

Throw Back That Short Fish—Unharmmed!

By Conservation Officer Dominick Fresco

**“Officer, that fish wasn’t going to live anyway.”
“The fish swallowed my \$5 lure. Darned thing died when I tried to get it back, so I just kept the fish.”**

All too common, these excuses are heard daily by New Jersey Conservation Officers from the Marine Enforcement Unit when inspecting anglers who possess illegal or “short” marine fish. But be advised that COs rely on sure-fire techniques when it comes to short fish: state-issued fish measuring board. Either the fish is of legal size, or it’s not.

To release sublegal fish, follow these tips for returning hooked fish back to the water unharmmed.

The main causes of hooking mortality in fish are stress and wounding. Fish fighting after they are hooked is a major stressor. More physiological stress results from the change in temperature or pressure as fish are reeled up from depths greater than 40 feet. An outward sign of the adverse effects of the rapidly decreasing water pressure surrounding the fish during retrieval is a distended air bladder protruding from the fishes’ mouth. Of course, there’s also wounding from the hook. The degree of wounding depends on the location of the hook; gill- or gut-hooked fish have a greater possibility of death.

Catch and Release Guidelines

Plan—in advance—your strategy for releasing hooked fish, especially species with season or size restrictions. On lures, replace treble hooks with single hooks and consider pinching barbs. Try using non-offset circle hooks when fishing with bait. Use properly-sized equipment for the targeted fish species to limit time and effort spent on fighting fish. Use a slower retrieve when fishing in depths greater than 40 feet, such as offshore wreck fishing.

Once the decision is made to release, attempt to keep the fish in the water while using needle-nose pliers or a de-hooking device to extract the hook. If the fish is gill- or gut-hooked, cut the line as close to the hook as possible. Studies show the hook will release within about 120 days. Avoid netting the fish. If a



net must be used, neoprene nets cause less damage to the protective slime layer covering the fish, a layer which guards against infection.

When leaving the fish in the water is not possible, keep your hands wet at all times (less damage to the slime layer) and minimize handling—particularly the gills and soft belly. Anglers often hold fish behind the gills while de-hooking. This can be problematic, especially for flounders whose internal organs (liver, heart and stomach) are located in this small region of the body and are particularly susceptible to injury. For these fish, pinch between your thumb and fingers on top and bottom sides just behind the eyes, flattening the dorsal fin to hold the body securely.

Avoid placing fish on hard surfaces. Use on an old piece of foam cushion and place a wet rag or gloved hand over the fish’s eye. This action can subdue even the most unruly bluefish or tuna.

Revive First

As quickly as possible return the fish to the water and *gently* rock it back and forth several times, making water flow through the gills. To assist reviving fish (saltwater ONLY) whose air bladder is distended and protruding from the mouth the best apparatus is a hypodermic syringe with the plunger removed.

(Or purchase the Florida SeaGrant-approved venting tool kit from major sporting goods retailers.) The instrument used must be hollow in order for gases to escape and is inserted at a 45 degree angle near the fourth or fifth spine at the base of the pectoral fin. If the bloated condition is severe, gentle pressure can be applied to the abdominal wall. The venting tool should be cleaned after each use (bleach or alcohol). As for all fish, be sure to release it—*always head-first*—into the water.

These catch-and-release techniques are the only resolve anglers have when sub-legal fish are caught. If you possess illegal fish and are inspected by a Conservation Officer, be truthful and cooperative. But don’t put yourself in that situation; the best approach is to immediately release hooked fish unharmmed.