



Atlantic
Bluefin Tuna

Text and photos by Antonio Busiello

— *Ferraris of the Sea*



Fishing boat (above). PREVIOUS PAGE: An endangered species, Atlantic bluefin tuna is one of the fastest and most valuable fish in the sea.

The Atlantic bluefin tuna is one of the largest and fastest fish in the ocean. They are incredible swimmers. With bodies shaped like torpedoes, they are practically built for speed. Some species of tuna can swim as fast as 69kph (43mph). They are exceptional predators from the moment they are born, and they can live up to 40 years.

The Atlantic bluefin tuna (*Thunnus thynnus*) belongs to the Scombridae family. They are magnificent and impressive wild animals. Atlantic bluefin tuna live in both western and eastern sides of the Atlantic Ocean, and during springtime, migrate into the Mediterranean Sea to spawn. Atlantic bluefin tuna was also present in the Black Sea, but not anymore, since they have become extinct in this sea.

Atlantic bluefin tuna migrate huge distances—across oceans—and can dive more than 1,200m (4,000ft). Studies have found that tuna migrate from North American to Europe and back several times during a year.

Atlantic bluefins are warm-blooded. They have no problem living in both cold and tropical waters.

Their average size is around 2m (6.5ft), and can weigh up to 250kg (550lbs). However, they can easily reach larger dimensions. In fact, one of the biggest tunas ever recorded was actually an Atlantic bluefin tuna, fished off the coast of Nova Scotia. Its weight was 679kg (1,496lbs) and approximately 3m (10ft) long.

Atlantic bluefin tuna has become one of the most valuable fish species in the world. In fact, in 2011, a record sale of a single bluefin tuna reached almost US\$400,000, at a Japanese market. However, due to overfishing, the Atlantic bluefin tuna is now considered an endangered species by the IUCN.

History

Because of the increase in demand for tuna meat worldwide (not just for sushi), a multi-billion-dollar fishing industry for tuna has developed in the Mediterranean Sea. Historically, bluefin tuna fishing was an ancient Mediterranean fishing tradition. Homer and Pliny described the fishing process as far back as 2,000 years ago. Centuries-old bluefin fishing traditions are found in both Italy and France. Of course, over the years, fishing techniques have changed and improved, and the old way of fishing is now only a tourist attraction.

Every year at the end of springtime, huge tunas migrate from the Atlantic Ocean to the warmer Mediterranean waters to spawn. In the old days, when the tuna was vast in numbers, fisherman used to place several kilometers of complex fixed-net systems, called “tonnara,” in the sea, along the migration path. The nets were like a corridor, with different big nets, called “rooms”, that

Atlantic bluefin tuna circle in a fishing net—they need to keep moving



feature

directed the tunas into one single final big net called the "room of death." The entire process used to last for months. Building and preparing the tonnara, putting the tonnara in the sea, waiting for the tuna, making sure that bad weather did not destroy the net system, and so on.

Everything was supervised by one very expert fisherman called the "rais." *Rais* is a term from the Arabic language meaning "leader". Arabian culture had a big impact on the Mediterranean

region during their invasion in the 8th century AD, apparently also on tuna fishing techniques. The rais was a very important person who knew a lot about the sea, fishing, tuna and weather, and he was very much respected by all the other fishermen.

Religion also played an important role in bluefin tuna fishing. Every year, fisherman even decided which Saint would protect the fishing, and during the fishing they kept singing very ancient religious songs, which they hoped would

help them have a good fishing year.

When the rais decided that there was enough fish to start a "mattanza" (the killing), the tuna fish were pushed into the final net—the room of death. Fishermen on little boats surrounded the room of death and started to pull the net from below, which made it smaller and smaller, the tunas started to get closer to the surface and the boats. At this point, all the fishermen started to kill the tunas and pull them



Underwater videographers film the passage of the tuna from the fisher seller's net to the fish farm buyer's net

THE SUCCESS CONTINUES...

WITH REINFORCED PANELS, SOFT BOOTS AND DOUBLE POCKETS

D9X
BREATHABLE
(only 3.2kg)

TAUCHEN
AWARD
2016
WINNER OF BEST
DRYSUIT 2016



D9X BREATHABLE

• 4-Layer Breathable Ultra light shell • Flexible TIZIP Master Seal Front zipper • Soft lightweight boots • Reinforcement knees, elbows and seat • Double lightweight pockets • Prepared for Dry Glove system • Quick-Dry • Latex seals • Warm cuffs • SI TECH valves • Telescope Torso • Seam free crotch • Integrated suspenders • Pre-bent knees • Zipper cover • Mesh bag

www.waterproof.eu





Divers play an important role in modern, more humane, tuna fishing procedures

aboard.

A mattanza could last for many hours, and when it was finished, all the tuna in the room of death were fished, and the sea was all red from tuna blood. During a good season, one single tonnara could have seven to eight mattanza (killings). This was a very cruel fishing method. However, it was very selective and had much less impact on the environment, compared to today's industrial fisheries.

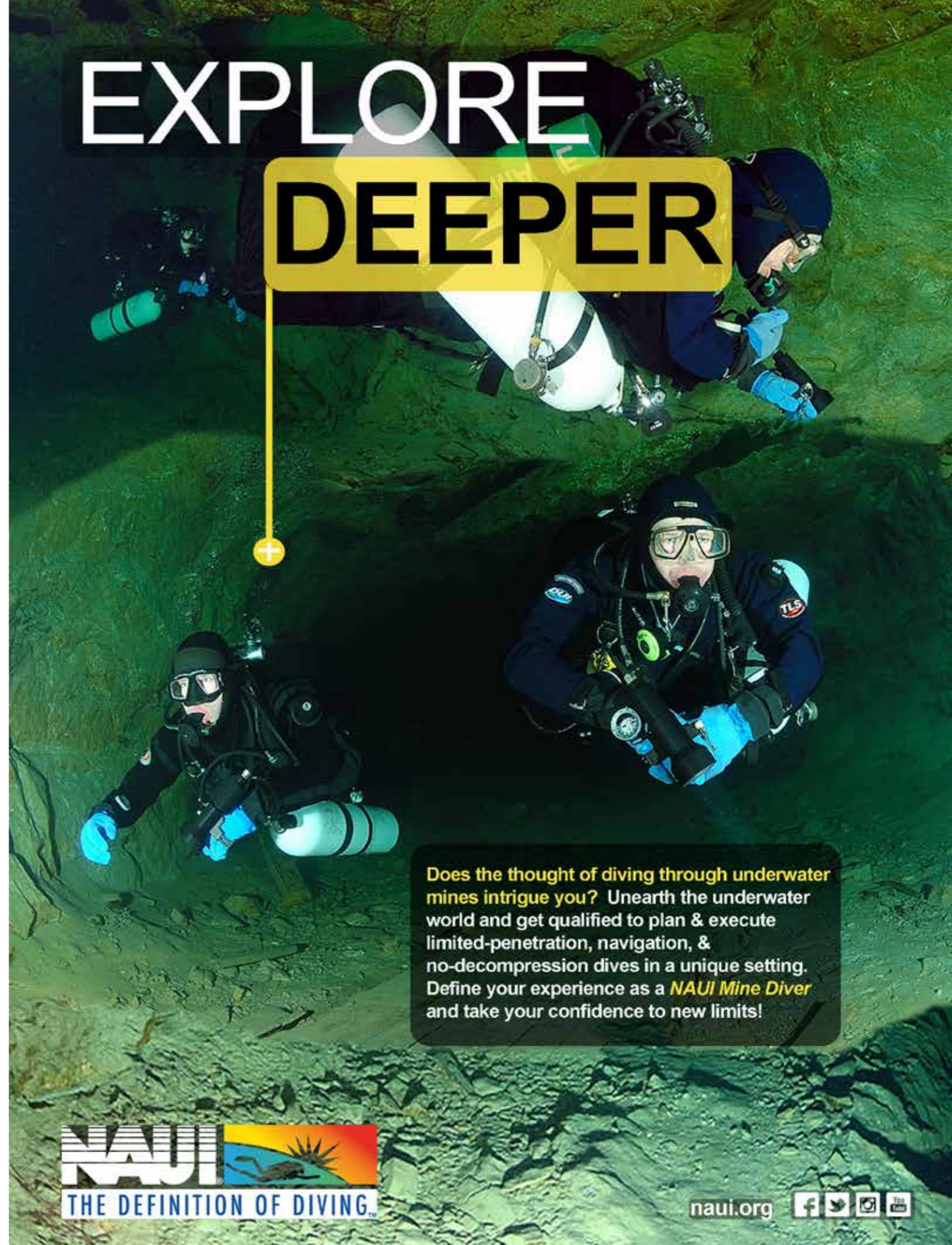
Modern fishing techniques

The new way to fish bluefin tuna is much more invasive. Tuna are found in big schools by employing very sophisticated instruments, and in the past, even the help of airplanes. Sadly, bluefin tuna has been overfished for too many years, so much so that, as a result,

it is now considered an endangered species by the International Union for Conservation of Nature (IUCN).

The industrial fishing of the bluefin tuna is now regulated by the International Commission for the Conservation of Atlantic Tunas (ICCAT), which sets the rules for the fishery. ICCAT started setting yearly catch limits, quotas that are assigned to each boat for how much they are allowed to fish. Each fishing boat must have a special fishing permit and must completely comply with ICCAT rules. Fishermen have to pay for an ICCAT inspector, who stays aboard during the entire fishing campaign, making sure that all the rules are respected. Tuna fishing boats cannot even leave the harbor without the ICCAT inspector aboard.

EXPLORE DEEPER



Does the thought of diving through underwater mines intrigue you? Unearth the underwater world and get qualified to plan & execute limited-penetration, navigation, & no-decompression dives in a unique setting. Define your experience as a **NAUI Mine Diver** and take your confidence to new limits!





Bluefin Tuna

THIS PAGE: Divers open and close a hole between nets to aid the passage of captured bluefin tuna between the fisher seller's net and the fish farm buyer's net

Since 2008, ICCAT rules have become even more restricted, limiting the fishing period to only one month per year, usually between May 15 to June 15, and the fishing boats that have a permit to fish tuna can still only capture a certain amount of fish.

Many complaints have been raised by fishers, especially about the period limit, which does not allow for bad weather. This means that when the fishing season is open, they only have 30 days to fish, and if sea conditions are bad, and boats cannot leave the harbor, there are no extra days they can get. Sometimes the fishing boats stay in the harbor for days, reducing their chances to fish. They cannot use airplanes to help them find the tuna anymore, so they can only fish a certain amount of tuna per boat, and they cannot fish small tunas.

According to ICCAT, things are get-

ting better for the Atlantic bluefin tuna. The industrial bluefin tuna fishing process nowadays, as I said, is very different from the past. Tuna are now caught alive, sold still alive to a fish farmer. They are then farmed and fed with fine sardines for approximately four months and then killed and sold.

Ninety percent of bluefin tuna caught in the Mediterranean is bought by the Japanese, which come with their big industrial ships all the way from Japan. They check the killing of the fish, inspecting and pricing every single tuna before buying it. Then they go back to Japan with the precious fish, and sell it in Japan and abroad.

Imbedded on the boat

I have spent 30 days on an Atlantic bluefin fishing boat, living with fishers and experiencing the entire tuna fishing process. The kind of fishing process

used now is called fishing-seine and requires different boats, people and equipment.

They search for the tuna, sometimes for weeks. Once they find the tuna, they feed them at the surface to keep them in one spot. Then they surround them with a huge net. Right after this, they lock the bottom of the net to trap the tuna inside.

Then they are sold alive to a fish farmer. The fish farmer keeps the tuna in another huge net, and with tow boats, takes the fish to the farms.

Bluefin fishing boats are equipped with every kind of very expensive modern device, in order to find the fish. However, fishers also search for tuna using the old way. They spend the entire day, until there is no daylight left, looking for the fish, using binoculars.

Many fishers have decided to be paid by commission on sales. They will

make money only if tuna is captured and sold. They can make more money this way, but they take on the risk of not getting paid if fishing is not successful. That makes the atmosphere on the boat even more exciting and tense.

The entire crew is involved in the fishing process, and emotions are very intense. The more days that pass by without finding the fish, the closer they get to the deadline, the more tense the atmosphere onboard is. Fishermen can also get very nervous when the deadline gets closer and closer—all they think about is finding the tuna. No tuna, no money—and their entire families live off the fishing season.

The role of divers

Once the tuna is caught, it needs to be quantified. And because the tuna must be sold to the farm company still

Buy Nature & Wildlife Prints



AntonioBusiello.com

[f @AntonioBusielloPhotography](https://www.facebook.com/AntonioBusielloPhotography)



Divers (left) work underwater to place together the fisher's net and the fish farmer buyer's net; Fishers are no longer allowed to use airplanes to find schools of tuna, and now often search for fish the old-fashioned way, with binoculars (below); Once transferred to the buyer's net, the tuna are transported slowly, at 1.6kph (1mph), to the fish farm (lower left)

Bluefin Tuna

otherwise the fish will die.

Once a fishing boat meets its quota (the maximum amount of

fish it is allowed to fish) and sold it to the farmer, fishers can usually have a little break before going

regarding the last transactions of the sale. ■



home. During my residence onboard, we spent a few days in Malta—the closest place to the fishing spot. The crew had some rest and enjoyed the island, while the fishing boat owner dealt with the fish farm owner

Antonio Busiello is an award-winning photographer known for his focus on the relationship between humankind and the natural world. A native of Italy, Busiello studied anthropology at the University of Naples, where he developed a deep interest in humanity and its cultural differences. After university, he traveled the world doing photography, living in Central America for many years before moving to California and now resides in London. On Facebook: @AntonioBusielloPhotography.

alive, it makes this process very difficult. A professional diver and underwater videographer dives into the cage and makes a first estimate to check the number and the size of the fish. Once the fisherman and the ICCAT inspector agree that the tuna fished in the net meets the ICCAT quota and size, the fish are ready to be transferred to the fish farm company.

The fish farmer is called by radio and a farming towboat comes. The farming net or cage is attached to the fisher's net or cage, and divers then open a huge hole between the two nets. The fish are now ready to be transferred from the fisher-seller's net to the farmer-buyer's net.

When everything is ready for the transfer, the fisher's boat pulls up the net from the bottom, reducing the space inside the net, the tuna get scared and

start to swim from one cage to the other. The tuna are forced to go from one net to the other while professional divers film the passage. The video will be the only instrument the parties have during the sale, to decide the quantity, number and weight of the fish transferred.

The fisher-seller and the farm owner-buyer can spend several hours watching and re-watching the video, arguing and trying to come up with a number, in order to close the sale. Sometimes the bad visibility of the water and the bad quality of the video makes the count even more difficult.



Once trapped in the net, the tuna can only swim in a circle, even during their transportation from the fishing spot to the fish farm. Fish farms can be miles away from where the tuna is caught—Malta, Spain, Italy—all over the Mediterranean Sea. The transportation can last up to 40 to 50 days, since the boat has to travel at around 1.6kph (1mph),



Bluefin tuna transferring from one net to another