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**Scientific name:** *Stizostedion vitreum*

**Common names:** Walleye, glass-eye, pickerel, walleyed pike, pike-perch

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**Description**

The walleye is a close relative of the perch and shares a few of the same characteristics. The walleye is a medium-sized fish, 13 to 20 inches long and weighing 1 to 3 pounds. The largest walleye caught on hook and line may weigh up to 25 pounds.

Walleye are members of the perch family, Percidae. This family includes the walleye, sauger, perch and darters. All members of this family have a dorsal fin (back fin) which is completely divided into a spiny portion and a soft-rayed portion. This is a characteristic found only in the family Percidae. In addition, all members of this family are predators, feeding on insects and on other fishes. Walleye are easily told apart from other perches by their many fanglike teeth, which they use to capture their prey.

Adult walleye vary greatly in color, depending on their environment. In turbid (cloudy) water, walleye take on a pale color. In clear water the fish are more brightly marked, usually with an olive brown, golden brown or yellow background with a darker back and milk white belly. The caudal fin (tail) is forked and has a large white spot on the lower tip of the fin. A dark olive pectoral fin is on each side just behind the operculum (gill cover). The two yellow or orange-yellow pelvic fins stem from the belly just behind the pectoral fins. The single anal fin located on the belly near the tail is edged with white. Walleye have two large eyes. Their eyes appear silver due to reflection from an eye layer called the tapetum lucidum. This eye layer helps a fish see in low light levels.

To tell the walleye from other large predatory game fish such as the pike, look for the walleye's large, completely divided dorsal fin. To tell the walleye from other members of the perch family, note the walleye's white-tipped lower tail fin lobe. To tell a walleye from its closest relative, the sauger, look for dark, crescent-shaped spots on the sauger's front dorsal fin. The sauger also has a dark spot at the base of each pectoral fin.

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**Life History**

Walleye spawn (breed) in the spring. Spawning movements begin as soon as ice breaks up in the tributaries (rivers or streams draining into lakes). Spawning begins while the lakes are still ice-covered. Males move to the spawning grounds first. Walleye spawn in...
the rocky, fast-water areas below dams or on shoals consisting of boulders or course gravel in lakes. Males do not defend a territory or build a nest. Before spawning, walleye go through a set of instinctive behaviors called a courtship. This courtship includes pushing, chasing, swimming in circles and displaying fins. After this courtship, the walleye swim into shallow water, roll on their sides and spawn. Walleye do not die after spawning.

Most of the eggs hatch in 12 to 18 days, depending on water temperatures. The young fish absorb its yolk sac quickly and begins to feed before the yolk is completely absorbed. In 10 to 15 days the young walleye move into the upper levels of open water. Here they feed on zooplankton, (microscopic free-floating animals). Walleye begin to eat fish as soon as they are large enough. If other foods are not available, walleye will eat other walleye, a habit called cannibalism. Adult walleye will eat a wide variety of foods, including fish, crayfish, snails, frogs, insects and leeches.

Male walleye mature in 2 to 4 years. Female walleye are not mature until they are 3 to 6 years old. Walleye live for 10 to 12 years in the southern part of their range, but have been known to live up to 20 years in northern states.

**Fishery**

Walleye are widespread throughout northern and central North America. They are found throughout the Great Lakes region. They are a popular sport and food fish, as well as a valuable commercial fish in the United States and Canada. Walleye are the most sought after fish by Canadian anglers.

Walleye are very active predators in the shallow areas of lakes and rivers. Their light-sensitive eyes allow them to be crepuscular (active at dawn and dusk) feeders. As a result walleye are seldom caught from shallow waters during the daylight hours, unless the shallows are turbid and dark. The best walleye fishing action, however, will occur at dawn and dusk, regardless of whether the water is turbid or clear.

Since the walleye is a predator, anglers use baits that imitate fish. Drifting or trolling near the bottom with live bait or artificial lures (jigs, spoons, plugs or spinners) is usually the best fishing method until a school, or large group, of walleye is located. Once a school is found, still-fishing with live or artificial baits is very productive. One of the most popular techniques is to fish with a jig tipped with a minnow, worm, leech, fish eye or cut bait (piece of fish) on the bottom. Once hooked, walleye swim quickly toward the bottom. They are not spectacular fighters, but are prized by anglers for their delicious flesh.

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**Glossary**

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

**Angler**—one who fishes

**Cannibalism**—when an animal eats members of its own species

**Caudal fin**—tail fin

**Courtship**—a set of instinctive behaviors before breeding

**Crepuscular**—active at dawn and dusk

**Dorsal fin**—a fin on the back, usually central in position, which on walleye, is divided into spiny and soft portions

**Operculum**—gill cover

**Pectoral fins**—paired fins, one on each side of the fish

**Pelvic fins**—paired fins located on the belly below the pectoral fins, or between the pectoral and anal fins

**Predator**—an animal which feeds on other animals

**School**—a large number of fish swimming or feeding together

**Tapetum lucidum**—a light-reflecting layer in a walleye’s eye

**Tributary**—a stream or river which drains into a larger main stream or river, or into a lake

**Turbid**—cloudy water due to the presence of small soil particles and other materials

**Zooplankton**—microscopic free-floating animals

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