

# Fishes of Lake Arrowhead State Park,

Clay County, TX

Compiled by Debra Halter  
and  
the Rolling Plains Chapter of Texas Master Naturalist  
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### Threadfin Shad

The **threadfin shad** (*Dorosoma petenense*) is a small pelagic fish common in rivers, large streams, and reservoirs of the Southeastern United States. Like the American gizzard shad, the threadfin shad has an elongated dorsal ray, but unlike the gizzard shad its mouth is more terminal without projecting upper jaw. The fins of threadfin shad often have a yellowish color, especially the caudal fin. The back is grey to blue with a dark spot on the shoulder. *D. petenense* is more often found in moving water, and is rarely found deep in the water column. It occurs in large schools, sometimes with gizzard shad, and can be seen on the surface at dawn and dusk. This fish is very sensitive to changes in temperature and dissolved oxygen, and die-offs are frequent in late summer and fall, especially when water temperature drops to 42°F. Threadfin shad have proven to be an excellent forage fish for largemouth bass in fertile lakes and ponds. Threadfin rarely exceed 5 to 7 inches in length, making them an ideal-size food item for almost all bass. They are schooling, filter-feeding bait fish that swim through the open water of the lake.



### American Gizzard Shad

The **American gizzard shad** (*Dorosoma cepedianum*), also known as the **mud shad**, is a member of the herring family of fish, and is native to large swaths of fresh and brackish waters of the United States of America. The adult has a deep body, with a silvery-green coloration above fading to plain silver below. The gizzard shad commonly resides in freshwater lakes, reservoirs, rivers, and streams, but can reside in brackish waters, as it does on the Atlantic coast of the United States. Their range is across most of the continental United States, although they typically go no further north than New York and no further west than New Mexico. They are large parts of many of the ecosystems they inhabit, and can drive changes in phyto- and zooplankton, thereby indirectly affecting other planktivorous fishes. The gizzard shad has been widely used as a food source for game fish, with varied success in management and effectiveness. American Gizzard Shad can comprise up to 80% of fish biomass in certain lake systems. They prefer shallow lakes with muddy bottoms and relatively high turbidity. This may be due in part to their breeding preferences, but it probably arises from because they have lower survival rates in clear waters and waters with high vegetative cover. The gizzard shad is so named because it possesses a gizzard, a sack filled with rocks or sand, that aids the animal in the breakdown of consumed food. Its generic name, *Dorosoma*, is a reflection of the fact that, when young, the fish has a lancelet-shaped body (*doro* meaning lanceolate and *soma* meaning body).



### Western Mosquitofish

The **western mosquitofish** (*Gambusia affinis*) is a species of freshwater fish, also known commonly, if ambiguously, as simply **mosquitofish** or by its generic name, *Gambusia*, or by the common name **gambezi**.

There is also an eastern mosquitofish (*G. holbrooki*). Mosquitofish are small in comparison to many other freshwater fish, with females reaching a maximum length of 2.8 inches and males a maximum length of 1.6 inches. The name "mosquitofish" was given because the fish eats mosquito larvae, and has been used more than any other fishes for the biological control of mosquitoes. Mosquitofish typically eat zooplankton, beetles, mayflies, caddisflies, mites and other invertebrates. Mosquito larvae make up only a small portion of their diet. Mosquitofish usually live in the shallows of slow-moving freshwater streams. They can survive in salt water, though, and have been introduced in coastal marshes to help control mosquitoes. Instead of laying eggs like most fish, female mosquitofish carry their eggs inside and give birth to tiny, live fish.



### Red Shiner

The **red shiner** or **red-horse minnow** (*Cyprinella lutrensis*) is a North American species of freshwater fish in the family Cyprinidae. The red shiner is native to central North America west of the Mississippi River drainage, ranging as far west as New Mexico.

Latitudinally, the species ranges from central Mexico north to South Dakota. Clearly a plains species, red shiners range throughout Texas. They are deep-bodied and laterally compressed, and can grow to about three

inches in length. For most of the year, both males and females have silver sides and whitish abdomens. Males in breeding coloration, though, have iridescent pink-purple-blue sides and a red crown and fins (except the dorsal fin which remains dark). Red shiners can live up to three years. They are omnivorous; they eat both aquatic and terrestrial invertebrates, as well as algae. Red shiners have also been known to eat the eggs and larvae of native fish found in locations where they have been introduced.



### Bullhead Minnow

*Pimephales vigilax*, also known as the **bullhead minnow**, is a species of freshwater demersal fish, native to the Southern United States. It is cylindrical and small in size, with an average length of 2.25". The males of the species are dark in color, brown, olive, or tan, with two light

colored vertical lines down their side, while the females are plain in comparison. The snout is rounded, and no teeth are present. The tail is forked with rounded ends, the single dorsal fin contains eight rays and no spine, the anal fin contains seven rays with no spine, pelvic fins are abdominal and no adipose fin is present. The bullhead minnow is mainly located in the southern United States, in the Gulf of Mexico and the Mississippi River basin. It can be found in lesser numbers throughout the entire Mississippi River, as well as connected brooks, streams, ponds, lakes, and rivers. They are found more often in waters that typically have little to no movement, such as in river pools. They were probably introduced into other areas as bait fish carried by anglers. They live an average of three to five years. They are a bottom-living species, and feed on organisms found in the mud covering the ground.



### Black Crappie

The **black crappie** (*Pomoxis nigromaculatus*) is a freshwater fish found in North America, one of the two crappies. It is very similar to the white crappie in size, shape, and habits, except that it is darker, with a pattern of black spots. Black crappies are most accurately identified by the seven or eight spines on its dorsal fin (white crappies have five or six dorsal spines). Crappies have a deep and laterally compressed body. They are usually silvery-gray to green in color and show irregular or mottled black splotches over the entire body. Black crappies have rows of dark spots on their dorsal, anal, and caudal fins. The dorsal and anal fins resemble each other in shape. Both crappies have large mouths extending to below the eye, and thin lips—both suggestive of their predatory feeding habits. Crappies are typically about 4–8 inches (10–20 cm) long. The black crappie's range is uncertain, since it has been widely transplanted, but it is presumed to be similar to the white crappie's. Its native range is suspected to be in the eastern United States and Canada. (Photo by D. Halter)



### White Crappie

White crappies are morphologically similar to Black Crappies. They have 5–10 dark vertical bars along their bodies, rather than the randomly scattered spots like the black crappie. The white crappie has a silvery color with green or brown shades along its back, with dark lateral bars along its side, and a white belly. The dorsal fins of the white crappie start farther back on the body than those of the black crappie. The anal fin is about the same size as the dorsal fin. The white crappie has six dorsal fin spines, whereas the black crappie has seven or eight dorsal fin spines. White crappies are also slightly more elongated than black crappies. The white crappie is a deep-bodied fish with a flattened body, or a depth that is one-third of the length of the fish. White crappies have spinous rays and ctenoid fish scales found in advanced teleosts. The exposed part of the scale has tiny tooth-like projections (cteni). Both species of crappies have a terminal mouth position with many small, conical teeth in two rows along the mouth and are called cardiform because they resemble a tool used for wool carding. The white crappie rarely exceeds 2 pounds and typically lives 2–7 years. The species is generally about 9–10 inches in length as an adult. The current for all-tackle fishing world record for a white crappie is 5.2 lb. White crappies are more tolerant of turbid (murky) waters than black crappies. The white crappie usually outnumbers the black crappie in turbid waters and in areas with little rooted aquatic vegetation. White crappies spawn in May and June. Males construct nests by creating small, bowl-shaped depressions on the bottom around brush, rocks, and logs in the shallow water. During the spawning season, males develop dark coloration on their throats. Females lay 5,000 to 30,000 eggs. The males guard these nests until the fry swim away. White crappies are neither cruise- nor ambush-feeding strategists. Instead, they swim intermittently and only search for prey when stationary. This strategy is considered saltatory, or pause-and-travel search. Lake Arrowhead record is 3 lbs, 15.9" long. (Photo by TPWD)

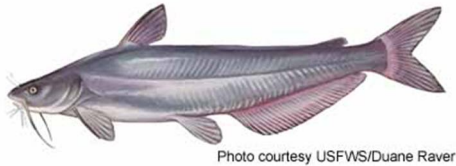
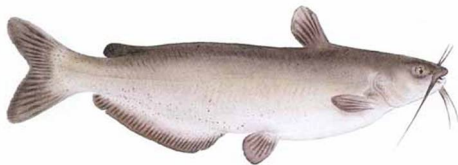


Photo courtesy USFWS/Duane Raver

### Blue Catfish

The **blue catfish** (*Ictalurus furcatus*) is the largest species of North American catfish, reaching a length of 65 in and a weight of 150 lb. The average length is about 25–46 in. The fish can live to 20 years. The native distribution of blue catfish is primarily in the Mississippi River drainage, including the Missouri, Ohio, Tennessee and Arkansas Rivers, The Des Moines River in South Central Iowa, and the Rio Grande, and south along the Gulf Coast to Belize and Guatemala. These large catfish have also been introduced in a number of reservoirs and rivers in South Carolina, Virginia, and Illinois. This fish is also found in some Florida lakes. The fish is considered an invasive pest in some areas, particularly the Chesapeake Bay. Blue catfish can tolerate brackish water, thus can colonize along inland waterways of coastal regions. Blue catfish are often misidentified as Channel Catfish. Blue catfish are heavy bodied, blueish gray in color, and have a dorsal hump. The best way to tell the difference between a channel catfish and a blue catfish is to count the number of rays on the anal fin. A blue catfish has 30–36 rays, whereas a channel catfish has 25–29. Blue catfish also have barbels, a deeply forked tail, and a protruding upper jaw. Blue catfish are opportunistic predators and eat any species of fish they can catch, along with crawfish, freshwater mussels, frogs, and other readily available aquatic food sources. Catching their prey becomes all the more easy if it is already wounded or dead, and blue catfish are noted for feeding beneath marauding schools of striped bass in open water in reservoirs or feeding on wounded baitfish that have been washed through dam spillways or power-generation turbines. Blue catfish are one of the only species of fish in the Mississippi river basin able to eat adult Asian Carp. Lake Arrowhead record is 74.7lbs, 49.5” long.



### Channel Catfish

Channel catfish, *Ictalurus punctatus*, are easily distinguished from all others, except blue catfish, by their deeply forked tail fin. Unlike flathead catfish, the upper jaw projects beyond the lower jaw. Coloration is olive-brown to slate-blue on the back and sides, shading to silvery-white on the belly. Typically, numerous small, black spots are present, but may be obscured in large adults. The anal fin has 24-29 soft rays, in contrast to the blue catfish which always has 30 or more rays in the anal fin. *Ictalurus* is Greek and *punctatus* is Latin, meaning "fish cat" and "spotted", respectively. Channel catfish are most abundant in large streams with low or moderate current. Channel catfish are native to North America east of the Rockies from southern Canada, south into northeastern Mexico, and east of the Appalachians with the exception of much of the coastal plain north of Florida. The species has been widely introduced in other areas as far west as California. Today channel catfish range throughout Texas, however, it is believed that the species was not native to the upper Rio Grande and Pecos basins. Channel catfish ranks behind only bass and crappie as the most preferred fish to catch in Texas. Popular with trotliners as well as rod-and-reel anglers, channel cats may be captured on a wide variety of baits including liver, worms, grasshoppers, shrimp, chicken, cheese and stinkbait, among others. Undoubtedly, part of the reason for their popularity is their delicious flavor when cooked. Channel catfish in excess of



36 pounds have been landed in Texas waters. The North American record stands at 58 pounds. Lake Arrowhead record is 9.56 lbs, 26" long.

### Flathead Catfish



Photo courtesy USFWS/Duane Raver

As the common name suggests, this catfish has a flat head, but other than that, it looks like any other catfish: it has smooth, scaleless skin, whisker-like barbels around the mouth, and long spines on the dorsal (back) fin and one on each side of the pectoral (shoulder) fin. Flathead catfish reach a length of 3 - 4 feet and their weight can exceed 100 pounds. *Pylodictis* is Greek meaning "mud fish", and *olivaris* is Latin for "olive-colored". Flathead catfish are typically pale yellow (hence the name "yellow cat") to light brown on the back and sides, and highly mottled with black and/or brown. The belly is usually pale yellow or cream colored. The head is broadly flattened, with a projecting lower jaw. The tail fin is only slightly notched, not deeply forked as is the case with blue and channel catfish. Young fish may be very dark, almost black in appearance. Unlike other catfish which are scavengers, flatheads prey only on live fish. Average lifespan of the flathead catfish is 12 to 14 years, but one recorded flathead catfish lived 24 years. Adults are usually solitary, each staking out a favorite spot under a tree or in a cove, in deep water. At night, they move into shallow areas to feed. Poor overall health and certain environmental conditions such as drought or flood can reduce flatheads' ability to spawn. Flathead catfish prefer deep pools of streams, rivers, canals, lakes and reservoirs, where the water is turbid (cloudy) and the currents are slow. In size, flatheads are the second largest sport fish in Texas after their cousin, the blue catfish. "Catfish" is the second most preferred group of fish among licensed Texas anglers, and flatheads rank second behind channel catfish. Where mature populations exist, 50-pounders are not unusual. Typically, the largest fish are caught by trotliners, who have landed specimens in excess of 110 pounds. Lake Arrowhead record is 45.72 lbs, 42.5" long. (Photo by TPWD)

### Yellow Bullhead



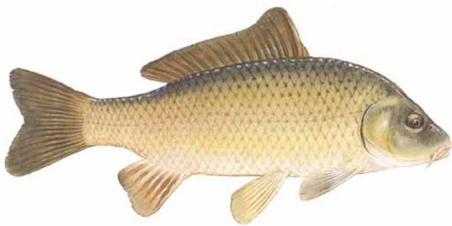
The **yellow bullhead** (*Ameiurus natalis*) is a species of bullhead catfish that is a ray-finned fish that lacks scales. *Ameiurus* means "primitive or curtailed" in reference to the notch in the distal end of the caudal fin, and *natalis* is Latin for "having large buttocks." Yellow bullheads are typically light yellow to olive-green on the back, often somewhat mottled. The belly is yellowish to white. The tail is not notched, and may be slightly rounded. Chin barbels are white. The anal fin has 23-27 rays. the yellow bullhead is omnivorous, feeding on a variety of plant and animal material, both live and dead. Immature aquatic insects and crustaceans often comprise a considerable proportion of the diet. Although yellow bullheads rarely achieve edible size, some individuals may exceed four pounds. Yellow bullheads range throughout the central and eastern US from central Texas north into North Dakota and east through the Great Lakes region to the coast. The species is found throughout Texas with the exclusion of the Trans-Pecos and Panhandle drainages. The largest specimen reported to date in Texas was 5.59 pounds. Lake Arrowhead record is 2.62 lbs, 16.5" long. (Photo by TPWD)

## Freshwater Drum



The **freshwater drum**, *Aplodinotus grunniens*, is a fish endemic to North and Central America. It is the only species in the genus *Aplodinotus*. The freshwater drum is a member of the family Sciaenidae, and is the only North American member of the group that inhabits freshwater for its entire life. Its generic name, *Aplodinotus*, comes from Greek meaning "single back", and the specific epithet, *grunniens*, comes from a Latin word meaning "grunting". It is given to it because of the grunting noise that mature males make. This noise comes from a special set of muscles within the body cavity that vibrate against the swim bladder. The purpose of the grunting is unknown, but due to it being present in only mature males and during the spawning season, it is assumed to be linked to spawning. The drum typically weighs 5–15 lb. The freshwater drum is gray or silvery in turbid waters and more bronze or brown colored in clearer waters. It is a deep bodied fish with a divided dorsal fin consisting of 10 spines and 29–32 rays. Lake Arrowhead record is 31 lbs, 35.5" long. (Photo by TPWD)

## Common Carp

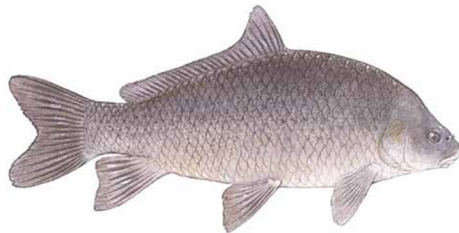


The **common carp** or **European carp** (*Cyprinus carpio*) is a widespread freshwater fish of eutrophic waters in lakes and large rivers in Europe and Asia. The native wild populations are considered vulnerable to extinction by the International Union for Conservation of Nature (IUCN), but the species has also been domesticated and introduced into environments worldwide, and is often considered a destructive invasive species, being included in the list of the world's 100 worst invasive species. The original common carp was found in the inland delta of the Danube River about 2000 years ago, and was torpedo-shaped and golden-yellow in color. It had two pairs of barbels and a mesh-like scale pattern. Although this fish was initially kept as an exploited captive, it was later maintained in large, specially built ponds by the Romans in south-central Europe. In Europe, domestication of carp as food fish was spread by monks between the 13th and 16th centuries. Although tolerant of most conditions, common carp prefer large bodies of slow or standing water and soft, vegetative sediments. As schooling fish, they prefer to be in groups of five or more. Common carp were brought to the United States in 1831. In the late 19th century, they were distributed widely throughout the country by the government as a food-fish, but they are now rarely eaten in the United States, where they are generally considered pests. It gives its name to the carp family, Cyprinidae. *Cyprinus* is Greek, and *carpio* is Latin; both words mean "carp." The common carp is a heavy-bodied minnow with barbels on either side of the upper jaw. Typically, color varies from brassy green or yellow, to golden brown, or even silvery. The belly is usually yellowish-white. The dorsal fin with 17-21 rays, and the anal fin both have a heavy toothed spine. Individuals 12-25 inches in length and weighing up to 8-10 pounds are common, although they can grow much larger. Common carp may live in excess of 47 years and weigh over 75 pounds. Lake Arrowhead record is 12.52 lbs, 29" long. (Photo by TPWD)



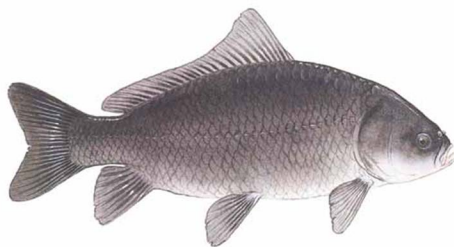
### River Carpsucker

The **river carpsucker** (*Carpionodes carpio*) is a freshwater fish found in the eastern United States. This species has a slightly arched back and is somewhat stout and compressed. While the fins are usually opaque, in older fish they may be dark yellow. It is distributed along the Mississippi River basin from Pennsylvania to Montana. The river carpsucker, like other suckers, is a bottom feeder and obtains its nutrients from algae, microcrustaceans, and other various tiny planktonic plants and animals found in silty substrates. The river carpsucker typically lives about two to four years, but may survive for up to 10 years. The species is frequently confused with non-native species, such as the various Asian carp species. The river carpsucker has historically occupied the Mississippi River basin from Pennsylvania to Montana. It also currently occupies the Gulf Slope Drainage from the Calcasieu River to the Rio Grande River in Texas and New Mexico. Lake Arrowhead record is 3.11 lbs, 17.5" long.



### Smallmouth Buffalo

The **smallmouth buffalo** (*Ictiobus bubalus*, from the Greek for "bull-fish" and "buffalo") is a Cypriniformes fish species found in the major tributaries and surrounding waters of the Mississippi River in the United States as well as some other water systems where it has been introduced. It is a stocky fish. *Ictiobus* and *bubalus* are both Greek words meaning "bull fish" and "buffalo", respectively. The back and sides are light brown or otherwise dark with a coppery or greenish tint. The belly is pale yellow to white. Smallmouth buffalo scales are large, and the species sometimes be confused with common carp by the novice. However, buffalo lack the barbels of carp. Smallmouth buffalo, as opposed to bigmouth buffalo, have a distinctive sucker-type mouth, oriented downward. Although some anglers consider smallmouth buffalo to be a rough fish, in many areas the species is highly prized. Specimens in excess of 82 pounds have been landed by rod and reel anglers, whereas the trotline record is 97 pounds in Texas. Buffalo will sometimes take doughballs made with cottonseed meal, and when hooked provide exceptional sport. Many people may be unaware that smallmouth buffalo is quite a food fish. Lake Arrowhead record is 28.7 lbs, 32" long. (Photo by TPWD)



### Bigmouth Buffalo

The **bigmouth buffalo** (*Ictiobus cyprinellus*) also known as the **gourd head**, **redmouth buffalo**, **buffalo fish**, **bernard buffalo**, **roundhead**, or **brown buffalo**, is a large species of the Catostomidae or "sucker" family. *Ictiobus* is Greek for "bull fish" and *cyprinellus* is Latin meaning "small carp." Bigmouth buffalo are similar in color and shape to smallmouth buffalo, except that the mouth is not oriented downward in typical sucker fashion, but rather straight ahead. As with smallmouth buffalo, some anglers consider



bigmouth buffalo to be a rough fish. However, the species is highly prized in many areas. Many people consider it quite a food fish despite its many bones. Some even relish the species' bony nature. Bigmouth buffalo in excess of 58 pounds have been landed by rod-and-reel anglers, whereas the trotline record in Texas is 75 pounds. Bigmouth buffalo are found in the Lake Erie drainage, and in the Mississippi River drainages from southern Canada south to the Gulf Coast. In Texas the range is limited to the Red River below Lake Texoma and to the Sulphur River in the northeast. Lake Arrowhead record is 30.81 lbs, 34.0" long. (Photo by TPWD)

### Largemouth Bass



The **largemouth bass** (*Micropterus salmoides*) is a freshwater gamefish in the sunfish family, a species of black bass native to North America. It is known by a variety of regional names, such as the **widemouth bass, bigmouth bass, black bass, bucketmouth, largies,**

**Potter's fish, Florida bass, Florida largemouth, Green Trout, and Lineside Bass.** They are usually green with dark blotches that form a horizontal stripe along the middle of the fish on either side. The underside ranges in color from light green to almost white. They have a nearly divided dorsal fin with the anterior portion containing nine spines and the posterior portion containing 12 to 13 soft rays. Their upper jaw reaches far beyond the rear margin of the eye. Except for humans, adult largemouth bass are the top predators in the aquatic ecosystem. Fry feed primarily on zooplankton and insect larvae. At about two inches in length, they become active predators. Adults feed almost exclusively on other fish and large invertebrates such as crayfish. Larger bass will also prey upon smaller bass. Immature largemouth bass may tend to congregate in schools, but adults are usually solitary. Sometimes several bass will gather in a very small area, but they do not interact. Largemouth bass hide among plants, roots or limbs to ambush their prey. Lake Arrowhead record is 12.73 lbs, 24.25" long (Photo by TPWD)

### Striped Bass



The **striped bass** (*Morone saxatilis*) is also called **Atlantic striped bass, striper, linesider, rock, or rockfish.** The striped bass is the largest member of the sea bass family, often called "temperate" or "true" bass to distinguish it from species such as largemouth,

smallmouth, and spotted bass which are actually members of the sunfish family Centrarchidae. Although *Morone* is of unknown derivation, *saxatilis* is Latin meaning "dwelling among rocks." As with other true basses, the dorsal fin is clearly separated into spiny and soft-rayed portions. Striped bass are silvery, shading to olive-green on the back and white on the belly, with seven or eight uninterrupted horizontal stripes on each side of the body. It has also been widely introduced into inland recreational fisheries across the United States. However, striped bass have two distinct tooth patches on the back of the tongue, whereas white bass have one tooth patch. Striped bass have two sharp points on each gill cover, and white bass have one. Additionally, the second spine on the anal fin is about half the length of the third spine in striped bass, and about two-thirds the length of the third spine in white bass. The striped bass can live in both freshwater and saltwater environments. Although not native to Texas, the species has been stocked in a

number of reservoirs. Because stream flow is required for a successful hatch, most reservoir populations are not self-sustaining and must be maintained through stocking. One notable exception is Lake Texoma along the Red River in northeastern Texas. In Texas, stripers in excess of 50 pounds have been landed. Although specimens exceeding 100 pounds have been caught in saltwater, to date a 67.5-pounder was the largest individual reported from inland waters. Lake Arrowhead record is 14.36 lbs, 31.0”.

### White Bass



Morone is of unknown derivation. The species epithet chrysops is Greek meaning "golden eye." As with other true basses, the dorsal fin is clearly double, separated into spiny and soft-rayed portions. White bass are silvery shading from dark-gray or black on the back to white on the belly. Several incomplete lines or stripes run horizontally on each side of the body. Adults resemble young striped bass, and the two are often confused. However, striped bass have two distinct tooth patches on the back of the tongue, and white bass have one tooth patch. Striped bass have two sharp points on each gill cover, as opposed to white bass which have one, and the second spine on the anal fin is about half the length of the third spine in striped bass, whereas it is about two-thirds the length of the third spine in white bass. White bass more than four years of age are rare. White bass are excellent fighters, and are considered superb table fare. White bass are native to the the central US west of the Appalachians, including the Great Lakes, as well as river systems in the Ohio and Mississippi river valleys. In Texas the species is native to the Red River drainage. White bass may grow eight or nine inches during the first year. Adults are usually found in schools. Lake Arrowhead record is 2.88 lbs, 17.5”

### Bluegill



The **bluegill** (*Lepomis macrochirus*) is a species of freshwater fish sometimes referred to as bream, brim, or copper nose. It is a member of the sunfish family Centrarchidae of the order Perciformes. It is native to North America and lives in streams, rivers, lakes, and ponds. It is commonly found east of the Rockies. It usually hides around, and inside, old tree stumps and other underwater structures. It can live in either deep or very shallow water, and will often move from one to the other depending on the time of day or season. Bluegills also like to find shelter among aquatic plants and in the shade of trees along banks. Bluegills can grow up to 12 inches long and about 4 ½ pounds. While their color can vary from population to population, they typically have a very distinctive coloring, with deep blue and purple on the face and gill cover, dark olive-colored bands down the side, and a fiery orange to yellow belly. The fish are omnivores and will eat anything they can fit in their mouth. They mostly feed on small aquatic insects and fish. The fish play a key role in the food chain, and are prey for bass and other fish, turtles, and mammals. The bluegill is noted for the black spot (the "ear") that it has on each side of the posterior edge of the gills and base of the dorsal fin. The sides of its head and chin are commonly a dark shade of blue. It typically has a yellowish breast and abdomen, with the breast

of the breeding male being a bright orange. Bluegill try to spend most of their time in water from 60 to 80 °F and tend to have a home range of about 320 square feet during nonreproductive months. They enjoy heat, but do not like direct sunlight – they typically live in deeper water, but will linger near the water surface in the morning to stay warm. Bluegill are usually found in schools of 10 to 20 fish, and these schools will often include other panfish, such as crappie and smallmouth bass.

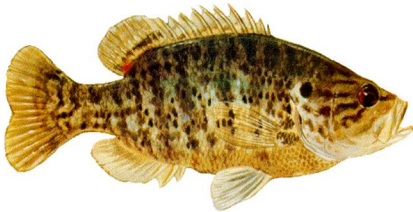


### Longear Sunfish

The **longear sunfish** (*Lepomis megalotis*) is a freshwater fish in the sunfish family, Centrarchidae, of order Perciformes. It is native to the area of eastern North America stretching from the Great Lakes down to northeastern Mexico. The species is found throughout Texas, except for the headwaters of the Canadian and Brazos rivers. The longear sunfish reaches a maximum recorded length of about 9.5 inches, with a maximum

recorded weight of 1.7 lb. Most do not live beyond six years. Longear sunfish have an elongated opercle flap. This flap, always trimmed in white in adults, is unique and makes field identification relatively easy, if hybridization has not occurred. Longear sunfish are quite colorful. Males are often bright orange or scarlet, and the head and fins usually have turquoise markings. Longear sunfish are primarily found in small streams and creeks. Like other sunfish, they are often associated with vegetation, avoiding strong currents by inhabiting pools, inlets, and waters off the main stream channel. Because of its small size, the species' importance to anglers derives in three ways. Since they are relatively easy to capture with simple, natural baits such as earthworms, longears are an important species for young anglers with little experience. Like most sunfish, they provide more than enough fight for their small size. Longears may feed on the surface, providing the fly fishermen with a challenge, and finally, they are often a prized bait fish for trotliners.

### Warmouth

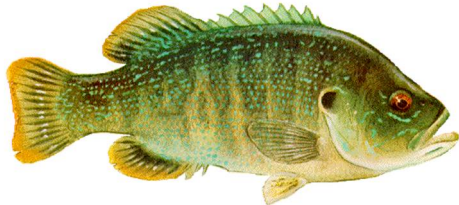


The **warmouth**, **warmouth sunfish**, or **warmouth bass**, (*Lepomis gulosus*), is a large sunfish found throughout the eastern United States. Other local names include molly, redeye, goggle-eye, red-eyed bream, stump knocker, and strawberry perch. The warmouth is somewhat larger than

either rock bass or green sunfish (with which it is often confused) but very similar otherwise in that it is large-mouthed and heavy-bodied. Adult warmouth are dark, with mottled brown coloration. Their belly is generally golden, and males have a bright orange spot at the base of the dorsal fin. Three to five reddish-brown streaks radiate from the eyes, and the gill flaps are often red. Warmouth have three spines in the anal fin, 10 spines in the dorsal fin, and small teeth are present on the tongue. These fish range in size from 4 to 10 inches, but can grow to more than 12 inches, and weigh up to 2.25 pounds. Warmouth are quite secretive. They seek cover in rocky banks, stumps or weeds, or near other large objects, where they can hide and wait for food. They are sight feeders. When in breeding condition, the males' eyes turn red. Lakes, ponds, swamps,

and quiet areas of streams with muddy bottoms and vegetation are preferred habitat for the warmouth. Warmouth are found in the Great Lakes and Mississippi River basins, from western Pennsylvania to Minnesota, south to the Gulf of Mexico. They are good to eat when caught in clean water, but because they are bottom-feeders like catfish, the flesh can have a strong flavor. Lake Arrowhead record is 0.72 lbs, 8.75" long.

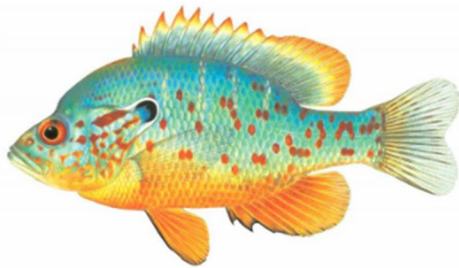
### Green Sunfish



The **green sunfish** (*Lepomis cyanellus*) is a species of freshwater fish in the sunfish family (Centrarchidae) of order Perciformes. A panfish popular with anglers, the green sunfish is also kept as an aquarium fish by hobbyists. They are usually caught by accident, while fishing for other game fish. The green sunfish, like

warmouth, has a large mouth and a heavy, black bass body shape. The body is dark green, almost blue, dorsally, fading to lighter green on the sides, and yellow to white ventrally. Faint vertical bars are apparent on the sides. Some scales have turquoise spots. The green sunfish is a very versatile species, able to tolerate a wide range of environmental conditions, and tends to do very well when competition with other sunfish is minimal. Its ability to tolerate environmental extremes makes it ideal for survival in prairie streams where conditions are not stable, and it is often the first sunfish species to repopulate depleted areas. Green sunfish nest in shallow water colonies where nests are often closely packed. Gravel or rocky bottom sites are usually preferred for nest building. Because of their enormous reproductive potential, green sunfish often overpopulate small lakes and ponds. Adults feed on insects and small fish. (Photo by TPWD)

### Orangespotted Sunfish



The **orangespotted sunfish** (*Lepomis humilis*) is a North American species of freshwater fish in the sunfish family (Centrarchidae) of order Perciformes. These fish are widely distributed across the middle and eastern United States, from the Rocky Mountains to the east, from the Great Lakes south into the Gulf Coast. The orangespotted sunfish is ecologically unique and thrives in turbid,

shallow systems that have few predators and low oxygen contents. The species prefers vegetated areas in sluggish backwaters or lakes, and can also be found in turbid rivers. The orangespotted sunfish can extend its range in lower-quality waters, which is not characteristic to other sunfish. Orangespotted sunfish vary in total length and age for different river basin originations, but can be found to live four to seven years, and recorded lengths are up to 5.9 inches. Breeding male orangespotted sunfish have orange bellies and fins, silvery green sides with orange spots, and a blue sheen on the side of their heads. Females are silvery with orange-brown spots on their upper sides; they show a small amount of orange along their backs and have only a hint of orange in the fins. (Photo by TPWD)



### Spotted Gar



The **spotted gar** (*Lepisosteus oculatus*) is a primitive freshwater fish of the family Lepisosteidae, native to North America from the Lake Erie and southern Lake Michigan drainages south through the Mississippi River basin to Gulf Slope drainages, from lower Apalachicola River in Florida to Nueces River in Texas, USA. Gar are long and cylindrical with elongated mouths and have an elongated mouth with many needle-like teeth to catch other fish and crustaceans. It is one of the smallest of the seven species of gar found in North America, growing 2–3 feet in length and typically weighing between 4–6 lb. Gars have diamond-shaped, thick, enamel (ganoid) scales. Their upper body is brown to olive, and they have silver-white sides. Head, body, and fins have olive-brown to black spots that help camouflage the fish. A broad, dark stripe is on the sides of immature fish. Their long, snout-like mouth is lined with strong, sharp teeth, and their body is covered with thick, ganoid (diamond-shaped) scales. Spotted gar may be distinguished from other Texas gar species by the dark roundish spots on the top of the head, the pectoral fins and on the pelvic fins. Gar move slowly unless trying to catch food, which it grabs in its jaws in a quick sideways lunge. The long-lived gar has a life span up to 18 years. Gar have a specialized swim bladder which allows them to gulp air and live in the poorly oxygenated back waters of Texas' streams, swamps and lakes. Lepisosteus is Greek and means "bony scale", referring to the large ganoid scales. Oculatus means "provided with eyes" in Latin and refers to the dark spots on head, body, and fins. The common name, gar, is rooted in the Anglo-Saxon language and means "spear." The roe (or egg mass) is highly toxic to humans, animals, and birds. (Photo by TPWD)

### Longnose Gar



The **longnose gar** (*Lepisosteus osseus*) is a primitive ray-finned fish of the gar family. Lepisosteus is Greek, meaning "bony scale", and osseus is Latin, meaning "of bone." Longnose gar are distinguished from other gar species found in Texas by the long snout, whose length is at least 10 times the minimum width. Longnose gar are typically associated with backwaters, low inflow pools and moderately clear streams. They often do very well in man-made impoundments. Longnose gar range widely throughout the eastern US and north into southern Quebec. The species is especially common in the Mississippi River drainage and in the Carolinas. It may be found as far south and west as the Rio Grande drainage in Mexico, Texas and New Mexico. Longnose gar appear in most Texas rivers. The average lifespan of 15–20 years with a maximum reported age of 39. Longnose gar reach a typical length of 28–48 inches with a maximum length around 6 feet and 55 lb in weight. Eggs have a toxic, adhesive coating to help them stick to substrates, and they are deposited onto stones in shallow water, rocky shelves, or vegetation. Overfishing is a large issue for this fish, especially when the fish have not reached sexual maturity due to the female not reaching sexual maturity until about six years of age. Lake Arrowhead record is 5.98 lbs, 39.5" long for rod & reel; for bow fishing it is 22.7 lbs, 55.75" long. (Photo by TPWD)



## Shortnose Gar

The **shortnose gar** (*Lepisosteus platostomus*) is a primitive freshwater fish of the family Lepisosteidae. It is native to the United States where its range includes the Mississippi and Missouri River basins, ranging from Montana to the west and the Ohio River to the east, southwards to the Gulf Coast. It inhabits calm waters in large rivers and their backwaters, as oxbow lakes and large pools. *Lepisosteus* is Greek, meaning "bony scale", and *platostomus* is also Greek, meaning "broad mouth." Shortnose gar may be distinguished from other Texas species in that they lack the double row of teeth in the upper jaw of the alligator gar, the long snout of the longnose gar, and the spots of the spotted gar. Shortnose gar are present in the Mississippi River drainage from the Gulf Coast as far north as Montana in the west, and the Ohio River in the east. In Texas, shortnose gar may be found in the Red River basin below Lake Texoma. The Lake Arrowhead record is 5.4 lbs, 33.0".

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[https://tpwd.texas.gov/publications/pwdpubs/pwd\\_rp\\_t3200\\_2168/pwd\\_rp\\_t3200\\_2168.pdf](https://tpwd.texas.gov/publications/pwdpubs/pwd_rp_t3200_2168/pwd_rp_t3200_2168.pdf)

Texas Park & Wildlife Bass identification Guide

<https://tpwd.texas.gov/regulations/outdoor-annual/fishing/freshwater-fishing/bass-identification>

Freshwater Fishes Found in Texas

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Common Texas Sunfish

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Channel Catfish and Blue Catfish: identification guide

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