

LOAN COPY ONLY

CIRCULATING COPY
Sea Grant Depository

Reducing Kill in Fishing Tournaments

**By
Jim Murray
and
Jim Bahen**

**UNC Sea Grant Publication
UNC-SG-86-27**

NATIONAL SEA GRANT DEPOSITORY
PELL LIBRARY BUILDING
URI, NARRAGANSETT BAY CAMPUS
NARRAGANSETT, RI 02882



Reducing Kill in Fishing Tournaments

by Jim Murray and Jim Bahen

UNC Sea Grant Publication UNC-SG-86-27

This publication was sponsored by the Office of Sea Grant, NOAA, U.S. Department of Commerce, under Grant No. NA86AA-D-SG046, and the North Carolina Department of Administration. The U.S. Government is authorized to produce and distribute reprints for governmental purposes notwithstanding any copyright that may appear hereon.

For a copy of this publication, write: UNC Sea Grant College Program, Box 8605, North Carolina State University, Raleigh, NC 27695-8605.

Reducing Kill in Fishing Tournaments

By Jim Murray and Jim Bahen

Introduction

Fishermen who have been around the tournament circuit know the scene: a pile of billfish, tuna, shark or king mackerel, stacked on the dock like cordwood, baking in the hot summer sun. It's enough to offend any concerned fisherman.

For conservation-minded anglers, the joy of a tournament comes in the competition and sport of landing a prize fish; the killing of the fish is secondary. More and more sport fishermen are realizing that the fish they target are not an unlimited resource. And it has them concerned.

The purpose of this publication is to present some alternative ways to conduct a tournament --- ways that may help preserve fisheries stocks and reduce the waste of a valuable resource.

We've geared the publication toward members of tournament committees and fishing clubs. You are the people who must take the lead in promoting the conservation of the resource.

The Fishing Experience

Studies of the motives of sportfishermen indicate their most important reasons for going fishing are relaxation and a pleasing outdoor experience.

One study showed that experienced trout fishermen placed less emphasis on catching and keeping large numbers of trout than beginning trout fishermen (Bryan, 1983).

As the anglers gain experience, they become more conservation-minded. For example, a majority of sportfishermen in the Gulf Coast Conservation Association supported a variety of fishery conservation options, even if it required self-sacrifice in the form of reduced catch or increased fees (Ditton, 1984). GCCA members were selective as to the type of fish they caught.

In a study of members of the Bass Anglers Sportsman Society (Bryan), the importance of the fishery was well documented. Committed bass fishermen release the fish because it is more important for them to be able to continue to catch fish.

The bass anglers also preferred size over numbers. This suggests that total-number tournaments may add little to the overall satisfaction of the tournament.

Reasons for Minimizing Kill in Tournaments

At a 1986 national tournament directors' conference in Miami, Fla., the overriding theme was the need for conservation. In recent years there has been much concern over the dwindling stocks of many popular recreational fish such as king mackerel, redfish, speckled trout and billfish.

Even though overfishing isn't the only cause, it has been a contributor to reduced catches. Many species are being fished at maximum levels. Responsible tournament managers should stay one step ahead of regulators and add voluntary restrictions to tournaments.

Tournaments have been around for many years, but their numbers have grown recently. An international directory contains over 3,500 tournaments, and many small, local tournaments were not even included.

As leaders in the industry, tournament planners should pave the way in conservation to preserve their sport.

Conservation is Good Public Relations

Many tournaments are sponsored by fishing organizations, marinas, chambers of commerce, fire departments, or other groups concerned with their public images. It is poor public relations to conduct a tournament that encourages an inordinate amount of kill and waste. On the other hand, conservation is good public relations. In fact, more and more fishermen are choosing to fish a tournament based on the conservation ethic it maintains.

Many tournaments have been conducted by the same rules over many years, and it is easy to base them on tradition. But since tournament fishermen are considered the opinion leaders in the sportfishing community, they have a responsibility to be role models and leaders in fisheries conservation.

Some Alternatives

- 1) Measure-in and release

When fish are removed from the water, they are easily damaged because of excessive handling, asphyxiation, or thrashing about on deck. Measure-in and release tournaments minimize handling; the fish are measured in the water and then released.

There are several versions of measure-in tournaments. The simplest method is to have an observer aboard to witness and record the measurement and to ensure compliance with tournament rules.

This method is used by the Pirate's Cove Billfish Tournament. In order to enter, a captain must bring an observer who will be assigned randomly to another boat. Without an observer, participants cannot fish.

Invariably, some captains show up without an observer. Therefore some tournaments, such as the Oregon Inlet Billfish Tournament, provide observers. This gives the tournament committee slightly more control.

It is very important for the tournament committee to meet with the observers to make certain that they understand and adhere to the rules. You should also cover the method used to measure fish (for example, from the end of the bill to the tip of the fork of the tail). To maintain consistency, some tournaments provide measure-in boxes to facilitate the measurement.

Some surf fishing tournaments or inshore tournaments are smaller and more localized, and tournament officials can often perform the measurements. Several measurement officials can be scattered on vessels throughout an area. When a fish is hooked, the captain radios the official, who can be present within minutes to witness the measurement.

In surf fishing tournaments, the shore fisherman is assigned an area of the beach, and the tournament official who is patrolling the area can perform the measurements.

There are several ways to avoid using observers. In 1986 the Tampa Chapter of the Florida Conservation Association sponsored "The All-Release Fishing Challenge." The tournament provided a new twist.

Polaroid cameras were donated to the tournament by the manufacturer. Each captain received a camera and a simple measuring box color-coded to prevent cheating. Each fish was measured in the box with photos taken to verify the size of the fish. The fish were then released.

Another way to avoid having observers is to administer a polygraph test to participants.

A tournament can choose a minimum length limit to qualify a fish for entry. This length limit should be based on scientific information to ensure that all landed species have at least a season or two to reproduce.

For example, a minimum length for king mackerel could be set at 28 inches. At this length, king mackerel are sexually mature and have probably spawned at least once. A penalty could be implemented for bringing back a fish less than 28 inches. Although the minimum length may vary among tournaments, obviously it should meet state and federal standards.

This system is a compromise between a total-kill and a total-release tournament. It reduces the total number of fish entered and reduces the number of immature fish landed. It also aids the release of roe-laden females which may be the same length but quite a bit heavier during spawning season. If total length rather than weight is used, the fish can also be bled, iced and gutted in order to maintain maximum edibility characteristics.

Time is of the essence when fish are being released. Avoid taking them out of the water. If this is not possible, keep them in the boat for as short a time as possible. Handle the fish gently and as little as possible. Do not squeeze the fish, and keep your hand out of its fragile gills. Fish can be revived by holding them upright against the current so that water flows over the gills.

The hook should be removed with long-nosed pliers. If the hook is deeply imbedded, cut the line. If the fish is gut-hooked, chances are it is going to die anyway, and you might as well bring it home for the freezer.

2) Total number of fish released

Fishermen get a certain number of points for fish caught and released. Different points can be awarded for different species of fish. For example, a fisherman may earn 100 points for each white marlin released, 150 points for sailfish and 200 points for blue marlin.

This type of tournament is often used for billfish or other offshore species, but it could be used for other species as well. (Note: We don't advise using this method for fish such as king and Spanish mackerel that are difficult to properly and easily identify. Proper identification of the fish is important.)

It is important for entrants to understand what qualifies as a release and for observers to adhere to the rules. In most tournaments, the mate must touch the leader

before the fish can qualify as a release. In others, the leader or swivel must touch the rod tip.

3) Using Live-Wells

The idea of live-wells is borrowed from the Bass Anglers Sportsman Society. It's never been tried with saltwater fish, but it may work for smaller fish such as flounder, trout, redbfish or largemouth bass. Live-wells will not work for large marine fish such as king mackerel.

To enter some BASS tournaments, you must have a live-well with an operable aeration pump on your vessel. Tournament officials may provide a chemical called Rotenoe for your live-well. The chemical will immobilize the fish to prevent injury from thrashing. Consult an experienced biologist for proper strengths. The chemical can be deadly to fish if it is administered incorrectly.

After you return to the dock and the fish are weighed, they are placed in a shore-side tank containing a Rotenoe neutralizer to revive them. They are released from this tank. Some tournaments show a 100 percent survival rate for the fish they release.

4) Increasing the sport of the tournament

Most tournament participants--- the so-called "purists" --- are more interested in the competition and the sport of the event than in taking home the catch. A variety of rules can be established to satisfy these purists and to promote conservation. The rules make it more difficult to catch the fish by increasing the sporting value and, at the same time, help reduce overall kill.

The tournament committee can make barbless hooks mandatory. This increases the sport and causes less damage to the fish. Rules may preclude the use of live bait and allow only certain types of artificial lures. This also increases the sport, limits the options available to fishermen and minimizes kill.

Another variation is the dead-boat tournament in which the vessel is used only as a fishing platform. The angler hooks, catches and releases the fish without help from a mate. This type of tournament pits the fisherman against the fish.

The Gold Cup and Masters Tournaments in Florida use several methods to maximize the competition. Dead-boat rules are observed, and anglers must catch and release the fish. The captain acts as observer. The twist to the

tournament is that the fishermen show up with only a rod and reel. They are then assigned to a captained boat. The vessel can either belong to another fisherman or be a charter boat. Identical lures are issued to the participants, and the hooks are barbless. If two contestants are placed on the same vessel, they each get a certain side of the cockpit, and they alternate sides at designated intervals.

5) Minimum Weight

Like minimum length, minimum weight requirements for target species are a variation of the measure-in tournament. If fish are entered less than that weight, either no points will be awarded or points may be deducted.

A minimum-weight tournament requires some skill at guessing the weight of the fish. But, to make some allowances for miscalculations, the committee may choose not to penalize entrants for fish that weigh slightly less than the minimum weight.

For example, if the committee sets a 200-pound minimum, it could deduct 1 point per pound for any fish weighing less than 180 pounds. This method makes an allowance for miscalculation of weight.

As with minimum length tournaments, the minimum weight should be selected based on sexual-maturity to allow the fish to reproduce at least once. Consult state and federal minimum size regulations, and set your limits in accordance with them. (For more information, contact your regional fisheries management council or your state marine fisheries management agency. Your local Sea Grant advisory agent can also help.)

6) Underutilized Species

Most tournaments focus on single species which are usually popular game fish. For example, of the 25 fishing tournaments in North Carolina, 19 are king mackerel or billfish events.

But over 80 species are caught by recreational fishermen in the Southeast (Johnson and Griffin, 1984). And many of these species are either good fighters and/or highly edible. Even so, they are rarely sought and frequently discarded because they suffer from unjustifiable negative reputations.

Since tournament fishermen are often opinion leaders, a tournament committee may want to either add nontraditional species to the list of prize categories or develop a new tournament around these nontraditional species. In this way, we can begin to correct misconceptions and help anglers make better use of the ocean's bounty.

When choosing these species it is important to check with local biologists to make sure the species is available at the time of your tournament. Generally an educational program will be needed on how to catch, clean and prepare the alternative species. You can obtain help from local biologists or your state Sea Grant program.

The Scotts Hill King Mackerel Tournament added amberjack as a second category in its 1985 tournament. The tournament committee and the fishermen determined the tournament was successful. Although it was a poor year for king mackerel, the addition of amberjack helped fishermen maintain a high interest level.

The tournament committee asked local Sea Grant agents to help with demonstrations on cleaning and removing parasites in the amberjack, and in cooking and distributing free samples to the over 400 fishermen throughout the weekend. In 1986 the tournament committee doubled the prize money for amberjack.

Numerous other species can be added to the prize list. The net result is an increase in fishermen's satisfaction. Even though they are catching fewer of the more popular species, they make up for it by catching underutilized species. Over time, we hope that fishermen will come to recognize the positive attributes of currently underutilized species and actively seek them or choose not to waste them when they are caught.

7) Miscellaneous

The tournament committee may want to discourage tournament rules that give points based on total number of pounds. This rewards fishermen for keeping small, immature fish.

In other cases, raffle tickets are distributed based on total number of fish landed. This also encourages the landing of small, immature fish. Rather than giving a raffle ticket for each fish landed, the committee could give raffle tickets for each king mackerel released or each amberjack landed.

Many tournaments award prizes for the smallest fish landed. Although this creates fun at the awards ceremony,

it encourages the wrong kind of ethic. This practice should be eliminated.

Tournaments are important sources of biological and socioeconomic data. Tagging programs should be encouraged. In some instances, provisions can be made for keeping small billfish or other unusual catches. They should be coordinated with appropriate federal, state or university research programs.

Potential Problems

If you choose an alternative method of conducting a tournament, such as a total-release contest, the money obtained from sales of the landed fish will be lost. The committee will need to think of other ways to make up for those lost funds, such as identifying corporate sponsors.

The good news is that corporations are more likely to sponsor an event if your tournament is conservation-oriented. Sponsors are looking for good publicity, and this makes an excellent sales tool.

Even if sponsorship can't be obtained, the amount of money made from the sale of fish is usually a small percentage of the proceeds. Entry fees can be increased slightly to make up for the difference.

Some fishermen may object to being prohibited from keeping a potential trophy. If so, the rules can be adjusted to allow for keeping a trophy fish or for keeping a small number of fish for personal consumption.

Policing anglers is more difficult, and is the major reason why more tournaments haven't adopted conservation policies. But tournament directors have devised some creative alternatives to avoid kill tournaments.

Conclusions

This discussion is not all inclusive. It is designed to give the tournament committee some alternatives. Rules must be refined to make them work, and no two tournaments will be alike. Even if the tournament committee decides it is happy with the tournament the way it is, there are ways to minimize wastage.

Encourage the captains to maintain the quality of their fish. When tournaments are based on total weight, captains will handle the fish well in order to keep the weight up by minimizing moisture loss.

When tournaments are based on total numbers or total length, the fish may be left on deck. These fish are not suitable for sale or for consumption when they get to the dock.

At the captain's meetings, the committee should educate the fishermen about icing their catch to maintain quality. If the fish are landed, they should be utilized. The committee should also make provisions for selling the catch. Don't wait until you have 50 mackerel on the dock to call around for buyers. If you're selling your fish or donating it to a civic association, have those people lined up in advance.

FOR MORE INFORMATION . . .

If you'd like additional information about ways to reduce kill in tournaments, contact your local Sea Grant Marine Advisory Service. In North Carolina, agents are located at: Manteo (919/473-3937), Pine Knoll Shores (919/247-4007) and Ft. Fisher (919/458-5498).

REFERENCES

Bryan, Hobson, The Role of the Fishery Resources in the Recreational Angling Experience. A research report submitted to the Sport Fishery Research Foundation, Department of Sociology, University of Alabama, 1983.

Ditton, Robert B. and Holland, Stephen M. Understanding Involved Fishermen: A Survey of Members of the Gulf Coast Conservation Association. Texas A & M University, College Station, TX., 1984.

Graefe and Falk, Coastal Fishing Tournaments: A Review of Participant Characteristics, Motives and Spending Patterns. Proceedings of the National Outdoor Recreation Trends Symposium II, Clemson University, 1985.

Murray, et. al., Using Nontraditional Fish in Saltwater Sport-fishing Tournaments, UNC Sea Grant College Program, Raleigh, N.C., 1986.

O'Hara, William F. Jr., O'Hara's 1985-86 International Sport Fishing Tournament Directory, International Sport Fishing Publications, Captiva Island, FL. 1985.