



KEEPING BASS ALIVE

LIVEWELL MANAGEMENT

MAINTAINING GOOD OXYGEN AND WATER QUALITY. Take responsibility for the care of your catch. Regardless of the brand of boat or type of livewell aeration system, keeping bass alive requires proper livewell operation.

- Begin by filling your livewell early in the day, at your first fishing spot. Water temperatures are coolest early in the morning. Cooler water holds more oxygen. Take water from open areas, avoiding stagnant backwaters, sloughs, or boat launch sites.
- While the freshwater system is filling the livewell, turn on the boat's recirculating pump and run it continuously until the livewell is full to build oxygen.

Maintaining healthy oxygen and water quality in livewells depends on temperature because warmer water holds less oxygen and bass in warmer water consume more oxygen and produce more dissolved wastes—carbon dioxide and ammonia—that can be toxic.

WHEN WATER TEMPERATURE IS BELOW 75° F

- Fill the livewell as described above
- Run the livewell pumps on intake mode to add fresh water
- Run the livewell pumps continuously if you have more than 5 pounds of fish in the livewell.

WHEN WATER TEMPERATURE IS ABOVE 75° F

When surface water temperature increases above 75° F, temperature control with ice, partial water exchange to remove dissolved wastes, and the addition of salt to aid osmotic regulation are essential to maximize survival.

- Fill the livewell as described above
- Set the livewell system to operate in recirculating mode
- Cool the livewell water by adding block ice

| SURFACE WATER TEMPERATURE | LIVEWELL WATER TEMPERATURE |
|---------------------------|----------------------------|
| 75-80° F | 75° F |
| 81-85° F | 78° F |
| ABOVE 85° F | 80° F |

- As a guide, one 8-pound block (or two frozen half-gallon milk jugs) of ice cools a 30-gallon livewell 10°F for about 3 hours. Experiment with your boat's livewell volume and calculate the amount of ice you need to achieve the desired drop in water temperature.
- Block ice melts more slowly than crushed or cube ice, provides more constant temperature modification and can be easily stored for later use. Don't be concerned about chlorine in the ice. The little that remains when the ice melts will come out of solution with proper aeration.
- Monitor livewell water temperatures with a plastic aquarium thermometer or install a temperature probe in the livewell.
- If you have more than 5 pounds of bass in the livewell, pump out half of the livewell water every 3 hours, then refill with fresh water from areas with good water quality.
- Add ice to lower the temperature to the desired range (see table).
- Avoid adding water from stagnant backwaters or shallow areas that may be extremely warm and low in oxygen.
- Run the recirculating pumps continuously if you have more than 5 pounds of bass in the livewell.

OXYGENATION. When large catches of bass are expected, oxygen uptake in livewell water can be improved by flowing pure oxygen from a pressurized cylinder, or via an oxygen-generating device. With the pressurized system, a regulator controls the flow through a bubble hose. Oxygen generators give off tiny bubbles directly into the water and are designed to work only when submerged.

- Use caution with pressurized cylinders and make sure they are secured and hoses and fittings are maintained in optimal condition.
- Oxygen generators should be wired through a switch that will allow the operator to turn them on and off as necessary.

LIVEWELL CHEMICAL ADDITIVES. Bass expend a lot of energy keeping the salt concentration of their body fluids within a certain, narrow range. Adding a small amount of salt to fresh water helps reduce stress.

- Add non-iodized salt at a rate of 1/3 cup per 5 gallons of
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livewell water. Pre-measure the salt into plastic bags and carry several with you for later use.

- Most commercial livewell additives contain salts, but some also contain ingredients that are not approved by the U.S. Food and Drug Administration for use on fish that may be treated, released, then caught again at a later date and possibly eaten by humans. For this reason, State and Federal fisheries agencies cannot recommend the use of these products.
- Oxygen generators can generate chlorine if used with livewell additives that contain salt. It is best to avoid the use of salt when running these devices.
- There are also no approved livewell additives that help sustain adequate oxygen in the livewell water that have been proven to be safe at all concentrations.

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