

My name is Jack Graham. I run a recreational charter boat out of the Oregon Fishing center, fishing the gulf stream waters off the coast of North Carolina's Outer Banks. I'm one captain in a fleet of about 75 boats, one of the "young bloods" in my fleet. I work alongside some of the most renowned and respected skippers on the planet with over 500 years of cumulative experience. Most of us spend 125-200 days per year on the water. I appreciate the invitation to come give testimony about a phenomenon that has been occurring, and exponentiating, over the past 10 years. That phenomenon is an astounding depredation of yellowfin and bigeye tuna by what we believe is one of the most significant biomasses of large sharks in existence on the planet. The testimony I am about to give here today is, by the numbers, conservative in nature, as I do not want to give the impression I am telling a "fish story." All the same, I think you all will find this testimony interesting, and to be quite honest, incredible.

To begin, I would sincerely like to congratulate the scientific community and legislators who took initiative in conservation efforts so many years ago. If what we are seeing off our coastlines isn't proof that conservation works, I don't know what is. Just the other day, by rudimentary calculations, there were boats fishing in 300 feet of water, all the way out to 3,000 feet of water, and all had multiple encounters, and depredation issues with large sharks feeding on a multitude of species of fish on the end of their lines. I used my GPS and drew a square from the northernmost boats to the southernmost boats and came up with an area of, and again conservatively, approximately 300 square miles. The species of shark varies somewhat depending on depth, but the most common encounters are with Dusky, greater hammerhead, silky, spinner and sandbar sharks. Interesting side note, research tells me spinner sharks are coastal sharks, however we routinely encounter them in over 1,000 feet of water 35-40 miles off the coast. I have traveled all over the world to fish and dive, I have seen just about every square inch of Australia's Great Barrier Reef, and I, nor my colleagues have seen anything that comes close to what we are seeing in our home waters.

I mentioned the square mileage, and that was just one day, but I feel I must stress this is a daily occurrence. From about the middle of April through September, we take bookings 7 days a week and will fish days and days in a row if weather permits. For several years I was trying to get in touch with folks in the scientific community. I had gone to a meeting to protest offshore drilling off our coast and raised a question of concern for the effect said drilling and seismic testing would have on marine mammal life. We sometimes catch tuna around the pilot whales so I was concerned not only for the mammals themselves, but for the tuna my customers enjoy catching. Anyway, a whale scientist from Duke university approached me to thank me for my line of questioning. I in turn asked him to point me to some folks in the scientific community who may be interested in what we were seeing off the coast. He did. I made several calls, wrote several emails and did receive some feedback, but was never able to garner the interest I felt like this area deserves. I'll put it this way... shark week has absolutely nothing on what we are seeing off the coast of North Carolina right now. The reason I am telling you this story is because for years I took records of the depredation happening on a daily, and monthly basis out of my marina. My method was fairly simple. Our marina offers a fish cleaning service. Each day they pick up each boat's fish and weigh them. The customer pays by the pound. By knowing how many tuna were caught that day I was able to calculate the average size tuna

brought to the docks each day. I would then talk to the other boats and ask them how many tuna they caught vs. how many were eaten by sharks. In the beginning it was about half and half. So if I hooked 20 tuna I would get, on an average day, 10 to the boat. Some days were worse, very rarely were they better. For months on end our fish cleaning service was cleaning in the neighborhood of 10,000 pounds of tuna per day. Again, this is an average, there were days they cleaned as much as 15-18,000 pounds. But if we use just a conservative estimate of 10,000 lbs of tuna per day, and factor in 5 days per month for weather days where the fleet did not go fishing, that still adds up to a staggering 250,000 pounds of tuna depredation IN ONE MONTH. This has now been going on for over 8 years. And these numbers just reflect my small marina of about 25 boats. So including charter boats from 3 other marinas, and a fairly active recreational private boat sector, that number of 250,000 pounds is more than likely much higher. Only one thing has changed over the years, it has gotten worse. Before a 50 percent average was justifiable, now it's about 1 fish in 10, and many days we do not get any.

In the beginning, economically speaking, depredation created a boom. We all thought it would be over soon, that they would move on and this was an anomaly. After all, so many captains with so many years experience had never seen anything like this in their lifetimes. The sharks ate the tuna and bit through our lines. We needed more fishing tackle, and the tackle shops were happy to oblige. We fished longer days and made longer runs, so we burned more fuel and paid for it at the pump. We bought new types of gear, electrical and hydraulic equipment to try and find a method that would get the fish to the boat faster than the shark could swim. I even bought shark deterrent magnets, and worked with a shark deterrent company to try and develop a product that would keep them away. But over the last few years a sort of gloom has settled in over our fleet. Used to be, during good fishing times, small trailer boats would come from all up and down the east coast to experience our tuna fishery. Filling hotels, restaurants, buying tackle from the shops, and booking vacation rental homes, some for entire weeks just to go fishing.

In addition to the recreational industry, my community prided itself in having one of the most successful day boat hook and line sustainable tuna fleets on the east coast. Hook and line fisherman catching bigeye and yellowfin tuna that not only supported our local restaurants, but were shipped out to fish markets all over the country. Contrary to what you may have seen on TV, bigeye tuna is the most valuable tuna per pound in the United States, and our area was responsible for distributing tons and tons of sustainable hook and line caught bigeye tuna all over the country. That domestically caught fish is now a thing of the past. Those boats have been sold off or are being used for other things. I have not seen a commercial hook and line boat offshore in over 5 years.

As for myself and others like me, my business is beginning to feel the effects of the depredation. Our fleet takes all kinds of folks from all over the country out for a day on the water, most coming in hopes of experiencing some of our world class tuna fishing. They arrive armed with canning supplies and vacuum packing machines, in hopes of taking fresh fish home to somewhere it isn't readily available. It is not a cheap trip after a long drive or flight, accommodation and charter fee is paid. They are still seeing what would be world class fishing,

lots of action, lots of strikes, but very little reward for their efforts. As a captain I can no longer in good conscience tell my clients we can look forward to a fun day on the water. I feel that even if we are fortunate enough to hook several tuna, they stand a very slim chance at being harvested and processed on board my vessel. Across the board, charters are down. And with several factors already working against us in the industry, many of us, especially us young captains just starting out, fear the depredation of the fish that put our fleet on the map, could be our undoing. We have tried just about everything to outsmart the sharks, tried to find areas where maybe there aren't as many, but it hasn't yet been done with any success.

This testimony was not meant to be completely gloomy. There is a success story here and it should be celebrated. If nothing else, what we are seeing off our coast is that conservation truly does work. The ocean is capable of healing in ways many could never imagine. In my opinion it is a blueprint for aquatic ecosystems all over the world. But as we attempt to create a balanced ecosystem we can also create an imbalance, fishermen are the greatest tools available to the scientific community. We are literally performing an experiment every day we put our lines in the water. The ecosystems that exist off our coastlines here in the United States are some of the most fascinating anywhere on the planet. But I do believe we must adapt, and we must use the valuable information we fishermen retain first hand each and every day to help create a more balanced and productive ecosystem for future generations to enjoy.