This Information Note provides an overview of the stock status and management advice for Northeast Atlantic mackerel. It has been prepared for a non-technical audience and is primarily directed at mackerel processors and retailers. This publication updates our original Information note dated January 2019.

Specifically, this document provides:

2. An explanation of the significance of the assessment for future fisheries’ management.
3. What the latest ICES advice means for the mackerel fisheries’ Marine Stewardship Council (MSC) certification.
4. Possible implications for the UK seafood supply chain.

This document aims to build both confidence and understanding across the UK seafood supply chain on the important processes underway to address the underlying Northeast Atlantic mackerel stock issues.
Overview of the latest ICES advice for Northeast Atlantic mackerel fisheries

The status of the fishery is assessed annually by ICES using four key information sources:

1. Catch data from the entire fleet;
2. Data from mackerel caught and tagged using radio-frequency identification (RFID) tags, and released into the wild. These tags are recovered in fish processing plants, enabling scientists to track the fate of these fish;
3. An international triennial mackerel egg survey which maps out the spawning grounds in the Northeast Atlantic, estimates the number of eggs produced and the spawning stock biomass; and
4. Two trawl survey indices.

The 2019 stock assessment results for the fishery estimates that the spawning stock biomass (SSB) has increased to 4.39 million tonnes. This increase is being driven by strong recruitment of young mackerel into the fishery, particularly from the 2016/2017 year class. This latest assessment result estimates that the size of the fishery is above the Maximum Sustainable Yield (MSY) reference point which means that it can continue to support a sustainable commercial fishery.

The 2019 results are in marked contrast to the biomass estimates from 2018 when the stock was estimated to be 2.35 million tonnes. This meant that action had to be taken to reduce fishing pressure so as to ensure the long-term sustainability of the stock. The 2018 assessment results were subsequently reviewed by ICES due to concerns that:

• The assessment was not taking adequate account of the tagging data; and
• Estimates for the number of young fish due to enter the fishery (recruitment) from the 2016 and 2017 year classes were unavailable at the time of the assessment.

The findings of this review led to the stock status estimate being revised, up from 2.35 to circa 4.19 million tonnes. This revised estimate was subsequently accepted by ICES.

However, despite the increase in biomass estimates there is still a degree of uncertainty in the assessment results. The trawl surveys show an increasing trend in biomass while in contrast the egg survey shows a decreasing trend. These discrepancies will need to be monitored and they could result in increased variation in future annual assessments.
How will the fishery be managed given the latest ICES advice?

The current assessment indicates that a Total Allowable Catch (TAC) could be set at 922,064 tonnes for 2020. Following the inter-benchmark review in March 2019, the TAC advice was increased from 318,403 to 770,358 tonnes; so the latest assessment advises a further increase in catches.

Northeast Atlantic mackerel is a 'straddling stock' which means that its range extends across a number of Exclusive Economic Zones (EEZ) and into international waters. This creates a number of management challenges for how catch limits are set and monitored. Putting the ICES advice into practice is achieved through a Coastal States Agreement (CSA) between the EU, Norway and the Faroe Islands - the three jurisdictions into which the stocks originally extended. This has become more complicated in recent years as the migratory range of the fishery has shifted since the mid-2000s and now extends into Icelandic and Greenlandic waters. Further Russia is also actively engaged in fishing the stock in international waters. As a result, the combined fishing effort of five fishing nations and the EU needs to be taken into account when allocating shares of the TAC. Since 2014, the CSA has established individual shares for each of the three parties, up to 84.4% of the total TAC. The remaining 15.6% is set as an allocation for the other nations exploiting the stock outside the CSA.

There is currently no overall agreed mechanism to share the TAC (CSA + non-CSA) for this stock and the catch allowance for non-CSA members has been exceeded every year since the current arrangement was finalised. This level of fishing mortality, if it remains unchecked, could have implications for the long-term sustainability of the stock.

Prior to 2010, the CSA limited the level of mackerel catches in international waters to 10% of each party’s quota share. This was not a requirement when the current iteration of the CSA was finalised in 2014. However, the EU and Norway do not fish mackerel in international waters and the Faroe Islands only fishes a limited amount. In contrast Russia, Iceland and Greenland have significantly increased their mackerel catches in international waters in recent years; 2019 catch estimates indicate that Iceland and Russia took 48% and 100% respectively of their catch from this area. At the North East Atlantic Fisheries Commission meeting in November 2019 there were positive discussions about limiting the level of mackerel catches in international waters, although no measures were agreed for 2020.
What does this mean for the fishery’s MSC certification?

MSC certified fisheries are independently assessed against the standard’s three principles:

• Principle 1: sustainable fish stocks (where fishing effort is at a level that ensures it can continue indefinitely and where fish populations can remain productive);

• Principle 2: minimises environmental impact (fishing activity is managed carefully so that other ecosystem species and habitats remain healthy); and

• Principle 3: effective fisheries management (certified fisheries comply with relevant laws and are able to adapt to changing environmental circumstances).

The fishery was first certified in January 2009. Certification typically lasts for a five-year period during which time there is a scheduled annual audit. However, if new information becomes available that could affect how the fishery performs against one or more of these three principles, the certifying body instigates an ‘expedited audit’ to reassess the fishery in light of the changing circumstances.

Until March 2019, there were four Northeast Atlantic mackerel fisheries certified to the MSC Standard:

• Faroese Pelagic Organisation Northeast Atlantic mackerel;

• Iceland Sustainable Fisheries Iceland mackerel;

• Mackerel Industry Northern Sustainability Alliance (MINSA) North East Atlantic mackerel (which represents the UK part of the fishery and accounts for 78% of the total volume of North East Atlantic mackerel harvested); and

• Northern Ireland Pelagic Sustainability Group Irish Sea-Atlantic mackerel.

The results of the 2018 assessment, and the projected decline in stock biomass below the limit reference point, meant that the fishery was required to undergo an expedited audit. The absence of an agreed and coordinated management approach to limit fishing pressure by participating countries meant that the MSC certification was ultimately suspended.

Specifically, the grounds for suspension were failure to meet the MSC Standard on the Harvest Control Rules (HCR) under Principle 1. The purpose of a HCR is to prescribe the management actions that should be taken if there is any change in stock status. Without these rules it is more difficult to monitor and reduce fishing pressure when required. The most desirable solution to this issue is the development and implementation of a new binding international agreement that is capable of determining the optimal quota share allocation amongst all participants in the fishery, to ensure the long-term sustainability of the stock.
This is not a new development for the fishery. In 2012, MSC certification was suspended because of concerns that catch limits were being exceeded; although the certification was successfully reapplied for and re-awarded in 2014. However, there are understandably frustrations with the current suspension given that:

1. It occurred in response to the flawed 2018 stock assessment.
2. The MSC harmonisation process failed to reach a consensus between the certifying bodies on how to score the fishery (noting that the MINSA fishery on its own passed a recertification by Lloyds Register in the summer of 2019), and
3. The latest assessment shows that the biomass has increased.

Further, participants in the MINSA fishery have also been active in progressing the corrective actions that apply to their part of the fishery, such that if MSC certification applied to just the MINSA component it would have retained its certification.
What does this mean for the UK supply chain?

The latest ICES assessment indicates a healthy stock capable of sustaining higher catches, at least in the short-term, which is good news for the supply chain. The current estimated biomass is also well above previous years’ estimates when MSC certification was still in place.

However, the ongoing suspension of the fishery’s MSC certification is a cause of concern for processors and retailers alike. This is further complicated by the fact that the corrective actions required to achieve re-certification fall out-with the direct authority or influence of the fishing industry. This means that the traditional solution to achieve improvements, namely through a ‘Fishery Improvement Project’ where industry agree to a series of management actions to fix the issues identified through the MSC process, is not a solution.

Rather the authority to initiate the required actions to regain certification rests with the governments of the coastal state nations. Specifically international cooperation between the five coastal states and Russia is required before agreement can be reached on functioning stock-wide HCRs. This will require the scientific working group looking at quota allocation criteria to be reinstated and a science-based quota allocation to be adopted by all fishing nations, so that catches do not exceed the scientific advice.

Without the ability to display the MSC blue fish label, it will remain challenging for the UK seafood supply chain to be able to communicate to customers and consumers alike that Northeast Atlantic mackerel is being sourced sustainably, despite the positive progress that is being made in the MINSA fishery and the overall state of the stock. In response the UK supply chain, led by the retail sector, is working pre-competitively to create a market-led advocacy initiative to influence a positive outcome at an international political level. This should provide the reassurance that the fishery is taking all necessary steps to ensure its long-term sustainability.

Conclusion

While the latest stock assessment results are positive the ongoing suspension of the MSC certification and issues around wider coastal management continue to cause issues for Northeast Atlantic mackerel in the supply chain. This fishery is an exemplar of the difficulties which fishery managers face when stocks migrate outside their previous ranges; international agreements have to be forged and approaches to quota setting agreed as stocks change their migration patterns. Climate change means that the issues of the stock continuing to alter its range are likely to continue.

However, the positive measures taken by the MINSA fishery and the proactive response by the wider supply chain mean that, despite these issues, work is underway to drive improvements in the management of the fishery. Given the nature of the problems it is expected that achieving progress will take time.
About Seafish

Seafish is a non-departmental public body (NDPB), supporting the £10bn UK seafood industry from catch to plate. Our vision is for a seafood industry that is truly thriving and we use our unique position, right at the heart of industry, to work in partnership with businesses, Government and other stakeholders to make progress together.

We are funded by a levy on the first sale of seafood in the UK which we use to deliver research, campaigns and events, business and industry support tools, information networks and training for the seafood industry.

www.seafish.org
seafish@seafish.co.uk