BULLHEADS-

Black (Ictalurus melas)



Brown (Ictalurus nebulosus)



Yellow (Ictalurus natalis)



Common Names: *Black bullhead:* Bullhead, common bullhead, black catfish, black cat, yellow-belly bullhead, horned pout, stinger, river snapper. *Brown bullhead:* Northern brown bullhead, marbled bullhead, marble cat, mudcat, speckled cat, bullpout. *Yellow bullhead:* Northern yellow bullhead, yellow catfish, Mississippi bullhead, white-whiskered bullhead, greaser.

Wisconsin Department of Natural Resources Bureau of Fisheries Management

PUBL-FM-706 08 July 2008

Stubborn, obstinate, tenacious: People with these traits are called "bullheaded." Add fins, gills and a preference for aging, warm-water lakes rather than land, and you'd be talking about bullheads.

Despite the somewhat derogatory name, these prolific members of the catfish family have earned the grudging respect of anglers in Wisconsin and scientists all over the world. Bullheads can be depended upon to bite at almost anything anywhere at almost any time of day, put up a worthy fight on the line, and once caught, make a tasty meal. Many sport anglers for whom only the mighty muskie has meaning first discovered the thrill of fishing as children, when a headstrong bullhead swallowed a hook threaded with marshmallows, hot dogs, and whatever else was left after a family picnic.

The bullhead is one tough fish, frequently surviving after other species have long since gone belly up. Bullheads can tolerate acidic waters with low oxygen and high carbon dioxide levels—and because they withstand pollutants better than most fish, they're used extensively by researchers as a laboratory animal for toxic chemicals and medical experiments. Excellent aquatic pets, bullheads require a minimum of attention and are able to endure aquarium conditions that would doom more delicate fish.

Not everyone loves the bullhead trio. Fisheries managers are tormented by bullheads, which destroy aquatic vegetation by stirring up the bottom in their search for food, thus eliminating protective cover for bass, bluegills and waterfowl. Bullheads have also been known to feed on the spawn of various sportfish species. With their high reproductive rate, bullheads will quickly overpopulate small ponds and lakes, choking out other fish and stunting themselves in the process.

There are no restrictions on bullhead fishing, so why not do a favor to the species that has helped the advance of science. Grab a pole and a can of worms and catch yourself a mess of bullheads. Your stomach and Wisconsin's waters will be the better for it.

Identification: All three species of bullheads are scaleless, average eight to ten inches in length and have thick, heavy heads with rounded snouts and wide mouths ringed with broad bands of tiny, needle-shaped teeth. Six whisker-like barbells (feelers)—one long barbell sweeping back from the upper jaw at each corner of the mouth and four in a line on the lower chin—give bullheads a catlike appearance. Don't make the mistake of thinking that these fish are pussycats, however; many an unwary angler has been cut by the sharp spines at the base of the dorsal (on the back) and

pectoral (on the side behind the gills) **fins** of the bullhead. These painful, stinging cuts are not caused by the barbels, as many people believe; the barbells are important sensory organs that alert the bullhead to the presence of food.

How do you know what kind of bullhead has swallowed that hook baited with leftover pizza? Black bullheads have dark, olive to black backs with a white or yellow underside; their barbels are black or gray, and their **caudal** (tail) **fins** are somewhat square and slightly notched at the midpoint. The fin spines are sharp but smooth.

Brown bullheads are yellowish-brown to black on top, with gray or light brown mottled sides and pale yellow or white bellies. Barbels are dark brown and the caudal fin most often has a straight edge; occasionally, it may be slightly indented at the middle. Fin spines are rough and jagged.

The yellow bullhead has a yellow, olive or black back with light-colored sides and a yellow to white underside. The chin barbells are white (in large individuals, gray) and the caudal fin is rounded. Fin spines are jagged. (Fig. 1)

What the bullhead lacks in scales, it makes up for in taste buds. Each individual fish has an estimated 100,000 taste receptors distributed all over the body on the smooth skin. The buds make it easier for the bullheads to find food at night when they are most active.

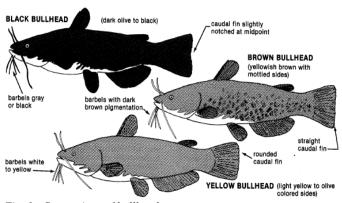


Fig. 1. Comparison of bullheads.

Distribution: To put it bluntly, bullheads get around. You'll find them in the drainage basins of the Mississippi River, Lake Michigan and Lake Superior. The black species is widespread and common in lakes and streams throughout the state. The brown bullhead, the least common of the three species, is found mostly in the Rock, Fox and Wolf river systems of the east, and the Chippewa River system of the northwest. Brown bullheads also frequent the shallows of Lake Superior, Lake Michigan, Green Bay, and Lake Winnebago. Look for yellow bullheads in Green Bay, the Wisconsin River, lakes Winnebago and Poygon, and the larger northern lakes. (Fig. 2)

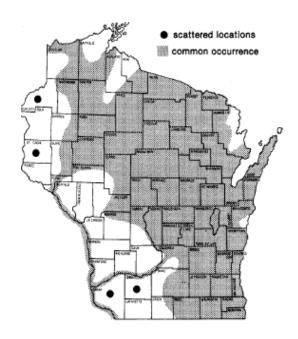


Fig. 2. Generalized distribution of bullheads in Wisconsin.

Habits and Habitat: Bullheads are gregarious fish. They prefer to travel in large schools, drifting along the bottom of warm lakes and sluggish streams in search of quiet backwaters or vegetated shallows. Generally, bullheads remain inactive during the daylight hours, loafing in weed beds until night falls. After dark—just like the cats they resemble—bullheads go out on the prowl. No snail, clam, insect, leech, small fish, algae or crayfish is safe from their barbells and taste-sensitive skin.

The bullhead's voracious appetite decreases with the coming of winter. The fish stop feeding, become sluggish and often bury themselves in soft, leafy ooze along the shore with only their mouths and gills exposed to the water above the surface of the mud. The ability to "hibernate" allows the bullhead to survive serious winterkill (low oxygen and/or low temperature) conditions.

The phrase "like a fish out of water" applies only to less hearty fish. The stalwart bullhead actually seems to enjoy being on land. Bullheads can survive out of water for hours, and there are stories of bullheads living for weeks in 'cocoon like' clods of nearly dried mud. This is a fish that would just as soon trade its **pelvic** (under the belly) **fins** for a pair of sneakers.

Life cycle: Between April and July, when the water reaches a balmy 70 to 77 °F, bullheads begin to spawn. Black bullheads prefer mud bottoms, "browns" rocky and sandy bottoms, and "yellows" heavy banks of weeds in which to build their nests.

With a downward fanning of their lower fins, the females excavate saucer-shaped nests in spots sheltered by vegetation, logs, rocks, or overhanging banks; occasionally nests are built in hollow stumps or muskrat burrows. The females will push or suck larger debris out of the next area with their mouths.

Prior to spawning, a male and female will butt one another in the abdominal area and each will slide their barbels over the body of the other. They then position themselves facing opposite directions, side by side and close together. The male twists his caudal fin over the female's head, and after they "embrace" several times, the female quivers and deposits anywhere from 1,600 to 14,000 eggs in gelatinous masses to be fertilized by the male's **milt** (sperm).

Bullheads are among the best parents in the aquatic world. Females guard the eggs for the first few days, even from the males—but after that, both males and females fan and slap the egg mass with their fins to aerate the developing eggs. After the eggs hatch (in five to ten days, depending on water temperature), the parent fish become more gentle in their movements, swimming over the youngsters huddled together at the bottom. When the **fry** (young fish) rise off the bottom in a large, cloudlike mass, the parents attempt to keep them in compact schools by swimming around the group in circles.

After about two weeks, the adults complete their parental duties and the young bullheads are on their own. They will continue to travel in large schools and will reach maturity in three to four years.

Age (years)	Length (inches)
1	2.80
2	7.70
5	9.30
10	13.50

Fishing for bullheads: On light tackle, few fish are more sporting than the bullhead, even though the average representative of the species will weigh just under three-quarters of a pound. World-record specimens—the 8-pound black bullhead caught in New York in 1951; the 5-pound, 8-ounce brown snagged in Georgia in 1975; and the 3-pound, 3-ounce yellow pulled from the depths of Nelson Lake in Wisconsin's Sawyer County in 1972—no doubt put up a mighty fight for the anglers on the other end of the line.

What to use as bait to tempt these warm-water gluttons is limited only by your imagination. Since the bullhead is a scavenger that feeds by smell, anglers should stay away from artificial lures and seek the stinkiest bait possible (worms are a special favorite). Bait your hook, let it set on the bottom of a shallow bay in the evening, and get ready for action.

Bullheads are easy to catch, but because they have extremely tough mouths, are sometimes difficult to hook. It's best to let the fish mouth the bait for a few seconds before setting the hook. Speaking of hooks—bullheads often swallow them deeply, so use long-shanked hooks and bring along a pair of long-nosed pliers to dislodge them. Experienced bullhead anglers simply snip the line and pull out the hooks when they clean the fish.

To preserve flavor and firmness, bullheads should be cleaned and put on ice soon after being caught. Use pliers to pull off the slippery skin. The skinned fish can be filleted or cooked whole after the head is removed. Work gloves will help protect you from the sharp spines, but if you get "finned," clear household ammonia daubed on the cut will relieve the stinging sensation. Wiping some of the slime that covers the bullhead's body over the cut is also said to help.

If your bullheads were taken from muddy or weedy water, soak them overnight in a bowl with one tablespoon of salt, two tablespoons of vinegar and enough clear, cold water to cover. Refrigerate overnight. The next day, discard the dirty water, and rinse the fish under cold, running water before cooking.

Environmental concerns: Where they are abundant, bullheads wreak havoc on the habitat of gamefish and waterfowl by rooting up vegetation and stirring up bottom sediment in their search for food. Because they have few predators and can survive conditions other fish find intolerable, bullheads are often the only species in small, shallow lakes; they can quickly overpopulate these bodies of water, stunting their own growth in the process.

As the lakes of Wisconsin become eutrophic—as they age, become silted in and

overgrown with weeds—conditions will favor the warmwater fishes, bullheads in particular. This trend is inevitable, part of the natural process of a changing environment. The bullhead will be among the last survivors when a lake is finally filled in and becomes extinct.

For information on bag limits, legal size and seasons for bullhead, pick up a copy of Wisconsin's fishing regulations at the nearest DNR office.