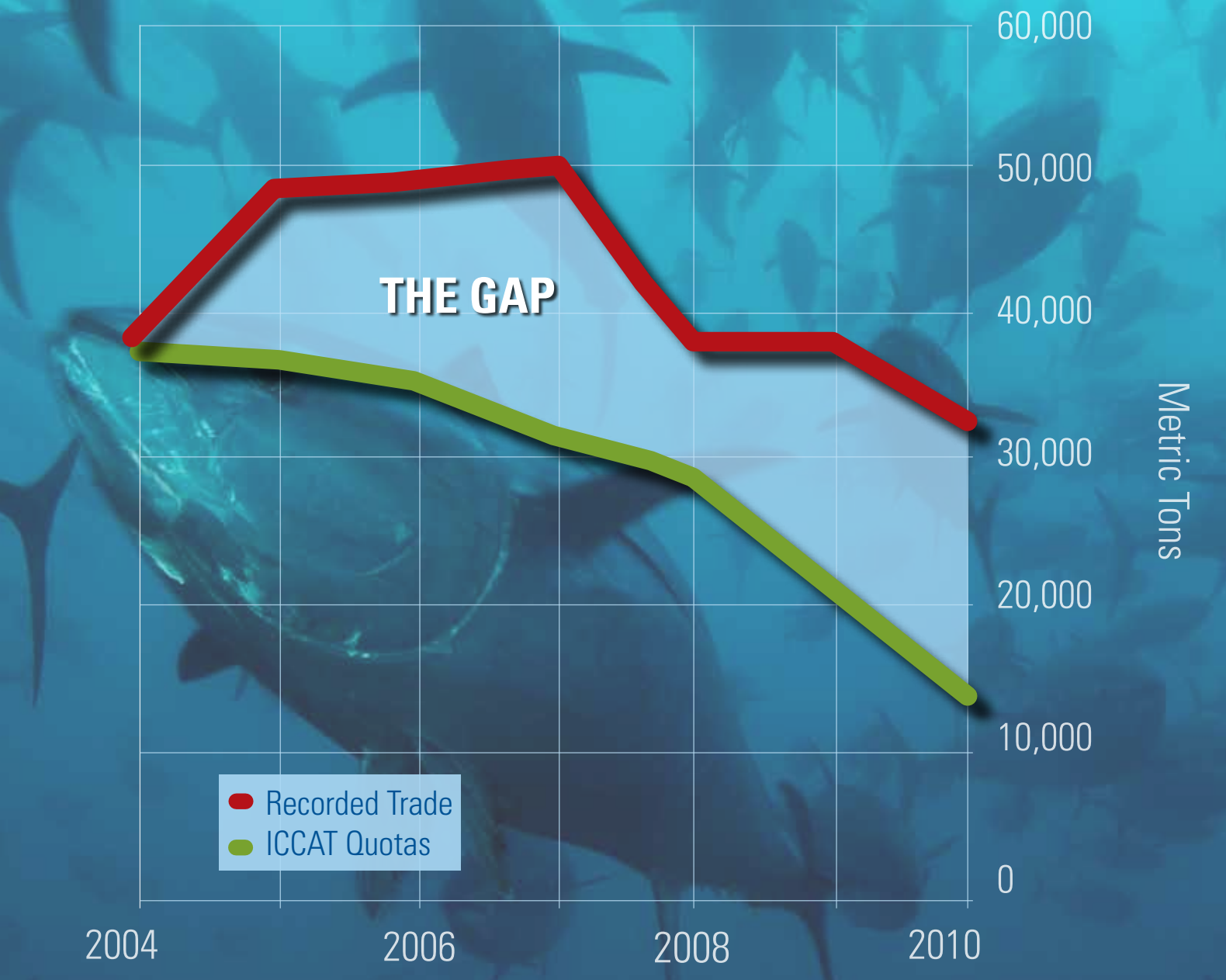
THE PEW ENVIRONMENT GROUP

MIND THE GAP

An analysis of the gap between Mediterranean bluefin quotas and international trade figures.



Research and analysis by
Roberto Mielgo Bregazzi

www.PewEnvironment.org/Tuna

OCTOBER 2011

For many years, the Mediterranean bluefin tuna fishery was considered mismanaged and out of control. In 2008, an independent review of the International Commission for the Conservation of Atlantic Tunas (ICCAT), the body that manages the fishery, famously called its Atlantic bluefin tuna policies a *"travesty of fisheries management."*[1] For more than a decade, the Mediterranean was heavily fished by an oversized industrial purse-seine fleet, flouting ICCAT's catch limits and compromising the sustainability of the fishery and the livelihoods of traditional, smaller-scale bluefin tuna fishermen operating legally. According to ICCAT's own scientists, catch limits *"were not respected and largely ineffective in controlling overall catch."*[2]

A previously released analysis examined the international trade in Mediterranean bluefin tuna[3] from 1998 to 2008[4] and found significant gaps between the catch limits set by ICCAT and the reported amount of eastern Atlantic and Mediterranean bluefin tuna traded on global markets each year. Due in part to this analysis and other reports, which exposed the problems plaguing the Mediterranean fishery, and after years of campaigning by environmental groups, bluefin tuna quotas have decreased since 2008. In 2010, for the first time, the quota was within the range of scientific advice, although it was not sufficiently precautionary, given the fishery's history. Improved compliance measures have also been adopted. In 2008, ICCAT countries agreed to a paper-based bluefin catch documentation system, meant to more accurately record the amount of bluefin tuna caught and traded and, in theory, help officials ensure the legality of bluefin tuna entering the market.

Bluefin tuna trapped in a cage in the Mediterranean Sea.

PHOTO: PAUL HILTON/ GREENPEACE

This updated analysis includes 2009 and 2010 and seeks to determine whether, despite reduced quotas and improved compliance measures since 2008, significant gaps still exist in the amount of bluefin tuna caught, reported and traded, and the quotas set by ICCAT.

Roberto Mielgo Bregazzi is an expert on the Mediterranean bluefin tuna trade and a tuna ranching consultant.

COVER PHOTO: BRIAN SKERRY/NATIONAL GEOGRAPHIC STOCK

1 MIND THE GAP: An analysis of the gap between Mediterranean bluefin quotas and international trade figures.

About the Methodology

The analysis compares the amount of Atlantic bluefin tuna reported to have been caught and traded in the Mediterranean Sea and northeastern Atlantic Ocean with annual adjusted catch quotas set by ICCAT between 1998 and 2010. The methodology used to conduct this work was developed by the author and consists of examining data from official customs documents, catch records, and ICCAT country reports in order to quantify the amount of bluefin tuna caught in excess of the yearly quotas over the past 13 years. This analysis does not include "black market" tuna, or bluefin tuna that has been mislabeled as another species, which is not recorded in any national or international trade databases and is, therefore, also not reported to ICCAT by fishing nations.

Trade Data Sources

- ICCAT Contracting Parties' biannual reports.
- Eurostat statistical database.
- Japanese customs trade data.
- Data from the U.S. Department of Agriculture's Foreign Agricultural Service.
- Trade reports from the Croatian Chamber of Economy's Agriculture, Food Industry and Forestry Department.

Conversion Factors

To accurately account for the amount of tuna traded, all processed bluefin trade data were converted to wild round weights (i.e., the weight of a fish when it was initially caught) using the appropriate conversion factors. For example, to account for the fattening of bluefin tuna that occurs while they are held in ranches, a maximum average conversion factor of 1.14 was used. An exception to this is Croatia, whose ranches sometimes keep bluefin for two years. A conversion factor of 2 was used for Croatian-ranched bluefin. (Spain and Malta, in contrast, usually process their ranched tuna within a year.)

Farmed bluefin tuna, southern Italy. PHOTO: TONY GENTILE/REUTERS

For the purposes of this analysis, the author assumed that bluefin tuna reported as ranched and traded in the first two quarters of a year were caught the previous year, except for tuna farmed in Croatia, which were assumed to have been caught on average two years prior.

Double Counting

To avoid double counting, trade data only on the final import, export, or re-export of tuna were used. Trade of value-added tuna products (such as prepared sushi rolls) was excluded, because those products originated from fish already captured in the import and export documents.

Cross-Checking Data Sources

When there were multiple sources of trade data, cross-checks were performed where appropriate and possible. For example, when quantifying trade from the European Union to the United States, three sources of data were available for several years:

1. U.S. Department of Agriculture's Foreign Agricultural Service import documents.

2. Eurostat statistical database export records.

3. The EU and U.S. semiannual Statistical Document Declarations to ICCAT.

At times, there were discrepancies between the figures provided by the available documents. When import documents recorded higher trade than the corresponding export document, the larger figure was used because the import data were the most recent and presumably the most accurate. When export documents recorded higher trade than the corresponding import documents, the higher figure was used in recognition that the differences in recorded amounts may be due in part to tuna that were lost or refused during the shipping process.

This analysis examined only international trade and trade within the European Union. Therefore, any domestic stockpiles of bluefin tuna (predominantly in Japan and other Asian countries) were accounted for on the date they first entered their country of destination.

In 2008, the amount of eastern Atlantic bluefin tuna traded on the global market was **31%** larger than ICCAT's adjusted quota.

In 2010, this gap increased to **141%**.

A purse-seine vessel drops its net into the water south of Formentera Island, part of an autonomous community of Spain in the Mediterranean.

PHOTO: ALBERTO INGLESIAS/ OCEANA

Key Findings

Each year, ICCAT sets an overall fishing quota for the eastern Atlantic and Mediterranean population of bluefin tuna (BFT) that is divided among Contracting Parties.[5]

- Between 1998 and 2010, ICCAT's annual adjusted quotas totaled 378,698 metric tons (mt).

- According to official ICCAT catch reports, 395,554 mt of bluefin tuna were caught in the eastern Atlantic and Mediterranean Sea between 1998 and 2010.

- Based on official trade reports and export documents, more than 490,000 mt of bluefin tuna were reported as caught and traded between 1998 and 2010. This discrepancy indicates a quota overage of 98,250 mt.[6]

- In 2009, the adjusted quota set by ICCAT was 21,780 mt and in 2010, it was 13,525 mt. Official trade records indicate the total amount of bluefin tuna traded in 2009 and 2010 was 70,646 mt. This is a combined overage of 35,306 mt, suggesting that the total catch for the two years combined was double the quotas set by ICCAT.

Note: These figures do not account for "black market" bluefin tuna that are not recorded in national or international trade databases and are not reported to ICCAT by fishing countries. The true scale of illegal trade in any valuable resource is notoriously hard to calculate. A recent estimate put the worldwide cost of illegal fishing between US$10 billion and US$23 billion.[7] This figure includes significant lost opportunities for legal fishermen and governments due to declining fish populations.

The results of this newly released trade analysis and reports by the ICCAT Standing Committee on Research and Statistics (SCRS) indicate that between 1998 and 2007, black market trade in Mediterranean bluefin tuna may have represented an additional 20 percent on top of the total trade reflected in this report.[8]

Although improved enforcement and trade measures adopted in 2008 have greatly reduced the total catch and trade in Mediterranean bluefin tuna, a number of serious loopholes remain, including:

An illegal driftnet operation hauls its net southwest of Cetraro, Italy.

PHOTO: JUAN CUETOS/ OCEANA

- The continued and persistent underreporting and non-reporting of bluefin tuna caught and transferred into bluefin tuna ranches across the Mediterranean Sea by the purse-seine fleet.

- The continued use of prohibited fishing gear such as driftnets by Italy and other Mediterranean coastal countries.

- Trade of illegal bluefin tuna by EU Mediterranean coastal countries through the falsification of bluefin catch documents (BCD) necessary for sale.[9]

Assuming these elevated catch levels continue, based on a 2010 stock assessment by ICCAT scientists, the Mediterranean bluefin tuna population has a less than 24 percent chance of rebuilding by 2022.

A conservative estimate of the wholesale value of the 98,250 mt of bluefin tuna caught and traded above the total ICCAT quota from 1998 to 2010 amounts to more than €2 billion (US$2.7 billion). If estimates of unrecorded trade for the same period are included, the total wholesale value of illegal or unreported bluefin tuna increases to more than €3 billion (US$4.1 billion). This amounts to almost a third of the estimated €10 billion (US$13.5 billion) of the total value of the recorded bluefin tuna trade between 1998 and 2010.

Conclusions

The overall legal and illegal catch of bluefin tuna in the Mediterranean Sea and eastern Atlantic Ocean has dropped significantly since 2008. This is because of lower quotas set by ICCAT, planned reductions in fleet capacity by ICCAT member countries, a shortened fishing season, and enforcement of the ban on spotter planes over the Mediterranean. However, this fishery cannot be considered a success story because:

- The gap continues to widen between *yearly bluefin quotas*, the amount of bluefin *officially reported by fishing nations*, and the reported *amount of bluefin traded on the international market*.

In 2008, the amount of eastern Atlantic bluefin tuna traded on the global market was 31 percent greater than the legal quota. By 2010, that gap had increased to 141 percent.

- Illegal or unreported fishing directly impacts the current and future health of the bluefin tuna population in the Mediterranean, which is already at near-historic lows after years of overfishing. If current fishing levels continue, ICCAT scientists have determined that the population has less than a 24 percent chance of rebuilding by the 2022 target set by ICCAT members.[10]

Despite reductions in ICCAT's yearly quota for bluefin tuna (in 2008, it was 29,082 mt, and in 2010 it was 13,525 mt) and a substantial reduction in fleet capacity, this report indicates that overfishing and fraud have continued, suggesting compliance still needs to be significantly improved, particularly in purse-seining and ranching operations. These efforts must be coupled with continued fleet capacity reduction plans, as overcapacity in the fishing and ranching industry is one of the factors driving illegal fishing and underreporting.

Swarming tuna penned at a ranch off Italy. PHOTO: MARCO CARÈ/ MARINE PHOTOBANK

Recommendations

Based on the results of this analysis, the Pew Environment Group recommends that ICCAT member countries:

1. Improve compliance with bluefin tuna quotas by ensuring that an electronic catch documentation (eBCD) system is fully in place for the 2012 fishing season.

- The current paper-based catch documentation system is plagued with fraud, misinformation and delays in reporting.
- ICCAT member countries recognized these problems and committed to a March 2012 deadline for implementing an eBCD.[11]
- An eBCD that covers all bluefin tuna caught, farmed, harvested, and traded would reduce fraud by requiring electronic validation from the appropriate authorities before the fish could proceed through the supply chain.
- Such a system would also increase compliance and allow for more accurate and timely reporting of catch data, since information will be quickly transmitted to a central database, instead of being manually entered, as currently required by the paper-based system.[12]

2. Take decisive action against the ongoing use of illegal driftnets in the Mediterranean.

- Much of the bluefin tuna traded in excess of the yearly ICCAT quotas comes from unreported or fraudulent catches from the purse-seine and ranching industry. However, detailed information has been gathered on Italy's use of illegal driftnets targeting bluefin tuna and swordfish. These catches end up on the European market and elsewhere, based on false or nonexistent bluefin catch documents.
- In addition to the implementation of an eBCD system, which could address some of the loopholes exploited by the Italian coastal fishing fleet, the Pew Environment Group urges ICCAT member countries to include all Italian operators that have been identified as using driftnets in violation of the commission's regulations on their illegal fishing vessel list. These concrete steps will help end this wasteful practice.

Endnotes

1. International Commission for the Conservation of Atlantic Tunas. 2008. *Report of the Independent Review*, p. 62. www.iccat.int/Documents/Meetings/Docs/Comm/PLE-106-ENG.pdf.

2. International Commission for the Conservation of Atlantic Tunas. 2008. *Report for the Biennial Period, 2006-2007, Part II (2007)*, p. 113. www.iccat.es/Documents/BienRep/REP_EN_06-07_II_2.pdf.

3. ICCAT divides Atlantic bluefin tuna into two populations, the eastern Atlantic and Mediterranean population, which spawns in the Mediterranean Sea, and the western Atlantic population, which spawns in the Gulf of Mexico. This report analyzes only catch and global trade in the eastern Atlantic and Mediterranean bluefin tuna. For the purposes of this report, any reference to bluefin tuna refers specifically to the eastern Atlantic and Mediterranean population.

4. Advanced Tuna Ranching Technologies. 2010. *Requiem for a Bluefin.* www.atuna.com/requiem.pdf.

5. With the exception of 2002, when ICCAT did not set a fishing quota.

6. Because ICCAT did not set a fishing quota in 2002, fish caught that year (33,770 mt) are not included in this overage calculation.

7. Agnew, D., *et al.* 2009 *Estimating the Worldwide Extent of Illegal Fishing.* PLoS One, 2009, 4(2).

8. In its 2006 assessment, ICCAT's Steering Committee on Research and Statistics (SCRS) noted that reported BFT catches were below quota in 2003-2004 but substantially higher in 2005—though it believed real catches were on the order of 50,000 mt throughout the period and that it was "*apparent that the TAC [total allowable catch] regulation was not respected and was largely ineffective in controlling overall catch.*" In 2008, ICCAT's SCRS estimated 2007 bluefin tuna catches amounting to 61,000 mt, twice the TAC for that year and four times the sustainable level at the time.

9. An inquiry conducted by La Maddalena port authorities in July 2001 brought to light a vast international BFT trafficking ring. Roughly 1,000 administrative violations relating to BFT have been confirmed, worth approximately €4 million. Seventy people are under investigation. The fraud was carried out via the avoidance or falsification of BCDs that are mandatory under EU law. In June 2011, SEPRONA, the nature protection service of Alicante's *Guardia Civil* in Spain, also seized a batch of BFT at the city's wholesale fish auction market that came from an illegal fishing operation in Italy. The seized BFT lacked the obligatory documents detailing their origin and compliance with health regulations. Source: FishUpdate.com, 27 July 2011.

10. International Commission for the Conservation of Atlantic Tunas. 2010. *Report of the Standing Committee on Research and Statistics.* www.iccat.es/Documents/Meetings/Docs/2010_SCRS_ENG.pdf.

11. International Commission for the Conservation of Atlantic Tunas. 2009. *Recommendation by ICCAT Amending Recommendation 08-12 on an ICCAT Bluefin Tuna Catch Documentation Program* [Rec. 09-11]. www.iccat.int/Documents/Recs/compendiopdf-e/2009-11-e.pdf.

12. Lack, M. 2008. *The Case for a Catch Documentation Scheme in the Western and Central Pacific.* WWF South Pacific Programme and TRAFFIC International. www.traffic.org/fisheries-reports/traffic_pub_fisheries8.pdf.

THE PEW ENVIRONMENT GROUP

Lee Crockett | Director of Federal Fisheries Policy | Pew Environment Group | 202-552-2065 | lcrockett@pewtrusts.org

For additional resources, visit us at **www.PewEnvironment.org/Tuna**.