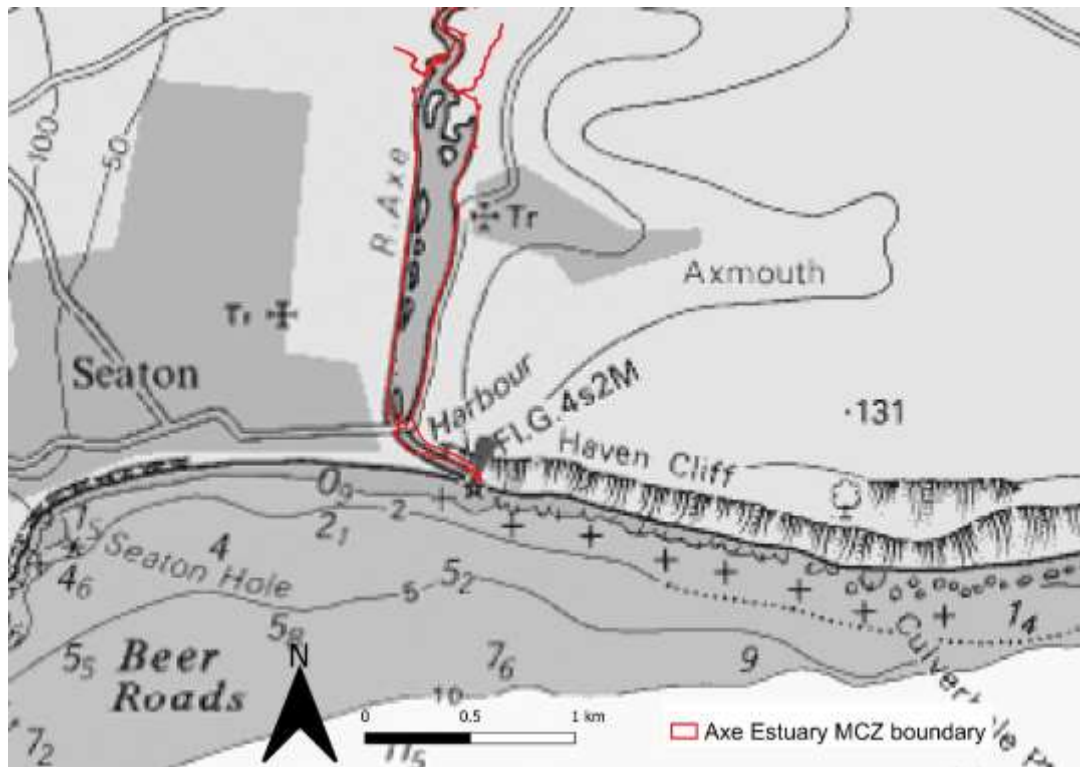


# Fishing Activity Report- Axe Estuary MCZ



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Sarah Curtin	19/01/2022	First draft	0.1
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## 1. Introduction

Devon and Severn Inshore Fisheries and Conservation Authority (D&S IFCA) has 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, and 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 Axe Estuary MCZ.

The Axe Estuary MCZ was designated in May 2019 and is an inshore site of approximately 0.404km<sup>2</sup>. The Axe Estuary runs from Colyford to Axmouth and Seaton, opening into Lyme Bay. The site lies adjacent to the Seaton Wetlands which are a series of local nature reserves. The Axe Estuary forms an important link between the surrounding wetlands and the sea. The coastal saltmarshes, intertidal sediments and rocky habitats are important nursery grounds for juvenile fish, including sea bass. In addition, these areas act as habitats for sensitive species of birds, crustaceans and molluscs. The estuary is also home to the critically endangered European eel (Defra, 2019).

*This report should be thought of as a working document and will be updated if and when fishing activities within or close to the Axe 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 Marine Management Organisation (MMO, 2014)*

## 2. Methodology

In the first instance, a thorough literature review was carried out in order to identify the fishing methods used in the Axe Estuary MCZ. This included information from the harbour master, landowner and knowledge from IFCA officers. This was used to identify fishing activities for which more information was required. In order to provide data regarding bait digging, hand gathering, potting and seine netting in the MCZ, a request for information was sent to permit holders who were deemed local to the estuary (47 individuals), and other stakeholders including the harbourmaster, and landowner. This included a map of the MCZ with an overlaying grid in order for respondents to indicate the location (grid cell) of any fishing activities. 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 Axe Estuary MCZ. There may be some minor hand gathering of peeler crabs, mussels and Pacific oysters on the eastern side of the channel (Appendix 1, Figure 3 and 4), but this activity appears to be occurring at a very low level (three respondents replied out of 47 advising they carry out this activity from the request for information). One respondent advised they hand gather peeler crabs from April to September and pick two dozen oysters twice a month. The second respondent hand gathers peeler crabs once or twice a month and the third respondent hand gathers mussel and peeler crab but has not confirmed how often. D&S IFCA has attempted to find out the frequency of the third respondents' activities but has been unable to obtain this information.

### **3.2. Static- Pots/Traps**

#### **3.2.1 Pots/Creels, Cuttle Pots, Fish Traps**

There are 31 vessels that have been issued with potting permits in the East of the District. The base ports include: Axmouth (11), Beer (4), Branscombe Beach (1), Lyme Regis (13), and Sidmouth (2). The vessels have a total of 8,177 pots between them made up of 385 inkwells, 2,375 parlours/creels, 4,895 whelk pots, 265 cuttle pots, and 200 wrasse pots, 22 prawn pots and 35 lobster pots. The target species are brown crab, lobster, spiny lobster, cuttle, whelk, wrasse and prawns. It should be noted that the live wrasse fishery is restricted to Plymouth Sound and therefore any targeting of wrasse in the Axe would not be for use as cleaner fish.

Low levels of potting do occur around the Axe estuary (two respondents replied from the call for information advising that they pot around the estuary) however the majority of this activity appears to occur at the mouth of the estuary, outside of the MCZ, with the exception of one grid cell (C15 which crosses into the MCZ, Appendix 1, figure 4 and Appendix 2 figure 5). From the information provided it cannot be confirmed whether the pots within this grid cell are located in the MCZ or not, and it has not been possible to get this additional information from the respondent. However, the nature of the channel and tides through the area mean that it is unlikely that these pots are deployed within the MCZ. In addition, grid cell C15 does not contain any designated features (Appendix 3) The two respondents that indicated that they conduct potting around the estuary have 330 pots between them, 240 of which are inkwells or parlours, and 90 are whelk pots. One of these vessels indicated that they work between 10-12 pots and lift them 2-3 times a week from March to October as weather and tide allows.

### **3.3. Static- Fixed Nets and Passive Nets**

#### **3.3.1 Gill Nets, Trammels, Entangling, and Drift Nets (Demersal)**

This activity falls under the D&S IFCA Netting Permit Byelaw and is currently not permitted to take place within the Axe Estuary MCZ. In the estuary landward of the coordinates set out

in Figure , a permit holder or named representative is not authorised to use any net other than a seine net in accordance with paragraph 3.2 of the Netting Permit Conditions.

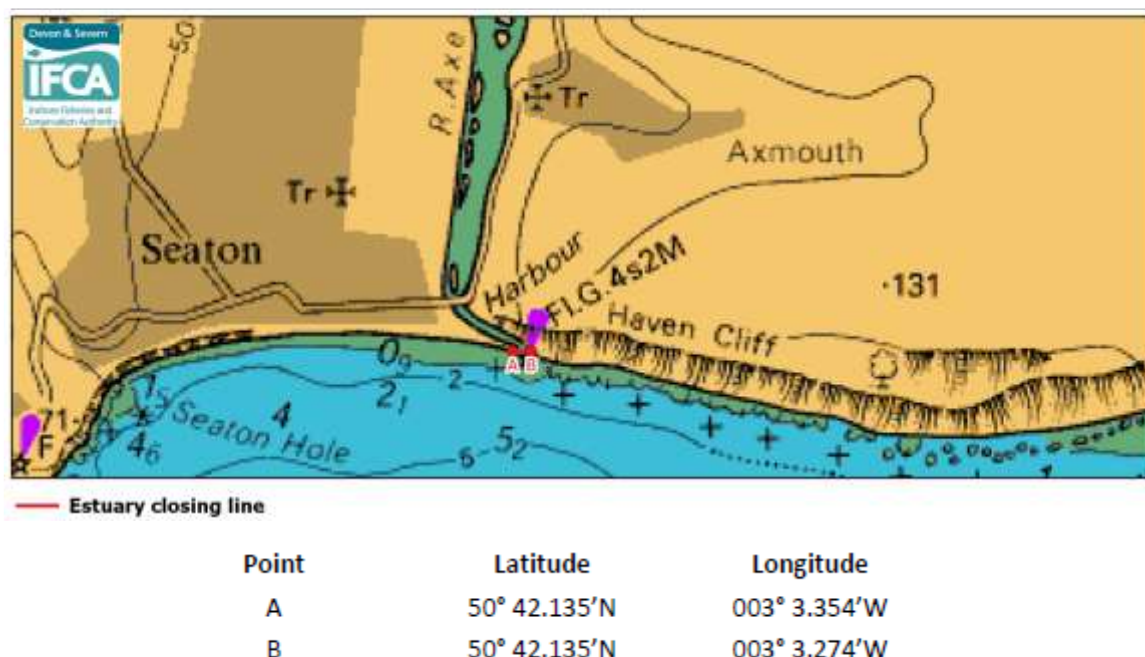


Figure 1: River Axe closing line latitude and longitude. No access landward of the line to the use of nets other than a seine net in accordance with paragraph 3.2 of the Netting Permit Conditions.

### 3.4 Lines

#### 3.4.1 Longlines (Demersal)

There are no records of this activity taking place within the Axe Estuary MCZ. However, there is no evidence that it is not occurring at a low, undetected level and therefore cannot be completely ruled out.

### 3.5 Seine Nets & Others

#### 3.5.1 Beach Seine/Ring

Seine netting in the Axe Estuary requires a netting permit under D&S IFCA's Netting Permit Byelaw. A permit holder or named representative may only use a seine net 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. In addition, the permit holder or their named representative must a) remain in attendance with the net for the entire duration that the net is deployed in the water; and b) deploy and haul the net in one continuous action without pause or delay.

There are 24 vessels that have been issued with a netting permit in the East of the District. The base ports include: Axmouth (8), Beer (3), Lyme Regis (12), and Sidmouth (1). None of these vessels indicated on their permit application that they intend to use a seine net within an estuary. In addition, there are currently no records of seine netting for sand eel in the Axe

Estuary MCZ. There is no evidence that it is not occurring at a low, undetected level and therefore cannot be completely ruled out.

### **3.5.2 Shrimp Push-nets, Fyke & Stake nets**

This activity is currently not permitted to take place within the Axe Estuary MCZ as this activity falls under the D&S IFCA Netting Permit Byelaw. In the estuary landward of the coordinates set out in Figure above, a permit holder or named representative is not authorised to use any net other than a seine net subject to the conditions outlined above in section 3.5.1. It should be noted that the Netting Permit Byelaw does not include any net which when fully expanded does not exceed an area of more than four meters squared, where it is operated only manually and not in connection with any vessel or mechanical device.

It should be noted that the Netting Permit Byelaw does not include any net which when fully expanded does not exceed an area of more than four meters squared, where it is operated only manually and not in connection with any vessel or mechanical device.

## **3.6 Miscellaneous**

### **3.6.1 Crab Tiling**

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

Crab tiles were first recorded on the River Axe in 2016 (the first year in which such recording was undertaken). Surveys on the River Axe were carried out on foot in 2020, during which 245 tiles were observed on the east bank of the Axe and in a small area of the west bank under the B3172/Harbour Road bridge. This is a 46% increase relative to 2016. The rest of the west bank of the River Axe was not surveyed due to Covid-19 restrictions limiting surveys and the requirement of two officers due to muddy conditions. In 2016, a total of 95 crab tiles were observed along the section of the west bank that remained unsurveyed in 2020. Figure 2 shows the location of crab tiles on the River Axe, comparing 2016 and 2020.



*Figure 2: Overview of crab tiles on the River Axe comparing 2016 and 2020 surveys. Base map © OpenStreetMap contributors*

### **3.7 Bait Collection- Digging with Forks**

D&S IFCA conducted bait digging surveys in summer and autumn of 2020. During these surveys no evidence was found of bait digging on the Axe Estuary.

D&S IFCA also circulated a request for information on bait digging to the local community and harbour master to gather evidence and better understand fishing activity within the site. The harbour master advised that little bait digging occurs on the Axe Estuary. Responses from the request for information indicate that bait digging is occurring within the Estuary (see Appendix 1, figure 3 and 4), but this is likely to be at low levels (only three respondents advised they dig in the MCZ on average two to three times a month).

### **3.8 Aquaculture**

3.8.1. Shellfish aquaculture: bottom culture, Shellfish aquaculture: suspended rope/net culture, Shellfish aquaculture: trestle culture

There are no records of this activity taking place within the Axe Estuary MCZ. Currently, there are no classified shellfish harvesting areas within the MCZ. No evidence of aquaculture infrastructure (e.g. trestles) was observed during D&S IFCA's surveys of bait digging or crab tiling. However, there is no evidence that bottom culture is not occurring at a low, undetected level and therefore cannot be completely ruled out.



## 4. References

- Defra. 2019. Axe Estuary Marine Conservation Zone factsheet.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/914337/mcz-axe-estuary-2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/914337/mcz-axe-estuary-2019.pdf).
- Marine Management Organisation. (2014.). Fisheries in European marine sites: Matrix.  
<https://www.gov.uk/government/publications/fisheries-in-european-marine-sites-matrix> (Accessed 24 January 2022).

## Appendix 1. Location of fishing activities

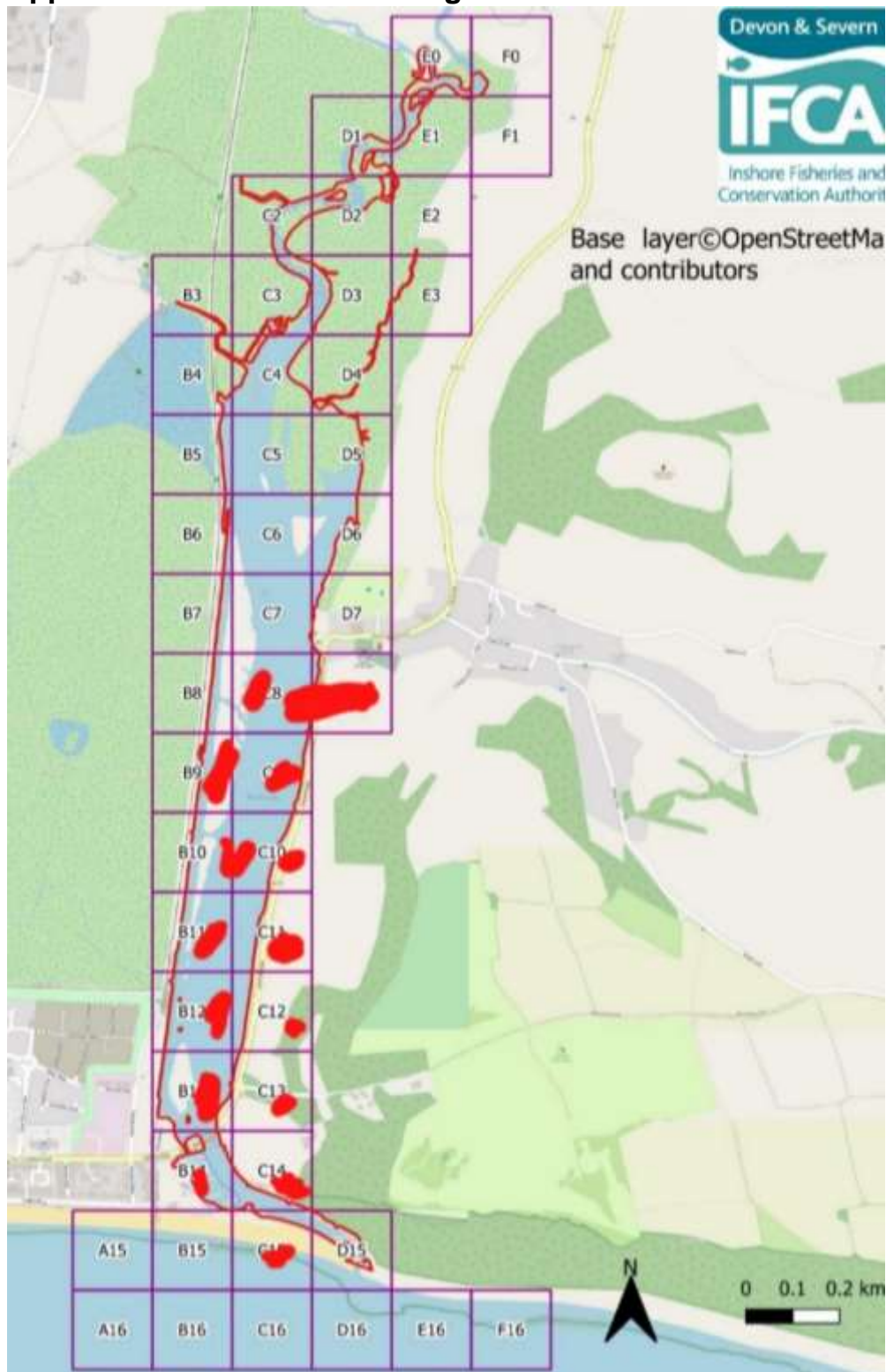


Figure 3: Location of one respondent's fishing activity from request for information (bait digging and hand gathering). Base map © OpenStreetMap contributors

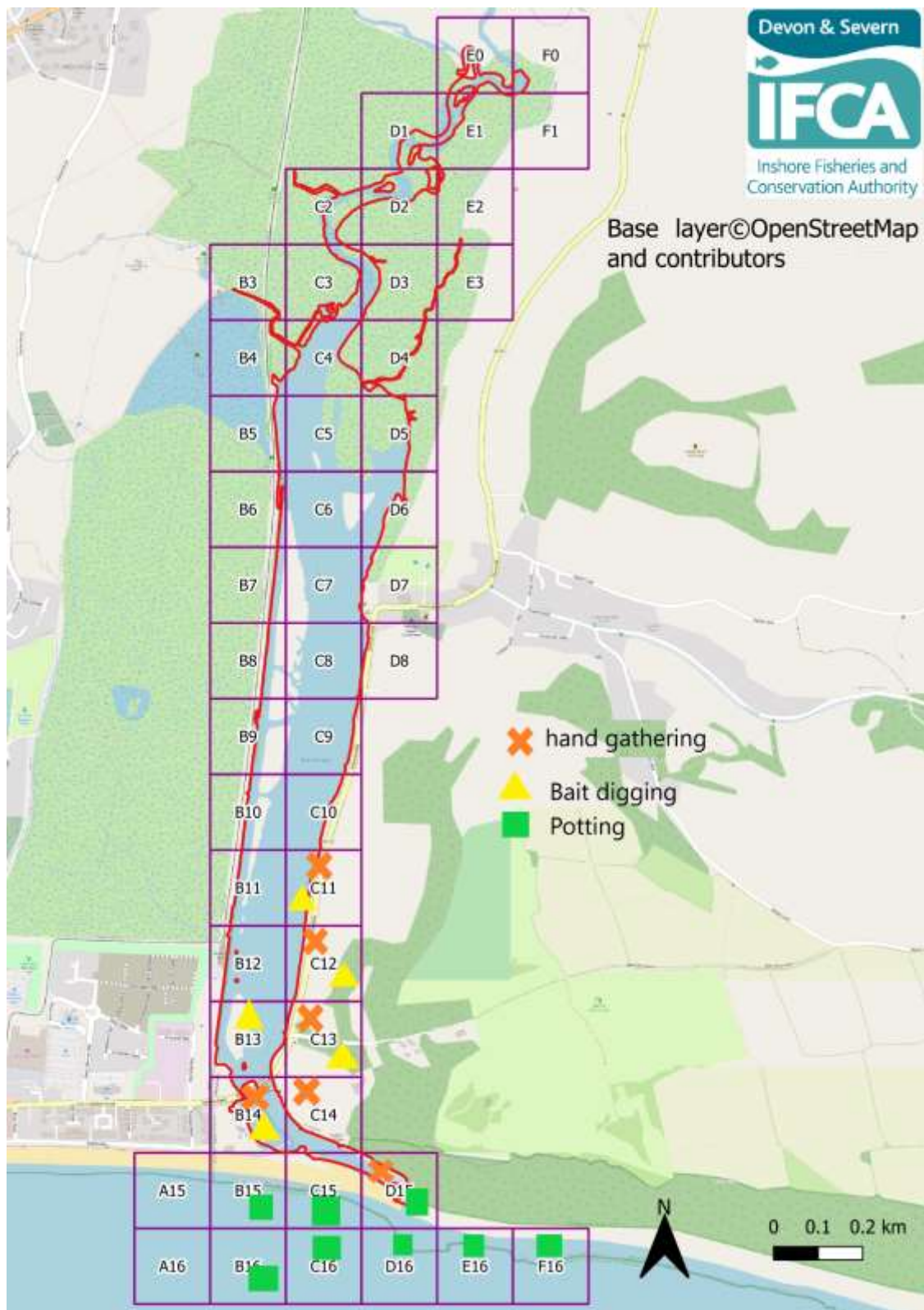


Figure 4: Location of one respondent's fishing activity from request for information (bait digging, potting and hand gathering). Base map © OpenStreetMap contributors



## Appendix 2. Location of potting activities

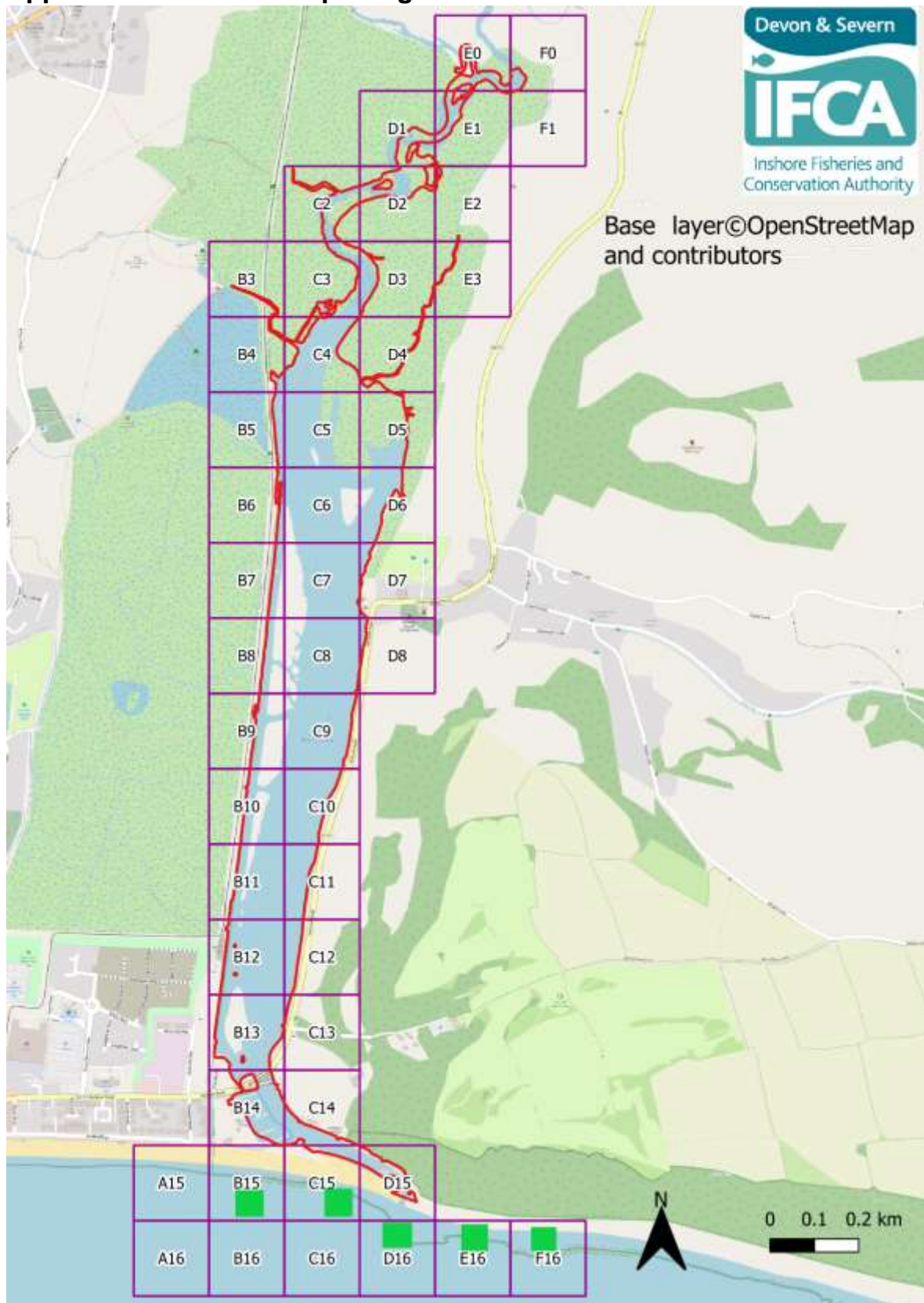


Figure 5: Location of one respondent's potting activity from request for information (green squares). Base map © OpenStreetMap contributors

### Appendix 3. Extent of features designated in the Axe Estuary MCZ

