

NOAA Fisheries Service
conserves, protects and
manages living marine
resources

NOAA Fisheries Service is an agency
within the Commerce Department's
National Oceanic and Atmospheric
Administration (NOAA). NOAA's
mission is to understand and predict
changes in the earth's environment
and conserve and manage coastal
and marine resources to meet
our nation's economic, social and
environmental needs. The NOAA
Fisheries Service provides world class
science, service and stewardship.



We value your interest, questions, and comments.
Please feel free to contact us.

www.nmfs.noaa.gov

Partnerships & Communications (301) 713-2379

NOAA Fisheries Service
1315 East West Highway
SSMC 3, F/SF8
Silver Spring, Maryland 20910

Science, Service, Stewardship



Are You
An
Ethical
Angler?

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Releasing an undersized Lingcod

The History of the Code

NOAA Fisheries Service adopted a code of angling ethics in support of the public education strategy under the NOAA Recreational Fisheries Strategic Plan. The code was developed in cooperation with a wide range of constituent groups. The code was approved in February 1999, and published in the Federal Register. The importance of an angler code has been recognized and adopted by many other countries and organizations throughout the world.

Let's Work Together to Preserve Our Sport

Anglers have been leaders of the conservation movement in this Country for over 100 years. Today, it is more important than ever for us to increase our conservation efforts. When we practice ethical angling, we influence other anglers and increase public awareness of the important role we all play. Responsible anglers must be viewed as part of the solution for sustainable resource management.



The Ethical Angler

- Promotes ethical behavior in the use of aquatic resources.
- Values and respects the aquatic environment and all living things in it.
- Avoids spilling, and never dumps any pollutants on land or in the water.
- Disposes of all trash, including worn-out lines, leaders, and hooks and helps to keep fishing sites litter-free.
- Takes all precautionary measures necessary to prevent the spread of exotic plants and animals, including live baitfish, into non-native habitats.
- Learns and obeys angling and boating regulations treating other anglers, boaters, and property owners with courtesy and respect.
- Respects property rights, and never trespasses on private lands or waters.
- Keeps no more fish than needed for consumption, and never wastefully discards fish that are retained.
- Carefully handles and releases all fish that are unwanted or prohibited by regulation, as well as other animals that are accidentally hooked.
- Uses tackle and techniques which minimize harm to fish when engaging in catch-and-release angling.

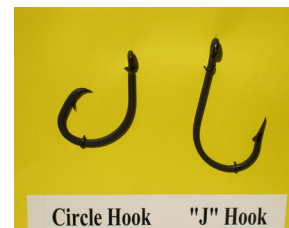
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Ethical Angling

An ethical angler pays attention to restrictions on fish sizes, fishing seasons and other reasons for releasing a fish. Catch-and-release methods vary depending on fish species, water depth, and other factors. To help a fish survive, plan your release in advance by having appropriate release tools (dehooker, long-nose pliers, fish decender, etc.). Circle and barbless hooks help reduce injury to fish and landing it quickly will minimize exhaustion. The fish should be kept in the water if possible during hook removal. The less a fish is handled and the quicker it is released, the better chance it will have for survival.



Circle hooks reduce gut hooking and hooking mortality by increasing mouth hooks.

Ethical anglers minimize the hooking of seabirds and treat hooked birds with care to avoid injury to the angler and the bird. Anglers also recognize that cutting or breaking the line may result in entanglement and starvation of the bird and therefore remove all hooks and line prior to release.

Ethical anglers should never harm marine mammals even when they attempt to steal anglers' bait or catch. The law allows people to deter marine mammals to avoid damage to private property, including gear and catch, so long as the deterrence is safe and marine mammals are not killed or seriously injured. NOAA Fisheries Service has identified some deterrent techniques on its website that may be used to deter problem seals and sea lions, these include firecrackers, horns, whistles, and sling shots.

Finally, an ethical angler knows that part of the angling experience is to be in tune with nature - this means treating all wildlife with care and respect. Feeding wildlife may harm an animal, be illegal and could change the animal's behavior.

Get Copies of the Ethical Angler Code

Copies of the code are provided on the NOAA Fisheries Service website under Recreational Fisheries.

<http://www.nmfs.noaa.gov>

Careful Catch and Release



**Helping large pelagic
fish survive to fight
another day**

Photo by J. Graves

Here are some tips on handling and releasing large saltwater pelagic fish including tunas, billfish, sharks, and swordfish, to maximize their survival after catch and release. These fish are also known collectively as “highly migratory species” or “HMS” because of their far-ranging, migratory behavior.

Careful Catch & Release Guidelines

1. Plan Ahead

- Be prepared to practice careful catch and release before your fishing trip begins. Bring along any necessary gear and discuss handling and release procedures with your fishing party.
- Make sure each member of the fishing party understands his or her part in increasing safety for both fishermen and fish alike.
- Plan ahead to retain legal-sized fish that are wounded or severely stressed from capture or handling, and to release fish that are in good condition.
- Start to plan your release strategy as soon as a fish is hooked, so that you can successfully release the fish and maximize its chances of survival.

2. Gear

- Use corrodible, non-stainless hooks in case the leader must be cut. A non-stainless hook remaining in a fish will corrode at a faster rate.

- Use non-offset circle hooks, which are more likely to hook the fish in the corner of the mouth rather than sensitive areas like the gut.



J-hook (left) and circle hook (right). Photo by MA DMF.

- If you plan to catch and release, flatten hook barbs or file barbs down to make removal easier.
- Use a de-hooker to remove the hook from the fish. There are a wide variety of dehooking tools available on the market.
- Rig a measuring device so the fish can be measured in the water. For example, a leader with a clip on one end and a small float on the other end can be marked off with a red flag at the legal retention size; or, mark a pole or the gunwale of the boat with measurements for the legal retention size.

3. Play and Handling

- Use appropriately sized tackle and bring the fish in quickly to reduce exhaustion. Playing a fish to exhaustion depletes its energy reserves and causes lactic acid build up in the tissues, which can eventually lead to mortality.
- If you are not using circle hooks, be attentive and set the hook immediately in order to lip/jaw hook the fish, and prevent it from swallowing the hook.

Remember, the survival of a released fish today will help lead to healthy stocks for future harvest.



Highly Migratory Species Management Division
National Marine Fisheries Service
1315 East West Highway
Silver Spring, MD 20910

Further information on management of Atlantic HMS: <http://www.nmfs.noaa.gov/sfa/hms/>

- Minimize physical handling. Leave the fish in the water. And do not gaff it in the body. Lip gaffing the fish or a “snooter” can be used to help control the fish boat-side and remove the hook.



- If you want to take a picture of the angler and the fish together, have the angler lean over the side instead of taking the fish out of the water. Do not grab or hold the fish by the gills.

4. Release and Revive

- If the fish swallows the hook or is hooked in a sensitive area like the gills, cut the leader as close to the hook as possible. Cutting the leader may also be appropriate in dangerous conditions like rough seas.
- One way to revive an exhausted fish is to lip-gaff it in the front part of the lower jaw, or use a snooter for billfish, and tow it slowly behind the boat, making sure the fish’s head is totally submerged. HMS are ram-ventilators and cannot breathe unless they are moving. Some experienced charter captains suggest towing the fish until its color returns, which may take 10-15 minutes.

The objectives of careful catch and release include:

- Reducing stress and minimizing injury to the fish while reeling it in and handling it, and
 - Assisting in recovery of the fish prior to release.
- These objectives are especially challenging because of the size and potentially dangerous features (e.g., teeth and “swords”) of many HMS. To assist in meeting these objectives, please use the guidelines in this brochure.

Whether you prefer to release all captured HMS, or continue to catch and release only after achieving your retention limit, handling these species to maximize survivability after release is part of being an ethical angler, *and it’s the law*. Every HMS released alive moves the nation one step closer to the goal of achieving and maintaining sustainable fisheries.

Practicing careful catch and release is important because in some fisheries with high fishing pressure, the number of fish that die after being caught and released sometimes is actually larger than the number of fish that die through catch and retention.

A good example of this occurs in the Massachusetts recreational striped bass fishery. The Massachusetts Division of Marine Fisheries reports that approximately 500,000 striped bass die annually in the local recreational fishery from the stress associated with handling and release, while only 300,000 stripers are annually retained

(http://www.mass.gov/dfwele/dmf/spotlight/fish_responsibly.htm).

Federal law at 50 CFR 635.21(a)(1) requires that any Atlantic HMS that is caught but not kept, be released in a manner that maximizes its probability of survival. The law also requires that fish that are going to be released may not be removed from the water

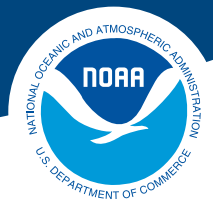
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Ever Gone Barbless?

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The goal of the Barbless Circle Hook Program is to minimize fishing's impact on our nearshore resources by promoting the use of barbless circle hooks among Hawaii's fishermen. Our research has shown that using barbless circle hooks won't affect your catch rates. Because barbless circle hooks are self-shedding they minimize impacts on protected species, fish that are accidentally lost after hooking, or those that are tagged and released or just released.



It's the hook's basic design that makes it effective – not the barb.

Preliminary studies on barbless circle hook effectiveness show that it is just as effective at catching fish in almost all situations. Similarly, the hook is just as effective at holding bait without the barb.

Ulua fishermen have been using time-tested methods, such as tying or bridling, for retaining large or live bait on barbless hooks.





Spend more time fishing

Unintentionally hooking a marine mammal or turtle can ruin a good day of fishing. Fishing areas with a high concentration of protected species expose both fisherman and marine mammal to risk. It's good to think of these mammals as dependent on the area and to respect their use and dependence by using barbless circle hooks. Barbless circle hooks reduce potential injury in the event of an accidental hooking or entanglement, and allow for quicker release or self-shedding release to reduce trauma and enable a return to normal activities.



Catch more fish

Every fisherman knows what it is like to lose a fish. Barbless hooks can help the fish that got away or in the case of lost fishing rigs hooking up - the hooks should enable self shedding which will allow for a quick resumption of feeding and minimal injury which means a better chance for survival. Using barbless also allows you to more quickly release unwanted catch which means more and healthier fish for you to catch in the future.

Stay safe

Safety is an ongoing concern for all fishermen. The use of barbless hooks can minimize injury and save a fishing day from an expensive emergency room visit. Pinching down the barb will result in an easier time unhooking that oama, as well as the scoop net, t-shirt, shorts, hat, ear, or your finger.



The largest barbless circle hook ulua to date was caught in 2006 on the Big Island. Randall Elarco Jr. caught this 117 lb white ulua on May 29, 2006. He used a barbless 16/0 mustad circle hook that he got at the Big Island Ohana tournament in 2005. At the first Annual Fishing and Seafood Festival held on October 8, 2006 in Honolulu, a special "100 pounder" award was given to Randy Elarco Jr. by Mayor Mufi Hanneman. We plan to continue to honor outstanding catches made by Hawaii's barbless circle hook anglers at the annual festival.

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We are always looking for feedback on how these hooks work or don't work for you. Contact us to share your story or get more information about this season's events.

NOAA Fisheries
Pacific Islands Fisheries Science Center
2570 Dole Street
Honolulu, HI 96822-2396
Phone: (808) 983-5326
Email: kurt.kawamoto@noaa.gov