

To: Bluefin Tuna Commercial Handgear Fishermen
From: American Bluefin Tuna Association
Re: New Fishing Quota for 2022
Date: December 1, 2021

For those of you who want to go straight to the bottom line regarding bluefin fishing quota going forward, please see the *Summary* below. We know that there are some of you who want a higher level of detail regarding the stock assessment and negotiations and this information is provided below the *Summary* and *Repayment to Japan*.

SUMMARY

*At the conclusion of ICCAT's Plenary meeting which concluded in late November, quota for the west Atlantic bluefin tuna stock was raised to 2,726 mt for 2022. This represents a **62%** increase over the quota of 1,680 mt recommended in last year's stock assessment and a **16%** increase over the quota set in 2017 of 2,350 mt. This stock is primarily harvested by the US, Canada and Japan. However, due to an agreement dating from two decades ago, there is quota from the US and Canada which needs to be repaid to Japan (see below for an explanation). If the amount of the repayment is deducted from the overall quota for 2022, this results in the US obtaining an approximate **5%** increase over the present quota of 2,350 mt for 2022.*

REPAYMENT TO JAPAN

Approximately 23 years ago, west Atlantic harvesters were locked in a stalemate in negotiations regarding a cut in quota at ICCAT. At the time, the U.S. and Canada were unwilling to agree to the proposed cut. In order to facilitate an agreement on a new quota, Masa Miyahara, the head of the Japanese delegation to ICCAT, offered to give some of the Japanese quota to the US and Canada in exchange for an agreement to repay this quota to Japan at a later date when quota levels would increase. This was done by the Japanese to facilitate avoiding a stalemate and enabled arriving to an agreement. This quota repayment arrangement will go into effect for the first time in 2022. Therefore, under a somewhat complex arrangement, Japan will receive in 2022 all west Atlantic bluefin quota between 2,413 mt and 2,660 mt, equating to 257 mt.

2021 STOCK ASSESSMENT

Normally a stock assessment is held for both west and east Atlantic bluefin tuna every three years. 2021 was an exception. The most recent stock assessment took place in 2020, with poor results. There were many problems in the 2020 stock assessment, most notably weakness found in the data relating to the juvenile indices resulting in low estimates of recruitment (recruitment = estimate of number of bluefin which become spawners in a given year) and lower estimates of spawning stock biomass. The 2020 assessment proposed a Total Allowed Catch (TAC) of 1,680 mt representing a dramatic 30% cut in TAC. Therefore, we wanted a new assessment.

ACTION TAKEN LAST YEAR

Due to the poor results of the 2020 stock assessment, the US Commissioners to ICCAT, ABTA and fishermen strenuously advocated for, 1/ a rollover of the existing TAC of 2,350 mt for 2022 and, 2/ a new stock assessment in 2022. As a result, the US decided to fight for these two issues. Holding a stock assessment in two consecutive years is unprecedented in the history of bluefin science at ICCAT and was opposed by the European Union and Norway. At the end of this difficult negotiation, both of these issues achieved a consensus.

WHY DO WE HOLD STOCK ASSESSMENTS?

There are two main reasons for holding a stock assessment:

1. To obtain new TAC advice.
2. To obtain the present status of the fish stock.

THE 2021 STOCK ASSESSMENT

There were also numerous problems with the 2021 stock assessment. However, this stock assessment did clearly indicate that the weakness found in the juvenile indices in 2020 was incorrect and, in actual fact, showed strong improvement. This resulted in the scientists' revising (improving) their view of recruitment going back to 2012. As regards measurement of spawning stock biomass (SSB), here is the recent history:

1. The 2017 assessment predicted a 7% *decrease* in SSB for 2018-2020
2. The 2020 assessment predicted an 11.6% *decrease* in SSB for the same period.
3. The 2021 assessment predicted a 9% *increase* in SSB for the same period.

It's easy to see that the 2021 assessment differed greatly from the prior two assessments.

RESULTS OF THE 2021 STOCK ASSESSMENT

Even though the 2021 assessment has established improved recruitment and biomass estimations, the scientists were, in the end, unable to develop the all-important TAC advice for future quota. This has never happened before in the history of bluefin science at ICCAT.

WHAT DID THE SCIENTISTS DO?

Since the scientists were not able to develop TAC advice from the assessment, they decided to take the issue to the Plenary meeting of ICCAT scientists, attended by all SCRS scientists, to obtain their advice. Here are the four options that were developed in the Plenary meeting for west Atlantic bluefin TAC:

1. A 4% increase (equating to 2,440 mt) reflecting a 4% increase in relative abundance based upon all west stock indices of abundance.
2. A 16% increase (equating to 2,726 mt) reflecting a 16% increase in relative biomass based upon only the Gulf of Mexico indices.
3. A 28% increase (equating to 3,000 mt) which uses all 32 operating models developed for the MSE. ***This alternative was developed by ABTA's scientists.***
4. To use the results of the Kobe Plot (K2SM) which indicated a TAC of 3,700-3,800 mt.

The only option above which uses data that came out of the stock assessment is No. 4, the Kobe Plot. The other three options do not depend upon any data from the stock assessment – they are “free-standing” methodologies that could have been developed without having an assessment.

THE RESULT

The Kobe Plot was not acceptable to the scientists. The “optics” of recommending such a large increase in TAC, potentially raising the question of credibility, was an important consideration.

Of the three remaining alternatives, the third – the 28% increase – was developed by ABTA’s scientists and, without question, of the three alternatives, it represented the best available science. However, the decision by the Commission was political, and they chose the second alternative (a 16% increase).

CANADIAN PROPOSAL FOR PEER REVIEW

In 2020, the Canadians proposed that an independent (outside) expert be secured by ICCAT to perform a “Peer Review” of the 2021 stock assessment. This Reviewer attended the 2021 stock assessment meetings and filed a report afterwards. The main thrust of the Reviewer’s comments was that Stock Synthesis and Virtual Population Analysis, the two models used to perform the stock assessment, are not able to properly assess the west Atlantic bluefin stock. Why? Because these models are “area-based”, rather than “stock-based”. Here is a brief explanation:

It has long been understood that bluefin from the east fishery migrate across the Atlantic and mix with western fish on our fishing grounds. The presence of eastern migrants in our catch are understood to vary from 30-80%, depending upon size/age and catch location, and fluctuates yearly. However, until recently, it has not been technically possible for the scientists to separate the east from the west fish caught on our fishing grounds enabling them to assess *only* the western fish. Therefore, all assessments to date have assumed, in effect, that all bluefin caught in the west were western spawners (the “area-based” method), which is of course incorrect. Only very recently the scientists who are developing the MSE have secured a way of “separating” the east from the west fish on our fishing grounds (the “stock-based” approach).

CONCLUSION

The 2020 assessment was a failure and this has been proven by the results regarding stock status found in the 2021 assessment. However, the 2021 assessment has to be considered a failure as well because no recommendation on TAC came out of this assessment other than the Kobe-based TAC which the scientists were not willing to support. We must also consider the comments of the Reviewer who stated that we can no longer use the models we have been using for assessing the west stock.

Therefore, how will west Atlantic bluefin tuna be assessed in the future? According to ICCAT’s workplan, the Atlantic bluefin MSE, in development over the last 7 years, is projected to be

ready by the end of 2022 and the plan is, going forward, the MSE will be used in place of “conventional” assessments. However, it is the gold standard with MSE that there is also a viable way of conventionally assessing the fish stock, and that a conventional assessment should be run every 5 years or so in order to compare results with what the MSE is telling us. Consequently, in the next few years we expect that the scientists will have to find viable way to conduct a conventional “stock-based” assessment of west Atlantic bluefin for this purpose.

Happy Holidays,

American Bluefin Tuna Association