



MarinTrust Standard V2

Whole fish Fishery Assessment WF 15

Boarfish (*Capros aper*) FAO 27, ICES area 6-8

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name(s): Pelagia (UK and Ireland)			
Country: Ireland			
Email address:		Applicant Code	
Certification Body Details			
Name of Certification Body:		LQRA	
Assessor Name	CB Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Sam Peacock	3	Surveillance 2
Assessment Period	October 2024 to October 2025		
Scope Details			
Management Authority (Country/State)		Republic of Ireland, UK and European Commission	
Main Species		Boarfish (<i>Capros aper</i>) Stock = boarfish in ICES subareas 6 – 8 (Celtic Seas, English Channel, and Bay of Biscay)	
Fishery Location		FAO Area 27 (Atlantic, Northeast)	
Gear Type(s)		Pelagic trawl, pelagic pair trawl	
Outcome of Assessment			
Overall Outcome		PASS	
Clauses Failed		NONE	
CB Peer Review Evaluation		Agree with Conclusion	
Fishery Assessment Peer Review Group Evaluation		Agree with Conclusion	
Recommendation		APPROVED	

Table 2. Assessment Determination

Assessment Determination
<p>The boarfish (<i>Capros aper</i>) stock has transitioned from Category B to Category A following its benchmarking in 2024, and it is now classified under Category 1 by ICES, with reference points available for stock management. According to Marin Trust standards, species listed as Endangered or Critically Endangered on the IUCN Red List or included in CITES appendices cannot be approved for raw material use. Boarfish does not fall under either list, making it eligible for Marin Trust raw material.</p> <p>The Pelagic Advisory Committee (PelAC) has emphasized its vital role in the benchmark process for the boarfish stock, leading to an assessment upgrade from Category 3 to Category 1 as mentioned. This significant change reflects improved stock management and assessment practices. The PelAC is fully committed to developing a Long-Term Management Strategy for boarfish and conducting a Management Strategy Evaluation (MSE) to ensure sustainable practices in the fishery.</p> <p>For 2025, the PelAC recommends that the Total Allowable Catch (TAC) for boarfish be set in line with Maximum Sustainable Yield (MSY) at 38,295 tonnes. This recommendation aligns with the commitment to sustainable fisheries management and the precautionary approach endorsed by ICES.</p> <p>Fishery, using pelagic trawls, has minimal impact on physical habitats, and ICES' studies on bycatch of protected species (WGBYC) show compliance with requirements on endangered, threatened, and protected species (ETP). Furthermore, ICES' Working Group on Widely Distributed Stocks (WGWISE) confirms the ecosystem impact is minimal, meeting Marin Trust standards.</p> <p>In summary, for this audit, the latest stock assessment indicates that boarfish remains above limits, with removals adequately considered in the assessment. There are no significant concerns regarding impacts on habitats, ETP species, or ecosystems since the last audit. Mackerel, the only species associated with boarfish, is also above limits according to the 2024 stock assessment, showing no relevant changes from previous assessments. Management strategies continue unchanged from the last audit, reflecting stability in practices and no new developments in regulations.</p> <p>Both boarfish and mackerel stocks are with their biomass levels above thresholds. Since the last surveillance report in 2023, there have been no significant changes to habitats or ecosystems, and the fishery continues to meet all the Marin Trust v2.0 requirements, making boarfish eligible for fishmeal and fish oil production.</p>
Fishery Assessment Peer Review Comments
<p>This report represents a thorough surveillance assessment of the boarfish fishery, with sufficient references provided to support the conclusions. The only significant change since the previous MT assessment is the introduction of a fully quantitative stock assessment, which has revealed boarfish biomass to be substantially larger than the target reference point level. The peer reviewer agrees with the assessor that the fishery meets the MT whole fish requirements, and should remain approved for use as a raw material.</p> <p>Comments from the external peer reviewer can be seen in Appendix 1 at the end of this report.</p>
Notes for On-site Auditor

Table 3 General Results

General Clause	Outcome (Pass/Fail)
M1 - Management Framework	Pass
M2 - Surveillance, Control and Enforcement	Pass
F1 - Impacts on ETP Species	Pass
F2 - Impacts on Habitats	Pass
F3 - Ecosystem Impacts	Pass

Table 4 Species- Specific Results

List all Category A and B species. List approximate total percentage (%) of landings which are Category C and D species; these do not need to be individually named here

Category	Species	% landings	Outcome (Pass/Fail)	
Category A	Boarfish (<i>Capros aper</i>)	95%*	A1	Pass
			A2	Pass
			A3	Pass
			A4	Pass
Category B	NA		NA	
Category C	Mackerel (<i>Scomber scombrus</i>)	5%*	Pass	
Category D	NA		NA	

- Please note that no catch data has been provided for this surveillance and the assessor has taken the same approach of per previous audits, no relevant changes in catch composition were expected.

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category ¹	% of landings	Management	Category
Boarfish	<i>Capros aper</i>	Boarfish in ICES subareas 6 – 8 (Celtic Seas, English Channel, and Bay of Biscay)	Least Concern ²	>95%	No Species-specific management regime in place	A
Mackerel	<i>Scomber scombrus</i>	Mackerel in ICES subareas 1 – 8 and 14, and Division 9.a (the Northeast Atlantic and adjacent waters)	Least Concern ³	<5%	Species-specific management regime in place	C

Species categorisation rationale

Background:

The boarfish fishery, particularly in ICES areas 6 to 8, encompasses a significant portion of the Celtic Seas, the English Channel, and the Bay of Biscay. The species, scientifically known as *Capros aper*, is predominantly found in areas such as Rockall, the Northwest Coast of Scotland, and the Irish Sea, among others. This fishery primarily operates at depths ranging from 50 to 500 meters, making it a demersal fishery focused on shelf and slope environments.

Historically, the boarfish stock has undergone assessment changes, moving from category 3 to category 1 during the 2024 benchmarking process. This shift highlights improvements in the management and sustainability of the stock, supported by efforts from the Pelagic Advisory Committee (PelAC). The PelAC is committed to developing a Long-Term Management Strategy for boarfish and has recommended a Total Allowable Catch (TAC) of 38,295 tonnes for 2025, in line with Maximum Sustainable Yield (MSY) principles.

Catch Composition Designation:

No new catch composition data was provided for this surveillance audit. Based on previous audits, the catch composition was reported as 95% boarfish and 5% mackerel. For this audit, the assessor has maintained the same approach. In this report, boarfish is classified as the target species (Category A), while mackerel is considered a bycatch species (Category C).

References

Smith-Vaniz, W.F., de Bruyne, G., de Morais, L. & Carpenter, K.E. 2015. *Capros aper*. *The IUCN Red List of Threatened Species* 2015: e.T198557A21910115. <https://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T198557A21910115.en>. Accessed on 20 October 2024.

Collette, B.B., Didden, J. & Di Natale, A. 2023. *Scomber scombrus*. *The IUCN Red List of Threatened Species* 2023: e.T170354A170089639. <https://dx.doi.org/10.2305/IUCN.UK.2023-1.RLTS.T170354A170089639.en>. Accessed on 20 October 2024.

¹ <https://www.iucnredlist.org/>

² [Capros aper \(Boarfish\)](#)

³ [Scomber scombrus \(Atlantic Mackerel\)](#)

MANAGEMENT

The two clauses in this section (M1, M2) relate to the general management regime applied to the fishery under assessment. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. A fishery must meet all the minimum requirements in every clause before it can be recommended for approval.

M1	Management Framework – Minimum Requirements	
M1.1	There is an organisation responsible for managing the fishery.	Pass
M1.2	There is an organisation responsible for collecting data and assessing the fishery.	Pass
M1.3	Fishery management organisations are publicly committed to sustainability.	Pass
M1.4	Fishery management organisations are legally empowered to take management actions.	Pass
M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making.	Pass
M1.6	The decision-making process is transparent, with processes and results publicly available.	Pass
Clause outcome:		PASS

The International Council for the Exploration of the Sea (ICES) plays a pivotal role in the management and assessment of the boarfish stock (*Capros aper*). Regular evaluations by ICES involve monitoring stock levels, biological parameters, and the overall health of the fishery. Recently, assessments have resulted in an upgrade of the boarfish stock from Category B to Category A, which reflects improvements in management practices. This change is significant as it indicates a more sustainable approach to fishing and stock management. However, aside from this upgrade, no other substantial changes have been noted regarding the entities responsible for managing the stock in the latest audit conducted this year. Most of information remain as in previous audits in terms of management structure.

M1.1 There is an organisation responsible for managing the fishery.

The management of the boarfish fishery involves collaboration among several jurisdictions, each with specific responsibilities. In the Republic of Ireland, the Department of Agriculture, Food and the Marine oversees marine policies aimed at supporting the economic and environmental health of coastal communities. In Scotland, Marine Scotland, a ministry of the Scottish Government, is tasked with monitoring and enforcing regulations for Scottish vessels and waters, including quota allocations and scientific research.

The Department of Agriculture, Environment and Rural Affairs (DAERA) manages Northern Ireland's waters, focusing on quota allocation and monitoring legislation, particularly in inshore fisheries. Similarly, the Welsh Government adopts a centralized approach to fisheries management, regulating quotas and licensing for Welsh vessels, while also ensuring compliance with marine laws.

Due to the existence of these dedicated organizations overseeing fisheries in their respective areas, the fishery meets the requirements outlined in Clause M1.1

M1.2 There is an organisation responsible for collecting data and assessing the fishery.

Various organizations at both national and international levels are responsible for collecting data and assessing the boarfish fishery. In the Republic of Ireland, the Marine Institute is the primary source of scientific information and advice, conducting annual assessments of boarfish spawning aggregations and leading the Western European Shelf Pelagic Acoustic Survey (WESPAS) through its Fisheries Ecosystems Advisory Services (FEAS) section.

In the United Kingdom, several entities contribute to data collection, including the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), DAERA in Northern Ireland, and Marine Scotland. These organizations work collaboratively to monitor the health of marine resources and ensure sustainable practices.

On an international level, the International Council for the Exploration of the Sea (ICES) plays a key role in assessing the boarfish stock. This intergovernmental marine science organization, based in Copenhagen, Denmark, consists of 20 member countries, including the UK and Ireland. ICES provides impartial evidence regarding the state and sustainable use of marine resources in its area of competence, which includes the North Atlantic and North Sea.

Due to the existence of these organizations responsible for data collection and assessment, the fishery complies with Clause M1.2

M1.3 Fishery management organisations are publicly committed to sustainability.

In 2024, the Department of Agriculture, Food and the Marine (DAFM) in Ireland has taken significant steps toward enhancing the sustainability of its fisheries. The department has launched four new schemes under the Seafood Development Programme, which are jointly funded by the Irish government and the European Maritime, Fisheries and Aquaculture Fund (EMFAF). These initiatives aim to bolster both the fishing fleet and the seafood processing industry, addressing challenges faced by these sectors in recent years.

In the United Kingdom, fishery management organisations are publicly committed to sustainability including the MMO whose stated purpose is to protect and enhance the UK’s marine environment, and support UK economic growth by enabling sustainable marine activities and development⁸, Marine Scotland whose responsibilities include inter alia promoting sustainable, profitable and well-managed fisheries⁹ and Northern Ireland’s Government Departments and District Councils who have a statutory duty to promote the achievement of sustainable development in the exercise of their functions.

Based on the above, fishery management organisations are publicly committed to sustainability such that the fishery passes Clause M1.3.

M1.4 Fishery management organisations are legally empowered to take management actions.

The management of fisheries in the Republic of Ireland (ROI), the United Kingdom (UK), and the Common Fisheries Policy (CFP) within the European Union is governed by a framework of legal structures that empower these entities to implement various management actions.

In the Republic of Ireland, the Department of Agriculture, Food and the Marine (DAFM) is responsible for fisheries management under the European Communities (Fisheries) Regulations. These regulations allow the DAFM to set quotas, issue fishing licenses, and enforce conservation measures to ensure sustainable practices. The DAFM's authority also extends to implementing EU policies related to fisheries, which include maintaining fish stocks and protecting marine ecosystems

In the United Kingdom, fisheries management is divided among various national agencies, such as Marine Scotland, the Department for Environment, Food & Rural Affairs (DEFRA) in England, the Department of Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland, and the Welsh Government. Each of these bodies has the authority to set local regulations, issue licenses, and enforce fishing quotas in alignment with both national and EU regulations. After Brexit, the UK continues to work within the framework of the CFP for managing shared fish stocks but has also established its own regulations and governance structures.

The Common Fisheries Policy (CFP) is a comprehensive framework that governs fisheries management across EU member states, including the UK prior to Brexit. It empowers the European Commission and member states to take collective action in managing fish stocks. The CFP includes regulations on sustainable fishing practices, quota allocations, and conservation measures to protect vulnerable species and ecosystems. Member states are required to implement these regulations at the national level, ensuring that fishing practices are sustainable and economically viable

In summary, the ROI, UK, and CFP are structured through legal frameworks that grant fisheries management organizations the authority to implement regulations and take management actions aimed at sustaining fish stocks and protecting marine environments. Therefore, based on the above, the fishery passes M1.4.

M1.5 There is a consultation process through which fishery stakeholders are engaged in decision-making.

The consultation processes regarding fisheries management in the Republic of Ireland (ROI), the United Kingdom (UK), and under the Common Fisheries Policy (CFP) in the European Union are designed to involve stakeholders effectively and ensure transparency and participation in decision-making.

In the Republic of Ireland, DAFM engages in consultations with various stakeholders, including industry representatives, environmental groups, and local communities. This is achieved through public consultations, workshops, and forums, where feedback is gathered on proposed regulations and policies. The DAFM also collaborates with the Marine Institute to conduct scientific assessments that inform these consultations

In the United Kingdom, consultation processes are similarly structured, involving multiple governmental bodies such as Marine Scotland, DAERA, and DEFRA. Each agency conducts consultations on fisheries management plans, often seeking input from fishermen, scientists, and conservation groups. These consultations aim to ensure that management actions reflect the needs and perspectives of all stakeholders involved.

The Common Fisheries Policy (CFP) mandates a collaborative approach, requiring EU member states to consult with stakeholders during the formulation of fisheries policies. This includes regional advisory councils, where fishery representatives, scientists, and NGOs discuss management measures and provide recommendations to the European Commission. Based on the above, the fishery passes M1.5

M1.6 The decision-making process is transparent, with processes and results publicly available.

The fisheries management decision-making process in the Republic of Ireland, the UK, and under the Common Fisheries Policy (CFP) is transparent, with procedures and outcomes publicly available. The DAFM in Ireland and agencies in the UK, like Marine Scotland and DEFRA, regularly publish reports and consultation results on their websites. Similarly, the European Commission ensures transparency by making relevant documents accessible to the public, thereby promoting accountability and stakeholder engagement in fisheries management decisions. Based on the above, the fishery passes M1.6

References

Department of Agriculture, Food and the Marine (DAFM) – Ireland: gov.ie - [Department of Agriculture, Food and the Marine](http://gov.ie)
 DEFRA [Department for Environment, Food & Rural Affairs - GOV.UK](http://gov.uk)
 Marine Scotland: [Marine and fisheries - gov.scot](http://gov.scot)
 Common Fisheries Policy (CFP) - European Commission: [Common fisheries policy \(CFP\) - European Commission](http://ec.europa.eu)

Links

MarinTrust Standard clause	1.3.1.1, 1.3.1.2
FAO CCRF	7.2, 7.3.1, 7.4.4, 12.3
GSSI	D.1.01, D.4.01, D2.01, D1.07, D1.04,

M2 Surveillance, Control and Enforcement - Minimum Requirements		
M2.1	There is an organisation responsible for monitoring compliance with fishery laws and regulations.	Pass
M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.	Pass
M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.	Pass
M2.4	Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.	Pass
Clause outcome:		Pass

M2.1 There is an organisation responsible for monitoring compliance with fishery laws and regulations.

In both the Republic of Ireland and the UK, various governmental organizations are tasked with monitoring compliance with fisheries laws and regulations. In Ireland, the Department of Agriculture, Food and the Marine (DAFM) oversees fisheries management, including monitoring adherence to regulations through its Sea Fisheries Protection Authority (SFPA). In the UK, Marine Scotland, DEFRA, and DAERA perform similar functions, ensuring that fishing activities comply with established laws. These organizations utilize scientific assessments and stakeholder input to facilitate sustainable fisheries management. Further, the European Fisheries Control Agency (EFCA) is a European Union agency whose mission is to promote the highest common standards for control, inspection and surveillance under the CFP. EFCA’s primary role is to organise coordination and cooperation between national control and inspection activities so that the rules of the CFP are respected and applied effectively. In practice, organisational responsibility for monitoring compliance with fishery laws and regulations is carried out by the Member States' control authorities. Therefore, the fishery passes clause M2.1

M2.2 There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.

Both the Republic of Ireland and the UK have established frameworks of sanctions that are applied when fisheries laws and regulations are breached. In Ireland, the SFPA can impose penalties ranging from fines to the suspension of fishing licenses. Similarly, in the UK, agencies like Marine Scotland and DEFRA have the authority to issue sanctions, which may include financial

penalties, license revocation, and even criminal prosecution for severe violations. These measures are designed to deter illegal fishing practices and promote compliance among fishers. Therefore, the fishery passes clause M2.2

M2.3 There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.

There is currently no substantial evidence indicating widespread non-compliance or illegal, unreported, and unregulated (IUU) fishing within the fisheries of the Republic of Ireland or the UK. Monitoring systems and compliance checks have proven effective, as highlighted in various reports from fisheries management authorities. The International Council for the Exploration of the Sea (ICES) and other organizations routinely assess fisheries and report minimal instances of non-compliance, reinforcing the effectiveness of management measures in place. Therefore, the fishery passes clause M2.3

M2.4 Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.

Compliance with fisheries laws and regulations in the Republic of Ireland and the UK is actively monitored through a robust regime that includes various methods such as at-sea inspections, portside checks, and the implementation of observer programs. The VMS is also employed to track fishing vessels in real time, ensuring adherence to quotas and other regulations. These monitoring efforts are supported by both national and EU policies, which aim to enhance sustainability and compliance within fisheries. Therefore, the fishery passes clause M2.4

References

- SFPA.ie [Home](#)
- Department of Agriculture, Food and the Marine (DAFM) – Ireland: [gov.ie - Department of Agriculture, Food and the Marine](#)
- DEFRA [Department for Environment, Food & Rural Affairs - GOV.UK](#)
- Marine Scotland: [Marine and fisheries - gov.scot](#)
- Common Fisheries Policy (CFP) - European Commission: [Common fisheries policy \(CFP\) - European Commission](#)

Links

MarinTrust Standard clause	1.3.1.3
FAO CCRF	7.7.2
GSSI	D1.09

CATEGORY A SPECIES

The four clauses in this section apply to Category A species. Clauses A1 - A4 should be completed for **each** Category A species. If there are no Category A species in the fishery under assessment, this section can be deleted. A Category A species must meet the minimum requirements of all four clauses before it can be recommended for approval. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. The species must achieve a pass rating against all requirements to be awarded a pass overall. **If the species fails any of these clauses it should be re-assessed as a Category B species.**

Species Name		Boarfish (<i>Capros aper</i>) in subareas 6–8 (Celtic Seas, English Channel, and Bay of Biscay)	
A1	Data Collection - Minimum Requirements		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	Pass
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	Pass
Clause outcome:			PASS

A1.1 Landings data are collected such that the fishery-wide removals of this species are known.

The assessment for boarfish uses a length-based analytical method through Stock Synthesis 3 and NOAA Toolbox. It incorporates data from various sources, including commercial catches, international landings, discards, and multiple acoustic surveys spanning from 2003 to 2024. Time-invariant maturity at length is estimated from survey data, while natural mortality is fixed at 0.174 for all lengths based on a maximum age of 31 years. Discard data from non-directed fisheries has been included since 2003.

Catches

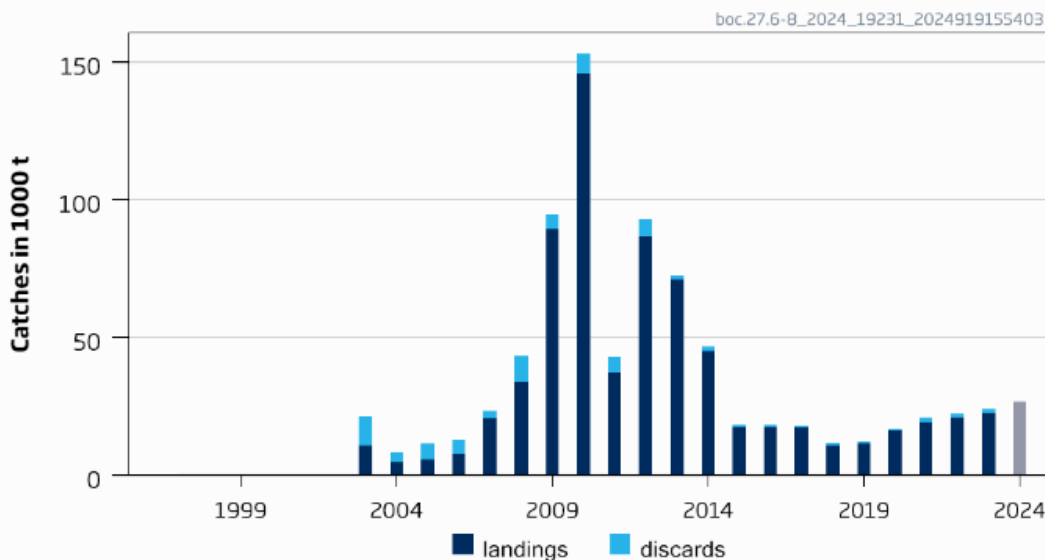


Figure 1. The 2024 catch (shaded grey) is estimated by ICES based on national quotas, expected uptake, and an estimate of discards. Source: ICES 2024.

Based on the information, the fishery passes A 1.1.

A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.

The stock was benchmarked in 2024. The basis for the advice has changed to a length-based Stock Synthesis model (Category 1). Additional catch data and a time-series of catch length composition have been included in the assessment. The WESPAS acoustic survey has been revised and combined with the PELGAS survey. Several IBTS surveys have been combined into a single index using the VAST model. Length distribution information from the IBTS surveys has also been included and biological information has been revised. The updated model is considered to provide more realistic and accurate estimates than the previous model (ICES, 2024a).

Recruitment (age 0)

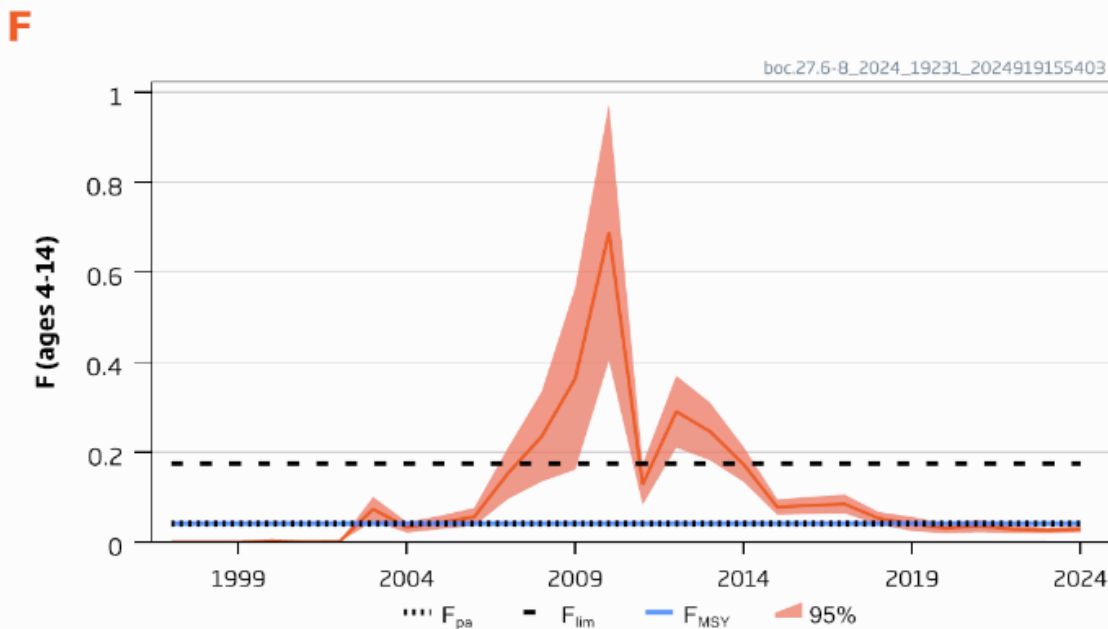
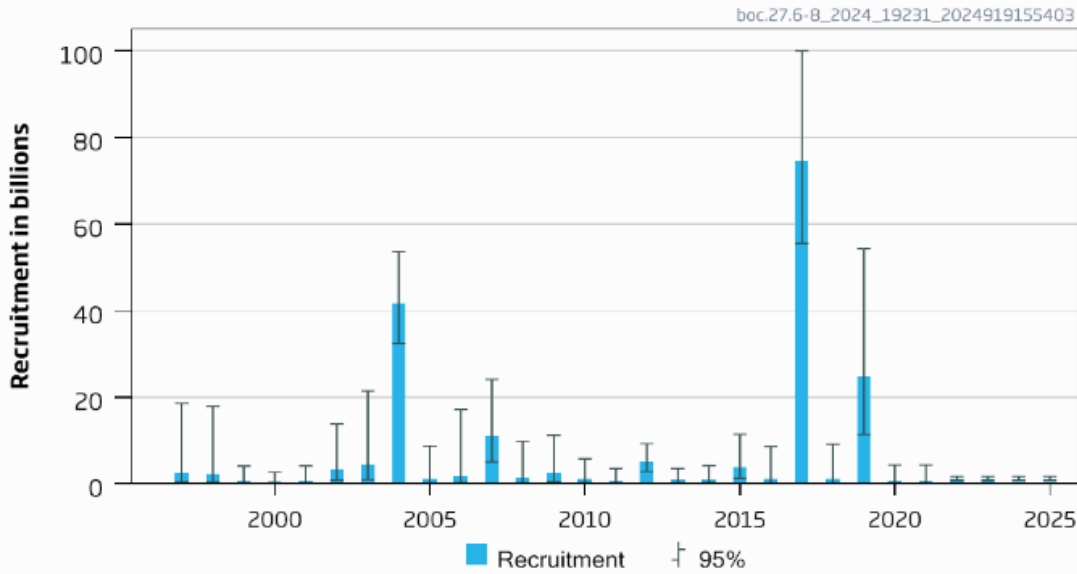


Figure 2. Boarfish in subareas 6–8. Summary of the assessment. Recruitment in 2024 and 2025 are assumptions based on the stock–recruitment relationship. For F and SSB, the 95% range is approximated by two standard deviations. Source: ICES 2024
Based on the information, the fishery passes A 1.2

References

- <http://standardgraphs.ices.dk/stockList.aspx>
- ICES. 2024. Boarfish (*Capros aper*) in subareas 6–8 (Celtic Seas, English Channel, and Bay of Biscay). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, boc.27.6-8, <https://doi.org/10.17895/ices.advice.26763898>
- ICES. 2023a. Advice on fishing opportunities. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1.1. <https://doi.org/10.17895/ices.advice.22240624>
- ICES. 2024a. Benchmark workshop on horse mackerel and boarfish (WKBHMB). ICES Scientific Reports. 6:8. 296 pp. <https://doi.org/10.17895/ices.pub.25002482>
- ICES. 2024b. Working Group on Widely Distributed Stocks (WGWIDE). ICES Scientific Reports. 6:81. <https://doi.org/10.17895/ices.pub.26993227>

Links

MarinTrust Standard clause	1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	7.3.1, 12.3
GSSI	D.4.01, D.5.01, D.6.02, D.3.14

A2 Stock Assessment - Minimum Requirements		
A2.1	A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.	Pass
A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	Pass
A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	Pass
A2.4	The assessment is subject to internal or external peer review.	Pass
A2.5	The assessment is made publicly available.	Pass
Clause outcome:		PASS

A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.

ICES provides advice for Category 1 stocks annually, ensuring regular updates on stock status and management recommendations. This periodic review process helps adapt to changing stock dynamics and ecological conditions, promoting sustainable fishing practices. Recently, this stock has been transferred for category 1 and it was benchmarked in 2024. Previously ICES provided advice on a biannual basis for this stock, the stock has been upgraded to Category 1 and advice can be provided annually in future. Based on the information, the fishery passes A 2.1

A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

The directed fishery occurs primarily in the Celtic Sea and developed during the early 2000s, initially unregulated before the introduction of a TAC in 2011. In the 2024 benchmark a length based analytical assessment in Stock Synthesis 3 was set up including catch data, a combined acoustic survey biomass index, a combined groundfish survey biomass index, and new reference points were estimated. Based on the new assessment, the stock was moved from category 3 to category 1 and a new advice for 2025 replaced the advice issued in 2023. The current assessment indicates that, following a decline from 2012 to 2019, SSB has been increasing sharply in recent years following high recruitment in 2017 and 2019. SSB is estimated to be well above MSY $B_{trigger}$ in 2024 and forecast to remain above MSY $B_{trigger}$ in 2025 and 2026. Based on the information, the fishery passes A 2.2

A2.3 The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.

The ICES assessment estimates that the total catch for 2024 will be 26,858 tonnes, based on national quotas, expected uptake, and discard estimates. This assessment helps indicate the appropriate volume of fishery removals given the current stock status, ensuring sustainable fishing practices are followed. Based on the information, the fishery passes A 2.4

A2.4 The assessment is subject to internal or external peer review.

ICES Technical Guidelines outline a transparent review process for stock assessments, emphasizing the importance of public availability of data and methodologies. This allows stakeholders to scrutinize the input data used in models, ensuring accountability and fostering trust in the assessment outcomes. The review process includes expert evaluations and opportunities for public comment, contributing to the continuous improvement of assessment practices. Based on the information, the fishery passes A 2.4

A2.5 The assessment is made publicly available.

Yes, the assessment can be found in ICES website. [Latest advice](#), the fishery passes A 2.5.

References

ICES (2021). Technical Guidelines - Guidelines for review processes. ICES Technical Guidelines. Report. <https://doi.org/10.17895/ices.advice.7682>

Boarfish (*Capros aper*) in subareas 6–8 (Celtic Seas, English Channel, and Bay of Biscay). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, boc.27.6-8, <https://doi.org/10.17895/ices.advice.26763898>

ICES. 2024a. Benchmark workshop on horse mackerel and boarfish (WKBHMB). ICES Scientific Reports. 6:8. 296 pp. <https://doi.org/10.17895/ices.pub.25002482>

ICES. 2024b. Working Group on Widely Distributed Stocks (WGWIDE). ICES Scientific Reports. 6:81. <https://doi.org/10.17895/ices.pub.26993227>

Links

MarinTrust Standard clause	1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	12.3
GSSI	D.5.01, D.6.02, D.3.14

A3	Harvest Strategy - Minimum Requirements		
	A3.1	There is a mechanism in place by which total fishing mortality of this species is restricted.	Pass
	A3.2	Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.	Pass
	A3.3	Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).	Pass

Clause outcome: Pass

A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.

The reference points for fishing mortality in the boarfish stock assessment indicate that the MSY approach is being applied. The values include FMSY at 0.042, which is supported by stochastic simulations and a segmented regression stock-recruitment relationship. The limit fishing mortality (Flim) is set at 0.175, determined through long-term simulations to ensure a 50% probability of spawning stock biomass (SSB) exceeding Blim. Additionally, Fpa is also 0.042, indicating the fishing mortality level that ensures SSB remains above Blim with a 95% probability (ICES, 2024a). Therefore, the fishery passes clause A3.1.

A3.2 Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.

Table 1. History of advice, catch, and management. Boarfish in subareas 6–8. ICES advice and catch. All weights are in tonnes.

Year	ICES advice	Catch corresponding to advice	TAC *	ICES catch
2017	Precautionary approach (-36% relative to previous advice)	≤ 27288	27288	17134
2018	Precautionary approach	≤ 21830	20380	10850
2019	Precautionary approach (same advice as for 2018)	≤ 21830	21830	11577
2020	Precautionary approach	≤ 19152	19152	16211
2021	Precautionary approach (same advice as for 2020)	≤ 19152	19152	19166
2022	Precautionary approach	≤ 22791	22791	21115
2023	Precautionary approach (same advice as for 2022)	≤ 22791	22791	22612
2024	MSY approach	≤ 27349	27349	
2025	MSY approach**		≤ 38295	

The recent increase in biomass is due to the two strong year classes in 2017 and 2019. Catches were around the TAC and when exceeded it was less than 10 %. Therefore, the fishery passes clause A3.2.

A3.3 Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).

ICES advises that the total catch for boarfish should not exceed 38,295 tonnes in 2025 under the MSY approach. While conservation measures may exist at national or regional levels, they were not reviewed by ICES. Starting in 2024, this stock

will be monitored annually, and if stock levels fall below limits, immediate management actions, including a potential zero total allowable catch (TAC) for the following year, may be implemented. Therefore, the fishery passes clause A3.3.

References

ICES. 2024. Boarfish (*Capros aper*) in subareas 6–8 (Celtic Seas, English Channel, and Bay of Biscay). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, boc.27.6-8, <https://doi.org/10.17895/ices.advice.26763898>
<http://standardgraphs.ices.dk/ViewCharts.aspx?key=19231>

Standard clause 1.3.2.1.3

Links

MarinTrust Standard clause	1.3.2.1.3, 1.3.2.1.4
FAO CCRF	7.2.1, 7.22 (e), 7.5.3
GSSI	D3.04, D6.01

A4	Stock Status - Minimum Requirements	
	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.
		Clause outcome: PASS

A4.1 The stock is at or above the target reference point, OR IF NOT:

The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT:

The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.

Table 2. Boarfish in subareas 6-8. Annual catch scenarios. All weights are in tonnes. Reference points.

Basis	Total catch (2025)	F (2025)	SSB (2026)	% SSB change*	% catch change**	% advice change***
ICES advice basis						
MSY approach: F_{MSY}	38295	0.042	801834	-5.9	43	40
Other scenarios						
$F = 0$	0	0	836867	-1.79	-100	-100
F_{pa}	38295	0.042	801834	-5.9	43	40
F_{lim}	149575	0.175	700324	-18	457	447
$SSB_{2026} = B_{lim}$	761883	1.663	156762	-82	2738	2686
$SSB_{2026} = B_{pa} = MSY B_{trigger}$	721714	1.465	190845	-78	2588	2539
$F = F_{2024}$	26860	0.029	812290	-4.7	0.05	-1.79

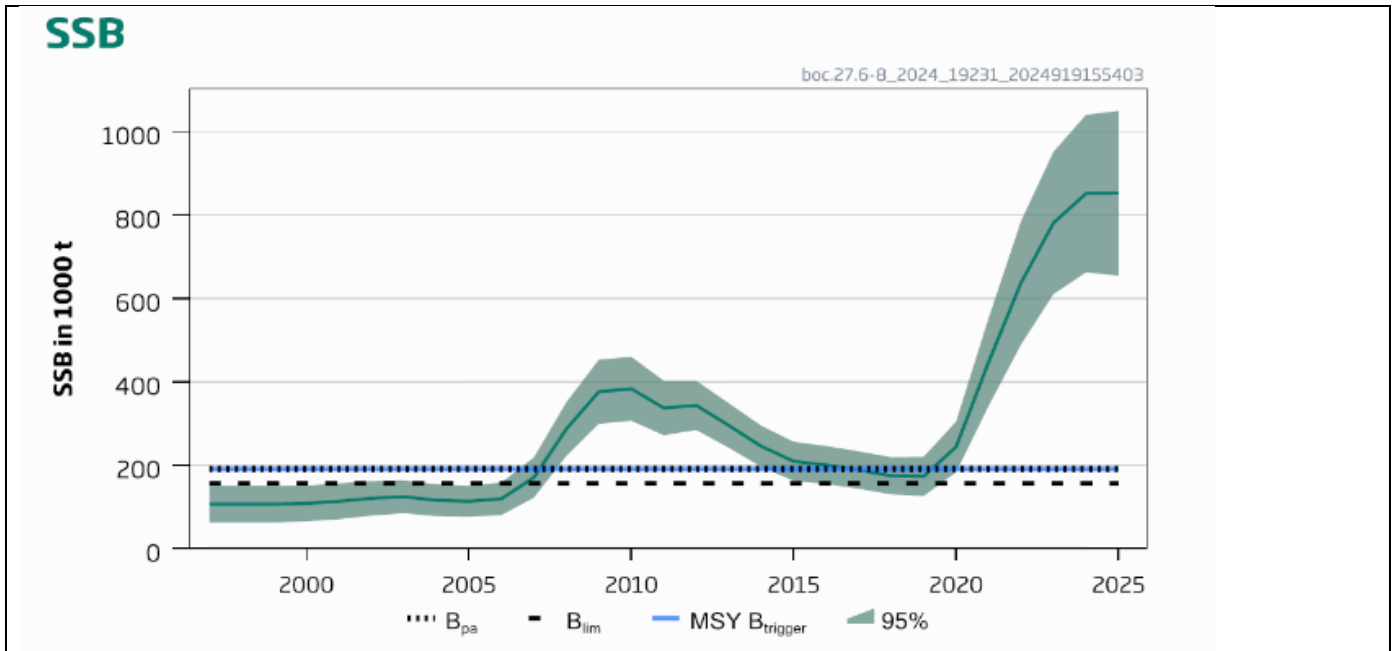


Figure 3. Boarfish in subareas 6–8. Summary of the assessment. SSB, the 95% range is approximated by two standard deviations. Source: ICES 2024

Fishing pressure on the stock is below FMSY, and spawning-stock size is above MSY Btrigger, Bpa, and Blim. Therefore, the fishery passes clause A4.1.

References

ICES. 2024. Boarfish (*Capros aper*) in subareas 6–8 (Celtic Seas, English Channel, and Bay of Biscay). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, boc.27.6-8, <https://doi.org/10.17895/ices.advice.26763898> <http://standardgraphs.ices.dk/ViewCharts.aspx?key=19231>

Links

MarinTrust Standard clause	1.3.2.1.4
FAO CCRF	7.2.1, 7.2.2 (e)
GSSI	D6 01

CATEGORY B SPECIES

Category B species are those which make up greater than 5% of landings in the applicant raw material, but which are not subject to a species-specific research and management regime sufficient to pass all Category A clauses. If there are no Category B species in the fishery under assessment, this section can be deleted.

Category B species are assessed using a risk-based approach. The following process should be completed once for each Category B species.

If there are estimates of biomass (B), fishing mortality (F), and reference points

It is possible for a Category B species to have some biomass and fishing mortality data available. When sufficient information is present, the assessment team should use the following risk matrix to determine whether the species should be recommended for approval.

TABLE B(A) - F, B AND REFERENCE POINTS ARE AVAILABLE

Biomass is above MSY / target reference point	Pass	Pass	Pass	Fail	Fail
Biomass is below MSY / target reference point, but above limit reference point	Pass, but re-assess when fishery removals resume	Pass	Fail	Fail	Fail
Biomass is below limit reference point (stock is overfished)	Pass, but re-assess when fishery removals resume	Fail	Fail	Fail	Fail
Biomass is significantly below limit reference point (Recruitment impaired)	Fail	Fail	Fail	Fail	Fail
	Fishery removals are prohibited	Fishing mortality is below MSY or target reference point	Fishing mortality is around MSY or target reference point, or below the long-term average	Fishing mortality is above the MSY or target reference point, or around the long-term average	Fishing mortality is above the limit reference point or above the long-term average (Stock is subject to overfishing)

If the biomass / fishing pressure risk assessment is not possible

Initially, the resilience of each Category B species to fishing pressure should be estimated using the American Fisheries Society procedure described in Musick, J.A. (1999). This approach is used as the resilience values for many species and stocks have been estimated by FishBase and are already available online. For details of the approach, please refer to Appendix A. Determining the resilience provides a basis for estimating the risk that fishing may pose to the long-term sustainability of the stock. Table B(b) should be used to determine whether the species should be recommended for approval.

TABLE B(B) - NO REFERENCE POINTS AVAILABLE. B = CURRENT BIOMASS; B_{av} = LONG-TERM AVERAGE BIOMASS; F = CURRENT FISHING MORTALITY; F_{av} = LONG-TERM AVERAGE FISHING MORTALITY.

B > B _{av} and F < F _{av}	Pass	Pass	Pass	Fail
B > B _{av} and F or F _{av} unknown	Pass	Pass	Fail	Fail

B = B_{av} and F < F_{av}	Pass	Pass	Fail	Fail
B = B_{av} and F or F_{av} unknown	Pass	Fail	Fail	Fail
B > B_{av} and F > F_{av}	Pass	Fail	Fail	Fail
B < B_{av}	Fail	Fail	Fail	Fail
B unknown	Fail	Fail	Fail	Fail
Resilience	High	Medium	Low	Very Low

Assessment Results

Species Name		
B1	Species Name	
	Table used (Ba, Bb)	
	Outcome	
References		
Links		
MarinTrust Standard clause		1.3.2.2, 4.1.4
FAO CCRF		7.5.1
GSSI		D.5.01

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Species Name		Mackerel (<i>Scomber scombrus</i>) in subareas 1–8 and 14, and in Division 9.a (Northeast Atlantic and adjacent waters)	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
			Clause outcome: PASS
C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.			
<p>The inclusion of a new year of data has altered the relative weight of various data sources in the stock assessment, leading to a revised understanding of the stock's status. The impact of data sources is influenced by both the length of the time series and the consistency of the information. With the latest data, the influence of tagging data in the assessment model has slightly increased. Recent assessments have shown systematic upward revisions of spawning stock biomass (SSB) estimates and downward revisions of fishing mortality (F) for the years 2010 to 2020, though similar revisions are not observed for the most recent years.</p> <p>The stock assessment and short-term forecasts consider fish ages 0 to 12. Abundance estimates for ages 0 and 1 are uncertain, with recruitment becoming clearer when fish reach ages 2 to 3. Thus, recruitment data is presented at age 2. The assessment incorporates catch data, steel and RFID tagging data from different periods, and various survey indices, including the SSB index from triennial egg surveys and abundance indices from the IBTS and IESSNS surveys. Catches before 2000 are given minimal weight in the assessment. Natural mortality is set at 0.15 for all ages, based on tagging studies from the early 1980s, while maturity varies over time based on catch information.</p>			

Although discarding occurs, accounting for approximately 0.3% of the total catch by weight in 2023—it is only partially quantified across different fisheries, making it challenging to calculate the overall proportion of landings. Nonetheless, partial discard estimates are included in the assessment, and overall discarding in recent years is assumed to be negligible (ICES, 2024)

Catches

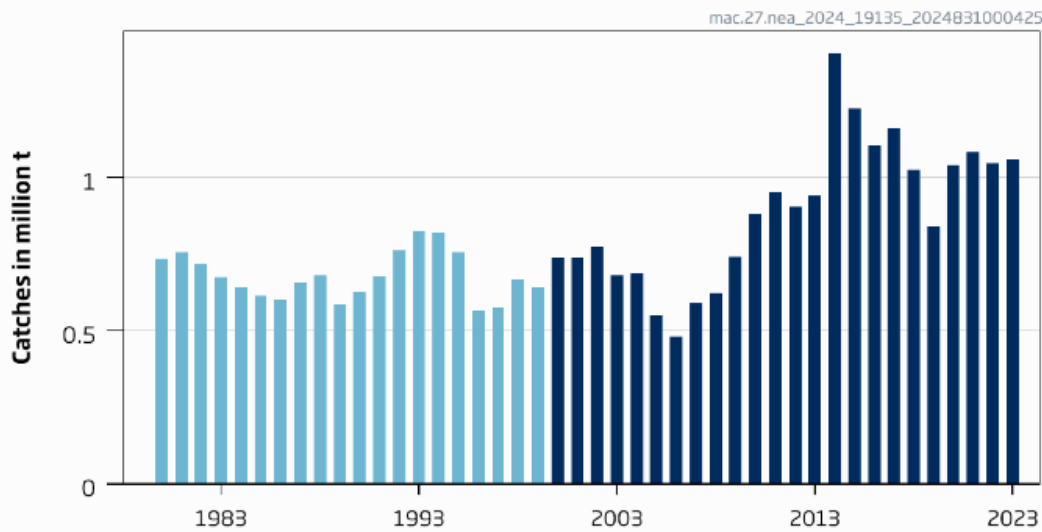


Figure 3. Summary of the stock assessment. Catches prior to 2000 have been down weighted in the assessment because of the considerable underreporting suspected of taking place in this period. Source: ICES 2024.

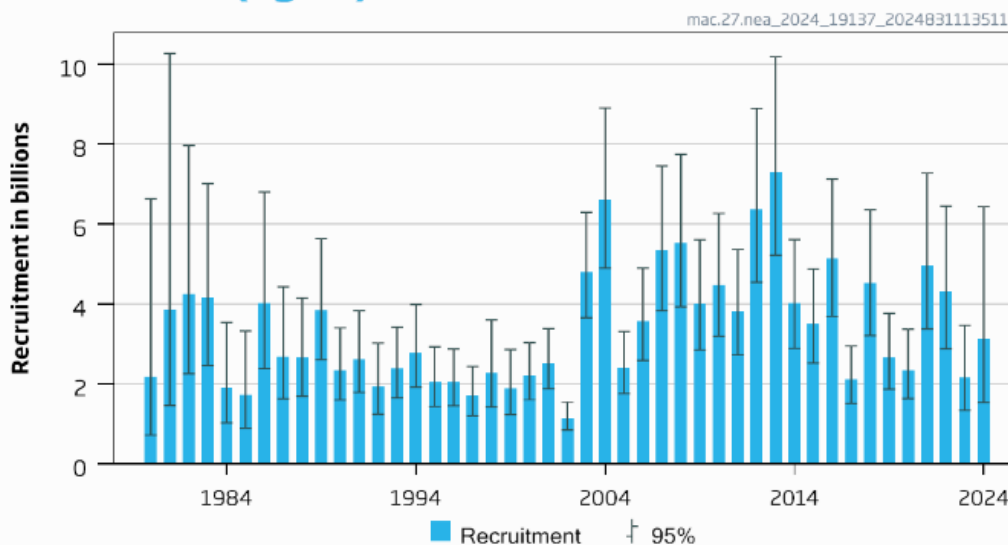
Based on the above information, the fishery passes clause C1.1.

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

Fishing pressure on the stock is above FMSY and between Fpa and Flim; spawning-stock size is above MSY Btrigger, Bpa, and Blim. Conservation aspects and associated management measures may exist at a national or regional level but were not reviewed by ICES.

ICES advises that when the maximum sustainable yield (MSY) approach is applied, catches in 2025 should be no more than 576 958 tonnes (ICES, 2024).

Recruitment (age 2)



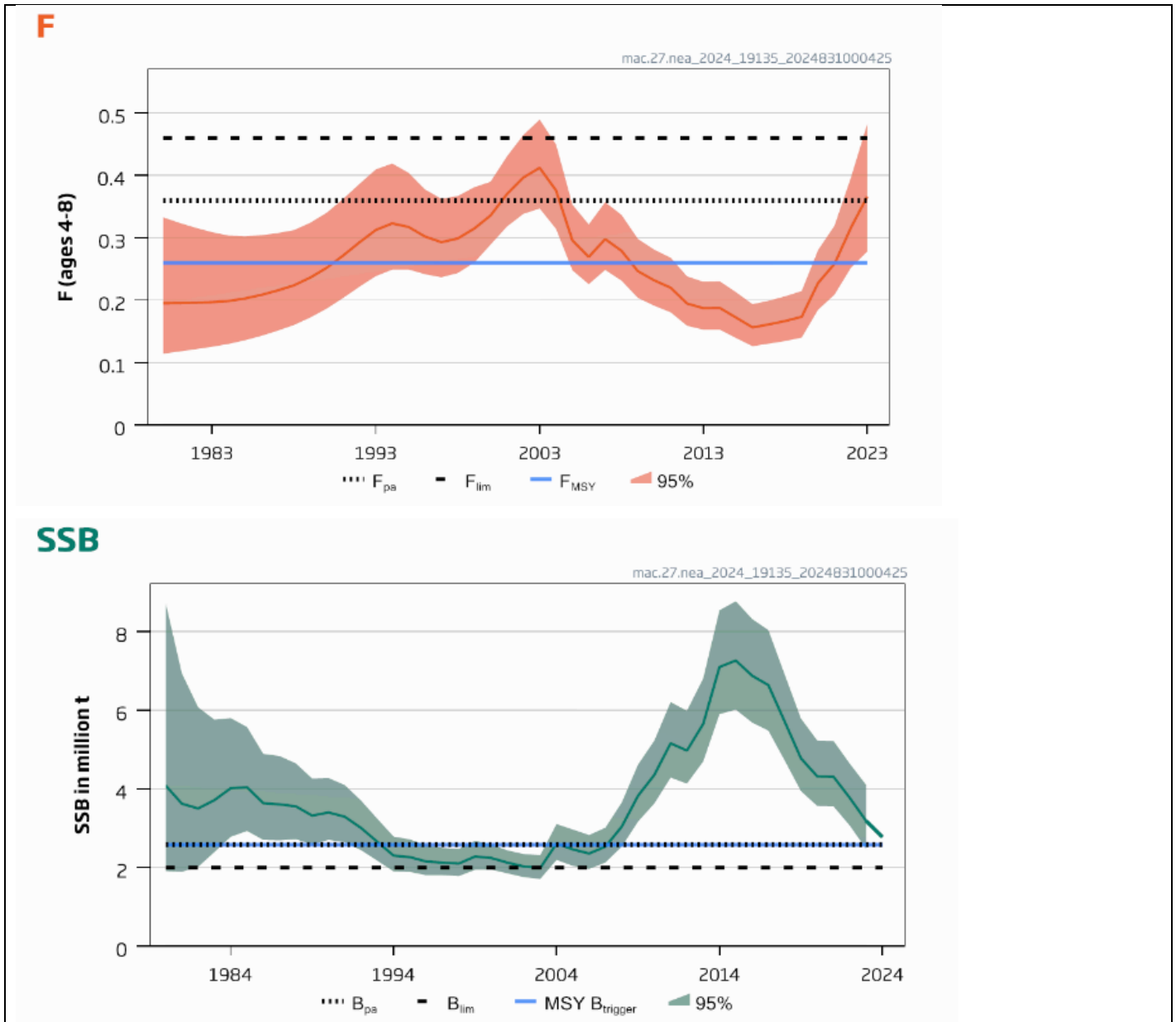


Figure 4. Mackerel in subareas 1–8 and 14, and in Division 9.a. Summary of the stock assessment. Abundance estimates of age 0 and 1 from the assessment model poorly reflect year-class strength and therefore recruitment is shown at age 2. Source: ICES 2024

Based on the above information, the fishery passes clause C1.2

References

ICES (2024). Mackerel (*Scomber scombrus*) in subareas 1–8 and 14 and Division 9.a (the Northeast Atlantic and adjacent waters). ICES Advice: Recurrent Advice. Report. <https://doi.org/10.17895/ices.advice.25019339.v1>

Villamor, B., Navarro MR., Dueñas-Liaño, C., Antolinez, A. 2016. Criterios de Interpretación de la Edad en los Otolitos de la Caballa (*Scomber scombrus*) del Atlántico Nordeste. Documento Interno del IEO, Proyecto BIOPEL. Repositorio del IEO

Links

MarinTrust Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

D1	Species Name		
	Productivity Attribute	Value	Score
	Average age at maturity (years)		
	Average maximum age (years)		
	Fecundity (eggs/spawning)		
	Average maximum size (cm)		
	Average size at maturity (cm)		
	Reproductive strategy		
	Mean trophic level		
	Average Productivity Score		
	Susceptibility Attribute	Value	Score
	Availability (area overlap)		
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)		
	Selectivity of gear type		
	Post-capture mortality		
	Average Susceptibility Score		
	PSA Risk Rating (From Table D3)		
	Compliance rating		
	Further justification for susceptibility scoring (where relevant)		
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		
References			
Standard clauses 1.3.2.2			

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)	Medium susceptibility (medium risk, score = 2)	High susceptibility (high risk, score = 3)
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap	10-30% overlap	>30% overlap
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).	Medium overlap with fishing gear.	High overlap with fishing gear (high encounterability). Default score for target species
Selectivity of gear type Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b Individuals < half the size at maturity can escape or avoid gear.	b Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4

D4	Species Name		
Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements			
D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
Outcome:			
Evidence			
D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
References			
Links			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	

FURTHER IMPACTS

The three clauses in this section relate to impacts the fishery may have in other areas. A fishery must meet the minimum requirements of all three clauses before it can be recommended for approval.

F1	Impacts on ETP Species - Minimum Requirements		
	F1.1	Interactions with ETP species are recorded.	Pass
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	Pass
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	Pass
		Clause outcome:	PASS
F1.1 Interactions with ETP species are recorded.			
<p>The boarfish fishery actively monitors interactions with endangered, threatened, and protected (ETP) species. Data collection mechanisms are in place to document any interactions that occur during fishing operations. Both the Marine Institute in Ireland and Marine Scotland conduct research and gather data on bycatch, including ETP species. This information is essential for understanding the impact of fishing practices on vulnerable marine life and is reported to regulatory bodies, ensuring that any interactions are accurately recorded and addressed. ICES obtains data on ETPs species (ETPs) bycatch through an annual data call. These data are most commonly linked to at-sea observations carried out for the purposes of fisheries monitoring in accordance with the EU Data Collection Framework Regulation 2017/1004 (DCF). The Working Group on Bycatch of Protected Species (WGBYC) was established in 2007 and collates and analyses information from across the Northeast Atlantic and adjacent sea areas related to the bycatch of ETPs species, including marine mammals, seabirds, turtles and sensitive fish species in commercial fishing operations, UK and Ireland provide data for this WG. Therefore, the fishery passes clause F1.1.</p>			
F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species.			
<p>Recent assessments indicate that the boarfish fishery does not have a substantial negative effect on ETP species. Reports from the International Council for the Exploration of the Sea (ICES) and national studies from both the Republic of Ireland and the UK highlight that current management practices have effectively mitigated risks to ETP species. The fishery's operations, including the use of selective fishing gear and adherence to quota regulations, contribute to maintaining healthy populations of ETP species within the fishing area. In the last report conducted by ICES in 2022 in the call for ETP interaction with the different metiers by country, the data reported in the study areas were as follows: In the Celtic Seas ecoregion, 155 marine mammals (5 species), 125 birds (1 species), 4280 elasmobranchs (27 species), 42452 teleosts (17 species) and 319 deep sea holocephalians (1 species) were reported from 1443 days at sea.</p> <p>In the Greater North Sea ecoregion, 416 marine mammals (6 species), 175 birds (17 species), 8657 elasmobranchs (24 species), 219075 teleosts (27 species), 2 lamprey (2 species) and 782 deep sea holocephalians (1 species) were reported from 3595 days at sea. In the reported fishing and monitoring days (only for those metiers that reported bycatch) and number of bycaught specimens and incidents in 2022 provided through the ICES WGBYC 2023 data call by ecoregion for all reported species (ICES 2023c), there was no evidence that the pelagic fisheries have a significant impacts on ETPs. Therefore, the fishery passes clause F1.2.</p>			
F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality.			
<p>When interactions with ETP species are documented, the boarfish fishery implements measures to minimize mortality. These measures include the use of selective fishing gear, bycatch reduction technologies, and protocols for the safe release of ETP species when captured accidentally. In addition, the UK Marine Management Organisation (MMO) and Irish Sea Fisheries Protection Authority (SFPA) have established guidelines that mandate the use of best practices to ensure the welfare of any ETP species that may come into contact with fishing operations. Continuous training and awareness programs for fishers also help reinforce these measures. Therefore, the fishery passes clause F1.3.</p>			
References			
<p>ICES. 2022. Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. 4:91. 265 pp. https://doi.org/10.17895/ices.pub.21602322</p>			

Marshall, C.T., Macdonald, P., Torgerson, E., Asare, J.L. and Turner, R., 2021. FIS032 Design, development and deployment of a software platform for real-time reporting in the west of Scotland demersal fleet. Available at: <https://fiscot.org/wp-content/uploads/2021/05/FIS032.pdf>

Lopes, M., Murta, A.G. & Cabral, H.N. 2006. The ecological significance of the zooplanktivores, snipefish *Macroramphosus* spp. and boarfish *Capros aper*, in the food web of the south-east North Atlantic. *Journal of Fish Biology*, 69, 363–378.

ICES (2023). Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. Report. <https://doi.org/10.17895/ices.pub.24659484.v3>

ICES (2023). Bycatch of endangered, threatened and protected species of marine mammals, seabirds and marine turtles, and selected fish species of bycatch relevance. ICES Advice: Recurrent Advice. Report. <https://doi.org/10.17895/ices.advice.24681123.v1>

ICES (2024). Working Group on Widely Distributed Stocks (WGWIDE). ICES Scientific Reports. Report. <https://doi.org/10.17895/ices.pub.26993227.v1>

Sian Egerton, Sarah Culloty, Jason Whooley, Catherine Stanton, R. Paul Ross, Boarfish (*Capros aper*): review of a new capture fishery and its valorization potential, *ICES Journal of Marine Science*, Volume 74, Issue 8, September-October 2017, Pages 2059–2068, <https://doi.org/10.1093/icesjms/fsx048>

Links

MarinTrust Standard clause	1.3.3.1
FAO CCRF	7.2.2 (d)
GSSI	D4.04, D.3.08

F2	Impacts on Habitats - Minimum Requirements	
F2.1	Potential habitat interactions are considered in the management decision-making process.	Pass
F2.2	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.	Pass
F2.3	If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.	Pass
Clause outcome:		PASS

F2.1 Potential habitat interactions are considered in the management decision-making process.

The management decision-making process for the boarfish fishery in ICES areas 6 to 8 incorporates considerations of potential habitat interactions. This approach is guided by scientific assessments and stakeholder input to ensure that ecological impacts are factored into management plans. By evaluating how fishing practices may affect marine habitats, decision-makers aim to promote sustainable fishing while protecting marine ecosystems. Member states are required to comply with the Habitats Directive (Council Directive 92/43/EEC) and the Technical Measures Regulation (Regulation (EU) 2019/1241), which mandate protective measures for natural habitats and species. Member States must gather robust data on fishing efforts and bycatch to meet legislative obligations. Technological advancements, such as in-trawl cameras and automated catch profiling systems from various projects in Denmark, will be implemented to monitor and mitigate bycatch of endangered, threatened, or protected (ETP) species in UK and Ireland too as states member of ICES. Therefore, the fishery passes clause F2.1.

F2.2 There is no substantial evidence that the fishery has a significant negative impact on physical habitats.

Current evaluations reveal no substantial evidence that the boarfish fishery significantly impacts physical habitats. The use of pelagic trawls, which primarily target water-column species, minimizes disturbance to the seabed and surrounding ecosystems. As a result, the fishery has demonstrated a capacity to operate without causing significant harm to marine habitats, aligning with sustainability objectives. Therefore clause 2.2 is met.

F2.3 If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.

When potential interactions with physical habitats are identified, the boarfish fishery employs measures to mitigate any negative impacts. This includes adhering to regulations that govern fishing practices and implementing monitoring programs to assess habitat health. By establishing guidelines and protocols, management bodies work to reduce any potential ecological

harm, thereby ensuring the long-term viability of both the fishery and marine environments. Habitats are provided protection through the Natura 2000 network established under the EU Birds and Habitats Directives (2009/147/EC;92/43/EEC) and the corresponding national legislation (Natura 2000 in Denmark, National Order No. 1048/2013). Nevertheless, the fishery is known not to interact with physical habitats, this clause is not applicable and therefore, the fishery passes clause F2.1.

References

- [Natura 2000 | National Parks & Wildlife Service](#)
- [Improvement programme for England’s Natura 2000 sites \(IPENS\) - GOV.UK](#)
- [Protecting Europe’s biodiversity \(Natura 2000\) | EUR-Lex](#)

ICES. 2022. Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. 4:91. 265 pp. <https://doi.org/10.17895/ices.pub.21602322>

Marshall, C.T., Macdonald, P., Torgerson, E., Asare, J.L. and Turner, R., 2021. FIS032 Design, development and deployment of a software platform for real-time reporting in the west of Scotland demersal fleet. Available at: <https://fiscot.org/wp-content/uploads/2021/05/FIS032.pdf>

Links

MarinTrust Standard clause	1.3.3.2
FAO CCRF	6.8
GSSI	D.2.07, D.6.07, D3.09

F3 Ecosystem Impacts - Minimum Requirements		
F3.1	The broader ecosystem within which the fishery occurs is considered during the management decision-making process.	Pass
F3.2	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.	Pass
F3.3	If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.	Pass

Clause outcome: PASS

F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.

ICES sets reference points for boarfish stock management primarily to ensure sustainable exploitation, focusing on biomass and fishing mortality aligned with maximum sustainable yield (MSY). While these points do not explicitly incorporate the ecological role of boarfish, ICES integrates broader ecosystem dynamics through ecosystem overviews and assessments. These consider habitat conditions and fisheries' ecological impacts, including bycatch and the species' role within the food web.

The ICES Working Group on Widely Distributed Stocks (WGWIDE) and the Working Group on Bycatch of Protected Species (WGBYC) emphasize the Precautionary Approach and advocate for better integration of ecosystem considerations in stock management. Additionally, ICES highlights the need for collaboration between Integrated Assessment groups to operationalize ecosystem-based approaches for pelagic species, including boarfish. These efforts align with the European Commission's push for enhanced sustainability and ecosystem resilience in fisheries management. Therefore, the fishery passes clause F3.1.

F3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.

Boarfish have a role in marine ecosystems, feeding primarily on zooplankton like copepods and shrimps, and serving as prey for species such as sharks and eels, particularly around the Azores. However, studies in Irish waters suggest they are not a key prey species and do not have a significant ecological impact on predator populations.

While the fishery does not show evidence of adverse effects on the marine ecosystem, management remains cautious. The ICES Working Group on Widely Distributed Stocks (WGWIDE) acknowledges the ecological role of boarfish and emphasizes precautionary management, particularly given their interactions with other species. Although the stock is not overfished, continued monitoring and adaptive strategies are essential to ensure long-term sustainability and to mitigate any potential ecosystem impacts. Therefore, the fishery passes clause F3.2

F3.3 If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.

Mackerel is a vital species within the marine ecosystem; however, its catches in the boarfish fishery are minimal compared to the targeted mackerel fishery. The management plan includes closed seasons from March 31 to August 31 to protect herring and mackerel during their presence in boarfish areas. Since 2018, the total allowable catch (TAC) for boarfish has remained around 20,000 tons, with actual catches consistently falling below this limit. Thus, precautionary measures are integrated into management recommendations for species identified as significant to the marine ecosystem. Therefore, the fishery passes clause F3.3

References

O'Donnell, C., O'Malley, M., Smith, T., O'Brien, S., Mullins, E., Connaughton, P., Perez Tadeo, M., & Barile, C. (2020). Western European Shelf Pelagic Acoustic Survey (WESPAS), 03 June – 12 July, 2020. FEAS Survey Series: 2020/03. Marine Institute.

Lopes, M., Murta, A.G. & Cabral, H.N. 2006. The ecological significance of the zooplanktivores, snipefish *Macroramphosus* spp. and boarfish *Capros aper*, in the food web of the south-east North Atlantic. *Journal of Fish Biology*, 69, 363–378.

ICES (2023). Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. Report. <https://doi.org/10.17895/ices.pub.24659484.v3>

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Links	
MarinTrust Standard clause	1.3.3.3
FAO CCRF	7.2.2 (d)
GSSI	D.2.09, D3.10, D.6.09

SOCIAL CRITERION

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.

Appendix A - Determining Resilience Ratings

The assessment of Category B species described in this assessment report template utilises a resilience rating system suggested by the American Fisheries Society. This approach was chosen because it is also used by FishBase, and so the resilience ratings for many thousands of species are freely available online. As described by FishBase, the following is the process used to arrive at the resilience ratings:

“The American Fisheries Society (AFS) has suggested values for several biological parameters that allow classification of a fish population or species into categories of high, medium, low and very low resilience or productivity (Musick 1999). If no reliable estimate of r_m (see below) is available, the assignment is to the lowest category for which any of the available parameters fits. For each of these categories, AFS has suggested thresholds for decline over the longer of 10 years or three generations. If an observed decline measured in biomass or numbers of mature individuals exceeds the indicated threshold value, the population or species is considered vulnerable to extinction unless explicitly shown otherwise. If one sex strongly limits the reproductive capacity of the species or population, then only the decline in the limiting sex should be considered. We decided to restrict the automatic assignment of resilience categories in the Key Facts page to values of K , t_m and t_{max} and those records of fecundity estimates that referred to minimum number of eggs or pups per female per year, assuming that these were equivalent to average fecundity at first maturity (Musick 1999). Note that many small fishes may spawn several times per year (we exclude these for the time being) and large live bearers such as the coelacanth may have gestation periods of more than one year (we corrected fecundity estimates for those cases reported in the literature). Also, we excluded resilience estimates based on r_m (see below) as we are not yet confident with the reliability of the current method for estimating r_m . If users have independent r_m or fecundity estimates, they can refer to Table 1 for using this information.”

Parameter	High	Medium	Low	Very low
Threshold	0.99	0.95	0.85	0.70
r_{max} (1/year)	> 0.5	0.16 - 0.50	0.05 - 0.15	< 0.05
K (1/year)	> 0.3	0.16 - 0.30	0.05 - 0.15	< 0.05
Fecundity (1/year)	> 10,000	100 - 1000	10 - 100	< 10
t_m (years)	< 1	2 - 4	5 - 10	> 10
t_{max} (years)	1 - 3	4 - 10	11 - 30	> 30

[Taken from the FishBase manual, “Estimation of Life-History Key Facts”, <http://www.fishbase.us/manual/English/key%20facts.htm#resilience>]

Glossary

Non-target: Species for which the gear is not specifically set, although they may have immediate commercial value and be a desirable component of the catch. OECD (1996), Synthesis report for the study on the economic aspects of the management of marine living resources. AGR/FI(96)12

Target: In the context of fishery certification, the target catch is the catch of stock under consideration by the unit of certification – i.e. the fish that are being assessed for certification and ecolabelling. (GSSI)

Appendix 1- MarinTrust Fishery Assessment Peer Review Template

This section comprises a summary of the fishery being assessed against version 2 of the MarinTrust Standard.

Fishery under assessment	Boarfish (<i>Capros aper</i>) Boarfish Denmark FAO 27 ICES subareas 6 – 8
Management authority (Country/State)	Republic of Ireland, UK and European Commission
Main species	<ol style="list-style-type: none"> 1. Boarfish (<i>Capros aper</i>) 2. Mackerel (<i>Scomber scombrus</i>)
Fishery location	FAO 27 ICES subareas 6 – 8 (Celtic Seas, English Channel, and Bay of Biscay) FAO 27 ICES 6-8
Gear type(s)	Pelagic trawl, pelagic pair trawl
Overall recommendation. (Approve/ Fail)	Approve

Summary: in this section, provide any additional information about the fishery that the reviewers feel is significant to their decision.
<p>I couldn't locate the code (W15) anywhere in the report. It might be beneficial to include it at the beginning—perhaps in the title or a similar prominent location—to ensure the report is clearly identified.</p> <p>The assessment determination is well-articulated, with all relevant information used to evaluate the fishery provided in a clear and comprehensive manner.</p>
General Comments on the Draft Report provided to the peer reviewer
Added to the front page. Thanks

Summary of Peer Review Outcomes

Peer reviewers should review the fishery assessment report with the primary objective of answering the key questions listed in the table below. Where the situation is more complicated, reviewers may instead answer “See Notes”.

	YES	NO	See Notes
A – Fishery Assessment			
1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	X		
2. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	X		
3. Are the scores in the following sections accurate (i.e. do the scores reflect the evidence provided)?			
Section M - Management	X		
Category A Species	X		
Category B Species			NA
Category C Species	X		
Category D Species			NA
Section F – Further Impacts	X		

Detailed Peer Review Justification

Peer reviewers should provide support for their answers in the boxes provided, by referring to specific scoring issues and any relevant documentation as appropriate.

Detailed justifications are only required where answers given are one of the ‘No’ options. In other (Yes) cases, either confirm ‘scoring agreed’ or identify any places where weak rationales could be strengthened (without any implications for the scores).

Boxes may be extended if more space is required.

1. Is the scoring of the fishery consistent with the MarinTrust standard, and clearly based on the evidence presented in the assessment report?
The assessment report is well-constructed, providing the necessary information to justify the scores assigned to each category.
Certification body response
Thank you

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?
Yes, the Marintrust fishery assessment methodology and associated guidance has been adequately and clearly applied to this assessment.
Certification body response
Thanks

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?

The species categorization relies on the same information used in the previous report, as no updated data appears to be available. The fishery targets only two species: boarfish, which has been moved to Category A, and mackerel, which remains in Category C.

While the rationale provided contains interesting details, not all of it seems directly relevant to the species categorization section. I would recommend streamlining this part to focus on the most pertinent information

Certification body response

The rationale has been simplified to explain the catch composition avoiding further details.

3M. Are the scores in “Section M – Management” clearly justified?

Yes, the information presented in Section M (Management) is adequate. There appear to be no significant changes regarding the entities responsible for stock management.

The report effectively synthesizes the information, providing a clear and concise overview of all the agencies involved in the fishery, including those from Ireland, the UK, and the EU. I have no further comments.

Certification body response

Thanks

3A. Are the “Category A Species” scores clearly justified?

Yes, the information provided is sufficient to support the assigned score. The stock biomass is well above MSY Btrigger (and Blim), and fishing mortality is below MSY, confirming that the species meets the requirements for approval.

I have just a couple of minor suggestions:

A2.1: Correct 'IES' to 'ICES' and 'Category 11' to 'Category 1.'

A4.1: Consider moving the last graph from Figure 2 to this section for better alignment with the content

Certification body response

The typos have been corrected. One plot has been included in 4.1

3B. Are the “Category B Species” scores clearly justified?

No category B species identified in the catch.

Certification body response

NA

3C. Are the “Category C Species” scores clearly justified?

Atlantic mackerel is identified in the catch and assessed under Category C. The information provided is sufficient to justify the assigned score. Although the stock has experienced a significant decline in recent years, it remains above the MSY Btrigger threshold.

C1.2: It's intriguing to note the mention of age 12 for this species—I wasn't aware they could reach that age. Is this figure accurate?"

Certification body response

Yes, FishBase also contains this information. Typically, the average lifespan is around 7 years, but they can live between 7 and 12 years. Further this study reported even longer ages, Villamor, B., Navarro MR., Dueñas-Liaño, C., Antolínez, A. 2016. Criterios de Interpretación de la Edad en los Otolitos de la Caballa (*Scomber scombrus*) del Atlántico Nordeste. Documento Interno del IEO, Proyecto BIOPEL. Repositorio del IEO

3D. Are the “Category D Species” scores clearly justified?

No category D species identified in the catch.

Certification body response

NA

3F. Are the scores in “Section F – Further Impacts” clearly justified?

Yes, the scores are clearly justified, and the fishery appears to have a limited impact on ETP species and habitats. However, I have a few clarifications and suggestions:

F1.2: When mentioning “Reports from the International Council for the Exploration of the Sea (ICES) and national studies,” are you referring to specific reports listed in the references? If so, it would be helpful to cite them explicitly here for clarity.

F2.1: The rationale refers to Denmark. Have any new mitigation measures been tested there, and are these measures planned for implementation in this particular fishery? Clarifying this connection would strengthen the argument.

F2.2: The information in this section regarding interactions with ETP species should be moved to F1.2 for consistency. Additionally, does this information refer specifically to the boarfish fishery or to all trawl fisheries in the mentioned areas? Please clarify.

F3.1: The response here is somewhat general. It would be valuable to elaborate on whether the reference points set by ICES for the stock consider the ecological role of the species in the ecosystem.

F3.2: The sentence, “According to the Working Group on Widely Distributed Stocks (WGWIDE), while boarfish are recognized for their ecological role, concerns exist regarding their management” seems slightly awkward and might be difficult to understand. Consider rephrasing it for clarity, such as: “The Working Group on Widely Distributed Stocks (WGWIDE) acknowledges the ecological role of boarfish but has expressed concerns about their management.”

F3.3: Is there any information available on the volume of herring caught in the boarfish fishery? Including such details would enhance the section.

Certification body response

F1.2 - References have been included in the reference section for F1.

F2.1- Yes, the measures described in the statement regarding the boarfish fishery in ICES areas 6 to 8, including compliance with the Habitats Directive (Council Directive 92/43/EEC) and the Technical Measures Regulation (EU Regulation 2019/1241), are applied in both Ireland and the UK. These regulatory frameworks require Member States to adopt measures to protect marine habitats and species, ensuring that fisheries operations, including those targeting boarfish, minimize their ecological impact. Both Ireland and the UK have been actively involved in implementing sustainable fishing practices for the boarfish fishery, guided by scientific assessments from ICES and national research.

F2.2 The rationale has been amended and information related to ETPs have been moved to section 1.2.

F3.1 – The rationale has been amended following the comment.
 F3.2 – the wording has been reviewed.
 F3.3 – The WESPAS survey, carried out by the Marine Institute, has been a key tool for estimating the abundance of herring and boarfish in the shelf waters from 47°N to 58°30’N, providing important data for stock assessments. Despite its long-standing use and value, for 2024 the assessor has not found an accurate number for herring catches in this fishery. This discrepancy could be due to various factors, such as incomplete or uncertain data, or challenges in tracking specific catch figures for the 2024 period.

Optional: General comments on the Peer Review Draft Report

Certification body response