



Shortfin Makos In Crisis

by CHARLES WITEK



If you spend much time fishing offshore, you know that **shortfin mako sharks** - that's the species of mako that typically swims through our slicks - isn't doing very well.

Today, we're catching smaller, and quite a bit fewer, makos than we did twenty-five years ago.

The fishing club that I belong to has about 100 members, most of them very competent anglers. None of them weighed in a mako this year. I haven't killed one - by choice - since 1997.

And if you've spent much time reading this blog, you'll know that, two years ago, the **International Commission for the Conservation of Atlantic Tunas (ICCAT)** came to the conclusion that makos are in serious trouble. You'll also know that ICCAT ultimately adopted conservation measures that are unlikely to rebuild the population at any time soon - probably not within my lifetime - and that when final mako regulations were adopted by the United States, they represented the bare minimum level of regulations needed to keep the United States in compliance with its ICCAT obligations.

I've done a fair amount of shark fishing since ICCAT first warned that makos were in trouble, and I've seen nothing to make me feel good. A 20-fathom spot where I once had a 6-mako day, and frequently caught three or four on a trip, reluctantly yielded a handful of fish on a handful of late-season trips. The summer mako fishery, which used to be good there, has completely dried up.

Another spot, further away and in deeper water, was about as close to a sure thing as you can find during the last week in June. The last time I went there, the ocean held enough bait that bluefin tuna smashed the surface all through the day, but the only shark that we saw in a full day of fishing was one good-sized sandbar; the makos, and even the blue sharks, were gone.

Earlier this year, ICCAT released a stock assessment update for the shortfin mako. The update (which won't be finalized until the ICCAT plenary session is held later this year) notes that

"All three models projected that spawning stock fecundity, defined as the number of pups produced each year, will continue to decline until approximately 2035 even with no fishing, because the cohorts that have been depleted in the past will age into the mature population over the next few decades (the median age at maturity is 21 years)."

The assessment scientists ran the model three different

times, including somewhat different assumptions about stock behavior in each run. Again, no matter how they looked at things, it was all bad news.

"For runs 1 and 2, a [total allowable catch] of between 800-900 [metric tons], including dead discards, resulted in >50% probability of...the joint probability of [a fishing mortality rate that is below the rate that results in maximum sustainable yield] and [spawning stock fecundity that is above the spawning stock fecundity necessary for the biomass to produce maximum sustainable yield] by 2070. Run 3, which assumed a low productivity stock-recruitment relationship, showed that only [a total allowable catch] of between 0 and 100 [metric tons] (including dead discards) resulted in a >50% probability of [achieving that desired result] by 2070. The Group emphasized that fishing mortality rates had to be well below [the fishing mortality rate that would achieve maximum sustainable yield] to see **any** rebuilding. [emphasis added]"

Since the pelagic longline fleet catches a lot of shortfin makos, and about a quarter of those will die before or shortly after release (assuming that the longliner opts to release them at all which, despite any laws mandating retention, is not a foregone conclusion, particularly in non-United States fleets, where most of the damage is done), restricting landings to just 800 or 900 metric tons is going to be difficult, and restricting landings to 100 metric tons or less is probably going to be a practical impossibility.

But even if such reductions could be achieved, it will take about 50 years to return the shortfin mako stock to something resembling a healthy level of abundance.

Which, in turn, means that I, and probably most of the people reading this article, will never see a healthy mako population in our lifetimes.

I'm not sure just how that makes me feel. Am I angry? Or am I just sad? Or do I feel a little of both?

At least I was around for the good times, three decades ago and more, when makos were far more abundant, fishing for them was still an exciting and exhilarating sport, and the cobalt and silver beauty of a mako cruising through your chum slick was nearly an every-trip thing, so routine that we took it for granted and never really thought about how wonderful it all was.

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