Fishing blue fin tuna into extinction



Humans have feasted on fish for as long as history can trace. The waters in which these fish are caught seem to be an overly abundant healthy environment that can relied on until the end of time, but what happens when that assumption is proved wrong? The truth is that no matter how vast and abundant the resources of our oceans may seem, we can indeed tap out the resources that our forefathers have relied on for more than thousands of years.

Blue fin tuna are some of the world's most amazing fish that roam the massive oceans, yet in recent decades, commercial fishing of these wonderful fish have caused the species' population to spiral down at an alarming rate. Due to a large lack of regulation and ignorance to comply with quotas being set we may see the day where the beautiful blue fin tuna have been completely wiped out of our oceans. In the documentary The End of The Line, commercial fishing is exposed as an extremely over exploited practice that is quickly draining life from our seas. The film thoroughly describes exactly how this has happened.

The fishing industry across the world has had a huge revolution of its own starting in the mid-20th century. These fishing vessels have increased their technology to the point where the fish don't stand a chance. Commercial fishing went completely un-monitored until the early 1990's and there are still huge signs of overfishing still occurring. The biggest problems this film stresses are the capacity of catches increasing dramatically and the lack of awareness amongst the public. The political decisions being made for tuna are too near sighted which may lead to a population drop that the tuna population will not be able to recover from.

In the May 19, 2010 edition of Nature David Cyranoski wrote an article titled "Pacific tuna population may crash at any time". Cyranoski writes about the lack of confidence in research behind blue fin numbers in the pacific. The article warns that with improper fish being caught could lead to Pacific blue fin tuna to drop to the numbers of their Atlantic cousins. This is mainly due to 70% of the tuna being caught is still under one year old and 90% being under two years of age. These numbers do not allow the tuna to keep up the populations needed for a healthy environment.

Also Cyranoski touches on the tactics of fishing the Pacific blue fin spawning grounds. Cyranoski quotes Toshio Katsukawa, a fisheries expert at Mie University in Tsu City, Japan. Katsukawa says about fishing at spawning grounds "If things go on like this, the Pacific [bluefin] populations will be the first to collapse [before the Atlantic stock]," This is a critical quote because earlier in the article it is stated that the Atlantic blue fin population is only 15% of its historical population that was sustained before commercial fishing was started in the Atlantic.

Blue fin tuna are not the only species being impacted by the increase of commercial fishing. The huge nets used to catch these tuna also entrap other vulnerable species including different varieties of threatened sharks and sea turtles. Many of these animals get caught in the nets and die as they are being brought in. This is a problem because these animals have showed similar population decline to those of the tuna being fished. This means that as we come closer to over exploiting blue fin tuna populations, we may also be losing other valuable sea dwellers that simply get caught in nets they are not being targeted for.

However there are improved net designs in the making that can provide ways for sharks and turtles to be able to find an exit before it is too late. On an April 10, 2010 Barbara Block gives a talk on blue fun tuna for TED. In this presentation she first describes the great reputation tuna have had with civilizations for thousands of years. She displays many ancient coins and pottery dating back as far as four thousand years ago that feature blue fin tuna. As the market for these blue fin tuna have increased the number of these fish has fallen just as quickly.

Block explains to her audience that blue fin tuna were given the same classification under CITES as the giant panda, tigers, and elephants for endangered species. Barbara's idea for the key to success for the blue fin is to learn more about them. Scientists have been unsuccessful in presenting their proposals for yearly catch totals due to discrepancy over the statistics provided. Barbara Block and her team have tagged thousands of these blue fins and other tuna species to help understand more about the way the travel and where they gather most frequently.

The information provide by these numbers can help researchers gather adequate statistics to help protect these vulnerable fish. By finding the feeding and breeding hotspots, this can help researchers understand the effects of commercial fishing on larger areas than just that of which they net them. One map Barbara Block shows her audience tracks blue fin tuna that were tagged along the coast of North Carolina traveling all the way to the Eastern edge of the Atlantic Ocean. These statistics alone put a dent in theories that there are two separate Atlantic blue fin tuna populations.

Block suggests that the fisheries set up along the Eastern Atlantic should model their catch numbers to simulate that of Canada and the USA to hope to sustain the populations for generations to come. Technology maintained from scientists like Block are the key to saving Pacific blue fins before the go the way of their Atlantic cousins. An article from Rodale's Scuba Diving written by Lance Leonhardt touches up with other statistics on the decling numbers of predators due to commercial fishing with "Predators in Peril: big fish are in decline".

This article states that in the last fifty years commercial fishing has wiped out nearly 90% of the world's big predatory fish. This list of predators includes tuna along with many sharks and swordfish. Leonhardt warns that if these fisheries are left unchecked we could see these numbers drop until they hit zero. To prevent further drops in population for these large predators big changes would need to be made. Leonhardt finishes his article with a quote from fisheries biologist Ransom Myers.

He says, "I want there to be hammerhead sharks and bluefin tuna around when my five-year-old son grows up. If the present fishing levels persist, these great fish will go the way of the dinosaurs. "Leonhardt stresses how dire this situation with commercial fishing really is and if we do not take big steps now it may soon be too late to go back. In the January 11, 2011 issue of Our Planet, Brita Belli explains how the average citizen can play a part in helping sustain the blue fin tuna in the article "More sustainable sushi".

Belli spreads the efforts of The Center for Biological Diversity's Bluefin Boycott. This boycott has a simple purpose with a simple plan. Stop eating blue fins. At the time of the article more than 20, 000 people and many restaurants across the United States have signed up on this growing effort. With the spread of this boycott we can see the demand drop which will eventually lead to a drop in commercial fishing for blue fin tuna. Efforts like these are what could help save these desperate animals from being blindly hunted out of existence.

An article from October 28, 2010 in the National Geographic News goes into further detail on just how and why these blue fin tuna are being over-fished. In the article "Bluefin Tuna in Atlantic Nearing Extinction, Conservation Group Says" it is explained that the quota for blue fin tuna for the Mediterranean Sea is at 32, 000 tons; however countries like France, Libya, and Turkey are completely ignoring these quotas. The deliberate carelessness of these countries has led to the actual catch to exceed 50, 000 tons of blue-fin.

The article quotes the World Wildlife Federation's head of fisheries program Sergi Tudela saying, " The deliberate underreporting [of tuna fishing] by certain [countries], like France, and the impunity with which most industrial fleets are contravening the international legislation points to a situation of virtually unregulated fishing. " This unregulated fishing is leading to a possible permanent death sentence for the blue fin tuna species in the Mediterranean.

Problems with fish numbers have almost been directly related to the increase of technology used to find and catch blue fin. Tactics like spotting air planes and sonar have left these fish with no refuge in the seemingly shrinking Mediterranean Sea. This huge case of over exploitation is all due to the growing demand for the prized meat of the delectable blue fin tuna. The

Japanese sushi market has led to fishermen selling a single large blue fin tuna for as much as \$50, 000. With money like that up for grabs, it's easy to why this market has such a disregard for the law.

The National Geographic News article states " WWF says at least 25, 000 tons (23, 000 metric tons), and perhaps more than 30, 000 tons (27, 000 metric tons), of tuna from the Mediterranean and eastern Atlantic go to Japan. " With numbers like these feeding the demands of a wealthy market, it's hard to see how to stop the greedy fishermen. The WWF is so concerned with the future of the blue fin tuna population that they have asked the European Union to put a full stoppage in harvesting for at least a three month period to allow the remaining blue fin to spawn safely.

That solution, along with suggestions of increasing the allowable catch size, serves as the best hope for these seemingly doomed fish. Against all odds, there is still some hope for the deteriorating blue fin populations. In a May 4, 2010 edition of Time magazine features an article by Jiji press entitled "A Move to Save Blue Fin Tuna". This article explains the possibility of an international ban on the trade of blue fin tuna. This ban on international trade would not stop commercial fishing; however it would prevent nations from trading to Japan.

Without countries trading to Japan we would see the annual catch rates drop tremendously without the main market being supplied. Although this proposed international trade ban is still in its early stages, we can see that the awareness for these fish is becoming strong. The article closes with a quote of hope when it says, " It would also represent a rare occasion when

the international community proved willing to sacrifice today to protect the future.

The unification of countries willing to give efforts to help maintain the remaining blue fin tuna is a required step if we ever want to see more of these fish in our near future. There are groups of people already taking action on their own to save the blue fins as well. A June 18, 2010 entry in the Environment Blog by Wieste van der Werf goes through some of these brave efforts in "Why anti-whaling campaigners are the Bluefin tuna's last hope". Van der Werf explains the efforts of the once anti-whaling boats Greenpeace that are now shifting their sights to fighting illegal blue fin tuna fishing vessels in the Mediterranean.

The group has freed thousands of fish from illegal nets, and is now setting their sight on the problematic fishing tactics practiced in the Libyan section of the Mediterranean. The article explains that illegal fishing in the Libyan section of the Mediterranean is especially devastating because an important spawning point for the blue fin tuna lies in the area. Van der Werf quotes Gaylord Nelson saying, "The ultimate test of man's conscience may be his willingness to sacrifice something today for future generations whose words of thanks will not be heard".

Groups willing to sacrifice, like Greenpeace, may be the only hope for blue fin tuna if the world leaders cannot agree on sustainable techniques to harvest these marvelous fish. However, there are other techniques being used to try and help save the blue fin populations. A May 24, 2009 post from Mother Nature Network titled "Farm-raised Bluefin tuna spawn controversy".

The article covers the recent ability to spawn blue fin in captivity through artificial hormones that trigger reproduction in their unnatural environment.

This new ability is a huge development for captive tuna programs because it allows species to spawn without the threat of being caught before eggs are released. However; we find that this may be nowhere near a long term solution for these fish. The largest problem for this industry is the amount of fish needed to be harvested from the ocean to feed the captive tuna. A full farm of blue fin tuna will eat three times its biomass while in captivity (End of the Line). The article suggests that fish farming alone cannot be the only answer for maintaining populations.

With blue fin tuna populations dropping as low as 90% of what they used to be in parts of the Mediterranean, it will take an array of different tactics to successfully restore blue fin populations to what they used to be. Yonathan Zohar, director of the Center of Marine Biotechnology at the University of Maryland's Biotechnology Institute, is quoted in this article saying, "Everything that we do to preserve a species requires a toolbox, and this toolbox has several tools in it. Obviously regulating fishing and reducing the harvest is a very important tool in that box.

Another very important tool is developing bluefin tuna aquaculture. Those tools are completely synergistic, and it's to be used together for a quicker recovery." Blue fin tuna are in desperate need of any, if not all, of the tools possibly capable of saving these gorgeous swimmers. The largest and most ignorant problem when it comes to reducing the annual catch rate of blue fins is the assumption that blue fin extinction is a problem of the future.

However, in an article from Wildlifeextra. com we find that this assumption is way off track.

This article states that with the numbers of blue fin tuna being caught in the Mediterranean Sea we could see an extinction of these streamlined predators as soon as 2012. This article gets this information from the World Wildlife Federation, who has the statistics to back it up. The article explains how the populations have experience an exponential decay in recent years due to a lack of reduction in annual catches. The article states, "Mediterranean blue fin tuna is collapsing as we speak and yet the fishery will kick off again tomorrow for business as usual.

It is absurd and inexcusable to open a fishing season when stocks of the target species are collapsing. "As explained in past articles, we see that the solutions needed to save these blue fins are failing in policy meetings due to fiscal gains by greedy lobbyists. Blue fin tunas are not the first fish to be exploited to the brink of extinction, and past cases should provide a great example of what could happen if nothing is done to help these fish. In an article in Canadian Geographic Magazine the history of the once abundant Northern cod is examined.

Northern cod once had huge population densities in the waters on the Newfoundland coast. The article opens up with this statement; "When John Cabot arrived on the shores of Newfoundland 500 years ago, cod was so plentiful that sailors could reportedly scoop them up into their ships with buckets." The stocks of these delectable fish were seemingly never ending, and by the 1980's the Newfoundland coast hoisted jobs for close to 40,000

fishermen. However, due to the huge amount of fish being pulled in, the fish were not capable of sustaining a healthy population.

Then in 1993 40, 000 fishermen were informed that they no long had jobs because of a full stoppage of all cod fishing along Newfoundland. By 1997 the fish population had still not retained its original numbers, and recent studies suggest that the Northern cod may never come back to Newfoundland. This is just one example of hundreds of species of fish being greatly exploited due to commercial fishing. If the world cannot come to a sustainable solution for the blue fin tuna, we will one day see them go the way of the Northern Cod of the coasts of Newfoundland.

The commercial fishing industry is killing blue fin tuna at a faster rate than the species can keep up with. Over exploitation has led to one of the quickest exponential declines of a species we have ever seen. However we still have not seen anything but increases in the annual catch of these fish. Greed of fishers and politicians from across the globe has sent these beautiful warriors of the ocean into a critical state. Without immediate action from global fisheries we will see the day where blue fin and their unfortunate companions will be completely fished out of existence.