

Walleye – *Stizostedion vitreum*

Distribution – Native from Quebec south to northern Georgia and Alabama; northwest to North Dakota; north from McKenzie River, Great Slave Lake, Peace River in British Columbia; Hudson River Drainages. Widely introduced into all suitable waters in the United States. The walleye averages 1 to 2 pounds in most waters, though it occasionally exceeds 10. The torpedo-shaped fish ranges from dark olive brown to yellowish gold, its sides often marked with brassy flecks. The walleye is named for its pearlescent eye, which is caused by the tapetum lucidum, a reflective layer of pigment that helps the fish to see and feed at night or in turbid water. Unlike the sauger, the walleye lacks spots on its dusky dorsal fin, except for a dark splotch at the rear base of the fin, a marking the sauger does not have. The lower tip of the walleye's tail is white, unlike the all-dark lower lobe of the sauger. Walleye move into the shadows of cliffs, boulders, logs and even heavy weeds. Lacking this cover, they seek shelter in deeper water. Walleye remain more active throughout the day if turbidity, wave chop or clouds reduce rightness. Walleye may suspend over deep water to feed on open-water species.

Food Habits - The walleye's low-light vision and sensitivity to bright light play a large role in its behavior. They usually feed in shallow water at dawn and dusk. Walleye are fish-eaters, preying heavily on yellow perch, which cannot see as well as the walleye in low light and thus are easy prey at night.

Life History – Walleye spawn over rock, rubble, gravel and similar substrate in rivers or windswept shallows in water 1 to 6 feet deep, where current clears away fine sediment and will cleanse and aerate eggs. Male walleye move into spawning areas in early spring when the water temperature may be only a few degrees above freezing. The larger females arrive later. Spawning reaches its peak when water temperature ranges from 42 to 50 degrees. A five-pound female deposits more than 100,000 eggs. Neither parent cares for the eggs in any way. Depending on weather, the success of spawning can vary greatly year to year. Rapidly warming water can cause eggs to hatch prematurely. Prolonged cool weather can delay and impair hatching. A cold snap after the hatch can suppress the production of microcrustaceans that walleye fry eat. Year-class strength can vary 100-fold, depending on the success of the hatch and survival of the fry. One walleye year-class may dominate in a lake, while walleye a year older or a year younger are scarce. After spawning, walleye move to feeding areas. Walleye are a "cool-water" species, preferring warmer water than do trout and cooler water than do bass and panfish. As the preferred forage fish become larger and more abundant during the summer and walleye need to spend less time hunting food, walleye commonly spend more time in deep, cool water, away from bright light, where they are most comfortable.

Life Span – Up to 25 years.

Threats – Habitat loss, over-fishing, pollution.