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GREAT LAKES FISHES 4-H FACT SHEET



#### Description

he fighting fish breaks the mirrorlike surface of the water—twisting and turning until it splashes back into the cool stream. It is this action which makes the smallmouth bass a popular sport fish. Most smallmouth are between 9 and 14 inches long and weigh about 3 pounds. But avid bass anglers seek record-size fish of 8 to 10 pounds or even larger.

The smallmouth has a narrow, oval-shaped body. The front **dorsal fin** on its back is spiny, while the second is soft-rayed. These two fins are joined but have a slight notch between them. The single **anal fin** on the belly, back near the tail, or **caudal fin**, has three spines. Two **pectoral fins** are short and rounded and are located just behind the gill covers. Two **pelvic fins** arise from the belly almost directly below the pectoral fins.

The smallmouth bass' color varies with its habitat. Usually this fish has golden green sides with faint olive-colored vertical blotches or bars. These bars are more distinct on young fish. The back and sides may be darker brown, olive or even black. The belly is light yellow or white. Usually a few dark streaks extend back from the snout and eye across the side of the head. In the young, the caudal fin has a noticeable yellow or orange base, a dark middle band, and white or yellow tips. Smallmouths' eyes are usually red or orange.

The smallmouth got its name because its jaw does not extend back behind the middle of the eye as it does in its closest relative, the largemouth bass. Another way to tell it from the largemouth is that the largemouth's dorsal fins are nearly separated. In the smallmouth the two dorsal fins are more obviously joined. To tell a smallmouth bass from a rock bass, count the five to seven spines in the rock bass' anal fin and notice that the rock bass' dorsal fin has no notch separating the spiny and soft portions.

# Life History

he smallmouth was originally found only in the Great Lakes, St. Lawrence and Mississippi watersheds. Because of its popularity it has been introduced throughout other parts of the United States and southern Canada.

The habitat of this bass varies with its size and with the time of year. In general, the smallmouth prefers cool water (68°F to 78°F) with rock or gravel bottoms and protective cover such as submerged (underwater) logs. They are found in medium to large streams, in small clear rivers and in clear lakes. In the Great Lakes this fish is found along shoals or in bays. During the summer the smallmouth moves into deeper waters as the water temperatures in the shallows increase. During the winter this fish is very inactive at lake or stream bottoms. Smallmouths are not found in the warmer, shallow, weedy areas of lakes where largemouths are usually found.

Smallmouth bass spawn (breed) during a short period in late spring or early summer (late May or early June). The male builds the nest, sometimes returning to nearly the same location as the year before. He sweeps out an area 1 to 6 feet in diameter with his tail. The nest is usually in water 2 to 20 feet deep on a sandy or rocky area near logs or other cover. The male drives a female into the nest where she deposits 5,000 to 14,000 eggs. More than one female may lay her eggs in the male's nest.

The male guards the nest against **predators** such as rock bass and sunfishes, which will eat the eggs. He fans his tail to prevent silt from sticking to the eggs. In 4 to 10 days the eggs hatch. About 12 days later the young fish have completely absorbed their yolk sacs and begin to feed on microscopic animals called **zooplankton**. Soon they leave the nest, but the male still guards them for a few days. When they are young, the bass stay together in a **school**, but as they grow older they strike out on their own. Smallmouth bass are mature at about age 3 or 4, and may live up to 10 or 12 years.

Adult smallmouth bass are **crepuscular**, which means they actively feed mainly at dawn and dusk. During the day this fish rests in pools, under stream banks or in deeper cool water. This is different from the behavior of largemouth bass, which may be most active at midday. The smallmouth is a predator, feeding on a variety of other animals. Its most common foods include crayfish, smaller fishes (basses, sunfishes, perch, minnows, darters, sculpins, suckers and others) and aquatic and terrestrial (land) insects. This fish also eats frogs, tadpoles and fish eggs.

## Fishery

n the Great Lakes region today the smallmouth bass is strictly a game fish. It is not taken commercially. Because natural reproduction is high enough, stocking and hatchery rearing are generally not needed here. As a sport fish, the smallmouth bass is carefully regulated. A minimum legal size is set to ensure that a fish cannot be caught and kept until it is big enough to have spawned at least once. A closed season during winter and early spring protects the fish just before and during spawning season. But spawning time depends on such things as weather and location (northern or southern parts of the Great Lakes region), so occasionally the opening of the bass fishing season occurs when males are still guarding nests and are easily caught. Because of this, smallmouth bass populations might decline if fishing is heavy in a given area.

Anglers still-fish for smallmouth bass from banks, by wading and from canoes using minnows, crayfish and frogs as bait. Other live baits they use include hellgrammites (immature dobsonflies), angleworms and adult mayflies. Anglers also cast live baits, or spinners, poppers and plugs. Fly fishing with wet or dry flies is also challenging. The angler's goal is the delicious, white, low-fat flesh.

Written by:

Shari L. McCarty, 4-H Youth Specialist Donald L. Garling, Fisheries Specialist Department of Fisheries and Wildlife

Illustration by: Maureen Kay Hein

## Glossary

Anal fin—the fin on the underside, between the anus and the tail Caudal fin—tail fin

**Crepuscular**—active at dawn and dusk

**Dorsal fin**—a fin on the back, usually central in position, with rays or spines

**Pectoral fin**—fins just behind the gill, one on each side of the fish

**Pelvic fin**—paired fins below the pectoral fins on the belly of the fish

**Predator**—an animal which feeds on other animals **School**—a large number of fish swimming and feeding together

**Zooplankton**—microscopic free-floating animals



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