Managing a Stunted Largemouth Bass Fishery

by Steven Smith / sgsmith@noble.org

Many small lakes and ponds across the country are not actively managed for quality or trophy largemouth bass (LMB). If fishing for LMB is not a goal for an impoundment (body of water such as a lake or pond), there is often no need to manage LMB in the impoundment. However, if fishing for LMB is an important goal, lack of or improper management can result in a stunted LMB fishery.

A stunted fishery is one in which the majority of a species has stopped growing and is similar in size. This happens when there is not enough forage to feed an over-abundance of fish in a given size class. When this occurs, most fish caught only vary in size by a few inches.

Many impoundment managers and LMB anglers view a stunted LMB fishery as a negative situation. In most stunted LMB fisheries, the average length of LMB caught is approximately 7 to 12 inches and weights average less than half a pound. To address this issue, bluegill may need to be stocked (if absent), low fertility of an impoundment may need to be addressed, or adequate numbers of fish from the stunted size need to be removed. Unfortunately, there is not one correct answer.

When LMB removal is appropriate, the general rule of thumb is to start by removing 10 pounds of stunted fish per surface acre of the impoundment. The following year, survey the fishery to determine whether there was an increase in average length of caught fish. If there is no change, increase removal of LMB to 15 pounds per surface acre. Continue increasing the harvest rate each year until a change is noted. In one 16-acre impoundment, only minimal growth was achieved after removing 17 pounds of stunted LMB per acre for two consecutive years. After two years of removing LMB at this rate, the average length and weight of caught LMB increased by 0.75 inch and 0.25 pound, respectively. Increasing average size of LMB is easier in smaller impoundments than larger ones because of the labor involved in removing surplus fish. However, smaller impoundments can be
which helps maintain the attention of beginning or young anglers. This type of fishery can be desirable to control the young of typically undesirable fish, such as bullheads. Also, a stunted LMB fishery is often desirable when managing for trophy-size bluegill, hybrid sunfish or redear sunfish.

Each impoundment manager needs to determine whether a stunted LMB fishery is right for his or her goals.