



WILDLIFE NOTES

Largemouth Bass



The Largemouth Bass (*Micropterus salmoides*), the most popular sport fish in the U.S., is technically not a bass, but the largest member of the sunfish family. Both Largemouth and Smallmouth Bass are sometimes called Black Bass.

RANGE

Native to warm fresh waters east of the Mississippi, Largemouth Bass have been transplanted throughout much of the world. They are present in all the major drainages of New Mexico except the Tularosa Basin. Elephant Butte, Ute, and Conchas are the best Largemouth reservoirs in the state.

HABITAT

Largemouth Bass prefer clear waters with no noticeable current. They thrive in shallow, weedy lakes or in slow moving rivers or streams. Rooted aquatic weeds

or other heavy cover such as logs, rocks, riprap and docks provide protection for fry and cover and ambush sites for adults.

These fish are a "warm-water" species, pre-

ferred temperatures of 80-85 degrees F. They are seldom found deeper than the extent of rooted vegetation, usually less than twenty feet deep.

DESCRIPTION

The Largemouth Bass is heavy-bodied, dark olive green to brown above with lighter sides and a silvery belly. A distinct black lateral stripe runs from head to tail.

Depending on where the fish live, Largemouth Bass grow fairly fast, about 16 inches and two to three pounds in three to four years. The maximum recorded length is 38 inches, the heaviest over 22 pounds. New Mexico's record is nearly 16 pounds.

The fish have large mouths in proportion to their bodies, sometimes compared to the bucket on a front-end loader.

Similar species in New Mexico include Spotted Bass and Smallmouth Bass. Only the Largemouth has an upper jaw that extends beyond the rear edge of the eye, a dorsal fin with a deep notch almost dividing it into two sections, golden-brown eyes and a smooth, toothless tongue.

BEHAVIOR

The Shedd Aquarium in Chicago tested the "IQ" of eight gamefish species and the Largemouth Bass was a Phi(sh) Beta Kappa candidate. It had the best visual performance in discerning underwater objects and was the most wary species in terms of making good survival decisions.

Largemouth Bass have all the human senses and one extra. In clear water they can see 30 feet or more. They possess color vision and are especially sensitive to red. They can also see objects above the water including you with that brightly colored shirt. They hunt largely by sight, but in deeper or murky water they rely on their lateral lines as well. These are a series of vibration-sensing nerve endings along the sides of the fish. They are so sensitive that the fish knows the size, speed, and shape of its prey or predator. Even though their ears are inside their skull, bass have a keen sense of hearing. Sounds over 20 feet away can be detected. Largemouth Bass smell using the nostrils, or nares, to

detect predators and to find prey. Taste is not as important since they have few taste cells in their mouths.

The warming temperatures of spring start bass moving into shallower water to feed until they begin spawning. Bass will start their aggressive feeding binge as the water temperature reaches about 55 degrees. March through June are New Mexico's prime bass fishing months.

Immature Largemouth Bass may congregate in schools, but adults are usually solitary.

DIET/FEEDING

Newly hatched Largemouth Bass feed on tiny crustaceans and other zooplankton. At about two inches in length they become active predators, adding insects and smaller fish to their diet.

Adult Largemouth Bass are near the top of the aquatic food chain. Greedy carnivores, they eat almost any moving thing small enough to swallow. Because of their large mouths, this may mean prey half their own length. Adults eat practically every available fish species including their own, crayfish, frogs, worms, large insects and even small birds, snakes, turtles and mice.

REPRODUCTION

Largemouth Bass migrate from deep water to spawn in late spring or early summer when water temperatures reach about 60- 64 degrees F. They prefer firm bottoms of sand, gravel, mud or rock, usually in water from 1 - 6 feet deep. Males construct a nest by fanning out a



dish-shaped area, 18-30 inches in diameter, with their tails.

A male will court a female by rushing toward her and attempting to push her into the nest. If she enters the nest and turns on her side, the male moves next to her and they release eggs and sperm. Both sexes spawn with multiple partners. The male drives away any predators that come too close and fans the embryos until they hatch several days later. After the young hatch, they swim together in a "brood swarm" for the next 3-4 weeks. This school feeds near the nest while the male stands guard. He does not eat during this time. When the fry reach an inch in length, they leave the nest area. The male then resumes feeding and may eat any young he encounters.

From 2000 to 12,000 eggs hatch from the typical nest but only 5 - 10 are likely to survive to reach 10 inches in length. Bass may live almost two decades, but fish over 10 years old are rare. Female bass live longer and are more likely to reach trophy size.

CONSERVATION and MANAGEMENT

As with most aquatic species, habitat degradation, drought and pollution are the biggest threats to Largemouth Bass. Soil erosion from improper land use is the main factor in habitat degradation; pesticides and fertilizers contribute to pollution.

Largemouth Bass are frequent victims of winterkill, low oxygen and/or low temperatures that frequently occur in the shallow weedy water they prefer.

The usual management strategy is to protect bass from angling during at least part of the spawning season and to limit the catch. Being very prolific, only a few bass are required to populate a large body of water. Consequently, stocking plays a small role in Largemouth management.

Largemouth Bass can be voracious predators of unique, endemic western fish species including the Gila Chub, Cyprinodon species and the Gila Topminnow.

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