PE2110/E: Protect wild wrasse stocks

Scottish Government written submission, 4 December 2024

I am writing in response to the two questions asked in your letter of 8 November with regards to Parliamentary Petition PE2110: Protect wild wrasse stocks.

What considerations has the Scottish Government given to applying Total Allowable Catch limits to commercial wrasse fishing?

The Scottish Government has no current plans to introduce a Total Allowable Catch (TAC) limit for each of the five constituent species of wrasse. However, the Scottish Government is co-funding a PhD research studentship investigating appropriate principles of possible catch rules for wrasse species. This PhD work has been submitted for publication.

There are inherent challenges in developing a biological TAC (Total Allowable Catch) based on quantitative stock assessments for each wrasse stock that takes account of the sustainability of that stock. We are not aware of any measures currently in place in the UK, EU or further afield. These difficulties arise because wrasse are landed live for use as cleaner fish in salmon farms, and are indeed the only fin fish in Scotland that are landed live in this way. The data required to undertake a stock assessment to inform the setting of a biological TAC limit would require handling and measuring live fish, and unlike traditional consumption fisheries it is not possible to extract biological material for establishing age-length estimates critical for undertaking stock assessments.

There are further practical difficulties in gathering information about the wrasse fishery, due to the characteristics of the fleet and onboard operations. The captured fish do not go to traditional consumption fisheries market, removing the possibility of high volume sampling of landings at markets. Gathering biological data would mean extended handling of live fish, potentially causing damage and distress to the fish, and resulting in less marketable fish or increased fatalities. Alternatively, the required data may be obtained from sampling of landed (deceased) fish from fisheries independent surveys to obtain biological parameters. However, any new work in this area would need to be considered alongside other priorities.

Considerations have been made for sampling wrasse after they have been used in salmon farms. However, this would not be suitable because the fish would have been maintained in artificial conditions having been fed, sheltered from predation and medicated, and so would not be indicative of the wild populations.

Catch limits are applied in Norway, based on landings in preceding years prior to the limits were introduced. These limits are carried forward and have remained the same since being introduced in 2017. The issue with this approach is it is static (based on a fixed point in time) and is therefore not a valid measure of sustainability. It assumes constant productivity over time, and does not account for fishing or environmental changes, but most importantly presumes that historical landings reflect current abundance, and does not distinguish between availability and abundance.

It is also important to note that the stock structure for each wrasse species is unknown. Each wrasse species may be highly localised (for example such as crab and lobsters which have twelve separate assessment areas in Scotland), or it may be distributed across the North Atlantic (such Northeast Atlantic mackerel). If localised, individual assessments and limits would need to be applied in each area for each species. If on a wider, e.g. UK or European level, coordinated data sampling would be required across the stock distribution, and the catch of fish in Scotland could be inconsequential to that of the stock across its distribution. Setting an arbitrary stock boundary, which neither fish or sea currents recognise, does not in itself support a sustainable fishery.

Evidence from Norway points to suboptimal consequences of establishing a catch limit for wrasse stocks. Catch limits imposed there have resulted in an Olympic fishery, whereby fishers seek to maximise effort and land as many fish as possible before the overall limit has been reached. This resulted in the fishery closing part way through the season, which can be problematic as landed wrasse are a live fish and to be most effective should be available when sea lice are found on salmon farms (which can be later in the season).

In Scotland, our preferred approach is to use a combination of management measures to protect wrasse species, such as limiting fishing gear, minimum/maximum landing sizes and an open/closed season. These management measures are based on the best available evidence and kept under review by the Scottish Government. The controls are administered via licence conditions which ensures that if they need to be amended based on emerging evidence, this can be done so swiftly it can be done swiftly.

What discussions has the Scottish Government had with the UK Government on the development of its Wrasses Complex Fisheries Management Plan, specifically what consideration has been given to developing similar measures for Scottish waters?

As the Cabinet Secretary for Rural Affairs, Land Reform and Islands noted at the RAI Committee meeting of 6 November[1], the Scottish Government has set out the selection criteria used for the first Fisheries Management Plans (FMPs) within the Joint Fisheries Statement (JFS). Our resources are focussed on delivering the 43 FMPs in partnership with the four UK partnership fisheries policy authorities, with Scotland leading on a significant number of those FMPs.

While wrasse is not a species included on the list of UK-wide FMPs in the JFS, we have commissioned the Sea Fish Industry Authority (Seafish) to undertake some initial scoping work to help inform our approach to non-quota species (which includes wrasse) FMPs in Scotland. The Scottish Government and Seafish are engaged with DEFRA on the work they are undertaking.

In Scotland, we continue to improve the evidence base and management of the wild wrasse fishery; have invested in research to continue to inform our decision making to protect the stocks; including development of a Productivity Sustainability Assessment; are alive to developments in academic literature; have a flexible management structure in place to ensure we can respond to such developments;

[1] Meeting of the Parliament: RAI/06/11/2024 | Scottish Parliament Website

and are undertaking a fisheries assessment ahead of the 2025 fishery opening. A FMP is not required to progress any of this work.

Finally, I would like to take this opportunity to clarify that we received a copy of the unpublished Glasgow University report in 2024, and not in 2020, as the petitioner said in their submission of 28 October, hence why an appropriate assessment is being undertaken prior to the 2025 wild wrasse fishery opening. It is not the responsibility of the Scottish Government to publish the report that was commissioned by NatureScot.

I hope this information is helpful.

Yours sincerely,

Marine Directorate, Scottish Government