

# An Easy Way to Conserve Big Game Fish

by Crystal Straughn, NOAA Public Affairs



**Circle Hooks Promote Conservation**

Realizing that conservation is a team effort, NOAA Fisheries is working with the recreational fishing industry to encourage the use of circle hooks when targeting big gamefish. Studies have shown that the use of circle hooks promotes conservation in recreational highly migratory fisheries by helping reduce bycatch while increasing catch rates and lowering post-release mortality. But that's not all. Recreational fishermen also could reduce the need for future regulation by simply changing hooks.

You may be wondering how you could stave off regulation by switching to circle hooks. Let's use white marlin as an example. Stocks of white marlin have been identified by the International Commission for the Conservation of Atlantic Tuna as either over-exploited or fully exploited for more than two decades. The most current summaries of stock status for Atlantic marlin note high rates of fishing mortality observed in recent years.

NOAA Fisheries recently made a decision not to list white marlin as an endangered species under the Endangered Species Act (ESA), but that doesn't guarantee it will remain unlisted down the road. The agency has placed white marlin on the ESA candidate list, will monitor white marlin populations and is slated to re-assess its ESA listing decision in 2007. Reducing catch and post-release mortality estimates would reduce the likelihood of a future ESA listing.

NOAA Fisheries has been studying the efficacy of circle hooks for many years and has supported training and outreach efforts in proper baiting and hooking techniques since the mid-90s. A study conducted by NOAA Fisheries in the spring and summer of 1999 evaluated the performance of circle and J hooks on Atlantic and Pacific sailfish and, to a lesser extent, Pacific blue marlin.

The study compared circle hook and similar sized J-hook performance, while trolling/pitching dead bait or drifting live bait for billfish (methods commonly used by anglers targeting these species). Rates of fishing success and hooking percentage were comparable or higher for circle hooks compared with J-hooks. Circle hooks used on sailfish had hooking percentages (i.e., fish hooked/fish bite) that were 1.83 times higher compared with J-hooks. More sailfish were hooked in the corner of the mouth using circle hooks (85 percent), as compared with J-hooks (27 percent). In addition, more sailfish were deep hooked in the throat and stomach with J-hooks (46 percent) as compared with circle hooks (2 percent). Additionally the study indicated that circle hooks reduce deep hooking and promote the live release of species.

Anglers can benefit from using circle hooks in tournaments too. The Big Rock Blue Marlin Tournament is a prestigious event with forty-five years of history. Beginning with the 2003 Tournament, additional release points will be awarded for using circle hooks in lieu of J-hooks. This rule change reflects a clear commitment by tournaments to support billfish conservation while still providing competitive anglers the excitement and thrill of top-notch tournament fishing.

Dr. Bill Hogarth, director of NOAA Fisheries, is working to improve interactions with billfish tournaments seeking to reduce or eliminate fish mortality. Dr. Hogarth, who has committed NOAA Fisheries to providing monetary support to the Big Rock to conduct bait rigging seminars to aid participants in the proper use of circle hooks, did so in these difficult budget times so that "this bold step will have every chance of success within this tournament and to promote the expansion of circle hook use in other tournaments on the Atlantic and Gulf coasts."