

# Kids Lab Poster



## Black swallowtail caterpillars and mating black swallowtail butterflies

**Range/Habitat** - statewide; fields, gardens and other open areas

**Average Size** - 3 1/8 - 4 1/2 inches

**Food** - Black swallowtail caterpillars feed on plants belonging to the parsley family, like wild carrot, or Queen Anne's lace.

**Tell Me More!** - Larvae have a defensive gland which they extrude from behind their head when disturbed. The adult females are mimics of the bad tasting pipe-vine swallowtail. Black swallowtail butterflies find each other by sight. Thus, the patterns on their wings are very important and lead to courtship and mating.



## Milkweed aphids

**Range/Habitat** - statewide; stems, leaves, flowers of milkweeds

**Average Size** - 1/8 inch

**Food** - Milkweed aphids drink the liquids of milkweed plants.

**Tell Me More!** - Milkweed aphids cannot survive the winter in Illinois and must migrate here each spring. Both the milkweed aphid and monarch butterfly contain poisons they have ingested from the milkweed plant. Birds learn that monarch butterflies taste bad and associate the orange and black colors with the bad taste. After one nasty mouthful, birds also avoid the bright yellow milkweed aphids.



## Soldier beetle on chicory

**Range/Habitat** - statewide; grasses and other plants

**Average Size** - 1/2 - 5/8 inches

**Food** - The soldier beetle eats pollen and nectar from plants.

**Tell Me More!** - These beetles are very common each summer. The beetles are poisonous to predators because they contain cantharidin. This compound is used by doctors to remove warts. Their larvae are predators on small insects.



## Ailanthus webworm moth on goldenrod

**Range/Habitat** - statewide; forest as larvae, grasslands as adults

**Average Size** - 3/4 - 1 1/4 inches

**Food** - The brownish caterpillars of the Ailanthus webworm moth feed communally on Ailanthus, or tree-of-heaven trees. You can tell if the webworm is present by the webs on host trees.

**Tell Me More!** - This webworm is found in the adult stage from April through November. Often this moth can be seen at night flying around lights. Another common name for this insect is the ermine moth.



## Hover fly on aster

**Range/Habitat** - statewide; flowering plants in open areas

**Average Size** - 1/4 - 1/2 inch

**Food** - Hover fly larvae are predators on aphids and scavengers. Adults eat flower nectar.

**Tell Me More!** - Hover flies look like bees or wasps, but they aren't even related. They are flies and mimic the same black and yellow abdomen colors of many bees and wasps. Why look like these other insects? Birds know not to eat bees and wasps and these look-alikes have a better chance of being passed over. Like all flies, they have only two wings and lack any means to sting.



## Large milkweed bugs

**Range/Habitat** - statewide; grasslands and other places where milkweed grows

**Average Size** - 1/2 - 3/4 inches

**Food** - Large milkweed bugs feed exclusively on milkweeds, concentrating on the seeds.

**Tell Me More!** - These bugs have piercing-sucking mouthparts to let them drink plant juices. They undergo incomplete metamorphosis, having egg, nymph and adult stages. You can often see all stages on a single milkweed pod.



## Honeybee on aster

**Range/Habitat** - statewide; nest in human-provided hives or hollow trees

**Average Size** - queen - 3/4 inches; worker - 1/2 inch

**Food** - Honeybees feed on flower nectar and pollen.

**Tell Me More!** - Honeybees are not native to North America, but were brought here by early European settlers. They are one of the most important pollinators of crop plants. Honeybees have ventured into outer space aboard a NASA space shuttle. Scientists studied these insects to learn how they would build their honeycombs while in orbit. These bees overwinter by huddling together inside their hives.



## Gaura moth on morning honeysuckle

**Range/Habitat** - mainly the northern two-thirds of Illinois; fields and woods where morning honeysuckle grows

**Average Size** - 1 - 1 1/4 inches

**Food** - This moth's larvae eat the leaves, stems and flowers of Gaura, or morning honeysuckle plants.

**Tell Me More!** - This moth is unusual because it is highly cryptic as it sits on its host plant. Its larvae are also camouflaged and change color depending on what part of the plant they are eating. If they are feeding on flowers they will be pink. If feeding on the plant, they will be green. Adults are seen flying around in summer.



## Great spangled fritillary on purple coneflower

**Range/Habitat** - statewide; woodlands, gardens and wet meadows

**Average Size** - 2 1/2 - 3 1/2 inches

**Food** - The great spangled fritillary obtains food from prairie violets.

**Tell Me More!** - This large butterfly is common in Illinois prairies. Larvae are black and have black spines with an orange base. Only one adult generation appears each year and can be seen from late May through October. Larvae feed at night.



## Prairie cicada on blazing star

**Range/Habitat** - statewide; prairies

**Average Size** - 1 1/2 - 2 inches

**Food** - The prairie cicada feeds on the roots of prairie grasses and flowers.

**Tell Me More!** - This is the largest of Illinois' cicadas. It can be found in undisturbed prairies in late summer. The males sing (buzz) to attract the females. Nymphs develop underground, then emerge, crawl up a plant and shed their skin. Only adult cicadas have wings.



## Differential grasshopper nymph on a closed gentian

**Range/Habitat** - statewide; plants in open areas

**Average Size** - 1 1/4 - 2 inches

**Food** - Differential grasshoppers feed on grasses and agricultural crops.

**Tell Me More!** - The differential grasshopper is the most common large grasshopper in Illinois. It does well in old fields and is considered by many people to be a pest of corn and soybeans. This nymph will soon molt into an adult with fully-developed wings.



## Native bees in Coreopsis

**Range/Habitat** - statewide; nest in ground or in cavities; found near flowers

**Average Size** - most are 1/2 - 3/4 inches

**Food** - Native bees eat flower nectar and pollen.

**Tell Me More!** - Many species of native bees occur in Illinois. Unlike honeybees, they often are solitary and nest in the ground. Their body is usually hairy. They are important plant pollinators.

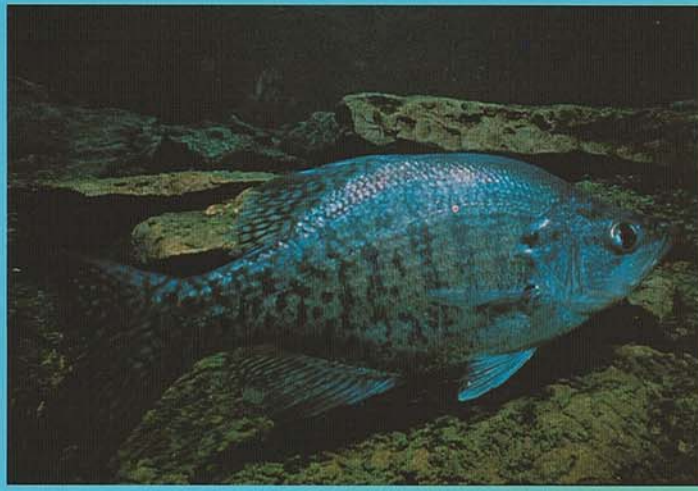
# ILLINOIS INSECTS



# Kids Lab POSTER

# Illinois Fishes

Photos courtesy of Dr. William N. Roston



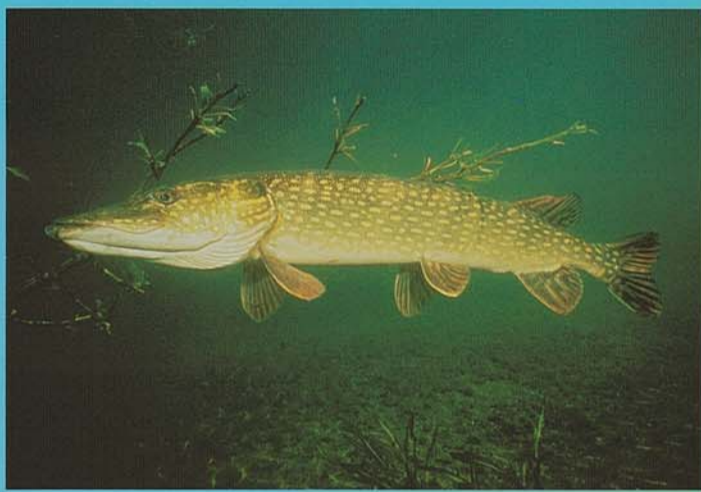
**white crappie - *Pomoxis annularis***  
 Range/Habitat - In Illinois, the white crappie may be found statewide in creeks, rivers, lakes and ponds.  
 Average Length - eight inches  
 Food - insects, small fishes and crayfish  
 Tell Me More! - In the spring the male builds a nest by fanning his fins over the bottom. The female lays 29,000 to 147,000 eggs which hatch in three to eight days. The male guards the eggs.



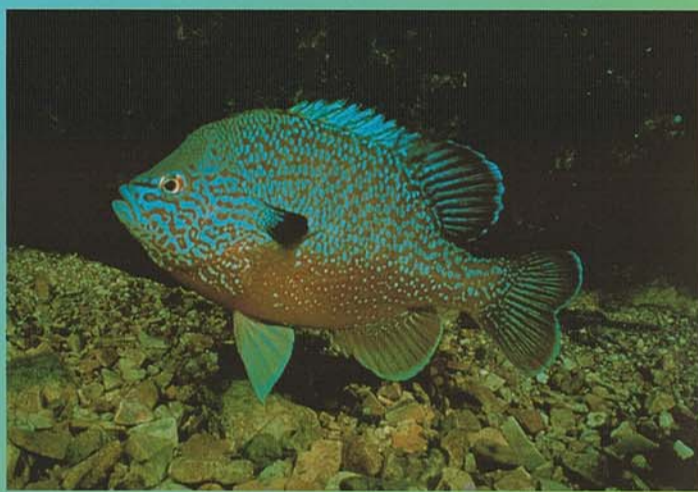
**black crappie - *Pomoxis nigromaculatus***  
 Range/Habitat - The black crappie may be found statewide in Illinois creeks, rivers, lakes and ponds.  
 Average Length - 14 inches  
 Food - insects, small fishes and crayfish  
 Tell Me More! - These fish move in groups around objects in the water. They may be found at depths of 15 feet or more.



**bluegill - *Lepomis macrochirus***  
 Range/Habitat - The bluegill may be found statewide in Illinois lakes, ponds, swamps, creeks and rivers.  
 Average Length - eight to 10 inches  
 Food - insects, small fishes, crayfish and snails  
 Tell Me More! - The bluegill, Illinois' state fish, has an average life span of five to six years. It swims in groups of 20 to 30 fish and is most active in the early morning and late evening.



**northern pike - *Esox lucius***  
 Range/Habitat - The northern pike may be found in all of Illinois except in, and in water that flows into, the Ohio and Wabash rivers. It lives in lakes, rivers and marshes.  
 Average Length - 48 inches  
 Food - fishes, insects, crayfish, frogs and reptiles  
 Tell Me More! - The northern pike's average life span is eight to 10 years. Its eyes are yellow, and the long, green body has yellow spots on the sides. The duckbill-like snout is easily seen.



**longear sunfish - *Lepomis megalotis***  
 Range/Habitat - The longear sunfish may be found in all of Illinois except the northwestern one-fourth. It lives in streams with clear water.  
 Average Length - six to seven inches  
 Food - insects, fishes and crayfish  
 Tell Me More! - The longear sunfish follows turtles and suckers as they feed on the bottom, eating organisms that they stir up and don't find. This fish will also feed on fish eggs from nests of its own and other sunfish species.



**rainbow trout - *Oncorhynchus mykiss***  
 Range/Habitat - The rainbow trout may be found in Lake Michigan. It is also stocked in many streams and lakes throughout Illinois.  
 Average Length - 10 to 15 inches  
 Food - insects, snails and small fishes  
 Tell Me More! - The common name of this fish comes from its beautiful colors. The back is olive green, the sides are silvery with a pink stripe, and the belly is silvery.



**walleye - *Stizostedion vitreum***  
 Range/Habitat - The walleye may be found statewide in Illinois lakes, reservoirs and streams.  
 Average Length - 12 to 28 inches  
 Food - insects and fishes  
 Tell Me More! - The walleye has teeth on its jaws and the roof of its mouth. The name "walleye" comes from the dull or whitish appearance of the eye. It looks this way because of a light-gathering structure in the eye that helps the fish to see during its active time at night.



**johnny darter - *Etheostoma nigrum***  
 Range/Habitat - In Illinois, the johnny darter may be found statewide in creeks, rivers and lakes.  
 Average Length - three inches  
 Food - crayfish and insects  
 Tell Me More! - The johnny darter lives near the bottom. In May, the female lays as many as 1,100 eggs under rocks or other objects. The eggs are laid and fertilized while the fish are upside down.



**rainbow darter - *Etheostoma caeruleum***  
 Range/Habitat - The rainbow darter may be found in creeks and rivers in eastern, north central and southern Illinois.  
 Average Length - two and one-half inches  
 Food - crustaceans, snails and insects  
 Tell Me More! - The colorful rainbow darter has a brown back, a yellow, green or red belly and red fins with a blue edge. The body has dark bars on the sides that are blue on males and brown on females.



**banded darter - *Etheostoma zonale***  
 Range/Habitat - The banded darter may be found in rivers in the northern one-half of Illinois.  
 Average Length - one and one-half to three inches  
 Food - insects  
 Tell Me More! - This tiny fish has a life span of about four years. It lives in sections of rivers where the water is fast-moving and algae and aquatic plants are present.



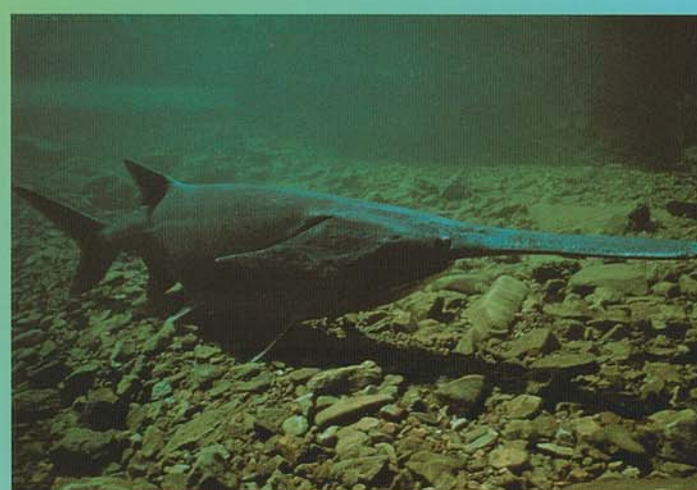
**grass pickerel - *Esox americanus***  
 Range/Habitat - The grass pickerel may be found in lakes, swamps, streams and marshes statewide in Illinois.  
 Average Length - nine inches  
 Food - fishes, insects, tadpoles and crayfish  
 Tell Me More! - The duckbill-like snout has teeth on its jaws. This predator hunts by ambush; waiting in or near plants until a possible prey animal moves past, then swimming quickly to capture it.



**common carp - *Cyprinus carpio***  
 Range/Habitat - The common carp may be found statewide in Illinois rivers, lakes and ponds.  
 Average Length - 12 to 25 inches  
 Food - plant and animal material (insect larvae)  
 Tell Me More! - This fish is a native of Asia. It was brought to America in 1876 and introduced to Illinois in 1879. The common carp is active in the evening and morning. It may feed in water so shallow that part of its back sticks out.



**yellow perch - *Perca flavescens***  
 Range/Habitat - The yellow perch may be found in Lake Michigan, in the Illinois and Mississippi rivers and in lakes and rivers in the northern one-half of Illinois.  
 Average Length - six to 10 inches  
 Food - fishes and insects  
 Tell Me More! - The average life span of the yellow perch is seven to eight years. Its body has a green back, yellow or yellow-green sides with dark bars, and a light belly. The yellow perch feeds in the morning and evening and rests on the bottom at night.



**paddlefish - *Polyodon spathula***  
 Range/Habitat - In Illinois, the paddlefish may be found in the Mississippi, Illinois, Kaskaskia, Ohio and Wabash rivers.  
 Average Length - 60 inches  
 Food - microscopic animals and insect larvae  
 Tell Me More! - Although its average weight is two pounds, the paddlefish may attain 160 pounds in weight and a length of seven feet. This fish may live 20 to 30 years. It has a flat, broad, paddle-shaped snout and no scales except for a patch on the tail. The paddlefish feeds by filtering microscopic organisms from the water as it swims about with its mouth open.



**orangespotted sunfish - *Lepomis humilis***  
 Range/Habitat - The orangespotted sunfish may be found statewide in Illinois in overflow pools of rivers and in streams with little or no current.  
 Average Length - four inches  
 Food - crayfish, insects and fishes  
 Tell Me More! - Breeding males have red eyes, red or orange-red spots on the lower sides and black edges on some of the fins. This fish can live in streams that are polluted with soil and other particles, unlike many other sunfishes.