

**Composition of Catches
in Trawl Fisheries in
Relation to Proposed EC
Council Regulation
SN4837/96**

Confidential Report No. CR118

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Sea Fish Industry Authority

Technology Division



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Channel, Eastern Irish Sea and off the NE Coast of
England in Relation to Proposed EC Council Regulation
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Summary

This report describes the analysis of trawl catch composition data from discard studies and the separator trawl trails. The results are discussed in terms of proposed regulations concerning catch composition for given mesh sizes. Possible influences of the regulations on fishermen's fishing and discarding practices are discussed.

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1. Introduction

Regulations are proposed (5) which will prescribe minimum percentages of certain target species in trawl catches using a given codend mesh size (Annex 1, Ref.5). The purpose of this report is to;

analyse data collected from discard and other surveys in order to describe the catch composition in terms of species and relative quantities,

to describe the catches in relative economic value terms,

to discuss the reliability of the results in the context of the proposed regulations,

to discuss these results in terms of likely influences on fishermen's fishing and discarding practices.

2. Data Sources

Three sources of data were drawn on for this study;

Discard Surveys;

Eastern Irish Sea 1993-1994 (6)

Ports and Gears;

Whitehaven; *Nephrops* and Otter trawls, Anchor seiners

Fleetwood; Otter, Beam (Inshore) and *Nephrops* trawls

Holyhead; Beam trawls (Offshore)

English Channel 1995 East (4)

Ports and Gears;

Rye; Beam trawls

Newhaven and Shoreham; Otter trawls

English Channel 1995 West (4)

Ports and Gears;

Brixham; Otter and Beam trawls

Plymouth; Otter trawls

Looe; Pair and Otter trawls

Separator Trawl Assessments (1)

NE Coast Cod Fishery 1995:

Bridlington Otter Trawl; Standard 100mm Codend and experimental

Separator trawl; 100/120mm codends

The appropriate references should be consulted for details. These data were chosen because the fisheries surveyed used current mesh sizes and the surveys measured all species of fish and shellfish captured in the trawl. In all cases the fisheries were operating under commercial conditions.

2.1 Data Processing

For each fishery the proportions by weight of the Annex I target species in the catches were calculated appropriate to the mesh size used (see Appendix for details of calculations). The following percentages were calculated;

$$\% \text{ Annex I species in Total Catch} = \left(\frac{\text{Weight Annex I Target Species in Total Catch}}{\text{Total Catch Weight}} \right) \times 100\%$$

$$\% \text{ Annex I species in Retained Catch} = \left(\frac{\text{Weight Annex I Target Species in Retained Catch}}{\text{Weight Total Retained Catch}} \right) \times 100\%$$

The economic target species were assessed by reference to the percentage value of the landed catches. For details see Appendix which also shows the complete catch composition and percentage values for all the fisheries surveyed.

3. Results and Discussion

The percentage of Annex I target species in the retained and total catches are shown by fishery and quarter in table A (page 7) together with the proposed criteria for the appropriate mesh sizes. The analysis of these catches by quarter implies that catch composition was similar for all fishing trips during the quarter for the fisheries concerned. There is evidence that this was so for the Channel fisheries (4) but further work would be required to establish the extent of between trip and haul variation.

3.1 Retained Catches

The criteria which would have to be met by the fisheries are the minimum qualifying percentages of Annex I target species in the retained catch.

In this table all the fisheries studied with the exception of the eastern Channel otter trawlers sampled in Quarter 4 1995 meet the criteria layed down in Annex I. However Irish Sea otter trawlers sampled in Quarter 2 1994 only just meet the minimum percentage of Annex I target species in the retained catch.

Both these results were obtained from very small samples of 1 and 7 hauls respectively; thus they may not be representative. In the eastern Channel otter trawlers the presence of turbot in the sample substantially distorts the results, whilst in the Irish Sea Otter trawlers the proportion of cod is much higher in this quarter than in the other quarters in this fishery.

Similar caveats, on the grounds of small sample sizes, should be added to the western Channel pair trawlers, Irish Sea anchor seiners and the beam trawl results from the eastern Channel.

Economic Target Species

Most of the fisheries captured a variety of species which together made up the percentage of total retained catch required to fulfill Annex I. In the main, these included the species most important in terms of percentage economic value and the target species described by the fishermen in the effort questionnaire (4) (Channel only). However there were some exceptions.

Irish Sea Nephrops

Irish Sea *Nephrops* trawlers, particularly during Quarter 2 1994 (Appendix Table 2) retained substantial quantities of plaice (not an Annex I target species for this mesh size) which made up a high proportion of the retained catch by weight and value. The criterion for percentage of Annex I target species in the retained catch was only just met for this gear type during this quarter.

The availability of *Nephrops* varies during the year due to changes in their behaviour related to aspects of their lifecycle (6). During the year of the study (1994) *Nephrops* were first pursued by the fishermen in any quantity during April-May. This was followed by a quiescent period towards the end of June when very little *Nephrops* were retained (Quarter 2). During July, August and September (Quarter 3) there was substantial effort in the *Nephrops* fishery

and substantial catches were made suggesting that availability was highest during this period.

However fishermen used *Nephrops* trawls to 'prospect' for *Nephrops* during the early part of the season (April) and during the period of quiescence (June). The evidence for this is in the field notes which indicate switches between 70 and 80mm mesh codend (the results from both codends were recorded separately). One result of these prospecting activities was a high proportion of plaice in the total and retained catches of the *Nephrops* trawls during Quarter 2 1994. It seems likely that some of these trips would not comply with the relevant percentage of Annex I target species. Further analysis would be required in order to examine this effect.

Eastern Channel Otter Trawlers

With the exception of Quarter 4 1995 for which there was a very small sample size the results from this fishery indicate good compliance with Annex I. However the results of the effort questionnaire (4) did not correspond fully with the relative values of the samples; this suggests that the fishermen may target species other than those featuring in the catches.

This is relevant because the fishermen indicate that they target cod during the winter months of October-February. Since the codend mesh size used was 80mm throughout the year this fishery may not comply with Annex I throughout the year.

3.2 Total Catches and Fishermen's Discarding Practices

The percentages of Annex I target species in the total catch are of interest because comparison with the retained catch data gives an indication of the extent to which the percentage catch composition is modified by discarding. This is important because it gives an indication of the extent by which the fishermen may alter the composition of the retained catches in response to legislative changes or market demand. Although retained weight is shown here because the regulations stipulate this parameter, fishermen normally monitor their catches as landed weight (after gutting); they would be expected to make an allowance for gutting.

Legislative Influences

In the western Channel otter trawl fisheries for squid using 60-65 mm codends already operate under a regime which requires a minimum proportion of target species retained in the catches (EC council regulation 3094/86). In this fishery the fishermen retain a proportion of economically unimportant horse mackerel which can be considered target species under this regime (4).

It seems likely that where there is a risk of not meeting the required proportions of Annex I target species fishermen may draw on fish species and size groups which they catch but do not normally land in an effort to make up the required retained catch composition. In most cases the fisheries meet Annex I requirements with a reasonable margin so discarding practices are not likely to be affected substantially.

Currently the use of 70mm mesh codends in the *Nephrops* fishing is permitted (under EC council regulation 3094/86) provided that the following catch composition conditions are met:

- Minimum percentage by weight of *Nephrops* in the retained catch is 30%.
- Maximum percentage by weight of protected species* in the retained catch is 60%.
- The remainder of the catch should consist of non protected species or, if these are not available the difference has to be made up with *Nephrops*.

In these results the percentage of currently unprotected species consisting of rays and pout whiting was very low, in both the total and retained catches at less than 1.5%. Thus the current target which the fishermen are effectively working to a minimum of 40% *Nephrops* in the retained catches. Apart from a small quantity of herring which are not retained, *Nephrops* is the only Annex I target species captured in this fishery. Thus these results suggest the net result of the implementation of the Annex I regime would be similar to the current rules, with a slight reduction in the percentage of *Nephrops* required in the retained catch.

These results indicate that this *Nephrops* fishery would fulfil the Annex I requirement on a quarterly basis but it is possible that some trips during the second quarter of 1994 would not have fulfilled the requirements (see above).

Market Influences

In the eastern Irish Sea *Nephrops* fishery for both quarters studied the percentage of Annex I target species (composed of almost all *Nephrops* in both cases) was substantially lower in the total catch than in the retained catch. This was due to the large quantities of whiting in the total catch, a high proportion of which were discarded in this fishery. (Appendix 1 Tables 2 and 3) Whiting of all sizes including those above the minimum landing size were discarded (6) indicating that the low price available for whiting was an important reason for the high discard rate. There may also have been some discarding of whiting in order to meet the catch composition conditions described above.

Changes in demand for whiting may alter the ratio between whiting (a non Annex I target species for this mesh size) and *Nephrops* retained in this fishery and hence reduce the proportion of Annex I target species in the retained catches. However, the requirement to the current rules and Annex I may discourage the retention of whiting in this fishery.

* All species with an MLS plus monkfish ling, eels and cuttlefish.

Table A

Proposed Codend Mesh Size Ranges (mm) and Observed Percentage of Target Species (as defined by Annex I) by Weight:			
55-69mm mesh	70-79mm mesh	80-99mm mesh	100-249mm mesh
Minimum= 70% of Target Species to qualify for use	Minimum= 35% of Target Species to qualify for use	Minimum=70% of Target Species to qualify for use	Minimum=90% of Target Species to qualify for use

Fishery	Codend Mesh mm	Year	Quarter	Sampling Effort Hauls	Hours	Economic Target Species	Total Catch %	Retained %	Total Catch %	Retained %	Total Catch %	Retained %	Total Catch %	Retained %	Appendix Table No	
W Channel Otter Trawlers	60-65	1995	3	11	33	Squid	81	84	-	-	-	-	-	-	1	
Irish Sea Nephrops Trawlers	70	1994	2	17	73	Nephrops, Plaice	-	-	16	40	-	-	-	-	2	
	70	1994	3	11	46	Nephrops	-	-	54	82	-	-	-	-	3	
W Channel Otter Trawlers	80-90	1995	1	18	64	Lemon sole	-	-	-	-	97	96	-	-	4	
	80-90	1995	2	14	52	Lemon sole	-	-	-	-	99	99	-	-	5	
	80-90	1995	3	11	34	Squid	-	-	-	-	96	95	-	-	6	
	80-90	1995	4	15	62	Cuttlefish, Squid	-	-	-	-	92	91	-	-	7	
E Channel Otter Trawlers	80-90	1995	1	12	33	Bass, Squid	-	-	-	-	95	95	-	-	8	
	80-90	1995	2	11	31	Cuttlefish, Squid	-	-	-	-	93	98	-	-	9	
	80-90	1995	3	11	35	Bass	-	-	-	-	89	94	-	-	10	
	80-90	1995	4	1	4	Cod, Turbot	-	-	-	-	64	67	-	-	11	
W Channel Pair Trawlers	80-90	1995	2	4	17	Lemon sole	-	-	-	-	99	100	-	-	12	
	80-90	1995	3	1	3	Squid, Whiting	-	-	-	-	97	97	-	-	13	
Irish Sea Otter Trawlers	80	1993	4	14	68	Plaice	-	-	-	-	98	98	-	-	14	
	80	1994	2	7	31	Plaice, Cod	-	-	-	-	88	70	-	-	15	
	80	1994	3	10	42	Plaice	-	-	-	-	98	97	-	-	16	
Irish Sea Anchor Seiners	80	1993	4	4	4	Plaice	-	-	-	-	90	78	-	-	17	
W Channel Beam Trawlers	80	1995	1	16	30	Cuttlefish, Sole	-	-	-	-	88	84	-	-	18	
	80	1995	2	75	139	Sole, Plaice	-	-	-	-	89	90	-	-	19	
	80	1995	3	21	42	Sole, Plaice	-	-	-	-	88	84	-	-	20	
	80	1995	4	41	72	Cuttlefish, Sole	-	-	-	-	89	89	-	-	21	
E Channel Beam Trawlers	80	1995	1	9	20	Sole	-	-	-	-	90	92	-	-	22	
Irish Sea Beam Trawlers Inshore	80	1993	4	2	4	Sole	-	-	-	-	99	100	-	-	23	
	Offshore	80	1994	1	67	134	Sole	-	-	-	-	81	82	-	-	24
	Inshore	80	1994	2	24	63	Sole	-	-	-	-	91	91	-	-	25
Irish Sea Anchor Seiners	120	1993	4	4	4	Plaice	-	-	-	-	-	-	98	98	26	
	120	1994	2	4	6	Plaice	-	-	-	-	-	-	99	99	27	
	120	1994	3	2	3	Plaice	-	-	-	-	-	-	100	100	28	
NE Coast Standard Trawl	100	1995	3	44	176	Cod, Lemon sole	-	-	-	-	-	-	99	99	29	
NE Coast Separator Trawl	100/120	1995	3	46	184	Cod, Lemon sole	-	-	-	-	-	-	100	100	30	
Upper codend only	100	1995	3	46	184	Cod, Lemon sole	-	-	-	-	-	-	100	100	31	
Lower codend only	120	1995	3	46	184	Cod, Lemon sole	-	-	-	-	-	-	100	100	32	

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4. Conclusion

- The majority of fisheries analysed comply with Annex I in terms of retained catch composition. In most cases the implementation of Annex I would not encourage the landing of minor species in order to improve compliance with Annex I.
- A possible consequence of the implementation of Annex I would be changes in the way in which Irish Sea fishermen prospect for *Nephrops*; they would be expected only to use 70mm codends when the *Nephrops* were consistently available.

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Appendix

Tables 1-32 show the catch composition of the fisheries surveyed by quarter. Table 33 shows the species list including latin names.

The columns in the tables are as follows:

1. Species; the species are listed in the same order as they are listed in Annex I. Also listed after the Annex I species are the other species captured during the study. Main economic target species shown in bold.
2. Annex I Target; Y= indicates that this is an Annex I target species for this mesh size,
N= indicates that this is not an Annex I target species for this mesh size.
3. Estimated Total Catch in kg of that species; from the Length-frequency distributions and Length- weight relationships.
4. Percentage of Total Catch by weight for that species.
5. Cumulative % (from the top of the table) of Total Catch. Thus the percentage of Annex I target species is calculated at the lowest Y on the list in Column 2.
6. and 7. These are estimates of the weight of Discarded and Retained fish for that species in kg; from Length-frequency distributions and Length-weight relationships.
8. Calculates the % of species retained by weight.
9. Percentage of Total Retained Catch by weight for that species.
10. Cumulative % (from the top of the table) of Total Retained. Thus the percentage of the Annex I target species is calculated at the lowest Y on the list in Column 2.
11. Landings Weight calculated from Retained Weight with an allowance for gutting.
12. Price £ per kg as obtained from the appropriate landings by port data.
13. Value = Landings kg*Price £
14. Percentage of Total Landings value.

Notes:

For some species no Length-weight data was available or the species were counted not measured. These species are indicated as P when present in the total catch. The weights of discarded gurnards in the Western Channel beam trawlers in quarter 4 is a provisional estimate based on smaller than normal samples. Length-Weight relationships were obtained from references 2 and 3.

Fishery: Irish Sea Nephrops Trawlers
 Quarter: 1994 Quarter 2
 Codend mesh size: Mesh size= 70mm
 Criterion: Minimum Percentage Annex I Target Species= 35% of Retained Catch

Table 2

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic herring	Y	5	0.1	0.1	5	0	0.0	0.0	0.0	0	0.00	0.00	0.0
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gurnard & latchet	-	-	-	-	-	-	-	-	-	-	-	-	-
Red mullet	-	-	-	-	-	-	-	-	-	-	-	-	-
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	Y	592	15.8	15.9	0	592	100.0	39.7	39.7	592	1.69	1000.48	51.4
Sole (Dover)	N	60	1.6	17.5	1	59	98.0	3.9	43.6	56	3.54	197.61	10.2
Plaice	N	991	26.4	43.9	322	669	67.5	44.9	88.5	631	0.94	593.14	30.5
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	-	-	-	-	-	-	-	-	-	-	-	-	-
Whiting	N	1359	36.2	80.2	1264	95	7.0	6.3	94.9	83	0.30	24.90	1.3
Brill	N	25	0.7	80.8	1	24	96.4	1.6	96.5	23	3.02	69.04	3.5
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	N	589	15.7	96.5	589	0	0.0	0.0	96.5	0	0.23	0.00	0.0
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	N	11	0.3	96.8	11	0	0.0	0.0	96.5	0	0.26	0.00	0.0
Pout whiting (pouting)	N	20	0.5	97.3	20	0	0.0	0.0	96.5	0	0.25	0.00	0.0
Lemon sole	N	6	0.2	97.5	6	0	0.0	0.0	96.5	0	1.00	0.00	0.0
Lesser spotted dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	N	5	0.1	97.6	5	0	0.0	0.0	96.5	0	0.18	0.00	0.0
John Dory	-	-	-	-	-	-	-	-	-	-	-	-	-
Queen scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod	N	41	1.1	98.7	28	14	33.1	0.9	97.4	12	1.03	12.10	0.6
Haddock	N	4	0.1	98.8	4	0	0.0	0.0	97.4	0	0.80	0.00	0.0
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	N	3	0.1	98.9	3	0	0	0.0	97.4	0	1.00	0.00	0.0

Fishery: Western Channel Otter Trawlers
 Quarter: 1995 Quarter 3
 Codend mesh size: Mesh size= 80-99mm
 Criterion: Minimum Percentage Annex I Target Species= 70% of Retained Catch

Table 6

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Species	Annex I Target	Catch kg	% of Total Catch	Cumulative % of Catch	Discards kg	Retained kg	Retained %	% of Retained Catch	Cumulative % of Retained Catch	Landings Weight kg	Price £ per kg	Value £	% of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	Y	9	0.7	0.7	0	9	100.0	0.8	0.8	9	0.36	3.10	0.2
Scad, horse mackerel	Y	31	2.4	3.0	5	26	82.9	2.2	3.0	26	0.22	5.70	0.3
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	Y	358	27.4	30.4	0	358	100.0	31.1	34.1	358	3.19	1142.50	55.8
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gurnard & latchet	Y	141	10.8	41.2	18	123	87.4	10.7	44.8	123	0.40	49.30	2.4
Red mullet	Y	2	0.1	41.3	0	2	100.0	0.2	44.9	2	5.29	9.80	0.5
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	-	-	-	-	-	-	-	-	-	-	-	-	-
Plaice	Y	18	1.4	42.7	0	18	100.0	1.6	46.5	17	1.13	19.50	1.0
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	Y	5	0.4	43.1	0	5	100.0	0.4	47.0	5	1.22	5.70	0.3
Whiting	Y	183	14.0	57.1	2	181	98.9	15.7	62.7	159	0.48	76.10	3.7
Brill	-	-	-	-	-	-	-	-	-	-	-	-	-
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	Y	25	1.9	59.0	16	10	37.9	0.8	63.5	9	0.49	4.40	0.2
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pout whiting (pouting)	Y	203	15.5	74.6	37	166	81.8	14.4	77.9	148	0.30	44.50	2.2
Lemon sole	Y	95	7.3	81.9	2	93	97.6	8.1	86.0	90	2.82	252.50	12.3
Lesser spotted dogfish	Y	73	5.6	87.5	73	0	0.0	0.0	86.0	0	0.32	0.00	0.0
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	-	-	-	-	-	-	-	-	-	-	-	-	-
John Dory	Y	109	8.3	95.8	3	106	97.3	9.2	95.2	106	3.58	379.50	18.5
Queen scallops	-	P	-	-	-	-	-	-	-	-	-	-	-
Cod	N	6	0.5	96.3	0	6	100.0	0.5	95.8	5	1.13	6.10	0.3
Haddock	-	-	-	-	-	-	-	-	-	-	-	-	-
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	N	7	0.5	96.8	0	7	100.0	0.6	96.3	6	0.47	2.70	0.1

Fishery: Eastern Channel Otter Trawlers
 Quarter: 1995 Quarter 2
 Codend mesh size: Mesh size= 80-99mm
 Criterion: Minimum Percentage Annex I Target Species= 70% of Retained Catch

Table 9

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Monkfish, Anglerfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Turbot	-	-	-	-	-	-	-	-	-	-	-	-	-
Skates & rays	-	-	-	-	-	-	-	-	-	-	-	-	-
Blond ray	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuckoo ray	N	1	0.1	93.1	1	0	0.0	0.0	98.0	0	1.62	0.00	0.0
Spotted ray	N	4	0.4	93.6	4	0	0.0	0.0	98.0	0	1.62	0.00	0.0
Stingray	-	-	-	-	-	-	-	-	-	-	-	-	-
Undulate ray	N	7	0.8	94.3	0	7	100.0	1.0	99.0	6	1.62	9.51	1.2
Thornback ray	N	1	0.1	94.4	0	1	100.0	0.1	99.2	1	1.62	1.34	0.2
Scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Lobsters	-	-	-	-	-	-	-	-	-	-	-	-	-
Crab - brown; mixed sexes	-	-	-	-	-	-	-	-	-	-	-	-	-
Spider crabs	-	-	-	-	-	-	-	-	-	-	-	-	-
Velvet crabs	-	-	-	-	-	-	-	-	-	-	-	-	-
Whelks	-	-	-	-	-	-	-	-	-	-	-	-	-
Garfish	N	6	0.7	95.1	0	6	100.0	0.8	100.0	6	0.44	2.50	0.3
Ribbon fish	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumpsucker	N	42	4.8	99.9	42	0	0.0	0.0	100.0	0	0.11	0.00	0.0
Sand sole	-	-	-	-	-	-	-	-	-	-	-	-	-
Dragonet	N	0	0.0	99.9	0	0	0.0	0.0	100.0	0	0.00	0.00	0.0
Scald fish	-	-	-	-	-	-	-	-	-	-	-	-	-
Shads (Twaite & Allis)	-	-	-	-	-	-	-	-	-	-	-	-	-
Wrasses	N	1	0.1	100.0	1	0	0.0	0.0	100.0	0	0.00	0.00	0.0

Fishery: Eastern Channel Otter Trawlers
 Quarter: 1995 Quarter 3
 Codend mesh size: Mesh size= 80-99mm
 Criterion: Minimum Percentage Annex I Target Species= 70% of Retained Catch

Table 10

1 Species	2 Annex I Target	3 Catch kg	4 % of Total Catch	5 Cumulative % of Catch	6 Discards kg	7 Retained kg	8 Retained %	9 % of Retained Catch	10 Cumulative % of Retained Catch	11 Landings Weight kg	12 Price £ per kg	13 Value £	14 % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	Y	32	1.5	1.5	0	32	98.9	2.7	2.7	32	0.33	10.51	0.6
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchard:	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	Y	41	1.9	3.4	0	41	100.0	3.5	6.1	41	2.55	105.77	5.8
Sea bream	Y	35	1.6	5.1	20	15	42.1	1.2	7.3	15	0.69	10.18	0.6
Gumard & latchet	Y	61	2.9	7.9	10	52	84.3	4.3	11.6	52	0.31	16.01	0.9
Red mullet	Y	13	0.6	8.5	0	13	100.0	1.1	12.7	13	4.53	59.89	3.3
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	Y	148	6.9	15.5	0	148	100.0	12.3	25.1	148	1.07	158.66	8.7
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	Y	5	0.2	15.7	0	5	100.0	0.4	25.5	5	4.39	20.59	1.1
Plaice	Y	51	2.4	18.1	34	18	34.1	1.5	27.0	17	1.26	20.89	1.1
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	-	-	-	-	-	-	-	-	-	-	-	-	-
Whiting	Y	66	3.1	21.2	7	59	90.1	4.9	31.9	52	0.57	29.61	1.6
Brill	Y	7	0.3	21.5	0	7	100.0	0.5	32.4	6	3.99	25.02	1.4
Pollack	Y	70	3.3	24.7	45	25	36.2	2.1	34.5	22	0.79	17.51	1.0
Dab	Y	69	3.2	28.0	59	10	14.6	0.8	35.4	9	0.30	2.81	0.2
Bass	Y	153	7.1	35.1	6	147	96.0	12.2	47.6	147	5.60	822.14	45.2
Flounder (flake)	Y	41	1.9	37.0	8	33	80.8	2.7	50.3	30	0.28	8.49	0.5
Pout whiting (pouting)	Y	442	20.6	57.6	304	138	31.2	11.5	61.8	123	0.20	24.65	1.4
Lemon sole 1	Y	436	20.3	77.9	295	141	32.4	11.8	73.6	136	2.52	342.24	18.8
Lesser spotted dogfish	Y	76	3.5	81.5	0	76	100.0	6.3	79.9	76	0.16	12.13	0.7
Unidentified dogfish	Y	162	7.5	89.0	0	162	100.0	13.5	93.4	162	0.16	25.89	1.4
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	-	-	-	-	-	-	-	-	-	-	-	-	-
John Dory	Y	2	0.1	89.1	0	2	100.0	0.2	93.5	2	3.44	6.74	0.4
Queen scallops	-	P	-	-	-	-	-	-	-	-	-	-	-
Cod	N	78	3.7	92.7	3	75	96.3	6.3	99.8	66	1.47	96.45	5.3
Haddock	-	-	-	-	-	-	-	-	-	-	-	-	-
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	-	-	-	-	-	-	-	-	-	-	-	-	-

1 The majority of Lemon soles were small in this fishery in this quarter (see ref. 2) and it is unlikely that they would have fetched the mean market price quoted.

Fishery: Eastern Channel Otter Trawlers
 Quarter: 1995 Quarter 3
 Codend mesh size: Mesh size= 80-99mm
 Criterion: Minimum Percentage Annex I Target Species= 70% of Retained Catch

Table 10

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Monkfish, Anglerfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Turbot	-	-	-	-	-	-	-	-	-	-	-	-	-
Skates & rays	-	-	-	-	-	-	-	-	-	-	-	-	-
Blond ray	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuckoo ray	N	1	0.0	92.8	0	1	100.0	0.1	99.9	1	1.62	1.00	0.1
Spotted ray	N	2	0.1	92.9	0	1	82.8	0.1	100.0	1	1.62	1.98	0.1
Stingray	-	-	-	-	-	-	-	-	-	-	-	-	-
Undulate ray	-	-	-	-	-	-	-	-	-	-	-	-	-
Thornback ray	-	-	-	-	-	-	-	-	-	-	-	-	-
Scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Lobsters	-	-	-	-	-	-	-	-	-	-	-	-	-
Crab - brown; mixed sexes	N	0	0.0	92.9	0	0	0.0	0.0	100.0	0	1.49	0.00	0.0
Spider crabs	N	153	7.2	100.0	153	0	0.0	0.0	100.0	0	1.00	0.00	0.0
Velvet crabs	-	-	-	-	-	-	-	-	-	-	-	-	-
Whelks	-	-	-	-	-	-	-	-	-	-	-	-	-
Garfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Ribbon fish	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumpsucker	-	-	-	-	-	-	-	-	-	-	-	-	-
Sand sole	-	-	-	-	-	-	-	-	-	-	-	-	-
Dragonet	-	-	-	-	-	-	-	-	-	-	-	-	-
Scald fish	-	-	-	-	-	-	-	-	-	-	-	-	-
Shads (Twaite & Allis)	-	P	-	-	-	-	-	-	-	-	-	-	-
Wrasses	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ The majority of Lemon soles were small in this fishery in this quarter (see ref. 2) and it is unlikely that they would have fetched the mean market price quoted.

Fishery: Irish Sea Anchor Seiners
 Quarter: 1993 Quarter 4
 Codend mesh size: Mesh size= 80mm
 Criterion: Minimum Percentage Annex I Target Species= 70% of Retained Catch

Table 17

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gurnard & latchet	-	-	-	-	-	-	-	-	-	-	-	-	-
Red mullet	-	-	-	-	-	-	-	-	-	-	-	-	-
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	Y	2	0.2	0.2	0	2	100.0	0.4	0.4	2	3.42	6.84	1.5
Plaice	Y	567	50.1	50.3	194	372	65.7	73.3	73.7	351	0.94	330.13	71.2
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	-	-	-	-	-	-	-	-	-	-	-	-	-
Whiting	Y	4	0.4	50.7	4	0	0.0	0.0	73.7	0	0.19	0.00	0.0
Brill	Y	20	1.8	52.4	0	20	100.0	4.0	77.7	19	2.83	54.62	11.8
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	Y	423	37.4	89.8	423	0	0.0	0.0	77.7	0	0.20	0.00	0.0
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pout whiting (pouting)	-	-	-	-	-	-	-	-	-	-	-	-	-
Lemon sole	Y	2	0.1	90.0	2	0	0.0	0.0	77.7	0	1.00	0.00	0.0
Lesser spotted dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	-	-	-	-	-	-	-	-	-	-	-	-	-
John Dory	-	-	-	-	-	-	-	-	-	-	-	-	-
Queen scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod	N	34	3.0	93.0	0	34	100.0	6.7	84.4	30	0.88	26.05	5.6
Haddock	N	17	1.5	94.5	0	17	100.0	3.3	87.7	15	0.55	8.09	1.7
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	N	4	0.3	94.8	0	4	100.0	0.7	88.4	3	1.00	3.10	0.7

Fishery: Irish Sea Beam Trawlers
 Quarter: 1994 Quarter 1
 Codend mesh size: Mesh size= 80-99mm
 Criterion: Minimum Percentage Annex I Target Species= 70% of Retained Catch

Table 24

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gumard & latchet	-	-	-	-	-	-	-	-	-	-	-	-	-
Red mullet	-	-	-	-	-	-	-	-	-	-	-	-	-
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	Y	2616	47.3	47.3	39	2577	98.5	59.4	59.4	2454	4.24	10405.00	84.7
Plaice	Y	839	15.2	62.4	227	612	72.9	14.1	73.6	577	0.97	560.10	4.6
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	Y	0	0.0	62.4	0	0	0.0	0.0	73.6	0	0.17	0.00	0.0
Whiting	Y	727	13.1	75.6	579	149	20.5	3.4	77.0	130	0.45	58.70	0.5
Brill	Y	56	1.0	76.6	0	56	100.0	1.3	78.3	53	3.34	178.00	1.4
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	Y	28	0.5	77.1	28	0	0.0	0.0	78.3	0	0.19	0.00	0.0
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pout whiting (pouting)	Y	22	0.4	77.5	22	0	0.0	0.0	78.3	0	0.35	0.00	0.0
Lemon sole	Y	50	0.9	78.4	11	39	78.2	0.9	79.2	38	1.15	43.40	0.4
Lesser spotted dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	Y	157	2.8	81.2	24	133	84.7	3.1	82.2	128	0.25	32.00	0.3
John Dory	-	-	-	-	-	-	-	-	-	-	-	-	-
Queen scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod	N	140	2.5	83.7	23	118	84.0	2.7	85.0	102	1.12	114.70	0.9
Haddock	N	225	4.1	87.8	12	214	94.8	4.9	89.9	184	0.81	149.10	1.2
Saithe, coley, blackjack	N	2	0.0	87.8	0	2	100.0	0.0	89.9	2	0.77	1.40	0.0
Ling	N	4	0.1	87.9	0	4	100.0	0.1	90.0	4	0.72	2.50	0.0

Fishery: NE Cod Fishery: Standard Trawl
 Quarter: 1995 Quarter 3
 Codend mesh size: 100mm
 Criterion: Minimum Percentage Annex I Target Species= 90% of Retained Catch

Table 29

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gurnard & latchet	-	-	-	-	-	-	-	-	-	-	-	-	-
Red mullet	-	-	-	-	-	-	-	-	-	-	-	-	-
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	Y	9	0.1	0.1	0	8	97.7	0.1	0.1	8	4.34	36.01	0.3
Plaice	Y	179	1.3	1.4	13	165	92.5	1.4	1.4	154	0.99	152.86	1.3
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	-	-	-	-	-	-	-	-	-	-	-	-	-
Whiting	Y	465	3.5	4.9	38	427	91.8	3.5	5.0	378	0.28	105.83	0.9
Brill	Y	5	0.0	5.0	0	5	100.0	0.0	5.0	5	1.88	9.55	0.1
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	-	-	-	-	-	-	-	-	-	-	-	-	-
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pout whiting (pouting)	-	-	-	-	-	-	-	-	-	-	-	-	-
Lemon sole	Y	1085	8.2	13.1	51	1033	95.3	8.5	13.5	994	1.16	1152.62	10.1
Lesser spotted dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	-	-	-	-	-	-	-	-	-	-	-	-	-
John Dory	-	-	-	-	-	-	-	-	-	-	-	-	-
Queen scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod	Y	11011	83.0	96.1	986	10025	91.0	82.8	96.4	8568	1.12	9596.64	83.9
Haddock	Y	397	3.0	99.1	73	324	81.6	2.7	99.1	280	0.70	195.76	1.7
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	Y	7	0.1	99.2	0	7	100.0	0.1	99.1	6	0.97	6.06	0.1

Fishery: NE Cod Fishery: Separator Trawl; Both Codends
 Quarter: 1995 Quarter 3
 Codend mesh size: 100mm (upper) + 120mm (lower)
 Criterion: Minimum Percentage Annex I Target Species= 90% of Retained Catch

Table 30

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gurnard & latchet	-	-	-	-	-	-	-	-	-	-	-	-	-
Red mullet	-	-	-	-	-	-	-	-	-	-	-	-	-
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	Y	6	0.0	0.0	0	6	100.0	0.1	0.1	6	4.34	26.98	0.2
Plaice	Y	190	1.5	1.5	20	170	89.2	1.4	1.4	159	1.19	188.69	1.7
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	-	-	-	-	-	-	-	-	-	-	-	-	-
Whiting	Y	1382	10.6	12.1	34	1348	97.6	10.9	12.4	1193	0.30	357.85	3.2
Brill	Y	4	0.0	12.2	0	4	100.0	0.0	12.4	3	1.88	6.49	0.1
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	-	-	-	-	-	-	-	-	-	-	-	-	-
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pout whiting (pouting)	-	-	-	-	-	-	-	-	-	-	-	-	-
Lemon sole	Y	266	2.0	14.2	10	256	96.2	2.1	14.5	246	1.54	379.46	3.4
Lesser spotted dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	-	-	-	-	-	-	-	-	-	-	-	-	-
John Dory	-	-	-	-	-	-	-	-	-	-	-	-	-
Queen scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod	Y	10318	79.3	93.5	398	9920	96.1	80.5	95.0	8479	1.16	9835.15	88.1
Haddock	Y	837	6.4	99.9	229	608	72.6	4.9	99.9	524	0.66	345.76	3.1
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	Y	6	0.0	100.0	0	6	100.0	0.0	100.0	5	0.97	4.87	0.0

Fishery: NE Cod Fishery: Separator Trawl Upper Codend
 Quarter: 1995 Quarter 3
 Codend mesh size: 100mm (upper)
 Criterion: Minimum Percentage Annex I Target Species= 90% of Retained Catch

Table 31

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gurnard & latchet	-	-	-	-	-	-	-	-	-	-	-	-	-
Red mullet	-	-	-	-	-	-	-	-	-	-	-	-	-
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	Y	0	0.0	0.0	0	0	100.0	0.0	0.0	0	4.34	1.64	0.1
Plaice	Y	3	0.1	0.1	0	3	94.0	0.1	0.1	3	1.19	3.43	0.1
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	-	-	-	-	-	-	-	-	-	-	-	-	-
Whiting	Y	1327	28.9	29.0	29	1298	97.8	30.4	30.5	1149	0.30	344.61	11.3
Brill	Y	0	0.0	29.0	0	0	0.0	0.0	30.5	0	1.88	0.00	0.0
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	-	-	-	-	-	-	-	-	-	-	-	-	-
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pout whiting (pouting)	-	-	-	-	-	-	-	-	-	-	-	-	-
Lemon sole	Y	14	0.3	29.3	2	12	87.1	0.3	30.8	12	1.54	18.26	0.6
Lesser spotted dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	-	-	-	-	-	-	-	-	-	-	-	-	-
John Dory	-	-	-	-	-	-	-	-	-	-	-	-	-
Queen scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod	Y	2438	53.1	82.4	68	2370	97.2	55.5	86.2	2026	1.16	2349.98	77.0
Haddock	Y	807	17.6	100.0	220	588	72.8	13.8	100.0	507	0.66	334.34	11.0
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	Y	0	0.0	100.0	0	0	0.0	0.0	100.0	0	0.97	0.00	0.0

Fishery: NE Cod Fishery: Separator Trawl Lower Codend
 Quarter: 1995 Quarter 3
 Codend mesh size: 120mm (lower)
 Criterion: Minimum Percentage Annex I Target Species= 90% of Retained Catch

Table 32

¹ Species	² Annex I Target	³ Catch kg	⁴ % of Total Catch	⁵ Cumulative % of Catch	⁶ Discards kg	⁷ Retained kg	⁸ Retained %	⁹ % of Retained Catch	¹⁰ Cumulative % of Retained Catch	¹¹ Landings Weight kg	¹² Price £ per kg	¹³ Value £	¹⁴ % of Total Value
Sprats	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Scad, horse mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-
Pilchards	-	-	-	-	-	-	-	-	-	-	-	-	-
Squid	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea bream	-	-	-	-	-	-	-	-	-	-	-	-	-
Gurnard & latchet	-	-	-	-	-	-	-	-	-	-	-	-	-
Red mullet	-	-	-	-	-	-	-	-	-	-	-	-	-
Octopus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuttlefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephrops (scampi)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole (Dover)	Y	6	0.1	0.1	0	6	100.0	0.1	0.1	6	4.34	25.34	0.3
Plaice	Y	187	2.2	2.3	20	167	89.2	2.1	2.1	156	1.19	185.26	2.3
Hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Megrim	-	-	-	-	-	-	-	-	-	-	-	-	-
Whiting	Y	54	0.6	2.9	5	50	91.6	0.6	2.8	44	0.30	13.24	0.2
Brill	Y	4	0.0	3.0	0	4	100.0	0.0	2.8	3	1.88	6.49	0.1
Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab	-	-	-	-	-	-	-	-	-	-	-	-	-
Bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounder (fluke)	-	-	-	-	-	-	-	-	-	-	-	-	-
Pout whiting (pouting)	-	-	-	-	-	-	-	-	-	-	-	-	-
Lemon sole	Y	252	3.0	6.0	8	244	96.7	3.0	5.8	235	1.54	361.20	4.5
Lesser spotted dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurdog	-	-	-	-	-	-	-	-	-	-	-	-	-
Witch	-	-	-	-	-	-	-	-	-	-	-	-	-
John Dory	-	-	-	-	-	-	-	-	-	-	-	-	-
Queen scallops	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod	Y	7880	93.5	99.5	330	7550	95.8	93.8	99.6	6453	1.16	7485.17	92.3
Haddock	Y	30	0.4	99.9	9	20	68.0	0.2	99.9	17	0.66	11.43	0.1
Saithe, coley, blackjack	-	-	-	-	-	-	-	-	-	-	-	-	-
Ling	Y	6	0.1	99.9	0	6	100.0	0.1	99.9	5	0.97	4.87	0.1

Table 33 Common and Latin names of species in the tables.

Common Name	Latin Name
Sprats	<i>Sprattus sprattus</i>
Atlantic mackerel	<i>Scomber scombrus</i>
Scad, horse mackerel	<i>Trachurus trachurus</i>
Atlantic herring	<i>Clupea harengus</i>
Pilchards	<i>Sardina pilchardus</i>
Squid	<i>Loligo spp.</i>
Sea bream	<i>Pagellus spp.</i>
Gurnard & latchet	<i>Triglidae spp.</i>
Red mullet	<i>Mullus surmuletus</i>
Octopus	<i>Unspecified</i>
Cuttlefish	<i>Sepia officinalis</i>
Nephrops (scampi)	<i>Nephrops norvegicus</i>
Sole (Dover)	<i>Solea solea</i>
Plaice	<i>Pleuronectes platessa</i>
Hake	<i>Merluccius merluccius</i>
Megrim	<i>Lepidorhombus whiffiagonis</i>
Whiting	<i>Merlangius merlangus</i>
Brill	<i>Scophthalmus rhombus</i>
Pollack	<i>Pollachius pollachius</i>
Dab	<i>Limanda limanda</i>
Bass	<i>Dicentrachus labrax</i>
Flounder (fluke)	<i>Platichthys flesus</i>
Pout whiting (pouting)	<i>Gadus luscus</i>
Lemon sole	<i>Microstomus kitt</i>
Lesser spotted dogfish	<i>Scyliorhinus canicula</i>
Unidentified dogfish	<i>Unspecified</i>
Spurdog	<i>Squalus acanthias</i>
Witch	<i>Glyptocephalus cygnoglossus</i>
John Dory	<i>Zeus faber</i>
Queen scallops	<i>Acquiptecten opercularis</i>
Cod	<i>Gadus morhua</i>
Haddock	<i>Melanogrammus aeglefinus</i>
Saithe, coley, blackjack	<i>Pollachius virens</i>
Ling	<i>Molva molva</i>
Monkfish, Anglerfish	<i>Lophius piscatorius</i>
Turbot	<i>Scophthalmus maximus</i>
Skates & rays	<i>Raja spp.</i>
Blond ray	<i>Raja brachyura</i>
Cuckoo ray	<i>Raja naevus</i>
Spotted ray	<i>Raja montagui</i>
Stingray	<i>Dasyatis pastinaca</i>
Undulate ray	<i>Raja undulata</i>
Thornback ray	<i>Raja clavata</i>
Scallops	<i>Pecten maximus</i>
Lobsters	<i>Homarus gammarus</i>
Crab - brown; mixed sexes	<i>Cancer pagurus</i>
Spider crabs	<i>Maia squinado</i>
Velvet crabs	<i>Unspecified</i>
Whelks	<i>Buccinum undatum</i>
Garfish	<i>Belone belone</i>
Ribbon fish	<i>Unspecified</i>
Lumpsucker	<i>Cyclopterus lumpus</i>
Sand sole	<i>Pegusa lascaris</i>
Dragonet	<i>Callionymus spp</i>
Scald fish	<i>Arnoglossus thori</i>
Shads (Twaite & Allis)	<i>Alosa spp.</i>
Wrasses	<i>Unspecified</i>