YELLOW PERCH- *(Perca flavescens)*

Common Names: Yellow perch, perch, lake perch, river perch, striped perch, ringed perch, American perch, and common perch.

Wisconsin Department of Natural Resources
Bureau of Fisheries Management

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As a sport fish, yellow perch are prized more for flavor than for fight. Their small size—adults average 7 to 10 inches—precludes them from being much of a challenge for the seasoned angler. Perch persistently nibbling at bait may even irritate anglers pursing other fish.

Persistent nibbling, though, is a yellow perch trait upon which anglers can usually depend. These hungry fish feed on a diverse diet throughout the day, allowing anglers to coax them to the hook with a variety of baits. Add the tendency for yellow perch to congregate in large schools, and casual and veteran anglers alike stand a good chance of filling a stringer with these colorful fish.

If yellow perch are so easy to catch, why would veteran anglers want to fill a stringer with them? The answer is found in another intrinsic quality: White, flaky yellow perch fillets are a true delicacy.

So the next time you are outwitted by wily walleyes or bomb out bringing in bass, try pinpointing a school of yellow perch. Fine one, and there's a good chance the yellow perch's persistent nibbling will help you fill your stringer. Then head back to treat your palate to one of the sweetest and most delicious meals Wisconsin's waters have to offer.

Identification: Yellow perch are easily identified by the golden-yellow coloration on their sides from which they get their most familiar common name as well as their scientific name, **flavescens** (yellow). The intensity of color may vary with age and with water clarity. Young perch and those found in clear **infertile** lakes (lacking vegetation) tend to have less yellow coloration. The common names "striped" and "ringed" perch come from another distinguishing feature, the six to eight broad, dark bands running vertically down their sides. The bands extend over their green to golden-brown backs, ending on the lower sides where they give way to a white belly.

In the same family *(Percidae)* as walleye and sauger, yellow perch have two **dorsal** (top or back) spiny-ray fins. The front dorsal fin has 12 to 14 **spines** (a stiff, sharp support of the fin) and the back

dorsal fin has two spines and 12 to 14 **rays** (soft, flexible support). Be careful of the spiny fins, which are sharp enough to pierce the skin, when handling a yellow perch *(Fig. 1).* As with walleye there is a dusky black color to the membrane between the first and second spines and between the last four or five spines of the front dorsal fin on the yellow perch. The yellow to green **caudal** (tail) fin has a slight fork and rounded tips. The side and belly fins often have a yellow or red tinge with the most brilliant colors found on males during the breeding season.

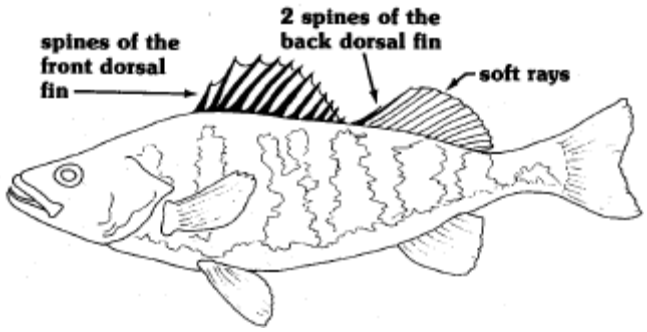

Fig. 1. The two dorsal fins of the yellow perch have sharp spines.

Yellow perch are about 3.5 times as long as they are deep, having deeper bodies than either the walleye or sauger. But they are also smaller, averaging 7 to 10 inches long, although members of the species sometimes reach 14 inches. Lakes with **stunted** populations (water where mature fish are smaller than normal because of competition for food) may have perch averaging just 4 to 6 inches. The Great Lakes often yield 8 to 12 inch yellow perch, with the latter weighing in at about one pound. Occasionally, yellow perch will grow quite large. The world record yellow perch was caught in New Jersey in 1865, and weighed 4 pounds 3.5 ounces. The Wisconsin record is 3 pounds 4 ounces and was taken from Lake Winnebago in 1954.

Unlike walleye and sauger, yellow perch do not have **canines** (conical, pointed teeth). Instead, yellow perch have bands of brushlike teeth on their jaws and on their **palatines** (roof of their mouth). Yellow perch have **ctenoid** scales (having a back margin with a comblike row of miniature, needlelike teeth) over their entire bodies, with the exception of their **opercles** (gill covers).

Distribution: A glacial lake species, yellow perch are found in most of the lakes and ponds left behind by the melting masses of ice that covered Wisconsin 10,000-20,000 years ago. They are common in all major river systems (especially where dammed up), in lower Green Bay and along the shore of Lake Michigan, and in Chequamegon Bay. The species is less common in the unglaciated driftless region of southwestern Wisconsin *(Fig. 2)*.

Many Wisconsin lakes are known for their yellow perch fisheries. Some of the better-known lakes include Lake Mendota (Dane County), Lake Geneva (Walworth County), Pewaukee Lake (Waukesha County), Lake Poygan and Little Lake Butte des Morts (Winnebago County), and Arbor Vitae Lake (Vilas County).

The range of yellow perch extends from Nova Scotia south along the Atlantic Coast to South Carolina, and west throughout most of the northern United States and Canada. Originally perch were not found along the West Coast but they have been introduced in Washington, Oregon and California.

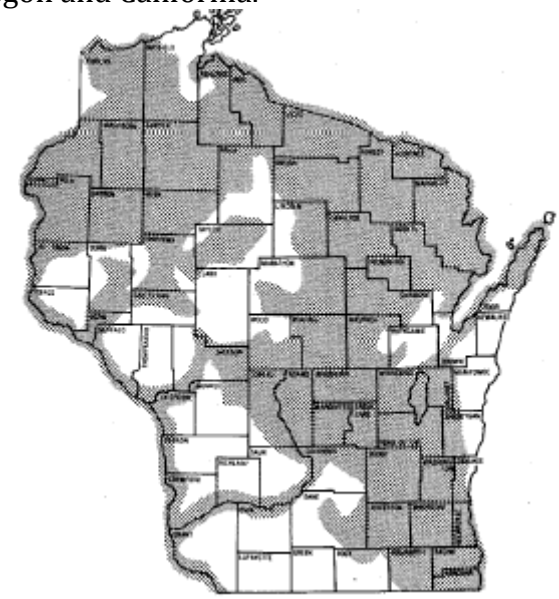

Fig. 2. Generalized distribution of yellow perch in Wisconsin.

Habits and habitat: One reason yellow perch are so prevalent in state waters is that they are a very tolerant fish. While they prefer clear, **fertile** water (water supporting moderate to large amounts of plant growth), yellow perch can adjust to a variety of conditions. This hardy species is renowned for its ability to survive low oxygen levels. That trait allows yellow perch to inhabit deep water that often has reduced oxygen levels and helps it survive **winterkill** conditions (mortality in fish associated with lack of oxygen under frozen lakes) that suffocate other species like bluegill, bass and walleye. After winterkill occurs, a lake will often provide an excellent yellow perch fishery for several years. Perch are also tolerant of **eutrophic** (nutrient rich) and **turbid** (containing suspended solids) water and a wide temperature range.

A gregarious fish, yellow perch are active during the day when they form spindle-shaped schools numbering 50 to 200 or more fish *(Fig. 3)*. Schools are generally comprised of individuals the same size and age. Not all yellow perch are sociable, though, as some loners swim independent of schools. When not feeding near the bottom, schools may be found at varying depths. Schools of smaller fish tend to stay in shallower water than schools of larger fish. As night approaches the schools move in toward shore. After dark, when they can no longer see each other, yellow perch disperse, move to the bottom and remain motionless. At daybreak they again form schools before moving back out to deeper water. Generally, yellow perch follow a seasonal migratory pattern that brings them in toward shore in the spring to spawn, out to deeper water as temperatures rise in summer and into very deep water during the winter.

Eating small aquatic organisms and being eaten by larger predator fish, yellow perch are an important link in the aquatic food chain. When feeding, small yellow perch swim along the bottom picking off small aquatic insects or straining **zooplankton** (minute aquatic organisms) from the water with their **gill rakers** (comblike structures inside the gills). Minnows and small fish become the preferred prey and make up a large portion of their diet as yellow perch grow in size. A relatively slow swimmer, yellow perch are an important prey for many predator fish like walleye, bass, northern pike and muskellunge.

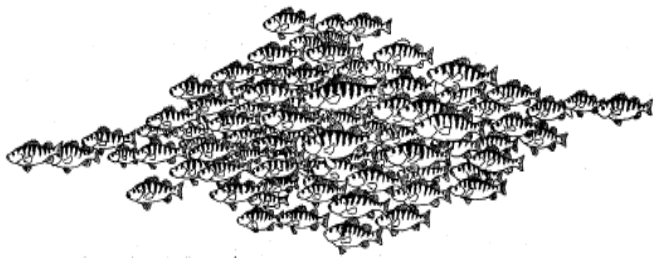

Fig. 3. Spindle-shaped school of yellow perch

Life cycle: With a short life span, lasting about seven years, yellow perch reach maturity and begin reproducing at age 2 or 3. Yellow perch spawn early in the spring shortly after the ice goes out. Spawning lasts approximately from April to early May, when the water temperature ranges between 44 and 52 °F. Males arrive at spawning sites first. Perch prefer vegetation or submerged brush for spawning but will also spawn on gravel, sand or rubble bottoms. In the Great Lakes, perch spawn primarily on sandy bottoms. One female may be attended by as many as 15 to 25 males swimming just below and behind the female, so close together that they almost appear as one body. As soon as the female expels her eggs, the males release **milt** (sperm) in a white cloud to fertilize the eggs. Yellow perch eggs are held together in a long, transparent egg strand that has unique accordion-like folds *(Fig. 4)*. The gelatinous strands can reach up to seven feet long and contain up to 210,000 eggs. Most strands are much shorter, with an average of 28,000 eggs per strand. The actual number of eggs depends upon the female's age and size. The strands float freely until becoming entangled in vegetation or other debris or until sinking to the bottom. Adults abandon the eggs after spawning.

Fig. 4. Gelatinous strand of perch eggs.

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It usually takes between eight and ten days for eggs to hatch, but depending on temperature and other conditions, it may take almost a month. The **fry** (newly hatched fish) are less than one-quarter inch when hatched and live on food stored in attached yolk sacks for three to five days *(Fig. 5).*

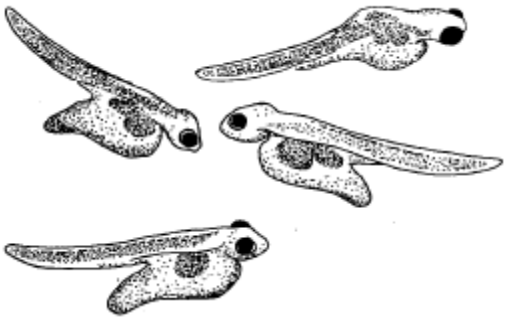

Fig. 5. Perch fry with yolk sacks attached.

After the yolk sack has been absorbed, the fry begin eating microscopic zooplankton. The fry achieve 50 percent of their first year's growth within three months. Perch continue to grow rapidly in length for the first two years, after which time they grow more in weight than in length.

Age (yr.)	**Average length** (in.)	**Average weight** (lbs.)
1	3-5	0.03
3	5-9	0.18
5	7-10	0.38
7	10-11	0.68

Fishing for yellow perch: Some anglers claim yellow perch are so willing to be caught that they will bite at a bare hook. Of course, you're much more likely to be successful with worms on the hook. Other common baits include small minnows, insect larvae, crayfish tails, shrimp and pieces of fish.

Although most anglers agree yellow perch are a reliable catch, there is a trick to consistently bringing in large perch. Like the yellow perch moving around in schools searching for food, the successful angler must also move around in search of yellow perch. Because perch feed primarily near the bottom, start looking for schools there. If you have no success on the bottom, pull your bait up a few feet before moving to a new location because schools occasionally swim at different depths. If you have no strikes after a few minutes, try a new location. Once you've located a school, mark the depth of the school with a bobber on the line. Since schools usually contain fish of about the same size, if only small perch are biting, look for a school of larger fish. Yellow perch feed during the day, especially early morning and late afternoon, and become inactive at night.

Once you've found a school, it can be tricky to hook a yellow perch. Because they don't have canines, yellow perch nibble at food rather than hitting with a solid strike. With such a light bite, most anglers set the hook with a swift jerk at even the slightest indication of a nibble, or they may end up pulling up a bare hook. Perch are notorious bait thieves.

Tackle may be as simple as a cane pole or as complex as a graphite rod with an ultra-light, open faced spinning reel—as long as it is sensitive. Use a small, fine wire hook with live bait; and a small bobber with just enough buoyancy to break water will signal even the lightest bites.

Yellow perch remain active during the winter, making them a particular favorite with many ice anglers. In winter, perch often move down to the lake depths, feeding exclusively off the bottom. On some lakes, anglers fish in 40 to 60 feet of water to catch yellow perch in the winter. Ice anglers fish for perch with short jig poles, some with specialized spools large enough to accommodate 50 to 60 feet of line. Small, colorful, tear-shaped jigs, baited with different types of grubs, such as wax worms or mousies—which are the larvae of flying insects—are the bait of choice among many Wisconsin ice anglers *(Fig. 6).*

Recreational fishing of yellow perch is open all year. Perch fall into the "panfish" category under Wisconsin fishing regulations, which allows for a liberal bag limit and no size limit. Check the current Wisconsin Hook and Line Fishing Regulations for more information.

Fig. 6. Tear-shaped ice fishing jig.

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Wisconsin has two major commercial perch fisheries, located in southern Green Bay and along the southern shore of Lake Michigan from Sheboygan to Racine. Commercial harvesters fish Green Bay, catching yellow perch in nets set on or near the bottom in water up to 90 feet deep. Yellow perch harvested commercially from Green Bay average about 10 inches. Total harvest for all of Lake Michigan, including Green Bay, has averaged over 2 million pounds annually since the late 1800s. Wisconsin harvest has averaged about one million pounds in recent years. Commercial harvest is prohibited in Green Bay and Lake Michigan during spawning.

Management: Stunted yellow perch populations commonly occur in inland lakes where perch are overcrowded. Stocking predator fish—primarily the highly effective walleye—is the main management practice for reducing yellow perch populations and increasing fish size. This management practice has the double benefit of boosting walleye populations while increasing perch size. In an effort to increase yellow perch populations in lakes and flowages that lack vegetation due to fluctuating water levels, fish managers and fishing clubs sometimes sink artificial "fish cribs," constructed of wooden pallets, concrete, brush, old Christmas trees or other materials, in shallow water to provide spawning habitat.

A quota management system in place for the commercial Green Bay fishery aims primarily at maintaining a stable population. The Green Bay perch fishery has historically seen many peaks and valleys. Commercial fishing combined with spawning conditions, such as water temperature and wind, can contribute to population fluctuations.

A similar looking fish to the yellow perch, *Gymnocephalu cernua*, commonly called a ruffe or, erroneously, white perch, has become established in the St. Louis River and the river's bay area of Lake Superior. It is believed the ruffe was introduced by European ships emptying ballast water into the lake before taking on cargo. While similar in appearance to the yellow perch, the ruffe lacks the distinctive yellow color. Because it competes for the same habitat and food as yellow perch, efforts are underway to control the spread of ruffe.

Environmental concerns: Tolerant of a variety of conditions, yellow perch are less susceptible to environmental degradation than many game fish. However, yellow perch do best in clear water with moderate vegetation. Increases in water turbidity can reduce perch populations, as can lack of cover for good spawning habitat. Large carp populations are associated with both turbid water and declines in aquatic vegetation, so carp control may benefit yellow perch. Nutrient-rich lakes tend to have abundant aquatic vegetation making it difficult for predators to successfully prey on perch, which may result in stunted perch populations.

With their relatively short life spans and low fat content (less than one percent of their body weight), there is less concern about chemical contaminants accumulating in perch than there is in larger predatory fish. Recent studies have indicated, however, that perch can accumulate mercury in their flesh. Anglers should always consult the current Fish Consumption Advisory. The advisory, published by the DNR and the Wisconsin Division of Health, lists which fish species in which waters do not meet health standards for a number of toxic pollutants.

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