

## **No Closed Walleye Season in South Dakota**

By Brian Blackwell

Early season walleye fishing can be really good. The good fishing often experienced shortly after ice out is likely a result of a reduced abundance of appropriate sized food, walleye metabolism is starting to increase as water temperatures begin to rise or the fish are making a last effort to increase their condition prior to spawning. Whatever the reason, this good fishing often spurs a discussion amongst anglers concerning the harvest of pre-spawn female walleyes and why South Dakota does not close the season for walleyes in the spring. It is great that anglers have concern and voice their concerns for our fisheries, but the biology does not point to a need for a closed spring walleye season.

The primary reason for many wanting a closed season is to protect the females that are full of eggs. However, most would not hesitate to harvest the same walleyes if they were caught in June. It does not matter when a walleye is harvested, once a fish is removed from the population it is gone whether it is full of eggs or not. Anglers are encouraged to practice selective harvest no matter what time of year they are fishing.

An angler once shared an analogy with me concerning why South Dakota should have a closed walleye season. His analogy was, we don't hunt hen pheasants when they are nesting, thus we should not fish for female walleyes when they are spawning. What seems like a logical analogy doesn't apply because of differences in parental care between the two species. Hen pheasants sit on their eggs until they hatch and remain with the chicks upon hatching aiding in their survival. Whereas, walleyes provide no parental care for either their eggs nor baby walleyes. The eggs are simply broadcast and settle to the bottom substrate and once hatched the fry fend for themselves.

A common argument for a closed season is that our Minnesota neighbors have a spring closure. That is no longer the case on lakes that border South Dakota and Minnesota (i.e., Big Stone, Hendricks, and Traverse). These lakes are now open to fishing year round. The closed season that remains for Minnesota's inland waters is considered more of a social regulation rather than being biological. The opener creates a lot of excitement among anglers and businesses that generate income from fishing.

Although it may appear that anglers are harvesting a lot of walleyes during the spring period, the actual numbers are less than during other times of the year. In addition, many of the walleyes caught during the spring are males as they tend to be more aggressive. Weather conditions during the spring are often

not favorable for many anglers and participation tends to be lower until the weather warms. Angler use and harvest surveys completed on South Dakota waters have consistently shown that the highest walleye harvest typically occurs during June and July. If protecting female walleyes is the intent of a season closure, the season would need to be closed during June and July and I'm betting most anglers and businesses would be opposed.

Walleye populations in South Dakota lakes are rarely, if ever, limited in the number of fish available to spawn. It does not take many fish to produce more than enough eggs for a successful spawn. The number of eggs produced by a female walleye is proportional to her body size. An average female walleye produces roughly 25,000 eggs per pound of body weight; a 5 pound female will produce approximately 125,000 eggs. Looking at these numbers it quickly becomes apparent that a few female walleyes can produce a lot of eggs! The conditions these eggs and hatched fry encounter likely have a larger influence on their success than the number of eggs produced. A variety of factors both biological and environmental can influence the number of catchable walleyes in future years. For example, eggs may be eaten by other organisms or they may become covered in silt which suffocates and kills the egg. Once hatched, the fry continue to encounter conditions that are less than hospitable for their survival. Walleye fry may be eaten, prolonged cold temperatures may limit food availability which can lead to starvation, high winds may wash the fry onto shore or a multitude of other factors can impact their survival.

Even if there was a case where adult walleye numbers were too low for sufficient reproduction, walleye stocking completed by South Dakota Department of Game, Fish and Parks (SDGFP) should negate the effects of low spawning stock. More than 45 million walleyes are annually stocked across South Dakota by SDGFP. The high numbers stocked are because of the highly variable success of natural walleye spawning in most South Dakota waters. In fact, you would be hard pressed to find a walleye fishery in South Dakota that has not been stocked by SDGFP. Stocking is not a guarantee that a walleye year class will be created, but in recent years it has been more consistent than natural reproduction.

Anglers can be assured that SDGFP has listened to their concerns about a closed walleye season. However, at this point there is no biological reason for a closure. Hopefully after reading this article those concerned about closing the season will have a better understanding as to why a closure is not necessary for the continued success of South Dakota's walleye fisheries.