

## MAINTAINING MICROPTERUS SALMOIDES IN HOME AQUARIA

By: George Barnes

After many unsuccessful attempts at maintaining the largemouth bass (*Micropterus salmoides*) which occurred over a period of several years, I decided to sit down and analyse why I had failed. The first step of this self analysis was to obtain as much literature on this species as I possibly could. Once this material was assembled, it was carefully read and a series of notes based on its contents was made. With these notes and a little detective work, I began to formulate a plan. This plan was put into effect and lo and behold, success was at hand. In the following paragraphs of this article is a brief description of the fish under consideration, mention of some of the pitfalls I faced, and my final theory which proved successful.

The largemouth bass (*Micropterus salmoides*) is a member of the sunfish group (family Centarchidae) and is found widely distributed from the Great Lakes region in the north to Florida in the south. The members of the genus *Micropterus* (which include the smallmouth bass--*Micropterus dolomieu*) in their natural environment are typical predators and feed chiefly on small fishes, snails, large aquatic insects and smaller crustaceans. They are common in lakes, rivers, ponds and quarries and when not stunted make excellent game fish. Sexually, maturity is reached after 3 to 4 years. The females can be recognized with certainty only during the breeding season, when they have a greater girth.

When breeding, *Micropterus salmoides* lines its nest with leaves and once the eggs are laid both parents take turns guarding the nest. The young bass hatch after 10 to 12 days and for a time are looked after by their parents and then abandoned to fend for themselves. Young largemouth bass are light olive-green to grey-green in color with a distinct longitudinal band composed of a series of blotches and above this and sometimes below are isolated dark blotches.

My first experience in maintaining the largemouth bass occurred in the spring of 1969, when I hooked a small five inch specimen while fishing in upstate Pennsylvania. The hook had barely embedded itself in the bass's upper lip and was carefully removed. Fresh lake water was placed into a minnow bucket and my specimen was prepared for the long journey (some 65 miles) home. Upon arriving home, the bass and lake water were slowly mixed with the contents of a ten gallon tank. As I watched the bass began to swim in swirling motions and its gills took on a reddish appearance. Later that evening it was dead apparently due to the water from the aquarium. After this I collected my water from lakes and ponds for all my native fishes.

In the years that followed I maintained several species of natives but still failed at keeping largemouth bass. My next specimen (also hooked) was approximately the same size as the first. Idle water conditions were supplied, but this specimen decided to beat its brains out by smashing into the sides as well as the hood of the tank. Finally, I decided to try seining for largemouth in the grassy shore area of a local lake where I had observed young bass schooling. The results were much better than I had expected. After three passes along the shore with the net, I ended up with six small sunfish, two small yellow perch, a medium bullhead cat, one beer can (Piel's), an irate water snake and four small (3 to 4") largemouths. These were the smallest specimens I had ever seen, so I quickly tossed the rest of my catch (except the beer can and especially the snake) back and headed home. (Continued on page 7)

Once back in the fishroom the four newcomers were introduced to their new home (a 20 gallon low tank filled with natural lake water). They seemed quite at home and settled down rapidly. However, after a few days I noticed that although the same size they were extremely aggressive toward each other. On the fourth day, two had died and a third was badly chewed up. The fifth day found the injured victim lying on his side close to death. The remaining bass began to improve and within a week his wounds were almost healed. He continued with me for another month when he suddenly developed a case of fungus and died. It was at this point that I consulted large quantities of literature and began to formulate my theory and patiently I waited for the coming of spring.

As the middle of March approached I began to put my plan into action. During the winter months I had written to the Pennsylvania Fish Commission requesting a list of commercial hatcheries in the state that would be able to supply me with a few specimens of fingerling bass. As usual, the Commission was more than helpful and upon receiving their list I sent letters to the various hatcheries. Thus, by the end of March, I had made arrangements to visit an upstate hatchery and purchase several fingerling largemouth bass. Once purchased, these specimens were quickly taken home and placed in their aquarium.

Again, the tank I used was a 20 gallon low equipped with an outside power filter as well as an undergravel filter. The water was natural as was the gravel bottom which had been gathered from local trout streams. The tank was decorated with shale rockwork forming ledges and caves which offered hiding places for the young bass. When the fish were first introduced to the tank the temperature was an even 66°. All the fingerlings I had obtained were 1½" to 1¾" in length and when placed in the tank seemed to adapt themselves well although they did a great deal of jumping at first.

As the middle of April approached I realized that I had overcome the problems of shock (by slowly acclimating the new fish) and water quality. The young bass reacted well to their new environment and no problems were evident. Apparently fingerling bass had little trouble in adjusting to a new aquarium environment. Slowly I began changing the natural water over to regular aquarium water (prior to this I had changed about 1/3 of the water each week, but added natural water). By the end of April the change had been completed and the young bass were doing fine. At this stage they had increased to an average of two inches each.

The time had now arrived to experiment in feeding. Up to this point the bass had been fed exclusively on brine shrimp (live and frozen) and tubifex worms which they eagerly accepted. By slowly cutting down their feedings, I was able to introduce dry flake food. This was only picked at in the beginning, however, after a time the young bass accepted it readily. Contrary to popular belief, I also discovered that these predators not only accepted the flake food but ate from the bottom of the tank. As a final step in my feeding experiment I offered the young bass live guppies. These were quickly stalked and brought down with all the skill and cunning of adult specimens. With this new feeding program the bass had increased their size to 3½" by the end of June. Thus, in conclusion, I believe that if the above outlined pattern is followed most aquarists can achieve success in maintaining and raising young specimens of *Micropterus salmoides*.