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## CVO report

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# Market Sampling of Landings of Commercial Fish Species in the Netherlands in 2004

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## Table of Contents

Table of Contents .....	2
Summary .....	3
Index tables and figures .....	4
1. Introduction .....	5
2. Sampling procedures.....	6
2.1 Plaice, Sole, Turbot, Brill, Lemon sole and Dab .....	6
2.2 Cod and Whiting.....	7
2.3 Herring, Mackerel, Horse Mackerel, Blue Whiting and Greater Argentine.....	7
2.4 Rays .....	8
2.5 Norway lobster .....	8
3. Data processing and data usage .....	9
4. Other data .....	10
4.1 Age samples from Dutch research vessel surveys .....	10
4.2 Discard samples taken on commercial vessels.....	10
Literature.....	11
Tables .....	12
Figures.....	97

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## Summary

The biological market-sampling programme for marine fish species provides, together with the information from the assessment surveys by research vessels, the information which is essential for relating changes in the fish stocks to changes in the fishery. The market sampling program in the Netherlands comprises the collection of fish samples from commercial catches, the analysis of these samples (estimation of length, weight, sex, sexual maturity and age), and the conversion of the national catches in tonnes to age compositions in numbers together with the additional information on mean weight at age, mean length at age, etc. In a later stage, this information by country is combined to figures representative for the whole fish stock. These combined international data, collected over many years, form the basis for the analysis of population dynamics and for providing biological advice on fishery management.

The age of a fish is determined from the otoliths (ear bones) taken out of the head. Because of seasonal changes in growth (due to food availability, temperature, spawning) ring structures are formed in the otolith similar to the ring structures on transverse sections of a tree. Age determination is important because from the annual age compositions, the annual increase in length and weight can be traced. This allows a quantification of important processes such as growth, recruitment of new age groups, mortality etc.

This report contains information on the biological sampling from the market sampling program in 2004: which species were sampled, how they were caught, when and where the samples were taken (date and position), how many fish have been measured, how many fish have been aged, etc. The report gives an overview of all the biological sampling activities in 2004 by IMARES on the landings of the commercial important species of herring, mackerel, horse mackerel, blue whiting, greater argentine, sole, plaice, turbot, brill, dab, lemon sole, cod, whiting, Norway lobster and four different species of rays from all ICES areas. This biological sampling took place on landings by both the Dutch fleet as well as foreign fleets landing in the Netherlands.

## Index tables and figures

Detailed information on sampling in 2004 is described in this report in tables and figures. The overview below show the table and figure number corresponding to the species described.

2004	Market Sampling	
	Tables	Figures
<i>General tables &amp; figures</i>		
Market size categories	1	
Map of ICES Divisions		1
<i>Overview by species</i>		
Sole	2	2
Plaice	3	3
Turbot	4	4
Brill	5	5
Dab	6	6
Lemon Sole	7	7
Cod	8	8
Whiting	9	9
Herring	10	10
Mackerel	11	11
Horse Mackerel	12	12
Blue Whiting	13	13
Greater Argentine	14	14
Norway Lobster	15	15
Blond Ray	16	16
Spotted Ray	17	17
Starry Ray	18	18
Thornback Ray	19	19
Overview Sampling	20	

# 1. Introduction

In the framework of the biological monitoring of the stocks of commercially important marine fish species, which are exploited by fishing fleets and are subject to EU management regulations, annual routine sampling programs of the landings in the Netherlands have been carried out since 1955 for pelagic species and since 1957 for demersal species. The information collected in these sampling programs concerns annual and quarterly age-length keys (ALK's), length distributions, weight at age and maturity at age. Combined with national statistics on nominal landings by size category as used in the fish market, age distributions of the landings, at various levels of aggregation, can be constructed. Amongst other data, this data are used in assessments of the state of the stocks by the International Council for Exploration of the Sea (ICES, [www.ices.dk](http://www.ices.dk)). The biological market sampling program has been financially supported by the EU from 1995 to 2002 by various contracts. From 2002 onwards the Dutch market sampling is part of the data collection regulation under EU Regulation 1639/2001. The research carried out in 2004 represents part of an international framework of national market sampling programs, which form the basis for fish stock assessment and management advice. The data obtained are essential to evaluate the probable effects of the various measures aiming at the conservation and management of fishery resources (TAC's and quota's) as laid down in the Common Fishery Policy.

The details of the planning of the 2004 market sampling is given in The Netherlands National Programme for Collection of Fisheries Data in 2004 and carried out in "Programma Wettelijke en Dientsverlenende Taken Visserijonderzoek 2002-2005 (WERKPLAN 2004, van Beek 2004). This report presents the actual biological sampling of the landings in 2004, as carried out following the workplan. This report does not include an evaluation of the sampling, as this is included in the "Technical Report of Activity 2004 – The Netherlands" (Anon., 2005). Sampling in previous years have been presented several RIVO reports, which are listed in section 5. A brief description of the sampling procedures presently applied in the Netherlands is given. The market sampling program in 2004 comprised the following species: sole, plaice, turbot, brill, dab, lemon sole, cod, whiting, herring, mackerel, horse mackerel, blue whiting, greater argentine, blond ray, spotted ray, starry ray, thornback ray and Norway lobster.

In earlier reports the additional samples taken during research vessel surveys were presented as well. From 2003 onwards, the results of this sampling are no longer included in this report. An overview of samples taken during surveys can be obtained from the IMARES FRISBE-database.

Details of the biological sampling for the 2004 market-sampling program as well as the survey sampling are presented in tables and figures. The sample characteristics are stored in an Excel-sheet during the year to provide an insight in the progress of the sampling by species. The tables and figures in this report are based on this spreadsheet and are created automatically by SAS-code developed by Jan Jaap Poos.

The Index of Tables and Figures by species is given after the Table of Contents in the beginning of this report. The table and figure numbers are kept identical by specie for fast table and figure searching. The a, b, c and d after the table or figure numbers refer to respectively the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarter, even if samples were only taken in 1 quarter, e.g. Cuckoo ray which has a 4<sup>th</sup> quarter sample only. The e,f,g,h refer to separate length measurements by quarter by species if relevant.

## 2. Sampling procedures

### *2.1 Plaice, Sole, Turbot, Brill, Lemon sole and Dab*

Almost all of the plaice, sole, turbot, brill, lemon sole and dab landed in the Netherlands are caught by beam trawlers, which are fishing almost exclusively in the North Sea. Table 1 shows the market size categories for these species together with the number of fish taken in 2004 by IMARES per size category for an age and length sample.

#### Representative sampling by size category, by harbour and by quarter

Representative sampling by size category, by harbour by quarter is carried out for plaice, sole, turbot and brill. Representative sampling implies that by size category the length distribution of the sample corresponds to that of the landings of that size category. Each fish sample consists of a certain number of fish per size category from one vessel, which is taken in a fish auction (see Table 1). There are three levels of stratification: by harbour, quarter and market size category. Sampling is restricted to 4 major landing ports (Den Helder, Stellendam, Urk and IJmuiden), which account for about 80% of the national landings. The number of samples are taken approximately in proportion to the expected landings in these ports and take account of differences in effort of various fleet components in different fishing areas. The sampling levels are based on both the Dutch as well as the foreign landings in the Netherlands.

Sampling during spawning time (plaice: first quarter; sole, turbot and brill: second quarter) is intensified to obtain detailed biological parameters (maturity data and weight at age of the stock).

Plaice landings are marketed in 4 and sole in 5 size categories. Samples consist of 15 (plaice) or 10 (sole) fish in each size category bought from the vessel selected.

Turbot landings are marketed in 6 and brill in 3 size categories. Samples consist of 10 (turbot) or 15 (brill) fish in each size category bought from the vessel selected.

In addition, the total landings of the vessel, the amount landed in each size category, gear, fishing position, vessel name and vessel characteristics are recorded. No separate length samples are taken. The fish are measured and weighed. The ovaries are weighed during the whole year in the laboratory. Sex and stage of maturity are recorded and both otoliths are removed for age determination. The age of the fish is determined by counting the number of rings on the slides of the sectioned otoliths.

Details on the planning of the sampling and the actual number of samples taken, are reported in "Technical Report of Activity 2004 – The Netherlands" (Anon., 2005).

#### Representative sampling by size category and by quarter

Representative sampling by size category and by quarter is carried out for lemon sole. There are two levels of stratification: by quarter and market size category. Sampling is carried out in Urk and IJmuiden.

#### Non-representative sampling by quarter

Non-representative sampling by quarter is carried out for dab. This implies that each quarter both length and age samples are collected. Sampling is carried out in IJmuiden, Urk, Vlissingen and Stellendam

## *2.2 Cod and Whiting*

Cod and whiting are caught by beam trawlers, pair trawlers and otter trawlers in the North Sea. The latter two fleets have almost disappeared over the last ten years. Roundfish is mainly sampled in the auctions of IJmuiden and Urk and partly in Stellendam and Vlissingen. The distribution of the age and length sampling by quarter should reflect the landings by quarter. Table 1 shows the market size categories for cod and whiting together with the number of fish taken in 2003 by IMARES per size category per age or length sample.

Cod landings are sorted in 6 market categories. Otolith samples and length measurements are taken in the auction. An age sample from an individual vessel consists of approximately 50 fish (1 otolith per fish) and each length sample consists of at least 50 fish. Age reading is carried out on sectioned otoliths mounted on slides.

Whiting landings are usually sold unsorted. Length measurements are collected in the auction. The age samples are bought and processed in the laboratory. Each sample consists of 50 fish and both otoliths are collected. Age reading is carried out on sectioned otoliths mounted on slides.

Prior to the assessment working group meetings, age-length-keys are prepared for each quarter. Based on the samples, the quarterly length composition per market category is calculated. Information from a number of fish auctions on the landings per market size category is used to raise the quarterly landings by market category. The age-length keys are then used to derive the quarterly numbers and weights at age.

## *2.3 Herring, Mackerel, Horse Mackerel, Blue Whiting and Greater Argentine*

The Dutch pelagic fleet consists of large freezer trawlers and pair trawlers, all using a pelagic trawl. In addition, a number of freezer trawlers and pair trawlers fishing under German, English and French flags land their fish mainly in the Netherlands (IJmuiden, Scheveningen or Vlissingen). The market sampling intensity has taken into account the landings of these 'foreign' vessels in the Netherlands. Biological samples of pelagic fish (horse mackerel, mackerel, herring, blue whiting and greater argentine) are taken from catches of the commercial fleet landing in the Netherlands. There are no size categories for the fish landed by the pelagic trawlers.

On board of a number of selected commercial vessels, crewmembers, trained for their task by IMARES staff, are taking unsorted fish samples (frozen blocks of 20-23 kg) from the catches according to instructions obtained from IMARES. These vessels are also supplying information on all hauls (dates, positions, hours fishing, species compositions, etc.). The ships collect samples only from medium to large catches. The sampling scheme is that at least one or two samples per week per fish species per ICES Division or Subdivision are taken. This way of sampling has the advantage that the distribution of the collected samples represents roughly the distribution of the fishery by the pelagic fleet.

The frozen samples are collected immediately after arrival of the vessels in a Dutch port. The samples are weighted and all fish are sorted into cm-groups in the laboratory. A sub-sample of 25 fish, representative for the length distribution in the sample is taken for further biological measurements such as age, weight, sex and maturity in such a way that the length frequency distribution in the sub-sample is representative for the length distribution of the total catch.

## *2.4 Rays*

From 2001 onwards IMARES included the length sampling of rays from commercial landings. These species include blond ray, cuckoo ray, spotted ray, starry ray and thornback ray.

Rays are caught by beam trawlers, pair trawlers and otter trawlers in the North Sea. The latter two fleets have almost disappeared over the last ten years. Rays are sampled in the auctions of IJmuiden, Urk and Stellendam. Table 1 shows the market size categories for rays together with the number of fish taken in 2004 by IMARES per size category for a length sample. Rays are sorted in 4 market categories. Length measurements are taken in the auction by species. The weight by size category by species is estimated.

## *2.5 Norway lobster*

From 2002 onwards IMARES included the length sampling of Norway lobster from commercial landings in its sampling programme. Norway lobster are mainly caught by twin trawls (multi-rig otter trawls) in the North Sea and are sampled in the auction in Den Oever. Table 1 shows the market size categories together with the number of Norway lobster to be taken in 2004 by IMARES per size category for a length sample. Next to the 4 market categories for whole lobsters, there is an extra category for tails. Length measurements are collected in the auction or length samples are bought and processed at the laboratory. Of each size category the carapace length of 100 Norway lobsters should be measured. Of the tails the width of the 5<sup>th</sup> abdominal segment has to be measured. Both of whole Norway lobster, as well of the tails, information on sex, egg-carrying and ex-egg-carrying is collected



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### 3. Data processing and data usage

All data collected in 2004 and in previous years are stored in a database. When the biological data are entered in the database they are checked for validity (is entered weight acceptable for length of the fish, is the age acceptable for the length of the fish, etc.). Before the meetings of the ICES assessment working groups the Dutch catches in tonnes by area of the relevant commercial species are converted to quarterly / monthly catches in numbers at age by area. The corresponding mean weights at age, the mean length at age, etc. are calculated.

The age and length samples will be used to construct age-length-keys (ALK's) by which a representative catch in tonnes can be converted into numbers by age group. Such ALK's can be constructed on a monthly, quarterly or yearly basis by (sub)area or areas combined and by market size category. The required level of stratification will be specified by the relevant ICES assessment Working Groups and differ by stock and also require desegregated information on the landing statistics by market size category of the sampling year. This information is not available at the time of production of this report and is therefore not included.

This report presents the actual biological sampling of the landings in 2004, but it does not include an evaluation of the sampling, as this is included in the "Technical Report of Activity 2004 – The Netherlands" (Anon., 2005).

## 4. Other data

### *4.1 Age samples from Dutch research vessel surveys*

During Dutch Research Vessel Surveys biological samples are taken from catches of various species to collect information on age, length and maturity. During these surveys (International Bottom Trawl Surveys (IBTS-1 and IBTS-3), Herring Echo Survey (Echo), North Sea Mackerel Egg Survey (Egg), Demersal Fish Survey (DFS), Beam Trawl Survey (BTS) and Sole Net Survey (SNS)) length distributions are collected. Age length-keys are used to convert these length distributions to numbers-at-age. In most cases these samples are stratified by rectangle or sampling area. In general a fixed number of otoliths are collected for each cm-group in each stratum.

Age samples collected from research vessel surveys are not used for the calculation of the catch in numbers at age based on the Dutch landings with the possible exception of cod and whiting. Since 2003, details of the biological sampling during research vessel surveys are no longer described in this report.

### *4.2 Discard samples taken on commercial vessels*

In 2004 discard sampling was carried on board of beam trawlers and freezer trawlers in all quarters. The [discard sampling in 2004](#) is reported in Van Keeken, 2004. Since 2003, details of the biological sampling discard surveys are no longer described in this report.

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## Tables

Table 1 Market size categories as applied in Dutch auctions and the number of fish taken in 2004 by IMARES per size category for an age and length sample

Species	Market size category	From	To (not inclusive)	Nr of fish in one AGE sample	Nr of fish in one LENGTH sample
Sole	1	38 cm	and larger	10	-
Sole	2	33 cm	38 cm	10	-
Sole	3	30 cm	33 cm	10	-
Sole	4	27 cm	30 cm	10	-
Sole	5	24 cm	27 cm	10	-
Plaice	1	41 cm	and larger	15	-
Plaice	2	35 cm	41 cm	15	-
Plaice	3	31 cm	35 cm	15	-
Plaice	4	27 cm	31 cm	15	-
Turbot	1+	6 kg	and more	↓	-
Turbot	1	4 kg	6 kg	10	-
Turbot	2	3 kg	4 kg	10	-
Turbot	3	2 kg	3 kg	10	-
Turbot	4	1 kg	2 kg	10	-
Turbot	5	0,5 kg	1 kg	10	-
Turbot	6	25 cm	0.5 kg	↑	-
Brill	1+	2 kg	and more	↓	-
Brill	1	40 cm (1 kg)	and larger (2 kg)	15	-
Brill	2	30 cm (0,4 kg)	40cm (1 kg)	15	-
Brill	3	25 cm	30 cm (0,4 kg)	15	-
Lemon sole	1	37 cm	and larger	10	-
Lemon sole	2	31 cm	37 cm	10	-
Lemon sole	3	25 cm	31 cm	10	-
Dab	1	30 cm	and larger	25	25
Dab	2	23 cm	30 cm	↑	25
Whiting	1	40 cm	and larger	↓	↓
Whiting	2	36 cm	40 cm	↓	↓
Whiting	3	32 cm	36 cm	50 #	50 #
Whiting	4	27 cm	32 cm	↑	↑
Cod	1	88 cm	and larger	10	10
Cod	2	72 cm	88 cm	10	10
Cod	3	55 cm	72 cm	10	10
Cod	4	46 cm	55 cm	10	10
Cod	5 @	35 cm	46 cm	10	10
Norway lobster	1+	10 / kg	and less	-	↓
Norway lobster	1	11 / kg	20 / kg	-	100
Norway lobster	2	21 / kg	30 / kg	-	100
Norway lobster	3	31 / kg	40 / kg	-	100
Norway lobster	4	41 / kg	and more	-	100
Norway lobster	5	only tails		-	100
Ray (Raja spp)	1	5 kg	and more	-	30
Ray (Raja spp)	2	3 kg	5 kg	-	30
Ray (Raja spp)	3	1 kg	3 kg	-	30
Ray (Raja spp)	4	0,3 kg	1 kg	-	30

↓ Combined with the lower size category

↑ Combined with the higher size category

@ Size category 5 can be split in two categories 5 and 6

# Whiting are usually sold unsorted

Table : 2a IMARES, 21DEC2006 9:41:40

Species : Sole  
 Year : 2004, quarter : 1  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5	Sample weight (kg)	Number measured	Number aged	
IVB	111003	23/01/2004	TX38	Beam trawl	38F0	110	269	427	1359	607		50	50	
	111006	09/02/2004	UK95	Beam trawl	36F1	79	226	372	1106	1211		50	50	
	111007	09/02/2004	HD29	Beam trawl	36F4	97	284	298	364	393		50	50	
	111011	15/03/2004	UK68	Beam trawl	37F1	32	103	195	546	531		50	50	
	111013	19/03/2004	TX36	Beam trawl	36F2	109	297	513	1054	513		50	50	
						427	1179	1805	4429	3255		250	250	
IVC	111001	16/01/2004	OD1	Beam trawl	35F3	71	277	548	1089	869		50	50	
	111002	16/01/2004	NG12	Beam trawl	33F2	47	179	331	737	472		50	50	
	111004	06/02/2004	TX68	Beam trawl	34F2	172	590	817	1407	1018		50	50	
	111005	06/02/2004	GO4	Beam trawl	33F3	72	168	364	686	431		50	50	
	111008	13/02/2004	GO8	Beam trawl	32F3	173	259	463	860	668		50	50	
	111009	12/03/2004	GO5	Beam trawl	33F3	128	213	420	947	648		50	50	
	111010	12/03/2004	GO8	Beam trawl	32F3	119	304	596	1079	722		50	50	
	111012	15/03/2004	UK162	Beam trawl	33F3	128	263	448	708	424		50	50	
							910	2253	3987	7513	5252		400	400
							1337	3432	5792	11942	8507		650	650
						=====	=====	=====	=====	=====		=====	=====	

Table : 2b IMARES, 21DEC2006 9:41:40  
 Species : Sole  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5	Sample weight (kg)	Number measured	Number aged
IVB	111017	19/04/2004	UK52	Beam trawl	37F4	62	113	326	638	478		50	50
	111027	10/05/2004	UK68	Beam trawl	36F2	11	49	58	633	1001		50	50
	111036	21/06/2004	UK197	Beam trawl	37F7	27	196	244	324	438		50	50
	111037	21/06/2004	UK61	Beam trawl	37F8	44	219	178	305	423		50	50
							144	577	806	1900	2340		200
IVC	111014	09/04/2004	GO23	Beam trawl	34F2	114	238	457	948	721		50	50
	111015	09/04/2004	GO36	Beam trawl	33F3	59	95	178	440	307		50	50
	111016	16/04/2004	GO22	Beam trawl	33F2	99	275	515	1126	686		50	50
	111018	19/04/2004	UK197	Beam trawl	34F4	127	194	527	962	541		50	50
	111019	19/04/2004	UK217	Beam trawl	34F4	63	192	408	845	924		50	50
	111020	19/04/2004	UK53	Beam trawl	34F3	89	245	426	817	467		50	50
	111021	23/04/2004	TX36	Beam trawl	35F4	140	274	551	1212	978		50	50
	111022	23/04/2004	TX33	Beam trawl	34F3	74	257	457	1053	750		50	50
	111023	07/05/2004	TX94	Beam trawl	35F3	51	168	289	1031	525		50	50
	111024	07/05/2004	GO58	Beam trawl	33F4	45	97	192	397	2		50	50
	111025	07/05/2004	GO8	Beam trawl	33F3	72	178	447	1201	812		50	50
	111026	10/05/2004	UK153	Beam trawl	34F4	102	229	426	1069	818		50	50
	111028	10/05/2004	NG12	Beam trawl	33F4	37	163	482	1068	918		50	50
	111029	10/05/2004	UK292	Beam trawl	33F4	54	164	337	845	935		50	50
	111030	13/05/2004	OD50	Beam trawl	33F4	35	70	154	289	70		50	50
	111031	14/05/2004	HD22	Beam trawl	34F4	79	216	434	1010	773		50	50
	111032	14/05/2004	TX68	Beam trawl	35F1	137	310	296	599	530		50	50
	111033	04/06/2004	GO48	Beam trawl	32F2	59	178	242	542	652		50	50
	111034	18/06/2004	GO5	Beam trawl	33F3	32	95	292	759	771		50	50
	111035	18/06/2004	TX68	Beam trawl	35F1	142	394	435	760	626		50	50
111038	21/06/2004	UK153	Beam trawl	34F3	36	127	271	864	672		50	50	
111039	25/06/2004	GO22	Beam trawl	34F3	36	153	322	806	545		50	50	
						1682	4312	8138	18643	14023		1100	1100
						1826	4889	8944	20543	16363		1300	1300









Table : 3b IMARES, 21DEC2006 9:41:40  
 Species : Plaice  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Cat 4	Sample weight (kg)	Number measured	Number aged
IVB	101026	19/04/2004	GY127	Beam trawl	40F4	507	2698	3712	4404		60	60
	101030	10/05/2004	UK162	Beam trawl	40F4	291	1453	2462	3120		60	60
	101034	10/05/2004	PD47	Beam trawl	40F2	484	1636	2369	3731		60	60
	101036	14/05/2004	BRA2	Twin trawl	38F5	27	136	244	1104		60	60
	101040	21/06/2004	UK162	Beam trawl	40F4	428	1654	2411	2660		60	60
	101042	21/06/2004	FD253	Beam trawl	38F2	514	2009	3530	3515		60	60
						2251	9586	14728	18534		360	360
IVC	101023	09/04/2004	GO23	Beam trawl	34F2	12	71	152	425		60	60
	101024	16/04/2004	GO22	Beam trawl	33F2	18	98	254	872		60	60
	101025	19/04/2004	UK217	Beam trawl	34F4	20	89	329	1456		60	60
	101027	19/04/2004	UK53	Beam trawl	34F3	16	113	240	1144		60	60
	101028	23/04/2004	TX33	Beam trawl	34F3	10	112	336	1147		59	59
	101029	07/05/2004	GO41	Beam trawl	33F3	28	86	127	406		60	60
	101031	10/05/2004	UK68	Beam trawl	35F2	410	1206	1489	2127		60	60
	101032	10/05/2004	UK292	Beam trawl	34F4	12	88	166	768		60	60
	101033	10/05/2004	NG12	Beam trawl	33F4	25	129	305	888		60	60
	101035	14/05/2004	TX68	Beam trawl	35F1	134	397	499	847		60	60
	101037	04/06/2004	GO48	Beam trawl	32F2	11	97	522	1455		60	60
	101038	18/06/2004	TX68	Beam trawl	35F1	220	519	751	1137		60	60
	101039	18/06/2004	GO5	Beam trawl	33F3	85	446	850	1474		60	60
	101041	21/06/2004	UK153	Beam trawl	34F4	34	184	617	1796		60	60
							1035	3635	6637	15942		839
						3286	13221	21365	34476		1199	1199
						=====	=====	=====	=====		=====	=====







Table : 4b IMARES, 21DEC2006 9:41:40  
 Species : Turbot  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5	Sample weight (kg)	Number measured	Number aged
IVB	141011	10/05/2004	UK284	Beam trawl	39F7	49	37	54	121	416		60	60
	141012	10/05/2004	SC25	Beam trawl	40F5	6	24	29	80	79		48	48
	141014	21/06/2004	UK197	Beam trawl	38F7	73	42	311	331	346		60	60
						-----	-----	-----	-----	-----		-----	-----
						128	103	394	532	841		168	168
IVC	141006	09/04/2004	GO23	Beam trawl	34F2	5	3	5	11	37		32	32
	141007	19/04/2004	UK133	Beam trawl	34F4	18	9	7	19	158		39	39
	141008	23/04/2004	GO38	Beam trawl	34F3	26	41	4	30	50		38	38
	141009	23/04/2004	TX38	Beam trawl	35F2	0	0	14	46	111		37	37
	141010	07/05/2004	OD8	Beam trawl	31F3	15	12	14	41	89		48	48
	141013	14/05/2004	HD22	Beam trawl	34F4	19	3	9	22	108		39	39
	141015	25/06/2004	GO5	Beam trawl	34F3	23	10	14	32	62		42	42
						-----	-----	-----	-----	-----		-----	-----
						106	78	67	201	615		275	275
						-----	-----	-----	-----	-----		-----	-----
						234	181	461	733	1456		443	443
						=====	=====	=====	=====	=====		=====	=====















Table : 6a IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 1  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number aged
IVB	121003	15/03/2004	UK59	Beam trawl	39F6	2300		25
						2300		25
IVC	121001	16/01/2004	OD1	Beam trawl	35F3	418		25
	121002	13/02/2004	GO8	Beam trawl	32F3	825		25
						1243		50
						3543		75
						=====		=====

Table : 6b IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 2  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number aged
IVB	121004	19/04/2004	GY127	Beam trawl	40F4	1532		25
						1532		25
IVC	121005	07/05/2004	G058	Beam trawl	33F4	1720		25
	121006	18/06/2004	G05	Beam trawl	33F3	545		25
						2265		50
						3797		75
						=====		=====

Table : 6c IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 3  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number aged
IIIA	121008	12/07/2004	UK172	Beam trawl	43F8	2297		25
						2297		25
IVC	121007	09/07/2004	OD50	Beam trawl	33F4	40		25
	121009	13/08/2004	GO6	Beam trawl	35F2	396		25
						436		50
						2733		75
						=====		=====

Table : 6d IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 4  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number aged
IVB	121011	11/10/2004	E104	Twin trawl	40F4	1622		25
						1622		25
IVC	121010	08/10/2004	OD6	Beam trawl	33F3	375		25
	121012	19/11/2004	GO38	Beam trawl	34F3	214		25
						589		50
						2211		75
						=====		=====



Table : 6e IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 1  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number measured
IVB	120008	05/03/2004	SC41	Twin trawl	38F4	1113		67
	120009	15/03/2004	UK59	Otter trawl	39F6	2300		158
						3413		225
IVC	120001	16/01/2004	VLI27	Beam trawl	31F2	839		41
	120002	16/01/2004	ARM7	Beam trawl	31F2	1860		41
	120003	16/01/2004	ARM15	Beam trawl	32F2	560		57
	120004	16/01/2004	OD1	Beam trawl	35F3	418		179
	120005	13/02/2004	ARM44	Beam trawl	31F2	25		50
	120006	13/02/2004	VLI25	Beam trawl	32F2	1870		40
	120007	13/02/2004	GO8	Beam trawl	32F3	825		216
						6397		624
						9810		849
						=====		=====

Table : 6f IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 2  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number measured
IVB	120012	19/04/2004	GY127	Beam trawl	40F4	1532		135
						1532		135
IVC	120010	02/04/2004	KW145	Beam trawl	35F2	208		64
	120011	09/04/2004	GO23	Beam trawl	34F2	500		65
	120013	23/04/2004	GO41	Beam trawl	34F2	409		88
	120014	07/05/2004	GO58	Beam trawl	33F4	1720		236
	120015	14/05/2004	GO4	Beam trawl	33F3	428		59
	120016	18/06/2004	GO5	Beam trawl	33F3	555		302
						3820		814
						5352		949
						=====		=====

Table : 6g IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 3  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number measured
IIIA	120017	12/07/2004	UK172	Beam trawl	43F8	2297		115
						2297		115
IVC	120018	16/07/2004	UK48	Twin trawl	35F3	350		55
	120019	16/07/2004	TX94	Beam trawl	35F3	987		62
	120020	13/08/2004	GO6	Beam trawl	35F2	396		211
						1733		328
						4030		443
						=====		=====

Table : 6h IMARES, 21DEC2006 9:41:40

Species : Dab  
 Year : 2004, quarter : 4  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Sample weight (kg)	Number measured
IVB	120023	19/11/2004	KW32	Beam trawl	37F1	117		117
	120024	13/12/2004	UK2	Beam trawl	37F6	223		44
						340		161
IVC	120021	08/10/2004	OD6	Beam trawl	33F3	375		375
	120022	19/11/2004	GO38	Beam trawl	34F3	214		214
	120025	17/12/2004	TX94	Beam trawl	35F2	685		65
						1274		654
						1614		815
						=====		=====

Table : 7a IMARES, 21DEC2006 9:41:40

Species : Lemon sole  
 Year : 2004, quarter : 1  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Sample weight (kg)	Number measured	Number aged
IVB	161002	20/02/2004	SC19	Twin trawl	38F4	0	7	21		50	50
						0	7	21		50	50
IVC	161001	09/02/2004	Z525	Beam trawl	31F1	4	4	19		41	41
						4	4	19		41	41
						4	11	40		91	91
						====	====	====	=====	=====	=====

Table : 7b IMARES, 21DEC2006 9:41:40

Species : Lemon sole  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Sample weight (kg)	Number measured	Number aged
IVB	161004	21/06/2004	FD253	Beam trawl	38F2	0	32	651		55	55
						0	32	651		55	55
						0	32	651		55	55
						====	====	====	=====	=====	=====

Table : 7c IMARES, 21DEC2006 9:41:40

Species : Lemon sole  
 Year : 2004, quarter : 3  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Sample weight (kg)	Number measured	Number aged
IIIA	161005	16/08/2004	UK284	Beam trawl	43F8	0	39	65		50	50
						0	39	65		50	50
IVB	161003	05/07/2004	GO26	Beam trawl	38F2	0	35	185		40	40
	161006	10/09/2004	GO26	Beam trawl	37F1	0	9	71		50	50
						0	44	256		90	90
						0	83	321		140	140

Table : 7d IMARES, 21DEC2006 9:41:40

Species : Lemon sole  
 Year : 2004, quarter : 4  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Sample weight (kg)	Number measured	Number aged
IVB	161007	15/11/2004	N168	Beam trawl	37F3	11	11	7		68	68
	161008	13/12/2004	UK59	Otter trawl	41F2	13	138	649		71	71
						24	149	656		139	139
						24	149	656		139	139



















Table : 9a IMARES, 21DEC2006 9:41:40

Species : Whiting  
 Year : 2004, quarter : 1  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number aged
IVB	211004	20/02/2004	SC19	Twin trawl	38F6	23			50
						23			50
IVC	211001	16/01/2004	OD1	Beam trawl	35F3	334			50
	211002	16/01/2004	GO26	Beam trawl	33F3	230			50
	211003	06/02/2004	GO4	Beam trawl	33F3	250			50
	211005	12/03/2004	GO5	Beam trawl	33F3	144			50
	211006	26/03/2004	OD1	Beam trawl	35F3	837			50
							1795		
						1818			300
						=====	=====	=====	=====

Table : 9b IMARES, 21DEC2006 9:41:40

Species : Whiting  
 Year : 2004, quarter : 2  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number aged
IVB	211008	23/04/2004	G038	Beam trawl	38F2	19			50
	211009	07/05/2004	G026	Beam trawl	38F2	22			50
						41			100
IVC	211007	16/04/2004	G022	Beam trawl	33F2	36			50
	211010	14/05/2004	YM8	Otter trawl	34F4	181			50
	211011	25/06/2004	G05	Beam trawl	33F3	36			50
	211012	30/06/2004	YM8	Otter trawl	33F4		287		50
						253	287		200
					294	287		300	
					=====	=====	=====	=====	



Table : 9c IMARES, 21DEC2006 9:41:40

Species : Whiting  
 Year : 2004, quarter : 3  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number aged
IVB	211014	16/07/2004	WR18/19	Pair trawl	37F3		2343		50
	211016	27/08/2004	UK48	Twin trawl	36F2	548	2120		50
	211017	03/09/2004	KW137/173	Pair trawl	37F2	451	1183		50
						999	5646		150
IVC	211013	09/07/2004	GO5	Beam trawl	34F3	80			50
	211015	27/08/2004	OD1	Beam trawl	35F3	25			50
	211018	30/09/2004	HD31	Beam trawl	33F4	30			50
						135			150
						1134	5646		300
						=====	=====	=====	=====

Table : 9d IMARES, 21DEC2006 9:41:40

Species : Whiting  
 Year : 2004, quarter : 4  
 Type : Commercial , age samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number aged
IVB	211022	19/11/2004	KW145	Beam trawl	37F0	45			50
	211024	10/12/2004	UK48	Twin trawl	37F3	920	1555		50
						965	1555		100
IVC	211019	28/10/2004	WR7	Otter trawl	33F4	110			50
	211020	29/10/2004	GO38	Beam trawl	33F3	47			50
	211021	05/11/2004	GO5	Beam trawl	34F3	48			50
	211023	03/12/2004	VD18	Otter trawl	33F4	133			50
						338			200
						1303	1555		300
						=====	=====	=====	=====

Table : 9e IMARES, 21DEC2006 9:41:40

Species : Whiting  
 Year : 2004, quarter : 1  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number measured	
IVB	210011	20/02/2004	SC19	Twin trawl	38F6	23			99	
	210012	05/03/2004	SC41	Twin trawl	38F4	22			45	
						45			144	
IVC	210001	16/01/2004	VLI27	Beam trawl	31F2	225			29	
	210002	16/01/2004	ARM7	Beam trawl	31F2	780			43	
	210003	16/01/2004	OD1	Beam trawl	35F3	334			125	
	210004	16/01/2004	GO26	Beam trawl	33F3	230			196	
	210005	06/02/2004	GO4	Beam trawl	33F3	250			173	
	210006	13/02/2004	ARM44	Beam trawl	31F2	684			79	
	210007	13/02/2004	VLI25	Beam trawl	32F2	260			33	
	210008	13/02/2004	ARM4	Beam trawl	31F2	1640			85	
	210009	20/02/2004	KW137/173	Pair trawl	33F4	1941			50	
	210010	20/02/2004	KW137/173	Pair trawl	33F4		1794		56	
	210013	12/03/2004	GO5	Beam trawl	33F3	144			223	
	210014	26/03/2004	OD1	Beam trawl	35F3	837			226	
						7325	1794			1318
						7370	1794			1462
					=====	=====			=====	

Table : 9f IMARES, 21DEC2006 9:41:40  
 Species : Whiting  
 Year : 2004, quarter : 2  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number measured
IVB	210017	23/04/2004	GO38	Beam trawl	38F2	19			98
	210018	07/05/2004	GO26	Beam trawl	38F2	22			50
	210021	18/06/2004	WR189	Twin trawl	37F3	342			51
						383			199
IVC	210015	16/04/2004	UK137	Otter trawl	33F3	3709			65
	210016	16/04/2004	GO22	Beam trawl	33F2	36			196
	210019	14/05/2004	YM8	Otter trawl	34F4	181			205
	210020	28/05/2004	NG10	Twin trawl	35F3	433			57
	210022	25/06/2004	GO5	Beam trawl	33F3	36			187
	210023	30/06/2004	YM8	Otter trawl	33F4		287		217
						4395	287		927
						4778	287		1126
						=====	=====	=====	=====

Table : 9g IMARES, 21DEC2006 9:41:40

Species : Whiting  
 Year : 2004, quarter : 3  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number measured
IVB	210027	16/07/2004	WR18/19	Pair trawl	37F3		2343		160
	210028	27/08/2004	UK48	Twin trawl	36F2		2120		66
	210029	27/08/2004	UK48	Twin trawl	36F2	548			185
	210031	03/09/2004	KW137/173	Pair trawl	37F2	451			151
	210032	03/09/2004	KW137/173	Pair trawl	37F2		1183		43
						999	5646		605
IVC	210024	09/07/2004	GO5	Beam trawl	34F3	80			220
	210025	16/07/2004	UK48	Twin trawl	35F3	78			46
	210026	16/07/2004	UK48	Twin trawl	35F3		50		37
	210030	27/08/2004	OD1	Beam trawl	35F3	25			96
	210033	30/09/2004	HD31	Beam trawl	33F4	30			115
						213	50		514
						1212	5696		1119
						=====	=====	=====	=====

Table : 9h IMARES, 21DEC2006 9:41:40  
 Species : Whiting  
 Year : 2004, quarter : 4  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Sample weight (kg)	Number measured
IVB	210034	22/10/2004	SC41	Twin trawl	36F2		8016		43
	210039	19/11/2004	KW145	Beam trawl	37F0	45			127
	210040	29/11/2004	SC41	Twin trawl	37F3	3400			38
	210041	29/11/2004	SC41	Twin trawl	37F3		734		37
	210042	03/12/2004	UK137	Otter trawl	36F3		2181		47
	210045	10/12/2004	UK48	Twin trawl	37F3		1555		169
	210046	10/12/2004	UK48	Twin trawl	37F3	920			51
					4365	12486			512
IVC	210035	28/10/2004	WR7	Otter trawl	33F4	110			238
	210036	29/10/2004	GO38	Beam trawl	33F3	47			152
	210037	05/11/2004	KW42	Beam trawl	35F2	9			30
	210038	05/11/2004	GO5	Beam trawl	34F3	48			257
	210043	03/12/2004	VD18	Otter trawl	33F4	133			214
	210044	03/12/2004	GO41	Beam trawl	33F2	40			57
	210047	17/12/2004	UK48	Twin trawl	32F3		1175		38
	210048	17/12/2004	UK48	Twin trawl	32F3	631			27
	210049	17/12/2004	TX94	Beam trawl	35F2	12			38
					1030	1175			1051
					5395	13661			1563
					=====	=====			=====

Table : 10a IMARES, 21DEC2006 9:41:40

Species : Herring  
 Year : 2004, quarter : 1  
 Type : Commercial , age/length samples  
 Area type : ICES subdiv

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVC	1	241002	14/01/2004	15/01/2004	SCH22/23	Pair trawl	32F3	23.9	260	25
		241006	22/01/2004	28/01/2004	SCH22/23	Pair trawl	32F2	24.4	285	25
		241007	23/01/2004	28/01/2004	SCH22/23	Pair trawl	32F2	21.5	221	25
		241008	26/01/2004	28/01/2004	SCH22/23	Pair trawl	32F2	24.0	273	25
								93.8	1039	100
VIAN	1	241004	09/01/2004	24/01/2004	SCH333	Pelagic trawl	48E4	23.3	180	25
		241005	11/01/2004	24/01/2004	SCH333	Pelagic trawl	47E4	24.2	189	25
	3	241013	29/02/2004	22/03/2004	SCH333	Pelagic trawl	45E1	19.9	162	25
		241014	29/02/2004	22/03/2004	SCH333	Pelagic trawl	45E0	24.2	143	25
								91.6	674	100
VIID	1	241001	07/01/2004	15/01/2004	SCH22/23	Pair trawl	29F1	23.1	213	25
		241003	04/01/2004	24/01/2004	SCH333	Pelagic trawl	28E9	23.2	204	25
	2	241009	19/02/2004	28/02/2004	SCH22/23	Pair trawl	29F1	25.3	219	25
		241010	24/02/2004	28/02/2004	SCH22/23	Pair trawl	29F1	26.2	248	25
	3	241011	03/03/2004	11/03/2004	SCH22/23	Pair trawl	29F0	26.0	348	25
		241012	06/03/2004	11/03/2004	SCH22/23	Pair trawl	29F0	23.9	328	25
								147.7	1560	150
								333.1	3273	350
								=====	=====	=====

Table : 10b IMARES, 21DEC2006 9:41:40

Species : Herring  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES subdiv

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVAW	6	241019	03/06/2004	13/06/2004	SCH22/23	Pair trawl	44F0	21.1	271	25
		241022	09/06/2004	13/06/2004	SCH22/23	Pair trawl	46F1	25.5	206	25
		241023	10/06/2004	13/06/2004	SCH22/23	Pair trawl	46F1	25.6	226	25
		241024	12/06/2004	13/06/2004	SCH22/23	Pair trawl	46F1	25.6	226	25
		241025	31/05/2004	18/06/2004	SCH333	Pelagic trawl	44E8	23.5	244	25
		241026	03/06/2004	18/06/2004	SCH333	Pelagic trawl	44E9	22.3	224	25
		241027	04/06/2004	18/06/2004	SCH333	Pelagic trawl	46E8	25.3	236	25
		241028	08/06/2004	18/06/2004	SCH333	Pelagic trawl	46E9	25.5	244	25
		241029	09/06/2004	18/06/2004	SCH333	Pelagic trawl	44E9	22.5	232	25
		241030	10/06/2004	18/06/2004	SCH333	Pelagic trawl	48E9	23.2	196	25
		241031	14/06/2004	18/06/2004	SCH333	Pelagic trawl	50F0	24.0	119	25
		241032	15/06/2004	18/06/2004	SCH333	Pelagic trawl	50F0	23.5	124	25
		241033	18/06/2004	27/06/2004	SCH22/23	Pair trawl	46F1	25.0	194	25
		241034	18/06/2004	27/06/2004	SCH22/23	Pair trawl	46F1	25.1	107	25
		241035	19/06/2004	27/06/2004	SCH22/23	Pair trawl	46F1	23.5	192	25
		241036	21/06/2004	27/06/2004	SCH22/23	Pair trawl	46F0	23.8	169	25
		241037	21/06/2004	27/06/2004	SCH22/23	Pair trawl	51F0	25.2	113	25
		241038	19/06/2004	27/06/2004	PH110/220	Pair trawl	52F0	23.8	113	25
		241039	19/06/2004	27/06/2004	PH110/220	Pair trawl	52F0	22.5	110	25
		241040	21/06/2004	27/06/2004	PH110/220	Pair trawl	51F0	24.5	106	25
		241041	22/06/2004	27/06/2004	PH110/220	Pair trawl	51F0	24.4	98	25
		241042	25/06/2004	27/06/2004	PH110/220	Pair trawl	51F0	23.0	76	25
		241043	25/06/2004	27/06/2004	PH110/220	Pair trawl	51F0	24.6	100	25
								553.0	3926	575
IVB	5	241017	24/05/2004	30/05/2004	SCH22/23	Pair trawl	42F2	26.4	296	25
		241018	26/05/2004	30/05/2004	SCH22/23	Pair trawl	41F1	22.2	235	25
	6	241020	05/06/2004	13/06/2004	SCH22/23	Pair trawl	40F0	22.2	234	25
		241021	07/06/2004	13/06/2004	SCH22/23	Pair trawl	43F2	27.4	248	25
								98.2	1013	100
VIID	4	241015	30/03/2004	09/04/2004	SCH22/23	Pair trawl	29F0	23.7	279	25



241016	08/04/2004	09/04/2004	SCH22/23	Pair trawl	29F0	21.9	240	25
						45.6	519	50
						696.8	5458	725

Table : 10c IMARES, 21DEC2006 9:41:40

Species : Herring  
 Year : 2004, quarter : 3  
 Type : Commercial , age/length samples  
 Area type : ICES subdiv

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVAW	7	241044	02/07/2004	10/07/2004	PH110/220	Pair trawl	51F1	23.4	120	25
		241045	02/07/2004	10/07/2004	PH110/220	Pair trawl	51F1	24.2	144	25
		241046	02/07/2004	10/07/2004	PH110/220	Pair trawl	51F1	24.1	117	25
		241047	03/07/2004	10/07/2004	PH110/220	Pair trawl	51F1	25.9	129	25
		241048	03/07/2004	10/07/2004	PH110/220	Pair trawl	51F1	23.5	132	25
		241049	05/07/2004	10/07/2004	PH110/220	Pair trawl	51F0	23.6	126	25
		241050	05/07/2004	10/07/2004	PH110/220	Pair trawl	51F0	23.4	104	25
		241051	05/07/2004	10/07/2004	PH110/220	Pair trawl	51F0	23.0	102	25
		241052	06/07/2004	10/07/2004	PH110/220	Pair trawl	51F0	23.8	122	25
		241053	06/07/2004	10/07/2004	PH110/220	Pair trawl	51F0	22.7	108	25
		241054	07/07/2004	10/07/2004	PH110/220	Pair trawl	50F0	24.0	127	25
		241055	08/07/2004	10/07/2004	PH110/220	Pair trawl	49F0	25.0	123	25
		241056	03/07/2004	11/07/2004	SCH22/23	Pair trawl	50F1	25.8	159	25
		241057	03/07/2004	11/07/2004	SCH22/23	Pair trawl	50F1	26.0	142	25
		241058	05/07/2004	11/07/2004	SCH22/23	Pair trawl	51F0	24.7	116	25
		241059	05/07/2004	11/07/2004	SCH22/23	Pair trawl	51F0	24.4	102	25
		241060	06/07/2004	11/07/2004	SCH22/23	Pair trawl	51F0	25.8	109	25
		241061	06/07/2004	11/07/2004	SCH22/23	Pair trawl	50F0	23.6	96	25
		241062	07/07/2004	11/07/2004	SCH22/23	Pair trawl	50F0	27.3	135	25
		241063	07/07/2004	11/07/2004	SCH22/23	Pair trawl	50F0	26.6	129	25
		241064	08/07/2004	11/07/2004	SCH22/23	Pair trawl	50F0	26.2	129	25
		241065	26/06/2004	15/07/2004	SCH333	Pelagic trawl	51E8	26.0	112	25
		241066	27/06/2004	15/07/2004	SCH333	Pelagic trawl	51E8	24.8	95	25
		241067	28/06/2004	15/07/2004	SCH333	Pelagic trawl	50F0	23.5	137	25
		241068	29/06/2004	15/07/2004	SCH333	Pelagic trawl	50F0	24.2	123	25
		241069	01/07/2004	15/07/2004	SCH333	Pelagic trawl	50E7	24.2	105	25

241070	02/07/2004	15/07/2004	SCH333	Pelagic trawl	50E7	24.9	121	25	
241071	03/07/2004	15/07/2004	SCH333	Pelagic trawl	52F0	23.8	104	25	
241072	04/07/2004	15/07/2004	SCH333	Pelagic trawl	52F0	25.3	115	25	
241073	05/07/2004	15/07/2004	SCH333	Pelagic trawl	52F0	24.9	121	25	
241074	09/07/2004	15/07/2004	SCH333	Pelagic trawl	51F0	24.6	93	25	
241075	11/07/2004	15/07/2004	SCH333	Pelagic trawl	50E8	23.6	103	25	
241076	12/07/2004	15/07/2004	SCH333	Pelagic trawl	51E9	24.7	106	25	
241077	16/07/2004	23/07/2004	SCH22/23	Pair trawl	50F0	25.7	124	25	
241078	17/07/2004	23/07/2004	SCH22/23	Pair trawl	50F0	25.1	118	25	
241079	19/07/2004	23/07/2004	SCH22/23	Pair trawl	51F0	24.8	98	25	
241080	19/07/2004	23/07/2004	SCH22/23	Pair trawl	51F0	25.3	94	25	
241081	19/07/2004	23/07/2004	SCH22/23	Pair trawl	51F0	22.9	80	25	
241082	21/07/2004	23/07/2004	SCH22/23	Pair trawl	51F0	23.1	86	25	
241083	19/07/2004	23/07/2004	SCH22/23	Pair trawl	50E9	24.3	68	25	
241084	21/07/2004	23/07/2004	SCH22/23	Pair trawl	51E9	24.6	84	25	
241085	20/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	24.9	129	25	
241086	21/07/2004	23/07/2004	PH110/220	Pair trawl	49E8	23.8	79	25	
241087	20/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	25.1	94	25	
241088	21/07/2004	23/07/2004	PH110/220	Pair trawl	51E9	24.3	87	25	
241089	21/07/2004	23/07/2004	PH110/220	Pair trawl	51E9	23.7	73	25	
241090	21/07/2004	23/07/2004	PH110/220	Pair trawl	49E8	26.1	84	25	
241091	16/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	23.0	84	25	
241092	14/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	25.2	83	25	
241093	19/07/2004	23/07/2004	PH110/220	Pair trawl	50E9	21.3	51	25	
241094	15/07/2004	23/07/2004	PH110/220	Pair trawl	45F1	26.4	123	25	
241095	15/07/2004	23/07/2004	PH110/220	Pair trawl	45F1	25.3	144	25	
241096	17/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	23.4	94	25	
241097	17/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	23.7	94	25	
241098	17/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	23.4	83	25	
241099	20/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	24.3	106	25	
241100	16/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	23.4	89	25	
241101	16/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	24.7	125	25	
241102	20/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	24.7	90	25	
241103	16/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	25.8	117	25	
241104	21/07/2004	23/07/2004	PH110/220	Pair trawl	50E8	24.7	96	25	
241105	21/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	23.7	77	25	
241106	20/07/2004	23/07/2004	PH110/220	Pair trawl	50F0	22.7	76	25	
8	241107	02/08/2004	06/08/2004	SCH22/23	Pair trawl	51F0	25.7	81	25
	241108	02/08/2004	06/08/2004	SCH22/23	Pair trawl	51F0	24.7	73	25
	241109	30/07/2004	06/08/2004	SCH22/23	Pair trawl	51F0	25.3	88	25
	241110	30/07/2004	06/08/2004	SCH22/23	Pair trawl	50F0	25.7	91	25
	241111	29/07/2004	06/08/2004	SCH22/23	Pair trawl	50F0	25.6	85	25
	241112	31/07/2004	06/08/2004	SCH22/23	Pair trawl	51E9	24.5	89	25
	241113	29/07/2004	06/08/2004	SCH22/23	Pair trawl	50F0	27.6	114	25
	241115	29/07/2004	05/08/2004	PH110/220	Pair trawl	50E9	22.9	105	25
	241118	31/07/2004	05/08/2004	PH110/220	Pair trawl	51F0	24.3	85	25

		241119	30/07/2004	05/08/2004	PH110/220	Pair trawl	50E9	24.7	122	25
		241120	30/07/2004	05/08/2004	PH110/220	Pair trawl	50E9	24.7	105	25
		241121	03/08/2004	11/08/2004	SCH333	Pelagic trawl	47E6	25.3	138	25
IVAW	8	241122	05/08/2004	11/08/2004	SCH333	Pelagic trawl	47E9	25.3	142	25
		241125	11/08/2004	20/08/2004	SCH22/23	Pair trawl	51E9	25.9	108	25
		241126	12/08/2004	20/08/2004	SCH22/23	Pair trawl	49E7	24.8	99	25
		241127	13/08/2004	20/08/2004	SCH22/23	Pair trawl	49E7	25.1	103	25
		241128	14/08/2004	20/08/2004	SCH22/23	Pair trawl	48E8	25.8	108	25
		241129	14/08/2004	20/08/2004	SCH22/23	Pair trawl	48E8	25.4	126	25
		241130	16/08/2004	20/08/2004	SCH22/23	Pair trawl	48E8	26.4	111	25
		241131	16/08/2004	20/08/2004	SCH22/23	Pair trawl	47E8	26.2	120	25
		241132	16/08/2004	20/08/2004	SCH22/23	Pair trawl	47E8	26.3	150	25
		241133	17/08/2004	20/08/2004	SCH22/23	Pair trawl	45E9	25.5	159	25
		241134	18/08/2004	20/08/2004	SCH22/23	Pair trawl	44E9	24.1	174	25
		241135	04/08/2004	27/08/2004	SCH72	Pair trawl	49E7	6.8	25	25
								-----	-----	-----
								2129.5	9337	2175
								-----	-----	-----
IVB	8	241114	28/07/2004	05/08/2004	PH110/220	Pair trawl	43F1	24.2	88	25
		241116	28/07/2004	05/08/2004	PH110/220	Pair trawl	43F1	22.9	177	25
		241117	28/07/2004	05/08/2004	PH110/220	Pair trawl	43F1	25.1	168	25
		241123	06/08/2004	11/08/2004	SCH333	Pelagic trawl	43E9	23.1	177	25
		241124	07/08/2004	11/08/2004	SCH333	Pelagic trawl	42F0	22.3	181	25
		241136	06/08/2004	27/08/2004	SCH72	Pair trawl	42F0	3.9	25	25
		241137	16/08/2004	27/08/2004	SCH72	Pair trawl	43E9	5.1	25	25
		241138	21/08/2004	27/08/2004	SCH72	Pair trawl	40E9	4.8	25	25
	9	241139	24/08/2004	01/09/2004	SCH22/23	Pair trawl	43E9	27.5	152	25
		241140	30/08/2004	01/09/2004	SCH22/23	Pair trawl	43E9	26.9	147	25
		241141	31/08/2004	01/09/2004	SCH22/23	Pair trawl	43E9	25.2	147	25
		241142	18/08/2004	08/09/2004	SCH333	Pelagic trawl	40E9	25.6	135	25
		241143	20/08/2004	08/09/2004	SCH333	Pelagic trawl	40E9	24.5	170	25
		241144	03/09/2004	08/09/2004	SCH333	Pelagic trawl	39F4	25.3	140	25
		241145	10/09/2004	17/09/2004	SCH22/23	Pair trawl	37F0	26.4	164	25
		241146	14/09/2004	17/09/2004	SCH22/23	Pair trawl	37F0	25.7	188	25
								-----	-----	-----
								338.5	2109	400
								-----	-----	-----
								2468.0	11446	2575
								=====	=====	=====

Table : 10d IMARES, 21DEC2006 9:41:40  
 Species : Herring  
 Year : 2004, quarter : 4  
 Type : Commercial , age/length samples  
 Area type : ICES subdiv

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged		
IVC	10	241147	13/10/2004	17/10/2004	SCH22/23	Pair trawl	31F2	21.9	162	25		
		241148	16/10/2004	17/10/2004	SCH22/23	Pair trawl	32F2	26.1	207	25		
	11	241150	04/11/2004	05/11/2004	SCH333	Pelagic trawl	31F2	26.3	214	25		
		241152	11/11/2004	25/11/2004	SCH333	Pelagic trawl	31F1	22.9	184	25		
								97.2	767	100		
VIID	11	241149	25/10/2004	04/11/2004	SCH22/23	Pair trawl	29E9	24.8	171	25		
		241151	11/11/2004	25/11/2004	SCH333	Pelagic trawl	29F0	23.8	168	25		
		241153	23/11/2004	25/11/2004	SCH333	Pelagic trawl	29F0	25.4	168	25		
		241155	21/11/2004	25/11/2004	SCH333	Pelagic trawl	29F0	23.4	171	25		
		241156	23/11/2004	29/11/2004	SCH22/23	Pair trawl	29F0	26.1	180	25		
		241157	26/11/2004	29/11/2004	SCH22/23	Pair trawl	30F0	23.1	169	25		
		241158	27/11/2004	29/11/2004	SCH22/23	Pair trawl	30F0	23.2	165	25		
		241159	29/11/2004	29/11/2004	SCH22/23	Pair trawl	29F1	26.3	256	25		
	12	241160	03/12/2004	10/12/2004	SCH22/23	Pair trawl	29E9	26.3	221	25		
		241161	08/12/2004	10/12/2004	SCH22/23	Pair trawl	29E9	22.1	174	25		
		241162	04/12/2004	20/12/2004	SCH123	Pelagic trawl	29F0	3.5	25	25		
		241163	10/12/2004	20/12/2004	SCH123	Pelagic trawl	29F0	3.0	25	25		
										251.0	1893	300
VIIIIB	11	241154	24/11/2004	25/11/2004	SCH333	Pelagic trawl	24E2	24.6	210	25		
										24.6	210	25
										372.8	2870	425
								=====	=====	=====		

Table : 11a  
 Species : Mackerel  
 Year : 2004, quarter : 1  
 Type : Commercial , age/length samples  
 Area type : ICES div

IMARES, 21DEC2006 9:41:40

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVA	1	281005	13/01/2004	24/01/2004	SCH333	Pelagic trawl	51E8	21.7	66	25
		281006	14/01/2004	24/01/2004	SCH333	Pelagic trawl	51E8	20.4	43	25
		281007	16/01/2004	24/01/2004	SCH333	Pelagic trawl	51E9	23.1	114	25
		281008	18/01/2004	24/01/2004	SCH333	Pelagic trawl	49E6	22.3	82	25
								87.5	305	100
VIA	1	281004	09/01/2004	24/01/2004	SCH333	Pelagic trawl	48E4	22.7	56	25
										22.7
VIIB	2	281014	15/02/2004	22/02/2004	SCH333	Pelagic trawl	36D8	24.3	87	25
		281024	11/03/2004	22/03/2004	SCH333	Pelagic trawl	35D8	23.2	82	25
	3	281026	07/03/2004	31/03/2004	SCH118	Pelagic trawl	36D9	7.2	25	25
		281027	13/03/2004	31/03/2004	SCH118	Pelagic trawl	36D9	5.8	25	25
								60.5	219	100
VIID	1	281003	05/01/2004	24/01/2004	SCH333	Pelagic trawl	28E9	19.2	28	25
		281009	22/01/2004	26/01/2004	PH110/220	Pair trawl	30F1	23.8	84	25
		281010	23/01/2004	26/01/2004	PH110/220	Pair trawl	30F0	23.6	78	25
	2	281017	09/02/2004	13/02/2004	PH110/220	Pair trawl	30F0	21.8	52	25
		281018	12/02/2004	13/02/2004	PH110/220	Pair trawl	30F0	22.3	47	25
		281019	18/02/2004	27/02/2004	PH110/220	Pair trawl	30F1	22.0	50	25
		281021	23/02/2004	28/02/2004	SCH22/23	Pair trawl	29F0	21.1	66	25
	3	281022	25/02/2004	28/02/2004	SCH22/23	Pair trawl	29E9	22.6	64	25
		281023	06/03/2004	11/03/2004	SCH22/23	Pair trawl	29F0	23.5	68	25
		281025	16/03/2004	24/03/2004	PH110/220	Pair trawl	29E9	23.1	42	25
								223.0	579	250
VIIE	1	281001	12/01/2004	16/01/2004	PH110/220	Pair trawl	29E5	23.3	120	25
		281002	10/01/2004	15/01/2004	SCH22/23	Pair trawl	28E7	22.1	66	25
	2	281016	03/02/2004	13/02/2004	PH110/220	Pair trawl	29E5	23.3	138	25

		281020	24/02/2004	27/02/2004	PH110/220	Pair trawl	29E5	22.4	220	25
								91.1	544	100
VIIJ	2	281011	10/02/2004	22/02/2004	SCH333	Pelagic trawl	28D9	20.9	35	25
		281012	09/02/2004	22/02/2004	SCH333	Pelagic trawl	33D8	22.0	53	25
		281013	10/02/2004	22/02/2004	SCH333	Pelagic trawl	30D8	22.2	87	25
		281015	13/02/2004	22/02/2004	SCH333	Pelagic trawl	29D9	22.5	62	25
								87.6	237	100
								572.4	1940	675
								=====	=====	=====

Table : 11b IMARES, 21DEC2006 9:41:40

Species : Mackerel  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVA	6	281049	31/05/2004	18/06/2004	SCH333	Pelagic trawl	44E8	22.8	83	25
		281050	15/06/2004	18/06/2004	SCH333	Pelagic trawl	50F0	20.8	80	25
		281051	21/06/2004	27/06/2004	SCH22/23	Pair trawl	51F0	23.3	94	25
		281052	19/06/2004	27/06/2004	PH110/220	Pair trawl	52F0	20.5	80	25
		281053	25/06/2004	27/06/2004	PH110/220	Pair trawl	51F0	24.1	95	25
								111.5	432	125
IVB	5	281044	27/05/2004	30/05/2004	SCH22/23	Pair trawl	42F0	22.7	61	25
								22.7	61	25
VIA	5	281040	22/04/2004	16/05/2004	SCH333	Pelagic trawl	47E3	23.2	56	25
		281041	26/04/2004	16/05/2004	SCH333	Pelagic trawl	47E3	22.0	43	25
		281042	05/05/2004	16/05/2004	SCH333	Pelagic trawl	47E2	22.8	52	25
		281043	09/05/2004	16/05/2004	SCH333	Pelagic trawl	45E1	17.6	38	25
								-----	-----	-----

								85.6	189	100
								-----	-----	-----
VIIIB	4	281038	26/04/2004	30/04/2004	PH110/220	Pair trawl	35D8	23.4	79	25
								-----	-----	-----
								23.4	79	25
								-----	-----	-----
VIIID	4	281031	28/03/2004	15/04/2004	SCH333	Pelagic trawl	29F1	23.0	123	25
		281036	14/04/2004	27/04/2004	SCH22/23	Pair trawl	28E9	23.0	123	25
	5	281039	03/05/2004	07/05/2004	SCH22/23	Pair trawl	29F0	22.8	192	25
								-----	-----	-----
								68.8	438	75
								-----	-----	-----
VIIH	4	281029	05/04/2004	09/04/2004	PH110/220	Pair trawl	25E1	21.8	102	25
								-----	-----	-----
								21.8	102	25
								-----	-----	-----
VIIIB	4	281028	01/04/2004	09/04/2004	PH110/220	Pair trawl	22E4	22.4	112	25
		281030	01/04/2004	09/04/2004	SCH22/23	Pair trawl	22E5	24.1	63	25
		281032	31/03/2004	15/04/2004	SCH333	Pelagic trawl	24E2	20.1	46	25
		281037	19/04/2004	27/04/2004	SCH22/23	Pair trawl	22E5	25.0	132	25
	6	281045	31/05/2004	12/06/2004	PH110/220	Pair trawl	20E6	23.2	62	25
		281046	02/06/2004	12/06/2004	PH110/220	Pair trawl	19E7	21.7	66	25
		281047	04/06/2004	12/06/2004	PH110/220	Pair trawl	19E7	24.8	96	25
		281048	08/06/2004	12/06/2004	PH110/220	Pair trawl	21E5	23.4	64	25
								-----	-----	-----
								184.7	641	200
								-----	-----	-----
VIIJ	4	281033	02/04/2004	15/04/2004	SCH333	Pelagic trawl	25E0	21.0	52	25
		281034	04/04/2004	15/04/2004	SCH333	Pelagic trawl	31D8	25.2	70	25
		281035	09/04/2004	15/04/2004	SCH333	Pelagic trawl	30D9	22.8	58	25
								-----	-----	-----
								69.0	180	75
								-----	-----	-----
								587.5	2122	650
								=====	=====	=====

Table : 11c IMARES, 21DEC2006 9:41:40

Species : Mackerel  
 Year : 2004, quarter : 3  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged		
IVA	7	281054	02/07/2004	10/07/2004	PH110/220	Pair trawl	51F1	22.8	77	25		
		281055	05/07/2004	10/07/2004	PH110/220	Pair trawl	51F0	19.5	64	25		
		281056	27/06/2004	15/07/2004	SCH333	Pelagic trawl	51E8	22.1	86	25		
		281057	03/07/2004	15/07/2004	SCH333	Pelagic trawl	52F0	22.1	66	25		
		281058	11/07/2004	15/07/2004	SCH333	Pelagic trawl	50E8	21.7	103	25		
		281059	19/07/2004	24/07/2004	PH110/220	Pair trawl	50E9	24.7	74	25		
		281060	31/07/2004	06/08/2004	SCH22/23	Pair trawl	51F0	21.5	61	25		
	8	281061	30/07/2004	06/08/2004	SCH22/23	Pair trawl	51F0	21.1	70	25		
		281062	31/07/2004	05/08/2004	PH110/220	Pair trawl	51F0	22.9	69	25		
		281064	03/08/2004	11/08/2004	SCH333	Pelagic trawl	47E6	22.9	102	25		
		281065	05/08/2004	11/08/2004	SCH333	Pelagic trawl	47E9	23.0	93	25		
		281068	13/08/2004	20/08/2004	SCH22/23	Pair trawl	49E7	21.8	93	25		
										266.1	958	300
										-----	-----	-----
IVB	8	281066	06/08/2004	11/08/2004	SCH333	Pelagic trawl	43E9	22.1	77	25		
		281067	08/08/2004	11/08/2004	SCH333	Pelagic trawl	42F0	21.7	81	25		
	9	281072	31/08/2004	01/09/2004	SCH22/23	Pair trawl	43E9	20.2	75	25		
		281073	03/09/2004	08/09/2004	SCH333	Pelagic trawl	39E9	22.8	99	25		
								86.8	332	100		
								-----	-----	-----		
IVC	9	281074	07/09/2004	08/09/2004	SCH333	Pelagic trawl	35F4	24.5	142	25		
		281075	16/09/2004	17/09/2004	SCH22/23	Pair trawl	35F4	23.7	64	25		
								48.2	206	50		
								-----	-----	-----		
VIIE	8	281069	17/08/2004	28/08/2004	PH110/220	Pair trawl	29E5	19.9	74	25		
		281070	01/08/2004	28/08/2004	PH110/220	Pair trawl	29E5	20.2	89	25		
		281071	23/08/2004	28/08/2004	PH110/220	Pair trawl	28E7	22.4	134	25		
								62.5	297	75		
								-----	-----	-----		
VIIJ	8	281063	26/07/2004	11/08/2004	SCH333	Pelagic trawl	30D8	21.9	78	25		



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                21.9          78          25
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                485.5        1871         550
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Table : 11d IMARES, 21DEC2006 9:41:40

Species : Mackerel  
 Year : 2004, quarter : 4  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVC	10	281077	16/09/2004	07/10/2004	SCH333	Pelagic trawl	35F4	23.8	96	25
		281084	16/10/2004	17/10/2004	SCH22/23	Pair trawl	32F2	21.6	80	25
	11	281087	04/11/2004	05/11/2004	SCH333	Pelagic trawl	31F2	21.8	91	25
								67.2	267	75
VIID	10	281076	01/10/2004	02/10/2004	SCH22/23	Pair trawl	29E9	23.0	34	25
		281078	16/09/2004	07/10/2004	SCH333	Pelagic trawl	30E9	22.4	87	25
		281080	30/09/2004	07/10/2004	SCH333	Pelagic trawl	29E9	19.9	84	25
		281083	07/10/2004	17/10/2004	SCH22/23	Pair trawl	29E8	23.3	135	25
	11	281085	13/10/2004	05/11/2004	SCH333	Pelagic trawl	29E9	21.8	57	25
							110.4	397	125	
VIIE	10	281079	28/09/2004	07/10/2004	SCH333	Pelagic trawl	28E7	20.1	104	25
		281081	03/10/2004	07/10/2004	SCH333	Pelagic trawl	29E7	23.2	79	25
		281082	05/10/2004	07/10/2004	SCH333	Pelagic trawl	28E7	21.3	91	25
	11	281086	30/10/2004	05/11/2004	SCH333	Pelagic trawl	29E7	21.0	51	25
		281088	13/11/2004	25/11/2004	SCH333	Pelagic trawl	27E6	22.1	66	25
							107.7	391	125	
							285.3	1055	325	

Table : 12a IMARES, 21DEC2006 9:41:40

Species : Horse mackerel  
 Year : 2004, quarter : 1  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVC	1	291006	12/01/2004	15/01/2004	SCH22/23	Pair trawl	31F1	21.8	92	25
		291008	12/01/2004	15/01/2004	SCH22/23	Pair trawl	31F1	19.3	81	25
		291014	24/01/2004	28/01/2004	SCH22/23	Pair trawl	32F2	20.0	76	25
		291015	24/01/2004	28/01/2004	SCH22/23	Pair trawl	32F2	20.3	114	25
								81.4	363	100
VIA	1	291009	09/01/2004	24/01/2004	SCH333	Pelagic trawl	48E4	21.6	62	25
		291010	12/01/2004	24/01/2004	SCH333	Pelagic trawl	45E1	18.4	70	25
	3	291033	03/03/2004	22/03/2004	SCH333	Pelagic trawl	42E0	22.9	168	25
								62.9	300	75
VIIB	2	291017	15/02/2004	22/02/2004	SCH333	Pelagic trawl	36D8	21.5	124	25
		291034	11/03/2004	22/03/2004	SCH333	Pelagic trawl	35D8	21.3	120	25
		291036	04/03/2004	31/03/2004	SCH118	Pelagic trawl	35D8	4.7	25	25
								47.5	269	75
VIID	1	291001	06/01/2004	16/01/2004	PH110/220	Pair trawl	29F0	20.6	82	25
		291004	14/01/2004	16/01/2004	PH110/220	Pair trawl	30F1	22.1	108	25
		291011	20/01/2004	26/01/2004	PH110/220	Pair trawl	30F1	19.2	114	25
		291012	21/01/2004	26/01/2004	PH110/220	Pair trawl	30F1	20.8	102	25
		291013	22/01/2004	26/01/2004	PH110/220	Pair trawl	30F1	19.5	77	25
		291016	27/01/2004	28/01/2004	SCH22/23	Pair trawl	29E9	20.1	78	25
	2	291022	09/02/2004	13/02/2004	PH110/220	Pair trawl	30F0	22.0	110	25
		291023	18/02/2004	27/02/2004	PH110/220	Pair trawl	30F1	20.7	86	25
		291024	20/02/2004	27/02/2004	PH110/220	Pair trawl	30F1	21.8	111	25
		291025	23/02/2004	27/02/2004	PH110/220	Pair trawl	30F0	21.2	93	25
		291026	26/02/2004	27/02/2004	PH110/220	Pair trawl	29E9	21.9	99	25
		291027	20/02/2004	28/02/2004	SCH22/23	Pair trawl	30F0	21.3	96	25
	3	291028	26/02/2004	28/02/2004	SCH22/23	Pair trawl	29E9	20.9	102	25
		291029	06/03/2004	11/03/2004	SCH22/23	Pair trawl	29F0	21.0	70	25
		291030	08/03/2004	11/03/2004	SCH22/23	Pair trawl	28E9	23.3	110	25

		291031	02/03/2004	11/03/2004	PH110/220	Pair trawl	29E9	19.6	83	25
		291032	08/03/2004	11/03/2004	PH110/220	Pair trawl	28E9	21.8	100	25
		291035	16/03/2004	24/03/2004	PH110/220	Pair trawl	29E9	19.8	74	25
								-----	-----	-----
								377.6	1695	450
								-----	-----	-----
VIIIE	1	291002	08/01/2004	16/01/2004	PH110/220	Pair trawl	28E7	21.6	109	25
		291003	12/01/2004	16/01/2004	PH110/220	Pair trawl	29E5	18.3	99	25
		291005	10/01/2004	15/01/2004	SCH22/23	Pair trawl	28E7	19.7	114	25
		291007	10/01/2004	15/01/2004	SCH22/23	Pair trawl	28E7	19.1	84	25
								-----	-----	-----
								78.7	406	100
								-----	-----	-----
VIIIB	2	291019	04/02/2004	22/02/2004	SCH333	Pelagic trawl	21E5	22.9	146	25
								-----	-----	-----
								22.9	146	25
								-----	-----	-----
VIIJ	2	291018	07/02/2004	22/02/2004	SCH333	Pelagic trawl	31D8	20.4	122	25
		291020	13/02/2004	22/02/2004	SCH333	Pelagic trawl	29D9	20.2	98	25
		291021	09/02/2004	22/02/2004	SCH333	Pelagic trawl	33D8	21.6	145	25
								-----	-----	-----
								62.2	365	75
								-----	-----	-----
								733.2	3544	900
								=====	=====	=====

Table : 12b IMARES, 21DEC2006 9:41:40

Species : Horse mackerel  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
VIIB	4	291047	27/04/2004	30/04/2004	PH110/220	Pair trawl	36D8	22.3	86	25
								22.3	86	25
VIID	5	291048	03/05/2004	07/05/2004	SCH22/23	Pair trawl	28E9	21.2	227	25
		291049	04/05/2004	07/05/2004	SCH22/23	Pair trawl	29F0	20.6	222	25
								41.8	449	50
VIIE	4	291038	30/03/2004	15/04/2004	SCH333	Pelagic trawl	29E7	22.2	100	25
								22.2	100	25
VIIIB	4	291037	01/04/2004	09/04/2004	SCH22/23	Pair trawl	22E5	21.4	395	25
		291039	31/03/2004	15/04/2004	SCH333	Pelagic trawl	24E2	18.9	156	25
		291043	19/04/2004	27/04/2004	SCH22/23	Pair trawl	22E5	23.7	405	25
		291044	24/04/2004	27/04/2004	SCH22/23	Pair trawl	22E4	23.1	438	25
	6	291046	19/04/2004	30/04/2004	PH110/220	Pair trawl	22E5	20.9	188	25
		291050	31/05/2004	12/06/2004	PH110/220	Pair trawl	20E6	21.1	145	25
		291051	02/06/2004	12/06/2004	PH110/220	Pair trawl	19E7	21.6	142	25
		291052	04/06/2004	12/06/2004	PH110/220	Pair trawl	19E7	22.1	96	25
		291053	08/06/2004	12/06/2004	PH110/220	Pair trawl	21E5	14.4	60	25
								187.2	2025	225
VIIJ	4	291040	01/04/2004	15/04/2004	SCH333	Pelagic trawl	25E0	19.2	136	25
		291041	04/04/2004	15/04/2004	SCH333	Pelagic trawl	31D8	22.7	122	25
		291042	11/04/2004	15/04/2004	SCH333	Pelagic trawl	29D9	21.8	126	25
		291045	16/04/2004	30/04/2004	PH110/220	Pair trawl	29D9	17.6	129	25
								81.3	513	100
						354.8	3173	425		

Table : 12c IMARES, 21DEC2006 9:41:40

Species : Horse mackerel  
 Year : 2004, quarter : 3  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVA	7	291054	20/07/2004	23/07/2004	SCH22/23	Pair trawl	51E9	22.3	68	25
		291055	21/07/2004	24/07/2004	PH110/220	Pair trawl	51F0	21.9	66	25
	8	291056	03/08/2004	05/08/2004	PH110/220	Pair trawl	51F0	19.2	60	25
		291057	31/07/2004	05/08/2004	PH110/220	Pair trawl	51F0	21.3	87	25
								84.7	281	100
IVB	9	291062	07/09/2004	17/09/2004	SCH22/23	Pair trawl	36F5	23.1	171	25
										23.1
IVC	9	291061	07/09/2004	08/09/2004	SCH333	Pelagic trawl	35F4	21.7	241	25
										21.7
VIIE	9	291063	02/09/2004	10/09/2004	PH110/220	Pair trawl	29E5	20.0	236	25
		291064	20/09/2004	24/09/2004	PH110/220	Pair trawl	27E7	20.4	216	25
									40.4	452
VIIIJ	8	291058	23/07/2004	11/08/2004	SCH333	Pelagic trawl	30D8	20.5	181	25
		291059	26/07/2004	11/08/2004	SCH333	Pelagic trawl	30D8	18.8	138	25
		291060	28/07/2004	11/08/2004	SCH333	Pelagic trawl	31D8	21.7	157	25
								61.0	476	75
								230.9	1621	275
								=====	=====	=====



		291088	13/11/2004	25/11/2004	SCH333	Pelagic trawl	27E6	20.8	165	25
		291089	13/11/2004	25/11/2004	SCH333	Pelagic trawl	27E6	22.9	198	25
12		291097	04/12/2004	10/12/2004	SCH22/23	Pair trawl	28E6	20.8	108	25
								-----	-----	-----
								195.5	1423	225
								-----	-----	-----
VIIIH	11	291090	14/11/2004	25/11/2004	SCH333	Pelagic trawl	26E3	22.6	279	25
		291091	15/11/2004	25/11/2004	SCH333	Pelagic trawl	25E2	20.7	220	25
		291092	16/11/2004	25/11/2004	SCH333	Pelagic trawl	26E2	20.5	186	25
		291093	17/11/2004	25/11/2004	SCH333	Pelagic trawl	26E2	21.4	222	25
								-----	-----	-----
								85.2	907	100
								-----	-----	-----
								739.0	5697	875
								=====	=====	=====

Table : 13a IMARES, 21DEC2006 9:41:40

Species : Blue whiting  
 Year : 2004, quarter : 1  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
VIA	3	301001	18/03/2004	27/03/2004	KW172	Pelagic trawl	39D8	25.7	270	25
		301002	21/03/2004	27/03/2004	KW172	Pelagic trawl	41D9	22.7	245	25
		301003	17/03/2004	27/03/2004	KW172	Pelagic trawl	38D8	23.7	269	25
		301006	24/03/2004	27/03/2004	KW172	Pelagic trawl	41D9	23.9	290	25
		301032	16/03/2004	30/03/2004	SCH72	Pelagic trawl	38D8	24.7	308	25
		301033	17/03/2004	30/03/2004	SCH72	Pelagic trawl	39D9	24.0	312	25
		301034	21/03/2004	30/03/2004	SCH72	Pelagic trawl	41D9	24.1	284	25
		301035	22/03/2004	30/03/2004	SCH72	Pelagic trawl	41D9	24.6	281	25
		301036	23/03/2004	30/03/2004	SCH72	Pelagic trawl	41E0	25.4	292	25
		301037	24/03/2004	30/03/2004	SCH72	Pelagic trawl	41D9	24.8	280	25
		301038	24/03/2004	30/03/2004	SCH72	Pelagic trawl	41D9	25.4	280	25
		301039	25/03/2004	30/03/2004	SCH72	Pelagic trawl	42D9	25.6	288	25
		301040	26/03/2004	30/03/2004	SCH72	Pelagic trawl	42E0	25.3	280	25

		301041	16/03/2004	31/03/2004	SCH118	Pelagic trawl	38D8	2.7	25	25
		301043	17/03/2004	31/03/2004	SCH118	Pelagic trawl	39D9	3.3	25	25
		301044	17/03/2004	31/03/2004	SCH118	Pelagic trawl	39D9	2.0	25	25
		301045	19/03/2004	31/03/2004	SCH118	Pelagic trawl	40D9	4.1	25	25
		301046	19/03/2004	31/03/2004	SCH118	Pelagic trawl	40D9	2.5	25	25
		301047	19/03/2004	31/03/2004	SCH118	Pelagic trawl	40D9	4.1	25	25
		301048	19/03/2004	31/03/2004	SCH118	Pelagic trawl	40D9	2.6	25	25
		301049	20/03/2004	31/03/2004	SCH118	Pelagic trawl	39D9	2.8	25	25
		301050	21/03/2004	31/03/2004	SCH118	Pelagic trawl	40D9	2.8	25	25
		301051	21/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	5.8	25	25
		301052	21/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	3.4	25	25
		301053	21/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	1.7	25	25
		301054	21/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	2.8	25	25
		301055	22/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	3.0	25	25
		301056	23/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	3.2	25	25
		301057	23/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	3.8	25	25
		301058	23/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	3.0	25	25
		301059	24/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	2.8	25	25
		301060	24/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	3.2	25	25
		301061	25/03/2004	31/03/2004	SCH118	Pelagic trawl	41D9	2.5	25	25
		301062	25/03/2004	31/03/2004	SCH118	Pelagic trawl	39D9	2.2	25	25
		301063	25/03/2004	31/03/2004	SCH118	Pelagic trawl	42D9	4.2	25	25
		301064	26/03/2004	31/03/2004	SCH118	Pelagic trawl	42D9	2.9	25	25
		301065	26/03/2004	31/03/2004	SCH118	Pelagic trawl	42D9	3.1	25	25
		301066	27/03/2004	31/03/2004	SCH118	Pelagic trawl	42D9	3.0	24	24
		301067	27/03/2004	31/03/2004	SCH118	Pelagic trawl	42D9	3.4	25	25
		301068	13/03/2004	31/03/2004	SCH118	Pelagic trawl	42D9	3.1	25	25
								-----	-----	-----
								403.9	4353	999
								-----	-----	-----
VIIB	3	301009	18/03/2004	22/03/2004	SCH333	Pelagic trawl	36D8	23.8	750	25
		301042	16/03/2004	31/03/2004	SCH118	Pelagic trawl	37D8	3.7	25	25
								-----	-----	-----
								27.5	775	50
								-----	-----	-----
VIIC	3	301004	12/03/2004	27/03/2004	KW172	Pelagic trawl	35D5	24.6	282	25
		301005	08/03/2004	27/03/2004	KW172	Pelagic trawl	35D5	24.4	294	25
		301007	16/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	23.8	363	25
		301008	07/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	26.1	263	25
		301010	06/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	23.5	449	25
		301011	07/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	23.8	360	25
		301012	15/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	23.6	276	25
		301013	12/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	24.9	258	25
		301014	14/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	22.5	304	25
		301015	16/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	24.1	348	25
		301016	07/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	26.6	284	25



		301017	06/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	23.4	250	25
		301018	15/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	23.5	224	25
		301019	08/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	25.6	296	25
		301020	06/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	23.7	280	25
		301021	07/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	25.7	280	25
		301022	13/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	22.2	275	25
		301023	05/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	21.4	228	25
		301024	13/03/2004	22/03/2004	SCH333	Pelagic trawl	35D5	23.1	220	25
		301025	07/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	24.3	228	25
		301026	07/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	23.4	264	25
		301031	14/03/2004	30/03/2004	SCH72	Pelagic trawl	35D5	25.1	297	25
								-----	-----	-----
								529.3	6323	550
								-----	-----	-----
VIIK	3	301027	04/03/2004	30/03/2004	SCH72	Pelagic trawl	33D5	23.5	120	25
		301028	05/03/2004	30/03/2004	SCH72	Pelagic trawl	33D4	25.3	304	25
VIIK	3	301029	06/03/2004	30/03/2004	SCH72	Pelagic trawl	33D4	26.1	336	25
		301030	07/03/2004	30/03/2004	SCH72	Pelagic trawl	33D5	26.5	268	25
								-----	-----	-----
								101.4	1028	100
								-----	-----	-----
								1062.1	12479	1699
								=====	=====	=====

Table : 13b IMARES, 21DEC2006 9:41:40

Species : Blue whiting  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	month	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
-----										
VIA	4	301069	30/03/2004	14/04/2004	SCH6	Pelagic trawl	44E0	24.4	275	25
		301070	05/04/2004	14/04/2004	SCH6	Pelagic trawl	45E0	16.8	158	25
		301071	10/04/2004	14/04/2004	SCH6	Pelagic trawl	44E0	18.0	200	25
	5	301072	09/05/2004	16/05/2004	SCH333	Pelagic trawl	45E1	22.1	128	25
								-----	-----	-----
								81.3	761	100
								-----	-----	-----
								81.3	761	100
								=====	=====	=====

Table : 14a IMARES, 21DEC2006 9:41:40

Species : Greater argentine  
 Year : 2004, quarter : 1  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
IVA	271001	16/01/2004	24/01/2004	SCH333	Pelagic trawl	51E7	22.2	79	25
	271002	18/01/2004	24/01/2004	SCH333	Pelagic trawl	49E6	22.9	69	25
							45.1	148	50
VIIC	271003	06/03/2004	22/03/2004	SCH333	Pelagic trawl	34D5	21.4	69	25
							21.4	69	25
							66.5	217	75

Table : 14b IMARES, 21DEC2006 9:41:40

Species : Greater argentine  
 Year : 2004, quarter : 2  
 Type : Commercial , age/length samples  
 Area type : ICES div

area	sample number	catch date	landing date	vessel	gear	ices rect	Sample weight (kg)	Number measured	Number aged
VIA	271004	02/04/2004	14/04/2004	SCH6	Pelagic trawl	44E0	21.4	53	25
	271005	26/04/2004	16/05/2004	SCH333	Pelagic trawl	47E3	21.4	53	25
	271006	06/05/2004	16/05/2004	SCH333	Pelagic trawl	48E3	23.1	52	25
							65.9	158	75
							65.9	158	75





























Table : 19d IMARES, 21DEC2006 9:41:40

Species : Ray thornback  
 Year : 2004, quarter : 4  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Cat 4	Sample weight (kg)	Number measured
IVB	321037	19/11/2004	KW32	Beam trawl	37F1	0	12	0	2		4
						0	12	0	2		4
IVC	321030	08/10/2004	GO38	Beam trawl	33F3	0	25	306	81		37
	321031	22/10/2004	OD1	Beam trawl	35F3	0	25	42	3		16
	321032	29/10/2004	GO28	Beam trawl	34F2	0	22	34	11		16
	321033	05/11/2004	KW42	Beam trawl	35F2	4	0	30	23		12
	321034	12/11/2004	GO9	Beam trawl	34F2	15	24	188	92		19
	321035	12/11/2004	VLI6	Beam trawl	32F1	0	0	11	19		15
	321036	12/11/2004	SL7	Beam trawl	32F2	0	7	61	15		18
	321038	19/11/2004	GO22	Beam trawl	34F3	5	17	33	17		24
	321039	29/11/2004	KW145	Beam trawl	35F3	0	24	9	4		8
	321040	03/12/2004	GO41	Beam trawl	33F2	0	16	83	12		10
	321041	10/12/2004	SL3	Beam trawl	35F2	0	0	26	1		6
	321042	10/12/2004	GO22	Beam trawl	35F2	10	17	42	19		19
	321043	17/12/2004	TX94	Beam trawl	35F2	0	32	17	4		19
	321044	20/12/2004	KW49	Beam trawl	34F2	0	13	18	4		7
	321045	20/12/2004	KW145	Beam trawl	35F2	11	11	14	2		7
						45	233	914	307		233
						45	245	914	309		237
						====	====	====	====	=====	=====



Table : 20d IMARES, 21DEC2006 9:41:40

Species : Ray cuckoo  
 Year : 2004, quarter : 4  
 Type : Commercial , length samples  
 Area type : ICES div

area	sample number	landing date	vessel	gear	ices rect	Cat 1	Cat 2	Cat 3	Cat 4	Sample weight (kg)	Number measured
IVC	351001	03/12/2004	GO41	Beam trawl	33F2	0	0	1	0		1
						0	0	1	0		1
						0	0	1	0		1
						====	====	====	====	=====	=====

IMARES  
 Overview of sampling information  
 Generated: 21DEC2006 9:41:40

Type	species	sample type	area	Q	number of samples	Number measured	Number aged	
Commercial	Blue whiting	age/length	VIA	1	40	4353	999	
				2	4	761	100	
			VIIIB	1	2	775	50	
			VIIC	1	22	6323	550	
			VIIK	1	4	1028	100	
					72	13240	1799	
					=====	=====	=====	
	Brill	age/length	IVB		2	3	76	76
					3	1	30	30
					4	2	64	64
				1	5	192	192	
IVC				2	7	237	237	
				3	3	90	90	
				4	3	94	94	
					24	783	783	
						=====	=====	=====
Cod			age	IVB		1	1	60
		2			3	151	151	
		3			4	212	212	
		4			6	313	313	
	IVC			1	10	492	492	
				2	8	340	340	
				3	1	50	50	
				4	7	352	352	
						40	1970	1970
						=====	=====	=====
	length	IVB		1	2	120		
				2	3	151		
				3	3	152		
				4	6	313		
IVC			1	14	678			

			2	8	335	
			3	1	50	
			4	7	352	
				-----	-----	-----
				44	2151	
				=====	=====	=====
Dab	age	IIIA	3	1		25
		IVB	1	1		25
			2	1		25
			4	1		25
		IVC	1	2		50
			2	2		50
			3	2		50
			4	2		50
				-----	-----	-----
				12		300
				=====	=====	=====
	length	IIIA	3	1	115	
		IVB	1	2	225	
			2	1	135	
			4	2	161	
		IVC	1	7	624	
			2	6	814	
			3	3	328	
			4	3	654	
				-----	-----	-----
				25	3056	
				=====	=====	=====
Greater argentine	age/length	IVA	1	2	148	50
		VIA	2	3	158	75
		VIIC	1	1	69	25
				-----	-----	-----
				6	375	150
				=====	=====	=====
Herring	age/length	IVA	2	23	3926	575
			3	87	9337	2175
		IVB	2	4	1013	100
			3	16	2109	400
		IVC	1	4	1039	100
			4	4	767	100
		VIA	1	4	674	100

		VIID	1	6	1560	150
			2	2	519	50
			4	12	1893	300
		VIIIB	4	1	210	25
				-----	-----	-----
				163	23047	4075
				=====	=====	=====
Horse mackerel	age/length	IVA	3	4	281	100
		IVB	3	1	171	25
		IVC	1	4	363	100
			3	1	241	25
			4	3	403	75
		VIA	1	3	300	75
		VII B	1	3	269	75
			2	1	86	25
		VIID	1	18	1695	450
			2	2	449	50
			4	19	2964	475
		VII E	1	4	406	100
			2	1	100	25
			3	2	452	50
			4	9	1423	225
		VII H	4	4	907	100
		VIII B	1	1	146	25
			2	9	2025	225
		VII J	1	3	365	75
			2	4	513	100
			3	3	476	75
				-----	-----	-----
				99	14035	2475
				=====	=====	=====
Lemon sole	age/length	IIIA	3	1	50	50
		IVB	1	1	50	50
			2	1	55	55
			3	2	90	90
			4	2	139	139
		IVC	1	1	41	41
				-----	-----	-----
				8	425	425
				=====	=====	=====
Mackerel	age/length	IVA	1	4	305	100
			2	5	432	125
			3	12	958	300

---

IVB	2	1	61	25
	3	4	332	100
IVC	3	2	206	50
	4	3	267	75
VIA	1	1	56	25
	2	4	189	100
VII B	1	4	219	100
	2	1	79	25
VII D	1	10	579	250
	2	3	438	75
	4	5	397	125
VII E	1	4	544	100
	3	3	297	75
	4	5	391	125
VII H	2	1	102	25
VIII B	2	8	641	200
VII J	1	4	237	100
	2	3	180	75
	3	1	78	25
		-----	-----	-----
		88	6988	2200
		=====	=====	=====

Type	species	sample type	area	Q	number of samples	Number measured	Number aged		
Commercial	Nephrops	length	IVB	1	4	1362			
				2	6	2657			
				3	7	3025			
				4	7	3732			
					24	10776			
	Plaice	age/length	IIIA	3	2	110	110		
				IVB	1	11	655	655	
					2	6	360	360	
					3	9	539	539	
			4		12	719	719		
			IVC	1	11	650	650		
				2	14	839	839		
				3	7	418	418		
				4	8	480	480		
							80	4770	4770
				Ray blond	length	IVC	1	12	126
2	3	57							
3	3	18							
4	11	70							
				29	271				
	Ray cuckoo	length	IVC	4	1	1			
					1	1			
	Ray spotted	length	IVB	4	1	28			
			IVC	1	12	116			

2	10	117
3	4	65
4	15	199
-----		
	42	525
=====		

Ray thornback	length	IVB	4	1	4
		IVC	1	13	207
			2	12	124
			3	4	69
			4	15	233
-----					
				45	637
=====					

Sole	age/length	IIIA	3	1	50	50		
		IVB	1	5	250	250		
			2	4	200	200		
			3	7	350	350		
			4	6	300	300		
		IVC	1	8	400	400		
			2	22	1100	1100		
			3	8	399	399		
			4	9	447	447		
		-----						
						70	3496	3496
		=====						

Type	species	sample type	area	Q	number of samples	Number measured	Number aged		
Commercial	Turbot	age/length	IVB	2	3	168	168		
				3	1	50	50		
				4	2	96	96		
			IVC	1	5	182	182		
				2	7	275	275		
				3	3	140	140		
				4	3	131	131		
				-----		-----	-----		
					24	1042	1042		
				=====		=====	=====		
			Whiting	age	IVB	1	1	50	50
						2	2	100	100
3	3					150	150		
4	2					100	100		
IVC	1				5	250	250		
	2			4	200	200			
age	IVC			3	3	150	150		
				4	4	200	200		
					-----		-----		
						24	1200	1200	
			=====		=====	=====			
	Whiting	length	IVB	1	2	144			
				2	3	199			
				3	5	605			
				4	7	512			
			IVC	1	12	1318			
				2	6	927			
		3		5	514				
				4	9	1051			
				-----		-----	-----		
					49	5270			
				=====		=====	=====		



# Figures

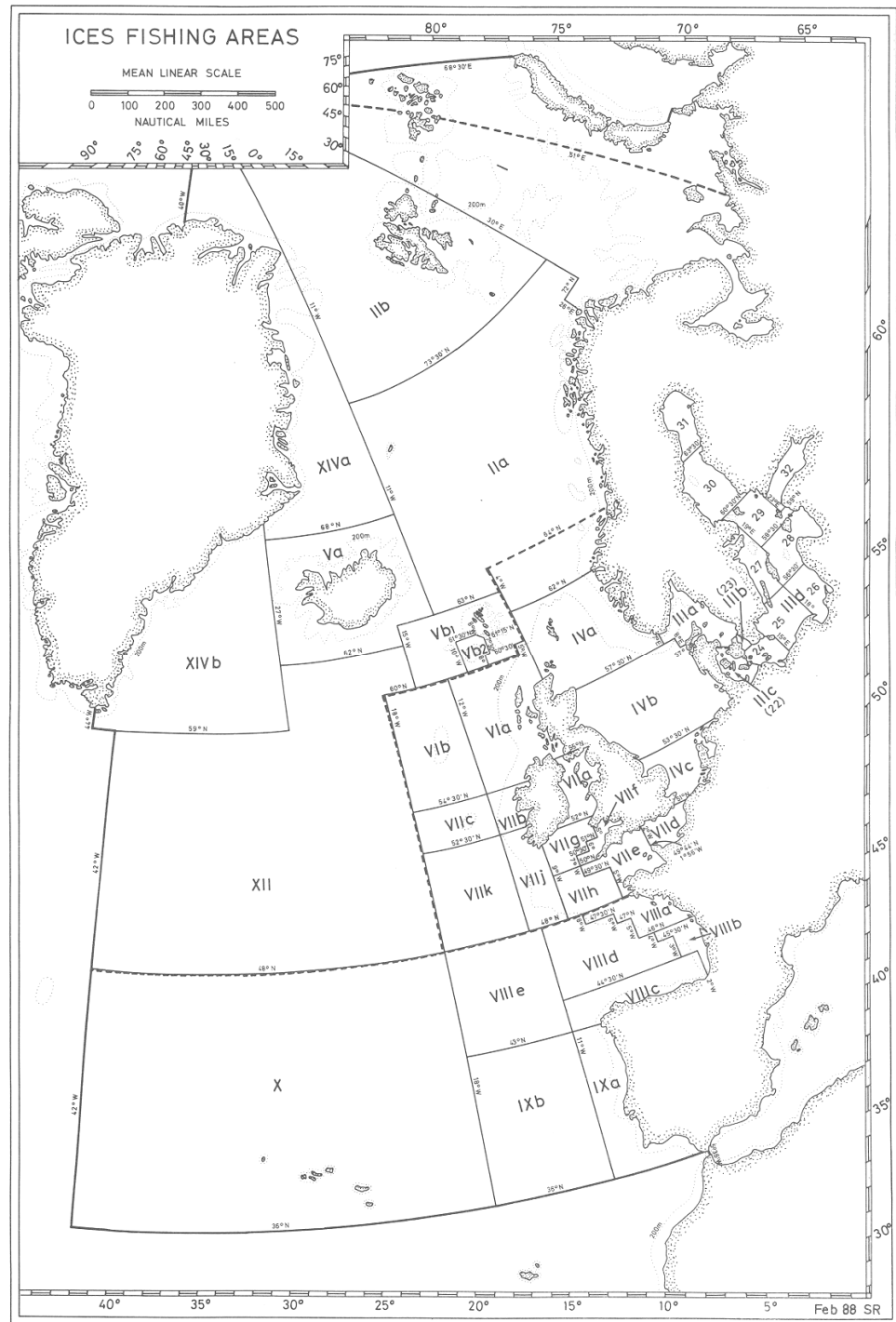


Figure 1: Map of ICES area