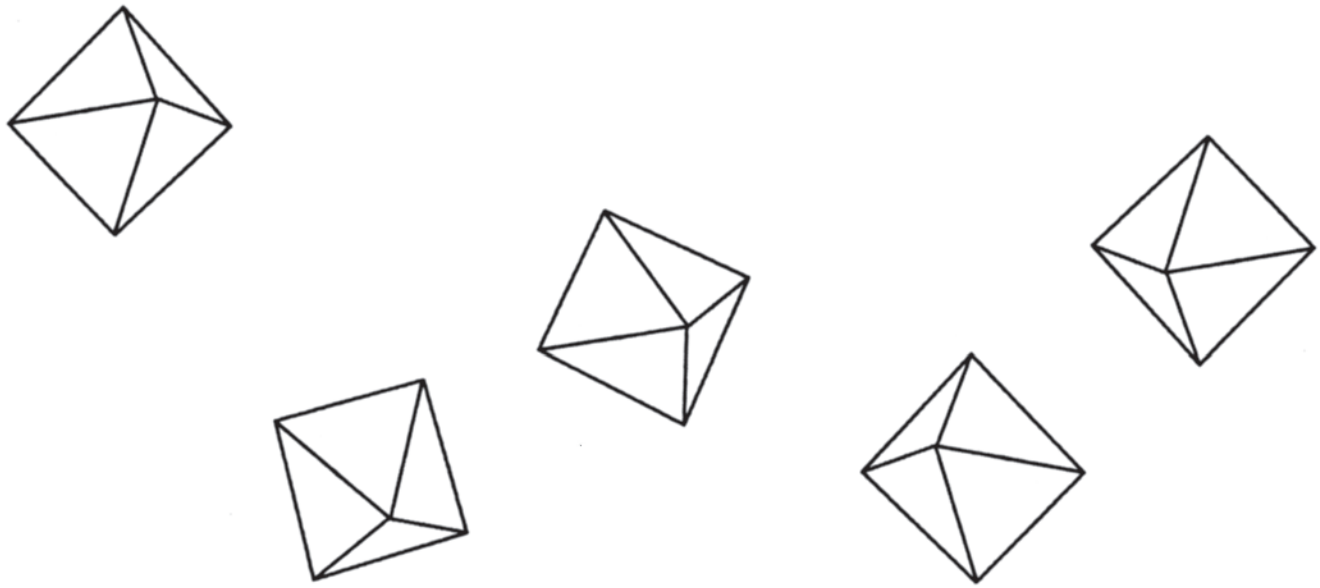
fluorite

(calcium fluoride)

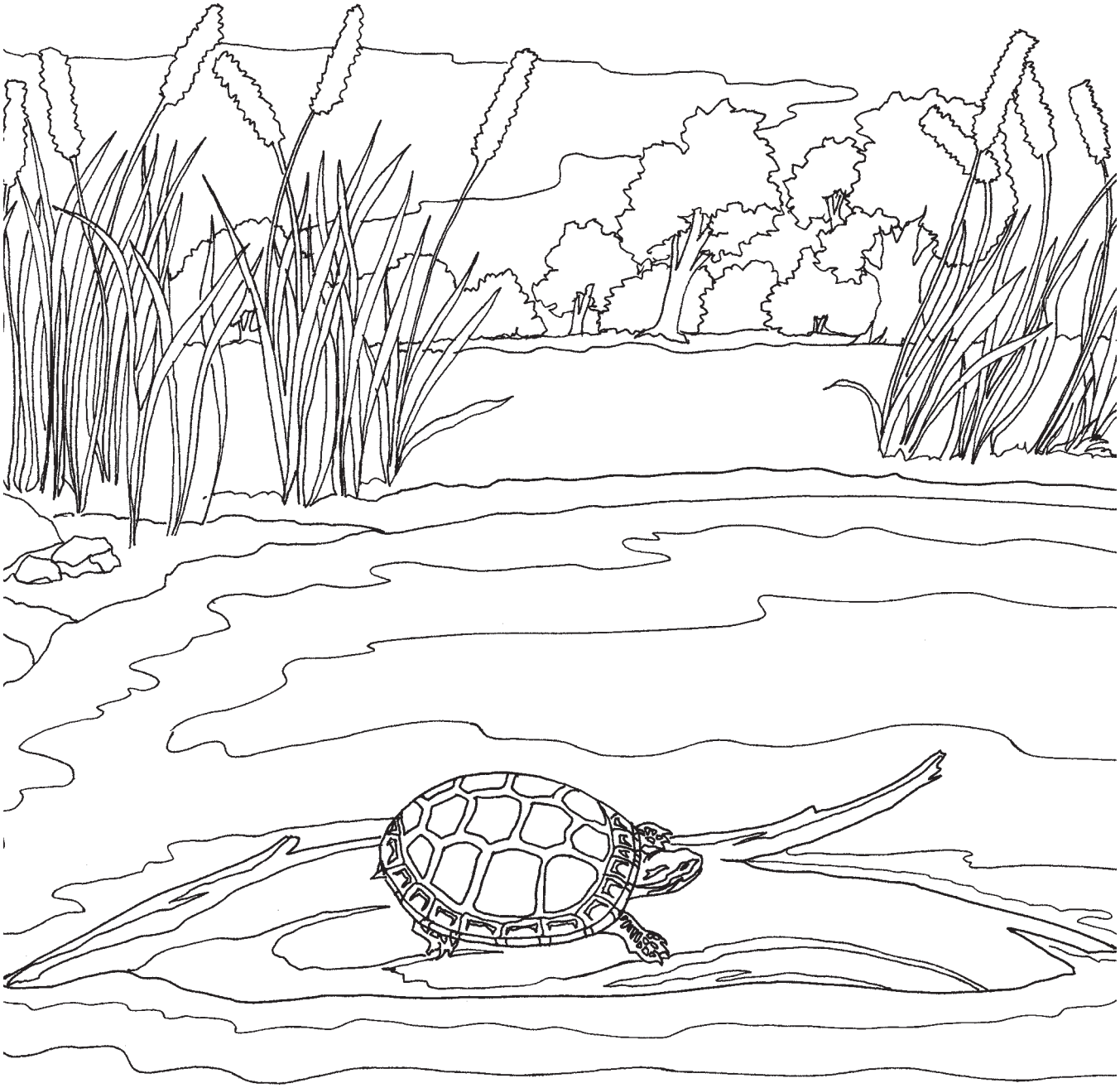
The Illinois General Assembly named fluorite as the State Mineral in 1965. The word "fluorite" means "to flow," and this mineral melts easily. Fluorite is found in many different color shades: dark purple; amethyst; light blue; light green; transparent yellow; and clear.

Fluorite (CaF_2) is made of the elements calcium (Ca) and fluorine (F). They form a mineral that is colorless. The colors we see in fluorite are caused by tiny amounts of other elements in the fluorite crystal. Fluorite is transparent. You can see through it. It forms clusters of beautiful cube-shaped crystals but is too soft and brittle to use for most jewelry. It breaks easily into eight-sided "diamonds."

Large amounts of fluorite are present in deposits in southern Illinois. Native Americans collected fluorite and carved it to make objects. Modern mining of fluorite in Illinois began in the early 1800s. Today, fluorite is used in making aluminum, iron and other metal alloys. It is also used in the making of glass, plastics, ceramics, cement, chemical compounds, uranium fuel for nuclear reactors and rocket fuel. Fluorite even provides the fluoride in toothpastes!



STATE REPTILE
painted turtle



STATE REPTILE

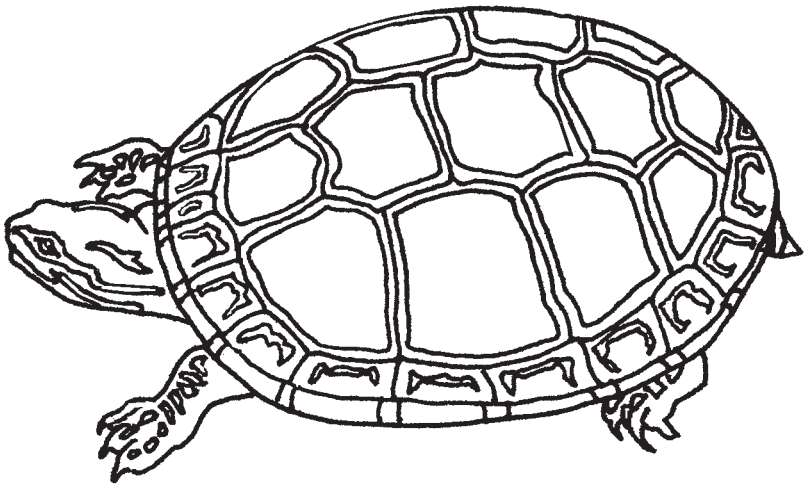
painted turtle

(Chrysemys picta)

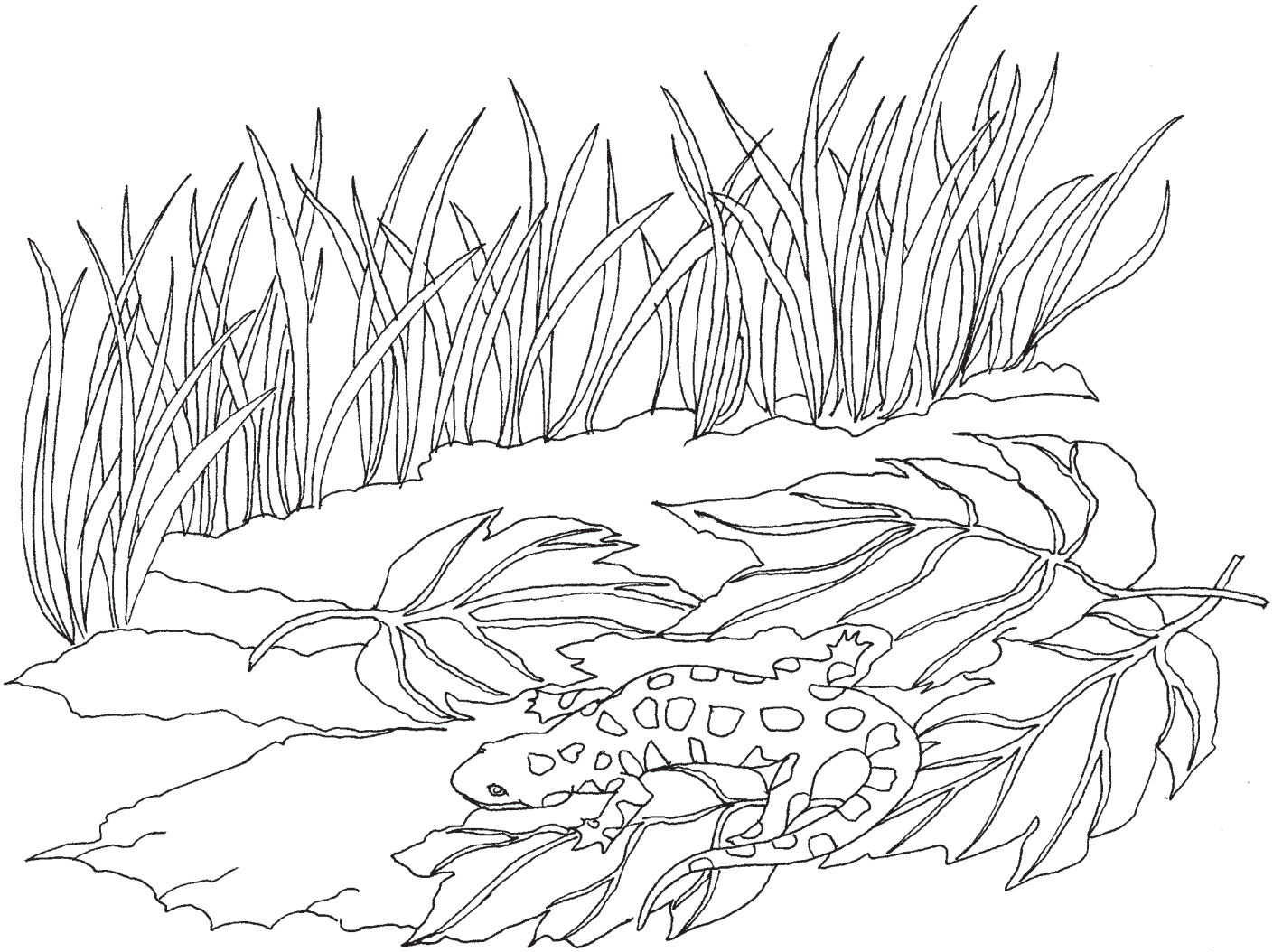
The painted turtle was named Illinois' State Reptile following a vote by Illinois citizens in 2004 and official approval by the Illinois General Assembly in 2005.

Found statewide in Illinois, the painted turtle adult averages five to seven inches in length. The female is larger than the male, and the male has long claws on his front feet. The shell has a red, yellow and black pattern on the back (carapace) while the bottom part of the shell (plastron) has dark marks. Yellow stripes can be seen on the head.

This turtle lives in shallow water that has a good amount of plants growing in a mud bottom. It is active during the day and can often be seen sunning on a log or on the bank close to the water's edge. It feeds on plants, insects, crayfish, mollusks, fishes and amphibians. Mating takes place from April through June. The female digs a hole on land several feet from the water's edge. She lays the eggs (8-9) in the hole, then covers it with dirt. Hatchlings may appear in about two months, but most spend the winter in the nest and emerge the next spring.



STATE AMPHIBIAN
eastern tiger salamander



STATE AMPHIBIAN

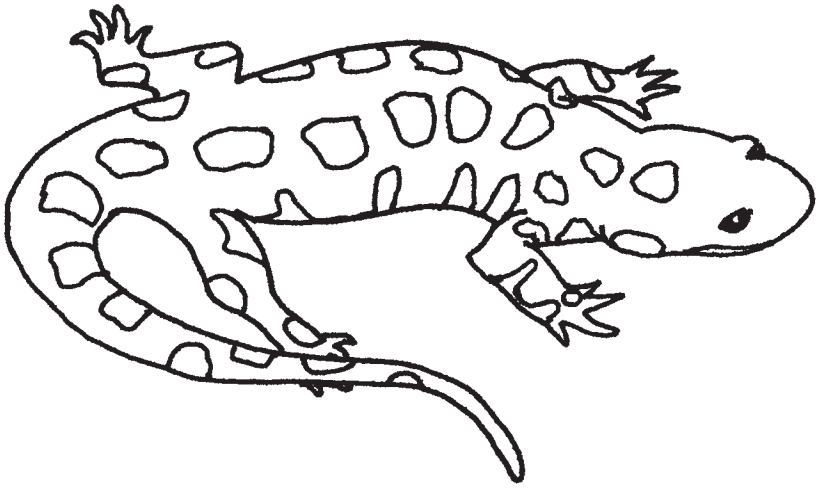
eastern tiger salamander

(Ambystoma tigrinum)

The eastern tiger salamander was named Illinois' State Amphibian after a vote of Illinois citizens in 2004 and approval by the General Assembly in 2005.

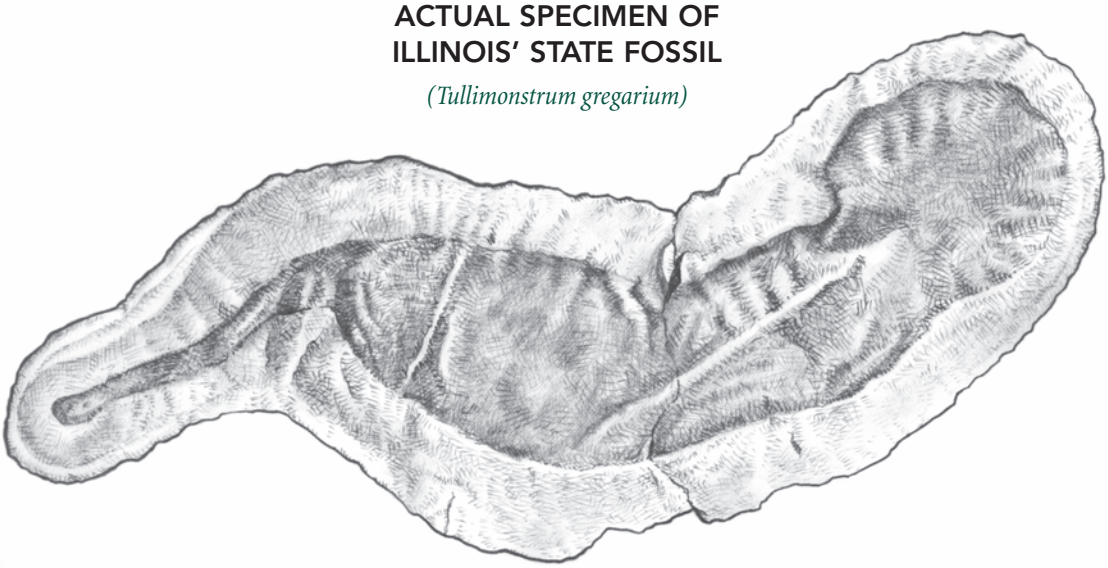
This salamander can be found statewide in Illinois living in woods, swamps, prairies, urban areas and farm fields. It is active at night, especially after rainfall, but spends most of the time under ground. It is a large salamander, growing to seven to eight inches in length. Its body color is blue-black or brown-black with scattered yellow blotches. The belly is yellow-green with dark stripes.

Worms, insects and any other animal that it can catch are food for this species. Breeding occurs in spring in ponds that do not have fish. The female may deposit about 1,000 eggs during the breeding season, attaching them in clusters of about 25-100 to plants and other objects on the pond bottom. The eggs hatch to the larval form in about three weeks. Larvae complete the change to the adult form from July through September.



ACTUAL SPECIMEN OF ILLINOIS' STATE FOSSIL

(Tullimonstrum gregarium)



ILLINOIS DEPARTMENT OF NATURAL RESOURCES

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