



codling
wind park

EIAR Addendum

Appendix 9-B Noise overlap
with spawning and nursery
ground calculations





Codling Wind Park Limited (hereafter 'the Applicant') is proposing to develop the Codling Wind Park (CWP) Project, which is located in the Irish Sea approximately 13 - 22 km off the east coast of Ireland, at County Wicklow.

On Friday 6th September 2024 Codling Wind Park Ltd. (referred to hereafter as the 'Applicant') applied for planning permission to An Coimisiún Pleanála (ACP) (referred to hereafter as the 'Commission') under Section 291 of the Planning and Development Act (PDA) 2000, as amended, for the construction, operation and decommissioning of the CWP Project.

On 1st August 2025, having reviewed the application documentation, including the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS), the Commission issued a Further Information Request (FIR) in relation to the CWP Project.

This document has been prepared in response to Item 11a of the Commission's FIR (see FIR Response Document). It supersedes Volume 4, Appendix 9.3 Noise overlap with spawning and nursery ground calculation of the EIAR.



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APPENDIX 9-B NOISE OVERLAP WITH SPAWNING AND NURSERY GROUND CALCULATION

1 Introduction

1. This document contains the summary tables and long list of the calculated overlaps for all species represented within the established nursery and spawning habitat sources. Values are based on the overlap between data source shapefiles and the noise level contours produced by modelling.

2 Turbine Development Site

2. Three different mitigation scenarios are available and have been assigned to specific modelling locations as described below:
 - Scenario 1 (slow soft start and ramp up, single pile in 24 hrs) is the only scenario considered in the SE corner outputs – also referred to as Stage 1 and the most restrictive;
 - Scenario 2 (soft start, single pile in 24 hrs) is the only scenario considered in the NE and SW corner outputs – also referred to as Stage 2 and less restrictive; and
 - Scenario 3 (soft start, two piles in 24 hrs) is the only scenario considered in the NW corner – also referred to as Stage 3 and least restrictive.

3 Methods

3. The methods were as follows:
4. For each piling location, model type, and for each sound level separately:
 - a. Polygonise the contour to allow for area calculations
 - b. Read in habitat polygons for each of the three datasets (Ellis, Coull and Ireland Atlas), and for spawning and nursery stages
 - c. Clip habitat polygons to only be those within the national boundary of the Irish Sea, and excluding any area on land
 - d. For each species, and for each habitat intensity available under the given dataset:
 - i. Combine multiple overlapping polygons if present, to avoid duplication of the same habitat under different resolutions (e.g., coarse data from national level dataset may overlap with fine-scale data from local regional dataset).
 - ii. Intersect area covered by noise contour and the habitat to provide overlap, where important habitat will be affected by noise.
 - iii. Calculate the area of overlap, and total area present (e.g., if one iteration is calculating overlap for Cod spawning areas of high intensity from the Ellis dataset, the area of the total habitat available to high intensity spawning cod within the national boundary (clipped to the sea), is calculated)
 - iv. Calculate the proportion of national habitat within the dataset that will be potentially impacted
 - v. Save the results and repeat for other species/intensity/dataset

5. Once a collated dataset of N combinations of habitat dataset, habitat type, species, habitat intensity use, piling location, noise level contour, and noise model type was amassed that had the proportion of national area, the maximum proportion was taken per species, habitat type, intensity, noise level, and noise model. This presents a worst-case, across all piling locations and habitat datasets.
6. See **Plate 1** for an example. In this example, the black background shows the national area (noting all assessments are undertaken on the mitigated noise contours in relation to the spawning or nursery areas within the ICES regional study area), excluding land. Green shows habitat for the relevant species, here nursery habitat from the Coull dataset. The yellow polygon shows the extent of the pile noise contours (here at the North West location, at 186 dB, using the stationary model where fish do not flee). The red polygon shows where overlap between the habitat for the relevant species, and the noise contours exist. This is repeated for each species across each sound level for each noise contour (4 locations each under two different models), two different habitat types (nursery and spawning), potentially multiple levels of habitat intensity (high, low, unclassified), across three different habitat datasets (Ellis, Coull, and Marine Institute data). Where some of the habitat polygons also had multiple resolutions (e.g., high resolution for the Irish Sea, low resolution for outside of this area), there was often an overlap between polygons (e.g., detailed local polygons, overlapped by coarser national polygons). To avoid duplication in the area calculations, polygons were combined. It should be clearly noted that the results used in the assessment are derived from the proportion of overlap of the mitigated noise contours with the spawning or nursery areas within the ICES regional study area only.

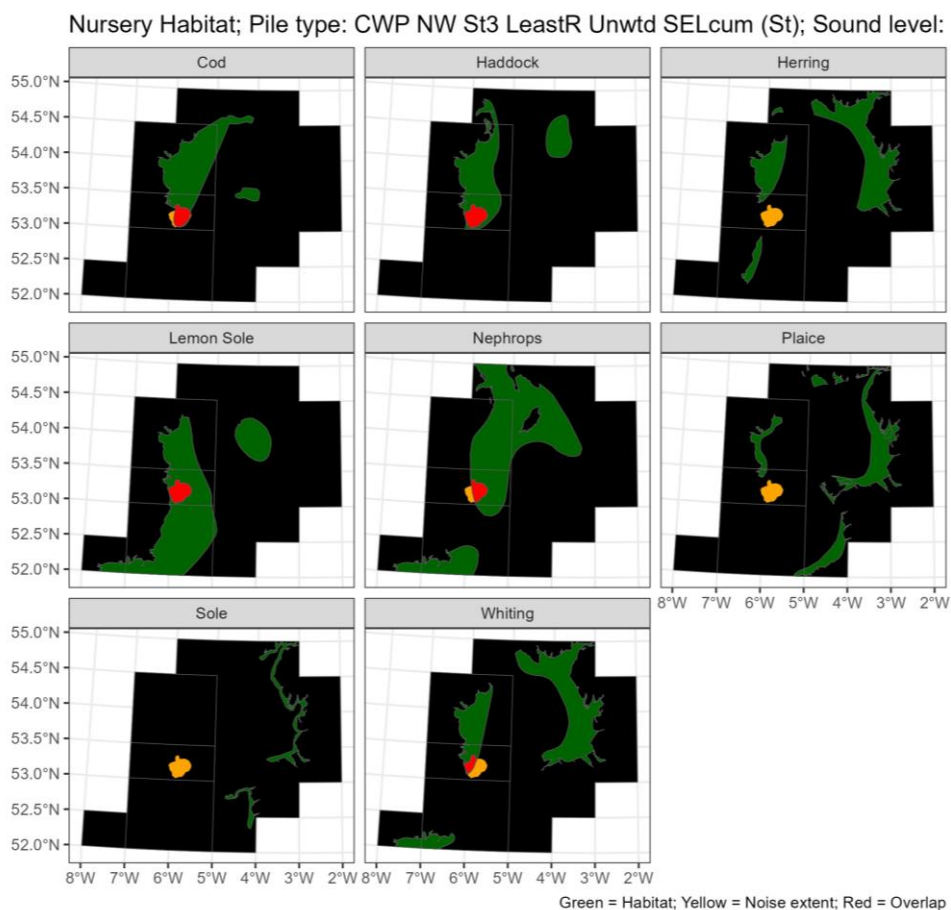


Plate 1 Example image one



7. In some datasets (particularly Coull spawning), there were many levels of habitat intensity. High and Higher were combined, and NULL was reclassified as Undetermined, as per the below plate (Plate 2).

Nursery Habitat; Pile type: CWP SW St3 LeastR Unwtd SELcum (St); Sound level: 186

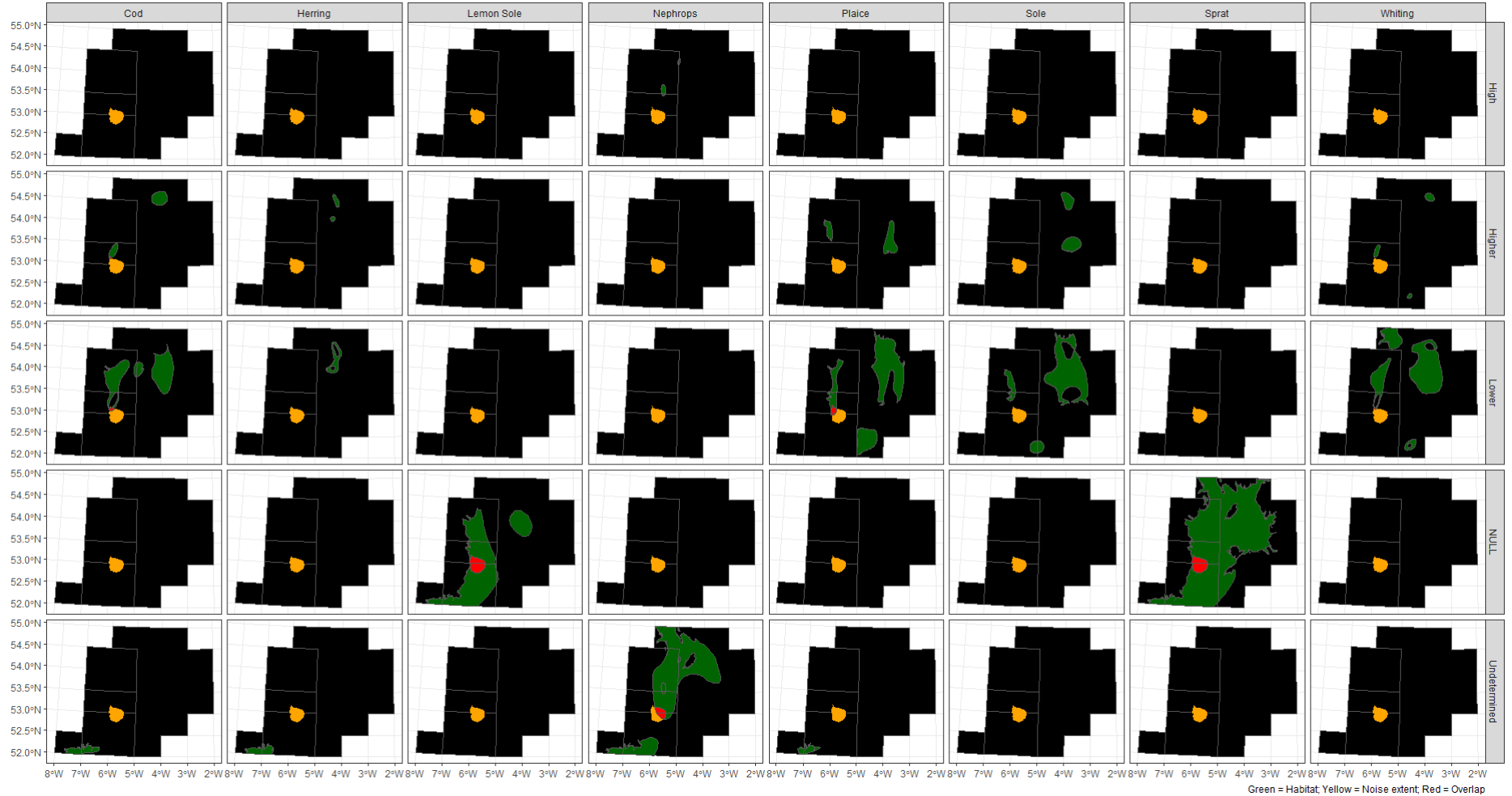


Plate 2 Example image two

8. Where multiple intensities exist, they were treated separately. E.g., below (**Plate 3**), red is high intensity spawning habitat of whiting within the Coull dataset, and green is other intensities including undetermined level and low intensity. Here the red polygons are used separately for overlap assessment, and then the assessment would be repeated for other intensities.

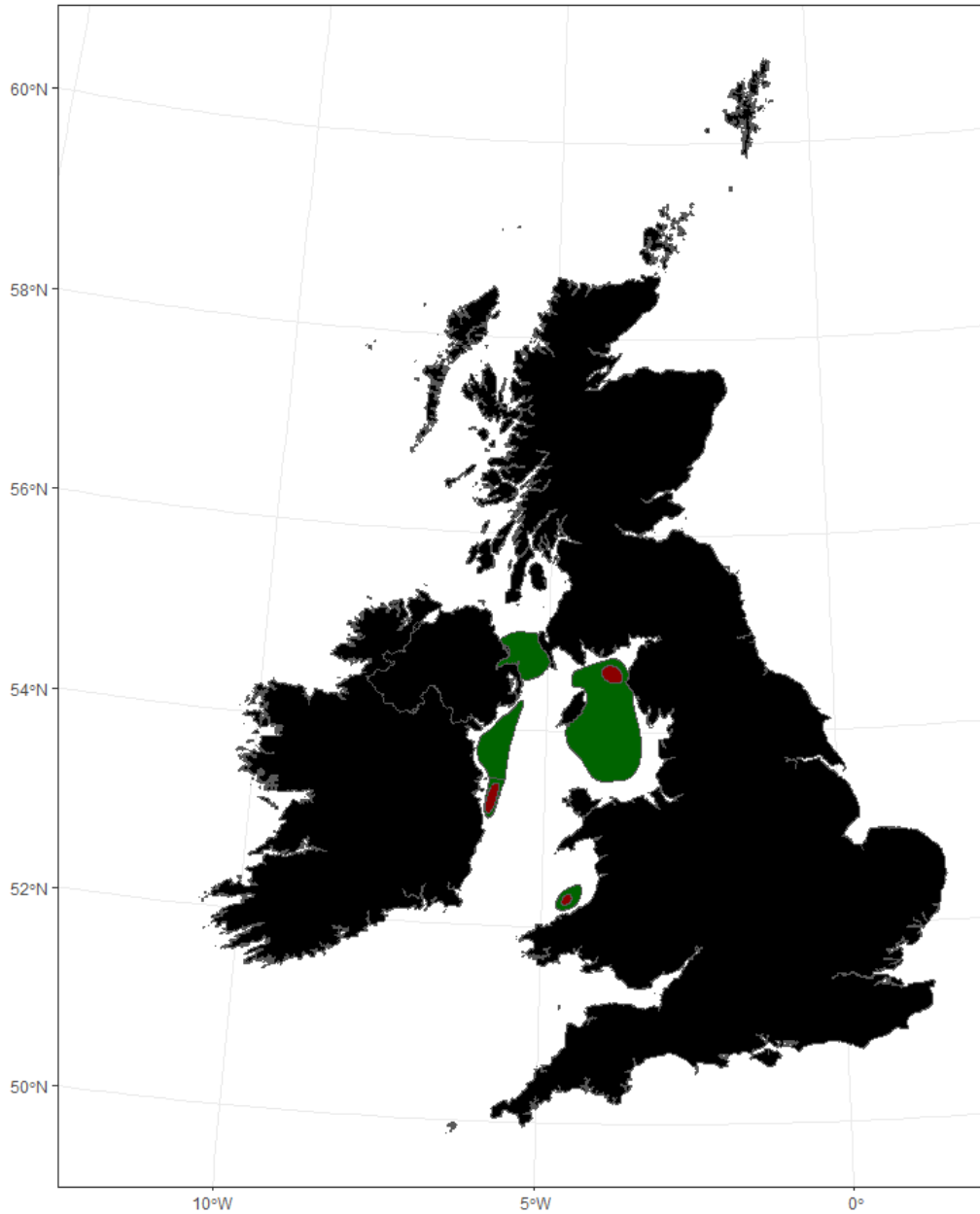


Plate 3 Example image three

4 Results

4.1 Overlap Long List Tables

9. The following two tables represent the long list of calculations completed for all modelling locations across intensity of habitat use.

Table A Noise modelling areas of overlap calculations for the Array/OECC in relation to the spawning or nursery areas within the ICES regional study area

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW	
1	Anglerfish	Nursery	Low	Multiple pulse	186	Flee	-	0.00044361	-	-	0.00054447	-	-	0.000201672	-	-	0.000222773	-	-	0.000306464	-	
2	Anglerfish	Nursery	Low	Multiple pulse	203	Flee	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	
3	Anglerfish	Nursery	Low	Multiple pulse	207	Flee	-	9.74E-08	-	-	9.74E-08	-	-	9.74E-08	-	-	9.74E-08	-	-	9.74E-08	-	
4	Anglerfish	Nursery	Low	Multiple pulse	210	Flee	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	
5	Anglerfish	Nursery	Low	Multiple pulse	216	Flee	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	
6	Anglerfish	Nursery	Low	Multiple pulse	219	Flee	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	
7	Anglerfish	Nursery	Low	Multiple pulse	186	St	-	0.01795725	-	-	0.01434845	-	-	0.010107179	-	-	0.017898822	-	-	0.013879719	-	
8	Anglerfish	Nursery	Low	Multiple pulse	203	St	-	0.00019342	-	-	0.00021616	-	-	0.000200787	-	-	0.000483138	-	-	0.000204388	-	
9	Anglerfish	Nursery	Low	Multiple pulse	207	St	-	5.58E-05	-	-	7.03E-05	-	-	6.67E-05	-	-	0.000153429	-	-	6.25E-05	-	
10	Anglerfish	Nursery	Low	Multiple pulse	210	St	-	2.19E-05	-	-	2.99E-05	-	-	2.81E-05	-	-	6.68E-05	-	-	2.49E-05	-	
11	Anglerfish	Nursery	Low	Multiple pulse	216	St	-	2.95E-06	-	-	5.06E-06	-	-	4.77E-06	-	-	1.19E-05	-	-	4.12E-06	-	
12	Anglerfish	Nursery	Low	Multiple pulse	219	St	-	1.19E-06	-	-	1.97E-06	-	-	1.97E-06	-	-	4.77E-06	-	-	1.56E-06	-	
13	Anglerfish	Nursery	Low	Single strike	207	-	-	1.17E-06	-	-	1.15E-06	-	-	1.12E-06	-	-	-	-	-	9.56E-07	-	
14	Anglerfish	Nursery	Low	Single strike	213	-	-	2.14E-07	-	-	2.45E-07	-	-	2.40E-07	-	-	-	-	-	1.91E-07	-	
15	Cod	Nursery	High	Multiple pulse	186	Flee	-	0.00111547	-	-	0.00142369	-	-	0.000527332	-	-	0.000582507	-	-	0.000329024	-	
16	Cod	Nursery	High	Multiple pulse	203	Flee	-	5.73E-07	-	-	5.73E-07	-	-	5.73E-07	-	-	5.73E-07	-	-	5.73E-07	-	
17	Cod	Nursery	High	Multiple pulse	207	Flee	-	2.55E-07	-	-	2.55E-07	-	-	2.55E-07	-	-	2.55E-07	-	-	2.55E-07	-	
18	Cod	Nursery	High	Multiple pulse	210	Flee	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	
19	Cod	Nursery	High	Multiple pulse	216	Flee	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	
20	Cod	Nursery	High	Multiple pulse	219	Flee	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	
21	Cod	Nursery	High	Multiple pulse	186	St	-	0.02546309	-	-	0.03751837	-	-	0.026428283	-	-	0.046801896	-	-	0.016484227	-	
22	Cod	Nursery	High	Multiple pulse	203	St	-	0.00050575	-	-	0.0005652	-	-	0.000525017	-	-	0.001263311	-	-	0.000337889	-	
23	Cod	Nursery	High	Multiple pulse	207	St	-	0.00014583	-	-	0.00018388	-	-	0.000174386	-	-	0.000401186	-	-	0.000120246	-	
24	Cod	Nursery	High	Multiple pulse	210	St	-	5.73E-05	-	-	7.81E-05	-	-	7.36E-05	-	-	0.000174572	-	-	5.65E-05	-	
25	Cod	Nursery	High	Multiple pulse	216	St	-	7.71E-06	-	-	1.32E-05	-	-	1.25E-05	-	-	3.12E-05	-	-	1.08E-05	-	
26	Cod	Nursery	High	Multiple pulse	219	St	-	3.12E-06	-	-	5.16E-06	-	-	5.16E-06	-	-	1.25E-05	-	-	4.08E-06	-	
27	Cod	Nursery	High	Single strike	207	-	-	3.07E-06	-	-	3.02E-06	-	-	2.94E-06	-	-	-	-	-	2.50E-06	-	
28	Cod	Nursery	High	Single strike	213	-	-	5.61E-07	-	-	6.41E-07	-	-	6.27E-07	-	-	-	-	-	4.98E-07	-	
29	Cod	Nursery	Low	Multiple pulse	186	Flee	-	5.19E-05	-	-	0	-	-	0	-	-	0	-	-	0.000550516	-	
30	Cod	Nursery	Low	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
31	Cod	Nursery	Low	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
32	Cod	Nursery	Low	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
33	Cod	Nursery	Low	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
34	Cod	Nursery	Low	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
35	Cod	Nursery	Low	Multiple pulse	186	St	-	0.02504969	-	-	0	-	-	0	-	-	0	-	-	0.023087965	-	
36	Cod	Nursery	Low	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0.000229086	-	
37	Cod	Nursery	Low	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	5.02E-05	-	
38	Cod	Nursery	Low	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	1.02E-05	-	
39	Cod	Nursery	Low	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
40	Cod	Nursery	Low	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
41	Cod	Nursery	Low	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	
42	Cod	Nursery	Low	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	
43	Cod	Nursery	Undetermined	Multiple pulse	186	Flee	-	0	-	0	0.00131791	-	0	0.00048815	-	0.00033194	0.000539227	-	0.000366672	0	-	0.000504423
44	Cod	Nursery	Undetermined	Multiple pulse	203	Flee	-	0	-	0	5.31E-07	-	0	5.31E-07	-	3.61E-07	5.31E-07	-	3.61E-07	0	-	3.61E-07
45	Cod	Nursery	Undetermined	Multiple pulse	207	Flee	-	0	-	0	2.36E-07	-	0	2.36E-07	-	1.60E-07	2.36E-07	-	1.60E-07	0	-	1.60E-07
46	Cod	Nursery	Undetermined	Multiple pulse	210	Flee	-	0	-	0	5.90E-08	-	0	5.90E-08	-	4.01E-08	5.90E-08	-	4.01E-08	0	-	4.01E-08
47	Cod	Nursery	Undetermined	Multiple pulse	216	Flee	-	0	-	0	5.90E-08	-	0	5.90E-08	-	4.01E-08	5.90E-08	-	4.01E-08	0	-	4.01E-08
48	Cod	Nursery	Undetermined	Multiple pulse	219	Flee	-	0	-	0	5.90E-08	-	0	5.90E-08	-	4.01E-08	5.90E-08	-	4.01E-08	0	-	4.01E-08
49	Cod	Nursery	Undetermined	Multiple pulse	186	St	-	0.00494091	-	0.003729969	0.02873424	-	0.006016786	0.02434998	-	0.016635856	0.040101528	-	0.029460469	0.00397959	-	0.01873831
50	Cod	Nursery	Undetermined	Multiple pulse	203	St	-	0	-	0	0.00052321	-	0	0.00048601	-	0.000330483	0.001169447	-	0.000795219	0	-	0.000336411
51	Cod	Nursery	Undetermined	Multiple pulse	207	St	-	0	-	0	0.00017022	-	0	0.00016143	-	0.000109771	0.000371378	-	0.000252535	0	-	0.000102817
52	Cod	Nursery	Undetermined	Multiple pulse	210	St	-	0	-	0	7.23E-05	-	0	6.81E-05	-	4.63E-05	0.000161601	-	0.000109888	0	-	4.11E-05
53	Cod	Nursery	Undetermined	Multiple pulse	216	St	-	0	-	0	1.22E-05	-	0	1.16E-05	-	7.86E-06	2.89E-05	-	1.96E-05	0	-	6.78E-06
54	Cod	Nursery	Undetermined	Multiple pulse	219	St	-	0	-	0	4.78E-06	-	0	4.78E-06	-	3.25E-06	1.16E-05	-	7.86E-06	0	-	2.57E-06

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
55	Cod	Nursery	Undetermined	Single strike	207	-	0	-	0	2.80E-06	-	0	2.72E-06	-	1.85E-06	-	-	-	0	-	1.57E-06
56	Cod	Nursery	Undetermined	Single strike	213	-	0	-	0	5.93E-07	-	0	5.81E-07	-	3.95E-07	-	-	-	0	-	3.14E-07
57	Cod	Spawning	High	Multiple pulse	186	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
58	Cod	Spawning	High	Multiple pulse	203	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
59	Cod	Spawning	High	Multiple pulse	207	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
60	Cod	Spawning	High	Multiple pulse	210	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
61	Cod	Spawning	High	Multiple pulse	216	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
62	Cod	Spawning	High	Multiple pulse	219	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
63	Cod	Spawning	High	Multiple pulse	186	St	0	0	-	0	0	-	0.07357378	0	-	0.156697666	0	-	0	0	-
64	Cod	Spawning	High	Multiple pulse	203	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
65	Cod	Spawning	High	Multiple pulse	207	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
66	Cod	Spawning	High	Multiple pulse	210	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
67	Cod	Spawning	High	Multiple pulse	216	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
68	Cod	Spawning	High	Multiple pulse	219	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
69	Cod	Spawning	High	Single strike	207	-	0	0	-	0	0	-	-	-	-	-	-	-	0	0	-
70	Cod	Spawning	High	Single strike	213	-	0	0	-	0	0	-	0	0	-	-	-	-	0	0	-
71	Cod	Spawning	Low	Multiple pulse	186	Flee	0	0.00079952	-	0	0.00101412	-	0.00096466	0.000375627	-	0.001065591	0.000414929	-	0	0.000240784	-
72	Cod	Spawning	Low	Multiple pulse	203	Flee	0	4.08E-07	-	0	4.08E-07	-	1.05E-06	4.08E-07	-	1.05E-06	4.08E-07	-	0	4.08E-07	-
73	Cod	Spawning	Low	Multiple pulse	207	Flee	0	1.81E-07	-	0	1.81E-07	-	4.66E-07	1.81E-07	-	4.66E-07	1.81E-07	-	0	1.81E-07	-
74	Cod	Spawning	Low	Multiple pulse	210	Flee	0	4.54E-08	-	0	4.54E-08	-	1.17E-07	4.54E-08	-	1.17E-07	4.54E-08	-	0	4.54E-08	-
75	Cod	Spawning	Low	Multiple pulse	216	Flee	0	4.54E-08	-	0	4.54E-08	-	1.17E-07	4.54E-08	-	1.17E-07	4.54E-08	-	0	4.54E-08	-
76	Cod	Spawning	Low	Multiple pulse	219	Flee	0	4.54E-08	-	0	4.54E-08	-	1.17E-07	4.54E-08	-	1.17E-07	4.54E-08	-	0	4.54E-08	-
77	Cod	Spawning	Low	Multiple pulse	186	St	0	0.01818913	-	0	0.02672493	-	0.02427316	0.018825286	-	0.032686893	0.033337735	-	0	0.011782176	-
78	Cod	Spawning	Low	Multiple pulse	203	St	0	0.00036025	-	0	0.0004026	-	0.00096042	0.000373978	-	0.002310998	0.000899877	-	0	0.000245504	-
79	Cod	Spawning	Low	Multiple pulse	207	St	0	0.00013087	-	0	0.00013098	-	0.00031901	0.000124218	-	0.000733897	0.000285771	-	0	8.82E-05	-
80	Cod	Spawning	Low	Multiple pulse	210	St	0	4.08E-05	-	0	5.56E-05	-	0.00013455	5.24E-05	-	0.000319347	0.00012435	-	0	4.15E-05	-
81	Cod	Spawning	Low	Multiple pulse	216	St	0	5.49E-06	-	0	9.42E-06	-	2.28E-05	8.89E-06	-	5.70E-05	2.22E-05	-	0	7.67E-06	-
82	Cod	Spawning	Low	Multiple pulse	219	St	0	2.22E-06	-	0	3.67E-06	-	9.44E-06	3.67E-06	-	2.28E-05	8.89E-06	-	0	2.90E-06	-
83	Cod	Spawning	Low	Single strike	207	-	0	2.19E-06	-	0	2.15E-06	-	5.38E-06	2.09E-06	-	-	-	-	0	1.78E-06	-
84	Cod	Spawning	Low	Single strike	213	-	0	3.99E-07	-	0	4.56E-07	-	1.15E-06	4.47E-07	-	-	-	-	0	3.55E-07	-
85	Cod	Spawning	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0.000772077	-	-	0.000852861	-	-	0
86	Cod	Spawning	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	8.39E-07	-	-	8.39E-07	-	-	0
87	Cod	Spawning	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	3.73E-07	-	-	3.73E-07	-	-	0
88	Cod	Spawning	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	9.33E-08	-	-	9.33E-08	-	-	0
89	Cod	Spawning	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	9.33E-08	-	-	9.33E-08	-	-	0
90	Cod	Spawning	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	9.33E-08	-	-	9.33E-08	-	-	0
91	Cod	Spawning	Undetermined	Multiple pulse	186	St	-	-	0	-	-	0.001511274	-	-	0.036505857	-	-	0.058793754	-	-	0.010448616
92	Cod	Spawning	Undetermined	Multiple pulse	203	St	-	-	0	-	-	0	-	-	0.000768688	-	-	0.001849639	-	-	0
93	Cod	Spawning	Undetermined	Multiple pulse	207	St	-	-	0	-	-	0	-	-	0.000255322	-	-	0.000587384	-	-	0
94	Cod	Spawning	Undetermined	Multiple pulse	210	St	-	-	0	-	-	0	-	-	0.00010769	-	-	0.000255594	-	-	0
95	Cod	Spawning	Undetermined	Multiple pulse	216	St	-	-	0	-	-	0	-	-	1.83E-05	-	-	4.56E-05	-	-	0
96	Cod	Spawning	Undetermined	Multiple pulse	219	St	-	-	0	-	-	0	-	-	7.55E-06	-	-	1.83E-05	-	-	0
97	Cod	Spawning	Undetermined	Single strike	207	-	-	-	0	-	-	0	-	-	4.31E-06	-	-	-	-	-	0
98	Cod	Spawning	Undetermined	Single strike	213	-	-	-	0	-	-	0	-	-	9.19E-07	-	-	-	-	-	0
99	European hake	Nursery	Low	Multiple pulse	186	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
100	European hake	Nursery	Low	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
101	European hake	Nursery	Low	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
102	European hake	Nursery	Low	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
103	European hake	Nursery	Low	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
104	European hake	Nursery	Low	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
105	European hake	Nursery	Low	Multiple pulse	186	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
106	European hake	Nursery	Low	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
107	European hake	Nursery	Low	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
108	European hake	Nursery	Low	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW	
109	European hake	Nursery	Low	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
110	European hake	Nursery	Low	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	
111	European hake	Nursery	Low	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	
112	European hake	Nursery	Low	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	
113	Haddock	Nursery	Undetermined	Multiple pulse	186	Flee	6.44E-05	-	0	0.0012151	-	0	0.00045007	-	0	0.000497161	-	-	0	2.14E-05	-	0
114	Haddock	Nursery	Undetermined	Multiple pulse	203	Flee	0	-	0	4.89E-07	-	0	4.89E-07	-	0	4.89E-07	-	-	0	0	-	0
115	Haddock	Nursery	Undetermined	Multiple pulse	207	Flee	0	-	0	2.17E-07	-	0	2.17E-07	-	0	2.17E-07	-	-	0	0	-	0
116	Haddock	Nursery	Undetermined	Multiple pulse	210	Flee	0	-	0	5.44E-08	-	0	5.44E-08	-	0	5.44E-08	-	-	0	0	-	0
117	Haddock	Nursery	Undetermined	Multiple pulse	216	Flee	0	-	0	5.44E-08	-	0	5.44E-08	-	0	5.44E-08	-	-	0	0	-	0
118	Haddock	Nursery	Undetermined	Multiple pulse	219	Flee	0	-	0	5.44E-08	-	0	5.44E-08	-	0	5.44E-08	-	-	0	0	-	0
119	Haddock	Nursery	Undetermined	Multiple pulse	186	St	0.01308512	-	0	0.03202137	-	0	0.02255615	-	0	0.039944725	-	0.002007782	0.01203587	-	-	0
120	Haddock	Nursery	Undetermined	Multiple pulse	203	St	0.00010996	-	0	0.00048239	-	0	0.00044809	-	0	0.001078217	-	-	0	5.32E-05	-	0
121	Haddock	Nursery	Undetermined	Multiple pulse	207	St	1.02E-05	-	0	0.00015694	-	0	0.00014884	-	0	0.000342406	-	-	0	0	-	0
122	Haddock	Nursery	Undetermined	Multiple pulse	210	St	0	-	0	6.67E-05	-	0	6.28E-05	-	0	0.000148994	-	-	0	0	-	0
123	Haddock	Nursery	Undetermined	Multiple pulse	216	St	0	-	0	1.13E-05	-	0	1.07E-05	-	0	2.66E-05	-	-	0	0	-	0
124	Haddock	Nursery	Undetermined	Multiple pulse	219	St	0	-	0	4.40E-06	-	0	4.40E-06	-	0	1.07E-05	-	-	0	0	-	0
125	Haddock	Nursery	Undetermined	Single strike	207	-	0	-	0	2.58E-06	-	0	2.51E-06	-	0	-	-	-	-	0	-	0
126	Haddock	Nursery	Undetermined	Single strike	213	-	0	-	0	5.47E-07	-	0	5.35E-07	-	0	-	-	-	-	0	-	0
127	Haddock	Spawning	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0.001587282	-	-	0.001753362	-	-	-	0
128	Haddock	Spawning	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	1.73E-06	-	-	1.73E-06	-	-	-	0
129	Haddock	Spawning	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	7.67E-07	-	-	7.67E-07	-	-	-	0
130	Haddock	Spawning	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	1.92E-07	-	-	1.92E-07	-	-	-	0
131	Haddock	Spawning	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	1.92E-07	-	-	1.92E-07	-	-	-	0
132	Haddock	Spawning	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	1.92E-07	-	-	1.92E-07	-	-	-	0
133	Haddock	Spawning	Undetermined	Multiple pulse	186	St	-	-	0	-	-	0.001239916	-	-	0.063590814	-	-	0.106201649	-	-	-	0
134	Haddock	Spawning	Undetermined	Multiple pulse	203	St	-	-	0	-	-	0	-	-	0.001580315	-	-	0.003802599	-	-	-	0
135	Haddock	Spawning	Undetermined	Multiple pulse	207	St	-	-	0	-	-	0	-	-	0.000524907	-	-	0.00120758	-	-	-	0
136	Haddock	Spawning	Undetermined	Multiple pulse	210	St	-	-	0	-	-	0	-	-	0.000221396	-	-	0.000525465	-	-	-	0
137	Haddock	Spawning	Undetermined	Multiple pulse	216	St	-	-	0	-	-	0	-	-	3.76E-05	-	-	9.38E-05	-	-	-	0
138	Haddock	Spawning	Undetermined	Multiple pulse	219	St	-	-	0	-	-	0	-	-	1.55E-05	-	-	3.76E-05	-	-	-	0
139	Haddock	Spawning	Undetermined	Single strike	207	-	-	-	0	-	-	0	-	-	8.85E-06	-	-	-	-	-	-	0
140	Haddock	Spawning	Undetermined	Single strike	213	-	-	-	0	-	-	0	-	-	1.89E-06	-	-	-	-	-	-	0
141	Hake	Nursery	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
142	Hake	Nursery	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
143	Hake	Nursery	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
144	Hake	Nursery	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
145	Hake	Nursery	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
146	Hake	Nursery	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
147	Hake	Nursery	Undetermined	Multiple pulse	186	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
148	Hake	Nursery	Undetermined	Multiple pulse	203	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
149	Hake	Nursery	Undetermined	Multiple pulse	207	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
150	Hake	Nursery	Undetermined	Multiple pulse	210	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
151	Hake	Nursery	Undetermined	Multiple pulse	216	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
152	Hake	Nursery	Undetermined	Multiple pulse	219	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-	0
153	Hake	Nursery	Undetermined	Single strike	207	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	-	0
154	Hake	Nursery	Undetermined	Single strike	213	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	-	0
155	Hake	Spawning	Low	Multiple pulse	186	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
156	Hake	Spawning	Low	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
157	Hake	Spawning	Low	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
158	Hake	Spawning	Low	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
159	Hake	Spawning	Low	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
160	Hake	Spawning	Low	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
161	Hake	Spawning	Low	Multiple pulse	186	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
162	Hake	Spawning	Low	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
163	Hake	Spawning	Low	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
164	Hake	Spawning	Low	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
165	Hake	Spawning	Low	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
166	Hake	Spawning	Low	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
167	Hake	Spawning	Low	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
168	Hake	Spawning	Low	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
169	Hake	Spawning	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
170	Hake	Spawning	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
171	Hake	Spawning	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
172	Hake	Spawning	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
173	Hake	Spawning	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
174	Hake	Spawning	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
175	Hake	Spawning	Undetermined	Multiple pulse	186	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
176	Hake	Spawning	Undetermined	Multiple pulse	203	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
177	Hake	Spawning	Undetermined	Multiple pulse	207	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
178	Hake	Spawning	Undetermined	Multiple pulse	210	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
179	Hake	Spawning	Undetermined	Multiple pulse	216	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
180	Hake	Spawning	Undetermined	Multiple pulse	219	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
181	Hake	Spawning	Undetermined	Single strike	207	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0
182	Hake	Spawning	Undetermined	Single strike	213	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0
183	Herring	Nursery	High	Multiple pulse	186	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
184	Herring	Nursery	High	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
185	Herring	Nursery	High	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
186	Herring	Nursery	High	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
187	Herring	Nursery	High	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
188	Herring	Nursery	High	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
189	Herring	Nursery	High	Multiple pulse	186	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
190	Herring	Nursery	High	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
191	Herring	Nursery	High	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
192	Herring	Nursery	High	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
193	Herring	Nursery	High	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
194	Herring	Nursery	High	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
195	Herring	Nursery	High	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
196	Herring	Nursery	High	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
197	Herring	Nursery	Undetermined	Multiple pulse	186	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
198	Herring	Nursery	Undetermined	Multiple pulse	203	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
199	Herring	Nursery	Undetermined	Multiple pulse	207	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
200	Herring	Nursery	Undetermined	Multiple pulse	210	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
201	Herring	Nursery	Undetermined	Multiple pulse	216	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
202	Herring	Nursery	Undetermined	Multiple pulse	219	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
203	Herring	Nursery	Undetermined	Multiple pulse	186	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
204	Herring	Nursery	Undetermined	Multiple pulse	203	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
205	Herring	Nursery	Undetermined	Multiple pulse	207	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
206	Herring	Nursery	Undetermined	Multiple pulse	210	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
207	Herring	Nursery	Undetermined	Multiple pulse	216	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
208	Herring	Nursery	Undetermined	Multiple pulse	219	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
209	Herring	Nursery	Undetermined	Single strike	207	-	0	-	0	0	-	0	0	-	0	-	-	-	0	-	0
210	Herring	Nursery	Undetermined	Single strike	213	-	0	-	0	0	-	0	0	-	0	-	-	-	0	-	0
211	Herring_Area	Herring_Spawning_Area	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
212	Herring_Area	Herring_Spawning_Area	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
213	Herring_Area	Herring_Spawning_Area	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
214	Herring_Area	Herring_Spawning_Area	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
215	Herring_Area	Herring_Spawning_Area	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
216	Herring_Area	Herring_Spawning_Area	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
271	HorseMackerel	Nursery	Undetermined	Multiple pulse	216	Flee	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08
272	HorseMackerel	Nursery	Undetermined	Multiple pulse	219	Flee	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08
273	HorseMackerel	Nursery	Undetermined	Multiple pulse	186	St	-	-	0.017970292	-	-	0.014358871	-	-	0.01011452	-	-	0.017911823	-	-	0.013889801
274	HorseMackerel	Nursery	Undetermined	Multiple pulse	203	St	-	-	0.000193557	-	-	0.000216312	-	-	0.000200932	-	-	0.000483489	-	-	0.000204537
275	HorseMackerel	Nursery	Undetermined	Multiple pulse	207	St	-	-	5.58E-05	-	-	7.04E-05	-	-	6.67E-05	-	-	0.00015354	-	-	6.25E-05
276	HorseMackerel	Nursery	Undetermined	Multiple pulse	210	St	-	-	2.19E-05	-	-	2.99E-05	-	-	2.81E-05	-	-	6.68E-05	-	-	2.50E-05
277	HorseMackerel	Nursery	Undetermined	Multiple pulse	216	St	-	-	2.95E-06	-	-	5.06E-06	-	-	4.78E-06	-	-	1.19E-05	-	-	4.12E-06
278	HorseMackerel	Nursery	Undetermined	Multiple pulse	219	St	-	-	1.19E-06	-	-	1.97E-06	-	-	1.97E-06	-	-	4.78E-06	-	-	1.56E-06
279	HorseMackerel	Nursery	Undetermined	Single strike	207	-	-	-	1.18E-06	-	-	1.16E-06	-	-	1.13E-06	-	-	-	-	-	9.57E-07
280	HorseMackerel	Nursery	Undetermined	Single strike	213	-	-	-	2.15E-07	-	-	2.45E-07	-	-	2.40E-07	-	-	-	-	-	1.91E-07
281	HorseMackerel	Spawning	Low	Multiple pulse	186	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
282	HorseMackerel	Spawning	Low	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
283	HorseMackerel	Spawning	Low	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
284	HorseMackerel	Spawning	Low	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
285	HorseMackerel	Spawning	Low	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
286	HorseMackerel	Spawning	Low	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
287	HorseMackerel	Spawning	Low	Multiple pulse	186	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
288	HorseMackerel	Spawning	Low	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
289	HorseMackerel	Spawning	Low	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
290	HorseMackerel	Spawning	Low	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
291	HorseMackerel	Spawning	Low	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
292	HorseMackerel	Spawning	Low	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
293	HorseMackerel	Spawning	Low	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
294	HorseMackerel	Spawning	Low	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
295	HorseMackerel	Spawning	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
296	HorseMackerel	Spawning	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
297	HorseMackerel	Spawning	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
298	HorseMackerel	Spawning	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
299	HorseMackerel	Spawning	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
300	HorseMackerel	Spawning	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
301	HorseMackerel	Spawning	Undetermined	Multiple pulse	186	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
302	HorseMackerel	Spawning	Undetermined	Multiple pulse	203	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
303	HorseMackerel	Spawning	Undetermined	Multiple pulse	207	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
304	HorseMackerel	Spawning	Undetermined	Multiple pulse	210	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
305	HorseMackerel	Spawning	Undetermined	Multiple pulse	216	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
306	HorseMackerel	Spawning	Undetermined	Multiple pulse	219	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
307	HorseMackerel	Spawning	Undetermined	Single strike	207	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0
308	HorseMackerel	Spawning	Undetermined	Single strike	213	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0
309	Lemon Sole	Nursery	Undetermined	Multiple pulse	186	Flee	0.00054503	-	-	0.00066894	-	-	0.00024777	-	-	0.0002737	-	-	0.00037652	-	-
310	Lemon Sole	Nursery	Undetermined	Multiple pulse	203	Flee	2.69E-07	-	-	2.69E-07	-	-	2.69E-07	-	-	2.69E-07	-	-	2.69E-07	-	-
311	Lemon Sole	Nursery	Undetermined	Multiple pulse	207	Flee	1.20E-07	-	-	1.20E-07	-	-	1.20E-07	-	-	1.20E-07	-	-	1.20E-07	-	-
312	Lemon Sole	Nursery	Undetermined	Multiple pulse	210	Flee	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-
313	Lemon Sole	Nursery	Undetermined	Multiple pulse	216	Flee	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-
314	Lemon Sole	Nursery	Undetermined	Multiple pulse	219	Flee	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-
315	Lemon Sole	Nursery	Undetermined	Multiple pulse	186	St	0.02206234	-	-	0.01762856	-	-	0.01241772	-	-	0.021990555	-	-	0.01705267	-	-
316	Lemon Sole	Nursery	Undetermined	Multiple pulse	203	St	0.00023763	-	-	0.00026557	-	-	0.00024669	-	-	0.000593585	-	-	0.00025111	-	-
317	Lemon Sole	Nursery	Undetermined	Multiple pulse	207	St	6.85E-05	-	-	8.64E-05	-	-	8.19E-05	-	-	0.000188503	-	-	7.67E-05	-	-
318	Lemon Sole	Nursery	Undetermined	Multiple pulse	210	St	2.69E-05	-	-	3.67E-05	-	-	3.46E-05	-	-	8.20E-05	-	-	3.06E-05	-	-
319	Lemon Sole	Nursery	Undetermined	Multiple pulse	216	St	3.62E-06	-	-	6.22E-06	-	-	5.87E-06	-	-	1.46E-05	-	-	5.06E-06	-	-
320	Lemon Sole	Nursery	Undetermined	Multiple pulse	219	St	1.47E-06	-	-	2.42E-06	-	-	2.42E-06	-	-	5.87E-06	-	-	1.92E-06	-	-
321	Lemon Sole	Nursery	Undetermined	Single strike	207	-	-	-	1.44E-06	-	-	1.42E-06	-	-	1.38E-06	-	-	-	-	1.17E-06	-
322	Lemon Sole	Nursery	Undetermined	Single strike	213	-	-	-	2.63E-07	-	-	3.01E-07	-	-	2.95E-07	-	-	-	-	2.34E-07	-
323	Lemon Sole	Spawning	Undetermined	Multiple pulse	186	Flee	0.00054456	-	-	0.00066837	-	-	0.00024756	-	-	0.000273466	-	-	0.0003762	-	-
324	Lemon Sole	Spawning	Undetermined	Multiple pulse	203	Flee	2.69E-07	-	-	2.69E-07	-	-	2.69E-07	-	-	2.69E-07	-	-	2.69E-07	-	-

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
325	Lemon Sole	Spawning	Undetermined	Multiple pulse	207	Flee	1.20E-07	-	-	1.20E-07	-	-	1.20E-07	-	-	1.20E-07	-	-	1.20E-07	-	-
326	Lemon Sole	Spawning	Undetermined	Multiple pulse	210	Flee	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-
327	Lemon Sole	Spawning	Undetermined	Multiple pulse	216	Flee	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-
328	Lemon Sole	Spawning	Undetermined	Multiple pulse	219	Flee	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-	2.99E-08	-	-
329	Lemon Sole	Spawning	Undetermined	Multiple pulse	186	St	0.02204349	-	-	0.0176135	-	-	0.01240711	-	-	0.021971769	-	-	0.0170381	-	-
330	Lemon Sole	Spawning	Undetermined	Multiple pulse	203	St	0.00023743	-	-	0.00026534	-	-	0.00024648	-	-	0.000593078	-	-	0.0002509	-	-
331	Lemon Sole	Spawning	Undetermined	Multiple pulse	207	St	6.85E-05	-	-	8.63E-05	-	-	8.19E-05	-	-	0.000188342	-	-	7.67E-05	-	-
332	Lemon Sole	Spawning	Undetermined	Multiple pulse	210	St	2.69E-05	-	-	3.67E-05	-	-	3.45E-05	-	-	8.20E-05	-	-	3.06E-05	-	-
333	Lemon Sole	Spawning	Undetermined	Multiple pulse	216	St	3.62E-06	-	-	6.21E-06	-	-	5.86E-06	-	-	1.46E-05	-	-	5.05E-06	-	-
334	Lemon Sole	Spawning	Undetermined	Multiple pulse	219	St	1.47E-06	-	-	2.42E-06	-	-	2.42E-06	-	-	5.86E-06	-	-	1.91E-06	-	-
335	Lemon Sole	Spawning	Undetermined	Single strike	207	-	1.44E-06	-	-	1.42E-06	-	-	1.38E-06	-	-	-	-	-	1.17E-06	-	-
336	Lemon Sole	Spawning	Undetermined	Single strike	213	-	2.63E-07	-	-	3.01E-07	-	-	2.95E-07	-	-	-	-	-	2.34E-07	-	-
337	Ling	Spawning	Low	Multiple pulse	186	Flee	-	0.00063781	-	-	0.00081405	-	-	0.00030152	-	-	0.000333069	-	-	0.000188131	-
338	Ling	Spawning	Low	Multiple pulse	203	Flee	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-
339	Ling	Spawning	Low	Multiple pulse	207	Flee	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-
340	Ling	Spawning	Low	Multiple pulse	210	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
341	Ling	Spawning	Low	Multiple pulse	216	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
342	Ling	Spawning	Low	Multiple pulse	219	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
343	Ling	Spawning	Low	Multiple pulse	186	St	-	0.0145594	-	-	0.02145242	-	-	0.01511128	-	-	0.026760594	-	-	0.009425424	-
344	Ling	Spawning	Low	Multiple pulse	203	St	-	0.00028918	-	-	0.00032317	-	-	0.000300197	-	-	0.000722342	-	-	0.000193199	-
345	Ling	Spawning	Low	Multiple pulse	207	St	-	8.34E-05	-	-	0.00010514	-	-	9.97E-05	-	-	0.000229392	-	-	6.88E-05	-
346	Ling	Spawning	Low	Multiple pulse	210	St	-	3.27E-05	-	-	4.47E-05	-	-	4.21E-05	-	-	9.98E-05	-	-	3.23E-05	-
347	Ling	Spawning	Low	Multiple pulse	216	St	-	4.41E-06	-	-	7.57E-06	-	-	7.14E-06	-	-	1.78E-05	-	-	6.15E-06	-
348	Ling	Spawning	Low	Multiple pulse	219	St	-	1.78E-06	-	-	2.95E-06	-	-	2.95E-06	-	-	7.14E-06	-	-	2.33E-06	-
349	Ling	Spawning	Low	Single strike	207	-	-	1.76E-06	-	-	1.73E-06	-	-	1.68E-06	-	-	-	-	-	1.43E-06	-
350	Ling	Spawning	Low	Single strike	213	-	-	3.21E-07	-	-	3.66E-07	-	-	3.59E-07	-	-	-	-	-	2.85E-07	-
351	Mackerel	Nursery	Low	Multiple pulse	186	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
352	Mackerel	Nursery	Low	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
353	Mackerel	Nursery	Low	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
354	Mackerel	Nursery	Low	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
355	Mackerel	Nursery	Low	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
356	Mackerel	Nursery	Low	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
357	Mackerel	Nursery	Low	Multiple pulse	186	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
358	Mackerel	Nursery	Low	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
359	Mackerel	Nursery	Low	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
360	Mackerel	Nursery	Low	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
361	Mackerel	Nursery	Low	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
362	Mackerel	Nursery	Low	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
363	Mackerel	Nursery	Low	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
364	Mackerel	Nursery	Low	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
365	Mackerel	Nursery	Undetermined	Multiple pulse	186	Flee	-	-	0.000443936	-	-	0.00054487	-	-	0.000201818	-	-	0.000222935	-	-	0.000306687
366	Mackerel	Nursery	Undetermined	Multiple pulse	203	Flee	-	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07
367	Mackerel	Nursery	Undetermined	Multiple pulse	207	Flee	-	-	9.75E-08	-	-	9.75E-08	-	-	9.75E-08	-	-	9.75E-08	-	-	9.75E-08
368	Mackerel	Nursery	Undetermined	Multiple pulse	210	Flee	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08
369	Mackerel	Nursery	Undetermined	Multiple pulse	216	Flee	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08
370	Mackerel	Nursery	Undetermined	Multiple pulse	219	Flee	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08
371	Mackerel	Nursery	Undetermined	Multiple pulse	186	St	-	-	0.017970292	-	-	0.014358871	-	-	0.01011452	-	-	0.017911823	-	-	0.013889801
372	Mackerel	Nursery	Undetermined	Multiple pulse	203	St	-	-	0.000193557	-	-	0.000216312	-	-	0.000200932	-	-	0.000483489	-	-	0.000204537
373	Mackerel	Nursery	Undetermined	Multiple pulse	207	St	-	-	5.58E-05	-	-	7.04E-05	-	-	6.67E-05	-	-	0.00015354	-	-	6.25E-05
374	Mackerel	Nursery	Undetermined	Multiple pulse	210	St	-	-	2.19E-05	-	-	2.99E-05	-	-	2.81E-05	-	-	6.68E-05	-	-	2.50E-05
375	Mackerel	Nursery	Undetermined	Multiple pulse	216	St	-	-	2.95E-06	-	-	5.06E-06	-	-	4.78E-06	-	-	1.19E-05	-	-	4.12E-06
376	Mackerel	Nursery	Undetermined	Multiple pulse	219	St	-	-	1.19E-06	-	-	1.97E-06	-	-	1.97E-06	-	-	4.78E-06	-	-	1.56E-06
377	Mackerel	Nursery	Undetermined	Single strike	207	-	-	1.18E-06	-	-	1.13E-06	-	-	1.13E-06	-	-	-	-	-	-	9.57E-07
378	Mackerel	Nursery	Undetermined	Single strike	213	-	-	-	2.15E-07	-	-	2.45E-07	-	-	2.40E-07	-	-	-	-	-	1.91E-07

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
379	Mackerel	Spawning	Low	Multiple pulse	186	Flee	-	0.00063781	-	-	0.00081405	-	-	0.00030152	-	-	0.000333069	-	-	0.000188131	-
380	Mackerel	Spawning	Low	Multiple pulse	203	Flee	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-
381	Mackerel	Spawning	Low	Multiple pulse	207	Flee	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-
382	Mackerel	Spawning	Low	Multiple pulse	210	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
383	Mackerel	Spawning	Low	Multiple pulse	216	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
384	Mackerel	Spawning	Low	Multiple pulse	219	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
385	Mackerel	Spawning	Low	Multiple pulse	186	St	-	0.0145594	-	-	0.02145242	-	-	0.01511128	-	-	0.026760594	-	-	0.009425424	-
386	Mackerel	Spawning	Low	Multiple pulse	203	St	-	0.00028918	-	-	0.00032317	-	-	0.000300197	-	-	0.000722342	-	-	0.000193199	-
387	Mackerel	Spawning	Low	Multiple pulse	207	St	-	8.34E-05	-	-	0.00010514	-	-	9.97E-05	-	-	0.000229392	-	-	6.88E-05	-
388	Mackerel	Spawning	Low	Multiple pulse	210	St	-	3.27E-05	-	-	4.47E-05	-	-	4.21E-05	-	-	9.98E-05	-	-	3.23E-05	-
389	Mackerel	Spawning	Low	Multiple pulse	216	St	-	4.41E-06	-	-	7.57E-06	-	-	7.14E-06	-	-	1.78E-05	-	-	6.15E-06	-
390	Mackerel	Spawning	Low	Multiple pulse	219	St	-	1.78E-06	-	-	2.95E-06	-	-	2.95E-06	-	-	7.14E-06	-	-	2.33E-06	-
391	Mackerel	Spawning	Low	Single strike	207	-	-	1.76E-06	-	-	1.73E-06	-	-	1.68E-06	-	-	-	-	-	1.43E-06	-
392	Mackerel	Spawning	Low	Single strike	213	-	-	3.21E-07	-	-	3.66E-07	-	-	3.59E-07	-	-	-	-	-	2.85E-07	-
393	Mackerel	Spawning	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
394	Mackerel	Spawning	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
395	Mackerel	Spawning	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
396	Mackerel	Spawning	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
397	Mackerel	Spawning	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
398	Mackerel	Spawning	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
399	Mackerel	Spawning	Undetermined	Multiple pulse	186	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
400	Mackerel	Spawning	Undetermined	Multiple pulse	203	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
401	Mackerel	Spawning	Undetermined	Multiple pulse	207	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
402	Mackerel	Spawning	Undetermined	Multiple pulse	210	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
403	Mackerel	Spawning	Undetermined	Multiple pulse	216	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
404	Mackerel	Spawning	Undetermined	Multiple pulse	219	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
405	Mackerel	Spawning	Undetermined	Single strike	207	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0
406	Mackerel	Spawning	Undetermined	Single strike	213	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0
407	Nephrops	Nursery	Undetermined	Multiple pulse	186	Flee	0.00081462	-	-	0.00099984	-	-	0.00037034	-	-	0.000409086	-	-	0	-	-
408	Nephrops	Nursery	Undetermined	Multiple pulse	203	Flee	4.03E-07	-	-	4.03E-07	-	-	4.03E-07	-	-	4.03E-07	-	-	0	-	-
409	Nephrops	Nursery	Undetermined	Multiple pulse	207	Flee	1.79E-07	-	-	1.79E-07	-	-	1.79E-07	-	-	1.79E-07	-	-	0	-	-
410	Nephrops	Nursery	Undetermined	Multiple pulse	210	Flee	4.47E-08	-	-	4.47E-08	-	-	4.47E-08	-	-	4.47E-08	-	-	0	-	-
411	Nephrops	Nursery	Undetermined	Multiple pulse	216	Flee	4.47E-08	-	-	4.47E-08	-	-	4.47E-08	-	-	4.47E-08	-	-	0	-	-
412	Nephrops	Nursery	Undetermined	Multiple pulse	219	Flee	4.47E-08	-	-	4.47E-08	-	-	4.47E-08	-	-	4.47E-08	-	-	0	-	-
413	Nephrops	Nursery	Undetermined	Multiple pulse	186	St	0.02970489	-	-	0.02634857	-	-	0.01442206	-	-	0.023519757	-	-	0.00629522	-	-
414	Nephrops	Nursery	Undetermined	Multiple pulse	203	St	0.00035518	-	-	0.00039693	-	-	0.00036871	-	-	0.000887204	-	-	0	-	-
415	Nephrops	Nursery	Undetermined	Multiple pulse	207	St	0.00010241	-	-	0.00012913	-	-	0.00012247	-	-	0.000281747	-	-	0	-	-
416	Nephrops	Nursery	Undetermined	Multiple pulse	210	St	4.02E-05	-	-	5.49E-05	-	-	5.17E-05	-	-	0.000122599	-	-	0	-	-
417	Nephrops	Nursery	Undetermined	Multiple pulse	216	St	5.41E-06	-	-	9.29E-06	-	-	8.77E-06	-	-	2.19E-05	-	-	0	-	-
418	Nephrops	Nursery	Undetermined	Multiple pulse	219	St	2.19E-06	-	-	3.62E-06	-	-	3.62E-06	-	-	8.77E-06	-	-	0	-	-
419	Nephrops	Nursery	Undetermined	Single strike	207	-	2.16E-06	-	-	2.12E-06	-	-	2.07E-06	-	-	-	-	-	0	-	-
420	Nephrops	Nursery	Undetermined	Single strike	213	-	3.94E-07	-	-	4.50E-07	-	-	4.41E-07	-	-	-	-	-	0	-	-
421	Nephrops	Spawning	High	Multiple pulse	186	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
422	Nephrops	Spawning	High	Multiple pulse	203	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
423	Nephrops	Spawning	High	Multiple pulse	207	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
424	Nephrops	Spawning	High	Multiple pulse	210	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
425	Nephrops	Spawning	High	Multiple pulse	216	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
426	Nephrops	Spawning	High	Multiple pulse	219	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
427	Nephrops	Spawning	High	Multiple pulse	186	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
428	Nephrops	Spawning	High	Multiple pulse	203	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
429	Nephrops	Spawning	High	Multiple pulse	207	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
430	Nephrops	Spawning	High	Multiple pulse	210	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
431	Nephrops	Spawning	High	Multiple pulse	216	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
432	Nephrops	Spawning	High	Multiple pulse	219	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
433	Nephrops	Spawning	High	Single strike	207	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	-
434	Nephrops	Spawning	High	Single strike	213	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	-
435	Nephrops	Spawning	Undetermined	Multiple pulse	186	Flee	0.00080145	-	-	0.00098367	-	-	0.00036435	-	-	0.000402473	-	-	0	-	-
436	Nephrops	Spawning	Undetermined	Multiple pulse	203	Flee	3.96E-07	-	-	3.96E-07	-	-	3.96E-07	-	-	3.96E-07	-	-	0	-	-
437	Nephrops	Spawning	Undetermined	Multiple pulse	207	Flee	1.76E-07	-	-	1.76E-07	-	-	1.76E-07	-	-	1.76E-07	-	-	0	-	-
438	Nephrops	Spawning	Undetermined	Multiple pulse	210	Flee	4.40E-08	-	-	4.40E-08	-	-	4.40E-08	-	-	4.40E-08	-	-	0	-	-
439	Nephrops	Spawning	Undetermined	Multiple pulse	216	Flee	4.40E-08	-	-	4.40E-08	-	-	4.40E-08	-	-	4.40E-08	-	-	0	-	-
440	Nephrops	Spawning	Undetermined	Multiple pulse	219	Flee	4.40E-08	-	-	4.40E-08	-	-	4.40E-08	-	-	4.40E-08	-	-	0	-	-
441	Nephrops	Spawning	Undetermined	Multiple pulse	186	St	0.02930583	-	-	0.02592262	-	-	0.01429638	-	-	0.023273476	-	-	0.00628952	-	-
442	Nephrops	Spawning	Undetermined	Multiple pulse	203	St	0.00034944	-	-	0.00039052	-	-	0.00036275	-	-	0.000872861	-	-	0	-	-
443	Nephrops	Spawning	Undetermined	Multiple pulse	207	St	0.00010076	-	-	0.00012705	-	-	0.00012049	-	-	0.000277192	-	-	0	-	-
444	Nephrops	Spawning	Undetermined	Multiple pulse	210	St	3.96E-05	-	-	5.40E-05	-	-	5.08E-05	-	-	0.000120617	-	-	0	-	-
445	Nephrops	Spawning	Undetermined	Multiple pulse	216	St	5.32E-06	-	-	9.14E-06	-	-	8.63E-06	-	-	2.15E-05	-	-	0	-	-
446	Nephrops	Spawning	Undetermined	Multiple pulse	219	St	2.16E-06	-	-	3.56E-06	-	-	3.56E-06	-	-	8.63E-06	-	-	0	-	-
447	Nephrops	Spawning	Undetermined	Single strike	207	-	2.12E-06	-	-	2.09E-06	-	-	2.03E-06	-	-	-	-	-	0	-	-
448	Nephrops	Spawning	Undetermined	Single strike	213	-	3.87E-07	-	-	4.43E-07	-	-	4.33E-07	-	-	-	-	-	0	-	-
449	Plaice	Nursery	Low	Multiple pulse	186	Flee	-	0.00111504	-	-	0.00142315	-	-	0.000527129	-	-	0.000582283	-	-	0.000328897	-
450	Plaice	Nursery	Low	Multiple pulse	203	Flee	-	5.73E-07	-	-	5.73E-07	-	-	5.73E-07	-	-	5.73E-07	-	-	5.73E-07	-
451	Plaice	Nursery	Low	Multiple pulse	207	Flee	-	2.55E-07	-	-	2.55E-07	-	-	2.55E-07	-	-	2.55E-07	-	-	2.55E-07	-
452	Plaice	Nursery	Low	Multiple pulse	210	Flee	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-
453	Plaice	Nursery	Low	Multiple pulse	216	Flee	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-
454	Plaice	Nursery	Low	Multiple pulse	219	Flee	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-	-	6.37E-08	-
455	Plaice	Nursery	Low	Multiple pulse	186	St	-	0.02545329	-	-	0.03750394	-	-	0.026418114	-	-	0.046783889	-	-	0.016477885	-
456	Plaice	Nursery	Low	Multiple pulse	203	St	-	0.00050555	-	-	0.00056499	-	-	0.000524815	-	-	0.001262825	-	-	0.000337759	-
457	Plaice	Nursery	Low	Multiple pulse	207	St	-	0.00014577	-	-	0.00018381	-	-	0.000174319	-	-	0.000401032	-	-	0.0001202	-
458	Plaice	Nursery	Low	Multiple pulse	210	St	-	5.72E-05	-	-	7.81E-05	-	-	7.35E-05	-	-	0.000174504	-	-	5.64E-05	-
459	Plaice	Nursery	Low	Multiple pulse	216	St	-	7.70E-06	-	-	1.32E-05	-	-	1.25E-05	-	-	3.12E-05	-	-	1.08E-05	-
460	Plaice	Nursery	Low	Multiple pulse	219	St	-	3.12E-06	-	-	5.16E-06	-	-	5.16E-06	-	-	1.25E-05	-	-	4.07E-06	-
461	Plaice	Nursery	Low	Single strike	207	-	-	3.07E-06	-	-	3.02E-06	-	-	2.94E-06	-	-	-	-	-	2.50E-06	-
462	Plaice	Nursery	Low	Single strike	213	-	-	5.60E-07	-	-	6.40E-07	-	-	6.27E-07	-	-	-	-	-	4.98E-07	-
463	Plaice	Nursery	Undetermined	Multiple pulse	186	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
464	Plaice	Nursery	Undetermined	Multiple pulse	203	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
465	Plaice	Nursery	Undetermined	Multiple pulse	207	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
466	Plaice	Nursery	Undetermined	Multiple pulse	210	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
467	Plaice	Nursery	Undetermined	Multiple pulse	216	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
468	Plaice	Nursery	Undetermined	Multiple pulse	219	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
469	Plaice	Nursery	Undetermined	Multiple pulse	186	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
470	Plaice	Nursery	Undetermined	Multiple pulse	203	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
471	Plaice	Nursery	Undetermined	Multiple pulse	207	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
472	Plaice	Nursery	Undetermined	Multiple pulse	210	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
473	Plaice	Nursery	Undetermined	Multiple pulse	216	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
474	Plaice	Nursery	Undetermined	Multiple pulse	219	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
475	Plaice	Nursery	Undetermined	Single strike	207	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	-
476	Plaice	Nursery	Undetermined	Single strike	213	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	-
477	Plaice	Spawning	High	Multiple pulse	186	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
478	Plaice	Spawning	High	Multiple pulse	203	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
479	Plaice	Spawning	High	Multiple pulse	207	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
480	Plaice	Spawning	High	Multiple pulse	210	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
481	Plaice	Spawning	High	Multiple pulse	216	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
482	Plaice	Spawning	High	Multiple pulse	219	Flee	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
483	Plaice	Spawning	High	Multiple pulse	186	St	0	0	-	0	0	-	0	0	-	0	0.000297493	-	0	0	-
484	Plaice	Spawning	High	Multiple pulse	203	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
485	Plaice	Spawning	High	Multiple pulse	207	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
486	Plaice	Spawning	High	Multiple pulse	210	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
487	Plaice	Spawning	High	Multiple pulse	216	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
488	Plaice	Spawning	High	Multiple pulse	219	St	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
489	Plaice	Spawning	High	Single strike	207	-	0	0	-	0	0	-	0	0	-	-	-	-	0	0	-
490	Plaice	Spawning	High	Single strike	213	-	0	0	-	0	0	-	0	0	-	-	-	-	0	0	-
491	Plaice	Spawning	Low	Multiple pulse	186	Flee	0	0.00079165	-	0	0.00100413	-	0.00147232	0.000371927	-	0.001626371	0.000410842	-	0	0.000238413	-
492	Plaice	Spawning	Low	Multiple pulse	203	Flee	0	4.04E-07	-	0	4.04E-07	-	1.60E-06	4.04E-07	-	1.60E-06	4.04E-07	-	0	4.04E-07	-
493	Plaice	Spawning	Low	Multiple pulse	207	Flee	0	1.80E-07	-	0	1.80E-07	-	7.11E-07	1.80E-07	-	7.11E-07	1.80E-07	-	0	1.80E-07	-
494	Plaice	Spawning	Low	Multiple pulse	210	Flee	0	4.49E-08	-	0	4.49E-08	-	1.78E-07	4.49E-08	-	1.78E-07	4.49E-08	-	0	4.49E-08	-
495	Plaice	Spawning	Low	Multiple pulse	216	Flee	0	4.49E-08	-	0	4.49E-08	-	1.78E-07	4.49E-08	-	1.78E-07	4.49E-08	-	0	4.49E-08	-
496	Plaice	Spawning	Low	Multiple pulse	219	Flee	0	4.49E-08	-	0	4.49E-08	-	1.78E-07	4.49E-08	-	1.78E-07	4.49E-08	-	0	4.49E-08	-
497	Plaice	Spawning	Low	Multiple pulse	186	St	0	0.01800998	-	0	0.02646171	-	0.05100097	0.018639871	-	0.084136203	0.032902968	-	0.03069346	0.011666131	-
498	Plaice	Spawning	Low	Multiple pulse	203	St	0	0.00039864	-	0	0.00039864	-	0.00146586	0.000370295	-	0.003527188	0.000891014	-	0	0.000243086	-
499	Plaice	Spawning	Low	Multiple pulse	207	St	0	0.000102857	-	0	0.00012969	-	0.00048689	0.000122995	-	0.001120118	0.000282956	-	0	8.73E-05	-
500	Plaice	Spawning	Low	Multiple pulse	210	St	0	4.04E-05	-	0	5.51E-05	-	0.00020536	5.19E-05	-	0.000487407	0.000123125	-	0	4.11E-05	-
501	Plaice	Spawning	Low	Multiple pulse	216	St	0	5.44E-06	-	0	9.33E-06	-	3.49E-05	8.80E-06	-	8.70E-05	2.20E-05	-	0	7.59E-06	-
502	Plaice	Spawning	Low	Multiple pulse	219	St	0	2.20E-06	-	0	3.64E-06	-	1.44E-05	3.64E-06	-	3.49E-05	8.80E-06	-	0	2.87E-06	-
503	Plaice	Spawning	Low	Single strike	207	-	0	2.17E-06	-	0	2.13E-06	-	8.21E-06	2.07E-06	-	-	-	-	0	1.76E-06	-
504	Plaice	Spawning	Low	Single strike	213	-	0	3.95E-07	-	0	4.52E-07	-	1.75E-06	4.43E-07	-	-	-	-	0	3.51E-07	-
505	Sandeel	Nursery	Low	Multiple pulse	186	Flee	-	0.00111757	-	-	0.00137166	-	-	0.000508058	-	-	0.000561217	-	-	0.000772054	-
506	Sandeel	Nursery	Low	Multiple pulse	203	Flee	-	5.52E-07	-	-	5.52E-07	-	-	5.52E-07	-	-	5.52E-07	-	-	5.52E-07	-
507	Sandeel	Nursery	Low	Multiple pulse	207	Flee	-	2.45E-07	-	-	2.45E-07	-	-	2.45E-07	-	-	2.45E-07	-	-	2.45E-07	-
508	Sandeel	Nursery	Low	Multiple pulse	210	Flee	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-
509	Sandeel	Nursery	Low	Multiple pulse	216	Flee	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-
510	Sandeel	Nursery	Low	Multiple pulse	219	Flee	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-	-	6.14E-08	-
511	Sandeel	Nursery	Low	Multiple pulse	186	St	-	0.04523849	-	-	0.03614708	-	-	0.025462333	-	-	0.044968727	-	-	0.03496624	-
512	Sandeel	Nursery	Low	Multiple pulse	203	St	-	0.00048726	-	-	0.00054455	-	-	0.000505828	-	-	0.001217137	-	-	0.000514901	-
513	Sandeel	Nursery	Low	Multiple pulse	207	St	-	0.0001405	-	-	0.00017716	-	-	0.000168012	-	-	0.000386523	-	-	0.000157368	-
514	Sandeel	Nursery	Low	Multiple pulse	210	St	-	5.52E-05	-	-	7.53E-05	-	-	7.09E-05	-	-	0.000168191	-	-	6.28E-05	-
515	Sandeel	Nursery	Low	Multiple pulse	216	St	-	7.42E-06	-	-	1.27E-05	-	-	1.20E-05	-	-	3.00E-05	-	-	1.04E-05	-
516	Sandeel	Nursery	Low	Multiple pulse	219	St	-	3.01E-06	-	-	4.97E-06	-	-	4.97E-06	-	-	1.20E-05	-	-	3.93E-06	-
517	Sandeel	Nursery	Low	Single strike	207	-	-	2.96E-06	-	-	2.91E-06	-	-	2.83E-06	-	-	-	-	-	2.41E-06	-
518	Sandeel	Nursery	Low	Single strike	213	-	-	5.40E-07	-	-	6.17E-07	-	-	6.04E-07	-	-	-	-	-	4.80E-07	-
519	Sandeel	Spawning	Low	Multiple pulse	186	Flee	-	0.00063781	-	-	0.00081405	-	-	0.00030152	-	-	0.000333069	-	-	0.000188131	-
520	Sandeel	Spawning	Low	Multiple pulse	203	Flee	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-	-	3.28E-07	-
521	Sandeel	Spawning	Low	Multiple pulse	207	Flee	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-	-	1.46E-07	-
522	Sandeel	Spawning	Low	Multiple pulse	210	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
523	Sandeel	Spawning	Low	Multiple pulse	216	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
524	Sandeel	Spawning	Low	Multiple pulse	219	Flee	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-	-	3.64E-08	-
525	Sandeel	Spawning	Low	Multiple pulse	186	St	-	0.0145594	-	-	0.02145242	-	-	0.01511128	-	-	0.026760594	-	-	0.009425424	-
526	Sandeel	Spawning	Low	Multiple pulse	203	St	-	0.00028918	-	-	0.00032317	-	-	0.000300197	-	-	0.000722342	-	-	0.000193199	-
527	Sandeel	Spawning	Low	Multiple pulse	207	St	-	8.34E-05	-	-	0.00010514	-	-	9.97E-05	-	-	0.000229392	-	-	6.88E-05	-
528	Sandeel	Spawning	Low	Multiple pulse	210	St	-	3.27E-05	-	-	4.47E-05	-	-	4.21E-05	-	-	9.98E-05	-	-	3.23E-05	-
529	Sandeel	Spawning	Low	Multiple pulse	216	St	-	4.41E-06	-	-	7.57E-06	-	-	7.14E-06	-	-	1.78E-05	-	-	6.15E-06	-
530	Sandeel	Spawning	Low	Multiple pulse	219	St	-	1.78E-06	-	-	2.95E-06	-	-	2.95E-06	-	-	7.14E-06	-	-	2.33E-06	-
531	Sandeel	Spawning	Low	Single strike	207	-	-	1.76E-06	-	-	1.73E-06	-	-	1.68E-06	-	-	-	-	-	1.43E-06	-
532	Sandeel	Spawning	Low	Single strike	213	-	-	3.21E-07	-	-	3.66E-07	-	-	3.59E-07	-	-	-	-	-	2.85E-07	-
533	Sole	Spawning	Low	Multiple pulse	186	Flee	0	0.00064171	-	0	0.00081395	-	0	0.000301484	-	0	0.000333029	-	0	0.000193257	-
534	Sole	Spawning	Low	Multiple pulse	203	Flee	0	3.28E-07	-	0	3.28E-07	-	0	3.28E-07	-	0	3.28E-07	-	0	3.28E-07	-
535	Sole	Spawning	Low	Multiple pulse	207	Flee	0	1.46E-07	-	0	1.46E-07	-	0	1.46E-07	-	0	1.46E-07	-	0	1.46E-07	-
536	Sole	Spawning	Low	Multiple pulse	210	Flee	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-
537	Sole	Spawning	Low	Multiple pulse	216	Flee	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-
538	Sole	Spawning	Low	Multiple pulse	219	Flee	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-
539	Sole	Spawning	Low	Multiple pulse	186	St	0	0.01459888	-	0	0.02144985	-	0	0.015109471	-	0	0.026757391	-	0	0.00945656	-
540	Sole	Spawning	Low	Multiple pulse	203	St	0	0.00028914	-	0	0.00032314	-	0	0.000300161	-	0	0.000722255	-	0	0.000197045	-

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
541	Sole	Spawning	Low	Multiple pulse	207	St	0	8.34E-05	-	0	0.00010513	-	0	9.97E-05	-	0	0.000229364	-	0	7.08E-05	-
542	Sole	Spawning	Low	Multiple pulse	210	St	0	3.27E-05	-	0	4.47E-05	-	0	4.21E-05	-	0	9.98E-05	-	0	3.33E-05	-
543	Sole	Spawning	Low	Multiple pulse	216	St	0	4.41E-06	-	0	7.56E-06	-	0	7.14E-06	-	0	1.78E-05	-	0	6.15E-06	-
544	Sole	Spawning	Low	Multiple pulse	219	St	0	1.78E-06	-	0	2.95E-06	-	0	2.95E-06	-	0	7.14E-06	-	0	2.33E-06	-
545	Sole	Spawning	Low	Single strike	207	-	0	1.76E-06	-	0	1.73E-06	-	-	1.68E-06	-	-	-	-	0	1.43E-06	-
546	Sole	Spawning	Low	Single strike	213	-	0	3.21E-07	-	0	3.66E-07	-	0	3.59E-07	-	-	-	-	0	2.85E-07	-
547	Spotted ray	Nursery	Low	Multiple pulse	186	Flee	-	0.00104225	-	-	0.00127922	-	-	0.000473819	-	-	0.000523395	-	-	0.000720024	-
548	Spotted ray	Nursery	Low	Multiple pulse	203	Flee	-	5.15E-07	-	-	5.15E-07	-	-	5.15E-07	-	-	5.15E-07	-	-	5.15E-07	-
549	Spotted ray	Nursery	Low	Multiple pulse	207	Flee	-	2.29E-07	-	-	2.29E-07	-	-	2.29E-07	-	-	2.29E-07	-	-	2.29E-07	-
550	Spotted ray	Nursery	Low	Multiple pulse	210	Flee	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-
551	Spotted ray	Nursery	Low	Multiple pulse	216	Flee	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-
552	Spotted ray	Nursery	Low	Multiple pulse	219	Flee	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-	-	5.72E-08	-
553	Spotted ray	Nursery	Low	Multiple pulse	186	St	-	0.04218977	-	-	0.03371105	-	-	0.023746374	-	-	0.042052499	-	-	0.032609793	-
554	Spotted ray	Nursery	Low	Multiple pulse	203	St	-	0.00045443	-	-	0.00050785	-	-	0.000471739	-	-	0.001135112	-	-	0.000480201	-
555	Spotted ray	Nursery	Low	Multiple pulse	207	St	-	0.00013103	-	-	0.00016522	-	-	0.00015669	-	-	0.000360474	-	-	0.000146763	-
556	Spotted ray	Nursery	Low	Multiple pulse	210	St	-	5.14E-05	-	-	7.02E-05	-	-	6.61E-05	-	-	0.000156856	-	-	5.86E-05	-
557	Spotted ray	Nursery	Low	Multiple pulse	216	St	-	6.92E-06	-	-	1.19E-05	-	-	1.12E-05	-	-	2.80E-05	-	-	9.67E-06	-
558	Spotted ray	Nursery	Low	Multiple pulse	219	St	-	2.80E-06	-	-	4.64E-06	-	-	4.64E-06	-	-	1.12E-05	-	-	3.66E-06	-
559	Spotted ray	Nursery	Low	Single strike	207	-	-	2.76E-06	-	-	2.71E-06	-	-	2.64E-06	-	-	-	-	-	2.25E-06	-
560	Spotted ray	Nursery	Low	Single strike	213	-	-	5.04E-07	-	-	5.76E-07	-	-	5.64E-07	-	-	-	-	-	4.48E-07	-
561	Sprat	Spawning	Undetermined	Multiple pulse	186	Flee	0.0004441	-	-	0.00054507	-	-	0.00020189	-	-	0.000223015	-	-	0.0003068	-	-
562	Sprat	Spawning	Undetermined	Multiple pulse	203	Flee	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	-	2.19E-07	-	-
563	Sprat	Spawning	Undetermined	Multiple pulse	207	Flee	9.75E-08	-	-	9.75E-08	-	-	9.75E-08	-	-	9.75E-08	-	-	9.75E-08	-	-
564	Sprat	Spawning	Undetermined	Multiple pulse	210	Flee	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-
565	Sprat	Spawning	Undetermined	Multiple pulse	216	Flee	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-
566	Sprat	Spawning	Undetermined	Multiple pulse	219	Flee	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-	2.44E-08	-	-
567	Sprat	Spawning	Undetermined	Multiple pulse	186	St	0.01797679	-	-	0.01436406	-	-	0.01011818	-	-	0.017918299	-	-	0.01389482	-	-
568	Sprat	Spawning	Undetermined	Multiple pulse	203	St	0.00019363	-	-	0.00021639	-	-	0.00020101	-	-	0.000483664	-	-	0.00020461	-	-
569	Sprat	Spawning	Undetermined	Multiple pulse	207	St	5.58E-05	-	-	7.04E-05	-	-	6.68E-05	-	-	0.000153596	-	-	6.25E-05	-	-
570	Sprat	Spawning	Undetermined	Multiple pulse	210	St	2.19E-05	-	-	2.99E-05	-	-	2.82E-05	-	-	6.68E-05	-	-	2.50E-05	-	-
571	Sprat	Spawning	Undetermined	Multiple pulse	216	St	2.95E-06	-	-	5.07E-06	-	-	4.78E-06	-	-	1.19E-05	-	-	4.12E-06	-	-
572	Sprat	Spawning	Undetermined	Multiple pulse	219	St	1.19E-06	-	-	1.97E-06	-	-	1.98E-06	-	-	4.78E-06	-	-	1.56E-06	-	-
573	Sprat	Spawning	Undetermined	Single strike	207	-	1.18E-06	-	-	1.16E-06	-	-	1.13E-06	-	-	-	-	-	9.57E-07	-	-
574	Sprat	Spawning	Undetermined	Single strike	213	-	2.15E-07	-	-	2.45E-07	-	-	2.40E-07	-	-	-	-	-	1.91E-07	-	-
575	Spurdog	Nursery	High	Multiple pulse	186	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
576	Spurdog	Nursery	High	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
577	Spurdog	Nursery	High	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
578	Spurdog	Nursery	High	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
579	Spurdog	Nursery	High	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
580	Spurdog	Nursery	High	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
581	Spurdog	Nursery	High	Multiple pulse	186	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
582	Spurdog	Nursery	High	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
583	Spurdog	Nursery	High	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
584	Spurdog	Nursery	High	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
585	Spurdog	Nursery	High	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
586	Spurdog	Nursery	High	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
587	Spurdog	Nursery	High	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
588	Spurdog	Nursery	High	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
589	Thornback ray	Nursery	Low	Multiple pulse	186	Flee	-	0.00100946	-	-	0.00128839	-	-	0.000477216	-	-	0.000527148	-	-	0.000297754	-
590	Thornback ray	Nursery	Low	Multiple pulse	203	Flee	-	5.19E-07	-	-	5.19E-07	-	-	5.19E-07	-	-	5.19E-07	-	-	5.19E-07	-
591	Thornback ray	Nursery	Low	Multiple pulse	207	Flee	-	2.31E-07	-	-	2.31E-07	-	-	2.31E-07	-	-	2.31E-07	-	-	2.31E-07	-
592	Thornback ray	Nursery	Low	Multiple pulse	210	Flee	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-
593	Thornback ray	Nursery	Low	Multiple pulse	216	Flee	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-
594	Thornback ray	Nursery	Low	Multiple pulse	219	Flee	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-	-	5.76E-08	-

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
595	Thornback ray	Nursery	Low	Multiple pulse	186	St	-	0.02304317	-	-	0.03395277	-	-	0.023916639	-	-	0.042354022	-	-	0.014917629	-
596	Thornback ray	Nursery	Low	Multiple pulse	203	St	-	0.00045768	-	-	0.00051149	-	-	0.000475122	-	-	0.001143251	-	-	0.000305777	-
597	Thornback ray	Nursery	Low	Multiple pulse	207	St	-	0.00013197	-	-	0.0001664	-	-	0.000157813	-	-	0.000363059	-	-	0.000108819	-
598	Thornback ray	Nursery	Low	Multiple pulse	210	St	-	5.18E-05	-	-	7.07E-05	-	-	6.66E-05	-	-	0.000157981	-	-	5.11E-05	-
599	Thornback ray	Nursery	Low	Multiple pulse	216	St	-	6.97E-06	-	-	1.20E-05	-	-	1.13E-05	-	-	2.82E-05	-	-	9.74E-06	-
600	Thornback ray	Nursery	Low	Multiple pulse	219	St	-	2.82E-06	-	-	4.67E-06	-	-	4.67E-06	-	-	1.13E-05	-	-	3.69E-06	-
601	Thornback ray	Nursery	Low	Single strike	207	-	-	2.78E-06	-	-	2.73E-06	-	-	2.66E-06	-	-	-	-	-	2.26E-06	-
602	Thornback ray	Nursery	Low	Single strike	213	-	-	5.07E-07	-	-	5.80E-07	-	-	5.68E-07	-	-	-	-	-	4.51E-07	-
603	Tope shark	Nursery	Low	Multiple pulse	186	Flee	-	0.00078086	-	-	0.00095839	-	-	0.000354986	-	-	0.000392129	-	-	0.000539444	-
604	Tope shark	Nursery	Low	Multiple pulse	203	Flee	-	3.86E-07	-	-	3.86E-07	-	-	3.86E-07	-	-	3.86E-07	-	-	3.86E-07	-
605	Tope shark	Nursery	Low	Multiple pulse	207	Flee	-	1.71E-07	-	-	1.71E-07	-	-	1.72E-07	-	-	1.72E-07	-	-	1.72E-07	-
606	Tope shark	Nursery	Low	Multiple pulse	210	Flee	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-
607	Tope shark	Nursery	Low	Multiple pulse	216	Flee	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-
608	Tope shark	Nursery	Low	Multiple pulse	219	Flee	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-	-	4.29E-08	-
609	Tope shark	Nursery	Low	Multiple pulse	186	St	-	0.0316087	-	-	0.02525642	-	-	0.01779085	-	-	0.031505851	-	-	0.024431349	-
610	Tope shark	Nursery	Low	Multiple pulse	203	St	-	0.00034046	-	-	0.00038048	-	-	0.000353428	-	-	0.000850429	-	-	0.000359768	-
611	Tope shark	Nursery	Low	Multiple pulse	207	St	-	9.82E-05	-	-	0.00012378	-	-	0.000117392	-	-	0.000270068	-	-	0.000109955	-
612	Tope shark	Nursery	Low	Multiple pulse	210	St	-	3.85E-05	-	-	5.26E-05	-	-	4.95E-05	-	-	0.000117517	-	-	4.39E-05	-
613	Tope shark	Nursery	Low	Multiple pulse	216	St	-	5.19E-06	-	-	8.91E-06	-	-	8.40E-06	-	-	2.10E-05	-	-	7.25E-06	-
614	Tope shark	Nursery	Low	Multiple pulse	219	St	-	2.10E-06	-	-	3.47E-06	-	-	3.47E-06	-	-	8.40E-06	-	-	2.74E-06	-
615	Tope shark	Nursery	Low	Single strike	207	-	-	2.07E-06	-	-	2.03E-06	-	-	1.98E-06	-	-	-	-	-	1.68E-06	-
616	Tope shark	Nursery	Low	Single strike	213	-	-	3.77E-07	-	-	4.31E-07	-	-	4.22E-07	-	-	-	-	-	3.35E-07	-
617	Whiting	Nursery	High	Multiple pulse	186	Flee	-	0.00081275	-	-	0.00103733	-	-	0.000384224	-	-	0.000424426	-	-	0.000239733	-
618	Whiting	Nursery	High	Multiple pulse	203	Flee	-	4.18E-07	-	-	4.18E-07	-	-	4.18E-07	-	-	4.18E-07	-	-	4.18E-07	-
619	Whiting	Nursery	High	Multiple pulse	207	Flee	-	1.86E-07	-	-	1.86E-07	-	-	1.86E-07	-	-	1.86E-07	-	-	1.86E-07	-
620	Whiting	Nursery	High	Multiple pulse	210	Flee	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-
621	Whiting	Nursery	High	Multiple pulse	216	Flee	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-
622	Whiting	Nursery	High	Multiple pulse	219	Flee	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-	-	4.64E-08	-
623	Whiting	Nursery	High	Multiple pulse	186	St	-	0.01855289	-	-	0.0273366	-	-	0.019256147	-	-	0.034100747	-	-	0.012010172	-
624	Whiting	Nursery	High	Multiple pulse	203	St	-	0.0003685	-	-	0.00041182	-	-	0.000382537	-	-	0.000920472	-	-	0.000246192	-
625	Whiting	Nursery	High	Multiple pulse	207	St	-	0.00010625	-	-	0.00013398	-	-	0.000127061	-	-	0.000292312	-	-	8.76E-05	-
626	Whiting	Nursery	High	Multiple pulse	210	St	-	4.17E-05	-	-	5.69E-05	-	-	5.36E-05	-	-	0.000127196	-	-	4.11E-05	-
627	Whiting	Nursery	High	Multiple pulse	216	St	-	5.61E-06	-	-	9.64E-06	-	-	9.10E-06	-	-	2.27E-05	-	-	7.84E-06	-
628	Whiting	Nursery	High	Multiple pulse	219	St	-	2.27E-06	-	-	3.76E-06	-	-	3.76E-06	-	-	9.10E-06	-	-	2.97E-06	-
629	Whiting	Nursery	High	Single strike	207	-	-	2.24E-06	-	-	2.20E-06	-	-	2.14E-06	-	-	-	-	-	1.82E-06	-
630	Whiting	Nursery	High	Single strike	213	-	-	4.08E-07	-	-	4.67E-07	-	-	4.57E-07	-	-	-	-	-	3.63E-07	-
631	Whiting	Nursery	Low	Multiple pulse	186	Flee	-	3.58E-05	-	-	0	-	-	0	-	-	0	-	-	0.000380184	-
632	Whiting	Nursery	Low	Multiple pulse	203	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
633	Whiting	Nursery	Low	Multiple pulse	207	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
634	Whiting	Nursery	Low	Multiple pulse	210	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
635	Whiting	Nursery	Low	Multiple pulse	216	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
636	Whiting	Nursery	Low	Multiple pulse	219	Flee	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
637	Whiting	Nursery	Low	Multiple pulse	186	St	-	0.01729923	-	-	0	-	-	0	-	-	0	-	-	0.015944467	-
638	Whiting	Nursery	Low	Multiple pulse	203	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0.000158206	-
639	Whiting	Nursery	Low	Multiple pulse	207	St	-	0	-	-	0	-	-	0	-	-	0	-	-	3.47E-05	-
640	Whiting	Nursery	Low	Multiple pulse	210	St	-	0	-	-	0	-	-	0	-	-	0	-	-	7.04E-06	-
641	Whiting	Nursery	Low	Multiple pulse	216	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
642	Whiting	Nursery	Low	Multiple pulse	219	St	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-
643	Whiting	Nursery	Low	Single strike	207	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
644	Whiting	Nursery	Low	Single strike	213	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-
645	Whiting	Nursery	Undetermined	Multiple pulse	186	Flee	-	0	-	0	0	-	0	0	-	0	0	-	0	0	0
646	Whiting	Nursery	Undetermined	Multiple pulse	203	Flee	-	0	-	0	0	-	0	0	-	0	0	-	0	0	0
647	Whiting	Nursery	Undetermined	Multiple pulse	207	Flee	-	0	-	0	0	-	0	0	-	0	0	-	0	0	0
648	Whiting	Nursery	Undetermined	Multiple pulse	210	Flee	-	0	-	0	0	-	0	0	-	0	0	-	0	0	0

	Species	Habitat_type	Intensity	Strike_type	Pile_level	model_type	Coull_SE	Ellis_SE	Ireland Atlas_SE	Coull_NE	Ellis_NE	Ireland Atlas_NE	Coull_NW	Ellis_NW	Ireland Atlas_NW	Coull_NW (x2)	Ellis_NW (x2)	Ireland Atlas_NW (x2)	Coull_SW	Ellis_SW	Ireland Atlas_SW
649	Whiting	Nursery	Undetermined	Multiple pulse	216	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
650	Whiting	Nursery	Undetermined	Multiple pulse	219	Flee	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
651	Whiting	Nursery	Undetermined	Multiple pulse	186	St	0	-	0	0	-	0	0.01181262	-	0	0.025289177	-	0	0	-	0
652	Whiting	Nursery	Undetermined	Multiple pulse	203	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
653	Whiting	Nursery	Undetermined	Multiple pulse	207	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
654	Whiting	Nursery	Undetermined	Multiple pulse	210	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
655	Whiting	Nursery	Undetermined	Multiple pulse	216	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
656	Whiting	Nursery	Undetermined	Multiple pulse	219	St	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0
657	Whiting	Nursery	Undetermined	Single strike	207	-	0	-	0	0	-	0	0	-	0	-	-	-	0	-	0
658	Whiting	Nursery	Undetermined	Single strike	213	-	0	-	0	0	-	0	0	-	0	-	-	-	0	-	0
659	Whiting	Spawning	High	Multiple pulse	186	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
660	Whiting	Spawning	High	Multiple pulse	203	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
661	Whiting	Spawning	High	Multiple pulse	207	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
662	Whiting	Spawning	High	Multiple pulse	210	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
663	Whiting	Spawning	High	Multiple pulse	216	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
664	Whiting	Spawning	High	Multiple pulse	219	Flee	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
665	Whiting	Spawning	High	Multiple pulse	186	St	0	-	-	0	-	-	0.07312817	-	-	0.174388635	-	-	0	-	-
666	Whiting	Spawning	High	Multiple pulse	203	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
667	Whiting	Spawning	High	Multiple pulse	207	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
668	Whiting	Spawning	High	Multiple pulse	210	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
669	Whiting	Spawning	High	Multiple pulse	216	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
670	Whiting	Spawning	High	Multiple pulse	219	St	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
671	Whiting	Spawning	High	Single strike	207	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	-
672	Whiting	Spawning	High	Single strike	213	-	0	-	-	0	-	-	0	-	-	-	-	-	0	-	-
673	Whiting	Spawning	Low	Multiple pulse	186	Flee	0	0.00063781	-	0	0.00081405	-	1.45E-06	0.00030152	-	3.97E-06	0.000333069	-	0	0.000188131	-
674	Whiting	Spawning	Low	Multiple pulse	203	Flee	0	3.28E-07	-	0	3.28E-07	-	0	3.28E-07	-	0	3.28E-07	-	0	3.28E-07	-
675	Whiting	Spawning	Low	Multiple pulse	207	Flee	0	1.46E-07	-	0	1.46E-07	-	0	1.46E-07	-	0	1.46E-07	-	0	1.46E-07	-
676	Whiting	Spawning	Low	Multiple pulse	210	Flee	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-
677	Whiting	Spawning	Low	Multiple pulse	216	Flee	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-
678	Whiting	Spawning	Low	Multiple pulse	219	Flee	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-	0	3.64E-08	-
679	Whiting	Spawning	Low	Multiple pulse	186	St	0	0.0145594	-	0	0.02145242	-	0.01726871	0.01511128	-	0.025435578	0.026760594	-	0	0.009425424	-
680	Whiting	Spawning	Low	Multiple pulse	203	St	0	0.00028918	-	0	0.00032317	-	0	0.000300197	-	0.00014907	0.000722342	-	0	0.000193199	-
681	Whiting	Spawning	Low	Multiple pulse	207	St	0	8.34E-05	-	0	0.00010514	-	0	9.97E-05	-	0	0.000229392	-	0	6.88E-05	-
682	Whiting	Spawning	Low	Multiple pulse	210	St	0	3.27E-05	-	0	4.47E-05	-	0	4.21E-05	-	0	9.98E-05	-	0	3.23E-05	-
683	Whiting	Spawning	Low	Multiple pulse	216	St	0	4.41E-06	-	0	7.57E-06	-	0	7.14E-06	-	0	1.78E-05	-	0	6.15E-06	-
684	Whiting	Spawning	Low	Multiple pulse	219	St	0	1.78E-06	-	0	2.95E-06	-	0	2.95E-06	-	0	7.14E-06	-	0	2.33E-06	-
685	Whiting	Spawning	Low	Single strike	207	-	0	1.76E-06	-	0	1.73E-06	-	0	1.68E-06	-	-	-	-	0	1.43E-06	-
686	Whiting	Spawning	Low	Single strike	213	-	0	3.21E-07	-	0	3.66E-07	-	0	3.59E-07	-	-	-	-	0	2.85E-07	-
687	Whiting	Spawning	Undetermined	Multiple pulse	186	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
688	Whiting	Spawning	Undetermined	Multiple pulse	203	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
689	Whiting	Spawning	Undetermined	Multiple pulse	207	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
690	Whiting	Spawning	Undetermined	Multiple pulse	210	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
691	Whiting	Spawning	Undetermined	Multiple pulse	216	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
692	Whiting	Spawning	Undetermined	Multiple pulse	219	Flee	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
693	Whiting	Spawning	Undetermined	Multiple pulse	186	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
694	Whiting	Spawning	Undetermined	Multiple pulse	203	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
695	Whiting	Spawning	Undetermined	Multiple pulse	207	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
696	Whiting	Spawning	Undetermined	Multiple pulse	210	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
697	Whiting	Spawning	Undetermined	Multiple pulse	216	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
698	Whiting	Spawning	Undetermined	Multiple pulse	219	St	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0
699	Whiting	Spawning	Undetermined	Single strike	207	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0
700	Whiting	Spawning	Undetermined	Single strike	213	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	0