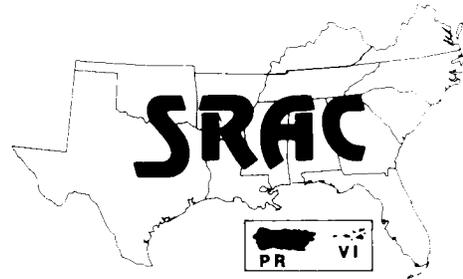




Texas
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Southern
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Aquaculture
Center



Largemouth Bass

Biology and Life History

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The **largemouth bass** (*Micropterus salmoides*) is one of several "basses" that are actually members of the sunfish family. White bass and striped bass are examples of the true bass family. The Florida bass is a distinctive subspecies of largemouth bass but will blend genetically with the northern subspecies. Although the two strains differ slightly in body structure, behavior and growth, biochemical tests are necessary to positively identify them.

Food and growth

Largemouth bass are valued to fishermen chiefly because of their feeding behavior. They are voracious predators that readily strike artificial baits. Bass begin to eat fish when they are about 2 inches long. They swallow live fish and other aquatic life whole rather than bite off chunks, which limits the size of what they can eat.

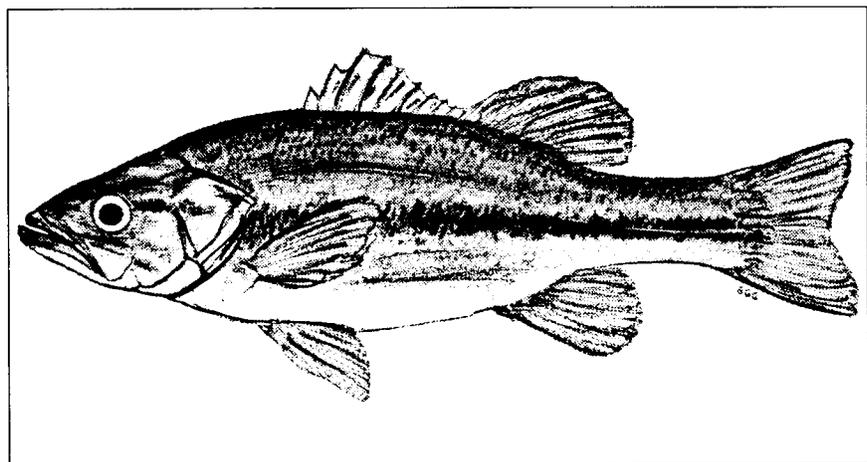
The availability of adequate size live food (baitfish or forage) usually limits bass growth. With adequate forage they can surpass 2 pounds the

first year, but normal growth is about 1/4 pound. Mature females grow larger than males, with northern strains growing up to 10 pounds. Florida strains and first generation crosses with northern strains have grown to more than 20 pounds.

Largemouth bass will eat a variety of live fish, but bluegill are particularly important because they reproduce throughout the warm months. This furnishes a continual supply of different size forage fish. Tilapia and/or

goldfish are commonly used as forage on fish farms because more can be produced at lower cost. About 5 pounds of live forage are required to add one pound of gain to largemouth bass.

Largemouth bass do not grow well in muddy ponds because they feed by sight. Water clarity should be at least 8 inches and preferably 12 inches for feeding.



Largemouth bass

* Texas Agricultural Extension Service.

Bass fingerlings can be trained to eat prepared rations under certain circumstances. See SRAC Publication No. 201 for more information.

Spawning

Bass will usually spawn when 1 year old if they are at least 8-10 inches long. Males select a nest site in the spring after water temperature has stabilized above 60° F. Bass normally spawn in water of 1 to 4 feet near shore, but nesting has been observed as deep as 20 feet in a clear water. A shallow, circular nest is constructed by sweeping away debris to about twice the male's body length in diameter. Hard substrates are preferred. Males normally guard the area about 6 feet around the nest.

When a ripe female joins the male, they slowly circle the nest, side by side. Spawning occurs with both fish tilted laterally so that their vents are close. Both fish shudder as eggs and sperm are released simultaneously. The male may turn and check on each release of eggs before resuming spawning position.

Multiple spawning is common. Females normally release about one-half of their eggs during first spawn, half of the remaining during the second spawn, and a third spawn up to 1 month later is common. Females average about 4,000 eggs per pound of body weight, but the number can be quite variable. Larger fish have larger eggs but fewer eggs per pound of body weight.

Males attempt to guard the nest until the eggs have hatched and guard the fry until they disperse. In nature, most nests are lost to sunfish predation if the male is not in excellent condition. If he is successful, eggs hatch in 2 to 4 days in the southern U.S., depending on temperature. Nesting success is reduced if the temperature drops below 60° F. during cold snaps. Fry swim up about 7 days after hatching and begin feeding on zooplankton (cladocerans, rotifers, copepods). They remain in a school for two or three more days before dispersing. They continue to feed on zooplankton and add insect larvae and fish to their diet when about 2 inches long.

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