

**DEFA has granted permission for the following scientific research:**

- **King and queen scallop survey in Isle of Man Territorial Waters**

**Name of Organisation:** Manx Fish Producers Organisation (MFPO)

**Vessels:** Benolas PL11 and Our Sarah Jane CT141

**Purpose of survey:**

- Survey selected fishing grounds, catching both adult and juvenile king and queen scallops using both standard and modified dredges;
- To record tow and catch data, measuring king and queen scallops caught; and
- Retain where requested samples for scientific analysis.

**Dates, times and location:** To take place 13<sup>th</sup> May to 12<sup>th</sup> June 2024 within Isle of Man Territorial Waters.

Survey locations within Isle of Man Territorial Waters are outlined below.

**Please note:** If you fish with static gear in any of the survey locations and require co-ordinates, please get in touch with DEFA Fisheries Division on 01624 685857 or email [fisheries@gov.im](mailto:fisheries@gov.im)

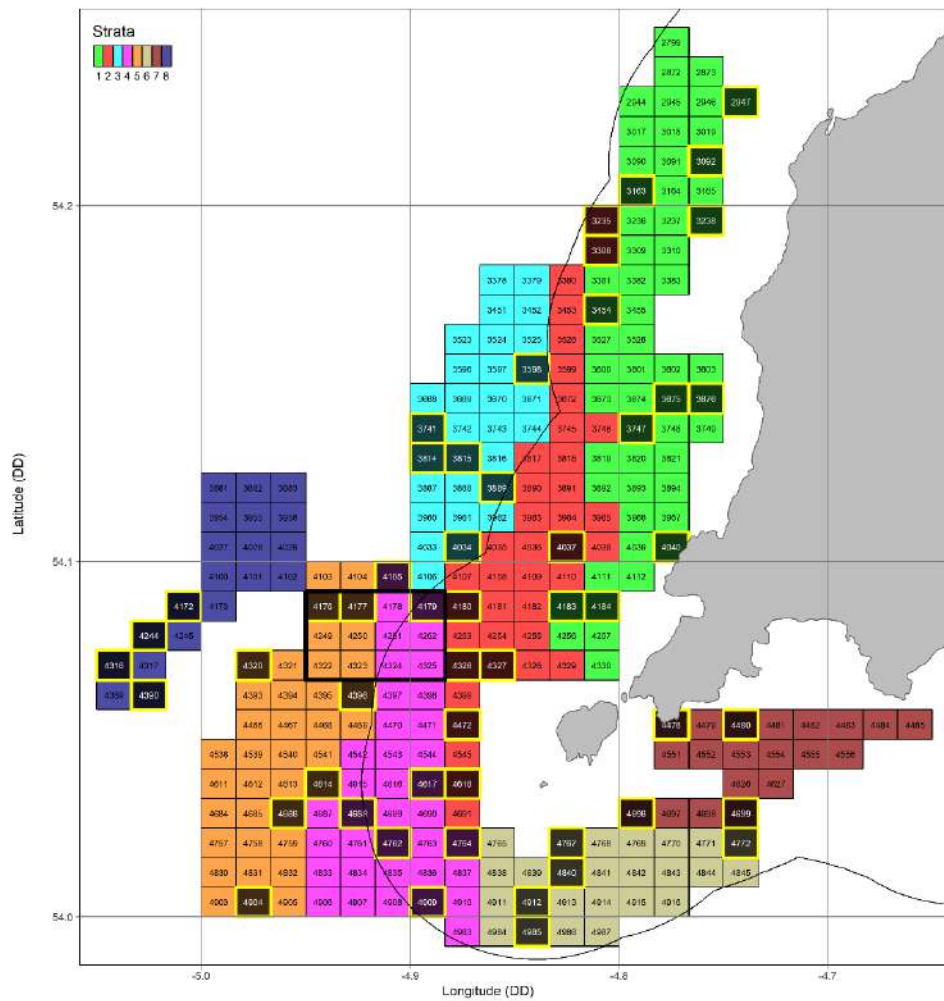


Figure 1. A map showing the survey extent for the Bradda (BRA) survey ground that is mainly within the 0-3 nm limit although Strata 5 extends outside the 0-3 nm limit. The survey area was divided into seven strata based on depth and location: Strata 1: green is > 32 m {56 cells}, Strata 2: red is > 32 m and < 40 m {39 cells}, Strata 4: pink is > 40 m and < 50 m {37 cells}, Strata 5: orange is > 50 and < 75 m {38 cells} and Strata 3: turquoise which was a fished area added at the request of industry in 2022 and extended in 2023 {30 cells} and Strata 8: navy which is a fished area added at the request of industry in 2023 {20 cells} which are all on the south-west and Strata 6: khaki is < 75 m {25 cells} and Strata 7: is < 5 32 m {20 cells}, which are all on the south coast. The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 11 tows, Strata 2 = 8 tows, Strata 3 = 6 tows, Strata 4 = 7 tows, Strata 5 = 7 tows, Strata 6 = 5 tows, Strata 7 = 4 tows and Strata 8 = 4 tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light black fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement.

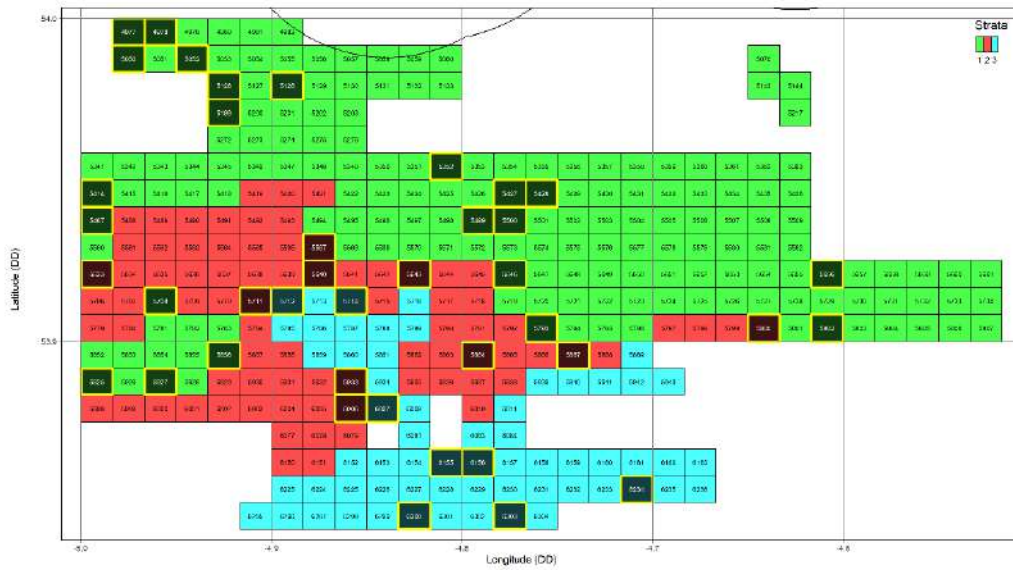


Figure 2. A map showing the survey extent for the Chickens (CHI) survey ground within the 3-12 nm limit. The survey area was divided into three strata based on depth (Strata 1: green is 5 65 m {171 cells}, Strata 2: red is > 65 m and 5 75 m {80 cells} and Strata 3: blue is > 75 m {61 cells}). The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 22 tows, Strata 2 = 10 tows and Strata 3 = 8 tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light black fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement.

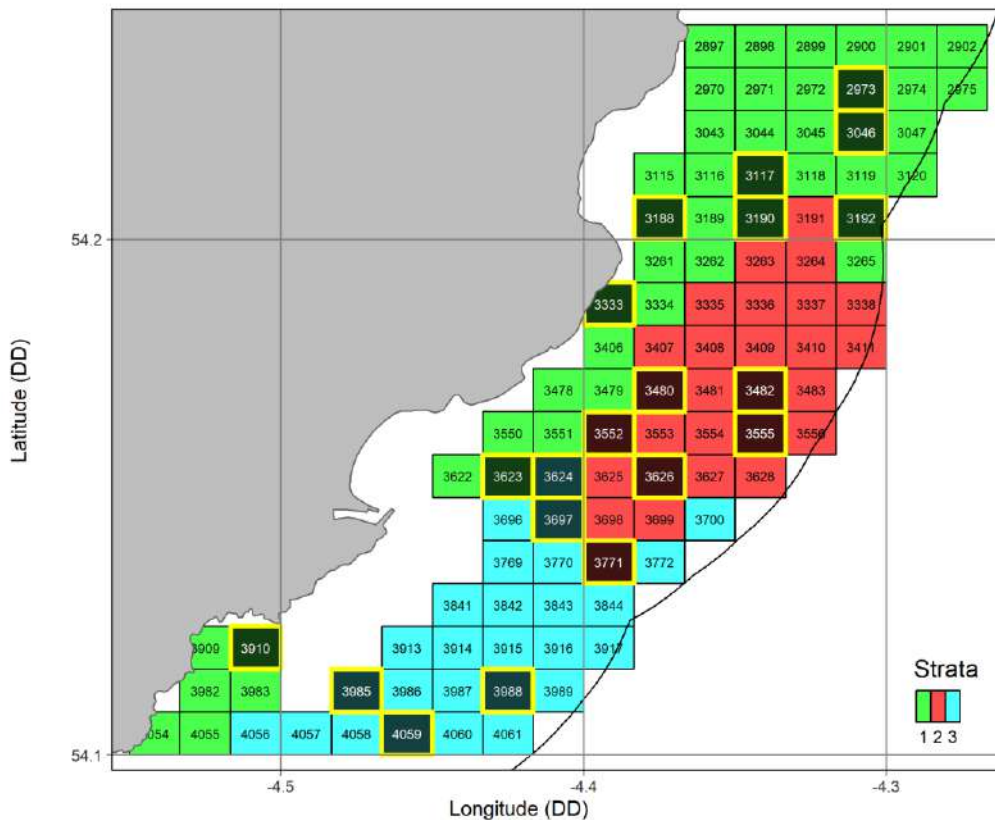


Figure 3. A map showing the survey extent for the East Coast (ECO) survey ground within the 0-3 nm limit. The survey area was divided into three strata based on depth (Strata 1: green is 5 27.43 m {45 cells}, Strata 2: red is > 27.43 m and 5 29.5 m {28 cells} and Strata 3: blue is > 29.5 m {27 cells}). The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 9 tows, Strata 2 = 6 tows and Strata 3 = 5 tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light black fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement

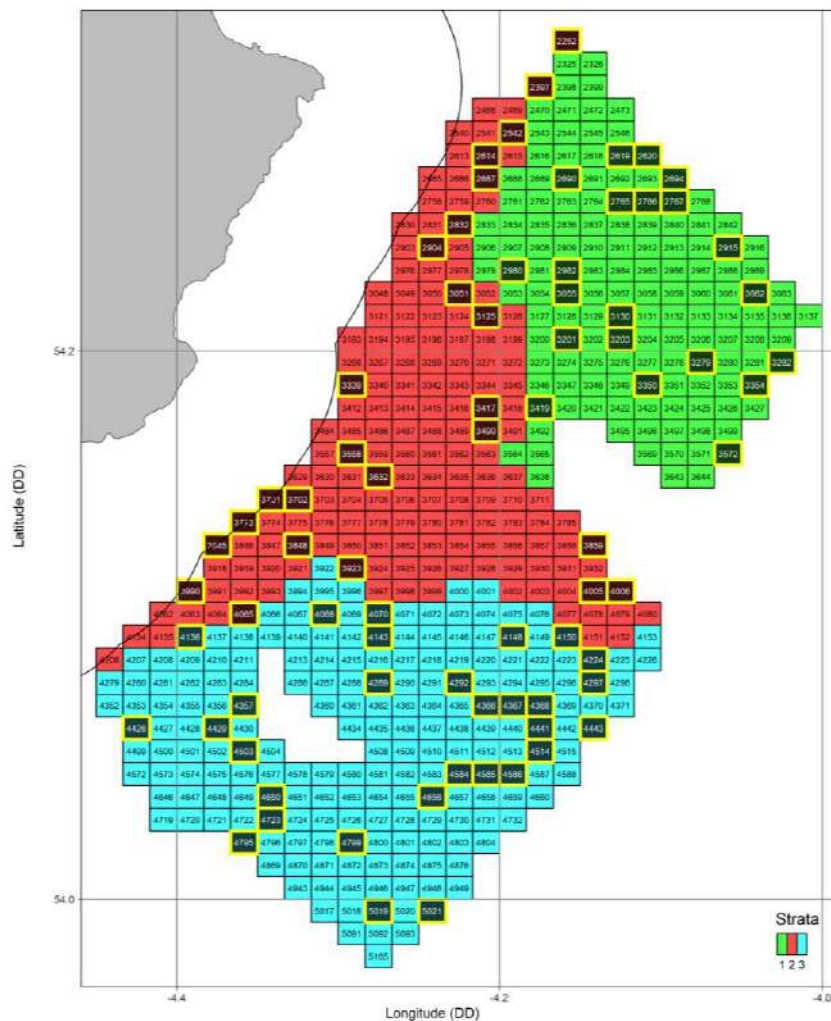


Figure 4 A map showing the survey extent for the East of Douglas (EOG) survey ground within the 3-12 nm limit. The survey area was divided into three depth strata {Strata 1: green is 5 26.6 m {139 cells}, Strata 2: red is > 26.6 m and 5 32.25 m {166 cells} and Strata 3: blue is > 32.25 m {198 cells)}. The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 21 tows, Strata 2 = 25 tows and Strata 3 = 30 tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light grey fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement.

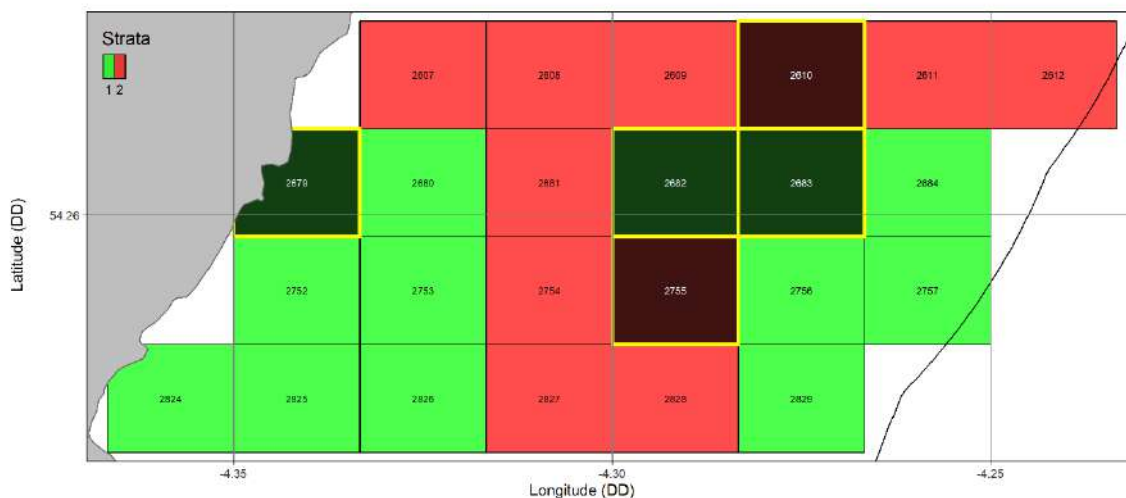


Figure 5. A map showing the survey extent for the East Douglas Experimental Research Area (EOGEHA) survey ground within the 0-3 nm limit. The survey area was divided into two strata based on sediment {Strata 1: green is medium sand [13 cells] and Strata 2: red is coarse sand [11 cells]}. The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 3 tows and Strata 2 = 2 tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light grey fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement.

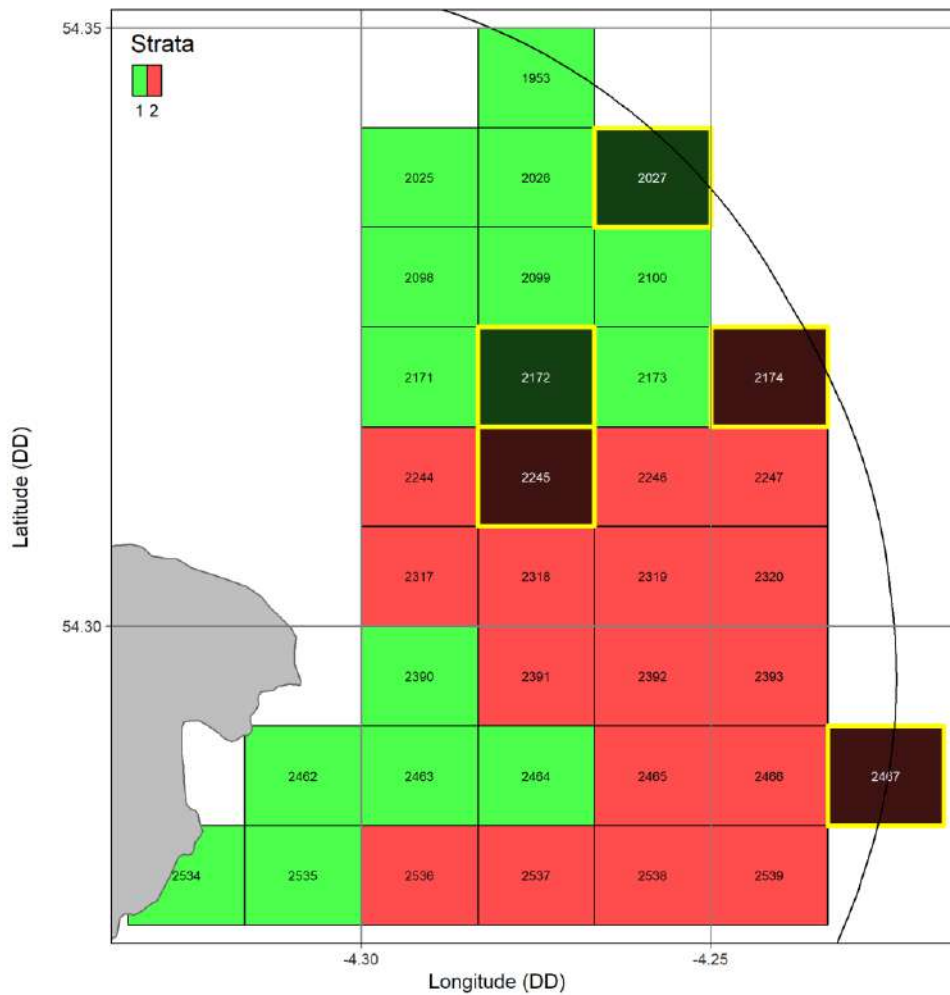


Figure 6. A map showing the survey extent for the Maughold (fVIGH) survey ground within the 0-3 nm limit. The survey area was divided into two strata based on depth (Strata 1: green is 5 22.25 m [16 cells] and Strata 2: red is > 22.25 m [19 cells]). The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 2 tows and Strata 2 = 3 tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light grey fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement.

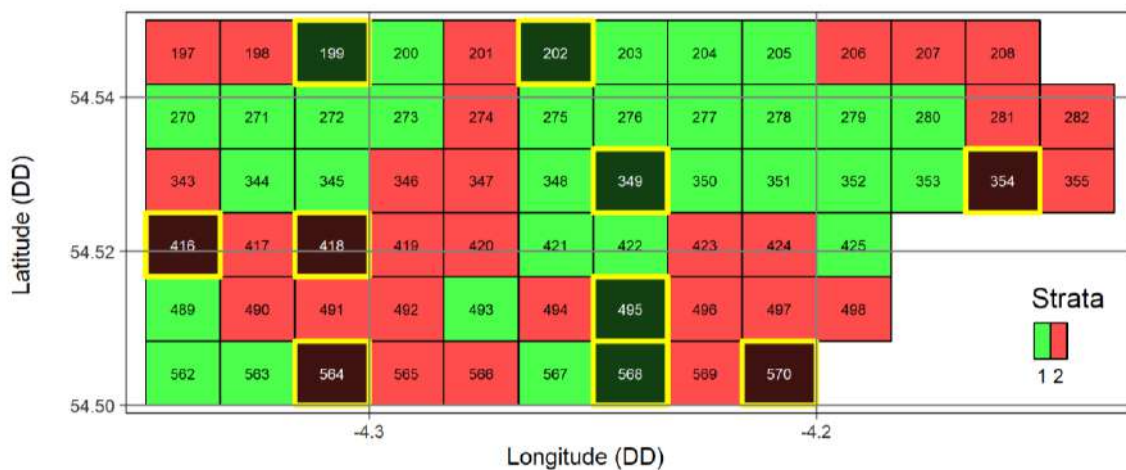


Figure 7. A map showing the survey extent for the Point of Ayre (POAJ) survey ground within the 6-12 nm limit. The survey area was divided into two strata based on depth (Strata 1: green is < 42 m [34 cells] and Strata 2: red is > 42 m and < 70 m [33 cells]). The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 5 tows and Strata 2 = 5 tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light grey fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement.



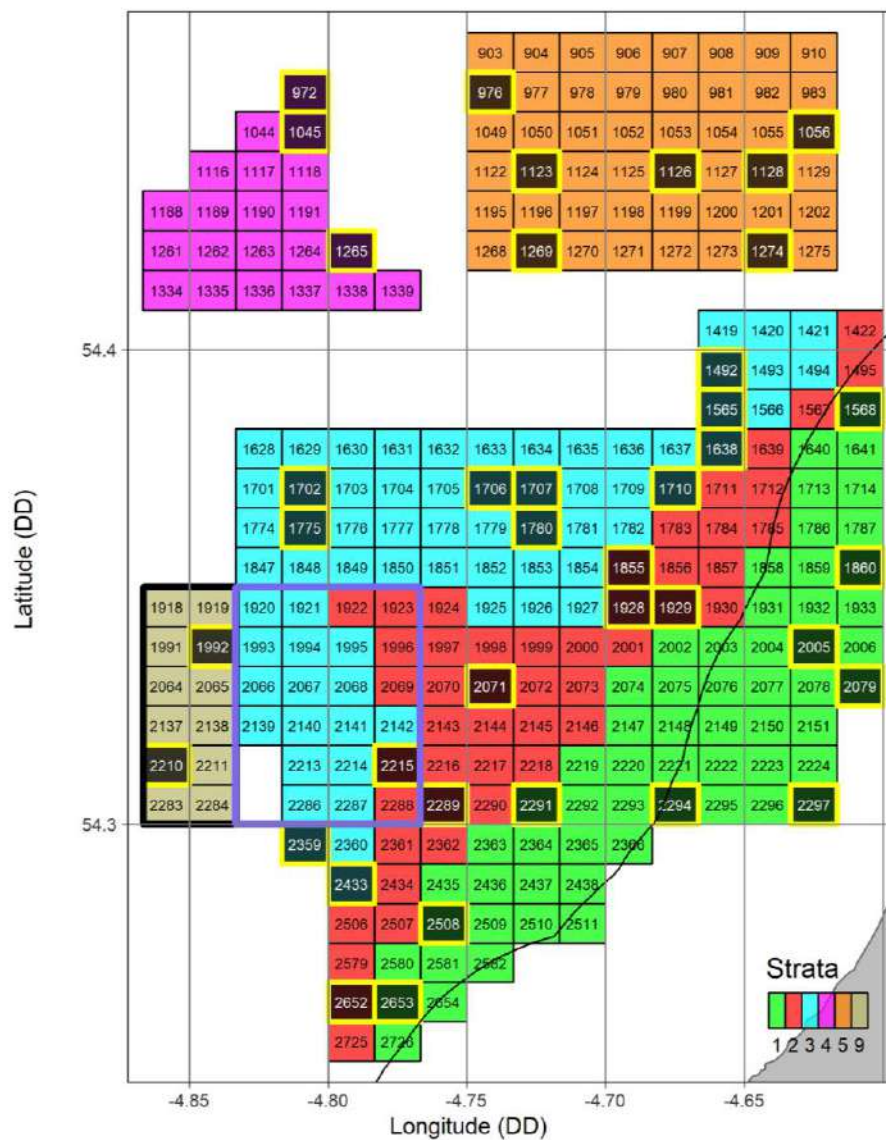


Figure 8 A map showing the survey extent for the Targets (TAR) survey ground within the 0-12 nm limit. The survey area was divided into five strata based on depth and location (Strata 1: green is 5 30.0 m {60 cells}, Strata 2: red is > 30.0 m and 5 35.9 m [48 cells], Strata 3: blue is > 35.9 m {68 cells} and Strata 9 khaki (12 cells) is a muddy closed area are all inshore and Strata 4: pink (21 cells) and Strata 5: orange {48 cells} are both also > 35.9 m but defined as a separate offshore strata). The survey effort was then split proportional to the area of each strata (i.e. Strata 1 = 9 tows, Strata 2 = 7 tows, Strata 3 = 11 tows, Strata 4 = 3 tows, Strata 5 = 7 and Strata 9 = 2 tows tows). Survey cells were randomised for priority order and the selected cells are highlighted in yellow borders with light grey fill. The selected cell should be surveyed unless there is a valid reason (i.e. static gear obstruction, ground unsuitable for survey gear) which should be recorded by the skipper and the next priority station surveyed as a replacement. Purple box is 2023/2024 Restricted Access Area and Black boxes = 2023/2024 Closed Areas.