



Potting Permit Byelaw

Formal review of the Live Wrasse Pot
Fishery



**Supplementary Report for members of the Byelaw and
Permitting Sub-Committee**

30th October 2018

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1. Summary (of supplement)

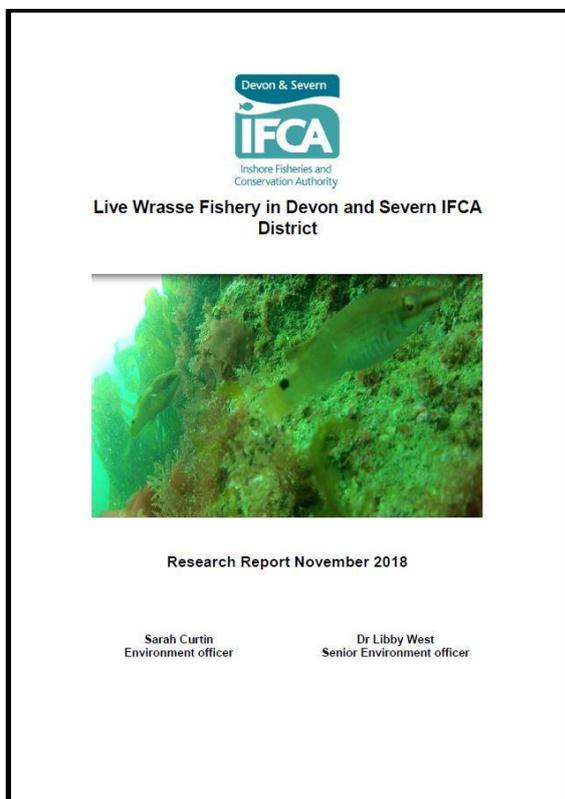
This supplementary report has been prepared for members of the Devon and Severn Inshore Fisheries and Conservation Authority (D&S IFCA) Byelaw and Permitting Sub-Committee and will be used to aid members conduct the formal review of the Live Wrasse Pot Fishery.

This will be the second formal review conducted by the Byelaw & Permitting Sub-Committee and build on from the last formal review that began in November 2017 and resulted in changes to the Potting Permit Conditions that were issued in August 2018.

Following the meeting of the Byelaw and Permitting Sub Committee (20th November 2018), the information documented in this supplementary report and the outcome of the meeting will be used to create a full report. The resulting report will detail what changes (if any) are proposed and document the complete decision-making process including the findings of any consultation that is undertaken. It is possible that during this formal review of the Live Wrasse Pot Fishery, members may determine that changes to the Potting Permit Conditions are required. If so, specific provisions or alteration to existing permit conditions would require consultation.

The completed process and progress report, when finalised, will then be suitable for public circulation and archiving as a single document.

A key element of decision making in the 2018 formal review will be to review the current management measures introduced via the Potting Permit Conditions and to analyse the [Live Wrasse Fishery in the Devon and Severn IFCA District \(November 2018\)](#) report that documents the findings from D&S IFCA's research that has been conducted over the last 12 months.



2. The decision-making & measures taken to date

The table below summarises the past decision making and the outcomes of those decisions:

Key Dates	Event & Comments	Outcomes
4 th November 2016	After seeing the emergence of the Live Wrasse Pot Fishery, D&S IFCA informs all commercial Potting Permit Holders that it is considering new management measures	Potential management options to be considered by the Byelaw & Permitting Sub Committee in 2017.
24 th February 2017	<p>Sub-Committee Meeting</p> <p>5 Proposals developed:</p> <ul style="list-style-type: none"> • Implement a Fully Documented Fishery • Pot Limitation (60 pots per vessel) • Requirements to mark gear • Closed season (between 1st April & 31st July) • Min & Max Sizes 120mm to 230mm (Rock cook, Goldsinny & Corkwing) 150mm to 230mm (Ballan & Cuckoo) 	Consultation for the Live Wrasse Pot Fishery is undertaken with all responses summarised.
15 th May 2017	<p>Sub-Committee Meeting</p> <p>Decisions Taken:</p> <ol style="list-style-type: none"> 1. Implementation of Fully Documented Fishery 2. 120 Pot limits per permit holder 3. Gear marking “WRA” required 4. Closed Season – 1st April to 30th June 5. Introduction of Min & Max sizes as set out in proposals. 6. Issue of a Policy Statement, 7. Requirements for fishers to allow officers aboard for surveys 8. Voluntary Closed Areas Introduced 9. Formal Review to be conducted in November 2017 	<p>Potting Permits amended and issued in July 2017.</p> <p>A Report was created to document complete process. The Report is still published on D&S IFCA Website (File F of the resource library) – “Management of the Live Wrasse Pot Fishery” Version 3 – August 2017</p>

13 th November 2017	<p>Sub-Committee Meeting Members of the Byelaw & Permitting Sub – Committee began the 2017 Formal Review by studying a Live Wrasse Fishery Data Analysis Research Report (November 2017) by Dr Libby West & Stephanie Davies. Consultation actioned to begin in January 2018.</p>	<p>2 Specific Proposals were formulated including proposed amended Permit Conditions:</p> <ul style="list-style-type: none"> • Change to closed season to be 1st May to 15th July inclusive. <p>Change in the slot size for Corkwing Wrasse to be 140mm to 180mm.</p>
12 th April 2018	<p>Sub-Committee Meeting Decisions Taken (Live Wrasse Pot Fishery)</p> <ul style="list-style-type: none"> • Potting Permit Conditions to be implemented to amend closed season to be 1st May to 15th July each year. • Potting Permit Conditions to be implemented to amend the slot size for Corkwing wrasse to be 140mm to 180mm. • New guidance to be issued (Voluntary closed areas) • A date set for another review in November 2018 	<p>Potting Permit Conditions were amended with new conditions, and voluntary measures issued in August 2018.</p> <p>D&S IFCA Environmental Officers were actioned to continue with the Fully Documented Fishery in preparation for presenting evidence for the 2018 formal review.</p>

Additional Information

The following information is available to viewed in the resource library of the D&S IFCA website and has also been imbedded in this document (hyperlinked).

- [Management of the Live Wrasse Pot Fishery \(Version 3 August 2017\)](#)
- [Data Analysis Research Report \(November 2017\) by Dr Libby West & Stephanie Davies](#)
- [Development and Management of the Live Wrasse Pot Fishery – Edition 2 - Final Report \(July 1st, 2018\)](#)
- [Current Potting Permit Conditions \(Version control 1st August 2018\)](#)
- [Policy and Guidance for the Live Wrasse Fishery \(Version control 1st August 2018\) – Includes the voluntary measures that have been introduced](#)
- [Live Wrasse Fishery in the Devon and Severn IFCA District \(November 2018\)](#)

3. Live Wrasse Fishery in the Devon and Severn IFCA District (November 2018)

Executive Summary from the Research Report

A fishery for the live capture of wrasse for use as cleaner fish in Scottish salmon farms developed in the Devon and Severn Inshore Fisheries and Conservation Authorities' (D&S IFCA) District in 2015. In 2017 management was introduced via the D&S IFCA potting permit byelaw. These early management measures were largely based on best practice identified in the literature and included minimum and maximum conservation reference sizes (MCRSs), a closed season, a fully documented fishery and a cap on effort. A fully documented fishery was also implemented including fisher log books and observer surveys. After the first year of data collection, some adaptations to the MCRSs and spawning closed season were adopted. The fully documented fishery continued in 2018 and the results are presented in this report.

There was a reduction in overall effort in 2018 compared to 2017 with a 68% reduction in the number of days vessels targeting wrasse in the D&S IFCA District. The reduction is thought to have been caused by a combination of mechanical issues with vessels, individual fisher's circumstances, fishers targeting Cornish waters within the Plymouth Sound during the Devon closed season and vessels remaining in Cornwall once Devon waters reopened.

The mean target observer effort was exceeded; however, the coverage of the vessels and the months was uneven despite extensive efforts in survey planning. There was a 29% decrease in mean landings per unit effort (LPUE) for 2018 compared with 2017. In contrast, there was a slight (~5%) increase in catch per unit effort (CPUE) from 2017 to 2018. The disparity between CPUE and LPUE could be caused by the relatively small sample size of CPUE resulting in an unrepresentative trend, or the proportion on small individuals increasing so that CPUE (which includes undersize and oversized fish) has a genuinely different trend to LPUE (which only includes fish above the Minimum CRS and below the Maximum CRS). The reduction in LPUE could also be caused by the change in Minimum and Maximum CRSs for corkwing, which has resulted in much higher numbers of fish being returned.

Spatially and temporally explicit data analysis was undertaken using the high-resolution CPUE analysis. No consistent trend in CPUE was found within individual grid cells between 2017 and 2018. Out of two vessels which could be compared between years, one had a small but significant reduction in CPUE. Differences in CPUE between months varied with months showing slightly reduced catches (June, July, September) and one month having increased CPUE (August). None of these comparisons were statistically significant.

Size-frequency distributions were remarkably similar between years as were mean sizes of individual wrasse species.

A more in-depth analysis of catch-composition and changes in size-structure between years is required but was not possible given the time-constraints of reporting. The complex spatial and temporal dynamics of the fishery will require a new approach to analysis in 2019.

Observer coverage should at least maintain the current effort, but with more even coverage, where possible. Greater coverage would improve statistical analyses, but this is unlikely given the current level of resource. Similarly, a fisheries-independent data set would be beneficial to separate changes in catch from spatial changes in effort, or observer coverage, but would require significant extra resource which is not currently available.

Conclusions and Officer Comments from the Research Report

The ultimate goal of the fully documented fishery implemented by D&S IFCA is to elucidate a relationship between some measure of fishing pressure and stock abundance. In this case CPUE and LPUE estimates are assumed to be related to the abundance of wrasse in Plymouth Sound. Whilst entirely consistent with global efforts to measure fisheries trends, this approach does have some caveats, especially in a fishery as complex as the live wrasse fishery (Ross 2016). However, it cannot be ruled out that reductions in LPUE and reductions in the occurrence of above-average catches may be caused by fishing pressure reducing the stock size. A reduction in the stock size is entirely consistent with the development phase of a new fishery and does not necessarily mean that the fishery is unsustainable. Due to the sensitive nature of the site the fishery should continue to be closely monitored, with the observer coverage remaining at least at its current level. A more even coverage of vessels would allow for a more powerful statistical analysis, but this is often hampered by logistical circumstances and realistically could only be managed by an increase in observer effort which would not be possible at the current level of resource.

Fishers must be reminded of their obligation to submit landings forms on a weekly basis. This was not regularly conformed to in 2018 with IFCA officers having to chase fishers to submit landings. Fishers should also be required to submit all landings for both D&S IFCA and Cornwall IFCA Districts, as fishers are currently inconsistent in their approach.

The Habitat Regulation Assessments for fish traps in Plymouth Sound will be updated following the 2018 report.

Further interrogation of the data collected in 2017 and 2018 will help in the interpretation of CPUE and LPUE and officers will continue with this work in 2018 and 2019. The amount of data collected, and the number of potential interacting factors influencing CPUE (e.g. water temperature, month, pot saturation, habitat type, depth, bait, exposure) means that statistical analyses are becoming increasingly complex and are unlikely to remain fit-for-purpose. A more appropriate method (such as generalized linear modelling) will be developed in time for the 2019 data analysis. With each subsequent year of data collection, the analysis becomes more complex and the time required to analyse and report on findings increases. It would be pertinent to consider this in the planning of future Byelaw and Permitting Subcommittee meetings.

4. The Management Process

When implementing past measures to manage the Live Wrasse Pot Fishery, the Authority clearly defined criteria to monitor the development of this fishery and review the decisions taken. The criterion is as follows:

- The Authority decided that if there was an increase in the number of vessels entering the Live Wrasse Pot Fishery this would trigger a review of the Permit Conditions for the Live Wrasse Fishery, and may lead to further changes to the Permit Conditions, which may include a reduction in the number of pots per vessel
- The Authority decided that a review of the management of the Live Wrasse Fishery will be undertaken in November 2018. Data collected from fishermen and on-board surveys will inform the review of the permit conditions for the Live Wrasse Fishery and may lead to changes to the Potting Permit Conditions (specific to the Live Wrasse Pot Fishery)
- Fishermen are required to allow D&S IFCA officers on board their vessels to collect catch data for the fishery
- Failure from the fishers to meet all the conditions as set out in the policy statement (directly issued to fishers) may also trigger a review of the Potting Permit Conditions
- In addition to formal management under the Potting Permit Conditions, the Authority may introduce further voluntary measures to support the management of the Live Wrasse Fishery
- Failure to adhere to the voluntary measures (directly issued to fishers) may lead to a review of the Permit Conditions (specific to the Live Wrasse Pot Fishery).

As part of the 2018 formal review of the Live Wrasse Pot Fishery, members can review and potentially amend the above criteria and consider amendments to the voluntary measures set out in section 5 of this supplement.

5. Guidance & Voluntary Measures

Further to the regulatory conditions, D&S IFCA has developed additional guidance to support these measures and the fishery. This guidance is in the form of voluntary measures to be adopted by those fishermen participating in the Live Wrasse Fishery.

1. The Live Wrasse Fishery currently takes place within the Plymouth Sound and Surrounds SAC and in a small area at the western end of the Start Point to Plymouth Sound & Eddystone SCI (Bigbury Bay reef area). It is not occurring in the other thirteen Marine Protected Areas in the District.
2. A series of small closed zones to the Live Wrasse Fishery or 'No Wrasse Pot Zones' have been identified through discussions with the fishermen. These areas lie within the fishery area in the Plymouth Sound and associated area and include reef habitat known to be favoured by the wrasse species fished. From research in Norway such areas have been found to afford protection for wrasse species that have high site fidelity and small home ranges/territories. Figure 1 shows the areas to be closed.
3. A small area east of Stoke Point has been allocated as a zone for the fishermen to place wrasse pots, for protection against potential gear damage during south westerly storms. Fishermen should notify the IFCA when they will be placing pots in this area and when those pots are removed.
4. Mount Batten Breakwater is known to be a popular angling mark and in order to remove any conflict with anglers in this area, fishermen are requested to keep their pots 30 m from the pier.

