

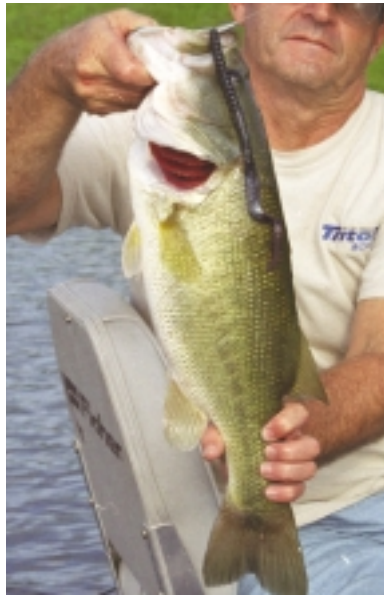
How Tournament Anglers Should Handle Fish

By: Jimmy Yarbrough (Article Re-print from October 2002)

One of the goals of American Bass Anglers and, hopefully, all of its members is to make sure that we handle and release bass properly, both during fun fishing and in tournaments. Bass are a hardy species and have very high survival rates when released immediately and with proper care when caught in tournaments. They are a valuable natural resource that can be recycled and caught over and over to the enjoyment of many anglers.

Survival of tournament caught fish is dependent on two main factors. Probably the most neglected factor is what the angler does to insure proper care in handling the fish when caught and then in the livewell. **Too many of us just put our fish in the livewell and turn it on and forget about the fish until weigh-in. That may work when the water temperature is below 70, but bass demand more care with higher temperatures.** The other major factor is how the fish are handled during the weigh-in procedure. This article will focus on the angler's role and in the next issue we will look at the tournament director's role.

Gene Gilliland of the Oklahoma Fishery Research Lab and Hal Schramm of the Mississippi Cooperative Fish and Wildlife Research Unit at Mississippi State University are fishery biologists and tournament anglers who have done a great deal of research on keeping bass alive during tournaments. They co-authored an excellent booklet "Keeping Bass Alive" which can be purchased or viewed on the Internet. I talked with both and they have provided much of the information for this article.



Handling Bass

Have you ever used a set of muscles to the point they burned and just quit working? That was caused by the build up of lactic acid in the muscles. Fish, like humans, build up lactic acid in their muscles when those muscles are being heavily used, such as in fighting when hooked. Fish should be landed as quickly as possible to minimize energy loss and lactic acid build up. Smallmouths fight so hard that lactic acid build-up is more of a problem with them.

Landing the fish without injuring it can be a problem. Bass have a protective mucus coating that prevents infections. Protecting this slime coat is extremely important to the survival of the fish. Never touch a fish with dry hands or swing them into the boat onto the carpet. I never use a net except when tournament fishing. Small fish can be lifted into the boat and larger fish lipped. If you use a net make sure it is made of knotless nylon or, preferably, the new rubber nets. Wet the net before using. Always wet your measuring board before using and make sure it

is cool if you use a metal board.

If the fish weighs more than 3 pounds don't hold him by the lip alone. Support his weight by placing your other hand on his belly near the anal fin or tail. Never place your hand in fishes' gills to lift them.

Once you've got the fish in the boat, handle it as little as possible and remove the hooks quickly. Longnose pliers speed this process. Don't keep the fish out of the water any longer than you can hold your breath.

What do you do with a gut hooked fish? The old advice was to leave the hook in and let it rust out. Gene Gilliland says: "Modern day hooks don't rust anymore. If you can remove the hook quickly do so. I like to use a hook remover developed by Earnie Hamby. It's made from PVC pipe and really works well." Hal Schramm has a different idea. "Cut the hook out. Snap-On makes a pair of long-shanked cutters strong enough to cut any hook. Cut the hook below the barb and pull it out. The cutters cost \$40, but they are worth it. Now I've got something that will cut the hook out of a fish, my partner, or me. A trip to the hospital will cost a lot more than \$40."



Why Fish Die

Tournament fish that die fall into 2 categories. Those that die during the tournament are referred to as initial mortalities and those that die after being released as delayed mortality. Our goal at American Bass Anglers is to keep both of these categories as low as possible.

Initial mortality can result from a number of factors including handling, injury, water temperature and oxygen levels, and water quality. Delayed mortality is caused by stress. There are 3 things we can do to reduce stress. First of all, try to reduce handling injuries and the loss of mucus which protects the fish. Secondly, maintain healthy livewell conditions. The third factor is proper weigh-in procedures.

The Livewell

Maintaining good water quality in the livewell is critical. Gilliland and Schramm believe there are 4 keys to providing a healthy livewell environment: **1. Eliminate the possibility of mechanical injury, 2. Insure adequate dissolved oxygen, 3. Maintain proper water temperature, and 4. Remove wastes.**

"Support his weight by placing your other hand on his belly near the anal fin or tail"

This article is a reprint, great tips on helping bass survive!

Livewell size and design are very important. All fixtures should be placed so as to reduce the possibility of injuring fish. It is important to keep your livewell full to reduce sloshing, especially in rough water. Dual livewells should have a capacity of at least 15 gallons each and a single livewell at least 30 gallons. The livewell system was one reason I chose my first Triton boat and it has done an outstanding job of keeping my fish healthy.

American Bass Anglers requires immediate culling once a limit of 5 fish is reached. This reduces stress from overcrowding and lessens oxygen demand and waste build-up. The use of Bass Tags (available from ABA) clearly marks the smallest fish and allows rapid culling and reduces stress because you don't have to sort through your fish. These tags clamp on fishes' lip instead of having a stringer type clip that must be punched through fishes' mouth.

The oxygen level of the livewell is critical. Oxygen levels below 5ppm can be lethal. The warmer the water, the less oxygen it can hold and vice versa. Tournament anglers should fill their livewells at the first stop in the morning if they will be re-circulating water. The surface temperature will be coolest at that time and will hold more oxygen. If you are going to be fishing stagnant backwater areas, fill your livewells on the main lake.

If the surface water temperature is below 65, just running your livewell fill pumps on the timer is adequate. Between 65 and 75, run your fill pumps constantly. With surface temperatures above 75, more care is necessary. Under these conditions, you need to run your recirculating pumps constantly. Don't pump in hot lake water. Add ice to your livewells to reduce the temperature 5 to 10 degrees below the surface temperature. Don't cool more than 10 degrees. Block ice is better since it melts more slowly. If you use bagged ice, don't open the bag. An inexpensive aquarium thermometer can be purchased to measure water temperature. The chlorine in the ice is not a problem.

Fish under stress absorb more water than they normally do and this can cause delayed mortality. To prevent this, salt needs to be added to the livewell. Add one-third cup of non-iodized salt for



every 5 gallons of water in the livewell. If you don't know your livewell capacity, measure it with a 5-gallon bucket. Rock salt (ice cream salt) or non-iodized salt purchased at a grocery store is best. Livestock salt might contain some harmful additives.

Every 2 hours, pump out half the water to remove ammonia and other wastes. Add more ice and one-half the original amount of salt. Never use hydrogen peroxide as it can damage the fishes'

gills. Livewell additives can be purchased. These are mainly salt, but some contain chemicals that tranquilize the fish. Gilliland recommended using these 30 minutes before weigh-in to help calm the fish. Unless you use the time release variety of these additives, use only when recirculating.

Weigh-In Bags

Proper weigh-in procedure is vital to fish survival. Stress levels go way up because the fish must be removed from the water to be measured and weighed. Handling and time out of the water need to be held to a minimum.

A good quality weigh-in bag is very important. It needs to be strong enough that it won't rip and spill fish onto the parking lot. Schramm is very impressed with the strength of Bass Bags. Place no more than 15 pounds of fish in a bag. The bags should be perforated if a life support tank is used. At 85 degrees water temperature, ten pounds of fish will deplete the oxygen level of 2 gallons of water to lethal levels in 2 minutes. You are going to get your pants and shoes wet, but it's worth it. A life support tank is necessary during warm water conditions.

The number of bags issued helps control the timing of the weigh-in procedure. Don't use your own bag. The weigh-in bag should be filled with livewell water if ice and salt have been used. Contestants should be able to walk from their boats to a life support tank in less than a minute. Once at the life support tank, the angler should place the mouth of the bag under a nozzle to let oxygen rich water flow through the bag.

Conclusion

Gene Gilliland said he had to remind the pros at the Bassmasters Classic how important it was to take care of their fish. He stressed that under summer conditions, bass require much more care. If we as bass anglers show proper respect and treat the bass we catch as the valuable natural resource they are, our children and grandchildren and generations to come will enjoy catching this fish that gives us so much pleasure and offers such a fishing challenge.

Fish Care Guidelines For Tournament Fisherman

Our goal at American Bass Anglers is to have the lowest mortality rate possible in our tournaments. This is a two-fold issue. It requires you, the angler, to do everything possible to keep your fish healthy prior to the weigh-in and us to weigh in the fish as quickly and safely as we can. The following suggestions will, if followed, enable you to do your part.

1. Fill your livewells at your first stop if you will be recirculating water. The surface temperature will be coolest at that time. Don't use stagnant water from backwater areas or marinas. Use main lake water. Make sure you keep your livewells full to reduce injuries while running, especially in rough water.
2. Lip fish or use a rubber net or knotless nylon net. Wet the net before using.
3. If the fish weighs over 3 pounds hold him by the lip and support his weight by placing your other hand under his belly or near

his tail. Never place your fingers in their gills.

4. Try to protect the mucus coating on the fish. Never touch a fish with dry hands, wet and cool your measuring board before using, and make sure you have water in the livewell. Do not swing a fish into the boat and onto the carpet. Reduce stress by handling the fish as little as possible.

5. Never hold the fish out of the water longer than you can hold your breath.

6. Carefully remove hooks with longnose pliers. Cut the hook below the barb and remove from gut-hooked fish using long shanked cutters.

7. If the surface temperature is below 65, use your livewell fill pumps on timed.

8. If the surface temperature is between 65 and 75, use your livewell fill pumps constantly.

9. When surface temperatures are above 75:

A. Recirculate livewell water and don't pump in hot lake water.

B. Add ice to cool the livewell water 5 to 10 degrees below the surface temperature.

C. Add one-third cup uniodized salt per 5 gallons of livewell water.

D. Monitor livewell temperature.

E. Drain one-half the livewell water every 3 hours to get rid of wastes

F. Add one-half the original amount of ice and salt each time the livewell is partially drained.

G. Use Catch and Release or other additives 30 minutes before weigh-in. They contain a tranquilizer that will help calm the fish during the weigh-in procedure. Recirculate only after adding chemicals.

10. Use Bass Tags with clips to cull fish quickly

11. Only use our weigh-in bags issued at the tournament.

12. Place no more than 15 lbs. of fish in a bag. Use 2 bags if you have more weight.

13. Place weigh-in bags under a nozzle in the life support tanks. Don't just place the bag in the tank. Ten pounds of fish will reduce the oxygen level in a bag with 2 gallons of water to lethal levels in 2 minutes, so you need to run oxygen rich water through your bag.