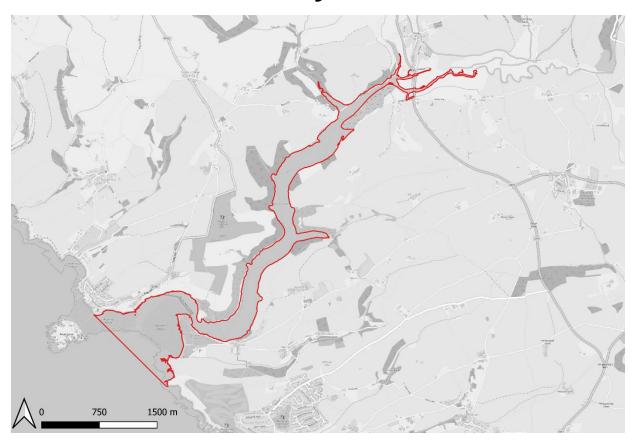
Fishing Activity Report- Devon Avon Estuary MCZ



Lauren Henly
Environment Officer
Devon and Severn Inshore Fisheries and Conservation
Authority
2022
V.1.0



Contents

1	. Introduction	2
2	. Methodology	3
	Fishing Activities	
	3.1. Intertidal Handwork	
	3.1.1 Hand working (access from vessel), Hand working (access from land)	3
	3.2. Static- Pots/Traps	
	3.2.1 Pots/Creels, Cuttle Pots, Fish Traps	4
	3.3. Seine Nets & Others	5
	3.3.1 Beach Seine/Ring	5
	3.4 Miscellaneous	7
	3.4.2 Crab Tiling	7
	3.5 Bait Collection- Digging with Forks	7
	3.6 Aquaculture	10

Version control history					
Author	Date	Comment	Version		
Lauren Henly	10/2021	First draft	0.1		
Lauren Henly	23/02/2022	Additional content from call for	0.2		
		information			
	06/07/2022	Final Version	1.0		

1. Introduction

Devon and Severn Inshore Fisheries and Conservation Authority (IFCA) have a responsibility to establish whether management measures are required to achieve the conservation objectives of Marine Conservation Zones (MCZs). The IFCA's responsibilities in relation to management of MCZs are laid out in Sections 124 to 126, & 154 to 157 of the Marine and Coastal Access Act 2009.

In order to aid the decision-making process, D&S IFCA have gathered information relating to the occurrence of the fishing activities within each of the Marine Conservation Zones (MCZs) within the District. This report pools official and anecdotal information in order to define fishing activities occurring, and at what levels, in the Devon Avon Estuary MCZ.

This report should be thought of as a working document and will be updated if and when fishing activities within or close to the Devon Avon Estuary MCZ change or develop. It is not a definitive list and only covers activities which are defined within the generic fishing matrix provided by Natural England.

2. Methodology

In the first instance, a thorough literature review was carried out in order to identify the fishing methods used in the Devon Avon Estuary MCZ. This included information from the landowner and knowledge from IFCA officers and estuary forum members. This was used to inform the Devon Avon MCZ site action plan, which then identified fishing activities where more information was required. In order to provide data regarding bait digging and seine netting in the MCZ, a request for information was sent to permit holders who were deemed local to the estuary (all base ports/towns/cities on the south coast of Devon between and including Plymouth and Exeter). This call for information included a map of the MCZ with an overlaying grid in order for respondents to indicate the location (grid cell) of any fishing activities. In addition, the request for information was also published on D&S IFCA's website.

3. Fishing Activities

3.1. Intertidal Handwork

3.1.1 Hand working (access from vessel), Hand working (access from land) Other than crab tiling and digging for bait with forks (covered in later sections), there is limited evidence of other hand working or shore-based activities occurring within the Devon Avon Estuary MCZ. One respondent highlighted that they gather cockles from the estuary as well as peeler crabs from weed/rocks. This respondent highlights that they walk the channels in the locations highlighted in Figure 1 and collect cockles if they are visible and occasionally search the rocks and weed for peeler crabs, producing about 8 - 12 cockles and 4 - 6 peeler crabs per day. This activity would occur once to twice a month from September until March at the most, but in recent years, the activity has been reduced. There is some evidence of low levels hand gathering of marsh samphire and of recreational rod and line fishing on the estuary, however the precise locations are not clear. Recreational angling is likely to occur towards the mouth of the estuary, mainly outside of the MCZ.

Given the designation of the MCZ and anecdotal reports of cockle beds on the estuary, D&S IFCA aimed to establish a baseline of cockle stocks on the estuary in 2020. Three locations were surveyed, including along the shore below Bantham Village, Cockleridge and Villa Crusoe. Only 8 cockles were found in total (7 at Cockleridge and 1 at Bantham) so no analyses were conducted. D&S IFCA officers liaised with some hand gatherers collecting cockles for personal consumption, who reported that they had not found many cockles in the estuary and there seem to be less now than previously recorded.

D&S IFCA will revisit the Devon Avon Estuary when cockle surveys are undertaken in 2022 to ensure no significant cockle beds were missed or have been established since this survey was undertaken.

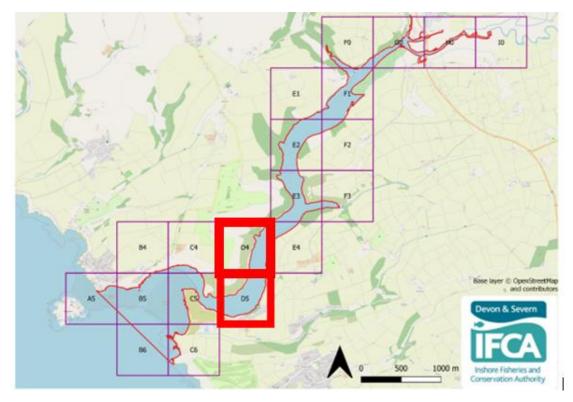


Figure 1: Location of hand gathering activity by respondents of the request for information sent out to local permit holders.

3.2. Static- Pots/Traps

3.2.1 Pots/Creels, Cuttle Pots, Fish Traps

Responses from the request for information indicate that potting for lobster and crab does occur around the Devon Avon Estuary. This is mainly done recreationally with a small number of pots (e.g. two pots). Three respondents indicated that they use lobster pots in the Estuary and one respondent does not currently pot there, but provided potential locations that they would consider for potting, with an occasional overnight pot when anchored. The locations highlighted by the respondents that currently pot in the Estuary are shown in Figure 2. The respondents that currently use pots in the estuary do so between April and October.

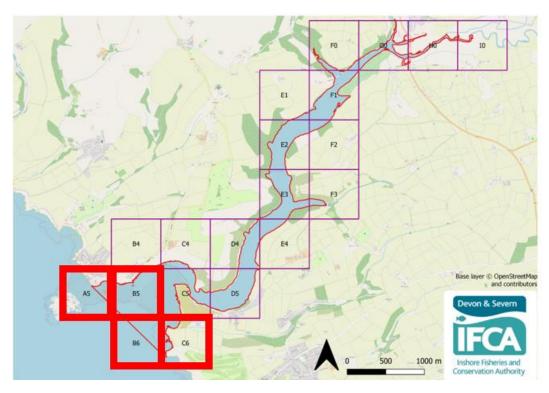


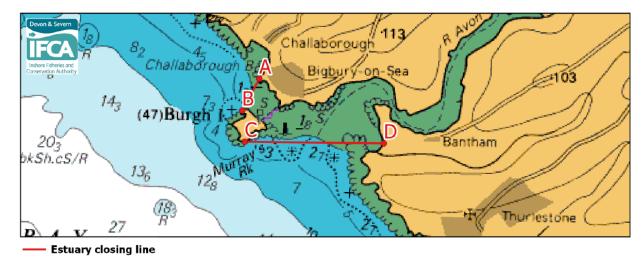
Figure 2: Location of potting by respondents of the request for information sent out to local permit holders. The respondent that informed of the potting occurring in A5 suggested this is likely to be outside of the MCZ.

3.3. Seine Nets & Others

3.3.1 Beach Seine/Ring

Seine netting in the Devon Avon Estuary requires a netting permit. A permit holder or named representative may only use a seine net landward of the closing line shown in Figure 3 and providing that; a) the net measures no longer than 20 metres in length; b) all species caught other than sand eel are returned immediately to the water; and c) the size of mesh does not exceed 20mm.

One respondent from the request for information informed of seine netting for sand eels in the estuary. This respondent seine nets once a week from June until November in the location highlighted in Figure 4.



River Avon closing line latitude and longitude positions:

Point	Latitude	Longitude
A (Warren Point)	50° 17.077′N	003° 53.884′W
B (Herringcove Point)	50° 16.876′N	003° 54.049′W
C (Burgh Point)	50° 16.684′N	003° 54.018′W
D (Bantham Sand)	50° 16.684'N	003° 52.676′W

Figure 3. Chart of River Avon closing line latitudes and longitudes. No access to the use of nets other than a seine net in accordance with paragraph 3.2. of the Netting Permit Conditions as described above.

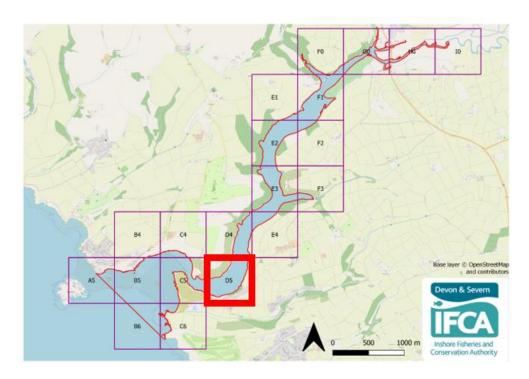


Figure 4: Location of seine netting for sand eels by a respondent of the request for information sent out to local permit holders. This respondent seine nets once a week from June until November in this location.

3.4 Miscellaneous

3.4.2 Crab Tiling

Every four years, surveys are undertaken to determine the number and location of crab tiles on the intertidal zone of estuaries in the D&S IFCA's District. These surveys enable D&S IFCA to assess any potential impacts of crab tiling on sensitive estuary environments, and to inform the development of appropriate management.

The River Avon was not surveyed in 2020 as no tiles have been present since 50 were observed in 2003/04.

3.5 Bait Collection- Digging with Forks

Bait digging occurring within the Devon Avon Estuary. D&S IFCA conducted bait digging surveys in Summer and Autumn of 2020 (6.75 hours over low tide during September and October). Evidence of bait digging was found on the Devon Avon Estuary in the Villa Crusoe area during one of these surveys (one bait digger collecting worms). Four other surveys were conducted in the Devon Avon MCZ across this time, but no evidence of bait digging was found on these occasions.

There have been reports from stakeholders that most bait digging on the estuary occurs towards the mouth of the estuary. This is most likely to be occasional small-scale private bait digging (and Marsh Samphire gathering) as commercial operations are not permitted by the Duchy of Cornwall. Back-filling of the holes from bait digging is encouraged to reduce the impact on the intertidal mud and intertidal sand and muddy sand features of the MCZ.

Pedestrian access to the estuary and its mud is mainly from the car park at the Bigbury end of the Tidal Road (see red oval; Figure 5). The car park is frequently used by members of the public to access moorings or walk along the estuary bed towards the sea (and samphire beds). Pedestrians can also access the lower estuary from the Bantham Estate car park (see red rectangle; Figure 5). Bait digging has been observed by the staff at the bantham estate in the moorings area just below the Bantham village, approximately 100m from the quay (Figure 6).

In a supplementary report to the D&S Byelaw and Permitting Sub Committee in 2019 summarising baseline information relating to bait digging, one of the stakeholders that engaged with D&S IFCA via an online survey about bait digging highlighted that they occasionally dig for bait (10–12 times per year) in the Devon Avon Estuary (D&S IFCA, 2019). The Chairman of the Anue Conservation Association also reported seeing 3 to 4 diggers operating occasionally on the Avon estuary.

Two respondents from the request for information sent out to permit holders reported that they dig for bait in the estuary. The first digs four or five times per year in the summer, whereas the second of these respondents digs occasionally, mainly throughout the winter months. The locations of the bait digging highlighted by these respondents are shown in Figure 7.

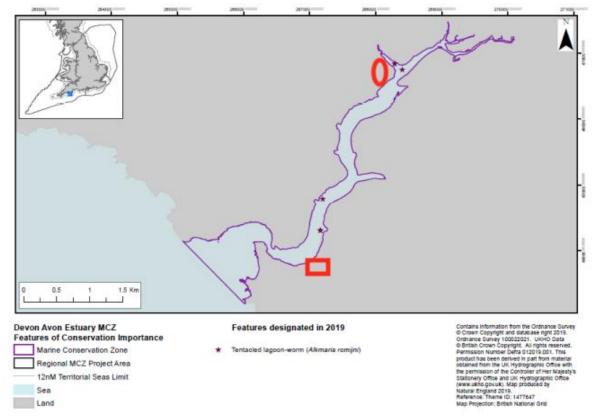


Figure 5: Main pedestrian access points on the Devon Avon Estuary. Red oval highlights the location of the car park at the Bigbury end of the Tidal Road, and the red rectangle highlights the Bantham Estate car park.



Figure 6: Evidence of bait digging in the Devon Avon Estuary MCZ. Observed in the area just below the Bantham village, approximately 100m from the quay.

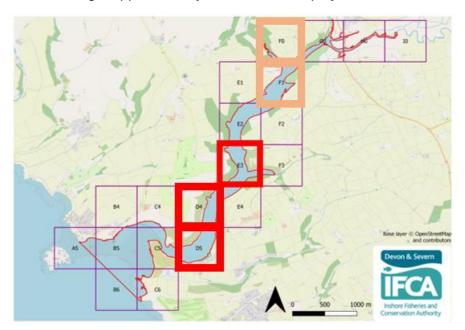


Figure 7: Location of bait digging by respondents of the request for information sent out to local permit holders. One respondent digs for bait four or five times a year in the summer (E3) and the second respondent digs up to once or twice a month from September until March (D4 & D5). The squares highlighted in orange represent historical (40 years ago) bait digging locations for the second respondent, although location F1 is occasionally still used 2–3 times per year over the summer by this respondent.

3.6 Aquaculture

3.6.1. Shellfish aquaculture: bottom culture, Shellfish aquaculture: trestle culture

The Devon Avon estuary supports a Pacific oyster (*Magallana gigas*, previously *Crassostrea gigas*) trestle farm, which is spread over three discrete blocks of trestles within a 600 m stretch of the lower to middle reaches of the estuary Figure 8. The oysters are grown from seed to a market size, a process that takes 3-4 years. Harvesting and husbandry is undertaken by hand, and the growers have their own depuration facilities. Harvesting may occur at any time of the year. Figure 9 shows the current classified shellfish waters and production areas of the Dart Estuary (Cefas, 2020).

The estuary bed is leased from the landowner (the Duchy of Cornwall) to Bantham Estates, which in turn leases the area in which the trestles are located to the harvester.

Following a site visit to the trestles in October 2021, the operator has requested to add Mussels to their authorised shellfish farm (APB) under the Aquatic Animal Health Regulations (England and Wales) 2009. The stock is to be wild sourced from the current farming area.

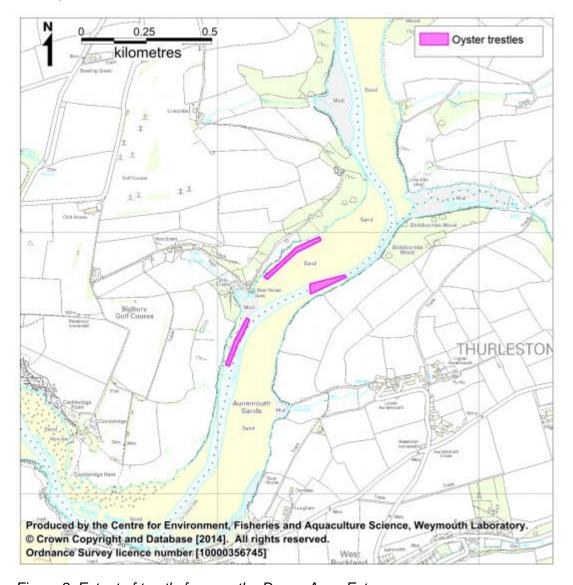
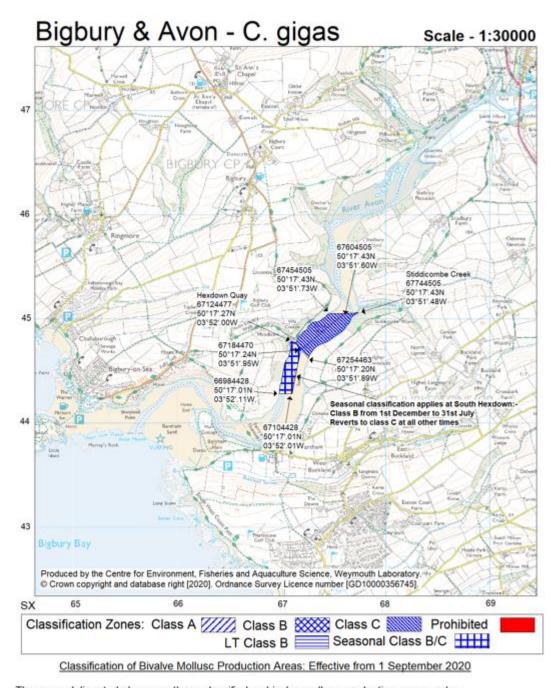


Figure 8: Extent of trestle farm on the Devon Avon Estuary



The areas delineated above are those classified as bivalve mollusc production areas under Regulation (EU) 2019/627.

Further details on the classified species and the areas may be obtained from the responsible Food Authority. Enquiries regarding the maps should be directed to: Shellfish Microbiology, CEFAS Weymouth Laboratory, Barrack Road, The Nothe, Weymouth, Dorset DT4 8UB. (Tel: 01305 206600 Fax: 01305 206601)

N.B. Lat/Longs quoted are WGS84

Unless otherwise stated, non-straight line boundaries between co-ordinates follow the OS 1:25,000 mean high water line.

Food Authority: South Hams District Council

Figure 9: Classified Oyster C. gigas Harvesting Areas on the Devon Avon Estuary

References

- Cefas. 2020. Classification zone maps Cefas (Centre for Environment, Fisheries and Aquaculture Science). https://www.cefas.co.uk/data-and-publications/shellfish-classification-and-microbiological-monitoring/england-and-wales/classification-zone-maps/ (Accessed 10 March 2021).
- D&S IFCA. 2019. Managing Hand Working Fishing Activity: A Focus on Bait Digging.
 Supplementary Report for the B&PSC Information & Evidence, V2.0. Devon &
 Severn Inshore Fisheries and Conservation Authourity, Brixham, Devon.