

# THE MODERN ANGLER



The protection and conservation of marine resources has never been more important than it is today. Many popular fish species are under stress through declining water quality or loss of habitat, and saltwater recreational anglers need to be mindful of their impact as well. Every time we head out on the water to enjoy a day of fishing we affect the marine environment

Understanding the changing conditions which have affected marine resources, many a direct result of an increasing population, is an important part of realizing what must be done to protect them for the future.

Coastal and estuarine water quality, in places like the Chesapeake Bay and its tributary rivers, has declined due to a myriad of actions which have taken place for decades. Oil and chemical spills, sewage outfalls and run-off, pesticide and fertilizer run-off from farms and private residences, industrial pollution and dredging have adversely affected water quality. Poor water quality can impact the ability of fish to reproduce, find a steady food supply, and survive the stress of life in the dynamic marine environment. The trend of declining water quality has been reversed in many areas in recent years, but major improvement will be a long term process. In the

interim, marine life must cope with water conditions which are less than optimal.

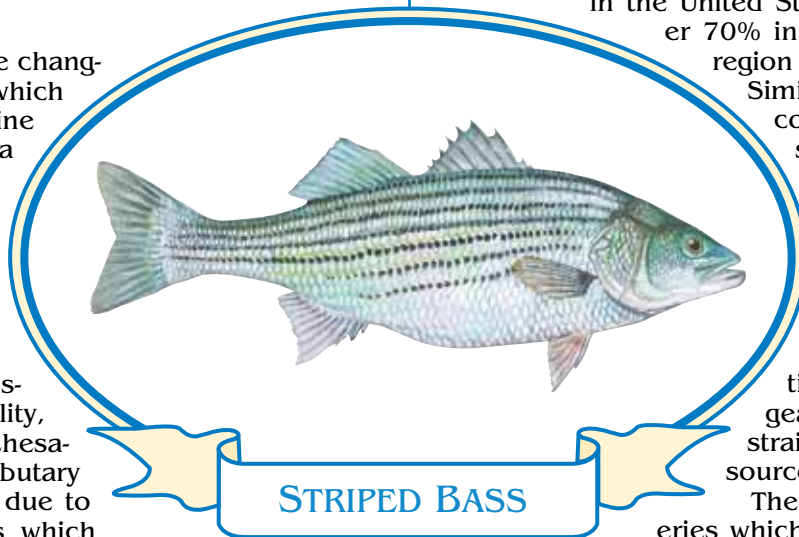
Habitat destruction has caused the loss of valuable spawning and nursery areas for many marine animals. Construction of bulkheads, fill operations, dredging and channelization, and substandard water quality have caused wetlands and submerged seagrass beds to disappear at alarming rates. This loss of habitat also contributes to declining water quality.

Meanwhile, the demand for marine fishery resources has increased markedly. The numbers of recreational anglers tripled from 1955 to 1985 in the United States and grew another 70% in the Mid-Atlantic sub-region from 1985 to 2005.

Similarly, the demand for commercially caught seafood continues to grow. This increase in the human population and its demand for fishery resources coupled with the use of increasingly sophisticated and efficient gear has put a severe strain on many fishery resources.

The result is marine fisheries which have become highly regulated, but in many cases the regulatory process cannot keep pace with the decline in fish stocks nor the degree of sophistication used by anglers.

We must recognize the important part the recreational fishery plays in this complex fisheries management web; and, we must work to develop a personal commitment to resource conservation, while developing and adhering to a high standard of angling ethics. In short, we all must become stewards of our marine resources.



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## The following are guidelines which the modern angler should consider incorporating into his daily fishing activities:

**1. KNOW AND ABIDE BY ALL FISHERY REGULATIONS.** Bag limits, closed seasons and size limits are established to protect fish stocks and ensure their reproductive viability. Limits are limits, not goals to be achieved every trip. In many cases we should consider holding our catches to even stricter standards than required by regulation.

**2. REPORT VIOLATIONS OF FISHERY REGULATIONS.** Do not tolerate illegal or irresponsible fishing practices. There are too few enforcement officers to check each of Virginia's over 1 million marine anglers dispersed over the huge tidal and coastal water area of Virginia. The 24-hour violation hotline number is 800-541-4646

**3. PRACTICE CATCH AND RELEASE FISHING.** Take only the fish you intend to eat and carefully release the rest. Studies have shown that released fish have an excellent chance of surviving. Consider using circle hooks—especially when using natural bait.

**4. KNOW HOW TO PROPERLY HANDLE FISH.** Releasing fish requires more than just "throwing fish back in the water." Know the best ways to handle fish, so they will not be injured, and use the proper tools to unhook your fish. A good source of information on handling fish is the brochure "Careful Catch" published by the Chesapeake Bay Foundation, (804) 780-1392 or (410) 268-8816.

**5. DISPOSE OF ALL TRASH PROPERLY.** Do not throw any trash into the water. Save it for disposal onshore. Fishing line and other plastic items are particularly harmful, often entangling fish and other marine life. Plastic sandwich bags look like jellyfish and are eaten by sea turtles, which often die as a result. Oil, gasoline, antifreeze and cleaning products cause pollution and can be toxic to marine life.

**6. PRACTICE SAFETY AFLOAT.** Learn basic boating skills. Have proper safety equipment on board, as required by law. Lives may depend on it.

**7. SHOW RESPECT AND COURTESY TO OTHERS.** Fishing is a fun, relaxing activity, as long as respect is accorded others. Treat other fishermen the way you want to be treated. Don't crowd them or create conflicts with them. Respect other people using the waters (e.g. boaters, divers) and the property rights of people living on the water. Cultivate a good reputation and image. To non-anglers, our behavior reflects on all anglers.

**8. SHARE THE SPORT OF FISHING WITH OTHERS.** Fishing is a great way to spend time with family and friends. Share the gift of fish with others, especially youngsters. Lead by example, practice and share all of the ethical guidelines contained here.



## Use A Landing Net

One of the biggest problems faced by many anglers is how to get big fish from the water into a boat.

Traditional angling practices call for the use of a gaff, which is a large barbless steel hook attached to a pole with a handle. The gaff is stuck into the fish and used to hoist the fish aboard.

Serious injuries are inflicted upon fish when they are gaffed. With the proliferation of size limits and creel limits on saltwater fish necessitating the release of many fish, the expanding interest in catch-and-release fishing, and the growing number of tagging programs, many anglers have abandoned the use of gaffs. In some cases, such as the landing of striped bass in Virginia, the use of gaffs is no longer legal.

Landing nets are a good alternative to gaffs in most situations. Landing nets come in a variety of sizes and can accommodate most large fish, including the often volatile cobia. In fact, large fish landed with a net usually are more docile and easier to handle than fish which have been stuck with a gaff. This reduces the chances for injuries to the fish and the angler.

Landing fish with a net is relatively easy. The fish should be led head first into the net, and the

hoop should be immediately lifted clear of the water. When attempting to land a large fish, do not lift the fish into the boat using the net handle. This may result in the handle bending or breaking, causing damage to the net and loss of the fish. When the hoop is lifted clear of the water, grab the edges of the hoop and lift the fish into the boat.

Control over a large fish often can be maintained if the net is not dropped on the deck in the cockpit of the boat. Rest the fish on the deck, while continuing to hold the sides of the hoop above the floor. This continues to suspend the fish within the confines of the net, while most the weight of the fish is resting on the deck. The fish can be unhooked while in the net, then the fish can be measured and released or placed in the fish box.



## GET HOOKED ON CIRCLE HOOKS

The popularity of circle hooks has exploded in recent years, but they are not new inventions. The first circle hooks were fashioned from bone, wood and stone more than 10,000 years ago. In recent times, circle hooks first became popular (and profitable) in the commercial long-line fishery, as “hook-up” ratios improved and a greater percentage were brought to the boat due to the tendency of the hooks to lodge in the tough, bony corner of the mouth.

These same attributes stimulated interest among recreational anglers more than twenty years ago, but the popularity of circle hooks was limited by the lack of diversity in hook sizes and styles. Originally, only large sizes were available in thick, heavy gauge wire. Today, the diversity of circle hooks is seemingly endless, with sizes as small as #18 and as large as 16/0 and a variety of hook and wire styles.

So, what is a circle hook and how does it work? Circle hooks are fishing hooks with their hook points bent around until they are perpendicular (or nearly perpendicular) to the shank of the hook. Typical fish hooks (now called

“j-hooks” by many people) have points that are parallel to their shanks or just slightly curved inward. Circle hooks work by catching on exposed “edges” in the mouths of fish – typically the corners of the mouth or the lips. The fish will swallow the bait (and hook), then, as the fish turns and/or swims away, the hook slides through the mouth until it reaches the corner of the mouth where the point “catches” and the hook rotates and automatically buries itself in the corner of the mouth or the lip. The unique curved shape of the hook with the point running perpendicular to the shank prevents the hook from catching on soft tissue (such as the stomach), thus reducing the incidence of deeply hooked fish. Also, because of the way the hook catches and rotates into the lip or corner of the mouth, once a fish is hooked, it is almost impossible for the hook to pull out during the fight. However, the hook is easily removed by the angler, by simply rotating the hook back out on the same path it caught and entered the fish’s lip or corner of the mouth. Circle hooks are also safer for anglers, as the likelihood of being accidentally hooked is much less than with a “j-hook.”

The most important aspect for anglers using circle hooks is not to aggressively set the hook





when a fish strikes. Circle hooks are designed to catch on an edge of the fish's mouth as it swims off and aggressive hook setting will pull the hook free before it has an opportunity to catch and penetrate. The best hook setting is none at all; let the biting action of the fish and its own movement set the hook.

The conservation advantages of circle hooks are obvious. The rate of hooking fish in the lips or corners of the mouth approaches or exceeds 95% for "true" circle hooks, reducing the damage caused by j-hooks, which often lodge deeply in the gullet or stomach (causing serious damage to vital organs) and can "tear" flesh and internal tissues by ripping out and resetting while an angler is fighting a fish. Use of circle hooks can greatly increase the survival rate for fish that are released. In addition, circle hooks are difficult for fish to dislodge once they are hooked, resulting in fewer lost fish. In certain species of fish, research also has shown a high rate of hooking fish (better than similar sized "j-hooks"), but in other species the results have been mixed.

The variety of styles and sizes of circle hooks becoming available is enabling anglers to better match their terminal gear to targeted

species, which is improving the effectiveness of circle hooks. In addition, manufacturers are offering several features to circle hooks to improve their versatility. However, some features, such as offset points and less radical bend to the point (a "semi" circle hook), may offer only some of the advantages of a "true" circle hook. Remember the more offset to the hook point or the less radical the bend of the point, the more exposed the hook point will be, the less the hook will function as a circle hook, and the more often fish will be hooked deeply or "gut-hooked" in soft tissue or vital internal organs. Any design change that offers more exposure of the hook point will offer greater opportunities for the hook to catch places other than the lips or corners of the mouth and are likely to cause more physical harm to the fish.

The bottom line is circle hooks are another tool anglers have available to help them become better anglers and better protectors of their saltwater fishery resources. They may not be the best choice for every fishing situation, but many anglers are finding they prefer to use circle hooks for most of their fishing activities.

