

Bowfin (*Amia calva*)

Do they have any other names?

Other names for the bowfin are dogfish, grindle, grinnel, cypress trout, swamp muskie, black fish, cottonfish, swamp bass, poisson-castor, speckled cat, shoepic or choupic, and beaverfish.

Why are they called bowfin?

Amia is Greek for “fish” and *calva* is Greek for “bald or smooth” which refers to the bowfin’s scaleless head. The name “bowfin” refers to the long curved fin on the back of the fish.

What do they look like?

The bowfin is an elongate and nearly-cylindrical fish with a long dorsal (back) fin that extends from the middle of the back to the tail. The tail fin is rounded and has a black spot on the upper base of the tail. This black spot resembles an eye that predators will mistakenly attack, allowing the bowfin to get away. The back and tail fins are dark-green with darker bands or bars and the lower fins are bright green. The back and upper sides are mottled olive-green with pale green on the belly. The head is without scales but the body is covered in smooth-edged scales. They also have a large mouth with many sharp teeth and each nostril has a prominent barbel-like flap.



Photo Credit: Duane Raver, USFWS

Bowfin vs. Snakehead

Bowfins are often mistaken as snakeheads, which are an exotic fish species native to Africa and Asia. Snakeheads are an aggressive invasive species that have little to no predators outside their native waters. Snakeheads have been reported in the United States; however no snakeheads have been seen in Indiana.



Photo Credit: Susan Trammell

Three main differences between bowfins and snakeheads:

1. Anal Fin (lower fin closest to tail)
 - Snakeheads have a very long anal fin that is more than half the length of the dorsal (back) fin.
 - Bowfins have a short anal fin that is less than half the length of the dorsal (back) fin.
2. Head
 - Snakeheads have a more pointed head that is flattened a little on the top.
 - Bowfins have a large, rounded head.
3. Jaw
 - A snakehead's lower jaw protrudes past the upper jaw with pointed teeth.
 - A bowfin's lower jaw is shorter than the upper jaw.

Where do they live in Indiana?

The bowfin is common in Indiana and can be found in marshes, lakes, and backwater habitats of large rivers associated with vegetation.

What kind of habitat do they need?

The bowfin can be found in many different habitats, but prefers calm, clear waters. It has an ancient swim bladder that acts as a lung when the bowfin fills it with oxygen at the surface. This allows the bowfin to breathe in low oxygenated waters and even out of water for a short period of time.

How do they reproduce?

Spawning occurs from early April into May or early June. Males build nests in shallow, weedy areas by clearing the vegetation and silt away so the female may lay the eggs, which attach to sand or gravel. The male continues to care for the eggs and young without help from the female. The eggs hatch eight to ten days after spawning and the fry leave the nest within nine days and form a school that is protected by the male until they reach around 4 inches long.

How old are they when they reproduce?

The bowfin begins reproducing at the age of 2 or 3.

How long do they live?

The natural maximum longevity for bowfins is about 10 years; however some have lived as long as 30 years in captivity.

How fast do they grow in Indiana?

The bowfin reaches around 7 to 9 inches long by the end of its first year and is around 20 inches long when it is 5 or 6 years old. Most adults are 15-27 inches long and weigh about 1 to 5 pounds but they can reach sizes of up to 19 pounds.

What do they eat?

The bowfin is an ambush predator that will come into the shallow water at night to feed. Young bowfins eat insects and other microscopic animals until they are 4 inches long, in which case they begin to eat fish. The majority of the bowfin's diet consists of fish, but they also eat crayfish, frogs, mollusks, and aquatic insects. The fish eaten by bowfins are mostly forage fish.

What eats them?

The main predator for a bowfin is a larger bowfin. Bowfins are eaten by other predators, but the protection of the young by the male and the bowfin's solitary and almost secretive habits often keep the bowfin from being predated on by other species.

Are they safe to eat?

Yes, but they are unpopular for consumption due to their poor taste. In some parts of Canada, however, smoked bowfin is a popular dish.

How do I fish for them?

Bowfins have great strength and endurance and can be taken on a variety of live baits, including minnows, crayfish, worms, and frogs. Artificial lures that are effective for largemouth bass also work for bowfin.

How is Indiana managing bowfin?

The bowfin is a native, ancient fish and is not managed by the state. Many people view bowfins as trash fish; however they play an important part in keeping a healthy ecosystem. The bowfin can be of use for maintaining forage fish populations and for preventing stunted growth of forage species.