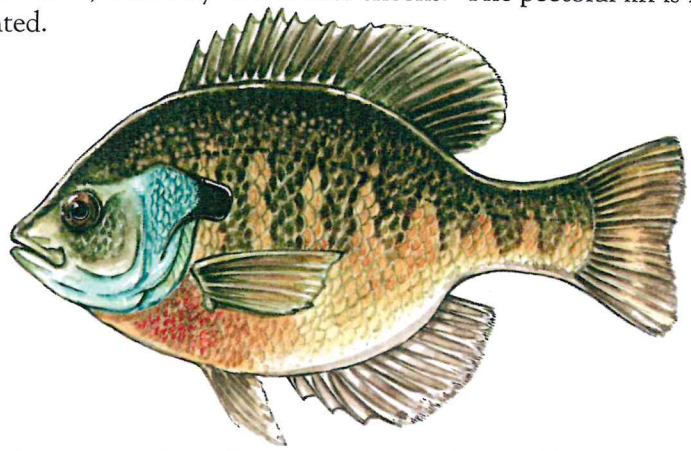
Bluegill *Lepomis macrochirus*

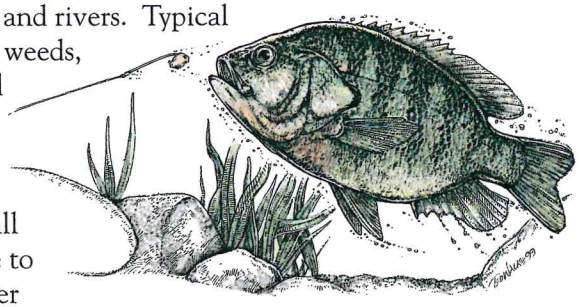
Species overview: The bluegill is what many people think of as a "sunfish." It is what they usually catch when they go fishing for "sunnies." The common name refers to the bluish color that curves from the lower jaw around the bottom of the gill cover. The scientific species name "*macrochirus*" means "large hand," probably describing the fish's body shape. The bluegill is found throughout Pennsylvania nowadays. It is believed not to have been present originally in Atlantic Ocean watersheds.

Identification: The bluegill has several characteristic markings, which are helpful because its colors vary so much. Generally, the bluegill has an olive to brownish back, with sides that shade to brownish, orange and even pink. The sides have eight to 10 sets of double, bluish vertical bars that may look chainlike. The belly is white to yellow or coppery-orange. The sides of the head are greenish to blue-green, with lighter metallic-looking blue on the lower edge of the gill flap and under the lower jaw. Breeding males are darker, with rosy or lavendar sheens. The pectoral fin is long and pointed.



The giveaway marking that distinguishes this sunfish from others is that the flap at the end of its gill cover is black with no red spot. Bluegills also have a dark spot or blotch on the lower part of the back section of the dorsal fin.

Habitat: Bluegills prefer to live in habitats similar to those of largemouth bass. Bluegills are found in lakes, small farm ponds, and the slower parts of warmwater streams and rivers. Typical bluegill habitat has aquatic weeds, where the fish can hide and feed. They can also be found near submerged stumps, logs and rocks. In the daytime, schools of small bluegills can be found close to shore. Larger bluegills prefer nearby deep water. In the evening and early morning, the bigger bluegills move into the shallows to feed.



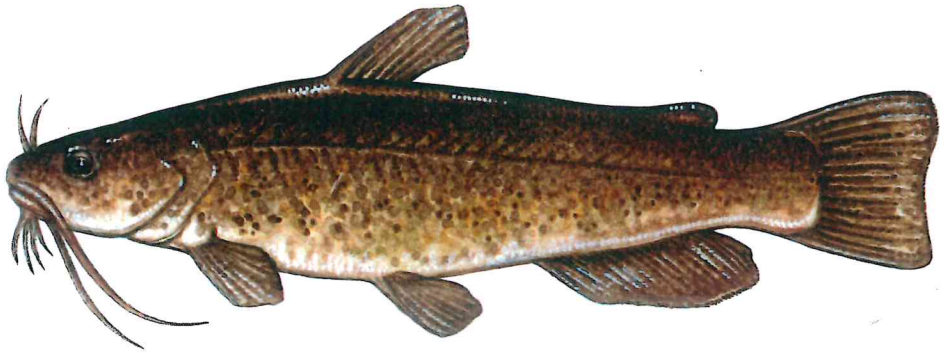
Dry flies and small poppers on a fly rod work well when bluegills are on the feed. Small jigs, wet flies, nymphs and a variety of small baits, fished on small hooks to accommodate the bluegill's small mouth, are also effective.

Life history: Bluegills spawn during a longer period than most sunfish, from May, when the water temperature reaches 67 degrees, until August. The males fan small, saucerlike depressions in sand and gravel as nests, and vigorously guard the eggs and hatched young. Large numbers of nests are often in the same area and form colonies. One female may deposit as many as 38,000 eggs in a nest. Bluegill eggs hatch in two to five days. Because several females have contributed, there may be more than 60,000 young fish produced from a single nest. Bluegills may overpopulate their habitat, resulting in smaller and slower-growing fish. As generalized feeders, bluegills eat aquatic insects, crustaceans and minnows, and they have been known to eat aquatic plants. The bluegill feeds only in the daytime and throughout the water column. It may grow to a foot long and up to two pounds, although nine inches is an average.

Brown Bullhead *Ameiurus nebulosus*

Species overview: The brown bullhead is the most widely distributed bullhead, found across Pennsylvania in suitable habitat. It is native to Atlantic and Gulf Coast watersheds, from eastern Canada to Alabama. It was also originally found in the Great Lakes system, Hudson Bay and the Mississippi River watershed. It has also been widely introduced. Its species name "*nebulosus*" means "clouded," referring to the fish's mottled sides.

Identification: An 18-inch and three-pound brown bullhead is a trophy, and is near the size maximum of the species. Brown bullheads



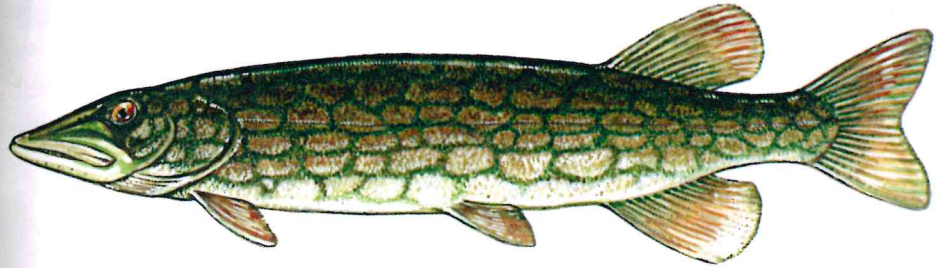
average 12 to 15 inches. The upper part of the head, back and sides are dark to light yellow-brown or olive-brown, shading to grayish white or yellowish white on the belly. The sides have brown or black mottling. The brown bullhead's chin barbels are dark, grayish black, but may have whitish color at the base. These help to distinguish the brown bullhead from the black bullhead, which is known from a few northwestern Pennsylvania counties. The black bullhead's chin barbels are all black. The brown bullhead's caudal fin is square-tipped, or slightly rounded. Its strong pectoral fin spines have five to eight sawlike teeth on their rear edges. The anal fin has 18 to 24 rays, usually 22 or 23.

Habitat: Brown bullheads live in several habitat types, but they are found mostly in ponds and the bays of larger lakes, and in slow-moving sections and pools of warmwater streams. They are bottom-dwellers, usually living over soft mud or muck, where there is plenty of underwater vegetation. Brown bullheads can sometimes be found as deep as 40 feet. They are tolerant of very warm water temperatures, high carbon dioxide and low oxygen levels, and levels of pollution that other fish cannot tolerate.

Chain Pickerel *Esox niger*

Species overview: Chain pickerel are the most abundant and widely distributed member of Pennsylvania's pike family. They are also the most often caught, biting the angler's bait or lure readily. The chain pickerel's original range was Atlantic and Gulf Coast tributaries, but the fish has been introduced elsewhere. In Pennsylvania, chain pickerel are restricted to the Delaware, Susquehanna and Potomac River watersheds. They are most common in the glaciated Pocono northeast.

Identification: Chain pickerel can grow to more than 30 inches long, but one of 25 inches and four or five pounds is considered a trophy in Pennsylvania. The state record is an eight-pounder. Two-pound pickerel are common where the fish have enough to eat. The chain pickerel hides easily in its weedy habitat, with its dark, greenish-yellow back, fading to lighter yellow-green along the sides. Over the sides is a pattern of dark chainlike markings that gives the fish its name. The belly is white. A dark mark, like a clown's painted tear, appears below each eye. The fins are unmarked and pale. As is typical of pickerel, both the cheek and the opercle, or gill cover, are fully scaled. Chain pickerel have a long snout. The distance from the tip of the nose to the front of the eye is greater than the distance from the back of the eye to the end of the gill cover.

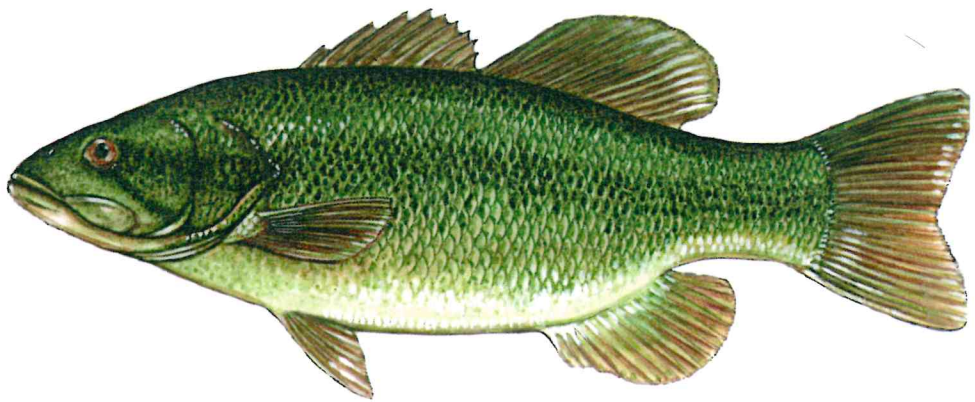


Habitat: Chain pickerel live in and around weedbeds and sunken stumps and logs in natural lakes, swampy ponds and manmade impoundments. They can also be found in the sluggish parts of clear streams and in the naturally acidic, tannin-stained waters that drain boggy wetlands, as in northeastern Pennsylvania. Chain pickerel are commonly shallow-water dwellers, but they can live in deep lakes. They don't travel far from their selected home areas, and they tolerate a wide temperature range.

Chain pickerel are solitary predators, feasting on fish, which they stalk through the underwater weedbeds, as well as crayfish, large aquatic insects, frogs and other small animal life that gets into the water. They feed during the day, especially at dawn and dusk, and are active through the winter, under the ice, so they can be caught by ice anglers. In ponds where they overpopulate and outstrip their food source, chain pickerel may become stunted "pencil pike," or "hammer handles," small in size and thin.

Largemouth Bass *Micropterus salmoides*

Species overview: Largemouth bass were originally distributed in the Ohio River and Lake Erie watersheds in Pennsylvania. The largemouth has been established statewide in appropriate habitat. The largemouth bass is Pennsylvania's biggest sunfish. The state angling record is over 11 pounds, and the fish can grow two feet or more in length. The largest largemouths are generally females. The species name "*salmoides*" refers to trout ("*salmo*"), because the largemouth is sometimes called a "trout" in the southern United States. One nickname is "bucketmouth," which, like the common name "largemouth," is well-deserved by the fish's gaping jaw, with which it can swallow sizable prey.



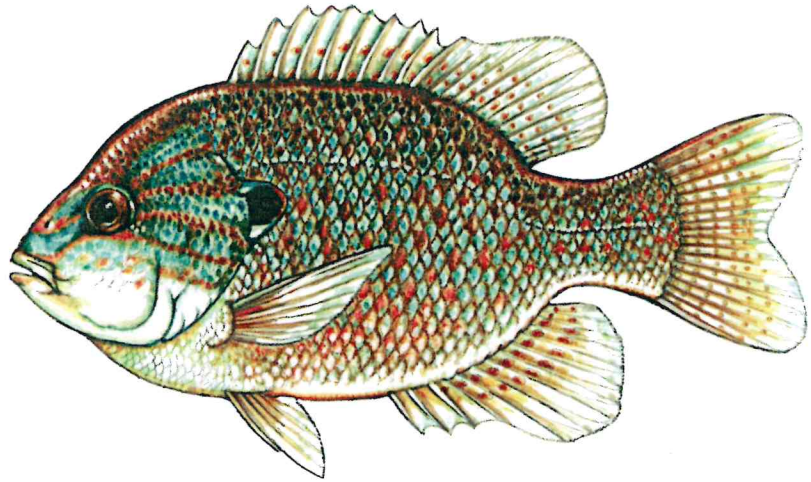
Identification: Along with growing larger, the largemouth is more rotund and less flattened laterally (side to side) than other members of the sunfish family. The largemouth's head and back are a bright-green to olive-green. Its sides are lighter green, and the belly is whitish or pale-yellow. The largemouth's upper jaw extends beyond the back edge of its eye. It has a broad black stripe or a line of broken splotches running along its side from head to tail. In the largemouth, the two sections of the dorsal fin are nearly separate.

Habitat: The largemouth bass lives throughout Pennsylvania in suitable warmwater habitat, which is usually a pond or small, weedy lake. It is also found in the shallow backwaters and coves of large lakes and in the sluggish sections of big rivers. Largemouths are almost always associated with aquatic weeds, a soft bottom or stumps and downed logs. They are rarely found over rocks or in depths of more than 20 feet.

Life history: In true sunfish style, the male largemouth fans a circular nest for spawning and aggressively defends the nest site, eggs and young fish. Largemouths spawn in spring and early summer, when water temperatures remain at 60 degrees for about three days. The typical nest is on gravel, sand or even soft mud. It is two to three feet in diameter, about six inches deep, and in one to four feet of water. Largemouths usually spawn within eight feet of a shoreline and keep their nests at least 20 feet apart.

Pumpkinseed *Lepomis gibbosus*

Species overview: As highly colored as any tropical fish, the pumpkinseed is one of our most common and frequently caught sunfish. Pumpkinseeds are found throughout Pennsylvania, and in eastern Canada and the eastern United States in the Atlantic watershed and



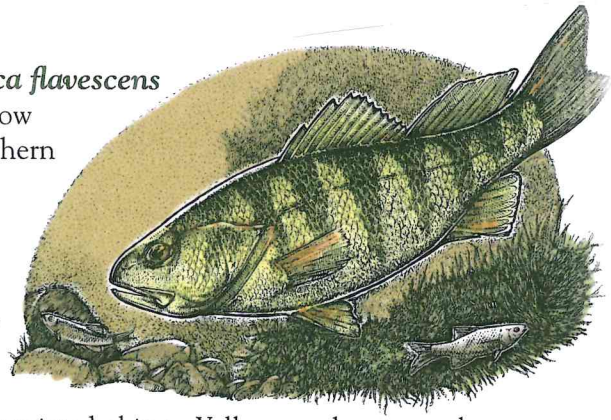
upper Mississippi watershed. The species name "*gibbosus*" means that it is "formed like the full moon," appropriate for its flat, roundish body.

Identification: The pumpkinseed is one of our smaller sunfishes, with eight inches an average size. The body is an overall light-olive to golden-brown, with irregular blue or blue-green lines and a sprinkling of olive, orange or red-orange spots. The fish's cheeks and gill covers are marked with wavy light-blue lines. The belly is reddish orange to yellow. The best way to identify a pumpkinseed is to observe its gill flap, which is at the rear edge of the gill cover. The black gill flap is smaller and more rigid than the bluegill's. It is bordered with lighter color and, most importantly, has a bright orange-red tip.

Habitat: Pumpkinseeds are found in the quiet, weedy shallows of streams, lakes and ponds. They usually live in cooler water than other sunfish. They can tolerate poorer water quality, surviving periods of low oxygen. They also tolerate muddy water and acidic water.

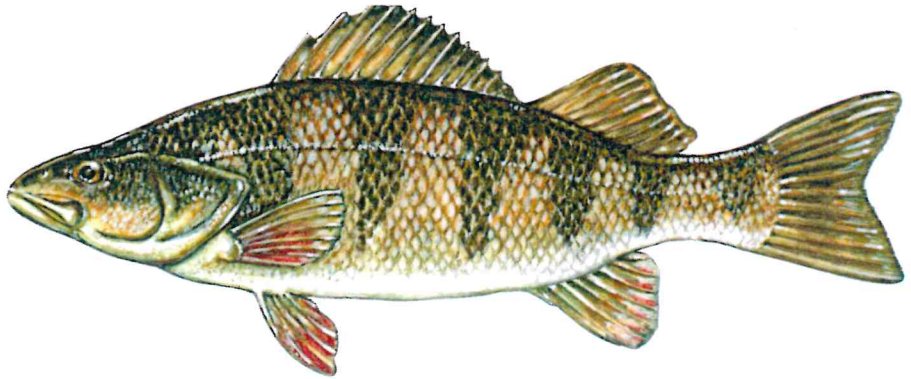
Life history: Pumpkinseeds spawn in late May to early June. The males clear small, saucer-shaped nests on the bottom in water three feet deep or less. Pumpkinseeds nest in small groups of up to three nests, but these groups of nests can be very close. The nests may have several thousand eggs each, which have been deposited by several females. Although the nest is guarded, other males may rush in and fertilize eggs. It takes about three days for the eggs to hatch, and each nest may produce more than 14,000 young pumpkinseeds. Pumpkinseeds may hybridize with bluegills and green, redbreast, longear and other sunfish. They feed heavily on snails and have special throat structures for doing so. Pumpkinseeds feed mostly on the bottom of a stream or pond, where they also eat burrowing and other aquatic insects. Like the bluegill, small baits, jigs and flies take pumpkinseeds best.

Yellow Perch *Perca flavescens*



Species overview: Yellow perch are native to the northern United States east of the Rocky Mountains and Atlantic Coast watersheds south to South Carolina. They have also been widely introduced throughout the country and are distributed across Pennsylvania in appropriate habitat. Yellow perch are popular with open-water anglers and ice fishermen. Yellow perch were netted commercially in Lake Erie. The genus name "*Perca*" means "perch," and the species name "*flavescens*" means "yellow."

Identification: Yellow perch have a long-looking body, but they are not as slim in appearance as other perch family species. The upper part of the head, back and sides is olive-green to golden-brown, shading to lighter yellow-green or yellow on the sides. The underside is white or



grayish. Some back and side scales are dark and form a pattern of six to nine vertical stripes that narrow as they approach the belly. These stripes are a perch's most distinctive feature. The pectoral, pelvic and anal fins are pale-yellow, becoming bright-orange on breeding-season males. The tail is slightly forked. The two dorsal fins are separated. The front dorsal fin has 13 to 15 sharp spines, and one or two spines can be found on the leading edge of the rear dorsal fin. The rest of the rear dorsal fin has soft rays. The anal fin has two spines, and there is a spine on the trailing edge of the gill cover, or opercle.

Habitat: Yellow perch live in a variety of aquatic habitats, including warm or cool lakes, ponds and sluggish streams. A prime yellow perch lake is cool and clear, with a sandy or gravelly bottom and rooted underwater vegetation. They also inhabit lakes with soft bottoms. Yellow perch are considered shallow-water dwellers and are not usually caught more than 30 feet deep.