

# KEEPING BASS ALIVE

## WATER QUALITY



Anglers must take an active role in maintaining the health of their catch. Do not assume that the boat's livewell system will automatically do all that is needed. You must have good equipment and you must also know how to use it under every kind of circumstance.

**REDUCE MECHANICAL INJURY.** This is best addressed by proper livewell design and construction. Make sure there are no obstructions or fittings that would injure fish in the livewell.

- The more water a livewell can hold, the more pounds of bass it can hold. Measure the capacity of your livewell, and do not exceed a ratio of more than 1 pound of bass per gallon of water.
- Distribute fish between livewells or livewell compartments to reduce crowding and stress.

**LIVEWELL BASICS.** The single most important factor in maintaining the health of your catch is keeping the oxygen level in the livewell water above 5 ppm. Oxygen is added to the water (aeration) by pumping water through some device that causes air to be mixed with the water. This can be accomplished by air intake, spraying, or water surface disturbance.

- Livewells can be operated to pump in fresh lake water or recirculate livewell water. A recirculating system is essential to provide aeration when the boat is on plane, when the boat being trailered, or when you are controlling livewell temperature (see below). If your boat does not have a recirculating system, add one. Brands of boats differ, so be sure you understand the livewell control settings for fresh water intake and recirculation.
- Livewell pump capacity is a major factor affecting aeration efficiency. Pumps should move at least 500 gallons of water per hour (gph) to assure maximum aeration. Replace existing pumps if they do not deliver at least 500 gph per livewell.
- Dual pump systems are recommended — one as an intake pump to fill the livewell, and one that functions only in a recirculating mode.
- Livewell pump failure will result in dead fish. Carry a spare pump motor to facilitate emergency replacement on the water. Carry a spare pump with sufficient wire and hose to allow pumping lake water into the livewell if the built-in pumps are not readily accessible.

**LIVEWELL TIMERS.** Most boats have timing devices that cycle the aerator pumps "on" for a predetermined period of time ev-

ery few minutes. Adjustable timers can be set to cycle on every 3 to 15 minutes. With some brands, "Maximum" means maximum time between aeration cycles - in other words; "Maximum" means minimum aeration. Know how your timer operates.

- Continuous pump operation is an absolute must for proper aeration when you have more than a few pounds of bass in the livewell. If the control on your aerator does not provide continuous operation, replace it with a control that has this capability.



**VENTILATION.** Aerators depend on mixing air with the water. If the air trapped in the space between the water's surface and the livewell lid is stale, you are not mixing fresh air (or oxygen) with the water.

- Lift the livewell lids regularly to allow fresh air to circulate into the compartment or vent the aspirator so that it is pulling in fresh air.
- Some livewell systems pull (aspirate) air into the aeration device. Make sure the air tube is not obstructed. Some of these systems can be easily improved by inserting a length of the appropriate-diameter aquarium air tubing into the vent hole on the top of the aspirator and routing the tubing to fresh air.



**TOYOTA supports conservation and encourages you to "Keep Bass Alive"**

