



Inshore Fisheries and Conservation Authority

Brixham Laboratory
Freshwater Quarry
Brixham
Devon
TQ5 8BA
Tel: 01803 854648
Email: office@devonandsevernifca.gov.uk

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Dear Sirs,

Wild Wrasse Harvesting: Consultation on Proposed New Mandatory Fishing Measures

I am writing on behalf of Devon and Severn Inshore Fisheries and Conservation Authority (D&S IFCA), in response to your recent consultation call regarding new mandatory fishing measures for wild wrasse harvesting in Scottish waters. D&S IFCA is the statutory manager of sea fisheries from baselines out to six nautical miles in the waters of the D&S IFCA's District and has been managing a Live Wrasse Fishery in these waters under a permit-based byelaw approach since 2017. In this context, I am writing to provide our input based on your consultation questions, as well as to provide additional information that may help to inform your future approach to managing the Live Wrasse Fishery in Scotland.

Detailed Context of D&S IFCA's Response

D&S IFCA has introduced a Potting Permit Byelaw which is used to manage potting activity in its District. Within the Permit Conditions of the Byelaw are specific measures to manage the Live Wrasse Fishery in D&S IFCA's District. These include a mandatory closed season, species-specific maximum and minimum conservation reference sizes, a cap on effort of 480 pots for the fishery, and voluntary closed areas, within a restricted well-defined geographic area of Plymouth Sound. There is also an obligation for wrasse fishers to provide landings figures every two weeks as part of a fully documented fishery. These management measures are well-supported by evidence collected by D&S IFCA officers through on-board observer surveys and landings forms submitted by fishers. The on-board observer surveys allow for collection of detailed data on the species, size, and spawning state (and, where possible, sex) of each fish caught. D&S IFCA officers achieve approximately 10% coverage of fishing trips in each season with these surveys, while the mandatory landings forms submitted by fishers give an overview of the number of wrasse caught and the fishing effort for each day of fishing.

Consultation Response and Additional Information

The responses below relate directly to the management measures detailed in question 1 of the online consultation:

Season closing dates, 1 December to 1 May

D&S IFCA agrees in principle with the implementation of a mandatory closed season for the live wrasse fishery. However, this closed season would likely be most useful if it were to coincide significantly with the spawning season of the targeted species. In the D&S IFCA's District, the closed season is in force 1st May – 15th July, as the literature and our analysis of spawning data suggests that this window provides adequate protection of spawning individuals in the District. Wrasse spawning seasons typically occur between April and September, but this varies by location and between species. A short scan of the literature suggests that April to June may be appropriate in Scotland, but it is likely that more data will

be required from fished areas in Scotland to develop a more thorough understanding of the local situation.

Depending on the distribution of the fishery activity, the implementation of closed areas may also benefit local wrasse populations. Given the small home range sizes of these species, it is likely that even small protected areas could have a beneficial impact on maintaining local populations, and perhaps inducing spill over effects at high population densities. Much work has been done in Norway on the success of closed areas.

Reporting of numbers of wrasse caught and returned

D&S IFCA has introduced a requirement under Paragraph 17 of its Potting Permit Byelaw that fishers collect data on all fishing days, which included the area fished (using a predetermined grid system) total number of pots deployed, number of strings fished, total daily number of species of wrasse retained.

Minimum and Maximum landing sizes

D&S IFCA also agrees in principle with the implementation of a minimum and maximum landing sizes for all species, but we would suggest that the sizes proposed will require monitoring and review. In the D&S IFCA's District, the minimum and maximum conservation reference size of 12–23 cm was insufficient for corkwing wrasse, as this resulted in the retention and landing of nearly all the catch. As a result, it was likely that all mature males, females and a proportion of immature males were retained, and this is unlikely to be sustainable, depending on the overall level of fishing effort. In order to protect a larger proportion of mature males and juvenile females, D&S IFCA implemented a change in the landable size range for corkwing to 14–18 cm in 2018.

The size range proposed in the consultation for ballan wrasse (12–24 cm) is considerably wider than that implemented by D&S IFCA. D&S IFCA has implemented a landable size range of 15–23 cm, which we believe is important in this hermaphroditic species. At larger sizes, and under appropriate ecological conditions, ballan wrasse undergo a sex change from male to female; D&S IFCA's introduction of that a landable size range of 15–23 cm helps to protect larger mature males whilst also affording protection to a subset of the mature females under 15 cm. However, it should be noted that there is some evidence in the literature that female ballan wrasse may not mature until they reach 16 cm. The landable size range for goldsinny and rock cook wrasse in D&S IFCA's District is currently 12–23 cm, though we are currently consulting on a change in management to prohibit the landing of rock cook, based on recently observed declines in catches and landings per unit effort for this species over the 2017–2019 period. The landable size range for cuckoo wrasse in D&S IFCA's District is 15–23 cm, although this species is generally returned to the sea if caught, as it is not required by the Salmon Farm Agent to which the fishers land.

Otter exclusion devices, such as a fixed-eye aperture, will be used at the entrance to the trap and traps must feature escape hatches

D&S IFCA has introduced management measures in estuaries in its District, under its Potting Permit Byelaw, where the permit condition 2.2 states:

‘Within the estuaries to the landward of the coordinates set out in the attached Annex 3 of this Permit, a permit holder or named representative, is not authorised under the Permit, to use any pot for the purposes of fishing, with an entrance at its narrowest point of 85mm or less in width unless;

- a) the entrance to the pot at its narrowest point is fitted with a ring constructed of a rigid material and;
- b) the ring is fitted across the narrowest part of the entrance to the pot and is the same width as the narrowest part of the entrance to the pot.

Traps to be lifted at a maximum rate of 6 metres per minute

While this requirement may prove difficult to monitor and enforce, anecdotal evidence suggests that this could be a valuable measure in improving the efficiency of wrasse use post-capture. Rapid pot hauls have been anecdotally associated with pressure-induced swim bladder damage, which is likely to reduce survivability of wrasse landed or returned to sea. Knowledge of this issue is likely to result in a high level of self-compliance.

Traps should not be deployed / lifted when the water temperature is $>17^{\circ}\text{C}$

This requirement may also prove difficult to monitor and enforce.

A maximum of 250 traps per vessel may be deployed

D&S IFCA has limited to the number of pots to 480 for the fishery as a whole. Currently there are four fishing vessels involved in the fishery – allowing for 120 pots per vessel. Should any new entrants wish to join the fishery this be decreased accordingly. D&S IFCA undertook research on the number of pots used in the Cornwall and Dorset wrasse fishery and the Authority determined that this level of effort would be acceptable, under precaution, to allow a fishery to take place whilst research was undertaken to determine if this level of effort on the catches and landing, and hence the impacts on the wrasse populations and wider ecosystem, could be assessed.

Requirement to accept observers if requested

Over the last three years, D&S IFCA has found immense value in conducting on-board observer surveys. These surveys have been critical in discerning important indicators of fishery sustainability at the species level, which would not be possible using fishers' landings data alone. Appropriate data collection through on-board observer surveys would, for example, allow greater certainty in the spawning seasons of wrasse in Scotland, and an improved understanding of whether the implemented closed season is serving its purpose. D&S IFCA would therefore strongly recommend the implementation of a programme of observer surveys. However, whilst that the data returned by fishers in Scotland, detailing the catch from the first 20 pots deployed each week, may provide sufficient data for some management purposes, D&S IFCA has requested that fishers in its District undertake this sampling, in parallel to observer on-board surveys, to compare the data collected and evaluate its usefulness. Referring to paragraph 3.2 of Annex A, it may be useful to also quantify the numbers of landed wrasse for comparison with the numbers of returned wrasse (as opposed to just the weight of landed wrasse).

Requirement to have REM or another appropriate inshore vessel monitoring if requested

Monitoring of the spatial distribution of fishing effort, and the ability to link catches/landings with specific fished areas would likely provide valuable data on local-scale patterns of catch composition and trends in LPUE and CPUE that could inform adaptive management, for example through closed areas.

Do you agree with the eligibility criteria for permit application?

D&S IFCA uses a permit-based system for fishing activities in its District. However, permits are not limited in number. D&S IFCA determined to limit the level of live wrasse fishing effort in a spatial area under the Potting Permit conditions. As part of the fully documented fishery guidance D&S IFCA request information form the fisher on the Salmon Farm Agent, the Salmon Farm and transport company.

Additional Information

In 2017, an extensive literature review was undertaken to look at Live Wrasse fisheries around the world. This help determine the management measures D&S IFCA introduced at this time. In 2019/2020 a comprehensive review of the Wrasse Fishery in the D&S IFCA's district was undertaken. This review three years' worth of data collected from the fishers and on board surveys. All data collected were analysed and a report was published in February 2020. The report produced is attached for your information together with the initial literature review that was undertaken. Also enclosed is the Policy and Guidance information relating to this fishery. D&S IFCA would be happy to work with Marine Scotland and assist in any management considerations that it is proposing. It would be beneficial to both organisations if a collaborative working relationship could be established and allow for sharing of information about the fisheries in the areas of jurisdiction. D&S IFCA would be very interested in the fishers sampling programme that Marine Scotland has introduced and the results of this work.

I hope that this response is useful. Please contact me using the details above if you would like further information. I look forward to the opportunity to discuss the Scottish live wrasse fishery further.

Yours sincerely,

Mat Mander

Acting Chief Officer