



## LARGEMOUTH BASS FACTS

The largemouth bass is indisputably the most sought-after freshwater game fish in North America, and this species commands the attention of resource management agencies primarily as a result of its recreational fishery value. Largemouth bass are an important predator species in the fish communities they inhabit. Wherever they are present, the condition of the bass population usually affects the overall quality of fishing more than any other factor.

For any given water body where bass are sought by fishermen, fishery managers must consider questions such as whether the public wants larger (but fewer) bass or more numerous (but smaller) bass. Both the number of fish caught and size of those fish are important to most fishermen, so a well-planned management program usually tries to find the best balance of these two factors.

If a given reservoir can produce 40 pounds of bass per acre per year, fishery managers must try to decide whether the public would prefer four 10-pound bass or forty 1-pound bass from that acre of water, or some combination. They also must consider how many people will have to share this 40 lbs of bass. Finally, they must develop a management plan to try to attain this goal.

Perhaps the most common question heard by fishery managers is "why can't I catch bigger bass?" One or more answers may be involved. Overfishing is a common condition for largemouth bass populations. Situations arise where no bass survive long enough to get very large. Underfishing may occasionally be implicated when food is limited and bass become too crowded to grow to larger sizes. In some cases, large bass are present in the population but difficult to catch; a different angling method is usually needed to accommodate the different feeding preferences of larger bass.

A number of fishery management tools are available to biologists, but there are no "cookbook" formulas for good bass management. Growth rates, reproductive success, natural mortality, food habits and fishing pressure can all differ between different habitats. A management strategy that produces good results in one area may have no effect at all in another. For this reason, it is usually difficult to apply management tools on a state-wide basis.

In certain situations, slot limits are used in managing bass populations. Slot limits are based on the principle that bass populations exhibit different habitat requirements during different phases of their life histories. Slot limits focus on protecting one segment of the life history which can influence overall fishing success.

Largemouth bass are usually prolific enough to accommodate natural mortality and fishing mortality, since fishing mortality normally takes the place of natural mortality under good management. **Minimum size limits** become important, however, when higher levels of reproduction are required. Unfortunately, strong winds or a rapid drop in temperature during spawning can wipe out an entire year class regardless of measures taken during the previous year to protect broodstock.

The purpose of **creel limits** is to prevent the harvest of too many fish at once, allowing more fish reach larger sizes. They also serve to distribute the potential catch more widely among fishermen. In Louisiana, research suggests that 97% of all freshwater anglers fail to catch 8 bass per day, so lowering the creel limit for bass would reduce catch very little under normal conditions.

Closed seasons are designed to reduce harvest in general, so they are most effective when applied to periods of high fishing pressure. Although they are sometimes imposed during spawning seasons, the same loss to the reproducing population occurs whether a fish is removed during spawning, three weeks earlier, or three months earlier.

Florida bass have been widely stocked outside of their natural range for their trophy potential. Much of their tendency to reach trophy weights is the result of a heavier body for a given length. Several studies suggest that their average growth is not significantly superior to our native largemouth during first few years, but they exhibit more variation in growth. After a number of years, trophies are produced from these florida stockings, but only a few individual fish actually reach trophy sizes. Research suggests florida bass exhibit poorer survival in cold winters and are harder to catch than our native largemouth. These traits are passed along to some degree in their offspring with native bass, but so is their tendency to produce trophy fish.

The quality of largemouth fishing in Louisiana is ultimately the anglers' responsibility. State agencies can perform research, develop recommendations, and impose rules and regulations but if they are not accepted and adhered to by the fishing public the whole process becomes a waste of time.