



Development of the Mobile Fishing & Diving Permit Byelaws

Scallop Closed Season

A Summary of Responses from the Pre-Consultation on the Scallop Closed Season and Additional Information

(10th September 2020 to 9th Oct 2020)

10th February 2021

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Part 1

1. Aim of Report

This report (10th February 2021) has been prepared for members of the Devon and Severn Inshore Fisheries and Conservation Authority's (D&S IFCA's) Byelaw and Permitting Sub-Committee (B&PSC) and for all stakeholders to examine via its publication on the D&S IFCA website.

This report provides information that will inform the development of the Permit Conditions for the Mobile Fishing Permit Byelaw and the Diving Permit Byelaw. It is divided into four parts, with the second part focussing on the consultation response from the Scallop Closed Season – Have Your Say 4-week consultation that ended on 9th October 2020. Part 3 includes assembled research and scientific information including spawning periods and landings data. The final section includes a recommendation by officers for consideration by the B&PSC.

This report includes embedded information (Hyperlinks) that give readers access to additional information. All additional information embedded in this report is freely accessible within different sections of [D&S IFCA's Website Resource Library](#).

Anonymised information from some responses has been extracted, rather than summarising it and this is demonstrated with the use of purple italic font. Officer comments, in blue italic font, are included in the report to provide some clarity and factual information relating to some of the points of view made by those that responded.

2. Background Information

The closed season for scallops (July, August and September) applies to both the commercial diving and "at sea" mobile fishing sectors (scallop dredgers). It was derived from a legacy Byelaw introduced by Devon Sea Fisheries Committee although its area of application was extended to the whole District when incorporated into the separate permit byelaws (permit conditions).

The opportunity has existed in recent years for both sectors to highlight concern associated with the closed season during set permit condition review periods; however, this opportunity has not been taken by many. More recently there has been increased correspondence from commercial divers impacted each year from reduced access to scallop stocks in the summer months and on-going business difficulties as a result of the Covid-19 pandemic. Enquiries have requested relaxation of management on a local level and the potential intervention of Defra to direct relaxation of fisheries legislation in an attempt of supporting business.

The B&PSC have previously highlighted the scallop closed season as relevant to both the commercial diving and mobile fishing sectors (scallop dredgers). Although there are clearly differences in the two fishing methods the B&PSC have concluded that the topic of any potential change to the scallop closed season should not be limited to one sector alone.

On 17th August 2020 the B&PSC recognised that pre-consultation at an early stage can provide more information and possibly evidence that may assist the decision making of the B&PSC for potential change regarding the scallop closed season.

Officers were actioned to prepare and conduct an "open" type of "Have Your Say" informal pre-consultation with all stakeholders regarding potential changes to the scallop closed season.

Review Process & Timelines

The Mobile Fishing Permit Byelaw and the Diving Permit Byelaw are being subjected to a five-year review. In both cases this is effectively a re-make of both byelaws. The reviews of the overarching byelaws provide the opportunity to review aspects of the associated permit conditions that are used to manage the different fishing activities. The current Mobile Fishing Permit Byelaw and the current Diving Permit Byelaw also include a review process (for permit conditions) and it is a review of current permit conditions that is applicable for decision making at this time.

Officer Comment:

As each overarching byelaw is reviewed, it is logical and time efficient to examine the Permit Conditions that will potentially become (or remain) as conditions for fishers. It was envisaged that this "Have Your Say" consultation would inform the review and re-making of both the Mobile Fishing Permit Byelaw and the Diving Permit Byelaw, rather than informing a review of present permit conditions that fall under the current permit byelaws.

This course of action was presented to and agreed by the B&PSC on 17th August 2020; however, in the interim period officers have recognised that the work required in re-making both Byelaws is time consuming and likely to extend well into 2021 or potentially 2022.. Officers have concluded that if the findings of this consultation result in the B&PSC concluding that changes should be implemented to permit conditions, the required amendments¹ could be applied to current permit conditions (via the review process) in the shorter term, rather than solely to inform re-made byelaws and the associated permit conditions.

3. How the Consultation was Conducted

The Scallop Closed Season – Have Your Say 4-week consultation had the aims of highlighting the existing restrictions, to seek the views of all stakeholders on this existing management and to provide the opportunity for alternative suggestions to be submitted. Information was prepared and directly circulated via mail chimp to 1268 people and organisations on D&S IFCA's email contact data base. 681 of recipients opened the email. D&S IFCA's Website and Facebook were used to support the four-week consultation that ended on 9th October 2020.

- [Pdf version of Mail Chimp Circular](#)
- [Pdf version of D&S IFCA Website & Facebook News Item \(10th September\)](#)
- [Pdf version of D&S IFCA Website & Facebook News Item \(24th September\)](#)

The Mail Chimp circular explained the purpose of the information gathering exercise and how the collected information would be used.

Options were provided for engagement as follows:

1. Contact us via email – consultation@devonandsevernifca.gov.uk
2. Write to us

Ideally the option for one to one surgery sessions would have provided another option for stakeholders to express their views. Due to Covid-19 and a change in working practices, this option was not available for this information gathering exercise.

¹ After considering an additional final phase of formal consultation specific to permit changes identified by the B&PSC

4. Topics and Questions

Although some questions were included to assist stakeholders in preparing a response, stakeholders had freedom to expand their feedback beyond the set questions.

Topic 1: Your Interests

- a) What interest do you have regarding the scallop closed season?
- b) Are you a fisher with a mobile fishing permit, a diving permit or someone else with a different interest?

Topic 2: Benefits and disadvantages of the scallop closed season

- c) What is your view on having a scallop closed season in place?
- d) What are the benefits for the fishery?
- e) What are the benefits to you and others?
- f) What are the disadvantages to you and others?

Topic 3: Length and dates of the scallop closed season

- g) What is your view on the length of the three-month scallop closed season?
- h) What is your view on when the scallop closed season should apply?

Topic 4: Alternatives

- i) What alternatives suggestions do you have to the scallop closed season?
- j) What are the benefits or disadvantages of your suggestions for yourself or others?

Topic 5: Other information

- k) If you have more to say regarding the scallop closed season, please tell us.

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Part 2: The Consultation Response

5. Who Responded?

A total of 34 responses were received during the four-week consultation period which ended on 9th October 2020. The response submitted by those with the strongest interest in commercial diving was relatively large and demonstrates how important this issue is to them. Two stakeholders responded twice, some responses were submitted by permit holders (owners of vessels) and some were submitted by named representatives (masters of vessels). Not all fishers that responded are listed on the D&S IFCA's permit data base, indicating that they may be crew on vessels being used for fishing activity.

The responses have been divided as follows:

Group	Number of Responses
Commercial Divers	10
Recreational Divers	3
Mobile Fishers (with Cat 1 Permits)	6
Conservation Interest	5
Other (including fishers with static gear and one with a Category Two Mobile Fishing Permit)	10
Total	34

Based on the total numbers of permits issued² within the District to commercial divers (25) and permits issued to mobile fishers operating at sea (125), the percentage of responses submitted per group is as follows:

- **40 % of commercial divers responded.**
- **5 % of “at sea” mobile fishers responded.**

Feedback was received regarding the consultation process and the timing of it. It was suggested that this is the first time there had been an opportunity for fishers to raise their concerns regarding the scallop closed season. Questions were also raised as to why the consultation period, of approximately one month, was so short.

Officer Comments:

Past reviews of permit conditions have provided the opportunity for fishers to raise concerns relating to the scallop closed season; however, the past responses relating to this issue were minimal. Previous engagement has been documented in reports that are all available to view on D&S IFCA's website. A month-long period of engagement, including direct notification is considered by officers and the B&PSC to be enough for this more informal type of information gathering exercise. If present permit conditions are recommended for amendment, then a final phase of formal consultation (demonstrating how amended permit conditions will function) will also be conducted. It should be noted that Defra guidance is clearer regarding consultation requirements when whole Byelaws are created or re-made. In regard to formal consultation, this will be conducted when each Byelaw (and associated permit conditions) are at an

² Total number of permits issued correct on 20th October 2020

advanced state for re-making and communication initiatives adopted by the Authority for formal consultation will exceed the guidance provided by Defra.

6. Overview of the Responses

Every attempt has been made to provide a factual account of all the consultation responses received. Not surprisingly, a lot of the views, opinions and suggestions provided in the consultation differ somewhat based on different perspectives. Individuals primary interests, how they view the different fishing activities and their own understanding of how those activities are managed, all have a bearing on the content of the responses submitted.

Responses have been grouped together into the following five sub-groups:

1. Responses representing the strongest interest in commercial diving
2. Responses representing the strongest interest in recreational diving
3. Responses representing the strongest interest in mobile fishing (at sea)
4. Responses with the strongest link to conservation/conservation organisations
5. Responses representing “other” interests including those using static gear

6.1 General Views and Themes from All Responses

The scallop closed season is not favoured by many that responded for differing reasons, but for some it remains an important management measure if applied correctly and its effectiveness monitored via stock assessment work. A common theme is that the differences in fishing methods (diving and dredging) should be better recognised in their respective management measures (permits) and that some forms of common management such as the scallop closed season may not fully reflect these differences. A relative lack of response from the “at sea” mobile fishing sector may indicate that there is minimal appetite for change.

Whilst many divers favoured continuation or additional restriction for the mobile fishing gear sector, in their view their low impact method should be separated and managed differently. This viewpoint extended into the responses with the strongest link to conservation. For example, the Devon Wildlife Trust believe that closed seasons are a cornerstone of conservation and an extension would potentially further protect scallop stocks; however their view is that the scallop closed season is a barrier to a fishing method (diving) that is potentially more sustainable within the District as compared to scallop dredging.

The words “impact” and “low-impact” are often used within the responses; however for many, this meaning is more likely to relate more to the impact on the seabed from the fishing activity (use of scallop dredges), as compared to the impact on stocks of scallops by their removal. The consultation highlighted that the scallop closed season was not originally introduced to protect the seabed or other features within the MPA network. Much of the response from the RSPB highlights how damaging bottom towed fishing gear can be, how the MPA network should be protected and that D&S IFCA should conduct the required environmental assessments to inform management that is needed to protect sites and features. It must be concluded that many do not fully recognise the full extent of the management measures that have been introduced (mobile fishing permits) by the Authority to recognise the MPA network and as a result approximately 40% of the District is now closed to mobile fishing activity.

The words “more sustainable” were frequently used within the consultation responses. The specific challenges faced by divers that limit their overall effort directed towards a fishery have been recognised and documented. Whilst it is a widely accepted view that diving is less impactful on sensitive features as compared to scallop dredging, the fishing method of diving does need some form of management, so it is sustainable.

Some responses, including one from a commercial diver highlight that diving can be an efficient way to collect shellfish from specific areas. DWT highlighted that diving, in the past, has had a role to play in the collapse of the spiny lobster population. The closed season has the potential to provide a “rest period” from exploitation from all fishing methods.

Lack of consistency in management was highlighted including the absence of a closed fishing season in both the Cornwall IFCA and Southern IFCA District’s and it was suggested that environmentally friendly fishers are being hampered by D&S IFCA’s management. The differences in total catches of scallops was another topic and the following extracts from the responses (purple italic font) help to demonstrate some of the views of stakeholders.

“The closed season purpose was to give the seabed and scallop stocks time to recuperate from dredging which tears up the ocean floor and picks up huge volumes of scallops a day (15,000) per average vessel (larger vessels vastly more). The season was chosen during the summer months when dredgers where not fishing for scallops and this time period is also the safest and busiest time for divers”.

“Divers unlike dredgers rely on the local business for buyers because of the small amount of scallop that take (1000 Per diver a day) large markets such as Brixham and Plymouth sell dived and dredged scallop at the same price and this you can understand is not financially viable due to the difference in costs and effort in the methods so it is a necessity to sell to those who understand the difference and willing to pay as much (local businesses) so when the prime seasons open for these businesses the demand for scallops goes up this is the same time as the closed season for diving we are then forced to miss the most profitable months and made to work the more dangerous and colder months”.

“The fact that hand dived scallops account for less than 3% of the annual scallop catch (source: The UK Scallop Fishery, Current trends, future management options and recommendations, Final Report October 2018, published by NWWAC) would suggest that having the dive fishery open year round would have minimal impact on the overall stocks”.

“Hand dived scallops don’t even represent 1% of the total quota landed in the UK, and there are so few of us capable of doing it. I don’t understand or see any sense in having a closed season for an activity like hand gathering scallops when stocks are so abundant and the diving activity itself couldn’t be any cleaner, gentler or more ethically right way to gather a product”.

“We divers feel strongly that we have been caught up in regulations that really shouldn’t have been applied to us. We are low impact because of the very nature and size of our activities”.

Differences in management between commercial and recreational divers was raised in one response. The scallop closed season does not apply to recreational divers; however, a daily catch restriction of 25 scallops per calendar day is a condition of a Category Two Diving

Permit. One fisher, who operates a commercial potting vessel in the North Devon area, suggested that the current closed season (that extends District wide) is a barrier to him obtaining a commercial diving permit. The following is an extract from the response.

“I would like to be able to dive for scallops throughout the Summer months and maybe even sell a few commercially. It seems very odd to me that a dive club vessel could potentially legally take 12 (number of divers on board) x 25 (allowed amount) of scallops a day = 300 scallops a day, every day of the year, whereas a single diver cannot take any commercially throughout the Summer months.

Any commercial activity would necessarily be limited by availability of scallops, as well as by the reasons outlined above. Scallops are generally found around the 20m depth which means that a diver is time limited; a diver could not stay at that depth indefinitely. In the days before regulation, a haul of 100 scallops was seen as very successful. I can see no reason why a targeted and regulated fishery could not be allowed along this stretch of coastline.

I have said many times before that my catches of lobster and crab are just a fraction of what my father used to catch with the same boat 30 and more years ago. I have asked for permission to make up some of the shortfall by diving for a few scallops when conditions allow but have rarely received a response.

I am not familiar with the situation elsewhere in the district, but up here, it seems pointless to have a closed season, especially when there isn't one recreationally. I have been collecting scallops here for many years, certainly way before you thought it necessary to impose restrictions, and I can say with some authority that there has been little or no impact on stock levels or size, either before or since your licencing requirements became a thing”.

Alternative Suggestions

There were some alternative suggestions to the scallop closed season and some of these are suggested by one sector but would only potentially impact one fishing sector. More detail regarding the alternative suggestions and the rationale offered by each sub-group for these ideas are set out within the following parts of this chapter.

The following is an example of suggestions offered from different stakeholders and sectors:

- **Limit the number of days a commercial diver can operate in replacement for a closed season**
- **Introduce a 110mm Minimum Conservation Reference Size (for all)**
- ***Apply a closed season in April, May and June instead of July, Aug, Sept***
- ***Designated areas could be deemed “fallow” on alternate seasons (to allow a year-round season, but with restricted areas that change each year).***
- **Implement dive only fishing areas**

7. The Responses in More Detail

This section details the responses, as divided into different sub-groups. It also highlights suggestions for management measures.

7.1 The Views of Commercial Divers

The responses were generally quite detailed and as well as some suggestions for change, many responses offered by commercial divers included comments more relevant to the management of mobile fishing, rather than their own fishing sector. The extracts from responses (purple italic font) highlight this:

“The 3-month closure doesn’t affect the dredging industry as it ties into their seasonal fishing routine. It makes viable sense to dredge offshore during the calm summer months to give the inshore grounds time to replenish before the rough winter months when they can dredge within the 6-mile limit. I think it would be a different story if the closure existed through that rough weather period. I would go as far as to say that the closure is possibly a bad thing for Devon waters as a whole, as it is an incentive/advertisement to the whole of the UK dredging fleet that the grounds have had a rest and fishing will be good”.

“Closure causes yearly arrival of multiple visiting dredging boats at the beginning of October. In turn putting more pressure on the stocks and undoing any good that the 3 months rest achieved”.

Other responses from commercial divers suggested that D&S IFCA has a lack of management in place to regulate the mobile fishing sector. Comments of this nature included the following:

“IFCA is hampering environmentally friendly fishers and whilst implementing a policy that does next to nothing in limiting scallop dredgers and the harm they do to stocks”.

Officer Comment:

A Category One Mobile Fishing Permit includes multiple restrictions based around the categories of catch, gear, spatial and time conditions. Vessel monitoring has been introduced via permits for all mobile fishers operating a vessel at sea that is over 6.99 metres in length and below 15.25 metres. A series of spatial closures that are largely focussed on protecting Marine Protected Areas have been introduced and therefore large areas of the District are closed to different forms of mobile fishing activity, regardless of the three-month scallop closed season.

Concerns

Not all commercial divers that responded were in favour of change. The extract below from the master of a vessel with a commercial dive permit demonstrates this:

“Through diving I have learnt that we can be somewhat efficient in gathering them from a specific area and if effort is over exerted it can clean an area out so good husbandry measures need to be ensured to keep a piece of ground sustainable for future return to gather again, I guess due to seeding stock being left to rejuvenate the area once again.

If things were to be influenced in any way to opening it to diving on a permanent basis this would not stay like it is. I feel sustainable fishing is the way forward and it is not unfortunately

followed by all, in which case if it was to be opened for longer periods of time more industrial set ups would be materialised over night to create more vessels with more divers purely for a short sighted agenda.

I hope the group does understand that any decisions made for the future of the fishery will have detrimental effects on the long-term durability of the fishery. I only hope you make your decisions based on what is right in the eyes of sustainability of the fishery as unfortunately these days money seems to rule the roost and sadly has a way of driving industrial matters harder and harder killing anything sustainable and ruining things for the small effort coastal community fishers making a small scale sustainable living from it”.

Challenges for Commercial Divers

All commercial fishers face challenges, regardless of their chosen fishing method; however, those with an interest in commercial diving presented relatively detailed examples of specific difficulties associated with conducting their fishing activity. A selection of comments was similar or repeated in several of the responses. Key points have been summarised as follows:

- Diving is self-managing with natural barriers
- We lose about 200 days a year to bad weather when it is too dangerous to dive
- Visibility is often too poor to fish and this is intensified with the May Bloom.
- Nitrogen build up is an issue and every 5 to 6 days a rest is needed to allow the nitrogen accumulated in the blood to disperse
- In the winter the daylight hours are shorter – It is too dangerous to dive in the dark
- Fog is a difficulty as it heightens the risk that the surface markers won't be seen
- We are unable to fish outside of the 6-mile limit as it is unsafe and too deep to dive.

Dive Caught Scallops & Markets

Covid-19 has presented an additional difficulty for many during 2020. Regardless of the pandemic, for many commercial divers, the imposition of the three-month scallop closed season impacts too much on their commercial viability. Several responses highlighted that it takes time to build up markets for the produce, which is then starved during the summer months. Demand is high for quality hand selected scallops and it was stated that outlets are willing to pay for premium products and to satisfy their moral values of recognising and promoting food obtained from low impact and sustainable fishing methods. It was recognised that the quality of scallops is interlinked with spawning cycles which according to some commercial divers does extend either side of the July to September closed period. Quality can be maintained as divers can hand select scallops in peak condition and therefore help to preserve the quality of the product reaching their customers.

Responses highlighted that customers rely on a steady supply but due to the closure they are forced to search for scallops elsewhere and, as hand dived scallops are difficult to acquire in the summer, they have to get them from those conducting less environmentally friendly and more destructive fishing methods such as dredging.

The summer months are typically more popular for tourism and one response commented that given hand dived scallops are at the premium end of the market, it makes sense for them to be caught fresh and distributed straight to the customer rather than using holding pens for an off-season, which dilutes the “caught fresh” offering. The disruption in the diver's ability to fish

for and sell hand selected scallops not only impacts total earnings, but also heightens the risk that the customer base can be lost. Following the closure, one stakeholder commented that he must quickly try to recover the customer base that he lost during the closed season. Some of his customers return as they do understand the prime quality and sustainability of the product, but unfortunately for him, others sometimes choose to stay supplied with a more regular supplier like dredged scallops.

Pesky Fish Ltd provided a relatively detailed response focussing on the Torbay area and the divers that operate in this area. They explained how the closed scallop season impacts on the marketplace for premium produce and in their view acts as a barrier to a low impact and sustainable fishing method that they endorse. This company, like many of the responses, recognise the objectives of a closed scallop season but have questions about its overall benefit and its scientific foundations. An alternative suggestion was highlighted suggesting a total number of days allocation be allotted for commercial divers, rather than a fixed closed season.

Suggestions for Management (Commercial Divers)

Removing the scallop closed season as a permit condition from Category One Diving Permit Conditions was the clearest suggestion, however there were some other alternatives highlighted within the responses.

Suggestions and Rationale:

- ***Up the minimum catch size to at least 110mm.*** *“This will leave more scallops on the grounds to help replenish the area and will not overly affect the fishing boats as through my experience there is a significant difference in meat yield over that 10mm of shell width and so little loss in profit”.*
- ***Widen the marine protected zones to dredging to least another 500m.*** *“This creates a buffer for human error when dredging boats accidentally sway over the line onto important marine habitats. It will also help in protecting these areas from being covered in sediment churned up through towing dredges as this happens enough through natural storms to be added to daily. I have seen this first-hand”.*
- ***Possibly implement a catch limit across the board for every scallop fishing boat.***
- *“I feel that divers should not be subjected to any closure at all due to the other limitations that we face. However, if you decide that there should be **a limit through the July-October period**, I would ask that you consider **a limit on fishing days. For example, 16 days per calendar month during this period**”.*
- *“If it is deemed necessary to have three months closed season, then **April, May and June** could be worthy of consideration. This allows local fishermen to benefit from the bumper demand and relatively good sea conditions over the Summer”.*
- ***“Designated areas could be deemed “fallow” on alternate seasons to allow a year-round season, but with restricted areas that change each year”.***

7.2 The Views of Recreational Divers

The scallop closed season does not form part of the Category Two Diving Permits as a catch restriction per calendar day was determined to be a more proportionate restriction; however, three responses were submitted by fishers in this sector and they offered their views on the closed season. One of these fishers is frustrated that the closed season, for him, is an obstacle to become more diverse in his commercial fishing operation. He reported that his catch of crab and lobster are now a fraction of what his father used to catch approximately 30 years ago and commercial scallop diving during the summer months would help him make up this shortfall. The response went on to highlight similar information as already documented associated with the challenges of diving for scallops such as weather conditions, visibility and water depth.

The other recreational divers were more supportive of a closed season that covers the spawning period. Comments highlighted that research and stock assessments should be undertaken to evaluate the effectiveness of a closed season which potentially should be applied to fishing methods with the highest impact.

Suggestions for Management (Recreational Divers)

Suggestions for management included the following:

- **Increase of minimal size for all fishers instead of a closing season.**
- **Funding of artificial reproduction of scallops with release into environment - preferably partially from shellfish fishing licence.**
- **Allowing only small vessels to fish for scallops.**
- **Promotion and support (government grants?) of scalloping farms would allow for wider distribution of wild scallops as they do breed in same waters.**
- **Stricter Quotas**
- **Implement inshore fishing limits and take/no take zones**

7.3 The Views of Mobile Fishers

There was a low response to the consultation from fishers operating mobile fishing gear at sea. Some of the responses received demonstrated that fishers can see the benefits for scallops to be protected during spawning periods and to allow stocks to replenish; however, there were mixed views on whether the closed season should be maintained in its current form. From the responses received from fishers with an “at sea” mobile gear permit, a common view was that the closed season as it stands has several disadvantages. It was highlighted that there are displacement issues and the end of the closed season on 1st October each year results in a large increase in effort and the pinpointing of effort within D&S IFCA’s District. The following extracts from the responses highlight these points:

“I consider having closed seasons in parts of the country impacts other fisheries which operate all-year-round. As a fisherman from Cornwall where there is a year-round Scallop fishery, I have witnessed the impact the closed seasons in other parts of the country have here; where boats from other areas work out of Cornish waters when their local fishery area is closed. In reality, the impact of closed seasons and closed areas results in more effort applied to Cornish waters”.

“In October, when the Devon fishery opens, there is inevitably a large influx of fishing vessels to that area. If the fishery remained open all year round, there would not be a displacement of

effort and visiting vessels would use Devon waters more sporadically throughout the year, as opposed to visiting in vast numbers at the same time”.

(There should be no closed season) “I see no disadvantage to local boats in the long run and helping to achieve sustainable fishing. The disadvantage to all would be the pinpointing of the beds would not happen. This being because with so many boats the beds all get discovered very quickly as everyone watches the radar for any boat that stays in one area too long. Once that happens all the boats centre on that area and wipe it out, even boats not near will see what is landed that evening and follow the most successful boat the next day”.

(With no closed season) “I can see only benefits will no seasonal onslaught of boats from everywhere, England, Ireland and Wales. By avoiding this the local beds would have a chance to spawn and recover in a major way. This area would then become a sustainable fishery with not enough boats to discover all the beds and no seasonal reason for the boats to come. The boats that want to fish scallops would occasionally find really good fishing but not enough to make boats change from their fishery”.

(With no closed season) “As stated as owner/partner in two fishing boats we would not attend this fishery were it opened permanently but feel we need to be here at the start of the opening as it has not been fished for three months and, with lockdown price crash, probably longer”.

Limited access to fishing areas due to protection of habitat and to reduce gear conflict also has the effect that certain areas of the District are subjected to intensified effort, rather than providing the fishers with the ability to space out their exploitation and give different grounds “a rest”. There were signs of disappointment that the introduction of new technology (IVMS) has not resulted in more access to fishers within the District. In addition, at least one fisher felt that the mobile fishing sector has insufficient representation on the Authority for decision making.

“The closed season should be managed better (and) there are far too many no take zones that divers plunder unchecked. If we had access to potting zones and closed areas every area could possibly have a longer time closed giving commercial fishermen more inshore grounds that were supposed to be opened with the introduction of vms. Nothing opened to date (is) a big kick in the teeth for fishermen that agreed on closing areas”.

“Fishermen should be on (the) Ifca committee (in) equal amounts so they can have a say . The people that actually know the grounds and how it works, not pen pushers with opinions that have no idea how a dredge works .Fishermen have no respect for Ifca because of heavy handed tactics. This isn't helping either side. Fishermen understand conservation but are being pushed to the limits by insane measures. In my opinion the whole scallop closed boxes and potting zones need to be re assessed with a fresh equal panel looking at it. The revenue lost because of this mismanagement must be colossal”.

Not all stakeholders with an interest in mobile fishing at sea were in favour of change. The following extract demonstrates this:

“Many years ago, this was proposed, but two local skippers said no. They are not fishing anymore (but) the biggest problem was from other boats around the country. Their local grounds were closed and they all headed to our waters, (therefore) the grounds were getting no rest or the stocks time to recover (and) these boats were having a great time when they all went home (as) their grounds had been restocked ,but here it had been destroyed - a closed season is a must”.

Suggestions for Management (Mobile Fishers – At Sea)

Specific suggestions for change, other than retain as it is or to remove the closed season completely, were as follows:

- Extend the closed season to help both the fishery and the environment.
- Open for 3 months, closed for 3 months on a cycle as follows:
 - a) Close in January, February and March
 - b) Open in April, May and June
 - c) Close in July, August and September
 - d) Open in October, November and December.
- Keep the time restriction of permitted fishing between 07:00hrs until 19:00hrs but ban all weekend fishing.

7.4 Conservation Focussed Responses

Several organisations, and one individual, submitted a response from more of a conservation or precautionary perspective. Organisations included the following:

- Devon Wildlife Trust (DWT)
- Marine Conservation Society (MCS)
- Royal Society for the Protection of Birds (RSPB)
- Wembury Marine Conservation Area Advisory Group (WAG)

DWT

Devon Wildlife Trust (DWT) stated that they support closed seasons and other measures to protect species, habitats and natural processes. These measures also protect the long-term viability and sustainability of commercial fish stocks. It was their view that the current three-month closure is insufficient to cover the whole spawning period and an extension to this temporal management measure would be favourable to potentially further protect scallop stocks. DWT recognised the disadvantages of applying this management to both the commercial diving sector and the mobile fishing sector (at sea) as in their view it impacts far more on the diving sector as scallop dredgers have more capacity to operate all year round and in greater areas. DWT recognise that the disadvantage of the scallop closed season is that it is a barrier to diving, which in their view is a more sustainable fishing practice and should be promoted. DWT is open to support change, but not without caveat.

“We would like to see sustainable fishing methods promoted, but this must not add to the burden on stocks placed by other methods but must be instead of these methods”.

“The Closed Season is there for a reason and this must not be eroded but extended – by reducing the wider impacts on stocks through unsustainable dredging. If these other elements cannot be put in place, we would not support an opening up of the scallop season July to September”.

Suggestions presented by DWT included dive only fishing areas, catch limits to reflect dive only caught scallops and an extension of the closed season to scallop dredgers (April to September inclusive) whilst the diver closed season could be in the form of reduced catches during a specified period.

In their view another part of the solution is to create more areas where scallops and other species are protected from mobile fishing gear – “Creating a Marine Nature Recovery Network”. Anecdotally DWT have heard that diver fishing areas around MPA’s have benefitted from “spill-over” and have seen increased catches. Extending the network of protected areas can be of benefit to divers.

“If the areas around MPA’s and a new mNRA could be buffered by dive only fishing, this would support commercial dive fishing, buffer sensitive areas and increase species diversity and abundance in our seas”.

Whilst recognising that some opportunities for change may be beyond the remit of D&S IFCA, DWT commented that managing fishing activity, including to support sustainable while dissuading unsustainable fishing approached, is within the IFCA’s remit.

MCS

MCS is supportive that the summer closed season for scallops was introduced and is hopeful that this benefits scallop stocks. However, this organisation is also supportive of the development of lower impact fishing methods such as hand selected scallops. As with DWT they believe that the closed season has a disproportionate impact on local hand diving operations.

Although MCS agree with the retention of spawning closures, they also believe in low-impact and more sustainable methods of fishing should be incentivised and supported especially when impacts are minimal in comparison with dredging. MCS didn’t offer any specific suggestions in their response on how to potentially achieve this balance.

RSPB

The RSPB went beyond the guidance questionnaire (focussed on the scallop closed season) and detailed how dredged activity impacts on benthic habitats and their associated wildlife due to the gear and lack of selectivity.

They raised concern about impacts on MPA’s and highlighted different food resources and foraging ranges for multiple bird species. The RSPB highlighted that D&S IFCA should be conducting Habitat Regulation Assessments (HRA) and Appropriate Assessment (AA) to ensure there is no likely significant effects on SAC’s and SPA’s. In addition, the RSPB recommended that an Environmental Assessment (EIA) is carried out so that appropriate temporal and spatial measures are put in place.

The RSPB also attached an Annex to their response which highlighted the protected sites within the District, foraging areas for birds that potentially fall within the District and pointed out that the seabird species Balearic Shearwater is critically endangered.

Officer Comment:

The consultation highlighted that the scallop closed season was not originally introduced to protect the seabed or other features within the MPA network. Other management measures have been introduced to recognise the MPA network as a result approximately 40% of the District is closed to mobile fishing activity. Mobile Fishing Permit Conditions (at sea) include multiple Annexes (charts) that demonstrate the extent of closed fishing areas and this is supported by the use of vessel monitoring technology on all mobile fishing vessels (between 6.99m and 15.25 metres) that operate at sea. Multiple environmental assessments have been conducted and considered when the Authority has introduced different management measures.

WAG

The remit of WAG is to promote and support the conservation and study of the Wembury Marine Conservation Area. Attached juvenile scallops are found on rocky reef overhangs at Wembury so scallops are part of the biological community here. WAG also have an overall interest in all issues that affect the health of local ecosystems and habitats. Regarding the benefits that the closed season offers, the following extract demonstrates their view:

“We are strongly in favour of having a scallop closed season as a common sense measure to protect breeding scallops. Respite from fishing activity is always a good management action and coinciding this with the breeding season will allow the larvae to be released and potentially settle without disturbance and so maintain stock numbers. Given that scallop spawning is reported to occur from April to September, with some larval settlement potentially following that, the current July to September closure should be a minimum requirement. Extension of the closed season, particularly earlier, may have benefit in covering more of the time that scallops are spawning”.

WAG did not offer any other alternative solutions. They consider that measures that protect stocks and ensure ecosystem health will benefit fishers in the long term in addition to protecting nature.

Individual Response

One stakeholder with a recreational dive permit and a strong interest in conservation issues offered a response. It highlighted his view that the closed season does cover the main part of the spawning period and therefore allows more larvae to enter the system and to colonise habitats where the young scallops can grow and move-on to the level seabed. Recruitment to the fishery is essential if it is to be sustainable. The closed season also provides respite from fishing intensity and although the closed season does not impact on his recreational fishing, it was his view that all commercial fishers eventually benefit from both temporary respite for existing stocks and recruitment to stocks.

This stakeholder highlighted some alternative suggestions for consideration as transcribed below:

“Alternatives that come-to-mind include weight limit of scallops caught for each boat, a moratorium for a period such as one year, diver-caught only reserves, reserve areas where no mobile bottom gear is permitted. The first two measures (in addition to a closed season)

would be considered especially if landings per unit effort were falling. The last two measures also take account of biodiversity conservation imperatives. A mixture of measures to achieve different aims is needed and a closed season to maintain/increase recruitment is one”.

This stakeholder also suggested that stock assessments that identify landings per unit effort should (if they are not already in force) be implemented and that support should be given to the proposed Highly Protected Marine Areas (the 'Benyon Review') as a potential stock enhancement (aka 'Fish Recovery Areas') measure.

Suggestions for Management (Conservation Based Responses)

- Extend the closed season (April to September inclusive) for scallop dredgers
- In addition to a scallop closed season, a weight limit (catch restriction) applied for each vessel catching scallops
- Apply catch limits for divers as a possible alternative to a complete closed season
- Diver caught scallops only areas
- Reserve only areas where no bottom gear is permitted

7.5 The Views Representing Other Interests, including Static Gear Fishers

Mixed views were presented with some of these responses with some extending into suggestions of further management for mobile fishing activity, rather than strong links relating to the scallop closed season. Gear conflict was highlighted as an issue when the closed season ends in October each year, D&S IFCA's enforcement capability was questioned and there was some support for considering alternatives to a closed season (for divers only) submitted by Pesky Fish Ltd. Responses with minimal content were submitted from organisations such as NWIFCA and the South Devon & Channel Fishermen's Association. A couple of other responses from individual stakeholders had less relevance to this consultation.

Pesky Fish Ltd

This company highlighted how they provide a marketplace for small-scale, low impact fishers that empowers and rewards vessel owners for sustainable fishing practices via fairer and stable prices for their catches. This company works exclusively with commercial divers in Torbay and highlighted that many buyers and consumers want to make a better choice regarding their sourcing of king scallops. This company does not endorse dredging in any sense.

In their view hand-dived scallops are the most sustainable (and selective) method to catch this species and therefore this fishing practice should be promoted. It is their view that the current closed season is a barrier to fishers and the unavailability of the product in the summer causes several issues. Pesky lose a valuable product to the marketplace and many restaurants and fishmongers make alternative sourcing arrangements. This impact on the marketplace feeds back to fishers and the wider local economy.

The response went on to highlight the differences in fishing methods (diving and dredging) and the limitations that divers have as compared to the dredging fleet which benefit from the closed season as they continue to fish outside the District. With this ability to continue fishing,

they generate a monopoly of supply with some mobile fishers also able to diversify their gear types such as trawling.

This company recognises the objectives of the closed season but commented that any such closure must be supported by data and research, rather than continuing it from a precautionary standpoint. They were also able to report that divers in Torbay are witnessing spawning earlier in the year during spring, but not during the summer which adds a question mark about its effectiveness.

Gear Conflict & Impacts

One response questioned the effectiveness of the closed season for stocks and as an additional measure that has the potential to dramatically improve the environmental conditions that are required for a healthy inshore system. It was his view that any progress made is wiped out each October due to the massive increase in effort that he witnesses at this time.

“Scallop dredging is hugely destructive, archaic, unsustainable and indefensible. To make any progress with its conservation aims the IFCA should consider a total ban on scalloping within the 3-mile line and a 100hp limit within the 6. The resulting dramatic increase in recruitment would be of huge benefit to the inshore sector as well as the environment”.

When and where scallop dredgers should be able to work and with how many dredges became a theme in some other responses. One fisher explained how his and other small-scale (vessel under 5 metres in length) static gear operations are limited to approximately 2 miles from the shore. When the scallop closed season ends and vessels return in large numbers, gear loss or damage becomes a major concern. The suggestions of two other stakeholders focussed on restricting mobile fishing activity to areas beyond two to three miles from the shore or reducing the number of dredges that should be used within the inshore areas to either three or four dredges per side. Other suggestions included increased minimum size, changes to dredge construction regulations and a cycle of three month open and closed periods.

Enforcement Issues

One stakeholder highlighted that regardless of what management is introduced by D&S IFCA, if enforcement action can't be undertaken due to a lack of resource it becomes a pointless exercise. This stakeholder highlighted that he had witnessed divers from Lyme Regis diving for scallops within the closed season period on approximately 50 days this year.

Responses: Minimal Content or Less Relevant

Both NWIFCA and South Devon & Channel Shellfishermen (SD&CS) responded. NWIFCA had no comment to make and SD&CS offered a simple response as follows:

“SD&CS supports the retention of the closed summer growing/breeding season, should this be deemed appropriate by currently available science”.

A couple of other responses were received that were not as relevant to this consultation; however, this still helps to demonstrate the reach of the consultation and the value for stakeholders to have a platform to engage with D&S IFCA or other IFCAs. One of these was more of an inquiry relating to potential future management of hand gathered resources. The other stakeholder used the consultation to highlight his personal disappointment with the performance of Cornwall IFCA, which in his view can damage the reputation of other IFCAs.

“.....may I take this opportunity to express a gripe with a section of your organisation, and ask that you kindly convey my message to your company superiors - the Cornwall group of the IFCA have displayed a complete lack of interest in conserving Bass stocks within their management domain, leading to much adverse publicity, which consequently impacts upon the perceived integrity and worth of the IFCA as a whole – may I respectfully suggest these guys are rounded up and led in a more sensible direction before irreparable harm is done”.

Suggestions for Management (Other Interests)

Increase size across board to 115mm

- number of days a commercial diver can operate in replacement for a closed season
- Ban all diving for scallops and close the scallop fishery for good.
- Reduce the effort to 4 dredges per side
- Increase the ring size to 115mm inside the ring
Make the teeth on the dredges further apart to 110mm.
- Close the District to scallop dredgers for 9 months and only open it for Jan, February and March, or introduce 3 dredges per side and operate the closed season(s) on a cycle

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Part 3: Research and Scientific Information

Scallop Spawning Season

Scallops are permanent synchronous hermaphrodite, which means they can produce ova and spermatozoa either at the same time (Barnes et al, 1993). They contain both sperm and eggs and are broadcast spawners releasing gametes into the water column (Salomonsen et al, 2015). When spawning occurs the sperm and eggs are released sequentially into the water column usually within hours of each other. Scallops can be protogyny (development of one sex gamete before another one) in birth and in recovery after spawning. Scallops' gonadal weight increases to maximal in pre-spawning. Gamete production in scallop and other marine bivalves requires large amount of energy (Sauot, 1999). Energy is transferred to the gonad directly from digestive gland when food is plenty (Sastry and Blake, 1971) or from stored energy in adductor muscle when food is not available. During spring and summer months this progress is rapid in order to prepare for spawning (Roman et al, 1996). Scallops can have a life span of 11-20 years and have a high fecundity.

The majority of *P. maximus* populations in Europe are documented to have continuous low-level spawning throughout spring and summer (April – September) with filled gonads found throughout the year (Barber and Blake 2006). This is interspersed with peaks of synchronous spawning episodes to ensure successful fertilisation. The frequency, timing and duration of these events varies by geographic region, sometimes at very small spatial scales. Past studies have shown that, in Holyhead in Wales, spawning had two peaks one in spring and one early summer, followed by rapid recovery with the gonads remaining full for the rest of the year (Baird, 1966). In Ireland, the first spawning event was a month later (May) in Kilkieran Bay in the north than in Birterbury Bay (April) in the south (Wilson, 1987). In the Isle of Man significant spatial variation in maturation rates was found (Lo, 2009). In Norway a distinct difference was found between scallops from Northern locations and those from the South (Magnesen & Christophersen, 2008). In the north of Norway, scallops rebuilt gonads directly after spawning (as is common for most studied populations) whereas in the south scallops rebuilt gonads the following spring. This has only been recorded for one other population of *P. maximus*, in St Brieuc Bay in France (Paulet et al.1988).

A study on the spawning of *P. Maximus* in Welsh Waters (Salomonsen et al, 2015) found that the king scallop exhibits continuous spawning from May until September with peak spawning events within this time period and trickle spawning until the end of September. In one area of this study spawning peaks at the end of May and a larger peak in the beginning of July were observed. By the beginning of July, the majority of scallops were ready to spawn. A lack of data collection through the remainder of July until mid-August meant that confirmation of the exact timing of the larger spawning peak. The UK Scallop Fishery report (Cappell et al, 2018) details the scallops can be reproductively mature at 3 years (60-90mm shell length) and spawning occurs from April to September.

There has been much debate on whether spawning times are linked solely to environmental factors or also genetic differences between stocks. There have been several studies in the Bay of Saint-Brieuc which have tried to clarify this (Cochard & Devauchelle, 1993, Wilding et al, 1997), which ultimately determined that genetic differences and environmental factors can influence spawning times. The gametogenic cycle is highly variable in king scallops and the timing of spawning may be influenced by both internal and external factors such as age and

temperature respectively (Barber & Blake, 1991). Spawning period of marine invertebrates has always suggested being closely related to algal bloom (increase in food availability). Scallop spawning are usually triggered by various environmental cues (temperature, salinity and photoperiod) and internal regulation (genetic variation between population/species) (Shumway et al, 2006). Most of the scallop species spawn during warm season where algal blooms usually take place.

In general, mature scallops spawn over the summer months from April or May to September. Estimates of gamete emission range from 15 - 21 million oocytes per emission for a three-year-old (Pennec *et al.*, 2003). A bi-modal spawning pattern has been reported by several authors in different areas. In Manx waters for instance, Mason (1983) found most of the adults spawned partially in the 'spring spawning' in April or May and then more fully in an 'autumn spawning' event in late August. He also found that the virgins (scallop that have not spawned previously) and juveniles (those between their first and second spawns) only had one major spawning in autumn. Spawning is followed by a period of recovery of the gonad before the next spawn. Some studies have shown that some populations of king scallops do not have a clear reproductive cycle where filled up gonads have been found throughout the year (Duinker and Nylund, 2002). This suggest multiple or continuous spawning periods. The gonad index varies throughout the seasons. A sharp decrease in gonad index after a peak indicates spawning activities. Determining the gonadal index peak can be used to aid the development of fisheries management.

Fisheries management policies are highly dependent on the time of scallop spawning in order to set no-fishing period, balancing between maximum meat value and landings. Protecting spawning stock biomass as well as settlement habits is essential to improve productivity and conserve scallop stocks (Buekers- Stewart et al 2005). Welsh Government has introduced management of scallop fishing in its waters, The Scallop Fishing Order Wales 2010 No,269. This includes a closed season from 1st May to 31st October each year to the removal of scallops from all fishing activities. There have further measures in place to prohibit scallop dredging within 1nm and an increase MCRS of 110mm.

Scallop Reproduction and Density

Scallops are hermaphrodite having both female (orange or red part) and male (creamy white part) organs which together form the roe. As they are hermaphrodite, they have the potential to self-fertilise. However, if this occurs the progeny may be less viable than if the eggs had been fertilised by a different scallop. The chance of self-fertilisation is reduced by releasing sperm and eggs separately as well as the dispersal of the gametes in the water column, with eggs settling downwards whilst the sperm disperse out into the water column (Salomonsen *et al.*, 2015).

When one individual spawns, some of the eggs which are released are filter fed from the water column by its neighbour. The pheromones contained in the eggs then cause the neighbour to release its eggs and so on. Therefore, in low density populations it is possible that there is a spawning stock but no reproduction due to a phenomenon known as the Allee effect i.e. there are too few individuals present to come in to contact for fertilisation. (AFBI, 2017).

Fertilisation produces trochophore larvae which live in the plankton (Figure 6 outlines the life cycle of *P. maximus*). Through the observation of hatchery reared larvae, the larval stage (D Larvae to pediveliger) of *P. maximus* lasts 15-32 days. In situ the pelagic stage from gamete emission to spat fall has been found to be. It is estimated that the survival rate of scallops during the larval stage is only 0.1%.

Studies have shown that once scallops have settled there is very little movement of scallops between beds (Barber et al 1991). Further tagging studies reviewed by Barber and Blake (1991) also show very little movement with nearly all returns coming from the same bed or within 1-2km of the release site. More significant movements of scallops tend to be through current transport. This lack of significant movement is apparent by looking at the shell of the scallop which generally matches the colour of the environment where it is living. However, if disturbed, scallops can jump or swim, but these movements are localised with no great distance being travelled. Minchin and Mathers (1982) estimated that, during one swimming burst, *P. maximus* can move around 3m reaching a height of 0.46m from the seabed. Scallops in high density beds may also stimulate each other to move. Howell and Fraser (1984) reported that during the relaying of tagged scallops onto a natural scallop bed swimming behaviour by one scallop was enough to cause a similar response in others. This increased level of swimming continued until the scallops were at a sufficient distance from each other. Also, high densities of transplanted scallops may increase predator aggregates in the area, increasing swimming response and thus dispersal (Brand, 2006). Studies on *P. maximus* have shown that whilst they show minimal movement when in sand, when placed on hard substrates they swim frequently and disperse widely (Wilkins, 2006).

The natural density of scallops is variable. Howell and Fraser (1984) reported natural densities between 0.1 and 0.41 scallops per m² on the sandy-gravel and mud habitat of Loch Creran, West Scotland. Franklin *et al.*, (1980a) found from underwater television and divers that scallops can be present at densities of 5-6 per m² but a more normal density is 0.2 per m². Dao *et al.*, (1999) reported that a good recruitment will reach 0.5 to 1 scallop per m². Brand (2006) provided a summary of natural densities reported for *P. maximus* which varied from 0.01 scallops m² to 0.67 per m² (Table 1).

Table 1: Natural densities of *Pecten maximus* (Source: Brand 2006).

Location	Density (number m ²)
Strangford Lough	0.67
Claonaig Bay, Scotland	Before fishing – 0.12 After fishing – 0.03
English Channel	Mean – 0.16; Max – 2.33
Isle of Man	0.04-0.13 ; 0.001-0.004

Beukers-Stewart *et al.*, (2005) reported on the impacts of a protected area in the Isle of Man. They found that scallops within a protected area showed increases in the density and mean age and size of scallops, with recovery of the population increasing as the duration of the closure increased. They suggested that the build-up of high densities of scallops within the protected area enhances local reproductive potential and the likelihood of larval export to surrounding fishing grounds. Indeed, commercial CPUE increased significantly on all fishing grounds off the West coast of the Isle of Man – those nearest to the closed area. Recruitment into the closed area may also be enhanced due to increased settlement material such as hydroids which increase due to lack of disturbance by fishing gear. Twist *et al.*, (2016) suggest

that while fecundity and larval export will increase after providing a refuge, due to the limited mobility of scallops, the “spillover” of adult scallops from protected areas will be minimal. Contrary to this, fishermen from the Isle of Man perceived improved fishing catches around the boundary of the protected area within the Bradda inshore fishing ground, off Port Erin (Duncan *et al.*, 2016).

Concern has been raised on the impacts of overexploitation on density of scallops and the impact on reproductions. Kaiser et al studied the reproductive output per unit areas in areas protected from fishing. Marine protected areas are advocated as an essential management tool to ensure the sustainable use of marine resources by providing insurance against over-exploitation and through the provision of refuge for a large biomass of sexually mature adults. Using a unique fishing gear-restriction, voluntary management system as a large-scale experiment, we found that adult scallops (*Pecten maximus*) within areas protected from towed bottom-fishing gear had heavier adductor muscle tissue and gonads that were 19%24% heavier than those of scallops in fished areas, while other body and age characteristics were similar in both areas. The scallops within the protected area also occurred at a much higher abundance than adjacent, chronically fished ($\times 12.83$) and wider commercially exploited ($\times 2.18$) areas. These results provide evidence that the use of towed bottom-fishing gear can further exacerbate the effects of overfishing through the suppression of the reproductive potential of individuals of similar body size. These findings underline the utility of using closed areas as tools for fisheries conservation of sedentary species of commercial importance.

Scallop Landing Data

Data analysed were obtained from the MMO statistics and include port landings, sales notes, and value of landings. D&S IFCA has issued 25 Commercial Diving Permits. Data for seventeen vessels were examined over the period from 2017-2020, which included Lyme Regis and West Bay. For South Devon Ports thirteen vessels' data were examined, and landings of scallops were analysed. Over a four year period between 2017 and 2020 a maximum of seven vessels in any one year, were recorded in 2019 having landed dived caught scallops into South Devon Ports. Figures 1, 2, 3 and 4 show the landings and value of scallops caught by Commercial Diving Permit holders landing scallops from their vessels into South Devon Ports, which include Plymouth, Salcombe, Dartmouth, Brixham, Exmouth and Axmouth. Some of these vessels will dive for scallops outside of the D&S IFCA's District during D&S IFCA's closed season for the removal of scallops, but the graphs clearly show the impact of the closed season, with reduced landings during the three month closure between July and September inclusive. The maximum number of vessels with D&S IFCA Diving Permits landing for each year range from five in 2017, 2018 and 2020 to seven vessels in 2019.

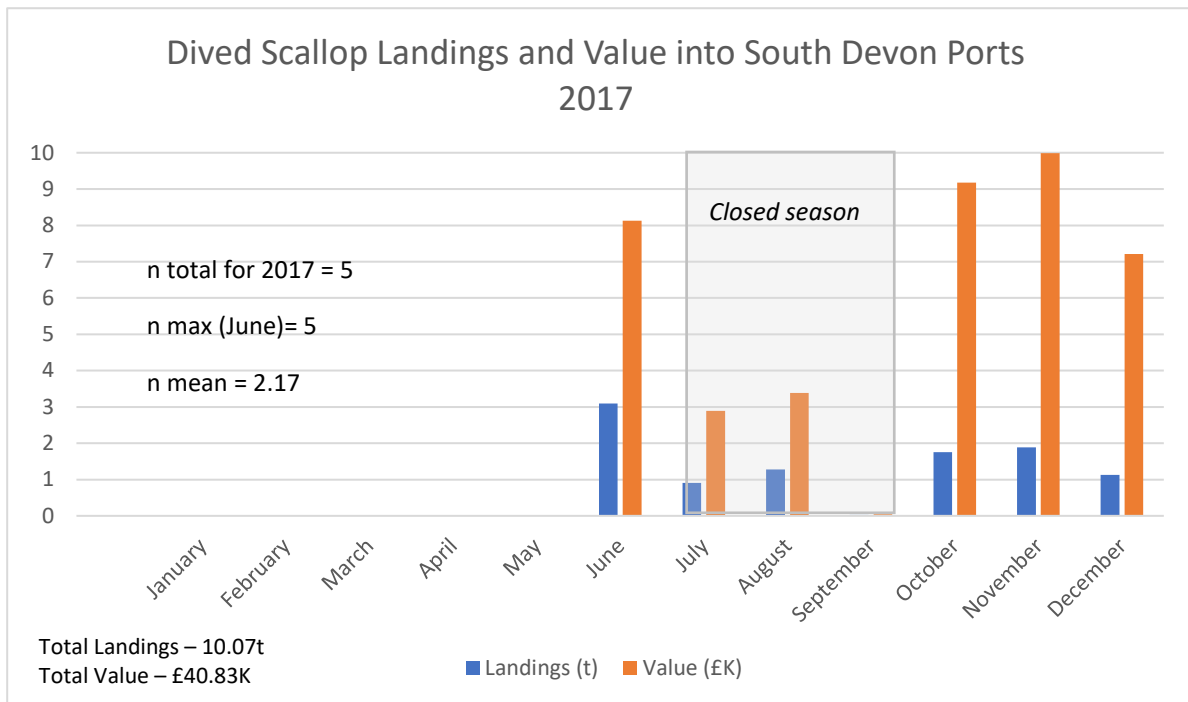


Figure 2 Dived Scallop Landings and Value into South Devon Ports 2017

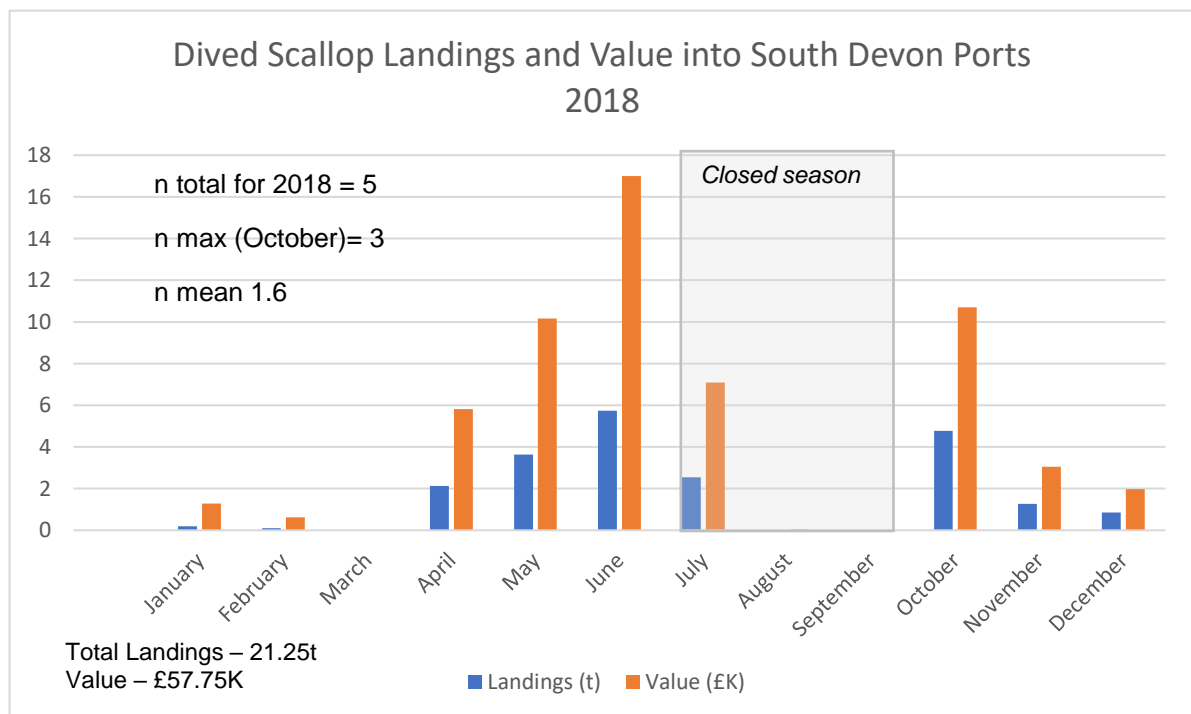


Figure 1 Dived Scallop Landings and Value into South Devon Ports 2017

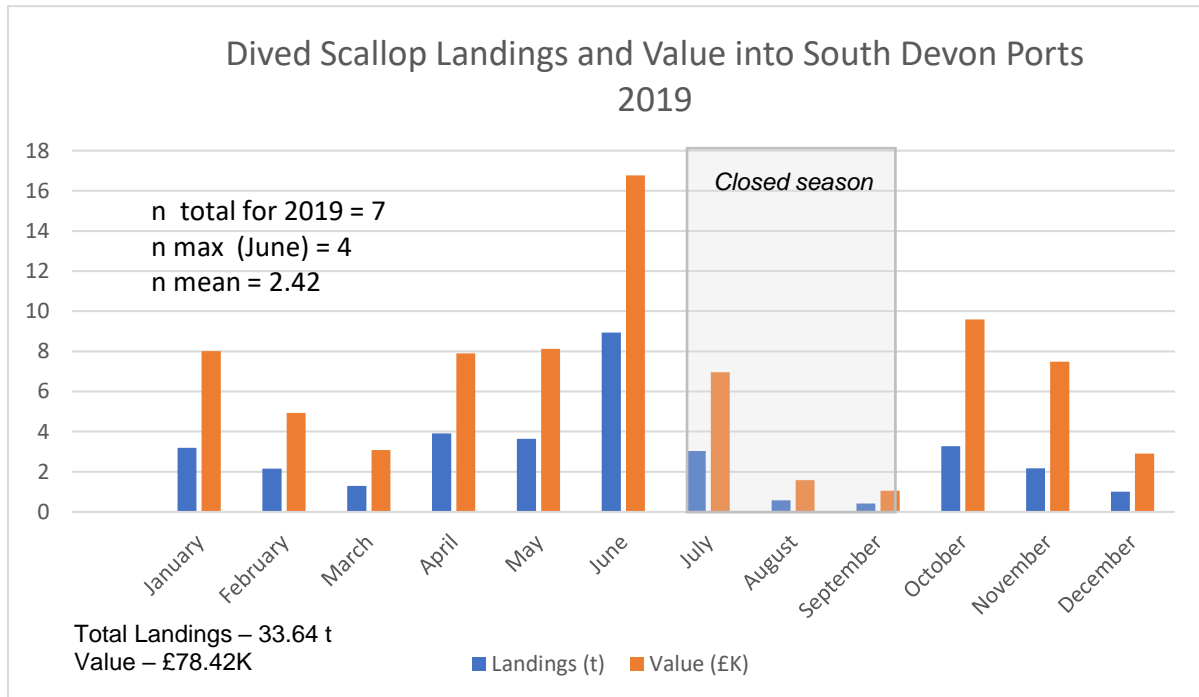


Figure 3 Dived Scallop Landings and Value into South Devon Ports 2019

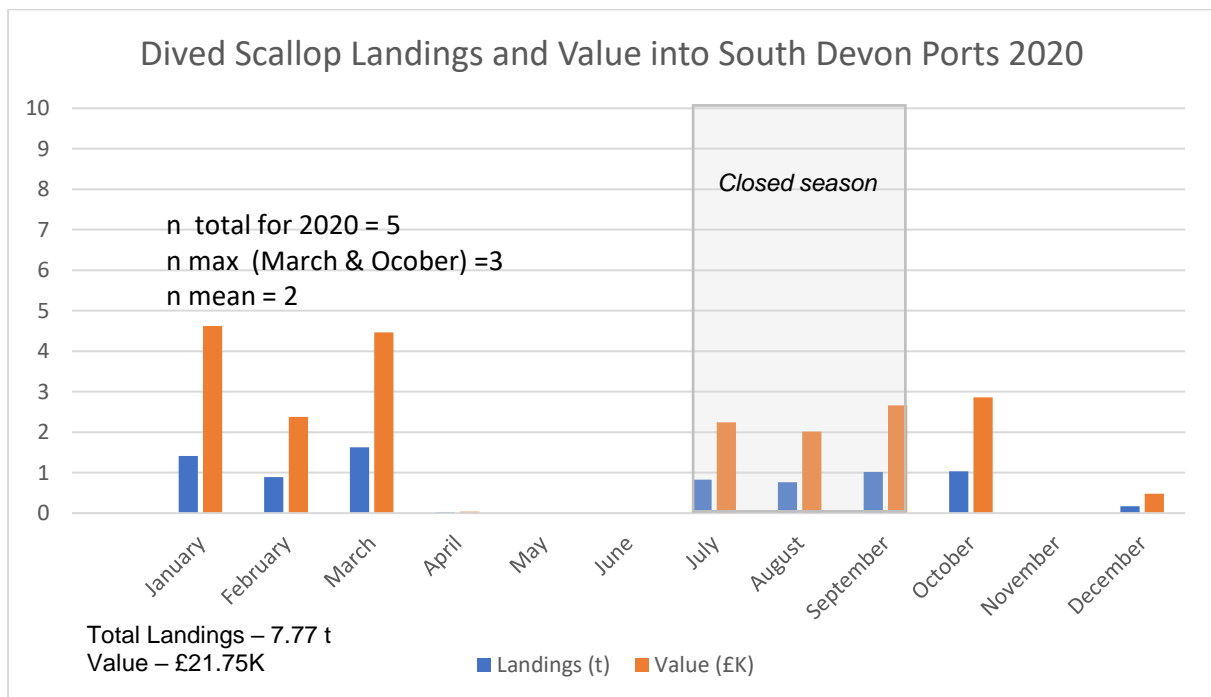


Figure 4 Dived Scallop Landings and Value into South Devon Ports 2020

Figures 5 and 6 indicate the percentages of the total landings of scallops caught during the closed and open seasons. There is a marked difference between the percentages for those vessels with D&S IFCA Diving Permits landing to South Devon ports compared to those landing into West Bay, Dorset. Those vessels landing into West Bay have a much larger proportion of the overall landings caught during July, August, and September, ranging from 37.12% to 62.12%. The mean of their landings, made during these months over the four years, is 48.72%. For the vessels landing into South Devon Ports 11.99% to 33.60% are landed during the D&S IFCA's closed season, with a mean across the four years of 19.89%. These data demonstrate the impact of the closed season on landings and the additional pressure to increase the landings, and subsequent earnings, during the open season. The D&S IFCA's prohibition on removing scallops by diving in the summer months has a marked effect when comparing the landings in adjacent waters, such as in Dorset in Southern IFCA's District. As mentioned previously the landings during the summer are almost 50% of the annual landings and the vessels here will have access to the prime restaurant market and potentially achieve a better price per kilo for their scallops. Table 4 gives the price per kilo of scallops, and the price for dive scallops landed in Devon ports is not very different from the price of dredged scallops. This may be due to the markets, between October and June, being flooded by scallops after the closed season. Dived caught scallops can achieve a premium price but this is not evidenced in the data analysed.

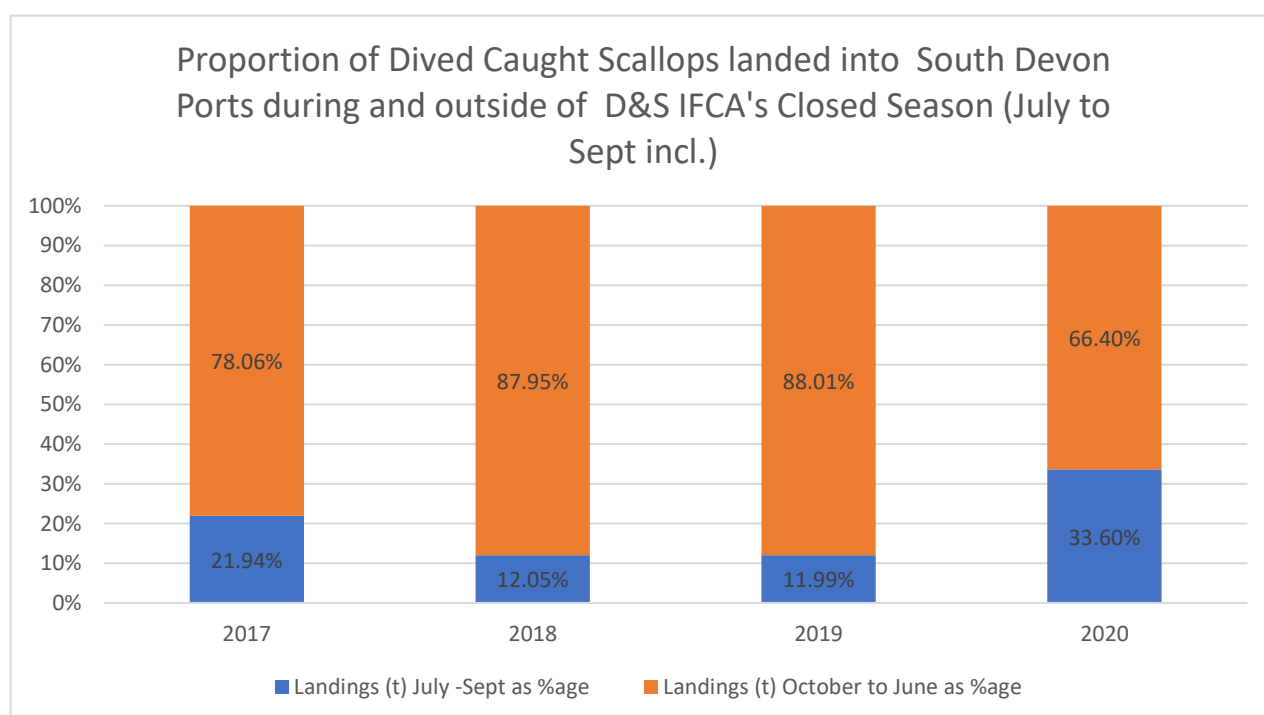


Figure 5 Annual Percentages of landings of dived caught scallops into South Devon ports, during D&S IFCA's closed season, and during the months open to the removal of scallops.

Some further analysis was undertaken to compare landings data from two South Devon vessels diving for scallops compared to two inshore vessels dredging for scallops, results are shown in table 4. Whilst all vessels will be impacted, in terms of landings and earnings,

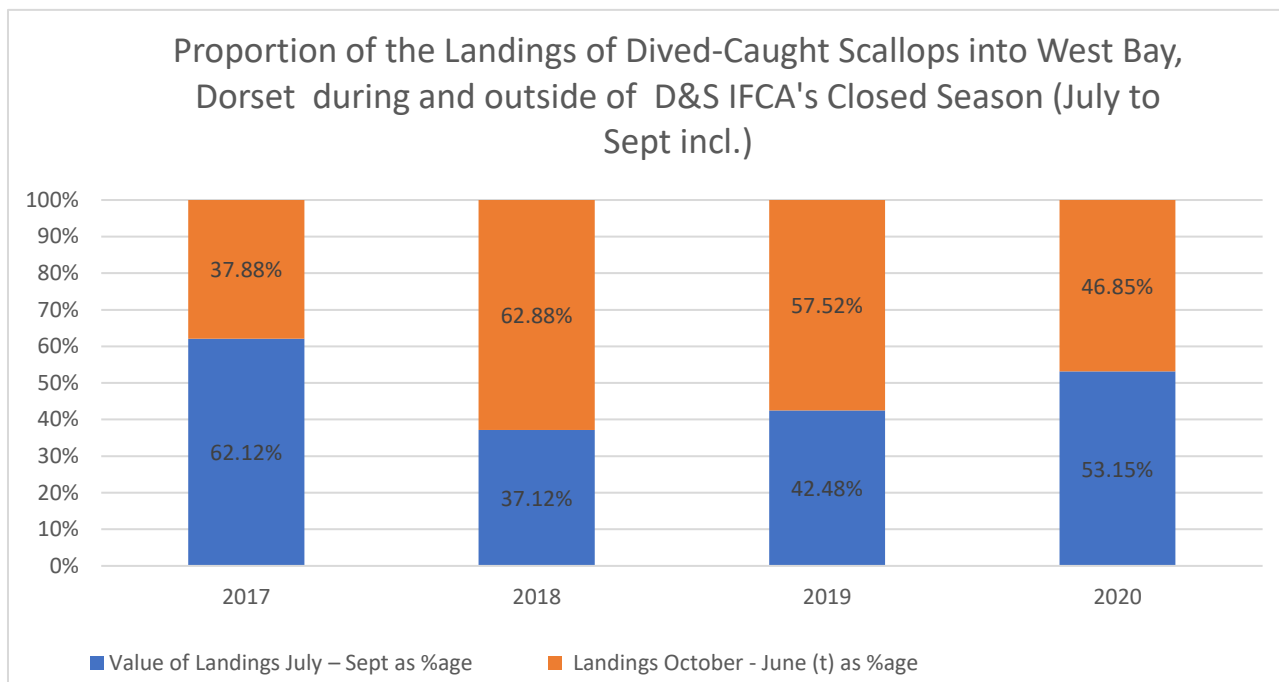


Figure 6 Annual Percentages of landings of dived caught scallops into West Bay, Dorset, during D&S IFCA's closed season, and during the months open to the removal of scallops.

by the closed season, the landings by the dive boats are relatively small compared to the landings from scallop dredgers. The two scallop dredge vessels, used in this comparison, rarely fish outside the District during the closed season. Many other vessels holding D&S IFCA Mobile Fishing Permits will dredge for scallops outside D&S IFCA's District between July and September. One such vessel landed 571.54 tonnes of dredged scallops worth £1.29 million over the four year period.

Table 4 Comparison of landings by scallop dived and dredged vessels between 2017-2020

Vessels	Landings (t)	Value (£k)	Price per kg
Scallop Dredge Vessel 1	135.32	316.85	£2.34
Scallop Dredge Vessel 2	115.08	260.381	£2.26
Dive Vessel 1	24.95	55.25	£2.21
Dive vessel 2	35.39	112.65	£3.18

The analyses of MMO landings, sales notes, and value of landings data in this report show a significant difference in the pattern of fishing, landings, and value of scallops between those vessels restricted during the summer months and those that can remove and land scallops in adjacent waters over the same period. The data indicate, that by allowing those vessels with D&S IFCA Commercial Diving Permits to remove and land scallops from Devon waters during July, August and September, would provide greater fishing opportunities for this low impact fishery and may, in fact, spread the fishing effort over the whole year rather than restricting the fishery to nine months. The current closed season may cause unintended consequences of creating additional effort, between October and June, and increased competition with the scallop dredged vessels.

Part 4: Officers' Recommendation & Explanation

The Officers' Recommendation:

That Formal Consultation is undertaken with a view to amendments to Category One Diving Permit Conditions authorising commercial divers to remove scallops from defined areas within the District during July, August, and September.

The permitting model introduced by D&S IFCA enables the activity of commercial diving targeting scallops to be better recognised as a low impact fishing method, in terms of impact to the seabed, as compared to mobile fishing activity. The officers' recommendation reflects a balance between competing fishing sectors, recognition of the needs of those separate fishing sectors with consideration of how to use the already introduced permitting model to introduce change that would be enforceable.

The officers' recommendation accounts for several factors including recognising that D&S IFCA has a flexible model to amend existing permit conditions and this approach will continue when both the Mobile Fishing Permit Byelaw, the Diving Permit Byelaw (and associated permit conditions) are re-made as expected in 2021-22. When both these byelaws are re-made there will be the opportunity for further changes to be considered.

Key Factors:

1. A relatively high response was provided by the commercial diving sector calling for change and a low response was provided by the mobile fishing sector.
2. Suggested amendments to Category One Diving Permit Conditions (including the introduction of Annexes) can be achieved before July 2021.
3. Relatively low numbers of commercial divers are active within D&S IFCA's District as compared to fishers operating mobile fishing vessels.
4. The total numbers of dive caught scallops are low as compared to the volume of scallops removed by fishers operating scallop dredging vessels.
5. Diving is a low impact method in terms of potential damage to the seabed.
6. Changes to Category One Diving Permit Conditions will only provide increased access to scallop stocks that are not accessible to fishers operating with a Category One Mobile Fishing Permit.
7. Divers can be selective regarding the size of scallops and quantities removed in a given area.
8. Analysis of data indicates the increased opportunities for fishers operating outside of D&S IFCA's District to land scallops over the summer period, thereby having access to the summer restaurant market and achieving a premium price.

Amendments to Category One Diving Permit Conditions:

The protection of Marine Protected Areas (MPAs) and specific features has been recognised within D&S IFCA's spatial management. The activity of diving for specified shellfish (crab, lobster and scallop) is not prohibited, generally, within MPAs, however permit conditions have been introduced to prohibit the removal of spiny lobster from the following Marine Conservation Zones (MCZ):

- Lundy Island MCZ,
- Skerries Bank and Surrounds MCZ
- Bideford to Foreland Point MCZ

An area around Lundy Island has also been defined as a No Take Zone. Within this defined area the removal of edible crab, spider crab, lobster, spiny lobster and scallop is prohibited.

In contrast, multiple areas within the District have been defined within Category One Mobile Fishing Permit Conditions, including the use of Permit Annexes (Charts), that prohibit scallop dredgers from operating in those areas. The existing Category One Mobile Fishing Permit Annexes can be viewed [here](#) and on D&S IFCA's [website](#).

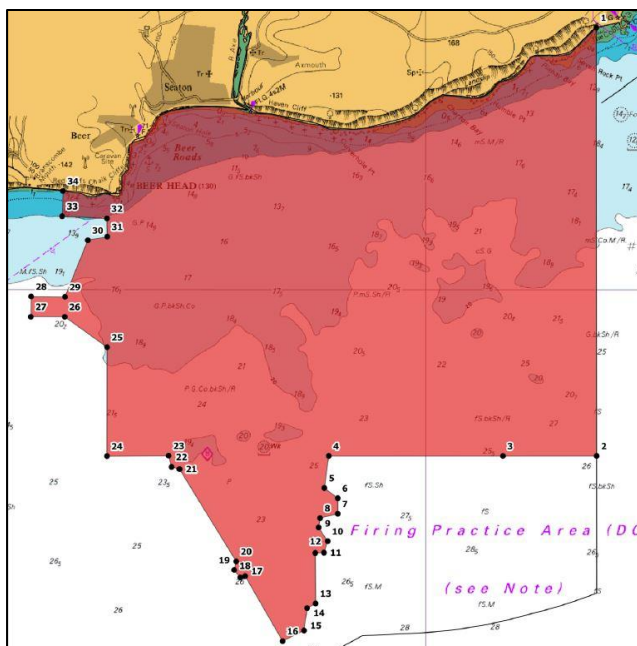
To recognise commercial diving for scallops as a separate and lower impact fishing method, the areas closed to scallop dredging (as set out in the Category One Mobile Fishing Permits and Annexes), could form the basis of tailored management for the commercial diving sector. Increased access for commercial scallop divers would include the parts of following areas:

- Lyme Bay
- Torbay
- South Devon Coast (Start Bay to Plymouth)
- Plymouth Sound
- Lundy Island (excluding a defined "No Take Zone")
- Severn Estuary

Within parts of these defined sites, the scallop closed season would not apply for commercial divers targeting scallops. The scallop closed season would apply to commercial divers targeting scallops in all other parts of the District. The areas where additional access could become available for commercial divers are not accessible to scallop dredgers, and therefore there is not impact on these fishers due to this potential change.

The following charts provide a visual demonstration of how this could be achieved; however, the colours would be amended on finalised Annexes for commercial diving activity.

Lyme Bay

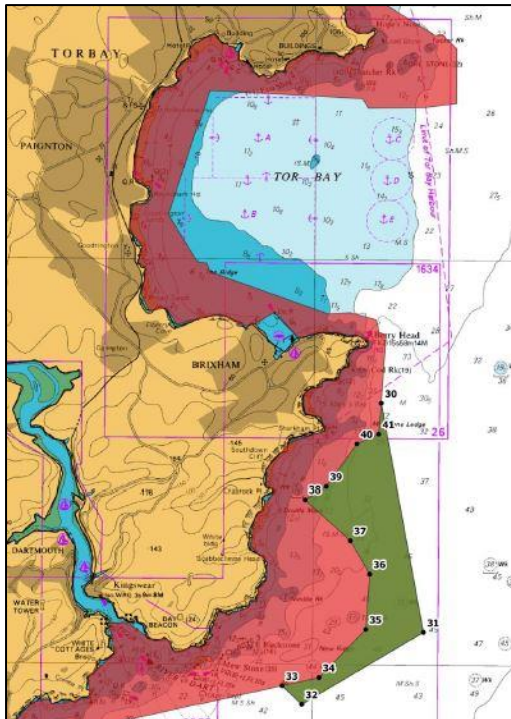


This area is one of several that are favoured by commercial divers. This area is not accessible to scallop dredgers at any time of the year.

This site (presently shaded red) could become accessible to commercial divers removing scallops during July, August, and September each year.

The scallop closed season would apply to commercial divers in areas of the District that are not defined within specific Annexes (the white areas beyond the perimeter).

Torbay



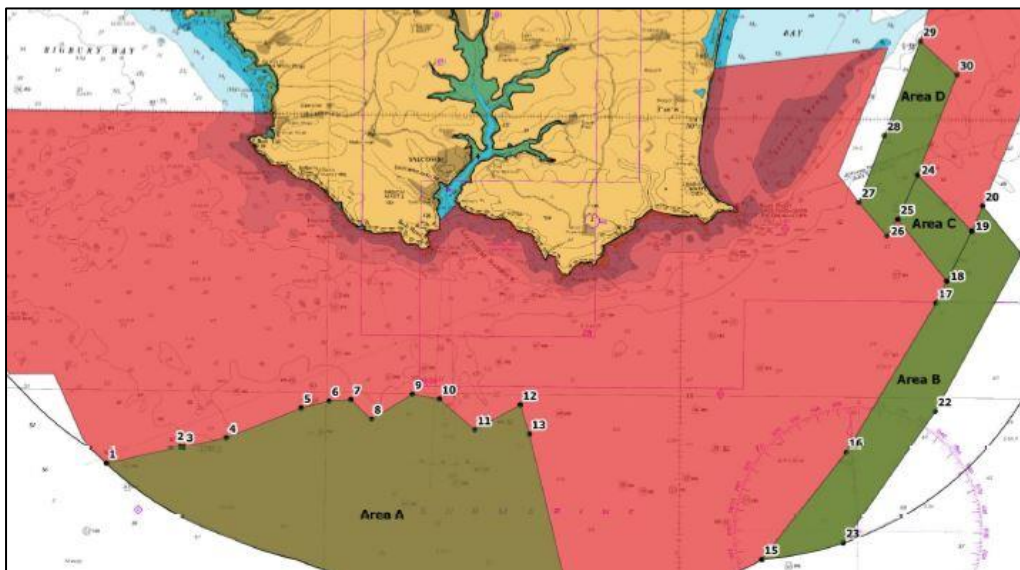
This second example shows the majority of a Torbay Annex. The green area is accessible for scallop dredgers (subject to specific criteria) throughout the year, other than when the closed season applies in July, August, and September.

The area (presently shaded red) could become accessible to commercial divers removing scallops during July, August, and September each year.

The scallop closed season would apply to commercial divers in the area shown as green on the chart as this area is accessible to scallop dredgers during periods of the year.

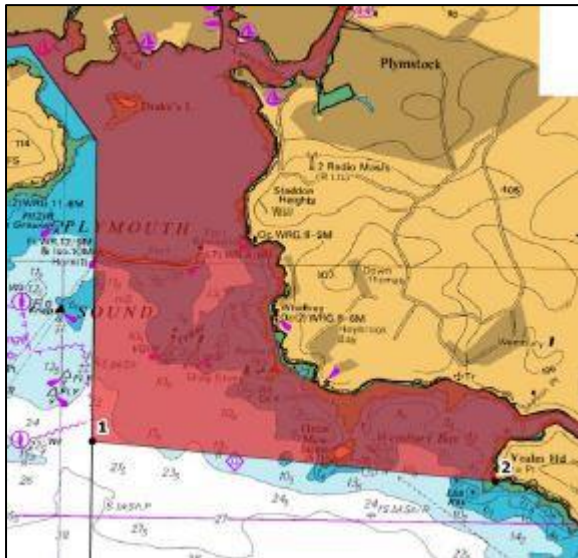
The scallop closed season would apply to commercial divers in the area shown on the chart that are not coloured at all (the white areas beyond the perimeter).

South Devon (Start Bay to Plymouth)



This example demonstrates a large area on the South Devon Coast. Some areas are accessible to scallop dredgers at different times of the year as indicated by green shading. The areas marked red could become accessible to divers targeting scallops during July, August, and September each year. The areas marked green would remain closed to the removal of scallops by commercial divers and scallop dredgers in July, August, and September.

Plymouth Sound Area



This example shows the majority of the Plymouth Sound and Estuaries Annex. The area coloured red is not accessible to scallop dredgers.

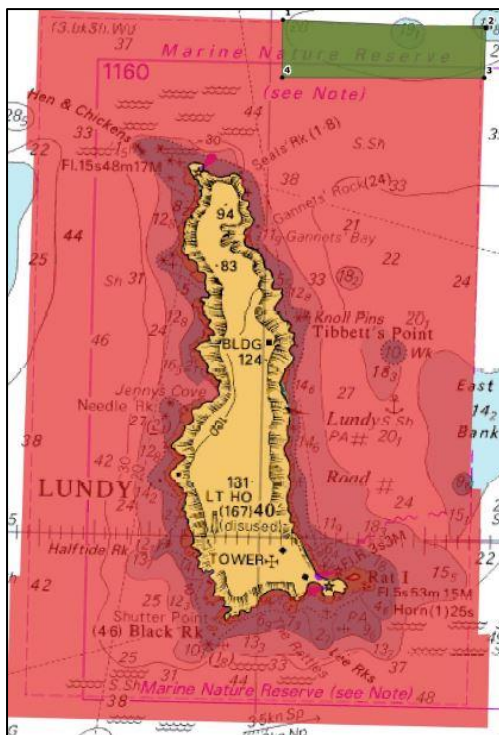
The red areas could become accessible to commercial divers targeting scallops.

The scallop closed season would apply to commercial divers in the area shown on the chart that is not coloured red (the white areas beyond the perimeter).

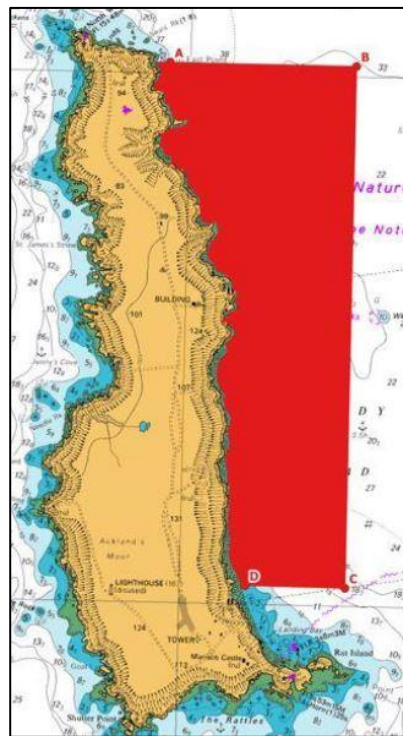
Lundy Island

This example is slightly more complicated to demonstrate; however, the chart below (A) highlights where scallop dredging is prohibited (red) and where it is permitted (green). A section of the red area could become accessible for commercial divers targeting scallops. Lundy Island has a “No Take Zone” as shown in the chart below (B). A Category One Diving Permit already includes an Annex that details the Lundy Island “No Take Zone”. Diving permits prohibit the removal of edible crab, spider crab, lobster, spiny lobster, or scallops from the “No Take Zone”.

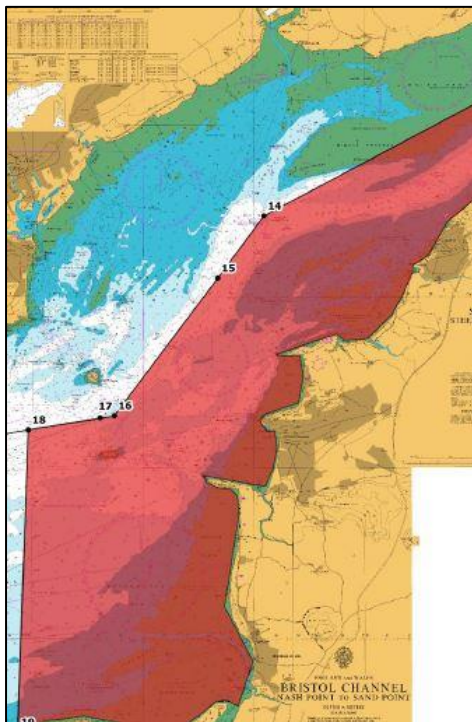
A



B



Severn Estuary



This example shows the majority of the Severn Estuary Annex. The area coloured red is not accessible to scallop dredgers.

The red areas could become accessible to commercial divers targeting scallops.

Formal Consultation

If members conclude that changes to permit conditions would be suitable, a final phase of consultation will be conducted. The Formal Consultation will highlight the changes that are being proposed and provide an indication of what format the amended permit conditions would take. The findings the Formal Consultation will be documented and presented to the B&PSC in due course. It will be at this point when a decision is taken regarding changes to permit conditions that will then be finalised and circulated to fishers.

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