

## **Black Bass Live Release Tournament Participant Check List:**

### **▶ If surface water temperatures are below 65° F (18.3° C):**

- Use the livewell fill pump to spray in fresh, oxygen rich lake/river water at **regular intervals** in order to exchange the entire volume of your livewell during each pumping session.

### **▶ If surface water temperatures are between 65° and 75° F (18.3-23.9° C):**

- Use the livewell fill pump to **continuously** exchange your livewell's volume by spraying in fresh, oxygen rich lake/river water.

### **▶ If surface water temperatures are above 75° F (23.9° C):**

- Re-circulate aerated, temperature-controlled water in your livewell. For details on how to accomplish re-circulation please see Keeping Bass Alive in Appendix below †. Do not re-circulate your livewell with "warm" lake water.
- To cool temperature in your livewell add 8 pounds (2 half-gallon milk jugs) of block ice to a 30-gallon livewell every 3 hours (do not cool your livewell more than 10° F below lake water surface temperature).
- Add **non-iodized** salt to the livewell (1/3 cup per 5 gallons of livewell water). More salt will need to be added each time you follow the next step.
- Flush stale water (containing metabolic wastes) by replacing half of the livewell water every 2 hours with freshwater (avoid stagnant backwater, boat launches, and shallow areas during exchange).

### **▶ At every tournament:**

- Fill livewell to maximum capacity to reduce excessive sloshing (rear livewells experience less sloshing than forward livewells).
- Distribute fish evenly, between front and rear livewell compartments, if so equipped.

### **▶ Hooks, in or out:**

If using a corrosion-resistant or specially coated hooks (example: bronzed, stainless steel, tin-cadmium, nickel) AND the hook can be easily removed:

- Make an effort to remove hooks using pliers, hemostats, or hook remover with as little tissue damage as possible with short air exposure. Cut off the hooks from artificial lures (crank baits) to facilitate lure and hook removal. Hook points may be left in if the hook shank is cut to facilitate lure removal. (Cutting pliers can also be used to cut off the hook barb and point, which allows the hook to be easily backed out).

If the hook cannot be removed in less than one minute of air exposure or without causing tissue damage:

- Cut the line above hook leaving less than 2 inches of line attached. Cut hook shanks on single and multi-hook lures to remove the lure body when the entire lure cannot be easily extracted from the fish and remove the lure body/blade; the hook point or points may be left in.

### **▶ Released bass that float after capture from deep water:**

In Pennsylvania capture of bass from deep water typically occurs in a few deep-water lakes (example: Lake Erie, Raystown Lake, and Lake Wallenpaupack). Bass caught from deep water may experience difficulty in submerging and swimming normally due to an over-inflated swim bladder. Procedures exist to expel pressure from the swim bladder using a hypodermic needle. Since the procedure requires knowledge of the location of the swim bladder, injury and death to the fish can result if carried out improperly. Anglers interested in mastering this procedure should consult publications that detail proper application such as the B.A.S.S. publication "Keeping Bass Alive" (see Appendix) and

apply the procedure only if they are comfortable that they will cause no harm to released bass. Studies have shown that when properly carried out, survival of deep water caught bass with over-inflated swim bladders is enhanced. In most Pennsylvania waters this condition will not be evident, and the procedure will not be necessary. Remember, releasing fish alive and unharmed is a regulatory requirement seasonally or year-round on some waterways.

► **Decontamination after the weigh-in process to prevent invasive species transfer:**

► **Basic information describing how to clean gear is available at:**

<http://www.fishandboat.com/Resource/AquaticInvasiveSpecies/Pages/CleanYourGear.aspx>

Remove plants and debris, clean, drain, thoroughly dry, and, if necessary, use hot water to disinfect boat, boat trailer, and all fishing and boating gear exposed to water. Such vigilance will prevent inadvertent transport of aquatic invasive species (AIS), from water to water, when boats and gear are moved from one fishing location to another. Some non-native plants can become established by introducing a single plant fragment, and some microscopic organisms can be transported in damp environments, thus cleaning and thoroughly drying trailers and boats is essential. Within Pennsylvania, non-native animals, plants, fish, and disease microorganisms have been detected. Thus, vigilant cleaning and drying is essential when moving boats and fishing gear from water to water. Never move fish, aquatic plants, or any organism from one water to another. The potential to unintentionally introduce an invasive aquatic species is too great. Pennsylvania Sea Grant has posted photos and provides information about known aquatic invaders now occurring in Pennsylvania and potential Pennsylvania invaders on their web site:

<https://seagrant.psu.edu/topics/invasive-species/aquatic-invasive-species/resources>

Within Pennsylvania, cleaning and drying are not a requirement but are strongly encouraged; the character of our aquatic resources and the fisheries they yield are everyone's responsibility, including Pennsylvania anglers and boaters. We summarize some methods for basic gear cleaning and decontamination, but encourage those seeking more detailed information to visit our "Clean Your Gear" web site:

<http://www.fishandboat.com/Resource/AquaticInvasiveSpecies/Pages/CleanYourGear.aspx>

The information that follows includes some practical advice; however, decontamination methods change frequently in response to effectiveness testing, and as new invasive organisms are detected. We caution that all cleaning and decontamination actions described below may not eliminate all invasive species but will eliminate most. The application of cleaning and decontamination protocols carries inherent risk to those engaged in cleaning and decontamination and those nearby; particularly at the conclusion of a tiring day on the water. We advise caution and safety when engaged in any and all cleaning and decontamination activity and that you **proceed at your own risk**.

Basic Cleaning, Drying, and Decontamination:

- I. While at the fishing location, after the event has concluded and the boat has been retrieved onto the trailer, and prior to inspection, remove all debris and plant fragments adhering to the boat, trailer, fishing nets, and fishing gear. Insure the tow vehicle, boat, and trailer are securely, safely, and legally parked away from other vehicular traffic, with engine off and emergency brake on, with wheel chocks in place as necessary, to prevent unintended vehicle and trailer movement during inspection, cleaning, and debris removal.
- II. Thoroughly inspect and remove all aquatic plant debris and mud; and drain and rinse any water holding livewells or containers onboard, do not discard any live baitfish, live non-native fish, live crayfish, or invertebrate (hellgrammites etc...) baits into the waterway. Do not discard or deposit any dead fish or dead organisms into the waterway or adjacent trash

bins. Bilges, livewells, and fish tanks should be completely drained. Any oil or fuel contaminated bilge water should be retained and disposed of properly.

III. Dead fish, dead crayfish, or dead invertebrates should be placed in a cooler or on ice for later consumption or properly disposed of when you return home or to your point of embarkation (camp, hotel etc...). **For all crayfish species, the head must be immediately removed behind the eyes upon capture unless used as bait in the water from which taken.** Entrails of any retained organisms and removed crayfish heads should be disposed of at home in municipal trash. Dead fish, removed crayfish heads, crayfish carcasses, or fish entrails should never be disposed of in waste containers at access areas.

IV. Upon return home or to point of embarkation and prior to launch in a different river or lake, the boat and trailer should be thoroughly decontaminated. For boats typically stored on a trailer outside, follow the procedures for: (1) cleaning, and (2) decontamination described below. The later procedure, decontamination, may include one or more of the following: (2a) thorough drying (or freezing), (2b) hot water washing, or (2c) chemical washing. Boats typically stored by mooring in a waterway (e.g., at a marina) and destined for use elsewhere require more aggressive cleaning and decontamination procedures, see clean your gear protocols link above.

(1) Cleaning at the fishing/boating site:

Remove all clinging plant fragments, clinging/attached animals (snails, mussels), debris, and mud from boat trailers and any fishing gear anchors lines or safety gear that has become wet. For moored vessels, pressure washing, scrubbing and/or scraping may be required to remove encrusted materials. Professional hull cleaning may be a best option for moored vessels. Conduct this cleaning activity at the waterway where the boat has been operated.

(2) Decontamination, at home may include one or more of the following procedures, see "Clean Your Gear" website above for additional detail:

a. Complete drying, where the boat and trailer are dried to touch and then allowed to dry for another 48 hours. Complete freezing for a 24-hour period or longer provides necessary decontamination; therefore, boats stored out of the water overwinter at ambient Pennsylvania air temperatures may be considered decontaminated following a period of 24 hours of freezing temperatures.

b. Hot water (140° F or hotter\*) pressure washing in a manner consistent with boat and boat trailer manufacturer recommendations, followed by complete drying. Boat engine cooling systems, water intakes, and internal livewell tubing may require alternate disinfection. In a manner consistent with manufacturer recommendations, flush the engine with 140° F\* water for at least 10 minutes; and in a manner consistent with manufacturer recommendations, run 140°F\* water through the boat live wells and livewell tubing, boat bilges, and all other areas that could contain water.

\*NOTE: To ensure 100% mortality of AIS, applied water temperature needs to be 140° F at the point of contact or 155° F at the nozzle‡.

c. Chemical washing may include use of a number of compounds that typically require follow-up rinsing and/or neutralization. Our guidance is restricted to one chemical, household bleach. Although household bleach is readily available to consumers, we caution that use at certain concentrations makes it corrosive,

therefore use and application must be carried out with extreme caution and safety. Thorough rinsing and, where necessary, neutralization should be consistent with manufacturer recommendations where applied:

Product <sup>1</sup>	Concentration <sup>1,2</sup>	Contact time <sup>1,3</sup>
Household Bleach (5.25% liquid sodium hypochlorite)	(1:1 or 50%) add 1 part bleach to 1 part water	Dip, wipe, or spray on item to be treated, wait 5 minutes, then rinse thoroughly with water or neutralize <sup>3</sup> and allow to dry.
Household Bleach (5.25% liquid sodium hypochlorite)	(1:9 or 10%) add 1 part bleach to 9 parts water	Immersion contact for 10 minutes for items to be treated, then rinse thoroughly with water or neutralize <sup>3</sup> and allow to dry.

<sup>1</sup>Application and use of these products carries inherent health risks to both the applicant and those in the immediate area where chemicals are applied. Necessary protective clothing, respirators, protective gloves, protective boots, and eye protection are required for the applicant and others who may be affected by application. These chemicals may have adverse effects upon boat, livewell, and boat trailer components. Consult the equipment manufacturer for guidance. Consult Material Safety Data Sheets and or manufacturer instructions for guidance associated with use and handling of these chemicals.

<sup>2</sup>Compounds should be unsealed and mixed immediately before use to be effective; use these compounds at described concentrations at your own risk. Application or exposure requires use of protective clothing and other apparatus. Consult the Material Safety Data Sheet of the product used for specific details.

<sup>3</sup>Chlorine solution compounds are corrosive to metal and rubber and are toxic to fish and humans not using recommended protections. Rinse all treated boats, trailers, and gear well with water after the necessary contact period or neutralize by spraying with sodium thiosulfate at 800ppm solution (3 grams per gallon of water) on all chlorine treated surfaces and equipment. Sodium thiosulfate is available from swimming pool supply sources. Follow all label precautions pertaining to neutralization; use this compound at your own risk. Application or exposure to sodium thiosulfate requires use of protective clothing and other apparatus. Consult the Material Safety Data Sheet of the product used for specific details.

**CAUTION:** Exercise care when handling and using hot water, chlorine compounds, and chlorine neutralizing compounds which can burn or harm unprotected skin, eyes, nose, and respiratory tract. Handling and use of high temperature water, high temperature water spray (steam), and chlorine compounds can be hazardous. Therefore, necessary precautions and safety procedures must be carefully adhered to, so that burns and other harm to oneself and others is prevented. Also, some equipment may melt, crack, or corrode in conjunction with exposure to hot water, steam, and/or chlorine compound cleaning. Some waterproof fabrics can delaminate or deteriorate with exposure to hot water and chlorine compounds. Consult manufacturer recommendations regarding use of hot water and or chlorine compounds in conjunction with decontamination described above. Chlorine and neutralization compounds must be applied away from waterways and storm sewers, such that un-treated drainage into a waterway will not occur. **Hot water and chlorine compound cleaning and follow-up neutralization, and any methods to enhance fish survival and prevent AIS contamination should be conducted at your own risk.**

## Appendix

† More information about *internally* re-circulating aeration systems and oxygenation systems is described in: Gilliland, G., & H. Schramm. (2009). Keeping Bass Alive. B.A.S.S. Birmingham, AL. Online at: [https://www.bassmaster.com/sites/default/files/bassmaster2011/imce/KeepingBassAlive\\_guidebook%20comp.pdf](https://www.bassmaster.com/sites/default/files/bassmaster2011/imce/KeepingBassAlive_guidebook%20comp.pdf)

‡ California Department of Fish and Wildlife Aquatic Invasive Species Decontamination Protocol; <https://nrm.dfg.ca.gov/FileHandler.ashx?documentversionid=74126>