DEMERSAL FISH COMMITTEE

1992

Report of Activities

by

Eero Aro

CONTENTS

		Page
BELGIUM		2
CANADA		. 3
DENMARK		. 4
FAROES		. 14
FEDERAL RI	EPUBLIC OF GERMANY	. 16
FINLAND		. 24
FRANCE		. 24
ICELAND		. 35
IRELAND		. 42
THE NETHE	RLANDS	. 45
NORWAY		. 54
POLAND		. 70
PORTUGAL		. 71
RUSSIA		. 73
SPAIN		. 77
SWEDEN		. 82
UNITED KIN	GDOM (England and Wales)	. 84
UNITED KIN	GDOM (Scotland)	. 105
U.S.A.		. 106

BELGIUM

(R. de Clerck)

Recording of densities and growth rates of the 1991 and 1992 year classes of sole, plaice, dab, flounder and whiting was carried out. Two cruises were therefore undertaken according to the criteria of the International Demersal Young Fish Survey. The beamtrawl survey was continued in order to estimate the stock size of adult flatfish in the Southern North Sea by means of beamtrawl fishery in August. This was part of an international survey in collaboration with the Dutch and UK institutes. The market sampling was continued covering sole and plaice (North Sea-English Channel-Celtic Sea and Irish Sea), cod (North Sea) and whiting (North Sea). The number of samples is shown in following tables.

SAMPLING DATA FOR:

SOLE

BELGIUM

1992			Research ve	ssel samples	Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	15	1550	150
	2	-	-	-	6	593	145
IV	3	-	-	-	7	670	144
	4	-	-	-	8	721	150
	Total:	0	0	0	36	3534	589
	1	-	-	-	4	400	240
	2	-	-	-	5	465	150
VII f,g	3	-	-	-	10	967	210
	4	-	-	-	6	550	220
	Total:	0	0	0	25	2382	820
	1	-	-	-	2	160	160
	2	-	-	-	7	792	160
VII a	3	-	-	-	1	80	80
	4	-	-	÷	5	662	240
	Total:	0	0	0	15	1694	640
	1	-	-	-	6	550	310
	2	-	-	-	1	70	70
VII d,e	3	-	-	-	4	350	140
	4		-	-	2	150	150
	Total:	0	0	0	13	1120	670

SAMPLING DATA FOR:

PLAICE

BELGIUM

92			Research vessel samples			Market samples	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	- 1	-	15	934	130
	2	-	-	-	6	358	90
IV	3	-	-	-	7	424	90
	4	-	-	-	8	438	90
	Total:	0	0	0	36	2154	400

)2			Research ves	ssel samples		Market	samples
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	4	190	130
	2	~	- 1	-	4	275	50
VII f,g	3	-	-	-	9	614	100
	4	-	-	-	6	357	133
	Total:	0	0	0	23	1436	413
	1	-	-	÷	2	80	80
	2	-	-	-	7	420	40
VII a	3	-	1 - 1	-	1	40	40
	4	-	-	-	5	386	90
	Total:	0	0	0	15	926	250
	1	-	-	. .	6	290	170
	2	-	-	-	1	50	50
VII d,e	3	*	-	-	4	259	100
	4		-	1-	2	90	90
	Total:	0	0	0	13	689	410

COD

BELGIUM

02			Research vessel samples			Market samples	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	1	50	50
	2	-	1 - 1	- 1	5	267	267
IV	3	-	- 1	- 1	3	160	160
	4	-	-	-	4	205	205
	Total:	0	0	0	13	682	682

SAMPLING DATA FOR:

WHITING

BELGIUM

1992		Research vessel sample				Market	samples
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	7	402	285
	2	-	-	-	4	180	180
IV	3	-	-	- 1	4	195	195
	4	-		-	5	329	225
	Total:	0	0	0	20	1106	885

CANADA

(R. N. O'Boyle)

Canada had no fisheries and no research vessel activity on demersal fish in the ICES area in 1992. Activities in the Northwest Atlantic have been reported to NAFO.

DENMARK

(H. Gislason)

The *R/V Dana* made 10 surveys in 1992. Apart from internationally coordinated surveys (1, 2, 8, 9), surveys aimed at investigating the microdistribution of fish and its implications for predation (3), monitoring of flatfish diseases (4), cod recruitment (5), the productivity of frontal regions around Dogger Bank (6) and monitoring of Pandalus in the North Sea and Skagerrak (10).

R/V DANA surveys in 1992

Survey no.	Area	Period	Purpose
1	North Sea	29/1-19/2	International Bottom Trawl Survey
2	Baltic Sea	3/3-20/3	Baltic Young Fish Survey
3	North Sea	1/4-14/4	Microdistribution of fish
4	North Sea	24/4-5/5	Flatfish diseases
5	North Sea	11/5-21/5	Cod recruitment
6	North Sea	22/5-3/6	Frontal region studies
7	North Sea	6/7-9/7	Acoustic calibration
8	North Sea	10/7-24/7	International herring acoustic survey
9	North Sea	3/11-17/11	International Bottom Trawl Survey
10	North Sea	18/11-2/12	Pandalus survey

The sampling of the landings from the human consumption fisheries was continued in 1992 at the same level as previous years, while the number of samples collected from industrial fisheries increased from 308 in 1991 to 449 in 1992, the highest number of samples on record since 1981. The number of market samples from human consumption fisheries is given as the number of boxes of ca. 35 kg collected, while the market samples obtained from the industrial fisheries weigh ca. 10 kg each.

SAMPLING	DATA	FOR:
DENMARK		

COD

992				Market	samples	
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest
	1		6	481	481	-
	2	Human	3	227	226	-
	3	consumption	3	205	205	-
	4		3	306	306	-
Eastern	Total:		15	1219	1218	0
Baltic	1		1	1	1	-
	2	Industrial	-	-	-	-
	3		-	-	-	-
	4		1	1	1	-
	Total:		2	2	2	0
and the second second	1		6	520	519	-
Western	2	Human	3	93	92	
Baltic	3	consumption	2	329	329	-
	4		1	230	230	-
	Total:		12	1172	1170	0

1992				Market	samples	
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.
	1		5	666	665	-
Belt	2	Human	3	895	892	-
Sea	3	consumption	3	460	460	-
	4		2	401	401	-
	Total:		13	2422	2418	0
	1		2	113	113	-
The	2	Human	-	-	-	-
Sound	3	consumption	-	-	-	-
	4		-	-	-	-
	Total:		2	113	113	0
	1		5	701	701	-
	2	Human	5	369	368	-
	3	consumption	10	711	711	-
	4		8	593	588	-
Kattegat	Total:		28	2374	2368	0
	1		8	42	42	
	2	Industrial	3	11	10	-
	3		1	1	1	-
	4		13	58	56	-
	Total:		25	112	109	0
	1		7	770	769	-
	2	Human	8	564	563	-
	3	consumption	7	528	527	-
	4		7	605	605	-
Skagerrak	Total:		29	2467	2464	0
	1		11	61	61	-
	2	Industrial	10	24	24	
	3		22	132	130	-
	4		12	78	78	-
	Total:		55	295	293	0
THE STATE OF THE S	1		1	1	1	-
Division	2	Industrial	-	-	-	-
IVa, E	3		2	21	14	-
	4		1	7	7	ē.
	Total:		4	29	22	0
	1		-	-	-	-
Division	2	Industrial	-	-	-	-
IVa, W	3		-	-	==	
	4		1	1	1	-
	Total:		1	1	1	0
	1		10	949	948	-
	2	Human	15	620	619	-
	3	consumption	14	537	535	-
	4		1	159	158	-
Division	Total:		40	2265	2260	0
IVb	1		1	1	1	-
	2	Industrial	5	6	6	-
	3		3	3	2	-
	4		8	17	16	-
	Total:		17	27	25	0

HADDOCK

992				Market s	samples	
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest
	1		1	2	2	14
Kattegat	2	Industrial	4	8	8	-
	3		3	3	3	-
	4		7	37	37	-
	Total:		15	50	50	0
	1		5	1114	1016	-
	2	Human	6	900	900	-
	3	consumption	9	1320	1291	-
	4		6	907	840	-
Skagerrak	Total:		26	4241	4047	0
	1		-	-	-	-
	2	Industrial	10	87	87	
	3		31	1523	1388	-
	4		11	165	165	-
	Total:		52	1775	1640	0
	1		1	59	59	-
	2	Human	-	-	-	-
	3	consumption	2	84	84	-
	4		2	347	345	-
Division	Total:		5	490	488	0
IVa, E	1		14	114	112	-
	2	Industrial	2	- 1	-	1-
	3		7	151	151	-
	4		2	104	104	-
	Total:		23	369	367	0
	1		1	1	1	-
Division	2	Industrial	8	-	-	-
IVa, W	3		5	31	31	
	4		22	209	208	-
	Total:		28	241	240	0
	1		-	-	-	-
	2	Human	-	-	-	-
	3	consumption	1	117	116	18
	4		*	-	-	-
Division	Total:		1	117	116	0
IVb	1		6	46	10	-
	2	Industrial	2	17	17	-:
	3		5	15	15	-
	4		7	387	385	Lo
	Total:		20	465	427	0

WHITING

1992				Market	samples	
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.
	1		2	3	3	-
Eastern	2	Industrial	-	-	H	
Baltic	3		-	-	-	-
	4		1	1	1	-
	Total:		3	4	4	0
	1		1	1	1	-:
Western	2	Industrial	-	-	÷,	-
Baltic	3		-	-	¥ 6	-
	4		-	-	-7	-
	Total:		1	1	1	0
	1		9	417	416	-
Kattegat	2	Industrial	7	61	59	-
	3		6	295	295	-
	4		16	652	652	-
	Total:		38	1425	1422	0
	1		15	561	558	-
Skagerrak	2	Industrial	11	123	123	-
	3		33	1467	1462	-
	4		13	267	197	-
	Total:		72	2418	2340	0
	1		8	60	60	-
Division	2	Industrial	-	-	-	-
IVa, E	3		2	102	102	-
	4		2	5	5	
	Total:		12	167	167	0
	1		-	-	-	-
Division	2	Industrial	-	-	-	-
IVa, W	3		4	14	14	-
	4		22	264	205	-
	Total:		26	278	219	0
	1		8	44	44	-
Division	2	Industrial	21	81	79	-
IVb	3		26	267	265	
	4		13	111	111	
	Total:		68	503	499	0
	1		-	-	-	-
Division	2	Industrial	-		- .	-
IVc	3		-	-	-	-
	4		1	1	1	-
	Total:		1	1	1	0

SAITHE

DENMARK

1992	.992			Market	samples	
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest
	1		2	330	330	-
	2	Human	5	237	236	2
	3	consumption	7	286	285	-
	4		3	131	130	-
Skagerrak	Total:		17	984	981	0
	1		3	4	0	-
	2	Industrial	-	-	-	-
	3		-	-	-	-
	4		-	-	-	-
	Total:		3	4	0	0
	1		4	346	346	-
Division	2	Human	1	47	47	-
IVa, E	3	consumption	7	407	406	-
	4		-	-	-	-
	Total:		12	800	799	0
	1		-	-	-	-
North	2	Human	-	-	-	-
Sea	3	consumption	-	-	-	-
	4		2	77	77	-
	Total:		2	77	77	0

SAMPLING DATA FOR:

BLUE WHITING

1992				Market	samples	
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.
	1		2	2	0	-
Skagerrak	2	Industrial	-	-	-	-
	3		11	224	0	-
	4		4	83	0	-
	Total:		17	309	0	0
	1		1	24	0	-
Division	2	Industrial	-	- 1	-	-
IVa, E	3		4	57	0	-
	4		н	-	-	-
	Total:		5	81	0	0
	1		-	-	-	-
Division	2	Industrial	-	-	-	-
IVb	3		2	6	0	-
	4		1	3	0	-
	Total:		3	9	0	0

NORWAY POUT

DENMARK

92		Market samples					
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.	
	1		2	6	6	-	
Kattegat	2	Industrial	2	206	206	-	
	3		E i	-	-	-	
	4		13	612	612	-	
	Total:		17	824	824	0	
	1		9	318	317	-	
Skagerrak	2	Industrial	14	1155	1154	-	
	3		25	1728	1712	-	
	4		14	1027	925	-	
	Total:		62	4228	4108	0	
	1		19	1941	1941	-	
Division	2	Industrial	-	-	-	-	
IVa, E	3		6	546	479	12	
	4		6	516	515	-	
	Total:		31	3003	2935	0	
	1		2	196	196	-	
Division	2	Industrial	-	-	-	1-	
IVa, W	3		5	468	468	-	
	4		22	2247	2247	-	
	Total:		29	2911	2911	0	
	1		3	324	324	-	
Division	2	Industrial	9	-	-		
IVb	3		2	116	116	-	
	4		7	441	440	-	
	Total:		12	881	880	0	
	1		-	-	-	-	
West of	2	Industrial	-	-	81	-	
Scotland	3		-	-	-	-	
	4		1	100	100	-	
	Total:		1	100	100	0	

SAMPLING DATA FOR:

SANDEEL

1992		Market samples				
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.
	1		-	-	-	=
Kattegat	2	Industrial	7	844	716	
	3		÷	-	-	7-
	4		2	3	0	1.0
	Total:		9	847	716	0
	1		2	213	112	-
Skagerrak	2	Industrial	12	1526	315	-
	3		3	627	408	-
	4		-	-	-	-
	Total:		17	2366	835	0

1992			Market samples					
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.		
	1		2	226	224	-		
Division	2	Industrial	3	509	199	-		
IVa, E	3		-	-	4	-		
	4		-	-	-	-		
	Total:		5	735	423	0		
	1		15	1682	858	-		
Division	2	Industrial	62	10404	4939	-		
IVb	3		13	1759	1145	-		
	4		-	-	-	-		
	Total:		90	13845	6942	0		
	1		-	-	-	-		
Division	2	Industrial	-	-	*	-		
IVc	3		1	168	166	-		
	4		-	-	-	-		
	Total:		1	168	166	0		

PLAICE

1992	1992		Market samples					
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest		
	1		1	28	28	-		
Belt	2	Human	-	- 1	-	-		
Sea	3	consumption	3	93	91	-		
	4		-	-	-	-		
	Total:		4	121	119	0		
	1		8	1040	985	-		
	2	Human	6	960	909	-		
	3	consumption	6	878	851	-		
	4		4	632	570	-		
Kattegat	Total:		24	3510	3315	0		
	1		5	9	0	-		
	2	Industrial	2	2	0	-		
	3		1	1	0	-		
	4		2	2	0	-		
	Total:		10	14	0	0		
	1		2	503	467	-		
	2	Human	3	471	449	-		
	3	consumption	3	514	510	-		
	4		3	461	453	-		
Skagerrak	Total:		11	1949	1879	0		
	1		3	3	0	-		
	2	Industrial	-	-	~	-		
	3		1	2	0			
	4		1	1	0	-		
	Total:		5	6	0	0		

992		Market samples					
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.	
	1		-	-	_	-	
Division	2	Industrial	-	-	-	-	
IVa, E	3		1	1	0	-	
	4		-	-	-	-	
	Total:		1	1	0	0	
	1		-	-	-	-	
Division	2	Industrial	-	-	-	-	
IVb	3		1	1	1	-	
	4		-	-	-	-	
	Total:		1	1	1	0	
	1		6	925	877	-	
North	2	Human	11	1137	1087	-	
Sea	3	consumption	10	996	984	-	
	4	5	9	1073	1046	-	
	Total:		36	4131	3994	0	

SOLE

DENMARK

1992			Market samples					
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.		
	1		3	280	280	-		
Kattegat	2	Human	2	324	324	-		
	3	consumption	3	383	380	-		
	4		-	-	_	-		
	Total:		8	987	984	0		
	1		2	182	182	-		
Skagerrak	2	Human	1-	-	-	-		
	3	consumption	1	43	43	-		
	4		-		161	-		
	Total:		3	225	225	0		
	1		-	-	_	-		
Division	2	Human	5	695	351	-		
IVb	3	consumption	-	-	-	-		
	4		-	-	-	-		
	Total:		5	695	351	0		

SAMPLING DATA FOR:

DAB

92		Market samples					
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.	
	1		1	96	92	-	
Western	2	Human	-	-	-	-	
Baltic	3	consumption	-	-	-	-	
	4		-	-	-	-	
	Total:		1	96	92	0	

1992				Market	samples	
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.
	1		-	-	-	-
	2	Human	1	77	73	-
	3	consumption	-	-	-	
	4		-	-	-	-
Belt	Total:		1	77	73	0
Sea	1		-	-	-	-
	2	Industrial	-	-	-	-
	3		-	-	-	-
	4		1	1	0	-
	Total:		1	1	0	0
	1		1	174	172	-
	2	Human	1	170	170	-
	3	consumption	-	-	-	-
	4		-	-	-	-
Kattegat	Total:		2	344	342	0
	1		6	136	0	-
	2	Industrial	7	33	0	-
	3		2	40	0	-
	4		13	96	0	-
	Total:		28	305	0	0
	1		10	96	0	-
Skagerrak	2	Industrial	5	23	0	-
	3		7	19	1	-
	4		5	31	0	-
	Total:		27	169	1	0
	1		2	3	0	-
Division	2	Industrial	×	-	æ	-
IVa, E	3		1	4	0	-
	4		-	-	-	-
	Total:		3	7	0	0
	1		-	-	-	-
Division	2	Industrial	-	-	-	· ·
IVa, W	3		-	-	-	-
	4		1	4	0	
	Total:		1	4	0	0
	1		7	41	0	-
Division	2	Industrial	3	17	0	-
IVb	3		8	31	0	-
	4		5	26	0	-
	Total:		23	115	0	0

LONG ROUGH DAB

DENMARK

992		Market samples					
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.	
	1		-	-	-	-	
Kattegat	2	Industrial	-	-	*	-	
	3		*	-	-	-	
	4		5	24	0	-	
	Total:		5	24	0	0	
	1		2	13	0	-	
Skagerrak	2	Industrial	3	34	0	-	
	3		21	316	0	-	
	4		8	60	0	-	
	Total:		34	423	0	0	
	1		1	2	0	-	
Division	2	Industrial	-	- 1	-	-	
IVa, E	3		2	2	0	-	
	4		-	-	-	-	
	Total:		3	4	0	0	
	1		-	-	-	-	
Division	2	Industrial	-	- 1	-	-	
IVa, W	3		2	2	0	-	
	4		11	52	0	-	
	Total:		13	54	0	0	
	. 1		2	1	0	-	
Division	2	Industrial	3	13	0	-	
IVb	3		4	9	0	-	
	4		4	42	0	-	
	Total:		13	65	0	0	

SAMPLING DATA FOR:

FLOUNDER

992		Market samples						
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest		
	1		1	77	76	-		
	2	Human	-	-	-	-		
	3	consumption	-	-	-	-		
	4		-	-	-	-		
Eastern	Total:		1	77	76	0		
Baltic	1		1	1	0	-		
	2	Industrial		-		-		
	3		1+	-	-	-		
	4		-	-1	-	-		
	Total:		1	1	0	0		
	1		1	22	22	-		
Belt	2	Human	-	-	*	-		
Sea	3	consumption	1	56	56	-		
	4		-	-	-	-		
	Total:		2	78	78	0		

1992		Market samples							
Area	Quarter	Fishery	N samples	N measured	N aged	Racial invest.			
	1		1	1	0	-			
Kattegat	2	Industrial	-	-	-	-			
	3		-	-	Ψ.	-			
	4		-	-	-	-			
	Total:		1	1	0	0			

FAROES

(J. Reinert)

The sampling programme for commercial catches of cod, haddock, saithe, Norway pout, tusk, ling, blue ling and redfish was continued in 1992. In addition samples of the species mentioned were taken from research vessel catches. The tables provide more details. The following research cruises with relevance to the Demersal Fish Committee were made in 1992:

- 1. In January-February **R/V** *Magnus Heinason* carried out fishing experiments in order to evaluate the performance of the boxtrawl used in the Groundfish Surveys. These experiments were continued in November-December.
- 2. The Faroese Groundfish Surveys with **R/V** *Magnus Heinason* were continued in March, specially designed for cod and haddock, in April specially for redfish and Faroe Bank cod and in July with special emphasize on saithe.
- 3. In April-May **R/V** *Magnus Heinason* carried out experiments to investigate the survival of fish escaping through the trawl meshes.
- 4. In June-July **R/V** *Magnus Heinason* continued the 0-group surveys in Faroese waters to get information on the year-class strength of cod, haddock, Norway pout and sandeel.
- 5. In September-October a survey was carried out with **R/V** *Magnus Heinason* in deeper waters West and Southwest of the Faroes to investigate the distribution of *Hoplostethus atlanticus* and other deepwater species in national and international waters.

In all surveys with **R/V** *Magnus Heinason* biological samples were taken as a routine for most fish species from almost every haul and the measurements were entered into the computer system automatically. Since all data have not been edited yet, the number of samples and measurements by species for 1992 can not be given at this stage.

SAMPLING DATA FOR:

COD

FAROES

92		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	*	*	*	39	8609	1515	
	2	*	*	*	27	3670	919	
IV	3	*	*	*	64	6624	537	
	4	*	*	*	40	5843	754	
	Total:	0	0	0	170	24746	3725	

HADDOCK

FAROES

92	12		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
	1	*	*	*	26	11572	647		
	2	*	*	*	18	3780	441		
IV	3	*	*	*	32	7345	276		
	4	*	*	*	22	7389	499		
	Total:	0	0	0	98	30086	1863		

SAMPLING DATA FOR:

SAITHE

FAROES

92	2		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
	1	*	*	*	34	7805	599		
	2	*	*	*	26	5481	648		
IV	3	*	*	*	40	7406	546		
	4	*	*	*	36	3687	549		
	Total:	0	0	0	136	24379	2342		

SAMPLING DATA FOR:

NORWAY POUT

FAROES

92		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	*	*	*	7	817	-	
	2	*	*	*	4	698	-	
IV	3	*	*	*	3	453	-	
	4	*	*	*	7	1077	-	
	Total:	0	0	0	21	3045	0	

SAMPLING DATA FOR:

Sebastes marinus

FAROES

92	92		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
NAMES OF TAXABLE PARTY OF TAXABLE PARTY.	1	*	*	*	-	-	-		
	2	*	*	*	2	261	-		
IV	3	*	*	*	1	8	-		
	4	*	*	*	3	480			
	Total:	0	0	0	6	749	0		

SAMPLING DATA FOR:

Sebastes mentella

FAROES

)2		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	*	*	*	2	1036	-	
	2	*	*	*	7	3366	-	
IV	3	*	*	*	6	3021	-	
	4	*	*	*	8	5681	-	
	Total:	0	0	0	23	13104	0	

S

TUSK

F	A	R	O	E

992		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	*	*	*	-	-	-	
	2	*	*	*	=	-	-	
IV	3	*	*	*	5	718	-	
	4	*	*	*	-	-	-	
	Total:	0	0	0	5	718	0	

SAMPLING DATA FOR:

LING

FAROES

02		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	*	*	*	-	-	-	
	2	*	*	*	1	439	-	
IV	3	*	*	*	8	803	-	
	4	*	*	*	2	192	<u>u</u>	
	Total:	0	0	0	11	1434	0	

SAMPLING DATA FOR:

BLUE LING

FAROES

992	92		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
	1	*	*	*	2	361	-		
	2	*	*	*	5	449	=		
IV	3	*	*	*	4	421	-		
	4	*	*	*	3	394	-		
	Total:	0	0	0	14	1625	0		

SAMPLING DATA FOR:

HALIBUT

FAROES

992		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	*	*	*	-	-	Η.	
	2	*	*	*	-	- 1	2	
IV	3	*	*	*	6	235	-	
	4	*	*	*	-	-	-	
	Total:	0	0	0	6	235	0	

^{*) =} Detailed information on all research vessel samples not available at this stage.

FEDERAL REPUBLIC OF GERMANY

(S. Ehrich)

The biological sampling programme of demersal species on board of research vessels, commercial trawlers and on fish markets has been continued.

A comprehensive sampling scheme, including length frequency measurements, otolith sampling, individual fish weights, tagging of fish, stomach sampling as well as studies on fish density and distribution of demersal fish species was carried out during groundfish surveys.

The monthly by-catch analysis of the shrimp fishery has been continued, as well as the joint investigations in the Wadden Sea area of Niedersachsen and Schleswig-Holstein (Young Fish and Brown Shrimp Survey) in spring and autumn together with vessels from the Netherlands and Belgium.

North Sea groundfish surveys with special emphasis on the gadoid and pelagic species has been repeated.

Research vessel cruises related to the national sampling scheme of demersal species were as follows:

R/V WALTHER HERWIG surveys in 1992

Survey no.	Period	ICES area	Objectives
1	January-February	IVa, b, Vla	IYFS
2	April	VIb, VII	Pelagic survey
3	May-June	IVa, b	Groundfish survey
4	July-August	IVa, b	Groundfish survey
5	September	XIV	Groundfish survey
6	November-December	XIVb; NAFO 1B-1F	Groundfish survey

R/V SOLEA surveys in 1992

Survey no.	Period	ICES area	Objectives
1	January	IVb	Brown shrimp beam trawl survey
2	February	IVb	IYFS
3	May-June	IVb	Sole beam trawl survey
4	July-July	IVa	Groundfish survey
5	July	IVa, b, c	Groundfish survey
6	September-October	IVb, c	Sole beam trawl survey

Notes in the tables refer to following samplings and surveys:

- 1) Samples taken on board of commercial vessels
- 2) Groundfish survey
- 3) Young fish and brown shrimp survey
- 4) Shrimp by-catch investigations
- 5) Brown shrimp beam trawl survey
- 6) Sole beam trawl survey

COD

1992			Research ve	ssel samples		Market	samples
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2 1)	-	-	-	21	6212	502
IIa	3	-	- 1	-	-	-	-
	4	-	-	-		-	-
	Total:	0	0	0	21	6212	502
	1	-	-	+	=1	-	-
	2 1)	-	-	-	41	9460	634
IIb	3	-	- 1	-	-	-	
	4 1)	-	-	-	20	4020	284
	Total:	0	0	0	61	13480	918
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1 2)	41	259	207	-	-	-
	2 2)	41	325	305		-	-
IVa	3	-	-	-	-	-	-
	4	-	-1	=-	-	-	-
	Total:	82	584	512	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1 2)	68	1010	313	-	-	-
	1 5)	25	507		-	-	-
	2 2)	86	2293	1044	-	-	-
	2 3)	14	30	-	-		-
IVb	2 4)	5	38	-	-		-
	2 6)	76	320	-			-
	3 2)	143	11854	1593	-	-	~
	3 6)	13	107	-	-	-	-
	4 1)	-	-		22	6105	-
	4 3)	10	16	-	9	2534	501
	Total:	440	16175	2950	31	8639	501
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	
XX7	2	- 20	- 202	-	-	-	-
IVc	3 2)	20	203	-	-	-	-
	Total:	20	203	0	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
FARCE	1		- TV measured		- TV samples	14 measured	- Tv aged
	2 2)	13	31	31	_		
VII g-k	3	-	-	-	_	_	_
	4	#	-	-	9	-	-
	Total:	13	31	31	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	3	1241	650
1	2	_	_	-	2	859	411
	2	-					
XIVb	2 3	-	-	-	1	376	190
XIVb	B I		- 85	- 85	1	376 -	190 -

2			Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
NAFO	2	-	-	-	-	-	-	
1B-1F	3	-	-	-	-	-	-	
	4 2)	31	160	160	-1	-	-	
	Total:	31	160	160	0	0	0	

HADDOCK

992		Rese	earch vessel sa	imples	Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2 1)	-	-	-	4	1473	201	
IIb	3	-	-	(3)	=	*	=	
	4 1)	-	-	-	8	2578	354	
	Total:	0	0	0	12	4051	555	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	59	12713	249	-	-	-	
	2 2)	39	9084	494	-	-	-	
IVa	3 2)	9	1969	124	-	-	-	
	4	-	-	*	-	*	-	
	Total:	107	23766	867	0	0	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	16	2750	328	-	-	-	
	2 2)	57	5241	534	-	-	=	
IVb	3 2)	61	8993	417	-	-		
	4		-	-	*	-	-	
	Total:	134	16984	1279	0	0	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	7	545	75	-	-	-	
	2	-	-	-	-	-	-	
VIa	3	-	-	-	-	4051 N measured 0 N measured	=	
	4	-	-	-	-	-	-	
	Total:	7	545	75	0	0 N measured 0 N measured	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2 2)	4	78	45	-	-	-	
VIIb, c	3	-	-	-	-	-	-	
	4	-	-	×	-	-	-	
	Total:	4	78	45	0	0	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2 2)	13	189	61	-	-	-	
VII g-k	3	-	-	4	-	-	F	
	4	-	-	i-	-	-	-	
	Total:	13	189	61	0	0	0	

GERMANY

WHITING

92		Rese	earch vessel s	amples	Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	41	9983	350	-	-	-	
	2 2)	33	3686	511	-	-	-	
IVa	3 2)	9	1831	117	-	-	-	
	4	-	-		-	-	=	
	Total:	83	15500	978	0	0	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	73	13056	631	-	-	-	
	1 5)	27	2050	-	-	-	-	
	2 2)	58	10285	780	-	-	-	
	2 3)	41	129	-	-	-		
IVb	2 4)	9	27	-	-	- 1		
	2 6)	3	25	-	-	-	-	
	3 2)	142	34479	1552	-		- "	
	3 3)	13	27	-	-	-	a ^	
	3 6)	16	92	-	-	-	-	
	4 1)	-5	93	-	22	1279	-	
	4 3)	24	53	=	-	-	-	
	Total:	406	60223	2963	22	1279	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	-	¥	
IVc	3 2)	14	2248	u u	-	-	-	
	4	-	-		-	-	-	
	Total:	14	2248	0	0	0	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-6	-	-	-	
	2 2)	3	355	222	-	-	-	
VIIe	3	-	-	-	-	-	ų.	
	4	-	-	-	-	-	-	
	Total:	3	355	222	0	0	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2 2)	125	86	¥.	-	-	-	
					I			
VII g-k	3	-	-	 	~	-		
VII g-k	3 4	-	-	-	-	-	-	

SAMPLING DATA FOR:

NORWAY POUT

02		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1 2)	37	6288	-		-	-
	2 2)	27	4376	130		-	-
IVa	3 2)	8	837	(=,			-
	4	-	- 1	~	-	-	-
	Total:	72	11501	130	0	0	0

2		Rese	Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	8	702		-	- 1	-	
	2 2)	34	2677	170	-	-	-	
IVb	3 2)	39	27486	=	-	-	1-	
	4	-	-	-	-	-	1-	
	Total:	81	30865	170	0	0	0	

BLUE LING

GERMANY

992		Rese	Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	1=	
	2	-	-	-	-	-	-	
XIV	3 2)	1	24	24	1	337	156	
	4	-	- 1	=	-	-	-	
	Total:	1	24	24	1	337	156	

SAMPLING DATA FOR:

SAITHE

GERMANY

992		Rese	earch vessel s	amples	Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	-	-	
IIa	3	-	-	-	1	427	212	
	4	-	-	-	3	9368	788	
	Total:	0	0	0	4	9795	1000	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	1	754	532	9	4647	2297	
	2 2)	2	1176	1038	9	4135	2045	
IVa	3	-	1-	-	8	4072	2061	
	4	-	-		6	3178	1811	
	Total:	3	1930	1570	32	16032	8214	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	1	88	88	3	1699	881	
	2	-	-	-	-	-	-	
VIa	3	-	-	-	-	-	-	
	4	-	-	-	-	-	-	
	Total:	1	88	88	3	1699	881	

SAMPLING DATA FOR:

POLLACK

2		Research vessel samples				Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1 2)	1	63	63	-	-	-	
	2	-	-	-	-	- 1	-	
IVa	3	-	-	-	-	-	*	
	4	-	-	-	-	-	-	
	Total:	1	63	63	0	0	0	

SOLE

GERMANY

992		Rese	Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2 3)	87	1018	-				
	2 4)	28	312	-	-	-	-	
IVb	2 6)	119	4545	816	-	- 1	-	
	3 3)	27	72	-	-	- 1		
	3 6)	50	771	176		- 1	-	
	4 3)	26	109	-		-	-	
	Total:	337	6827	992	0	0	0	

SAMPLING DATA FOR:

DAB

GERMANY

992		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1 4)	2	22	-	-	-	-
	1 5)	3	403	L,	-	-	-
	2 3)	112	2151	-	-	-	-
	2 4)	25	258	140	-	- 1	-
IVb	2 6)	64	2881	-	-	-	_
	3 3)	38	504	+	-	-	7=1
	3 6)	62	9816	753	-	-	1-1
	4 1)	-	-	-	22	4495	
	4 3)	80	697	5	-	-	-
	Total:	386	16732	753	22	4495	0

SAMPLING DATA FOR:

PLAICE

2		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1 4)	3	586	-	-	-	-
	1 5)	4	325	-	-	-	-
	2 3)	141	3942	-	-	-	i.L
	2 4)	35	3341	-	-	-	1-2
	2 6)	75	4280	-	-	- 1	-
IVb	3 3)	53	1341		-	- 1	-
	3 4)	7	460	-	-	- 1	-
	3 6)	60	5912	972	-	-	1-3
	4 1)	-	-	-	22	257	-
	4 3)	102	3963	-	-	-	-
	Total:	480	24150	972	22	257	0

FLOUNDER

GERMANY

992		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2 3)	72	516	-	-	-	-1
	2 4)	21	179	-	-	-	-
	3 3)	30	93	-	-	-	Ψ;
IVb	3 4)	4	69	-	-	-	~
	3 6)	62	9816	-	-	-	-
	4 1)	-	-	-	22	1274	
	4 3)	64	430	-	-	-	-
	Total:	253	11103	0	22	1274	0

SAMPLING DATA FOR:

GREENLAND HALIBUT

GERMANY

92		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	- 1	-	-		-
	2	1-	-	~		-	-
XIVb	3	-	-	<u>*</u>	1	179	-
	4 2)	11	68	-	-	-	-
	Total:	11	68	0	1	179	0

SAMPLING DATA FOR:

TURBOT

GERMANY

992		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	=1	-	-	-
	2 5)	70	172	-1	-	-	-
IVb	3 5)	21	58	H	-	-	-
	4	-	-	-	-	-	-
	Total:	91	230	0	0	0	0

SAMPLING DATA FOR:

Sebastes marinus

992		Rese	earch vessel sa	ımples	Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	-	-	
IIa	3	-	-	-	-	-		
	4	-	-	=	1	742	=	
	Total:	0	0	0	1	742	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-		-	-	-	-	
XIV	3 2)	16	919	-	-	-	-	
	4	-	-	-	-	-	-	
	Total:	16	919	0	0	0	0	

Sebastes mentella

GERMANY

992		Research vessel samples			Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	1	706	-	
	2	-	- 1	-	3	1187	-	
Vb	3	-	-	-	-	-	-	
	4	-	-	æ	-	æ	-	
	Total:	0	0	0	4	1893	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	-	-	
XIV	3 2)	10	673	-	-		-	
	4	-	-	2	-	-	-	
	Total:	10	673	0	0	0	0	

FINLAND

(E. Aro)

No activities carried out on demersal fishes other than that reported to the Baltic Fish Committee.

FRANCE

(C. Mellon-Duval)

SAMPLING DATA FOR:

COD

92		Number of	samples	Number of fish				
Area	Quarter	Research	Market	N measured	N aged	Other		
	1	34	-	693	267	-		
	2	. 1	-	-	-	1-7		
IVb	3	32	-	990	593	-		
	4		-	-	-	-		
	Total:	66	0	1683	860	0		
Area	Quarter	Research	Market	N measured	N aged	Other		
	1	13	-	238	115	-		
	2	-	-	-	-	-		
IVc	3	7	-	55	54	-		
	4	5	-	15	15	-		
	Total:	25	0	308	184	0		
Area	Quarter	Research	Market	N measured	N aged	Other		
	1	-	39	840	304	-		
	2	-	22	684	190	-		
VIa	3	-	18	452	147	-		
	4		44	1141	360	~		
	Total:	0	123	3117	1001	0		

992		Number of	samples	Number of fish				
Area	Quarter	Research	Market	N measured	N aged	Other		
	1	-	-	-	-	=)		
	2	-	-	-	-	-		
VIId	3	-	-	-	-	#2		
	4	17	-	49	42	20		
	Total:	17	0	49	42	0		
Area	Quarter	Research	Market	N measured	N aged	Other		
	1	-	26	448	307	-		
	2	-	27	385	292	-		
VII f, g	3	-	32	950	378	-		
	4	76	22	426	247	-		
	Total:	76	107	2209	1224	0		

HADDOCK

992		Number of	samples		Number	of fish
Area	Quarter	Research	Market	N measured	N aged	Other
	1	12	**************************************	498	241	-
	2	-	-	-	-	-
IVb	3	12	-	649	246	-
	4	-	=	-	-	-
	Total:	24	0	1147	487	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	12	-
	2	- 1	-	-	-	-
IVc	3	-	-	-	-	=
	4	-	-	-		-
	Total:	0	0	0	12	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	16	1355	-	-
	2	-	9	740	-	-
VIa	3	-	14	982	-	18
	4	-	34	2677	-	
	Total:	0	73	5754	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	-	-
	2	-	-		-	le.
VIIg, j	3	-	-	-	-	#1
	4	26	-	271	-	-
	Total:	26	0	271	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	-	-
	2	-	-	-	-	-
VIIIa	3	-	-	-	-	-
	4	6		10	-	-
	Total:	6	0	10	0	0

WHITING

992		Number of	samples		Number	of fish
Area	Quarter	Research	Market	N measured	N aged	Other
	1	38	-	6114	790	-1
	2	-	-	-	-	1=6
IVb	3	41	æ	5599	613	
	4	-	-	-	-	
	Total:	79	0	11713	1403	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	15	-	1590	349	-
	2	-	-	-	-	-
IVc	3	16	+.	2843	367	н .
	4	3	-	76	43	-
	Total:	34	0	4509	759	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1		10	827	333	-
	2		9	861	332	Ξ
VIId	3		3	197	-	-
	4	25	7	2698	893	-
	Total:	25	29	4583	1558	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	19	1735	403	-
	2	-	17	1642	473	-
VIIf, g	3	-	16	1625	449	-
	4	-	24	1867	412	
	Total:	0	76	6869	1737	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	-	-
	2	-	-	-	-	-
VIIg, j	3	-	-	-	-	=1
	4	22	-	561	243	#1
	Total:	22	0	561	243	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	-	-
	2	-	-	-	-	
VIIIa	3	-	-	-	-	-
	4	18	-	1050	190	-
	Total:	18	0	1050	190	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	-	-
	2	-	-	- 1	-	-
VIIIb	3	-	-	-	-	-
	4	5	-	385	52	-
	Total:	5	0	385	52	0

92		Number of samples		Number of fis			
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	27	15	964	-	-	
	2	35	9	848	-	-	
VIII	3	26	4	1349	-		
	4	24	9	1141	-	141	
	Total:	112	37	4302	0	0	

BIB

(Trisopterus luscus)

FRANCE

92		Number of	samples		Number	r of fish
Area	Quarter	Research	Market	N measured	N aged	Other
	1	10	-	35	I -	-
	2	-	÷	-	-	-
IVb	3	4	-	9	1	-
	4	-	1-	-	1-	2.0
	Total:	14	0	44	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	6	-	78	66	-
	2	-	-	٠,	-	-
IVc	3	7	-	158	95	-
	4	1	-	21	21	-
	Total:	14	0	257	182	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	7	903	119	-
	2	-	9	930	132	-
VIId	3	-	6	645	98	-
	4	16	7	1681	262	-
	Total:	16	29	4159	611	0

SAMPLING DATA FOR:

NORWAY POUT

FRANCE

2		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	11	-	439	71	-
	2	6	÷	524	55	-
IVb	3	-	-	-		-
	4	-	-	-	-	-
	Total:	17	0	963	126	0

SAMPLING DATA FOR:

HAKE

2		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	- 1	-	-
	2	-	-	-	-	-
VI	3	-	3	84	-	-
	4	-	3	172	-	-
	Total:	0	6	256	0	0

2		Number of	f samples	Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	8	318	-	-
	2	-	11	306	-	
VII	3	-	10	456	-	-
	4	-	13	580	-	-
	Total:	0	42	1660	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	31	92	7688	233	-
	2	42	84	9049	310	-
VIII	3	40	70	6721	307	-
	4	33	75	4051	310	-
	Total:	146	321	27509	1160	0

SAITHE

FRANCE

992		Number of	samples	344	Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	46	1240	293	-	
	2	-	28	1087	199	-	
VIa	3	-	39	1301	273	-	
	4	-	43	1682	326	-	
	Total:	0	156	5310	1091	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	-	-	-	-	
	2		-	-	-	-	
VIIg, j	3	-	-	-	-	-	
	4	3	-	14	14	-	
	Total:	3	0 .	14	14	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	-	-	-	-	
	2	-	-1	-	-	-	
VIIIa	3	-	~	-	_	-	
	4	1	4	1	-	-	
	Total:	1	0	1	0	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	-	-	-	-	
	2	-	-	-	-	-	
VIIIb	3	-	-	-	÷		
	4	1	-	1	-		
	Total:	1	0	1	0	0	

SAMPLING DATA FOR:

LING

02		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	18	451	215	-
	2	-	30	577	172	-
VIa	3	-	15	369	172	-
	4	-	21	455	166	-
	Total:	0	84	1852	725	0

92		Number of samples			Number of fish	
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	29	637	230	
VIIe	2	-	31	398	246	-
VIIf, k	3	-	44	858	343	ω.
VIIIa	4	26	41	796	384	-
	Total:	26	145	2689	1203	0

BLUE LING

FRANCE

1992	992		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	24	414	72	-	
	2	-	44	774	292	-	
VIa	3	-	20	355	-	-	
	4	-	20	294	-	-	
	Total:	0	108	1837	364	0	

SAMPLING DATA FOR:

POLLACK

FRANCE

92		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	17	250	125	
	2	-	-	-	-	
VIIb, k	3	-	-	-	-	#0
	4	-	-	-	-	¥°
	Total:	0	17	250	125	0

SAMPLING DATA FOR:

SOLE

2		Number of	samples	Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	6	14	1093	-	-
	2	-	13	811	-	-
IVc	3	9	8	858	-	-
	4	-	8	599	-	=:
	Total:	15	43	3361	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	:-	27	792	302	-
	2		31	1494	254	-
VIId	3	-	15	797	312	-
	4	7	21	1087	211	-
	Total:	7	94	4170	1079	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	32	54	3199	223	-
	2	39	60	3321	300	-
VIII	3	33	58	3279	149	-
	4	35	68	4579	300	-
	Total:	139	240	14378	972	0

PLAICE

FRANCE

92		Number of	samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other	
***************************************	1	35	-	1007	368	-	
	2	-	=	-	-	-	
IVb	3	37	-	813	395	-	
	4	-	-	-	-	-	
	Total:	72	0	1820	763	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	12	5	243	42	-	
	2	-	-	-	-	-	
IVc	3	8	12	743	11	-	
	4	4	15	827	13	Α.	
	Total:	24	32	1813	66	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	18	1359	419	-	
	2	-	27	1349	304	-	
VIId	3	-	15	913	627	-	
	4	24	22	1517	304	-	
	Total:	24	82	5138	1654	0	

SAMPLING DATA FOR:

MEGRIM

992		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	4	319	-	-
	2	-	4	365	-	Э
VIa	3	-	4	260	-	-
	4	-	4	308	-	-
	Total:	0	16	1252	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1		65	3007	398	-
	2	-	55	2684	362	-
VIIb, k	3	-	50	2585	354	-
	4	-	65	2590	261	-
	Total:	-	235	10866	1375	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	35	1113	-	-
	2	-	25	722	-	-
VIIIa, b	3	-	35	1238	-	20
	4	90	25	964	-	-
	Total:	90	120	4037	0	0

AMERICAN PLAICE

FRANCE

992		Number of samples			Number of fish	
Area	Quarter	Research	Market	N measured	N aged	Other
	1	22	-	351	-	-
	2	-	-	-	-	-
IVb	3	17	-	505	-	-
	4	-	-	- 1	-	
	Total:	39	0	856	0	0

SAMPLING DATA FOR:

DAB

FRANCE

02		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	37	-	4477	-	-
	2	- 1	:-	-	-,	-
IVb	3	45	+,	4772	-	-
	4	-	#1	-	-	-
	Total:	82	0	9249	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	14	-	734	-	-
	2	-	-	-	-	-
IVc	3	15	=:	1004	-	-
	4	5	3)	47	34	-
	Total:	34	0	1785	34	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	5	736	116	-
	2	-	9	1163	146	-
VIId	3		9	519	187	-
	4	24	7	1717	325	
	Total:	24	30	4135	774	0

SAMPLING DATA FOR:

LEMON SOLE

2		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
***************************************	1	16		77	-	-
IVb	2	-	-	-	-	-
	3	17	-	167	-	-
	4	-	=	-	-	-
	Total:	33	0	244	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
***************************************	1	5	-	51	-	-
	2	-	-	-	-	-
IVc	3	3	-	28	-	-
	4	2	=	4	-	-
	Total:	10	0	83	0	0

92		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	=	-
	2	-	-	- 1	-	-
VIId	3	- 1	-	- 1	-	-
	4	8	÷	14	3	-
	Total:	8	0	14	0	0

RED GURNARD

FRANCE

2		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	-	-	-1
	2	-	-	- 1	-	-
IVc	3	3	-	6	-	
	4	1	-	5	*	-
	Total:	4	0	11	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	7	691	172	-
	2	-	14	1177	230	-
VIId	3	-	5	589	185	-
	4	35	6	949	282	-
	Total:	35	32	3406	869	0

SAMPLING DATA FOR:

BASS

2		Number of	samples	Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	- 1	-	-	-
	2	- 1	-	-	-	-
IVc	3	-	+	-	-	-
	4	4	-	6	-	-
	Total:	4	0	6	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	-	- 1	-	-
	2	-	, -	- 1	-	-
VIId	3	-	1	-	-	-
	4	18	-	297	~	12
	Total:	18	0	297	0	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	15	-	86	-	1-
	2	-	-	-	-	-
VIII	3	-	-		-	
	4	18		59	-	-
	Total:	33	0	145	0	0

NEPHROPS

FRANCE

992		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	18	6	1720		-
	2	41	5	4011	-	-
VIII	3	35	4	4619	-	-
	4	25	5	2493	-	-
	Total:	119	20	12843	0	0

SAMPLING DATA FOR:

WHITE ANGLER (Lophius piscatorius)

FRANCE

992		Number of	samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	8	215	-	-	
	2	-	8	125	-		
IVa	3	-	4	106		-	
	4	-	4	106	-	1-	
	Total:	0	24	552	0	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	174	1500	160		
	2	Œ	156	1414	172	-	
VIIb, k	3	1-	120	1227	155	-	
	4	-	150	1400	170	-	
	Total:	0	600	5541	657	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	10	310	1112	98	-	
	2	9	210	1004	91	-	
VIIIa, b, d	3	7	160	774	88	-	
	4	14	213	1087	98	-	
	Total:	40	893	3977	375	0	

SAMPLING DATA FOR:

BLACK ANGLER (Lophius budegassa)

92		Number of samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	174	2248	122	-
	2	-	156	2121	115	-
VIIb, k	3	-	120	1840	110	-
	4	-	150	2200	115	-
	Total:	0	600	8409	462	0
Area	Quarter	Research	Market	N measured	N aged	Other
	1	5	306	1761	65	-
	2	13	209	1326	76	1-
VIIIa, b, d	3	7	159	1231	60	
	4	4	211	1393	72	-
	Total:	29	885	5711	273	0

RED MULLET

FRANCE

1992	1992		samples		Number of fish		
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	-	-	-	-	
	2	-	-	-	-	-	
IVb	3	2	-	14	: +	ē	
	4	-	-	-	-	-	
	Total:	2	0	14	0	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	-	-	-		
	2	-	-	-	-	-	
IVc	3	5	-	49	-		
	4	2	-	15	*:	-	
	Total:	7	0	64	0	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	-	-	-	-	-	
	2	-	-	-		-	
VIId	3	-	-	-	-	-	
	4	25	-	256	-	-	
	Total:	25	0	256	0	0	
Area	Quarter	Research	Market	N measured	N aged	Other	
	1	25	7	525	=	-	
	2	38	9	761	-	-	
VIII	3	8	4	264	-	-	
	4	20	6	830	-	-	
	Total:	91	26	2380	0	0	

SAMPLING DATA FOR:

ROUNDNOSE GRENADIER

FRANCE

992		Number of samples			Number of fish	
Area	Quarter	Research	Market	N measured	N aged	Other
patasii a careedgaa sacaadaa aykii sacaadaa	1	-	4	150	150	-
	2	-	4	140	140	-
VII f, g	3	-	4	155	155	-
	4	-	4	150	150	=
	Total:	0	16	595	595	0

SAMPLING DATA FOR:

CUCKOO RAY (Raja naevus)

92		Number of samples			Number of fish	
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	12	408	-	-
	2	-	12	392	-	-
VIIb, k	3	-	12	243	-	-
	4	71	12	515	-	-
	Total:	71	48	1558	0	0

MEAGRE

FRANCE

992	92		samples	Number of		r of fish
Area	Quarter	Research	Market	N measured	N aged	Other
	1	-	6	251		-
	2	-	6	86	-	-
VIII	3	-	-	- 1	. .	i e
	4	-	4	88	-	-
	Total:	0	16	425	0	0

ICELAND

(S. A. Schopka)

The biological sampling programme and research work on demersal fish was carried out in conventional manner and is thus based both on research vessel data and market samples.

The greatest part of the reasearch vessel data was collected during the annual groundfish survey in March. The survey is carried out simultaneously with five commercial stern trawlers of the same type covering the whole shelf area around Iceland with 600 trawling stations.

Market samples were collected at the headquarters of the Marine Research Institute in Reykjavík and the five branches of MRI located at other important fishing ports. Fishery inspectors collected a considerable amount of data both on board of commercial fishing vessels and at the landing places.

Emphasis was laid on assessment work, as usual, and great steps were taken to increase studies on species interactions. For that purpose 57 308 stomachs of 51 species were collected for further investigations.

In 1992 only mature cod altogether 2 363 specimens were tagged for subpopulation studies. Tagging on other species did not take place.

The number of fish sampled by species are shown in the following tables.

SAMPLING	G DATA	FOR:

COD

1992		Number of	samples		Numbe	r of fish
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	1261	-	68916	3684	4421
		-	61	6690	2370	-
	2	112	-	15980	1239	-
		-	69	8167	2698	-
Va	3	511	-	44488	2761	1854
		-	33	4951	953	-
	4	404	-	31190	2111	2073
		-	42	5863	784	-
	Total:	2288	205	186245	16600	8348

HADDOCK

ICELAND

1992		Number of	fsamples		Numbe	er of fish
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	922	-	92140	3128	3976
) -	25	2432	1000	-
	2	80	-	20138	757	-
		-	19	2779	600	-
Va	3	287	-	30193	2578	1768
		-	12	1640	394	-
	4	281	-	18004	2212	2017
		-	11	1539	300	=
	Total:	1570	67	168865	10969	7761

SAMPLING DATA FOR:

SAITHE

ICELAND

1992		Number of	samples	Number of fish		
			Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	397	-	6598	1340	777
		-	24	3286	700	-
	2	39	×	5302	397	-
		-	19	1899	604	-
Va	3	109	-	4974	468	150
		-	13	812	554	-
	4	79	-	2091	385	177
		-	4	911	100	-
	Total:	624	60	25873	4548	1104

SAMPLING DATA FOR:

WHITING

1992	92		Number of samples		Number of fish		
		Research	Market	Number	Number	Stomach	
Area	Quarter	vessel	samples me	measured	aged	samples	
	1	153	-	3796	-	597	
		-	-	-	-	-	
	2	8	-	276	-	-	
		-	-		-	-	
Va	3	20	-	618	-	159	
		-	=:		=	-	
	4	60	-	1215	-	348	
		-	-	-	-	-	
	Total:	241	0	5905	0	1104	

LING

ICELAND

992		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	126	-	339	130	68
		-	-	-	-	-
	2	6	-	23	1	-
		-1	2	291	-	-
Va	3	27	-1	123	-	7
		-	-	-	-	-
	4	13	-	42	-	15
		-	1	3	-	-
	Total:	172	3	821	131	90

SAMPLING DATA FOR:

BLUE LING

ICELAND

992		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	55	-	732	87	140
		-	-	-	-	-
	2	49	-	1030	141	-
		-	3	416	184	-
Va	3	19	-	87	-	43
		-	-	-	-	
	4	13	-	104	-	46
		-	1	148	-	-
	Total:	136	4	2517	412	229

SAMPLING DATA FOR:

TUSK

02		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	284	-	1401	367	340
		~	1	23	-	-
	2	11	-	17	-	-
		-	1	215	-	-
Va	3	54	-	218	-	71
		-	-	-		-
	4	36	-	71	- ,	42
		-	2	482	101	-
	Total:	385	4	2427	468	453

Sebaster marinus

ICELAND

1992		Number of	samples		Number of fish		
		Research vessel	Market	Number	Number	Stomach	
Area	Quarter		samples	measured	aged	samples	
	1	564	-	59636	-	2696	
		-	11	3239	159	-	
	2	11	-	857	-	-	
		-	8	2537	193	-	
Va	3	154	-	16035	-	1502	
	1	-	12	3419	146	-	
	4	143	-	8148	-	1548	
		-	7	1394	361	-	
	Total:	872	38	95265	859	5746	

SAMPLING DATA FOR:

Sebastes mentella

ICELAND

1992		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	39	-	1559	-	76
		-	2	307	143	-
	2	62	-	4260	505	-
		-	3	337	-	-
Va	3	34	-	1969	224	117
		-	-	- 1	-	-
	4	6	-	1458	-	15
		-	5	806	206	-
	Total:	141	10	10696	1078	208

SAMPLING DATA FOR:

Sebastes mentella

"Type oceanicus"

992		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
CONTRACTOR OF THE STATE OF THE	1	-	-	-	-	-
		-	-	-	-	-
	2	62	-	7794	1755	-
		-	-	-	: -	-
Va	3	19	-	1497	836	-
		-	-	-	-	-
	4	-		-	-	-
		-	-	-	141	-
	Total:	81	0	9291	2591	0

PLAICE

ICELAND

1992		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	253	-	6516	485	633
		-	-	-	-	l.
	2	16	-	1660	-	-
		-	-	-	-	1-1
Va	3	51	-	1801	24	361
		-	4	516	250	*
	4	54	-	1091	-	343
		-	5	682	200	-
	Total:	374	9	12266	959	1337

SAMPLING DATA FOR:

DAB

ICELAND

92		Number of samples		Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	113	#1	3983	-	406
		-	=:	-	-	Ε.
	2	17	H	1544	-	-
			-0	-	-	-
Va	3	-	-	-	-	281
			-	-	-	-
	4	-	-	-	-	201
		-	-	-	Η.	-
	Total:	130	0	5527	0	888

SAMPLING DATA FOR:

GREAT SILVERSMELT

02		Number of	samples		Number of fish		
		Research	Market	Number	Number	Stomach	
Area	Quarter	vessel	samples	measured	aged	samples	
	1	65	-	2322	163	392	
		-	1	98	98	-	
	2	11	-	87		-	
		-	-	-	-	-	
Va	3	39	- ,	2599	244	392	
		-	-	-	-	-	
	4	20	-	493	-	192	
		-	-	-	-	-	
	Total:	135	1	5599	505	976	

CATFISH

ICELAND

1992		Number of	fsamples		Number of fish		
		Research	Market	Number	Number	Stomach	
Area	Quarter	vessel	samples me	measured	aged	samples	
	1	421	-	15810	1531	3017	
		-	-	-	-	-	
	2	11	-	59	-	-	
		-	2	725	329	-	
Va	3	21	-	41	-	1353	
		-	-	-	-	-	
	4	-	-	-	-	875	
		+		-	-	-	
	Total:	453	2	16635	1860	5245	

SAMPLING DATA FOR:

LUMPSUCKER

ICELAND

1992		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	276	-	1352	-	-
		-	-	-		-
	2	4	-	4	-	-
		-	11	940	-	-
Va	3	3	79	3	-	2
		-	1-	-	-1	-
	4	47	12	105	-	93
		.	-	-	-	-
	Total:	330	11	2404	0	95

SAMPLING DATA FOR:

WITCH

1992		Number of	samples		Numbe	r of fish
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	188	-	1759	-	493
		×	-	- 1	-	-
	2	10		494	149	*
		-	2	170	100	-
Va	3	49	-	369		207
		-	-	-	-	-
	4	56	-	890	Tes	309
		-	2	152	100	
	Total:	303	4	3834	349	1009

GREENLAND HALIBUT

ICELAND

1992		Number of	samples		Number of fish		
			Market	Number	Number	Stomach	
Area	Quarter	vessel	samples	measured	aged	samples	
	1	63	-	3191	159	293	
		-	3	593	198	-	
	2	95	-	8103	1390	-	
		-	5	1453	391	-	
Va	3	178	-	1938	791	98	
		-	1	100	100	-	
	4	15	-	616		71	
		-	2	408	130	-	
	Total:	351	11	16402	3159	462	

SAMPLING DATA FOR:

HALIBUT

ICELAND

1992		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	82	-	216	84	148
		-	-	=	-	-
	2		-	-		-
		-	-	-	-	-
Va	3	-	-	-		19
		-	=	-	-	×
	4	-	-	-	-	75
		-	-	-	-	-
	Total:	82	0	216	84	242

SAMPLING DATA FOR:

ROUNDNOSE GRENADIER

92		Number of	samples	Number of fish		
		Research	Market	Number	Number	Stomach
Area	Quarter	vessel	samples	measured	aged	samples
	1	-	-	-	-	-
		-	-	-	-	14
	2	45	-	364	2	-
		-	1	100	100	-
Va	3		:-	-	-	-
		-	-	-	-	-
	4	-	-	-	-	-
		-	-	-	-	-
	Total:	45	1	464	102	0

IRELAND

(P. Connolly)

The Demersal Section of the Fisheries Research Centre (FRC) is responsible for monitoring of fish stocks around Irish Coast. The FRC stock monitoring programme is focused on species of cod, whiting, haddock, plaice and sole in ICES Divisions VIIa (Irish Sea), VIa (West of Scotland), VIb (Rockall), VIIb, c (West of Ireland), VIIj, k (South West Ireland) and VIIg (Celtic Sea). This programme will be expanded in 1993 to include species of hake, monk and megrim. Length and age data were collected through a comprehensive sampling programme at the Dublin Fish Market and by contract samplers based at the main commercial ports. There were also several young fish surveys conducted in VIIa, VIa and VIIg and these data were used to supplement the sampling and ageing programmes and construct recruit indices for stock assessment purposes. There was no on board vessel sampling programme in 1992 but a comprehensive sea sampling programme will be commenced in 1993. The data were collated and analysed at the FRC and annual stock summaries were presented to ICES for use by the Northern Shelf and Southern Shelf Working Groups in the various international stock assessments. In 1992 the FRC aged 11,000 fish and measured 150,000 specimens.

The following surveys were undertaken in 1992:

Research Vessel Survey Programme in 1992

Survey no.	Month	Area	Research vessel	Objectives
1	May	VIIa	Commercial vessel	Young Plaice
2	June	VIIa	R/V Lough Beltra	Young Gadoids
3	July	VIIa	R/V Lough Beltra	Young Gadoids
4	July	VIIg	R/V Lough Beltra	Young Gadoids
5	November	Vla	R/V Lough Foyle	Groundfish Survey

SAMPLING DATA FOR:

COD

IRELAND

1992		Number of sa	amples	Number of fi	sh
Area	Quarter	Commercial	Research	N measured	N aged
	1	-	-	- 1	-
	2	3	-	126	109
VIa	3	4	-	142	122
	4	8	3	665	199
	Total:	15	3	933	430
VIb	Total:	35	-	991	
	1	16	-	759	355
	2	56	14	1396	257
VIIa	3	59	2	1901	290
	4	44	-	1363	176
	Total:	175	16	5419	1078

1992		Number of sa	amples	Number of fis	sh
Area	Quarter	Commercial	Research	N measured	N aged
VIIb, c	Total:	101	-	1885	-
	1	21	-	585	83
	2	16	Ξ,	313	-
VIIg	3	24	-	776	27
	4	3	_	216	56
	Total:	64	0	1890	166
VIIj, k	Total:	14	-	229	-
Total all year:		404	19	11347	1674

WHITING

IRELAND

1992		Number of sa	amples	Number of f	ish
Area	Quarter	Commercial	Research	N measured	N aged
	1	3	-	698	172
	2	2	-	1976	132
VIa	3	4	-	683	180
	4	10	8	3155	395
	Total:	19	8	6512	879
VIb	Total:	-	-	-	-
	1	13	-	3451	333
	2	36	48	18936	681
VIIa	3	28	29	16258	571
	4	31	-	8564	103
	Total:	108	77	47209	1688
VIIb, c	Total:	56		8501	-
	1	18	-	2806	116
	2	10	-	1086	50
VIIg	3	8	-	1654	52
	4	20	-	4286	317
	Total:	56	0	9832	535
VIIj, k	Total:	16	•	1445	
Total all year:		255	85	73499	3102

SAMPLING DATA FOR:

HADDOCK

IRELAND

1992		Number of sa	amples	Number of fish		
Area	Quarter	Commercial	Research	N measured	N aged	
	1	3	-	703	162	
	2	2	-	484	117	
VIa	3	5	-	701	176	
	4	9	5	2386	209	
	Total:	19	5	4274	664	
VIb	Total:	192	-	24170	629	
VIIa	Total:	-		-	-	

1992		Number of sa	mber of samples Number of fish		
Area	Quarter	Commercial	Research	N measured	N aged
VIIb, c	Total:	56	-	8501	-
VIIg	Total:	-	-	-	-
VIIj, k	Total:	11	-	1329	-
Total all year	:	278	5	38274	1293

PLAICE

IRELAND

1992		Number of sa	amples	Number of fi	sh	
Area	Quarter	Commercial	Research	N measured	N aged	
VIa	Total:	-	•	-	-	
VIb	Total:	-	-	-	-	
	1	6	-	700	264	
	2	13	65	6275	1009	
VIIa	3	9	11	2090	335	
	4	4	-	2144	110	
	Total:	32	76	11209	1718	
VIIb, c	Total:	41	-	4678	-	
	1	16	-	1779	151	
	2	29	-	3073	233	
VIIg	3	13	-	1294	82	
	4	38	1-	3854	261	
	Total:	96	0	10000	727	
VIIj, k	Total:	-	•			
otal all year:		169	76	25887	2445	

SAMPLING DATA FOR:

BLACK SOLE

IRELAND

1992		Number of sa	amples	Number of fis	sh
Area	Quarter	Commercial	Research	N measured	N aged
VIa	Total:	-	•	-	-
VIb	Total:		-	-	-
	1	1	-	354	135
	2	-	12	-	=
VIIa	3	-	-	- 1	-
	4	1	-	279	141
	Total:	2	0	633	276
VIIb, c	Total:	19	-	1091	-
VIIg	Total:	7	•	486	-
VIIj, k	Total:	10	-	1146	-
otal all year:		38	0	3356	276

THE NETHERLANDS

(F. van Beek and H. Heessen)

In 1992 the market sampling of landings of the Dutch fleet from the North Sea in The Netherlands was continued for the following species: Cod (<u>Gadus morhua</u>), plaice (<u>Pleuronectes platessa</u>), sole (<u>Solea solea</u>), whiting (<u>Merlangius merlangus</u>) and the greater silversmelt (<u>Argentina silus</u>). Market sampling for brill (<u>Scophthalmus rhombus</u>) and turbot (<u>Scophthalmus maximus</u>) was continued. For all species samples were taken stratified by harbour. All samples were also stratified by market category. The tables below indicate the level of sampling.

In all four quarters *R/V Tridens* participated in the International Bottom Trawl Survey (11 weeks). Surveys were carried out with the GOV-trawl. *R/V Isis* participated in quarters 2 and 4 in these surveys (6 weeks).

In April and May *R/V Isis* fished in the southeastern North Sea with the MIK-trawl to investigate the distribution of cod larvae.

In the southwestern part of the North Sea about 800 dab (<u>Limanda limanda</u>) and about 2 100 starry ray (<u>Raja radiata</u>) were tagged near the Dogger bank with a red Petersen disc on board of **R/V Isis** (2 weeks).

In September -October a SNS survey (Sole Net Survey) was carried out by *R/V Tridens* (2 weeks) in a restricted part of the survey grid. This survey provides recruitment indices for 1- and 2-year-old plaice and sole.

In August-September the International Beam Trawl Survey (BTS) was carried out by *R/V Isis* (5 weeks) in the southern North Sea and in the English Channel in collaboration with Belgium, Germany and the U.K. This survey investigated the abundance and distribution of adult plaice and sole in this area.

The International Demersal Young Fish Surveys (DYFS) were continued in September-October by *R/V Isis* (3 weeks), *R/V Stern* (4 weeks), *R/V Schollevaar* (2 weeks). These surveys estimated the relative abundance of brown shrimp (*Crangon crangon*) and juvenile plaice and sole in the continental nursery areas. The surveys are carried out since 1969 in collaboration with Belgium and Germany.

COD

992	92		Research ve	essel samples		Market	samples
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	25	-	-	-
	2	-	-	-	Ę.	-	-
NRFA 1	3	-	-	97	*	-	-
	4		-	-	a /	-	-
	Total:	0	0	122	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	105	*	-	-
NRFA 2	3	-	1-	118	="	-	+
	4	-	-	4	-	-	-
	Total:	0	0	227	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	115	-	-	-
	2	-	-	21	.	-	-
NRFA 3	3	-	-	31		-	-
	4	-	-	-	-	-	-
	Total:	0	0	167	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
1 2 NRFA 4 3	1	-	-	-	-	-	
	2	-	-	58	-	-	L ,
	1	-		99	-	-	=
	4	-	-	97	-	-	*
	Total:	0	0	254	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	20	-	-	-
	2	-	-	40	-	61	-9
NRFA 5	3	-	-	4	æ	-	-
	4	-	-	54	-	50	50
	Total:	0	0	118	0	111	50
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	172	-	1815	606
	2	-	-	355	-	992	348
NRFA 6	3	-	-	61	-	1333	291
	4	-	-	208	-	2792	494
	Total:	0	0	796	0	6932	1739
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	**************************************	-	-
	2	-	-	77	-	-	1-
NRFA 7	3		-	101	-	-	-
	4	-	-	*	-		-
	Total:	0	0	178	0	0	0
otal in all are	ac and	0	0	1862	0	7043	1789

^{*)=}North Sea Roundfish Sampling areas

SILVER SMELT

THE NETHERLANDS

992	92		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	=	100	50	
IVa	3	-	-		_	-	-	
	4	-	-	-	-	-	-	
Total:	Total:	0	0	0	0	100	50	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	815	250	
VIa	3	-	-	-	-	-	-	
	4	-	-	-	-	- 1	-	
	Total:	0	0	0	0	815	250	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	63	25	
	2	-	-	-		-	-	
VIIc	3	€	-	-	-	-	-	
	4	-	-	<u>.</u>	-	-	-	
	Total:	0	0	0	0	63	25	
tal in all ar arters:	eas and	0	0	0	0	978	325	

SAMPLING DATA FOR:

HADDOCK

02			Research vessel samples			Market samples			
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
	1	-	-	127	-	-	-		
	2	-	- 1	-	*	-	-		
NRFA 1	3	-	-	153	-	-	-		
	4	-	-	-	-	-	-		
	Total:	0	0	280	0	0	0		
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
	1	-	-	-	-	-	(+		
	2	-	-	205	×	- 1	12		
NRFA 2	3	-	-	140	-	-	-		
	4	-	-	~	-	-	-		
	Total:	0	0	345	0	0	0		
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
	1	-	-	247	-	-	-		
	2	-	-	134	-	-	-		
NRFA 3	3	-	-	136	-	-	-		
	4	-	- 1	-	-	- 1	-		
	Total:	0	0	517	0	0	0		
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged		
	1	-	-	-	-	-	H.		
	2	-	-	118	-	-	-		
NRFA 4	3	-	-	94	-	-	-		
	4	5	-	74	-	-	-		
	Total:	0	0	286	0	0	0		

992	92		Research ve	ssel samples		Market	samples
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	-	-	-
NRFA 5	3	-	-	-	-	-	-
	4	-	-	-	14	-	-
	Total:	0	0	0	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	2	-	-	-
NRFA 6	3	-	-	-	-	-	-
	4	-	-	16	- *	-	
	Total:	0	0	18	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	108	-	-	-
NRFA 7	3	-	-	107	-	-	-
	4	-	-	-	-	-	-
	Total:	0	0	215	0	0	0
otal in all are	as and	0	0	1661	0	0	0

^{*)=}North Sea Roundfish Sampling areas

NORWAY POUT

992			Research ve	ssel samples	Market samples			
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	93	-	-	-	
	2	-	-	-	=	-	-	
NRFA 1	3	-	-	41	-	-		
	4	-	- '	-	-	-	-2	
	Total:	0	0	134	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
S-111(4-10-10-10-10-10-10-10-10-10-10-10-10-10-	1	-	-	-	-	-	-	
	2	-	-	47	-	-	-	
NRFA 2	3	-	-	34	-	-	-	
	4	-	-	-	-	- 1	-	
	Total:	0	0	81	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	- 1	85	+)	-	-	
	2	-	-	23	-	-	-	
NRFA 3	3	-	-	-	-	-	×	
	4	-	-	- 1	=	-	-	
	Total:	0	0	108	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
The second secon	1	-	-	-	-	-	-	
	2		-	76	-	-	-	
NRFA 4	3	-	-	28	-	-	-	
	4	-	18	40	-	-	Ή.	
	Total:	0	0	144	0	0	0	

92			Research ve	vessel samples Marke			t samples	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	_	-	-	-	-	12	
	2	-	-	-	-	-	-	
NRFA 5	3	-	-	-	-	-	-	
	4	-	-	-	=	¥	-	
	Total:	0	0	0	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	-	-	
NRFA 6	3	-	-	-	-	-	-	
	4	-	-	-	Ψ/	-	-	
	Total:	0	0	0	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	32	-	-	-	
NRFA 7	3		-	-	-	-	-	
	4	-	, =	-			-	
	Total:	0	0	32	0	0	0	
tal in all are	as and	0	0	499	0	0	0	

quarters:
*)=North Sea Roundfish Sampling areas

WHITING

02			Research ves	sel samples	Market samples			
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	133	-	-	-	
	2	-	-	-	-	-	-	
NRFA 1	3	-	-	88	-	-	-	
	4	-	-	-	-	-	-	
	Total:	0	0	221	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	:-	
	2	-	- 1	149	Ξ.	-	19	
NRFA 2	3	-	-	83	-	-	-	
	4	-	-	-	-	-	-	
	Total:	0	0	232	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
Total Control of the	1	-	-	273	-	-	-	
	2	-	-	128	-	-	÷.	
NRFA 3	3	-	-	137	-	-	-	
	4	-	-	-	-	-	-	
	Total:	0	0	538	0	0	0	
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	123	-	-	-	
NRFA 4	3	-	-	136	-	-	-	
	4	-	-	102	-	35	-	
	Total:	0	0	361	0	35	0	

992			Research ve	ssel samples		Market	samples
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	130	-	-	-
	2	-	-	194	-	46	÷
NRFA 5	3	-	-	73	-	-	-
	4	-	-	119	-	-	-
	Total:	0	0	516	0	46	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	248	-	3043	300
	2	-	-	278	-	2040	250
NRFA 6	3	-	-	116	-	2561	300
	4	-	-	329	Ħ	3045	300
	Total:	0	0	971	0	10689	1150
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	87	-	-	-
NRFA 7	3	-	-	120	-	-	-
	4	-	-	-	Ħ	-	-
	Total:	0	0	207	0	0	0
otal in all are	tal in all areas and		0	3046	0	10770	1150

^{*)=}North Sea Roundfish Sampling areas

SAITHE

2			Research ve	ssel samples		Market s	samples
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	8	-	-	-
	2	-	-	-	-	-	:-
NRFA 1	3	-	-	95	-	-	-
	4	-	-	-	-	-	-
	Total:	0	0	103	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	- 1	-
	2	-	-	-		-	-
NRFA 2	3	-	-	-	II-	-	16
	4	-		- 1	*	- 1	
	Total:	0	0	0	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	1	-	-	E _c
NRFA 3	3	-	-	-	-	- 1	-
	4	-	-	-	=	-	-
	Total:	0	0	1	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	*	-	
NRFA 4	3	-	-	-	-	-	
	4	-	-	-	-	-	
	Total:	0	0	0	0	0	0

992		- A 40	Research ve	essel samples		Market	samples
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	27	-	-
	2	-	-			-	-
NRFA 5	3	-	-		-	-	-
	4	-	-	-	18	-	-
	Total:	0	0	0	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	u =	-	-	-
NRFA 6	3	-	-	-	-	-	-
	4	-	-	-		-	-
	Total:	0	0	0	0	0	0
Area *)	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	- 1	-	4	-	-	14
NRFA 7	3	-	-	1	-	-	-
	4	-	-	-	-	-	-
	Total:	0	0	5	0	0	0
tal in all are	as and	0	0	109	0	0	0

quarters:
*)=North Sea Roundfish Sampling areas

PLAICE

992			Research ve	ssel samples		Market	samples
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	1620
	2	-	-	-	+	-	1018
IV	3	-	-	583	12	-	1016
	4	-	-	1070	-	-	1081
	Total:	0	0	1653	0	0	4735
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
The same of the sa	1	-	-	-	-	-	=
	2	-	-	-	-	- 1	_
Wadden	3	-	-	9-	-	-	
Sea	4	-	-	187	-	-	-
	Total:	0	0	187	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	-	-	-
Zeeland	3	-	-	126	-	-	-
estuary	4	-	-	-	-	-	-
	Total:	0	0	126	0	0	0
otal in all are parters:	as and	0	0	1966	0	0	4735

SOLE

THE NETHERLANDS

1992			Research ve	ssel samples		Market	samples
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	850
	2	-	-	-	(2)	-	1496
IV	3	-	-	427		-	800
	4	-	-	689	¥	-	750
	Total:	0	0	1116	0	0	3896
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	- 2	-	-
Wadden	3	-	-	-	=	-	-
Sea	4	-	-	31	=	-	-
	Total:	0	0	31	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	:-	-	-	-	-
	2	-	-	-	-	-	-
Zeeland	3	-	1-	77	-	-	=
estuary	4	-	-	-		-	
	Total:	0	0	77	0	0	0
otal in all are uarters:			1224	0	0	3896	

SAMPLING DATA FOR:

TURBOT

THE NETHERLANDS

992	92		Research vessel samples			Market samples		
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	- 1	-	-	-	-	
IV	3	-	-	214	-	-	-	
	4	-	-	53	-	-	-	
	Total:	0	0	267	0	0	0	

SAMPLING DATA FOR:

BRILL

2			Research ves	sel samples	Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	-	-	
IV	3	-	-	126	-	-	-	
	4	-	-	52	-	-	-	
	Total:	0	0	178	0	0	0	
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-		-	~	-	-	
	2	-	-	-	-	-	-	
Wadden	3	-		-	*	-	-	
Sea	4	-	-	3	-	-	-	
	Total:	0	0	3	0	0	0	

1992			Research ve	ssel samples	Market samples			
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged	
	1	-	-	-	-	-	-	
	2	-	-	-	-	-	Ε.	
Zeeland	3	-	-	5	-	-	-	
estuary	4	-	-	-	-	-	-	
	Total:	0	0	5	0	0	0	
otal in all areas and parters:		0	0	186	0	0	0	

DAB

THE NETHERLANDS

992			Research ve	ssel samples		Market	samples
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	-	-	-
IVa	3	-	-	630	i.	-	8
	4	-	-	502	-	-	-
	Total:	0	0	1132	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	- 1	-	lė.	-	-
Wadden	3	-		-	121	20	-
Sea	4	-	-	72	-	-	-
	Total:	0	0	72	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	-,	-	-
Zeeland	3	-	1=	33	æ	-	×
estuary	4	-	÷	-	-	-	-
	Total:	0	0	33	0	0	0
otal in all are uarters:	eas and	0	0	1237	0 0		0

SAMPLING DATA FOR:

FLOUNDER

992			Research ve	ssel samples		Market	samples
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	-	-	-
Wadden	3	-	-	-	-	-	-
Sea	4	- ,	-	65	-	-	-
	Total:	0	0	65	0	0	0
Area	Quarter	N samples	N measured	N aged	N samples	N measured	N aged
	1	-	-	-	-	-	-
	2	-	-	-	-	-	· <u>·</u>
Zeeland	3	-	-	100	-	-	1-
estuary	4	-	-	-	-	-	-
	Total:	0	0	100	0	0	0
otal in all areas and uarters:		0	0	165	0	0	0

NORWAY

(J. E. Eliassen and T. Jakobsen)

Sub-areas I and II

Routine research surveys were carried out as in previous years, accounting for most of the activity at sea. Most of the activity is aimed at Northeast Arctic cod, but other species are also covered during the same surveys. The experiment to use commercial trawlers for a bottom trawl survey in the Barents Sea/Svalbard area was continued with six trawlers for two weeks. Stomach sampling for multispecies research was carried out on routine surveys throughout most of the year. Investigations on cod and haddock spawning (eggs and larvae) were combined with other surveys.

The abundance of cod, haddock and redfish in the Barents Sea was investigated during a combined acoustic and stratified bottom trawl survey in February-March. The distribution and abundance of spawning cod was investigated by acoustic survey in the Lofoten area in February-April. Combined with shrimp investigations, the distribution of young cod and haddock was studied in the central Barents Sea in May-June. The distribution of shrimp, cod, haddock, redfish and Greenland halibut was investigated in the Svalbard area in August-September. Part of this survey was included in the combined 0-group/multispecies survey carried out together with Russian vessels during the same period, when the distribution of cod, haddock, redfish and pelagic species was investigated in the Barents Sea. Stomach samples from cod and haddock were collected on all routine surveys for cod/haddock in the Barents Sea and at Svalbard and in addition on shrimp and pelagic fish surveys.

A new activity, carried out by the Norwegian Institute of Fisheries and Aquaculture, Tromsø, was a comprehensive investigation in the coastal areas and fjords of northern Norway in August-October, aimed at coastal cod and other coastal resources. Preliminary results indicate considerable biomasses of cod, haddock, saithe redfishes and herring in the coastal regions. Taggings made and recaptures obtained indicate for example local coastal cod stocks in the northern Norway.

In November a bottom trawl survey with six commercial trawlers was carried out during two weeks in the Barents Sea under the supervision of the Institute of Marine Research, Bergen. The results so far indicate that this could be a valuable survey, especially with regard to the older age groups of cod, which are poorly covered in the winter survey. In addition to the abundance estimation, emphasis was put on comparison between commercial trawls and the standard sampling trawl used by research vessels.

In August-September the international 0-group survey was carried out in the Barents Sea and adjacent waters in cooperation with Russian vessels.

An 0-group (post-larvae) survey for saithe was carried out from 62° N to the Lofoten Islands in April-May, and an acoustic survey for saithe and redfish was carried out on the coastal banks of Norway south to 62° N in October-November.

A survey investigating mature redfish along the continental shelf of Norway was carried out in April.

In 1992 direct fishery for Greenland halibut was banned, but in order to continue the series of commercial CPUE data, a fishery with selected vessels was allowed in two periods under the supervision of the Institute of Marine Research.

The sampling programme for commercial catches of cod haddock saithe redfish and Greenland halibut was continued.

Sub-area IV

Norway participated in the Quarterly International Bottom Trawl Surveys in three quarters. During four weeks in January-February the Norwegian part of the International Young Fish Survey was carried out. The other two surveys were carried out in May-June and in October-November. In the latter survey, acoustic abundance estimation of the resources in the northern North Sea was also attempted.

The annual acoustic survey for saithe in the North Sea was carried out in February. Stomach samples were collected on all surveys. In April-may the distribution of saithe post-larvae was studied. The sampling of commercial catches of saithe, sandeel and Norway pout was continued.

SAMPLING DATA FOR:

COD

992			Resea	arch vessel sa	amples	Market samples				
		Ageo	l	Meas	sured	Age	1	Meas	ured	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	93	1845	271	. 26100	5	409	39	3875	
	2	-	-	100	7495	17	1500	18	1756	
I	3	40	951	318	23067	15	862	40	4627	
	4	18	766	243	28105	-	-	-	-	
	Total:	151	3562	932	84767	37	2771	97	10258	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	56	1529	210	11046	68	6787	42	4771	
	2	11	432	99	3887	15	1200	23	3161	
IIa	3	11	217	93	6822	19	858	3	366	
	4	18	419	122	3150	-	-	-	-	
	Total:	96	2597	524	24905	102	8845	68	8298	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	3	75	102	11477	-	14	5	1546	
	2	-	-	32	3141	-	-	14	634	
IIb	3	89	2386	508	49586	1	102	33	3422	
	4	9	347	145	27628	-	-	-	-	
	Total:	101	2808	787	91832	1	102	52	5602	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	26	250	49	397	3	235	-	-	
	2	-	-	2	2	-	-	-	-	
IVa	3	=	=	-	-	-	-	-	-	
	4	÷		-	-	-	-	-	-	
	Total:	26	250	51	399	3	235	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	8	38	11	45	-	-	-	-	
	2	-	-	-	-	-	-	-	-	
IVb	3	-	-	-	-	-	-	-	-	
	4	-	-	-	*	-	-	-	-	
	Total:	8	38	11	45	0	0	0	0	

992			Resea	Research vessel samples N			Research vessel samples Market samples			es
		Aged		Measured		Aged		Measured		
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	-	-	-	-	-	-	
	2	-		-	-	-	-	-	¥	
Vb	3	-	+	- 1		-	-	-	-	
	4	-	н:	-	a .	-	-	-	4.	
	Total:	0	0	0	0	0	0	0	0	

HADDOCK

992			Resea	rch vessel sa	mples		M	larket sample	es
		Aged	I	Meas	ured	Aged	1	Measured	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	90	1199	297	37504	3	263	13	1005
	2	-	-	88	3723	10	890	14	1433
I	3	26	340	222	8831	17	601	15	1838
	4	12	413	184	18758	-	-	-	-
	Total:	128	1952	791	68816	30	1754	42	4276
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
an ann an t-Airean St. an E	1	42	786	227	14501	22	1926	9	454
	2	4	143	88	1007	12	866	6	708
IIa	3	7	98	121	5316	17	798	11	1579
	4	12	554	107	6273	- 1	-	-	-
	Total:	65	1581	543	27097	51	3590	26	2741
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
- Palantikones	1	1	12	65	4348	-	-	2	22
	2	-	-	10	109	-	F	6	212
IIb	3	22	378	256 .	10285	-	-	-	-
	4	5	143	45	1230	-	-	-	-
	Total:	28	533	376	15972	0	0	8	234
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	15	381	72	4677	-	-	-	-
	2	-	-	28	418	2.1	l#	-	-
IVa	3	-	H		*	-	18	-	-
	4	-	-	-	-	-	-	-	-
	Total:	15	381	100	5095	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	4	38	12	610	-	-	-	-
	2	-	-	-	-	-	-	-	-
IVb	3	-	-	-	8	-	-	-	-
	4		-	-	-	-	-	-	-
	Total:	4	38	12	610	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	1	13	-	₩.	-	·
Vb	3	-	H	-	H	*	=		2-
	4	-		-	8	-	-	-	-
	Total:	0	0	1	13	0	0	0	0

SAITHE

992			Resea	rch vessel sa	mples		N	Market samples Measure	es
		Ageo	d	Meas	sured	Ageo	1	Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	1	8	16	470	1	38	1	3
	2	-	-	30	497	3	160	-	-
I	3	-	<u>-</u>	63	678	9	435	4	552
	4	13	248	41	1895	-	-	-	#3
	Total:	14	256	150	3540	13	633	5	555
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	4	113	85	2136	13	1185	7	1054
	2	1	16	152	3007	5	464	1	160
IIa	3	-	-	40	257	14	929	1	219
	4	30	1039	70	5668		-	-	14
	Total:	35	1168	. 347	11068	32	2578	9	1433
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
IIb	3	-	-	51	285	-	-	-	-
	4	-	-	14	51	-	말	-	*
	Total:	0	0	65	336	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	23	614	32	1009	1	54	2	530
	2	-	18	48	1166	-	-	-	-
IVa	3	-	<u></u>	-	-	-	×	-	-
	4	-	-	-	-	-	<u> </u>	-	-
	Total:	23	614	80	2175	1	54	2	530
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	1	1	-	- No. 10 (10 (10 (10 (10 (10 (10 (10 (10 (10	-	-
	2	¥	+	-	-	-	-	-	-
IVb	3	* 1	=	-	=	-	-	-	=
	4	-	-	-	-	18	17	-	-
	Total:	0	0	1	. 1	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
***************************************	1	-	-	-	-	-	-	-	-
	2	-	-	2	31	-	-		-
Vb	3	-	Ψ.	-	=	-	-:	-	-
	4	-	-	-	-	-	-		H
	Total:	0	0	2	31	0	0	0	0

GREENLAND HALIBUT

1992			Resea	rch vessel sa	mples		N	larket sample	es
		Ageo	d	Meas	ured	Aged		Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	5	66	70	594	-	-	-	-
	2	-	-	7	234	8	786	2	194
I	3	8	95	38	369	-	-	- ,	-
	4	-	-	84	631	-	7	-	-
	Total:	13	161	199	1828	8	786	2	194
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	1	8	19	53	-	-	-	=:
	2	56	2949	157	35515	3	248	- 1	-
IIa	3	1	15	14	79	1	60	1	60
	4	17	606	73	9563	-	-	-	-
	Total:	75	3578	263	45210	4	308	1	60
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	2	27	57	3393	-	-	2	52
	2	-	+:	12	465	-	-	12	854
IIb	3	56	656	148	1682	-	-	-	-
	4	14	552	127	10168	-	-	-	-
	Total:	72	1235	344	15708	0	0	14	906
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	¥	-	-	-	Ψ.
IVa	3	-	=:	-	÷	-	-	-	=
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
IVb	3	-	-	-	-	-	1-0	-	-
	4	-		-	-	-		-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
- CONTROL OF THE CONT	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-		-
Vb	3	4	-	-	-	-	¥	-	-
	4	-	-	-	-	-	×	-	-
	Total:	0	0	0	0	0	0	0	0

REDFISH

1992			Resea	rch vessel sa	mples		M	Market samples	es
		Ageo	d	Meas	sured	Age	1	Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	21	443	335	15084	1	50	8	389
	2	-	-	82	3348	-	-	12	444
I	3	14	207	107	4429	4	190	2	84
	4	9	315	76	2586	-	-	-	-
	Total:	44	965	600	25447	5	240	22	917
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	25	556	341	12769	7	325	1	147
	2	28	1183	148	5632	2	120	5	364
IIa	3	8	160	80	3612	5	222	1	129
	4	23	917	145	4737	-	-	-	141
	Total:	84	2816	714	26750	14	667	7	640
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	3	51	78	6262		-	-	-
	2	1	96	8	314	-	-	1	99
IIb	3	60	1046	452	28470	-	-	-	I-
	4	-	-	44	658	-	-	-	-
	Total:	64	1193	582	35704	0	0	1	99
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
PRODUCED CONTROL OF CONTROL	1	-	-	10	41	-	-	-	-
	2	-	¥	3	89	-	-	-	÷
IVa	3	-	-	-	-	-	+	-	-
	4	-	-	-	-	-	-	-	74
	Total:	0	0	13	130	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	4	-	-
IVb	3	-		-	-	-		-	-
	4	-	-	-	-	-	=	-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	=
	2	Е ,	-	-	-	-	-	-	-
Vb	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-		*	
	Total:	0	0	0	0	0	0	0	0

LING

992			Resea	rch vessel sa	mples	Market samples				
		Aged		Meas	ured	Aged		Measured		
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	3	-	=	-	-	-	-	
	2	-	-	-	-	-	-	-	-	
I	3	-	-	-	-	-	-	- 1	-	
	4	-	-	1	1	-	-	-	-	
	Total:	0	0	1	1	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	11	27	-	-	- 1	-	
	2	-	-	12	14	-	-	- 1	*	
IIa	3	-	-	-	-	-	*	- 1	-	
	4	-	-	11	16	-	-	-	-	
	Total:	0	0	34	57	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	-	-	-	-	-	-	
	2	-	+	*	-	-	-		×	
IIb	3	* 1	-	-	-	-	•	-	-	
	4	-	-	*	-	-	-	-	-	
	Total:	0	0	0	0	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	10	24	- 1	-	-	-	
	2	-	-	-	-	- 1	÷		-	
IVa	3	-	-		*	-	-	- 1	-	
	4	-	-	-	-	-	-	-	-	
	Total:	0	0	10	24	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	
IVb	3	-	-	-	-	1 - 1		-	-	
	4	-	-	-	-	-	<u>-</u>		-	
	Total:	0	0	0	0	0 -	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	
Vb	3	-	-		-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	
	Total:	0	0	0	0	0	0	0	0	

TUSK

1992			Resea	rch vessel sa	mples		M	arket sampl	es
		Aged	l	Meas	ured	Aged	1	Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	7	13	-	_	-	-
	2	-	-	-	-	-	-	-	-
I	3		-	4	8	- 1	-	-	-
	4	-	-	7	15	-			19
	Total:	0	0	18	36	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	59	226	-	-	-	-
	2	-	-	23	60	- 1	-	-	-
IIa	3	-	-	4	24	- 1	= 3	-	l e
	4	-	-	36	120	-	-		1+
	Total:	0	0	122	430	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	
IIb	3	-	-	4	8	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	4	8	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	8	13	-		-	-
	2	-	18	-	-		-	-	-
IVa	3	-	-	1-	-	-	-	-	5 2
	4	-	-	-	¥	-		-	=
	Total:	0	. 0	8	13	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	*	-	-	-
	2	9	-	*	20	-	-	-	-
IVb	3	-	-	-		-	-	-	=
	4	-	-:	-:	-	-	-	-	-
	Total:	. 0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-		-	-	-	-
	2	=	-	-	-	-	-	-	-
Vb	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-		-	=
	Total:	0	0	0	0	0	0	0	0

CATFISH

992			Resea	rch vessel sa	mples		M	larket sample	es
		Aged		Meas	ured	Aged		Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	90	325	-	-	-	-
	2	-	-	1	4	-	-	-	-
I	3	-	-	63	207	- 1	=	- 1	=
	4	-		97	254	-	-	-	1-
	Total:	0	0	251	790	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	33	76	-	-	-	-
	2	-	-	96	486	-	-	- 1	-
IIa	3	.*	*	9	10	-		-	-
	4	-	-	29	100	-	-	-	-
	Total:	0	0	167	672	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-		_	-	-	-	-
	2	-		-	-	-	-	-	-
IIb	3		2	233	3074	- 1	-		-
	4	-	-	17	47	-	ş -	-	-
	Total:	0	0	250	3121	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
of the Control of the	1	-	+	4	4	-	-	-	-
	2	*	*	33	129	-	18	-	-
IVa	3		-		-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	37	133	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
A	1	-	-	1	1	-	-	-	-
	2		-	-	-	-	-	-	-
IVb	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	- 1		- 1	-
	Total:	0	0	1	1	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	1-	-	-	-	-
Vb	3	-	-	-	1.5	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0

WHITING

992	i		Resea	rch vessel sa	mples		M	larket sampl	es
		Aged	I	Meas	sured	Aged		Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	1	2	-	1-	-	-
	2	-	-	-	-	-	-	-	-
I	3		-	-	-	- 1	1-2	-	-
	4		-	1	2	-	-	-	-
	Total:	0	0	2	4	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	10	31	-	-	-	-
	2	-	=	2	2	-	-	-	-
IIa	3	-	-	29	146	-	L	-	-
	4	-	-	13	78	-	-		-
	Total:	0	0	54	257	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
NICE OF THE PROPERTY OF THE PR	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	×	-	-
IIb	3	-	-	-	* .	-	-	-	-
	4	-		-	-	-	_	-	
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	9	243	53	3382	-	-	-	-
	2	- 1	-	4	23	- 1	-	- 1	-
IVa	3	-	-	-	-	-		-	-
	4	-		-	-	-	-	-	FI
	Total:	9	243	57	3405	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	3	82	14	846	-	-	-	-
	2	-	-	-	-	- 1	4	-	-
IVb	3	-	-		-	-	-	-	-
	4	-	-	Ε.	-	-	14.	-	-
	Total:	3	82	14	846	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	- 1	-		-	-	-	-	-
Vb	3	-	1-0	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0

BLUE WHITING

1992			Resea	rch vessel sa	mples		M	larket sampl	es
		Ageo	1	Meas	sured	Aged	1	Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	46	979	-	-	-	-
	2	-	-	1	12	-	=	-	-
I	3	-	-	13	383	-	-	-	-
	4	-	-	14	507	-	=	-	-
	Total:	0	0	74	1881	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	1	50	77	2379	-	-	-	-
	2	33	1632	85	4467	-	Ξ.	-	-
IIa	3	36	2276	75	3265	-	-	-	-
	4	-	-	43	1210	-	-	-	=
	Total:	70	3958	280	11321	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	\ -	-	2.	-	-
IIb	3	-	-	20	76	-	<u>.</u> .	-	-
	4	-	-	1	3	-	-	-	-
	Total:	0	0	21	79	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	3	84	-	-	-	-
	2	3	266	4	268	-	-	-	-
IVa	3	1	100	1	100	-	-	-	-
	4	-	-	-	-		-	-	
	Total:	4	366	8	452	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	/ -	-	21	-	-
	2	=	ų.	-	-	-	-	-	-
IVb	3	-	-	-	7=	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0 .	0	0 .	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	1	100	1	100		-	-	1-0
Vb	3	-	-	-		-	-	-	Ŧ,
	4	-	-	-	-	-	-	-	-
	Total:	1	100	1	100	0	0	0	0

NORWAY POUT

1992			Resea	rch vessel sa	mples		M	larket sampl	es
		Ageo	d	Meas	sured	Aged	ł	Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	37	1537	-	-	-	-
	2	-	-	1	59	-	-	-	1-1
I	3	-	-	20	754	- 1	-	-	-
	4	~	-	13	638	-	*	-	-
	Total:	0	0	71	2988	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	79	4348	-	-	-	-
	2	-	-	55	1708	- 1	-1	-	-
IIa	3	-	-	16	543	- 1	-	-	1=
	4	-	-	48	3129	-	-	-	-
	Total:	0	0	198	9728	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	- 1	-	-	-		-1	-	-
IIb	3	-	-	9	41	- 1	-	-	-
	4	=	-	-	-	-		-	-
	Total:	0	0	9	41	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	5	81	61	4884	-	-0	-	
	2		-	46	870	-	-	-	-
IVa	3	-	-	1	1		-	- 1	-
	4	-	-	-	-	-		-	-
	Total:	5	81	108	5755	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	1	42	8	412	-	-	-	-
	2	-	-	-	-	-	-	-	-
IVb	3	-			-	-	-	.	-
	4		-		-	-	-	-	-
	Total:	1	42	8	412	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
-	1	-	-	-	-	-	-	-	-
	2	-	-	1	30	-	9		-
Vb	3		-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	1	30	0	0	0	0

SANDEEL

992			Resea	rch vessel sa	mples	Market samples	es		
		Aged	l	Meas	ured	Aged		Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-1	-	-	-	~
I	3	-	-	13	443	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	13	443	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	. N fish
	1	-	-	1	75	-	-0	-	-
	2	-	-	26	58	-	-	-	-
IIa	3	-	-	4	44	-	-	- 1	-
	4	-	-	-	-	-	-		-
	Total:	0	0	31	177	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	1#
	2	-	-	-		-	-	- 1	-
IIb	3	-	-	-	-	-	-		-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	3	116	-	-	-	-
	2	-	-	45	537	-	-	-	-
IVa	3	-	-	-	-	-	F	-	-
	4	-	-	-	-		-	-	
	Total:	0	0	48	653	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	.=	-	-	-	-	-	-
	2	-	-		-	-	-	-	-
IVb	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	- 1	-	- 1	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	=:
	2	-	14	-	2 .	-	-	-	-
Vb	3	-	4	-	-	-	- 1	-	-
	4	-	7 aa	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0

SILVER SMELT

1992			Resea	rch vessel sa	mples		N	larket sampl	es
		Ageo	d	Meas	sured	Age	d	Meas	ured
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	2	3	-	-	-	-
	2	-	-	-		-	-	-	-
I	3	-	-	3	8	-	-	-	Ψ.
	4	-	1-	1	1	-	-	-	-
	Total:	0	0	6	12	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	28	479	-	-	-	-
	2	28	1388	59	2216	×	-	-	-
IIa	3	1	9	14	83	-	-	- 1	-
	4	-	-	29	368	-	-	-	-
	Total:	29	1397	130	3146	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	*	-	-	-
IIb	3	-	-	-		-	-	- 1	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	1	32	-	-	-	-
	2	-	-	-	H	-	-	-	. E
IVa	3	1	9	1	9	-	E	-	-
	4	-	-	-	-	-	- "	-	-
	Total:	1	9	2	41	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-		-	-
IVb	3	-	-	-	-		=:	-	-
	4	-	-	-		-	-	-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	1	100	2	104	-	-	-	-
Vb	3	-	-	-	-	-	-		-
	4	-	-	-	-	-	-,	-	-
	Total:	1	100	2	104	0	0	0	0

PLAICE

1992		Research vessel samples				Market samples			
		Aged		Measured		Aged		Measured	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
I	1	-	-	48	346	-	-	-	-
	2	-	-	-	=	-	-	-	-
	3	-	-	10	79	-	F	-	H
	4	-		17	77	-	-	-	-
	Total:	0	0	75	502	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	+	В	6	128	-	-	-	-
	2	-	-	1	48	-	-	-	19
IIa	3	-	-	-	-	-	-	-	1-
	4	-	-	9	36	-	-	-	-
	Total:	0	0	16	212	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-:	-	-
	2	-	-	-	-	-	-	-	-
IIb	3	-	-	-	-	-	-	-	-
	4	- 1	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	3	15	- 1	-	-	-
	2	-	-	-	8	-		-	-
IVa	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	3	15	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	10	122	-	-	-	-
	2	-	-	-	-	-	-	-	-
IVb	3	-	-	-	+	-	-	-	=
	4	-	-	-	-	-	7-		-
	Total:	0	0	10	122	0 .	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	1	-	-
Vb	3	-	-		-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0

LONG ROUGH DAB

1992		Research vessel samples				Market samples				
		Aged		Measured		Aged		Measured		
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
I	1	-	-:	179	8263	-	-	-	-	
	2	i e	H	+1	-	-	4	-	-	
	3	1	22	130	6469	-	¥	-	=	
	4	-	-	29	821	-	-	-	-	
	Total:	1	22	338	15553	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	99	2908	- 1	-	-	-	
	2	-	¥	12	98	-	÷	-	-	
IIa	3	1	25	29	1141	-	-	-	÷	
	4	-	-	52	503	-	-	-	-	
	Total:	1	25	192	4650	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	9	452	-	-	-		
	2	-	÷	-	-	-	-	-	-	
IIb	3	75	1526	363	23467	-	8	-	-	
	4	-	-	43	1464	-	-	-	-	
	Total:	75	1526	415	25383	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	59	1579	-	-	-	-	
	2	-	-	-	-	-	=	-		
IVa	3	-	×	-	-	-	-	-	-	
	4	-	-	-	-	-	-	~	Ξ.	
	Total:	0	0	59	1579	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	11	212	-	-	-	-:	
	2	-	-1		-	-	-	-	-	
IVb	3		-		-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	
	Total:	0	0	11	212	0	0	0	0	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish	
	1	-	-	+	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	
Vb	3	-	-	-	-	-	-		-	
	4	*	H	-	-	-	-	-	-	
	Total:	0	0	0	0	. 0	0	0	0	

DAB

NORWAY

1992		Research vessel samples				Market samples			
		Aged		Measured		Aged		Measured	
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	4	-	-	-	-	- 1		-
I	3	-	-	-	-	-	-	-	-
	4	1-	-	-	-	-	-	-	÷.
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	, al	-	1	8	-	-	-	=
IIa	3	1-	-	-	F)	-	-	1 - 1	Ψ.
	4	-	-	3	30	-	-	-	-
	Total:	0	0	4	38	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
IIb	1	-	-	-	-	-	-	-	-
	2	-	-	-		-	-	-	-
	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	0	0	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	12	331	-	-	-	-
	2	-	-	2	2	-	-	-	=
IVa	3	-	-	-	-	-	. -	-	-
	4	-	-	-	-	-	1=	-	-
	Total:	0	0	14	333	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
IVb	1	-	-	14	627	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Total:	0	0	14	627	0	0	0	0
Area	Quarter	N samples	N fish	N samples	N fish	N samples	N fish	N samples	N fish
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
Vb	3	-	-	-	1-	-	-	-	-
	4	-	, <u>-</u>	-	-	-	8	-	-
	Total:	0	0	0	0	0	0	0	0

POLAND

(J. Janusz and M. Liwoch)

No biological samples were collected in the Northeast Atlantic by Poland in 1992.

PORTUGAL

(F. Cardador)

During 1992 the National Institute of Fisheries Research (INIP/IPIMAR, Lisbon) had continued its national sampling programme at the main fishing ports. The main objective of this sampling programme is to provide length frequency distributions of the landings for the most important commercial species.

The Portuguese Institute has carried out during 1992 three groundfish syrveys on board of the *R/V Noruega*. These surveys covered the entire Portuguese coast from depths ranging from 20 to 750 m. The main goal of those surveys was to provide abundance indices and to study the distribution patterns of the most important species. The second aim of the surveys was to estimate the abundance and distribution of eggs and larvae of the main species in relation to basic environmental parameters.

Surveys took place in February-March, July and October-November. The methodology adopted was a fixed station scheme. Each survey had a duration of 30 fishing days, using a bottom trawl net (Norwegian Campell Trawl) with 20 mm cod-end mesh-size. Trawl stations took place during day light with a mean tow duration of 60 minutes and mean trawl speed of 3.5 knots.

The following tables present the sampling data collected by INIP/IPMAR for hake (<u>Merluccius</u> <u>merluccius</u>), black scabbard fish (<u>Aphanopus carbo</u>), some species of seabreams (<u>Boops boops</u>, <u>Pagellus acarne</u> and <u>Spondyliosoma cantharus</u>), monkfish (<u>Lophius budegassa</u> and <u>Lophius piscatorius</u>) and megrim (<u>Lepidorhombus boscii</u> and <u>Lepidorhombus whiffiagonis</u>).

SAMPLING DATA FOR:

PORTUGAL

HAKE

92		Number o	of samples Number of f	
Area	Quarter	Research vessel Market samples		measured
	1	80	484	32492
	2		435	21337
IXa 3 4	3	70	353	23470
	4	113	375	22062
	Total:	263	1647	99361

SAMPLING DATA FOR:

BLACK SCABBARD FISH

PORTUGAL

192		Number o	of samples	Number of fish	
Area	Quarter	Research vessel	Market samples	measured	
	1	-	25	1582	
	2	-	21	1755	
IXa	3		38	3174	
	4		30	2806	
	Total:	-	114	9317	

Boops boops

PORTUGAL

1992		Number of samples		Number of fish	
Area	Quarter	Research vessel	Market samples	measured	
	1	37	28	3179	
	2	-	24	1017	
IXa	3	24	16	2173	
	4	25	28	1942	
	Total:	86	96	8311	

SAMPLING DATA FOR:

Pagellus acarne

PORTUGAL

992		Number of samples		Number of fish	
Area	Quarter	Research vessel	Market samples	measured	
	1	18	36	2245	
	2	-	51	2854	
IXa	3	15	37	2736	
	4	14	56	3359	
	Total:	47	180	11194	

SAMPLING DATA FOR:

Spondyliosoma cantharus

PORTUGAL

92		Number of samples		Number of fish	
Area	Quarter	Research vessel	Market samples	measured	
	1	13	16	438	
	2	-	16	312	
IXa	3	15	13	543	
	4	11	22	596	
	Total:	29	67	1889	

SAMPLING DATA FOR:

MONKFISH

PORTUGAL

(Lophius budegassa and Lophius piscatorius)

992		Number o	r of samples Number of fish	Number of fish
Area	Quarter	Research vessel	Market samples	measured
	1	9	175	4008
	2	*	89	1133
IXa	3	2	53	269
	4	1	100	733
	Total:	12	417	6143

SAMPLING DATA FOR:

MEGRIM

PORTUGAL

Lepidorhombus boscii and Lepidorhombus whiffiagonis

1992		Number of samples		Number of fish
Area	Quarter	Research vessel	Market samples	measured
	1	27	-	176
	2	-	-	-
IXa	3	27	-	107
	4	19		118
	Total:	73	-	401

RUSSIA

(F. M. Troyanovsky)

In 1992, as in preceding years, the trawl-, trawl-acoustic and ichthyoplankton surveys were conducted to assess abundance and biomass of the main commercial fishes, possible recruitment of the abundant demersal fish species to commercial stocks in the Barents Sea area and adjacent waters.

Studies on effect of abiotic and biotic factors of environment upon fish ditribution and behaviour have been proceeded. Population structure, dynamics of biological parameters, trophic interrelations between stocks and migrations of main commercial fishes have been studied.

Following tables include material collected in 1992.

SAMPLING DATA FOR:

COD

RUSSIA

1992			Number of fish	
Area	Quarter	Measured	Feeding analysis	Aged
	1	18802	2362	851
	2	30452	2478	103
I	3	7956	450	-
	4	90584	10401	2874
	Total:	147794	15691	3828
Area	Quarter	Measured	Feeding analysis	Aged
The second secon	1	4547	613	-
	2	25738	3064	644
IIa	3		-	-
	4	3337	689	191
	Total:	33622	4366	835
Area	Quarter	Measured	Feeding analysis	Aged
	1	464	50	-
	2	4890	658	308
IIb	3	15998	2053	728
	4	79913	5625	1612
	Total:	101265	8386	2648
Total in all ar	eas:	282681	28443	7311

SAMPLING DATA FOR:

HADDOCK

92		Number of fish		
Area	Quarter	Measured	Feeding analysis	Aged
	1	8603	809	559
	2	8734	402	256
I	3	470	75	-
	4	136799	9239	2764
	Total:	154606	10525	3579

92			Number of fish	
Area	Quarter	Measured	Feeding analysis	Aged
	1	67	-	-
	2	1419	350	325
IIa	3	Ξ,	-	-
	4	2600	666	441
	Total:	4086	1016	766
Area	Quarter	Measured	Feeding analysis	Aged
	1	-	-	-
	2	877	135	110
IIb	3	62	_	-
	4	17966	623	571
	Total:	18905	758	681
tal in all ar	eas:	177597	12299	5026

REDFISH (Sebastes marinus)

RUSSIA

1992			Number of fish		
Area	Quarter	Measured	Feeding analysis	Aged	
	1	779	100	100	
	2	1567	-	-	
I	3	-	-	-	
	4	3316	454	448	
	Total:	5662	554	548	
Area	Quarter	Measured	Feeding analysis	Aged	
	1	3114	405	80	
	2	6258	1313	838	
IIa	3	-	-	_	
	4	9759	438	438	
	Total:	19131	2156	1356	
Area	Quarter	Measured	Feeding analysis	Aged	
n ca Marinda India dan casi sembalan balan sebahai	1	98	-	-	
	2	10802	1644	619	
IIb	3	838	-	-	
	4	26743	579	579	
	Total:	38481	2223	1198	
Total in all ar	eas:	63274	4933	3102	

SAMPLING DATA FOR:

GREENLAND HALIBUT

2		Number of fish		
Area	Quarter	Measured	Feeding analysis	Aged
	1	22	6	-
	2	587	-	_
I	3	-	-	-
	4	629	84	-
	Total:	1238	90	0

992		Number of fish				
Area	Quarter	Measured	Feeding analysis	Aged		
	1	1312	434	301		
	2	323	95	95		
IIa	3		-			
	4	1079	152	127		
	Total:	2714	681	523		
Area	Quarter	Measured	Feeding analysis	Aged		
	1	306	50	-		
	2	740	203	203		
IIb	3	307	-	-		
	4	9421	700	556		
	Total:	10774	953	759		
otal in all ar	eas:	14726	1724	1282		

SAITHE

RUSSIA

92		Number of fish			
Area Quarter		Measured	Feeding analysis	Aged	
	1	7	-	-	
	2	32	-	-	
I	3	109	-	-	
	4	79		-	
	Total:	227	0	0	
Area	Quarter	Measured	Feeding analysis	Aged	
	1	1	-	-	
	2	381	59	59	
IIa	3	\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\	-	-	
	4	13	-		
	Total:	395	59	59	
Area	Quarter	Measured	Feeding analysis	Aged	
	1	-	-	-	
	2	4	-	-	
IIb	3	E	-	-	
	4	104	-	-	
	Total:	104	0	0	
tal in all ar	eas:	726	59	59	

SAMPLING DATA FOR:

CATFISH

92		Number of fish			
Area Quarter		Measured	Feeding analysis	Aged	
	1	90	30	7	
I	2	-	-	-	
	3	26	-	-	
	4	733	284	1	
	Total:	849	314	8	

1992		Number of fish				
Area	Quarter	Measured	Feeding analysis	Aged		
	1	11	11	-		
	2	36	21	21		
IIa	3	-	-			
	4	42	17	4		
	Total:	89	49	25		
Area	Quarter	Measured	Feeding analysis	Aged		
	1	1	1	-		
	2	244	88	66		
IIb	3	97	88	88		
	4	1963	754	81		
	Total:	2305	931	235		
otal in all ar	eas:	3243	1294	268		

PLAICE

RUSSIA

992			Number of fish		
Area	Quarter	Measured	Feeding analysis	Aged	
	1	53	-	-	
	2	-	-	-	
I	Pack Pack	-			
	4	6448	273	273	
	Total:	6501	273	273	
Area	Quarter	Measured	Feeding analysis	Aged	
	1	-	-	-	
	2	-		-	
IIa	3		a -	-	
	4	- 1	-	-	
	Total:	0	0	0	
Area	Quarter	Measured	Feeding analysis	Aged	
	1	-	-	-	
	2	-	-	-	
IIb	3		- *	9	
	4		-	=	
	Total:	0	0	0	
otal in all ar	eas:	6501	273	273	

SAMPLING DATA FOR:

LONG ROUGH DAB

		Number of fish		
Area	Quarter	Measured	Feeding analysis	Aged
	1	1256	88	88
	2	-	-	Ε.
I	3	-	-	
	4	17755	463	213
	Total:	19011	551	301

.992		Number of fish			
Area	Quarter	Measured	Feeding analysis	Aged	
	1	19	-	-	
	2	219	65	65	
IIa	3	3	-	-	
	4	691	12	12	
	Total:	929	77	77	
Area	Quarter	Measured	Feeding analysis	Aged	
	1	-	-	-	
	2	901	246	246	
IIb	3	619	275	200	
	4	11914	547	397	
	Total:	13434	1068	843	
otal in all ar	eas:	33374	1696	1221	

SPAIN

(F. J. Pereiro)

In 1992 two groundfish surveys have been conducted, one covering the continental shelf of Galicia and Cantabrian Sea (Divisions VIIIc and IXa North) on board of *R/V Cornide de Saavedra* in September-October to estimate recruitment indices of hake, as well as indices of abundance and spatial distribution patterns of the main demersal species. In addition 5 945 stomachs from 55 species belonging to the demersal community were analyzed at sea. The other groundfish survey conducted on board *R/V F. de P. Navarro* covered the Gulf of Cadiz (Division IXa South) and the aim was to estimate abundance indices and distribution patterns of the most important species.

Following the recommendation of the Study Group on the Coordination of Bottom Trawl Surveys in Subareas VI, VII and VIII and Division IXa, a comparison of fishing gear performance between Spain (*R/V Cornide de Saavedra*-Baka trawl) and France (*R/V Thalassa*-GOV trawl) was conducted (19 hauls).

The results of the sampling programme on board of the Spanish commercial fleet fishing for cod were as follows:

COD

SPAIN

1992		Commercial vessel samples				
Area	Quarter	N samples	N measured	N aged		
	1	-	-	-		
	2	-	-	-		
I	3	-	-	-		
	4	6	1739	-		
	Total:	6	1739	0		
Area	Quarter	N samples	N measured	N aged		
	1	-	-	-		
	2	12	3820	214		
IIb	3	10	2353	542		
	4	35	9793	680		
	Total:	57	15966	1436		
Total number		63	17705	1436		

Number of samples, fish measured and aged on board of research vessels and in the market sampling programme are given in the following tables:

SAMPLING DATA FOR:

HAKE

1992		Number of samples		Number of fi	Number of fish	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	3	203	-	
	2	-	7	1097	=	
VI	3	-	1	91	-	
	4	-	5	441	-	
	Total:	0	16	1832	0	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	28	6545	-	
	2	-	30	7757	=	
VII	3	-	29	6079	+	
	4	-	27	6125	-	
	Total:	0	114	26506	0	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	95	14374	-	
	2	-	82	13048	1 5 7:	
VIIIa, b	3	-	73	14547	122	
	4	6	77	11735	-	
	Total:	6	327	53704	0	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	77	6669	-	
	2	-	82	6675	19	
VIIIc	3	37	61	7850	-	
	4	61	84	6678	-	
	Total:	98	304	27872	0	

1992		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	-	41	3973	-
	2	-	31	3348	-
IXa	3	40	38	6879	-
	4	-	35	2906	-
	Total:	40	145	17106	0
Total in all ar	eas	144	906	127020	0

Lepidorhombus whiffiagonis

1992		Number of sa	amples	Number of fi	Number of fish	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	8	543	-	
	2	-	8	660	=	
VI	3	-	4	244	-	
	4	-	6	506	-	
	Total:	0	26	1953	0	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	24	3714	338	
	2	-	29	4943	355	
VII	3	-	31	4911	70	
	4	-	24	3590	201	
	Total:	0	108	17158	964	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	43	3258	61	
	2	-	29	2156	243	
VIIIa, b	3	-	32	2211	256	
	4	5	30	1663	90	
	Total:	5	134	9288	650	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	32	1949	=	
	2	-	34	2001	-	
VIIIc	3	27	34	2232	125	
	4	56	36	4479	512	
	Total:	83	136	10661	637	
Area	Quarter	Research	Market	Measured	Aged	
	1	-	3	77	72	
	2	-	2	178	175	
IXa	3	-	3	198	192	
	4	-	2	191	185	
	Total:	0	10	644	624	
Total in all are	eas	88	414	39704	2875	

Lepidorhombus boscii

SPAIN

1992		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	-	5	110	-
	2	-	3	37	1
VI	3	-	4	117	-
	4	-	4	103	I.A.
	Total:	0	16	367	0
Area	Quarter	Research	Market	Measured	Aged
	1	-	22	1203	-
	2	-	23	619	46
VII	3	-	23	1104	41
	4		18	1066	24
	Total:	0	86	3992	111
Area	Quarter	Research	Market	Measured	Aged
	1	-	33	371	35
	2	-	23	506	78
VIIIa, b	3	-	28	497	134
	4	5	29	822	145
	Total:	5	113	2196	392
Area	Quarter	Research	Market	Measured	Aged
	1	-	32	1419	-
	2	-	34	1821	-
VIIIc	3	39	34	3551	472
	4	61	36	6773	117
	Total:	100	136	13564	589
Area	Quarter	Research	Market	Measured	Aged
	1	-	13 .	1383	57
	2	-	12	1128	29
IXa	3	20	12	1875	267
	4	-	8	795	69
	Total:	20	45	5181	422
Total in all are	as	125	396	25300	1514

SAMPLING DATA FOR:

Lophius budegassa

92		Number of s	Number of samples		sh
Area	Quarter	Research	Market	Measured	Aged
-	1	-	2	36	-
	2	-	6	352	-
VI	3	-	-	-	-
	4	-		-	-
	Total:	0	8	388	0
Area	Quarter	Research	Market	Measured	Aged
***************************************	1	-	19	1420	-
	2	-	27	1777	-
VII	3	-	26	1923	-
	4	-	19	1134	-
	Total:	0	91	6254	0

1992		Number of s	amples	Number of fi	ish
Area	Quarter	Research	Market	Measured	Aged
	1	-	51	2076	-
	2	-	32	1887	-
VIIIa, b	3	-	38	1663	-
	4	4	39	2147	<u>.</u>
	Total:	4	160	7773	0
Area	Quarter	Research	Market	Measured	Aged
	1	-	34	1131	-
	2	-	38	1572	-
VIIIc	3	14	35	770	¥.
	4	28	43	556	-
	Total:	42	150	4029	0
Area	Quarter	Research	Market	Measured	Aged
	1	-	4	148	-
	2	-	5	433	-
IXa	3	-	3	91	-
	4	9	5	207	-
	Total:	9	17	879	0
Total in all are	eas	55	426	19323	0

Lophius piscatorius

92		Number of s	amples	Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	-	5	326	-
	2	-	9	660	-
VI	3	-	4	262	
	4	-	6	496	-
	Total:	0	24	1744	0
Area	Quarter	Research	Market	Measured	Aged
	1	-	19	1171	-
	2	-	28	1366	
VII	3	-	26	1613	-
	4		20	1287	-
	Total:	0	93	5437	0
Area	Quarter	Research	Market	Measured	Aged
	1	-	48	1794	-
	2	-	32	1283	-
VIIIa, b	3	-	38	1328	=
	4	4	40	1606	- 5
	Total:	4	158	6011	0
Area	Quarter	Research	Market	Measured	Aged
	1	-	34	965	-
	2	-	38	1410	-
VIIIc	3	17	34	1087	-
	4	49	44	1114	273
	Total:	66	150	4576	273

1992		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	-	2	10	-
	2	-	5	66	n=
IXa	3		3	37	-
	4	- 1	3	18	-
	Total:	0	13	131	0
Total in all areas		70	438	17899	273

Pagellus bogaraveo

SPAIN

1992		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	-	20	507	-
	2	-	24	798	-
VIIIc	3	-	13	245	
	4	-	13	183	-
	Total:	0	70	1733	0

SWEDEN

(P.-O. Larsson)

An IBTS ("Young Fish Survey") was performed in February in Division IIIa and the eastern North Sea. Bottom trawl surveys were also made in Division IIIa in the third quarter.

In May coordinated surveys with a Danish, a Norwegian and a Swedish vessel were performed in Division IIIa and eastern North Sea in a project partly financed by the Nordic Council of Ministers. Fishing was done with a MIK trawl and the aim was to study the distribution of cod larvae and fry. Age (days) and length distribution in relation to hydrographic features were used in an attempt to verify the hypothesis that the Skagerrak cod stock is recruited mainly from spawning grounds in northeastern North Sea. The results obtained so far indicate that this is the case.

The research project on flatfish recruitment, started in 1991, was continued with sampling of 0-group plaice and flounder in shallow nursery areas.

A few hundred 0-group cod (12 - 17 cm), resulting from a small hatchery-rearing experiment with Skagerrak coastal cod, were tagged and released in a fjord close to Lysekil.

Numbers of fish sampled for size and age are given in the following tables:

COD

SWEDEN

92		Number of samples		Number of fish			
				Measured		Aged	
Area	Quarter	Research	Market	Research	Market	Research	Market
	1	47	-	3657	-1	939	-
	2	- 1	10	-	2328	-	793
IIIa	3	45	4	4086	1630	858	817
	4	-	8	-	1479	-	598
	Total:	92	22	7743	5437	1797	2208

SAMPLING DATA FOR:

HADDOCK

SWEDEN

1992		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	47	-	1529	259
	2	-	-	- 1	-
IIIa	3	45		2674	155
	4	-	-	- 1	-
	Total:	92	0	4203	414

SAMPLING DATA FOR:

WHITING

SWEDEN

92		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	47	• • • • • • • • • • • • • • • • • • •	4231	433
	2		-	-	L
IIIa	3	45	-	5366	414
	4	-	-	-	-
	Total:	92	0	9597	847

SAMPLING DATA FOR:

NORWAY POUT

SWEDEN

92		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	47	-	1536	162
	2	- 1	-	-	-
IIIa	3	45	-	3358	63
	4		-	-	-
	Total:	92	0	4894	225

SAMPLING DATA FOR:

PLAICE

SWEDEN

992		Number of samples		Number of fish	
Area	Quarter	Research	Market	Measured	Aged
	1	47	-	852	576
	2		-	-	-
IIIa	3	45	-	755	421
	4	-	-	-	-
	Total:	92	0	1607	997

UNITED KINGDOM (England and Wales)

(C. T. Macer)

The following research vessel cruises took place in 1992:

R/V CIROLANA surveys in 1992

Survey no.	Period	Locality	Activities
3	19/2-10/3	North Sea	Stomach content examination Fishing ground comparisons
4	18/3-15/4	South Western Approaches Western Channel	PHH trawl survey
9	14/8-14/9	North Sea	GOV trawl survey Macrobenthos survey Antroprogenic debris survey
11	20/10-23/11	North Sea	GOV trawl survey Macrobenthos survey Antroprogenic debris survey

R/V CORYSTES surveys in 1992

Survey no.	Period	Locality	Activities
7	4/6-19/6	North Sea	0-group gastric evacuation study
9	29/7-13/8	Southern Bight, Channel	Beam trawl survey
10b	28/8-21/9	Irish Sea, Bristol Channel	Beam trawl survey Pre-recruit survey
13	10/11-3/12	Western Channel	Beam trawl pre-recruit survey

GOV = Grande Ouverture Verticale

PHH = Portuguese High Headline

The market sampling programme was continued in 1992. Details of number of fish sampled, measured and aged are presented in the tables.

ANGLER FISH

UNITED KINGDOM (England and Wales)

992			Market s	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	218	-	-
	2	1	53	-	-
VIIa	3	-	- 1	-	-
	4	-	-) -	-
	Total:	3	271	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	119	-	-
	2	-	-	-	-
VIId	3	-	-	1-	Ħ
	4	-		-	-
	Total:	1	119	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	10	987	-	-
	2	7	1057	-	-
VIIe	3	14	1235	~	-
	4	16	1046	-	=
	Total:	47	4325	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	3	477	-	-
	2	4	212	+	-
VIIf	3	1	52	-	-
	4	3	435	-	-
	Total:	11	1176	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	124	-	-
	2	3	221	-	-
VIIg	3	1	147	-	-
	4	1	150	-	-
	Total:	6	642	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	5	704	-	-
	2	5	912	-	œ
VIIh	3	4	635		-
	4	2	184	-	-
	Total:	16	2435	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	68	-	-
	2	-		-	H
VIIj	3		=	-	-
	4	-	-	-	-
	Total:	1	68	0	0

BASS

UNITED KINGDOM (England and Wales)

92 Area Quarter			Market	samples	Research vessel	
		N samples	mples N measured N aged		N aged	
	1	2	2	1	-	
IVc	2	13	46	27	-	
	3	23	257	56	-	
	4	12	31	18	-	
	Total:	50	336	102	0	
Area	Quarter	N samples	N measured	N aged	N aged	
	1	2	13	-	-	
	2	5	56	9	-	
VIIa	3	13	341	8	-	
	4	4	59	-	-	
	Total:	24	469	17	0	
Area	Quarter	N samples	N measured	N aged	N aged	
	1	-	-	1	-	
	2	9	91	11	-	
VIId	3	23	1164	16	-	
	4	4	26	7	7.	
	Total:	36	1281	35	0	
Area	Quarter	N samples	N measured	N aged	N aged	
COLOR DE LOS DE COLOR DE LOS D	1	9	307	98	-	
	2	8	28	25	-	
VIIe	3	13	79	70	-	
	4	11	263	53	2	
	Total:	41	677	246	2	
Area	Quarter	N samples	N measured	N aged	N aged	
	1	-	-	-	-	
	2	3	11	-	-	
VIII	3	2	2	-	-	
	4	-	-	-	-	
	Total:	5	13	0	0	
Area	Quarter	N samples	N measured	N aged	N aged	
-	1	-	-	-	-	
	2	2	28		-	
VIIg	3	1	99	-	-	
	4	-	-	1-1	-	
	Total:	3	127	0	0	

SAMPLING DATA FOR:

COD

			Market samples		Research vessel	
Area	Quarter	N samples	N measured	N aged	N aged	
Managaran maran maran an a	1	6	784	221	-	
	2	2	358	92	-	
IIa	3	-	-	-	-	
	4	-	-	1-	-	
	Total:	8	1142	313	0	

1992			Market s	amples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	3	448	82	-
IIb	3	1	131	88	-
	4	-	-	-	-
	Total:	4	579	170	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	383	52	214
	2	15	1493	192	-
IVa	3	5	507	56	334
	4	3	361	24	339
	Total:	25	2744	324	887
Area	Quarter	N samples	N measured	N aged	N aged
	1	120	16720	1429	259
	2	150	21057	1483	262
IVb	3	126	17449	1402	362 268
	4	107	16990	1318	
	Total:	503	72216	5632	889
Area	Quarter	N samples	N measured	N aged	N aged
	1	24	1541	265	6
	2	20	1623	329	-
IVc	3	15	1066	162	8
	4	25	2508	318	82
	Total:	84	6738	1074	96
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	357	-	-
	2	1	180	35	-
VIa	3	-	-	-	_
	4	2	400	44	-
	Total:	5	937	79	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	218	37	-
	2	-	-	-	
VIb	3	-	-		
	4		210	37	0
	Total:	2	218		N aged
Area	Quarter	N samples	N measured	N aged	
	1	12	1681	171	-
XIXI.	2	12 14	1702 1753	152 165	38
VIIa	3 4	19	2424	103	-
	Total:	57	7560	591	38
		N samples	N measured	N aged	N aged
Area	Quarter			N aged	in ageu
	1 2	9	252	30	
VIId	2 3		-		
YIIG	4	3	98	58	10
	Total:	12	350	114	10
	Total.	12	550	1	

1992	992		Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	11	611	154	-
	2	8	554	99	-
VIIe	3	5	162	112	-
	4	8	467	53	2
	Total:	32	1794	418	2
Area	Quarter	N samples	N measured	N aged	N aged
	1	9	849	65	6
	2	3	338	33	
VIIf	3	-	-	-	-
	4	-	-	*	: -
	Total:	12	1187	98	6
Area	Quarter	N samples	N measured	N aged	N aged
	1	3	290	=/	84
	2	4	255	-	-
VIIg	3	1	61	-	-
	4	1	105	-	-
	Total:	9	711	0	84
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	71	-	13
	2	2	105	-	¥
VIIh	3	1	55	-	-
	4	2	195	24	-
	Total:	6	426	24	13
Area	Quarter	N samples	N measured	N aged	N aged
M-01400-00-00-00-00-00-00-00-00-00-00-00-00-	1	2	265	-	7
	2	1	84	•	
VIIj	3	-		-	-
	4	-	-	-1	-
	Total:	3	349	0	7

SPURDOG

		Market samples			Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	35	-	-
	2	-	-	=	-
IVa	3	1	42	-	-
	4	-	-	-	-
	Total:	2	77	0	0
Area	Quarter	N samples	N measured	N aged	N aged
eas and the check the state of	1	7	121	-	-
	2	13	802	8	-
IVb	3	14	667	-	-
	4	7	236	-	-
	Total:	41	1826	0	0

1992	92		Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	10	469	-	æ
	2	8	558	-	-
IVc	3	3	24	=	1-
	4	9	416	-	-
	Total:	30	1467	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	=	-
VIa	3	1.	142	-	
	4	-	-	-	-
	Total:	1	142	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	4	307	-	÷
VIIa	3	9	807	-	-
	4	2	219	-	-
	Total:	15	1333	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	92	-	-
	2	-	-	-	-
VIIg	3	-	-	- "	-
	4	-	-	-	-
	Total:	1	92	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	1	7	-	-
VIIe	3	-	-	-	-
	4	-	-	-	-
	Total:	1	7	0	0

HADDOCK

			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	6	963	212	-
	2	-	-	-	-
IIa	3	-	-	-	*
	4	-	-		-
	Total:	6	963	212	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	2	393	78	-
IIb	3	-	-	-	
	4	-	-	-	-
	Total:	2	393	78	0

1992			Market	samples	Research vessel
Area	Quarter	N samples	N samples N measured N aged		N aged
**************************************	1	7	1255	90	280
	2	7	1083	99	-
IVa	3	2	379	36	823
	4	2	408	32	726
	Total:	18	3125	257	1829
Area	Quarter	N samples	N measured	N aged	N aged
	1	73	9176	714	147
	2	94	12786	787	-
IVb	3	85	11184	803	491
	4	60	9600	720	422
	Total:	312	42746	3024	1060
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	47	5	-
	2	1	18	7	æ
IVc	3	-	-	-	-
	4	-	-	-	-
	Total:	2	65	12	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	305	15	-
	2	-	-	-	-
VIb	3	-	-	-	-
	4	-	-	-	-
	Total:	1	305	15	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	71	-	-
	2	¥:	-	-	-
VIIa	3	-	-	-	-
	4	-	-	-	-
	Total:	1	71	0	0

HERRING

			Market s	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	247
	2	-	-	-	-
IVa	3	-	-	*	481
	4	-	-	-	-
	Total:	0	0	0	728
Area	Quarter	N samples	N measured	N aged	N aged
The second secon	1	-	- 1	-	262
	2	-		-	
IVb	3	-	-	-	538
	4	-	-	-	-
	Total:	0	0	0	800

			Market s	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	8	1788	404	5
	2	1~	-	k.	-
IVc	3	-	- 1	*	62
	4	3	606	*	-
	Total:	11	2394	404	67
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	100
	2	-		-	-
VIIe	3	-			*1
	4	*		×	-
	Total:	0	0	0	100

HAKE

992			Market s	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	258	-,	-
	2	1	226		-
VIa	3	-	-		
	4	+	-		-
	Total:	2	484	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	69
	2	*	- 1		-
VII	3		-		
	4	-	-	=	*
	Total:	0	0	0	69
Area	Quarter	N samples	N measured	N aged	N aged
	1	6	1045	*	-
	2	3	648	*	-
VIIa	3	1	91	-	
	4	-	-	-	+
	Total:	10	1784	0	0
Area	Quarter	N samples	N measured	N aged	N aged
A	1	13	1243	-	-
	2	8	917		
VIIe	3	8	633	-	-
	4	4	351	-	-
	Total:	33	3144	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	3	394	-	-
	2	5	295		
VIIf	3	2	193		- 1
	4	3	476	-	
	Total:	13	1358	0	0

1992	992		Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	4	346	-	-
	2	2	381	-	-
VIIg	3	2	241	-	-
	4	1	91	-	-
	Total:	9	1059	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	36	-	-
	2	5	585	-	-
VIIh	3	4	444	-	-
	4	-	-	-	
	Total:	10	1065	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	309	-	-
	2	-	-	-	-
VIIj	3	-	-	-	-
	4	1	131		-
	Total:	3	440	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	70
	2	-	-	*	-
VIII	3	-	-	-	-
	4	-	-	-	-
	Total:	0	0	0	70

HORSE MACKEREL

UNITED KINGDOM (England and Wales)

2		Market samples			Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
<u> </u>	1	1	120	-	-
	2	-	-	I.e.	-
VIIe	3	-	- 1	-	-
	4	-	-	-	-
	Total:	1	120	0	0

SAMPLING DATA FOR:

LEMON SOLE

02		Market samples			Research vessel	
Area	Quarter	N samples N measured N aged			N aged	
	1	-	-	-	-	
	2	-	-	-	-	
VIIa	3	-	- 1	-	51	
	4	-	-	-	-	
	Total:	0	0	0	51	

1992	192		Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	10	1593	167	20
	2	11	1745	141	,
VIIe	3	11	1504	121	:-
	4	8	903	110	18
	Total:	40	5745	539	38
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	240	-	9
	2	.1	152	-	-
VIIf	3	1	134	- 1	17
	4	1	166	-	-
	Total:	4	692	0	26
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	78
	2	1-	-1	-	-
VIIg	3	1-	-	-	-
	4	1	73	-	-
	Total:	1	73	0	78
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	290	-	-
	2	1-	-	-	1-
VIIh	3	1	109	-	-
	4	2	254	* -	2
	Total:	5	653	0	2
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	14
	2	l=	-1	-	-
VIIj	3	1-	-	-	-
	4	-	-	*	-
	Total:	0	0	0	14
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	7
	2	-	-	4	-
VIIIa	3	#	-	-	-
	4	-	-	-	-
	Total:	0	0	0	7

MACKEREL

2		Market samples		samples	Research vessel	
Area	Quarter	N samples N measured N age		N aged	N aged	
	1	-	-	-	-	
	2	-	-	-	-	
IVa	3	-	-	-	98	
	4	-	-	-	-	
	Total:	0	0	0	98	

1992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	-
IVb	3	-	-	-	233
	4	-	-	-	-
	Total:	0	0	0	233
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	2
IVc	3	-	-	-	113
	4	-	-	-	-
	Total:	0	0	0	113
Area	Quarter	N samples	N measured	N aged	N aged
	1	10	1656	-	
	2	3	882	-	-
VIIe	3	1	181	-	-
	4	9	1366	-	-
	Total:	23	4085	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	:-
	2	-	-	-	-
VIIf	3	-	- 172	-	- 02
1	4	1	173	-	83
	Total:	1	173	0	83
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	114
	2	-	-	-	-
VIIg	3 4	-		-	
		0	0	0	114
	Total:				
Area	Quarter	N samples	N measured	N aged	N aged
	1 2	-	-	-	135
VIIh	3			_	
V 1111	4		-	-	-
	Total:	0	0	0	135
Area	Quarter	N samples	N measured	N aged	N aged
741.04	1	-	-		436
	2			-	-
VIIj	3	-	-	-	
	4	-	-	=	- "
	Total:	0	0	0	436
Area	Quarter	N samples	N measured	N aged	N aged
	1	-		-	166
	2	_	-	_	-
	3	_	-	-	
VIIIa			a contract of		t .
VIIIa	4	-	-	-	

MEGRIM

UNITED KINGDOM (England and Wales)

1992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	Ε.
	2	-	-	-	÷
VIIa	3	-	-	31	-
	4	-	-	-	-
	Total:	0	0	31	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	3	431	101	
VIIe	3	3	450	-	
	4	-	-	23	27
	Total:	6	881	124	27
Area	Quarter	N samples	N measured	N aged	N aged
	1	3	354	132	-
	2	-	-	-	
VIIf	3	1	170	24	÷
	4	2	214	, -	-
	Total:	6	738	156	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	63	83
	2	-	-	-	-
VIIg	3	1	124	-	
	4	2	314	-	-
	Total:	3	438	63	83
Area	Quarter	N samples	N measured	N aged	N aged
	1	3	378	-	131
	2	1	152	52	4
VIIh	3	2	322	72	-
	4	2	277	97	25
	Total:	8	1129	221	156
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	398
	2	1	174	-	-
VIIj	3	-	-	-	-
	4	-	-	-	
	Total:	1	174	0	398
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	10
	2	-			7
VIIIa	3	-	-	-	-
	4	-	-	-	-
	Total:	0	0	0	10

PILCHARD

UNITED KINGDOM (England and Wales)

1992	92		Market samples		Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	6	664	-	124
	2	-	-	-	
VIIe	3	-	-	-	-
	4	1	110	-	-
	Total:	7	774	0	124
Area	Quarter	N samples	N measured	N aged	N aged
	1	1-	-	-	88
	2	-	1-	-	-
VIIIa	3	-	-	-	-
	4		-	-	-
	Total:	0	0	0	88

SAMPLING DATA FOR:

PLAICE

1992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	13	2669	189	-
IVa	3	2	330	24	57
	4	2	307	25	35
	Total:	17	3306	238	92
Area	Quarter	N samples	N measured	N aged	N aged
Arabicata antikaanis, kojin uziko propinina	1	40	7417	614	-
	2	30	6641	480	-
IVb	3	45	9638	728	255
	4	44	8652	656	316
	Total:	159	32348	2478	571
Area	Quarter	N samples	N measured	N aged	N aged
	1	6	710	-	-
	2	1	44	-	
IVc	3	1	89	-	54
	4	1	58	-	39
	Total:	9	901	0	93
Area	Quarter	N samples	N measured	N aged	N aged
	1	10	1609	135	-
	2	12	2304	207	-
VIIa	3	17	2280	216	449
	4	10	1375	151	-
	Total:	49	7568	709	449
Area	Quarter	N samples	N measured	N aged	N aged
	1	40	4440	469	-
	2	22	2029	344	-
VIId	3	19	1965	227	420
	4	11	1233	384	-
	Total:	92	9667	1424	420

992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	18	2202	324	9
	2	16	2420	225	
VIIe	3	16	2167	346	-
	4	14	1999	500	111
	Total:	64	8788	1395	120
Area	Quarter	N samples	N measured	N aged	N aged
	1	3	526	-	2
	2	2	333	-	-
VIIf	3	1	82	96	179
	4	2	285	135	-
	Total:	8	1226	231	181
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	86	-	20
	2	2	604		-
VIIg	3	-	-	24	
	4	1	62	5	· ±
	Total:	4	752	29	20
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	129	-	2
	2	-	-	58	-
VIIh	3	2	208	23	-
	4	-	-	52	*
	Total:	4	337	133	2
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	6
	2	1	85	-	
VIIj	3	-	-		-
	4	-	-	-	-
	Total:	1	85	0	6

SAITHE

92			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	5	278	-	31
	2	3	377	-	-
IVa	3	2	100	-	186
	4	3	379	-	190
	Total:	13	1134	0	407
Area	Quarter	N samples	N measured	N aged	N aged
	1	5	172	-	-
	2	9	455	-	-
IVb	3	8	259	-	20
	4	4	149	-	1
	Total:	26	1035	0	21

992	12		Market samples		Research vessel		
Area	Quarter	N samples 1	Quarter N samples	Quarter N samples N measured	N measured N aged	N aged	N aged
	1	1	148	-	-		
	2	-	-	-	-		
VIb	3	-	-	=	-		
	4	-	-	-	-		
	Total:	1	148	0	0		

SOLE

992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N measured N aged	N aged
	1	32	3194	339	-
	2	18	1190	70	-
IVb	3	20	1543	101	7
	4	20	1729	293	-
	Total:	90	7656	803	7
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	255	40	-
	2	22	2637	324	-
IVc	3	27	2775	344	17
	4	8	759	173	-
,	Total:	59	6426	881	17
Area	Quarter	N samples	N measured	N aged	N aged
	1	15	2582	162	-
	2	15	2700	206	-
VIIa	3	11	1771	198	430
	4	8	1143	145	-
	Total:	49	8196	711	430
Area	Quarter	N samples	N measured	N aged	N aged
	1	26	2811	299	-
	2	38	4342	1060	-
VIId	3	10	1524	138	877
	4	3	867	99	-
	Total:	77	9544	1596	877
Area	Quarter	N samples	N measured	N aged	N aged
	1	27	2764	342	-
	2	25	2706	211	-
VIIe	3	26	2502	318	-
	4	25	2836	404	175
	Total:	103	10808	1275	175
Area	Quarter	N samples	N measured	N aged	N aged
	1	11	1968	142	-
	2	5	664	75	-
VIIf	3	1	226	72	169
	4	4	564	62	-
	Total:	21	3422	351	169

2			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
2645-2545-2544-2554-444-25-244-24	1	3	514	67	1
	2	5	966	54	-
VIIg	3	3	584	71	-
	4	3	570	72	
	Total:	14	2634	264	1
Area	Quarter	N samples	N measured	N aged	N aged
	1	6	723	-	-
	2	6	857	57	-
VIIh	3	7	1097	72	-
	4	6	570	119	4
	Total:	25	3247	248	4
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	1
	2	-	-	-	
VIIIa	3	-	œ	-	-
	4		-	-	-
	Total:	0	0	0	1

WHITING

1992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	165
	2	-	-	-	-
IVa	3	2	182	38	609
	4	-	-	-	825
	Total:	2	182	38	1599
Area	Quarter	N samples	N measured	N aged	N aged
	1	43	4088	600	275
	2	50	4896	520	-
IVb	3	44	3357	487	690
	4	42	4039	498	934
	Total:	179	16380	2105	1899
Area	Quarter	N samples	N measured	N aged	N aged
	1	12	477	131	5
	2	11	559	180	-
IVc	3	6	417	73	102
	4	10	908	143	145
	Total:	39	2361	527	252
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	1	146	~ ×	-
VIa	3	-	- 1	-	*
	4	·-	-	-	-
	Total:	1	146	0	0

1992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	15	1773	-	-
	2	17	2107	-	-
VIIa	3	20	2161	-	94
	4	16	1577	-	-
	Total:	68	7618	0	94
Area	Quarter	N samples	N measured	N aged	N aged
	1	3	127	-	-
	2	1	31	-	-
VIId	3	-	-	- '	-
	4	2	98		-
	Total:	6	256	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	13	2169	-	(-
	2	9	1475	-	-
VIIe	3	7	1222	-	-
	4	14	2088	-	-
	Total:	43	6954	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	2	192	-	-
	2	2	193	-	
VIIf	3	3	302	-	-
	4	1	153	-	-
	Total:	8	840	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	1	151	-	-
	2	2	116	-	× .
VIIg	3	-		-	
	4	-	-	-	
	Total:	3	267	0	0
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	
VIIh	3	-		*	-
	4	1	170	-	2

MEDITERRANEAN HORSE MACKEREL

92			Market s	Research vessel		
Area	Quarter	N samples	N measured	N aged	N aged	
	1	-	-	-	1	
	2	-	-	-		
VIIIa	3	-		165		
	4	-	-	1-1	-	
	Total:	0	0	0	1	

FOUR SPOT MEGRIM

UNITED KINGDOM (England and Wales)

1992	192		Market samples		Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	2
	2	-	-	=	-
VIIh	3	-	-	-	-
	4	-	-	-	-
	Total:	0	0	0	2
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	90
	2	-	-		-
VIIj	3	-	-	-	-
	4	-	-	-	-
	Total:	0	0	0	90

SAMPLING DATA FOR:

Lophius piscatorius

2			Market s	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	-
IVa	3	-	-	-	26
	4	-	-	=	19
	Total:	0	0	0	45
Area	Quarter	N samples	N measured	N aged	N aged
	1	=:	-	=	-
	2	<u> -</u> :	-	-	-
IVb	3	-	-	-	5
	4	-	-	-	8
	Total:	0	0	0	13
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	-
VIIa	3	-	-	-	32
	4	-	-	-	-
	Total:	0	0	0	32
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	4
	2	-	-	-	-
VIIe	3	-	-	-	-
	4	-	-	L	17
	Total:	0	0	0	21
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-		
VIIf	3	-	-	-	14
	4	-	-	-	-
	Total:	0	0	0	14

1992			Market	samples	Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	1
	2	-	- 1	-	-
VIIg	3		-		-
	4	*	-	-	-
	Total:	0	0	0	1
Area	Quarter	N samples	N measured	N aged	N aged
AND RESIDENCE OF STREET, WHEN STREET,	1	-	-	-	2
	2	-	-	-	-
VIIh	3	-	-	-	-
	4		-	-	5
	Total:	0	0	0	7
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	3
	2			-	-
VIIj	3	-	-	-	-
	4				-
	Total:	0	0	0	3

Lophius budegassa

2			Market s	Research vessel	
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	2
	2		-	-	-
VIIe	3		-	-	-
	4	-	-	1	-
	Total:	0	0	0	2
Area	Quarter	N samples	N measured	N aged	N aged
	1		-	-	2
	2				-
VIIh	3		-	7	-
	4	-	- 1	-	3
	Total:	0	0	0	5
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	5
	2	-	- 1		-
VIIj	3	-	-	-	-
	4		-	-	-
	Total:	0	0	0	5
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	2
	2	-	la.	*	-
VIIIa	3	*	-	-	-
	4	-	-	1	-
	Total:	0	0	0	2

SPRAT

UNITED KINGDOM (England and Wales)

92	Market samples		samples	Research vessel	
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	97
	2	-		-	*
IVa	3	-	-	-	-
	4	-	-	-	-
	Total:	0	0	0	97
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	247
	2	-	-	1-	-
IVb	3	-	-	-	-
	4	-	-	-	-
	Total:	0	0	0	247
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	54
	2	-	-	-	-
IVc	3	-	-	-	(4
	4	-			-
	Total:	0	0	0	54

SAMPLING DATA FOR:

BRILL

UNITED KINGDOM (England and Wales)

2		Market samples			Research vessel	
Area	Quarter	N samples	N measured	N aged	N aged	
	1	-	-	-	-	
	2	-	-	-	-	
VIId	3	-	-	-	17	
	4	-	-	-	-	
	Total:	0	0	0	17	

SAMPLING DATA FOR:

DAB

2		Market samples			Research vessel	
Area	Quarter	N samples	N measured	N aged	N aged	
	1	-	- 1	•	-	
	2	-	-	-	-	
VIId	3	-	- 1	-	253	
	4	-	-	-	-	
	Total:	0	0	0	253	

FOUR BEARDED ROCKLING

UNITED KINGDOM (England and Wales)

992		Market samples			Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	-
IVa	3	-	-	-	38
	4	-		-	34
	Total:	0	0	0	72
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	-
IVb	3	-	-	-	24
	4	-	-	-	10
	Total:	0	0	0	34

SAMPLING DATA FOR:

GREY GURNARD

UNITED KINGDOM (England and Wales)

1992			Market	Research vessel	
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-	*		-
IVa	3	-	-		73
	4	-	-	-	57
	Total:	0	0	0	130
Area	Quarter	N samples	N measured	N aged	N aged
	1	-		-	-
	2	-	-	-	-
IVb	3	-	-	-	284
	4	-	-	-	212
	Total:	0	0	0	496
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-		-	
IVc	3	-	-	-	9
	4	-	-	н	-
	Total:	0	0	0	9

SAMPLING DATA FOR:

NORWAY POUT

992	92		Market s	Research vessel	
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	-		-	-
IVa	3	-			244
	4	- 1	-	-	246
	Total:	0	0	0	490

92		Market samples			Research vessel
Area	Area Quarter		N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	.=	-
IVb	3	-	1 - 1	12	93
	4	-	- 1	-	181
	Total:	0	0	0	274

TURBOT

UNITED KINGDOM (England and Wales)

992		Market samples			Research vessel
Area	Area Quarter		N measured	N aged	N aged
	1	-	-	-	-
	2	-	-	-	-
VIId	3	i= "	-	×	10
	4	-	-	-	-
	Total:	0	0	0	10

SAMPLING DATA FOR:

TUSK

UNITED KINGDOM (England and Wales)

92		Market samples			Research vessel
Area	Quarter	N samples	N measured	N aged	N aged
	1	-	-	-	-
	2	:-	-	-	-
IVa	3	-	-	-	9
	4	-	-	-	13
	Total:	0	0	0	22

SAMPLING DATA FOR:

POLLACK

UNITED KINGDOM (England and Wales)

Area Quarter		Market samples			Research vessel
		N samples	N measured	N aged	N aged
	1	-	- 1	-	-
	2	-	-	-	-
IVa	3	-	-	-	3
	4	-	-	-	3
	Total:	0	0	0	6

UNITED KINGDOM (Scotland)

(P. A. Kunzlik)

< No report received >

U. S. A.

(F. Serchuk and B. Rothschild)

The U.S.A. had no fisheries and no research vessel activity on demersal fish in the ICES area in 1992. Activities in the Northwest Atlantic have been reported to NAFO.

*		

F