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Atlantic Bluefin Tuna Podcast and Scientist Interview

Thunnus thynnus

What is it like to be eyeball to eyeball with a fish the size of a Volkswagen? Learn about the process of tagging tuna and how those tags are revealing surprises that might help save tuna from their own popularity in sushi restaurants.

Transcript

Ari: I'm Ari Daniel Shapiro. And this is One Species at a Time, the story of Earth's biodiversity, one organism at a time.

Cummings: Keep that rod tip steady, man, you don't have to do that with that bait.

Ari: Andrew Cummings has been tuna fishing for 11 years off Cape Cod in Massachusetts. And specifically, Atlantic bluefin tuna. It's a streamlined purple and azure fish. They look like torpedoes and can weigh up to a thousand pounds each. Over the years, Cummings has really gotten to know these fish, though he usually works with smaller, 200 pounders.

Cummings: It's all about having contact with a truly, really, really wild animal that has seen more and done more than any human could ever imagine. I think it's intimate, it's a very intimate experience: I have tremendous amount of respect for these animals.

Ari: Five years ago, Cummings realized that these tuna were being over-fished: that people were taking way too many from the water. So these days Cummings isn't catching and selling tuna for food. Instead, he's catching and releasing them for science. Lemme explain.

Cummings works with a handful of scientists –

Lutcavage: I'm Molly Lutcavage.

Ari: – including Molly Lutcavage at the University of New Hampshire. They attach tags to wild Atlantic bluefin tuna.

Lutcavage: The tag itself looks like a cigar, which is basically a computer, a very small computer that we can attach to the outside of the fish.

Ari: Each tag gathers information about the migration path of a single fish.

Lutcavage: Pretty much shows us the – let's call it the daily life of a giant bluefin tuna.

Ari: If all goes well, the tag pops up to the surface a few months later and beams all its data back to Lutcavage. These tags, they're revealing secrets about the Atlantic bluefin tuna.

Lutcavage: There's no way on Earth you would've guessed that these giant bluefin could be dispersing to 4 or 5 different parts of the Atlantic. Some fish go to, say, Spain or Ireland, some fish go to the Gulf of Mexico. But what's interesting is: you tag them in one place, they look the same, they're the same size, but they have different patterns for where they go to feed.

Ari: And feeding, says fisherman Andrew Cummings, is what these fish do best.

Cummings: It's just they're the perfect animal: they're the perfect feeding machine. I mean, they live for one thing only, and that's eating.

Ari: Well, of course, there is a second thing, which is reproducing. In fish, it's called spawning: that is, fish spraying their eggs and sperm into the water. And Lutcavage's tags show the tuna aren't all going to the same place to spawn.

These results have both scientists and fishermen excited. Knowing basic facts about these fish like where they go to eat and where they go to make bluefin tuna babies is revealing how many there are and how to fish for them responsibly.

So that's why the tagging is important but what about the how? How do you actually tag a wild tuna?

Lutcavage: Tagging bluefin tuna has gotta be one of the most exciting things you could ever do. We started tagging by working with what we could call very elite fishermen that developed ways of getting, say, an 800-pound giant bluefin tuna, which is like getting a Volkswagen on a fishing line, alongside the boat while we the taggers lean over the side of the boat and plant the dart of this satellite tag into the back of that fish. I have to say that being eyeball to eyeball with a 1000-pound bluefin that's swimming in the sea next to your boat is probably the height of an experience. And then actually removing the hook from the animal, and we have this extreme pleasure of watching this giant, beautiful animal swim away.

Ari: So tagging is the answer to the riddle from our last episode of how to follow tuna around the ocean for months at a time. Some of our student listeners had other ideas.

Kid 1: Go on a submarine.

Kid 2: Make a camouflage underwater dome.

Ari: So you'd kinda be in an underwater igloo almost?

Kid 3: Put on a snorkel, go underwater, and follow it.

Cummings: Right now you're into that second-guessing mode where you never wanna leave fish to find fish.

Ari: Now, not every trip out onto the water means catching and tagging a fish, but Andrew Cummings couldn't image doing anything else.

Cummings: People say, "Well, why you doin' it at all?" And I think it's: either you get it or you don't. I love being out here with 'em. I love seeing them. To me is...it's just awesome.

Ari: Lutcavage is just as inspired. She told me a story about these tuna and one of the smaller types of fish they eat called sand lance.

Lutcavage: A school of giant bluefin came up on each side of our boat, and they were actually in the air chasing sand lance. So we were completely surrounded by an airborne school of giant bluefin chasing an airborne school of sandlance. It was over very quickly, but it was like being in a herd of buffalo chasing their food. But what's amazing to me is the Latin name of bluefin tuna is *Thunnus thynnus*. And I'm not a Latin expert, but I'm told that means 'rush,' 'rushing' and all I can think of is the name is absolutely apt for the sound that they made when they're in the air chasing their food.

Ari: If you want to see some photos of tuna tagging, visit our website: eol.org/podcast. You'll also find more audio about tuna conservation and what kind of tuna you should eat. Also, let us know what you think all those rushing tuna sounded like. Send us your impersonation or record some sounds or video and send it along to us! You'll see how at: eol.org/podcast.

Meet the Scientist

Meet Dr. Molly Lutcavage who you heard featured on the Atlantic Bluefin Tuna podcast episode:



Where do you work?

I'm the Director of the Large Pelagic Research Center at the University of New Hampshire

What do you study/ or what inspires you?

I study tunas, sea turtles and sometimes other large marine animals.

What are three titles you would give yourself?

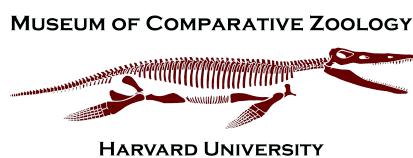
Biological oceanographer, fisheries scientist, and marine ecologist.

What do you like to do when you are not working?

Be on or in the ocean, playing or listening to music, or visiting with friends.

What do you like most about your work?

Learning about the beauty, art, and truth in our natural world, and solving mysteries!



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