

# Liven Up Your Livewell

*Oxygenation systems keep baits and tournament fish healthy.*

By ARIEL CABRERA

**A**dding pure oxygen to bait and release wells can save expensive bait, and for those who fish live release tournaments, can actually mean money in the bank, even during the harshest summer conditions. In a crowded summer livewell, dissolved oxygen levels can plummet, resulting in dead or sick fish.

Think your "aerator" will solve this dilemma? Aerators provide air, not oxygen. If your bait or prize-winning fish could talk they would say the same thing: "Give me oxygen, not air!"

Bubblers, air stones and other "aerators" assist in the breakdown of unwanted chemicals by agitating the water. They also provide raw water when used with flow-through ports. However, these devices may not keep fish or baits alive when the water gets really hot. Oxygen levels decrease in salt water when the temperatures climb and more bait or tournament fish are added to the livewell. With pure oxygen, temperature is not an issue. The use of oxygen is a scientifically proven method that is used for live fish transport by all state and federal fish hatcheries, salt or freshwater species.

The venerable "Otab" was one of the first oxygen delivery systems (first marketed in 1939) and it's still around. They sell for \$1.50 each—they're cheap, practical and found at most bait stores. Otabs release thousands of oxygen bubbles but can only be used once since the chemical compound eventually dissolves in fresh or salt water. They also produce 10 percent carbon dioxide, which will make livewell water more acidic. And, it would take a lot of them for a large saltwater livewell, though they can be helpful for a baitbucket transport.

Pressurized oxygen is a superior way to provide oxygen to keep fish alive



**Compressed oxygen tank is firmly secured near the livewell it serves. Using one of these systems is a big responsibility for the skipper.**

and healthy. The Oxygen Edge system ([www.oxyedge-chum.com](http://www.oxyedge-chum.com)) uses inexpensive compressed welding oxygen delivered with a specially designed brass regulator that is nickel plated internally and externally to withstand saltwater corrosive elements. They're fairly costly, with systems starting at \$365, but once installed they really do the job. Gas in a typical 9-pound cylinder lasts up to 47 hours. Larger cylinders can last far longer. Cylinders can be refilled from a home supply tank (rent \$4 a month) for about 75 cents on the 9-pound models. Baits that come out of an oxygenated well seem to be extra lively, and more attractive.

There is only one U.S. Coast Guard safety regulation regarding oxygen installation in a boat, but it's an important one: *The high-pressure cylinders must be secured to the actual hull*—same as with scuba and helium tanks. With the cylinder sturdily secured to the hull with good brackets, there is

no chance of having the high-pressure cylinder getting loose and becoming a projectile if the valve is accidentally knocked off. Since oxygen supports combustion and makes everything that burns burn hotter, precautions have to be taken.

Think safety when you mount the cylinder. Do not secure it in the boat's bilge, to a thin plastic ice chest lid, or anywhere near the battery box. And be sure not to run the oxygen tubing inside an electrical wire chase. Regulators should be E-4 Ignition Test Certified by the Compressed Gas Association. The tubing and all components must be cleaned and certified for pure oxygen service. Aluminum cylinders must be hydrostatic tested every five years, the steel ones every 10. The last hydrostatic test date is stamped in the metal on the shoulder of the cylinder.

Here's one you might not think of: Smoking near an oxygenated well can be dangerous. Do not smoke within five feet, and never lubricate or clean oxygen equipment with oil, grease or oil-based solvents such as WD-40.

Operating a pressurized injection system like the Oxygen Edge in a closed system livewell is simple. Just turn the valve to open—that's it. You turn the valve off when you're ready to empty the tank.

FishOx Systems, Inc., [www.fishox.com](http://www.fishox.com), produces an oxygen generator for baitwells. These systems are 12-volt DC-operated, generating oxygen from the air. It makes oxygen by passing the air through a series of internal components, which separate the oxygen from the other gasses. The oxygen is then self-contained in a product tank for use during operation. These systems never require "refills" and are low pressure, less than 20 psi. These portable and boat mounted systems generate in the neighborhood of 90 percent oxygen. FishOx oxygen systems vary in price according to applications and size.

Oxygen is not only good for your bait, it can help revive tired fish that you want to release. By dropping them into the "oxygen chamber" for a few minutes, you can revive even the most exhausted snook or redfish, giving it a much better chance of survival when you put it back into the water. ➤