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Report of Activities

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DEMERSAL FISH COMMITTEE

by

B. Vaske

1983

BELGIUM

(R. De Clerck)

Recording of densities and growth rates of the 1982 and 1983 year classes of sole, plaice, dab, flounder, cod and whiting was carried out.

Two cruises were also undertaken for the international demersal young fish survey.

The market sampling was continued covering cod (North Sea), whiting (North Sea), haddock (North Sea), plaice and sole (North Sea, English Channel, Celtic Sea and Irish Sea).

Species Area	Season	No of samples		No of samples	
		Research	Market	Measured	Aged
Sole	1	-	13	1319	210
IV	2	-	12	1471	210
	3	-	11	1198	210
	4	-	12	1240	210
VII f,g	1	-	12	1239	200
	2	-	4	329	210
	3	-	1	70	70
	4	-	8	778	210
VII a	1	-	-	-	-
	2	-	4	373	210
	3	-	-	-	-
	4	-	-	-	-
VII d,e	1	-	3	252	140
	2	-	2	190	190
	3	-	2	140	140
	4	-	2	140	140
Plaice	1	-	13	784	160
IV	2	-	12	800	150
	3	-	11	702	140
	4	-	12	694	140
VII f,g	1	-	12	646	120
	2	-	4	164	110
	3	-	1	40	40
	4	-	8	413	120
VII a	1	-	-	-	-
	2	-	4	187	150
	3	-	-	-	-
	4	-	-	-	-
VII d,e	1	-	3	155	90
	2	-	2	100	100
	3	-	2	90	90
	4	-	2	90	90

Species	Season	No of samples		No of samples	
Area		Research	Market	Measured	Aged
Cod	1	-	9	647	203
IV	2	-	12	917	315
	3	-	8	704	202
	4	-	10	991	230
Whiting	1	-	11	555	140
IV	2	-	15	1181	205
	3	-	11	799	150
	4	-	12	1054	150
Haddock	1-4	-	15	1702	150
IV					

CANADA

(No Report received)

DENMARK

(K. Popp Madsen)

COD.

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Belt Sea	1	Consum.*)	-	9	178	178	-
	2	"	-	8	193	193	-
	3	"	-	8	210	210	-
	4	"	-	7	241	241	-
Skager-	1	consum.	-	18	434	434	-
	2	"	-	19	390	390	-
	3	"	-	17	318	318	-
	4	"	-	18	413	413	-
Katte- gar	1	consum.	-	20	495	495	-
	2	"	-	16	429	429	-
	3	"	-	13	439	439	-
	4	"	-	19	455	455	-
North Sea	1	consum.	-	24	628	628	-
	2	"	-	24	552	552	-
	3	"	-	20	438	438	-
	4	"	-	29	604	604	-
Baltic	1	consum.	-	9	820	820	-
	2	"	-	3	296	296	-
	3	"	-	-	-	-	-
	4	"	-	12	1061	1061	-

*) for human consumption

COD

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
4 A	1	Industr.	-	4	7	7	-
	2	"	-	3	4	4	-
	3	"	-	6	13	13	-
	4	"	-	13	26	26	-
4 B	1	industr.	-	-	-	-	-
	2	"	-	-	-	-	-
	3	"	-	6	24	24	-
	4	"	-	3	23	23	-
4 C	1	industr.	-	-	-	-	-
	2	"	-	-	-	-	-
	3	"	-	-	-	-	-
	4	"	-	-	-	-	-
North Sea	1	industr.	-	4	7	7	-
	2	"	-	3	4	4	-
	3	"	-	12	37	37	-
	4	"	-	16	49	49	-

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Skager-rak	1	Industr.	-	10	91	90	-
	2	"	-	24	214	214	-
	3	"	-	31	373	373	-
	4	"	-	23	360	360	-
Katte-gat	1	"	-	7	40	40	-
	2	"	-	16	155	155	-
	3	"	-	2	5	5	-
	4	"	-	13	82	80	-

WHITING

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
4 A	1	Industr.	-	20	76	75	-
	2	"	-	1	1	1	-
	3	"	-	13	54	53	-
	4	"	-	28	124	123	-
4 B	1	industr.	-	8	371	282	-
	2	"	-	6	8	8	-
	3	"	-	12	109	109	-
	4	"	-	16	157	149	-
4 C	1	industr.	-	-	-	-	-
	2	"	-	-	-	-	-
	3	"	-	-	-	-	-
	4	"	-	1	2	2	-
North Sea	1	industr.	-	28	447	357	-
	2	"	-	7	9	9	-
	3	"	-	25	163	162	-
	4	"	-	45	283	274	-

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Skager-rak	1	Industr.	-	11	169	169	-
	2	-	-	23	214	214	-
	3	-	-	30	2208	2208	-
	4	-	-	19	1114	1114	-
Katte-gat	1	industr.	-	10	73	73	-
	2	"	-	22	456	456	-
	3	"	-	5	874	874	-
	4	"	-	16	1136	1136	-
Baltic	1	industr.	-	1	1	1	-
	2	"	-	-	-	-	-
	3	"	-	-	-	-	-
	4	"	-	-	-	-	-

HADDOCK.

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
4 A	1	Industr.	-	47	231	219	-
	2	"	-	7	18	18	-
	3	"	-	27	268	267	-
	4	"	-	60	505	503	-
4 B	1	industr.	-	-	-	-	-
	2	"	-	2	2	2	-
	3	"	-	4	5	5	-
	4	"	-	3	6	6	-
4 C	1	industr.	-	-	-	-	-
	2	"	-	-	-	-	-
	3	"	-	-	-	-	-
	4	"	-	-	-	-	-
North Sea	1	industr.	-	47	231	219	-
	2	"	-	9	20	20	-
	3	"	-	31	273	272	-
	4	"	-	63	511	509	-

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Skager-rak	1	Industr.	-	11	123	123	-
	2	"	-	26	110	109	-
	3	"	-	34	225	223	-
	4	"	-	23	501	501	-
Katte-gat	1	Industr.	-	1	1	1	-
	2	"	-	9	37	35	-
	3	"	-	1	5	5	-
	4	"	-	8	27	27	-

HADDOCK.

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
North Sea	1	consum.*)	-	6	699	699	-
	2	"	-	6	585	585	-
	3	"	-	3	278	278	-
	4	"	-	3	265	265	-
Skager-rak	1	"	-	-	-	-	-
	2	"	-	-	-	-	-
	3	"	-	3	250	250	-
	4	"	-	3	297	297	-

*) for human consumption

NORWAY POUT

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
4 A	1	Industr.	-	62	6587	6466	-
	2	"	-	11	829	829	-
	3	"	-	31	3371	3371	-
	4	"	-	60	6666	6666	-
4 B	1	Industr.	-	-	-	-	-
	2	"	-	2	212	212	-
	3	"	-	-	-	-	-
	4	"	-	-	-	-	-
North Sea	1	Industr.	-	62	6587	6466	-
	2	"	-	13	1041	1041	-
	3	"	-	31	3371	3371	-
	4	"	-	60	6666	6666	-

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Skager-rak	1	Industr.	-	5	188	188	-
	2	"	-	23	1382	1280	-
	3	"	-	28	1483	1483	-
	4	"	-	20	927	923	-
Katte-gat	1	"	-	-	-	-	-
	2	"	-	12	656	656	-
	3	"	-	-	-	-	-
	4	"	-	1	92	92	-

SANDEEL

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
4 A	1	Industr.	-	-	-	-	-
	2	"	-	-	-	-	-
	3	"	-	-	-	-	-
	4	"	-	-	-	-	-
4 B	1	industr.	-	-	-	-	-
	2	"	-	89	9259	8630	-
	3	"	-	13	1362	1362	-
	4	"	-	-	-	-	-
4 C	1	industr.	-	-	-	-	-
	2	"	-	2	195	195	-
	3	"	-	6	626	435	-
	4	"	-	-	-	-	-
North Sea	1	industr.	-	-	-	-	-
	2	"	-	91	9454	8825	-
	3	"	-	19	1988	1797	-
	4	"	-	-	-	-	-

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Skager-rak	1	Industr.	-	-	-	-	-
	2	"	-	9	979	979	-
	3	"	-	12	1386	1386	-
	4	"	-	-	-	-	-
Katte-gat	1	industr.	-	-	-	-	-
	2	"	-	1	85	-	-
	3	"	-	-	-	-	-
	4	"	-	-	-	-	-

SAITHE

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Skager-rak	1	industr.	-	-	-	-	-
	2	"	-	6	6	-	-
	3	"	-	4	27	-	-
	4	"	-	-	-	-	-
Katte-gat	1	industr.	-	-	-	-	-
	2	"	-	6	11	-	-
	3	"	-	1	1	1	-
	4	"	-	-	-	-	-

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
North Sea	1	consum.*)	-	3	307	307	-
	2	"	-	4	423	423	-
	3	"	-	-	-	-	-
	4	"	-	4	379	379	-
Skager-rak	1	consum.	-	1	97	97	-
	2	"	-	-	-	-	-
	3	"	-	4	403	403	-
	4	"	-	-	-	-	-

*) for human consumption

PLAICE.

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Skager-rak	1	consum.*)	-	9	1087	1087	-
	2	"	-	10	1016	1016	-
	3	"	-	9	980	980	-
	4	"	-	9	976	976	-
Katte-gat	1	consum.	-	13	1198	1198	-
	2	"	-	12	1323	1323	-
	3	"	-	11	1173	1173	-
	4	"	-	14	1494	1494	-
North Sea	1	consum.	-	15	1483	1483	-
	2	"	-	14	1218	1218	-
	3	"	-	12	956	956	-
	4	"	-	16	1395	1395	-

COMMON SOLE.

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Katte-gat	1	consum.*)	-	2	189	189	-
	2	"	-	5	315	315	-
	3	"	-	2	175	175	-
	4	"	-	3	328	328	-
North Sea	1	consum.	-	-	-	-	-
	2	"	-	4	758	488	-
	3	"	-	-	-	-	-
	4	"	-	-	-	-	-

*) for human consumption.

DAB.

Area	Season	Type of fish	No of samples		No of fish		
			Research vessel	Market	Measured	Aged	Examined racially
Katte-gat	1	consum.*)	-	1	102	102	-
	2	"	-	1	152	152	-
	3	"	-	1	206	206	-
	4	"	-	1	173	173	-

*) for human consumption

FINLAND

(V. Sjöblom & E. Aro)

No work was carried out on demersal fish other than that reported to the Baltic Fish Committee.

FRANCE

(B. Mesnil)

I. Statistiques de capture et d'effort.

L'implantation du système national de recueil et traitement des statistiques de pêche s'est poursuivie en 1983 avec la prise en charge des ports de Bretagne Sud (Lorient, Concarneau, Douarnenez et les 4 ports bigoudens) et de Manche Est (Cherbourg et Port-en-Bessin). Ce système fournit des états de capture et d'effort par espèce et catégorie, secteur et métier (classe de navire et type d'engin) pour les débarquements effectués en criée.

Le port de Boulogne-sur-Mer conserve un système indépendant mais qui fournit des résultats analogues. Il a été légèrement amendé en 1983 par la prise en compte d'une subdivision de la flottille en classes de navires selon la puissance motrice : il était en effet apparu que celle-ci détermine très étroitement le type d'activité et sa distribution géographique. On peut ainsi affiner en particulier la mesure de l'effort de pêche (désormais exprimé en heure de pêche en plus de l'unité standard pondérée par les puissances) par secteur et par métier.

II. Campagnes scientifiques à la mer.

La France a maintenu sa participation aux campagnes internationales coordonnées par le CIEM, à savoir l'International Young Fish Survey (5 février au 11 mars 1983 ; 41 stations en IV B, 2 en IV A et 11 en VI A) et la Demersal Young Fish Survey (6-22 septembre 1983 ; 25 stations en IV C Sud, 28 en VII D Nord, en zone côtière).

Pour répondre à un voeu exprimé par le Conseil, une campagne de marquage de lieu noir adulte a été effectuée sur les accores Nord-Ouest des Iles Britanniques du 10 mai au 9 juin 1983 ; 942 individus ont été marqués dans le secteur IV A (57 stations), 327 en VI A (27 stations).

Se sont également poursuivis les programmes propres au Golfe de Gascogne : campagnes trimestrielles SOLMER d'échantillonnage du merlu et de la sole (18 stations en février, 21 en mai, 26 en juillet, 26 en octobre) et campagne annuelle CRUGAS d'évaluation du recrutement de merlu (28 stations en novembre-décembre 1983), complétées par des observations directes à bord de navires professionnels.

Enfin, une campagne de mesure de la sélectivité a été menée en Manche Occidentale (VII E) du 16 au 25 mars 1983 (8 stations).

III. Echantillonnage.

Les opérations d'échantillonnage à la mer et à terre sont résumées dans les tableaux joints. Ceux-ci appellent les remarques suivantes :

- Selon les ports, le nombre d'échantillons mentionné peut recouvrir des entités très hétérogènes (nombre de navires, de lots ou de caisses, de séances d'échantillonnage), ce qui empêche parfois de préciser la taille des échantillons.

- Les clés taille-âge des gadidés de Mer du Nord sont établies pour l'ensemble du stock et l'on ne peut donc en général indiquer la taille des échantillons d'ageage prélevés dans chaque secteur (IV A à IV C).

- Le nombre d'individus effectivement mesurés au cours de la campagne IYFS (échantillons scientifiques en IV B et VI A au 1er trimestre) n'ayant pu être retrouvé, on a indiqué entre parenthèses le nombre total de poissons capturés dans chaque secteur.

ESPECE	SECTEUR CIEM	SAISON	NOMBRE D'ECHANTILLONS		NOMBRE DE POISSONS		
			NAVIRES DE RECHERCHE	APPORTS COMMERCIAUX	MESURÉS	AGÉS	AUTRES MESURES
LIEU NOIR	IV A	1er T	2	45	+	+	
		2e T	57		1379	437	942 marqués
				68	+	+	
		3e T		42	+	+	
		4e T		39	+	+	
	IV B	1er T		3	+	+	
		2e T		10	+	+	
		3e T		8	+	+	
		4e T		1	+	+	
	V B	2e T		4	+		
		3e T		4	+		
	VI A	1er T	11		80	73	
				+	876	363	
		2e T	27		450	223	327 marqués
				+	1002	233	
		3e T		+	940	105	
		4e T		+	1214	209	
	VII A	2e T		2	+		
	VII J	1e T		3	+		
		2e T		4	+		
MORUE	II A	2e T		2	+		
		3e T		1	+		
	IV A	1er T	2	73	+	371	
		2e T		67	+	527	
		3e T		65	+	679	
		4e T		79	+	342	
	IV B	1e T	41		1729	781	+ sexe et maturité
				20	+		
		2e T		20	+		
		3e T		21	+	Cf.IVA	
		4e T		19	+		
	IV C	1er T		53	+		
		2e T		23	+		
		3e T		43	+	Cf.IVA	
		4e T		36	+		
	V B	1e T		1	+		
		2e T		4	+		
		3e T		3	+		

ESPECE	SECTEUR CIEM	SAISON	NOMBRE D'ECHANTILLONS		NOMBRE DE POISSONS		
			NAVIRES DE RECHERCHE	APPORTS COMMERCIAUX	MESURÉS	AGÉS	AUTRES MESURES
MORUE (suite)	VI A	1er T	11		261	259	+ sexe et maturité
				+	1332	271	
		2e T		+	1100	201	
		3e T		+	1205	215	
		4e T			1056	181	
	VII A	1er T		5	+		
		2e T		5	+		
	VII D	1er T		2	135		
		2e T		3	149		
		4e T		3	+		
	VII E	1er T		2	39		
		2e T		1	48		
		3e T		4	189		
	VII F-G	1er T		+	1717	293	
					1213	234	
					1494	274	
					851	158	
EGLEFIN	II A	2e T		1	+		
		3e T		1	+		
	IV A	1er T	2		432		+ sexe et maturité
				68	+	918	
		2e T		61	+	915	
		3e T		49	+	973	
		4e T		55	+	294	
	IV B	1er T	41		(5869)	350	+ d°
				20	+		
		2e T		18	+		
		3e T		19	+	Cf.IVA	
		4e T		15	+		
	IV C	1er T		11	+		
		2e T		10	+	Cf.IVA	
		3e T		32	+		
		4e T		5	+		
	V B	2e T		1	+		
	VI A	1er T	11		(9034)	309	+ d°
				+	1188	420	
		2e T		+	1180	262	
		3e T		+	1359	276	
		4e T			1411	289	

ESPECE	SECTEUR CIEM	SAISON	NOMBRE D'ECHANTILLONS		NOMBRE DE POISSONS		
			NAVIRES DE RECHERCHE	APPORTS COMMERCIAUX	MESURÉS	AGÉS	AUTRES MESURES
MERLAN	IV A	1er T	2	57	+	415	
		2e T		81	+	524	
		3e T		62	+	840	
		4e T		61	+	402	
	IV B	1er T	41		(14215)	1374	
				17	+		
		2e T		23	+	Cf.IVA	
		3e T		24	+		
		4e T		20	+		
	IV C	1er T		55	+		
		2e T		23	+	Cf.IVA	
		3e T		43	+		
		4e T		37	+		
	V B	2e T		2	+		
		3e T		1			
	VI A	1er T	11		(6743)	240	
				+	1285	266	
		2e T		+	764	374	
		3e T		+	+	240	
		4e T		+	585	119	
	VII A	1er T		+	449	91	
		2e T		+	919	163	
		3e T		+	1643	248	
		4e T		+	267	48	
	VII D	1er T		4+	313	1487	
		2e T		4+	296	867	
		3e T		+	+	772	
		4e T		2+	139	433	
	VII E	3e T		4	316		
		4e T		2	160		
	VII F-G	1er T		+	2029	310	
		2e T		+	1305	248	
		3e T		+	1646	298	
		4e T		+	1387	255	
MERLU	VI	1er T	11		50		
				5	280		
	VII	1er T		10	345		
		2e T		13	447		
		3e T		21	841		
		4e T		24	756		

ESPECE	SECTEUR CIEM	SAISON	NOMBRE D'ÉCHANTILLONS		NOMBRE DE POISSONS		
			NAVIRES DE RECHERCHE	APPORTS COMMERCIAUX	MESURÉS	AGÉS	AUTRES MESURES
MERLU (suite)	VIII A-B	1er T	18		1291	279	
				81	5773		
		2e T	21		3598	264	
				72	4235		
		3e T	26		3694	520	
				29	2773		
		4e T	54		6670	483	
				76	3850	799	
TACAUD NORVEGIEN	IV B	1er T	21		+	135	
	VI A	1er T	11		+	104	
ASPITRIGLA CUCULLUS	VII E	1er T	8		1588		
SOLE	IV C	2e T	18		459	65	
		3e T	43		1859	204	
	VII D	1er T		12	1372		
		2e T		36	3269		
		3e T	188		1706	134	
				8	736		
		4e T		3	279		
	VII E	4e T		1	111		
	VIII A-B	1er T	18		467	415	
				38	2517	93	
		2e T	21		330	330	
				36	2728	89	
		3e T	26		435	302	
				27	2705	160	
		4e T	26		762	661	
				33	2152	135	
PLIE	IV B	1er T	41		2458		
	IV C	2e T	18		996	89	
		3e T	43		1592	101	
	VII D	1er T		12	1331		
		2e T		22	1640		
		3e T	188		3658	222	
				11	1176		
		4e T		10	566		

ESPECE	SECTEUR CIEM	SAISON	NOMBRE D'ECHANTILLONS		NOMBRE DE POISSONS		
			NAVIRES DE RECHERCHE	APPORTS COMMERCIAUX	MESURÉS	AGÉS	AUTRES MESURES
LIMANDE	IV B	1er T	41		(19055)		
	IV C	2e T	18		469	68	
		3e T	43		2033	74	
	VII D	3e T	188		6740	192	

German Democratic Republic

(B. Vaske)

The following sampling of length and age distributions has been carried out in 1983

Species/ Area	Season Quarter	No of Samples		No. of fish	
		Research vessel	Commercial vessel	Measured	Aged
Redfish (S.mentella)					
IIa	II		18	2354	1153
	III	24		6209	1360
XIVa	II		3	792	127
XIVa	III		9	1750	
Greenland halibut					
IIb	II		11	2601	712
IIb	III	25		2601	1270
IIb	III		1	198	100

Research vessel survey

Area	Date	Objective
Spitsbergen (Svalbard)	22,7,-28.7.1983	Redfish - Greenland halibut survey

FEDERAL REPUBLIC OF GERMANY

(G. Rauck)

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

This sampling scheme, including length frequency measurements, otolith samplings, single weights of fish, tagging of fish, stomach sampling, as well as studies on fish density and distribution of demersal fish species were carried out during ground fish surveys.

The monthly bycatch analysis of the shrimp fishery as well as joint investigations in the Wadden Sea area of Niedersachsen and Schleswig-Holstein have been continued in spring and autumn together with vessels from the Netherlands and Belgium.

Investigations on cod discards in the commercial fisheries and cod selectivity studies using mesh sizes of 90 and 100 mm mesh openings were carried out in the German Bight.

A ground fish survey covering most parts of the North Sea and investigations on haddock at Rockall Bank have been carried out and will be continued for the coming years.

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

R.V. "Walther Herwig"

Months	ICES area	Objectives
Jan./Febr.	VIab, Rockall	Groundfish survey
Febr./March	IIa, IVa, Va, VIab, VIIg-k	Groundfish and pelagic fish survey
Apr./May	VIab, VIIg-k	Groundfish survey
July/Aug.	IVa, Vb, VIab, VIIa, VIIbc, VIId-k, XIV	Groundfish and pelagic fish survey
Sept./Oct.	XIV	Groundfish survey
R.V. "Anton Dohrn"		
Jan.	IVb	Groundfish survey, fish diseases
Febr./March	IVabc	IHFS
March/Apr.	VIa, VIIbc, VIIg-k VIIde	Groundfish and pelagic fish survey
June/July	IVbc	Groundfish survey
Aug./Sept.	VIa, VIIbc, VIIg-k, VIIde	Groundfish/pelagic fish survey

R.V. "Solea"

Months	ICES area	Objectives
January	IVbc	Groundfish survey
February	IVb	Groundfish survey
June	IVb	Sole beam trawl survey, set net, turbot
July/August	IVb	Groundfish survey/ fish diseases
Aug./Sept.	IVe	
September	IVab	Groundfish survey
Nov./Dec.	IVb	Groundfish survey

Species Area	Season	Research Vessel Samples				Market Samples		
		No. of Samples	No. of Fish Measured	No. of Fish Aged	Racial Investigation	No. of Samples	No. Of Fish Measured	No. Of Fish Aged
Cod:								
IIa	I, II	3	701	393				
IVa	I	91	1421	734				
	II	80	677	472				
	III	12	1098					
	IV	25	444					
IVb	I	124	9265	1241				
	II	104	1751	551				
	III	85	5790					
	IV	46	7835	501				
IVc	I	27	498	31				
VIa	III	27	185					
VIIbc	III	5	8					
XIVb	I					4	1504	409
	II	4	651	492		3	635	492
	III					1	207	119
	IV	21	2097	1020				

Species Area	Season	Research Vessel Samples				Market Samples		
		No. of Samples	No. of Fish			No. of Samples	No. Of Fish	
			Measured	Aged	Racial Investigation		Measured	Aged
Haddock:								
IIa	I, II	4	971	510				
	I							
	II							
	III							
IIb								
IVa	I	56	14295	1559				
	II	92	19510	678				
	III	21	4774					
	IV							
IVb	I	35	3820	789				
	II	82	8826	638				
	III	17	3855					
	IV	1	748	290				
IVc	I							
	II							
	III							
	IV							
VIa	III	37	6808					
VIIbc	III	7	354					

Species Area	Season	Research Vessel Samples				Market Samples		
		No. of Samples	No. of Fish Measured	No. of Fish Aged	Racial Investigation	No. of Samples	No. Of Fish Measured	No. Of Fish Aged
Whiting:								
IVa	I	55	5434	269				
	II	74	1806	137				
	III	17	2655					
	IV							
IVb	I	73	5067	419				
	II	71	3327	98				
	III	26	10757					
	IV	28	2110					
IVc	I	18	993					
VIa	III	34	2726					
VIIb	III	4	49					
Saithe:								
IIa	I					4	1536	955
	II					5	1404	852
IVa	I	1	501	501		3	792	541
	II					7	3008	1595
	III	20	1473	746		6	2264	1044
	IV					2	981	532
Va	III	1	226	226				
VIa	I	1	1296	1296		4	1618	189
VIb	I	1	136	136		2	987	-

Species Area	Season	Research Vessel Samples				Market Samples		
		No. of Samples	No. of Fish Measured	No. of Fish Aged	Racial Investigation	No. of Samples	No. Of Fish Measured	No. Of Fish Aged
Pollock:								
IVa	III	1	206	159				
Blue Ling								
Vb	I	1	1346	1346		2	377	208
	II	1	175	175		2	388	210
	III					1	197	117
	IV					2	438	249
VIa		1	214	214				
VIb		1	310	310				
XIV	II					3	770	428
	III					3	630	355
	IV	1	250	250		3	603	356
Norway Pout								
IVa	I	53	4263					
	II	86	10667					
IVb	I	26	1572					
	II	27	1701					

Species Area	Season	Research Vessel Samples				Market Samples		
		No. of Samples	No. of Fish Measured	No. of Fish Aged	Racial Investigation	No. of Samples	No. Of Fish Measured	No. Of Fish Aged
Plaice:								
IVb	I	54	2610			4	3203	509
	II	180	12682			6	4275	467
	III	171	18498			4	2497	423
	IV	175	5900			2	889	406
IVc	I	13	374					
Sole:								
IVb	I					1	59	59
	II	187	4202	854		1	103	103
	III	171	623			1	524	267
	IV	110	161			10	421	309
Dab:								
IVb	I	126	8906					
	II	256	19230					
	III	172	7003					
	IV	112	2243					
IVc	I	12	824					
Flounder:								
IVb	I	7	204					
	II	86	449					
	III	71	375					
	IV							

Species Area	Season	Research Vessel Samples				Market Samples		
		No. of Samples	No. of Fish Measured	Aged	Racial Investigation	No. of Samples	No. Of Fish Measured	No. Of Fish Aged
Turbot:								
IVb	I					1	44	44
	II	1	241	241		2	144	143
	III							
	IV					2	61	19
Greenland Halibut:								
XIV	II,III	28	206	206		6	2478	2478
Catfish:								
A.lupus								
VI	III	35	634	20				
A. minor								
VI	III	26	63					
A. dentic.								
VI	III	27	45					
Hake:								
VI	II	21	2104	1244				
VII		15	2352					

Species Area	Season	Research Vessel Samples				Market Samples		
		No. of Samples	No. of Fish Measured	No. of Fish Aged	Racial Investigation	No. of Samples	No. Of Fish Measured	No. Of Fish Aged
Redfish:								
S.marinus								
IIa	I					2	782	300
	II					1	377	162
XIV	I					3	1516	
	II					3	1266	200
	III	47	9625	932				
	IV	21	2555	640		4	2031	
S.mentella								
Vb	I					3	1879	650
	II					3	1664	283
	IV					3	1556	164
XIV	II					1	204	100
	III	27	5835	723		3	2157	200
	IV	33	6735	670		1	613	
Grenadier fish:								
Macrourus berglax								
XIV	IV	17	304	304				
Coryphaenoides rupestris								
VIa	I	13	1628	658				

ICELAND

(No report received)

IRELAND

R. Grainger

Port sampling of the commercial catches of cod, whiting and plaice in Divisions VIa and VIIa and of haddock in Division VIa continued.

A beam trawl survey for juvenile plaice in shallow water off the east coast of Ireland in May and September was also continued.

Species	Division	Port	Season	No. of samples	No. of fish measured	No. of fish aged
Cod	VIa	Killybegs	1	4	277	172
			2	5	108	100
			3	4	102	100
			4	5	127	121
		Greencastle	2	6	505	271
			4	13	364	261
			Total	37	1483	1025
	VIIa	Howth	1	7	268	203
			2	4	164	49
			3	1	40	20
			4	9	626	337
		Dunmore East	2	4	61	35
			4	9	354	179
			Total	34	1513	823

Species	Division	Port	Season	No. of samples	No. of fish measured	No. of fish aged
Haddock	VIa	Killybegs	1	6	406	150
			2	8	541	184
			3	3	299	163
			4	4	232	102
		Greencastle	2	5	406	180
			4	4	354	148
			Total	30	2238	927
Whiting	VIa	Killybegs	1	5	545	139
			2	3	639	92
			3	3	546	143
			4	4	643	121
		Greencastle	2	3	219	107
			4	3	374	126
			Total	21	2966	728
	VIIa	Howth	1	4	460	162
			2	2	270	114
			3	6	591	207
			4	6	754	173
		Skerries	3	1	160	
			4	1	150	
		Dunmore East	1	1	72	
			4	2	331	
			Total	23	2788	656

Species	Division	Port	Season	No. of samples	No. of fish measured		No. of fish aged	
					M[1]	F[2]	M[1]	F[2]
Plaice	VIIa	Killybegs	1	3	226	224	(157)	(134)
			2	3	273	225	(86)	(97)
			3	7	557	543	(127)	(156)
			4	2	173	63	(48	(39)
		Greencastle	2	5	227	269	(86)	(97)
			4	8	184	179	(118)	(127)
			Total	28	1640	1503	622	650
	VII a	Howth	1	5	475	268	120	153
			2	10	238	691	79	212
			3	5	315	387	147	242
			4	5	128	300	93	153
		Dunmore East	2	2	39	137	19	68
			4	4	274	378	103	134
			Total	31	1469	2161	551	962

Numbers in brackets denote otoliths collected but not yet aged.

1) = Males
2) = Females

Beam trawl survey for plaice in 1983

Month	May	September		Total
No. of hauls	39	37		
Age groups	1	0	1	
Male	51	189	284	524
Female	43	82	209	334
Total	94	271	493	858

NETHERLANDS

(F.A. van Beek)

In 1983 the market sampling of the Dutch landings was continued for the species brill, cod, haddock, plaice, sole, turbot and whiting. The market sampling is stratified on area basis (see figure 1 and 2 in last years Administrative Report). The number of fish measured and aged in each area is given in tables I to VII.

In April and September/October two Demersal Young Fish Surveys, directed on 0-, I- and II-Group plaice and sole and brown shrimps were carried out in the continental nurseries from the English Channel to Jammer Bay.
These surveys are carried out since 1969 in collaboration with Belgium and the Federal Republic of Germany. For The Netherlands R.V. "Tridens", R.V. "Stern", R.V. "Schollevaar" and the charter GO 29 participated in both surveys.

In the period February - May 6 larval surveys were carried out in the estuaries Easterscheldt and Waddensea with R.V. "Schollevaar" and R.V. "Stern".
In these surveys the migration and settling of plaice larvae in these areas is investigated.

In August/September a beam trawl survey was carried out in the central North Sea with the chartered vessel KW 34 (4 weeks). The main objective of this survey was to investigate the distribution and abundance of adult plaice.
The gear in use was a 14 meter beam trawl with 6 tickler chains.
The survey covered the area between 54°00'N - 58°30'N and 2°00'W - 8°00'E.

In February R.V. "Tridens" participated in the International Young Fish Surveys (IYFS). These surveys are carried out yearly since 1960.

In June R.V. "Tridens" participated in the International 0-Group Gadoid Survey. This survey was held for the 10th consecutive year and will not be continued in future.

In October/November R.V. "Tridens" carried out a survey in the southern North Sea with the GOV trawl directed on roundfish. This survey is held since 1980.

The survival of 0-Group plaice, caught by the Dutch shrimp fleet, was investigated in survival tanks on board and by means of tagging experiments. In June (2 weeks) and November/December (2 weeks) shrimps and bycatch were processed with 2 types of sieves (rotating sieve and shaking sieve) on board of R.V. "Stern" in the Waddensea. In each period 1500 tagged young plaice were released processed with one of the 2 sieves or direct from the catch. From the recaptures difference of mortality caused by the processing method can be estimated.

In orde to estimate the level of discarding of commercial species in the Dutch fishery nine trips were made on board of commercial vessels. Most of these trips were directed on roundfish discards (6 pair trawl, 2 otter trawl and 1 beam trawl).

The numer of otoliths collected in these surveys is also given in table I to VII.

TABLE I

SAMPLING DATA FOR ..BRILL.. 19..83

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES.Vessel
		measured	aged	aged
1	1st quarter	233	120	---
	2nd ,,	219	175	16
	3rd ,,	57	100	18
	4th ,,	71	67	---
2	1st quarter	208	118	---
	2nd ,,	239	125	27
	3rd ,,	156	70	27
	4th ,,	173	182	---
3	1st quarter	318	120	---
	2nd ,,	276	141	---
	3rd ,,	297	54	---
	4th ,,	373	40	---
Waddensea Estuary	1st quarter			---
	2nd ,,			5
	3rd ,,			25
	4th ,,			---
Zeeland Estuary	1st quarter			---
	2nd ,,			1
	3rd ,,			---
	4th ,,			---
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
Total Annually		2620	1312	119

SAMPLING DATA FOR ..COD..... 1983

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES.Vessel
		measured	aged	aged
1 Northern North Sea	1st quarter	---	---	232
	2nd ,,	---	---	---
	3rd ,,	---	---	---
	4th ,,	---	---	---
2 Central North Sea	1st quarter	---	---	30
	2nd ,,	259	109	---
	3rd ,,	185	60	---
	4th ,,	50	50	---
3 Northwestern North Sea	1st quarter	---	---	50
	2nd ,,	---	---	---
	3rd ,,	---	---	---
	4th ,,	---	---	---
4 Western North Sea	1st quarter	288	100	---
	2nd ,,	1254	164	---
	3rd ,,	176	140	---
	4th ,,	308	100	---
5 Southwestern North Sea	1st quarter	550	100	3
	2nd ,,	468	50	---
	3rd ,,	682	160	---
	4th ,,	171	100	35
6 Southern North Sea	1st quarter	2397	250	255
	2nd ,,	1714	150	---
	3rd ,,	1453	199	---
	4th ,,	1736	219	272
7 Eastern North Sea	1st quarter	---	---	---
	2nd ,,	---	---	---
	3rd ,,	54	---	---
	4th ,,	111	---	57
Total Annually		11856	1951	934

TABLE III

SAMPLING DATA FOR HADDOCK. 1983

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES.Vessel
		measured	aged	aged
1 Northern North Sea	1st quarter	---	---	222
	2nd ,,	---	---	---
	3rd ,,	---	---	---
	4th ,,	---	---	---
2 Central North Sea	1st quarter	---	---	30
	2nd ,,	374	75	---
	3rd ,,	105	---	---
	4th ,,	---	---	---
3 Northwestern North Sea	1st quarter	---	---	138
	2nd ,,	---	---	---
	3rd ,,	---	---	---
	4th ,,	---	---	---
4 Western North Sea	1st quarter	83	---	---
	2nd ,,	433	75	---
	3rd ,,	90	---	---
	4th ,,	140	---	---
5 Southwestern North Sea	1st quarter	67	---	---
	2nd ,,	---	---	---
	3rd ,,	134	45	---
	4th ,,	---	---	---
6 Southern North Sea	1st quarter	172	50	58
	2nd ,,	158	149	---
	3rd ,,	687	185	---
	4th ,,	75	---	16
7 Eastern North Sea	1st quarter	---	---	---
	2nd ,,	---	---	---
	3rd ,,	---	---	---
	4th ,,	107	---	11
Total Annually		2625	579	475

TABLE IV

SAMPLING DATA FOR PLAICE 1983.

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES. Vessel
		measured	aged	aged
IV B	3rd quarter		---	1010
VB	1st quarter		160	---
	2nd "		240	301
	3rd "		160	295
	4th "		240	314
DB (o)	1st quarter		399	---
	2nd "		160	773
	3rd "		240	96
	4th "		160	681
DB (w)	1st quarter		400	---
	2nd "		400	---
	3rd "		240	375
	4th "		320	---
F1	1st quarter		320	---
	2nd "		160	---
	3rd "		160	198
	4th "		80	---
O.G.	1st quarter		640	---
	2nd "		240	315
	3rd "		240	170
	4th "		240	294
D.W.K.	1st quarter		639	---
	2nd "		160	627
	3rd "		320	---
	4th "		320	577
Waddensea Estuary	1st quarter			---
	2nd "			458
	3rd "			---
	4th "			524
Zeeland Estuary	2nd quarter			66
	4th "			166
Total Annually			6638	7240

TABLE V

SAMPLING DATA FOR SOLE ..... 19..83

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES.Vessel
		measured	aged	aged
1	1st quarter		110	---
	2nd ,,		165	8
	3rd ,,		110	---
	4th ,,		55	55
2	1st quarter		55	---
	2nd ,,		275	234
	3rd ,,		110	---
	4th ,,		110	250
3	1st quarter		275	---
	2nd ,,		660	247
	3rd ,,		165	---
	4th ,,		165	249
4	1st quarter		110	---
	2nd ,,		220	109
	3rd ,,		110	---
	4th ,,		110	62
5	1st quarter		110	---
	2nd ,,		55	114
	3rd ,,		165	---
	4th ,,		110	83
6	1st quarter		110	
	2nd ,,		165	
	3rd ,,		110	
	4th ,,		110	
7	1st quarter		110	
	2nd ,,		110	
	3rd ,,		110	
	4th ,,		110	

TABLE V (CONTINUED)

SAMPLING DATA FOR ...SOLE... 19.83

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES.Vessel
		measured	aged	aged
Irish Sea	1st quarter		55	
	2nd ,,		165	
	3rd ,,		---	
	4th ,,		---	
Golf of Biscay	1st quarter		55	
	2nd ,,		---	
	3rd ,,		110	
	4th ,,		---	
Waddensea Estuary	1st quarter			---
	2nd ,,			203
	3rd ,,			---
	4th ,,			160
Zeeland Estuary	1st quarter			---
	2nd ,,			128
	3rd ,,			---
	4th ,,			76
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
Total Annually			4565	1948

TABLE VI

SAMPLING DATA FOR TURBOT 1983

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES.Vessel
		measured	aged	aged
1	1st quarter	360	113	---
	2nd ,,	384	186	18
	3rd ,,	88	197	15
	4th ,,	119	81	---
2	1st quarter	347	95	---
	2nd ,,	440	212	65
	3rd ,,	422	122	124
	4th ,,	307	96	---
3	1st quarter	497	93	---
	2nd ,,	519	103	---
	3rd ,,	694	156	---
	4th ,,	709	82	---
Waddensea Estuary	1st quarter			---
	2nd ,,			---
	3rd ,,			5
	4th ,,			---
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
	1st quarter			
	2nd ,,			
	3rd ,,			
	4th ,,			
Total Annually		4886	1536	222

TABLE VII

SAMPLING DATA FOR WHITING 1983

AREA	PERIOD	NBRS. of fish sampled		
		MARKET		RES.Vessel
		measured	aged	aged
1 Northern North Sea	1st quarter	---	---	124
	2nd "	---	---	---
	3rd "	---	---	---
	4th "	---	---	---
2 Central North Sea	1st quarter	---	---	5
	2nd "	380	101	---
	3rd "	116	---	---
	4th "	63	---	---
3 Northwestern North Sea	1st quarter	---	---	74
	2nd "	---	---	---
	3rd "	---	---	---
	4th "	---	---	---
4 Western North Sea	1st quarter	152	---	---
	2nd "	364	101	---
	3rd "	131	---	---
	4th "	108	---	---
5 Southwestern North Sea	1st quarter	538	---	20
	2nd "	552	50	---
	3rd "	754	100	---
	4th "	172	---	51
6 Southern North Sea	1st quarter	1441	100	126
	2nd "	1233	251	---
	3rd "	1839	200	---
	4th "	1935	100	363
7 Eastern North Sea	1st quarter	---	---	---
	2nd "	---	---	---
	3rd "	---	---	---
	4th "	---	---	50
Total Annually		9778	1003	813

NORWAY

(O.M. Smedstad)

Subareas I and II.

The research activities at sea increased in 1983 compared to previous years. The distribution of young cod and haddock were investigated during a combined acoustic and stratified bottom trawl survey in the Barents Sea in February - March. Two commercial trawlers were hired to participate in the stratified bottom trawl survey together with one research vessel. In May the distribution of young cod were investigated in the Bear Island area, in June young cod and haddock were investigated in the eastern and sentral Barents Sea, in September - October the distribution and abundance of cod, haddock, redfish, Greenland halibut and blue whiting were investigated in the Bear Island - West Spitsbergen area, and in October young cod and haddock were investigated in the eastern and sentral Barents Sea.
The investigations on the distribution and the drift of cod egg were continued in March - April, and investigations on larvae were carried out in May - July. In August - September the annual international 0-group fish survey were carried out in the Barents Sea and adjacent areas. The distribution of spawning cod in Lofoten and off Møre were investigated during the cruises. The distribution of silver smelt along the Norwegian coast were investigated during one survey in April.

Tagging experiments of the major roundfish species continued.

Subarea IV

The sampling of Recommendation 2 Fisheries in Division IV was continued. The distribution and abundance of I-and II-group gadoids were studied in February as part of the international surveys.

SAMPLING DATA FOR NORWAY POUT 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1					
	2					
	3					
	4					
II A	1					
	2					
	3					
	4					
II B	1					
	2					
	3					
	4					
IV A	1	18	30	3272	176	
	2	-	61	3521	66	
	3	-	78	5882	243	
	4	-	53	4787	94	
IV B	1					
	2					
	3					
	4					

SAMPLING DATA FOR SANDEEL 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1					
	2					
	3					
	4					
II A	1					
	2					
	3					
	4					
II B	1					
	2					
	3					
	4					
IV A	1	-	2	100	199	
	2	12	6	1073	356	
	3	-	-	-	-	
	4					
IV B	1	-	1	-	70	
	2	3	13	1215	186	
	3					
	4					

SAMPLING DATA FOR COD 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1	236	9	18793	2130	
	2	236	22	3865	1371	
	3	-	49	4637	2346	
	4	104	13	4032	1402	
II A	1	126	106	16072	7166	
	2	38	50	3361	2984	
	3	22	14	159	1218	
	4	13	4	762	381	
II B	1	-	-	-	-	
	2	88	-	1351	852	
	3	125	2	2658	854	
	4	-	-	-	-	
IV A	1	26	16	105	299	
	2	-	29	389	189	
	3	-	26	54	-	
	4	-	8	10	-	

SAMPLING DATA FOR HADDOCK 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1	241	5	23527	1154	
	2	163	9	3555	341	
	3	-	38	1830	1779	
	4	84	7	5023	584	
II A	1	124	22	8898	1010	
	2	32	7	667	501	
	3	-	4	-	116	
	4	13	6	637	492	
II B	1	-	-	-	-	
	2	52	-	482	-	
	3	38	-	381	-	
	4	-	-	-	-	
IV A	1	16	17	3127	748	
	2	-	32	842	-	
	3	-	33	329	-	
	4	-	24	326	-	

SAMPLING DATA FOR SAITHE 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1	27	-	294	173	
	2	14	11	717	33	
	3	-	6	489	77	
	4	-	2	80	246	
II A	1	45	36	5968	1341	
	2	-	31	1624	1823	
	3	-	39	2437	2331	
	4	-	23	1473	1401	
II B	1	-	-	-	-	
	2	-	-	-	-	
	3	14	-	134	-	
	4	-	-	-	-	
IV A	1	5	35	1229	156	
	2	-	33	1963	-	
	3	-	28	45	-	
	4	-	30	929	400	

SAMPLING DATA FOR GREENLAND HALIBUT 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1	73	-	430	250	
	2	42	1	175	327	
	3	-	1	226	-	
	4	23	-	50	-	
II A	1	14	-	50	-	
	2	16	-	44	-	
	3	-	-	-	-	
	4	3	-	21	-	
II B	1	-	-	-	-	
	2	-	-	-	-	
	3	76	-	1823	300	
	4	-	-	-	-	
IV A	1					
	2					
	3					
	4					
IV B	1					
	2					
	3					
	4					

SAMPLING DATA FOR LING 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1					
	2					
	3					
	4					
II A	1					
	2					
	3					
	4					
II B	1					
	2					
	3					
	4					
IV A	1					
	2		1	50		
	3					
	4					
IV B	1					
	2					
	3					
	4					

SAMPLING DATA FOR TUSK 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1	27	-	88		
	2	4	-	7		
	3	-	-	-		
	4	-	-	-		
II A	1	59	-	396		
	2	-	1	229		
	3					
	4					
II B	1					
	2					
	3					
	4					
IV A	1					
	2					
	3					
	4					
IV B	1					
	2					
	3					
	4					

SAMPLING DATA FOR REDFISH 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1	100	-	8086		
	2	35	-	1987		
	3	-	-	-		
	4	74	-	7324		
II A	1	61	-	5370		
	2	10	-	668		
	3	-	-	-		
	4	-	-	-		
II B	1	2	-	306		
	2	31	-	969		
	3	49	-	3307		
	4	-	-	-		
IV A	1					
	2					
	3					
	4					
IV B	1					
	2					
	3					
	4					

SAMPLING DATA FOR LONG ROUGH DAB 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1	125	-	9642		
	2	100	-	6219		
	3	-	-	-		
	4	71	-	7676		
II A	1	91	-	5419		
	2	15	-	452		
	3	-	-	-		
	4	-	-	-		
II B	1	1	-	174		
	2	74	-	4169		
	3	59	-	4085		
	4	-	-	-		
IV A	1					
	2					
	3					
	4					
IV B	1					
	2					
	3					
	4					

SAMPLING DATA FOR WHITING 1983

Area	Season	No. of samples		No. of fish		
		Research vessel	Market samples	Measured	Aged	Racial invest.
I	1					
	2					
	3					
	4					
II A	1					
	2					
	3					
	4					
II B	1					
	2					
	3					
	4					
IV A	1	25	25	466	281	
	2	-	25	46	-	
	3	-	21	39	-	
	4	-	31	93	-	
IV B	1					
	2					
	3					
	4					

POLAND

(B. Draganik)

No research data on demersal fish in the northeastern Atlantic were collected by Poland in 1983.

PORTUGAL

(A.M. CARAMELO and F. CARDADOR)

1. Research vessel activities

The Portuguese R/V "NORUEGA" carried out during 1983 three groundfish surveys on the Portuguese continental coast (Div. IXa):

Area	Date	Main Objective	Sampling Scheme
Portuguese coast, from 20-500 meters depth	9th March-2nd April 16th June -7th July	Estimate indices of abundance of groundfish	Stratified random
Nursery grounds, from 20-500 m depth	27th Oct-22nd Nov	Estimate indices of abundance of young hake	

2. Biological sampling programme

The programme for demersal species was continued by INIP (Instituto Nacional de Investigação das Pescas), in 1983, on board of research vessels and at the most important Portuguese ports.

It has included mainly length frequency measurements, otoliths/scales and maturity studies.

The tables present the sampling date concerning hake (Merluccius merluccius), bib (Trisopterus luscus) and seabreams. The date for seabreams concern mainly the following species: Boops boops, Pagellus acarne, P. bogaraveo, Diplodus vulgaris, Sparus pagrus and Spondyliosoma cantharus.

Sampling date for Hake (Merluccius merluccius)

Area	Season (quarter)	No of samples		No of fish		
		Research vessels	Market samples	Measured	Aged *	racial ** invest.
IXa	1st	65	444	40 004	1 002	-
	2nd	72	509	33 483	1 031	-
	3rd	45	373	19 781	452	-
	4th	102	301	19 145	571	-
	Year 1983	284	1 627	112 413	3 056	-

* Otoliths not yet read

** no racial investigation in INIP

Sampling date for Bib (Trisopterus luscus)

Area	Season (quarter)	No of samples		No of fish		
		Research vessel	Market samples	Measured	Aged	racial ** invest.
IXa	1st	-	405	22 106	-	-
	2nd	-	389	20 181	-	-
	3rd	-	327	18 323	-	-
	4th	3	341	19 017	-	-
	Year 1983	3	1 462	79 627	-	-

Sampling date for Seabreams

Area	Season (quarter)	No of samples		No of fish		
		Research vessel	Market samples	Measured	Aged*	racial ** invest.
IXa	1st	40	142	5 815	188	-
	2nd	41	204	6 876	240	-
	3rd	-	217	5 983	131	-
	4th	35	206	7 251	174	-
	Year 1983	116	769	25 925	733	-

* including otoliths and scales collected, not read (Boops boops and Pagellus acarne)

** no racial studies in INIP

SAMPLING DATA FOR Lepidorhombus boscii

AREA	SEASON	Nº OF SAMPLES		Nº OF FISH		
		RESEARCH VESSEL	MARKET SAMPLE	MEASURED	AGED	RACIAL INVEST.
VII	1		15	500		
	2		13	922		
	3		13	898		
	4		14	1317		
VIIc	1	38	9	1847		
	2		13	1084		
	3	32	10	1568	177	
	4		6	572	264	
IXa	3	24	-	487	78	

SPAIN
(F.J. Pereiro)

SAMPLING DATA FOR *Lepidorhombus wiffiagonis*

AREA	SEASON	Nº OF SAMPLES		Nº OF FISH		
		RESEARCH VESSEL	MARKET SAMPLES	MEASURED	AGED	RACIAL INVEST.
VII	1	-	15	5183		
	2	-	13	4214	472	
	3	-	13	4165		
	4	-	14	4400	79	
VIIIc	1	38	9	227		
	2		13	541		
	3	32	10	756	184	
	4		6	278	288	
IXa	3	24	-	349		

SAMPLING DATA FOR Merluccius merluccius

AREA	SEASON	Nº OF SAMPLES		Nº OF FISH		
		RESEARCH VESSEL	MARKET SAMPLES	MEASURED	AGED	RACIAL INVEST.
VII	1		15	5530		
	2		16	6311		
	3		15	4480		
	4		14	4858		
VIIIc	1	38	17	9305	19	
	2		17	3455	26	
	3	32	18	19750	358	
	4		20	2670	555	
IXa	1		59	8450	470	
	2		57	9618	307	
	3	24	53	18865	170	
	4		54	6298	12	

SAMPLING DATA FOR Lophius budegassa

AREA	SEASON	Nº OF SAMPLES		Nº OF FISH		
		RESEARCH VESSEL	MARKET SAMPLES	MEASURED	AGED	RACIAL INVEST.
VII	1		15	1256		
	2		14	1280		
	3		12	965		
	4		13	1022		
VIIc	1	38	7	225		
	2		17	341		
	3	32	9	263		
	4		7	220		

SAMPLING DATA FOR *Lophius piscatorius*

AREA	SEASON	Nº OF SAMPLES		Nº OF FISH		
		RESEARCH VESSEL	MARKET SAMPLE	MEASURED	AGED	RACIAL INVEST.
VII	1		15	1523		
	2		14	1210		
	3		12	1134		
	4		13	1116		
VIIIc	1	38	9	1286		
	2		17	700		
	3	32	9	455		
	4		7	288		

SAMPLING DATA FOR COD

AREA	SEASON	Nº OF SAMPLES		Nº OF FISH		
		RESEARCH VESSEL	MARKET SAMPLE	MEASURED	AGED	RACIAL INVEST.
IIb	3	47	-	10.886	1456	
	4	10	-	2.322	266	

SWEDEN

(B. Sjöstrand)

Sweden took part in the International Young Herring Survey in the North Sea and the Skagerrak. However, it has no activities on which to report owing to reduced opportunities.

UNITED KINGDOM
(A.C. Burd)

U.K. SAMPLING 1983

SPECIES	AREA		RESEARCH VESSEL NO. OF FISH SAMP.	MEAS.	OTO'D	MARKET NO. OF FISH SAMP.	MEAS'D	OTO'D
BASS	WESTERN ENG. CHANNEL	107E	+	+	-	13	478	332
	BRISTOL CHANNEL	107F	+	+	-	2	92	-
COD	NORTH SEA	104A	+	+		131	19421	1436
		104B	+	+	1159	654	104510	5927
		104C	+	+		45	7537	626
	WESTERLY	106A	+	+	-	42	6150	782
		106B	+	+	200	4	704	96
	IRISH SEA	107A	+	+	202	94	12104	1840
	EASTERN ENG. CHANNEL	107D	+	+	-	44	1127	102
	WESTERN ENG. CHANNEL	107E	+	+	1	1	124	-
	BRISTOL CHANNEL	107F	+	+	13	8	533	6
	S.E. OF IRELAND	107G	+	+	31	5	448	28
	LITTLE SOLE BANK	107H	+	+	12	-	-	-
	GREAT SOLE BANK	107J	+	+	1	-	-	-
DOGFISH (SPURDOGS)	NORTH SEA	104A	+	+	-	31	2054	183
		104B	+	+	-	97	5789	754
		104C	+	+	-	38	3638	391
	WESTERLY	106A	+	+	-	14	1420	92
	IRISH SEA	107A	+	+	-	22	2425	343
	BRISTOL CHANNEL	107F	+	+	3	2	233	28
	S.E. OF IRELAND	107G	+	+	16	-	-	-
	LITTLE SOLE BANK	107H	+	+	2	-	-	-
HADDOCK	NORTH SEA	104A	+	+		90	15008	1046
		104B	+	+	1388	272	37876	2342
		104C	+	+		1	74	11
	WESTERLY	106A	+	+	-	55	7864	808
		106B	+	+	332	2	312	48
HAKE	WESTERLY	106A	+	+	-	6	835	-
	IRISH SEA	107A	+	+	-	18	2884	-
	WESTERN ENG. CHANNEL	107E	+	+	12	24	2279	-
	BRISTOL CHANNEL	107F	+	+	45	6	1029	-
	S.E. OF IRELAND	107G	+	+		-	-	-
	LITTLE SOLE BANK	107H	+	+	11	1	126	-
	GREAT SOLE BANK	107J	+	+	33	-	-	-
	BISCAY	108	+	+	99	-	-	-
HORSE MACKEREL	WESTERLY	106B	+	+	-	1	119	-
	IRISH SEA	107A	+	+	-	1	110	-
	WESTERN ENG. CHANNEL	107E	+	+	-	11	2706	-
	GREAT SOLE BANK	107J	+	+	-	2	531	-
	BISCAY	108A	+	+	-	2	542	-
		108B	+	+	-	1	492	-
		108C	+	+	-	1	123	-

U.K. SAMPLING 1983

SPECIES	AREA		RESEARCH VESSEL NO. OF FISH SAMP.	MEAS.	OTO'D	MARKET NO. OF FISH SAMP.	MEAS'D	OTO'D
	BRISTOL CHANNEL	107F	+	+	17	2	322	-
	S.E. OF IRELAND	107G	+	+	34	-	-	-
	LITTLE SOLE BANK	107H	+	+	58	1	141	-
	GREAT SOLE BANK	107J	+	+	10	-	-	-
	BISCAY	108	+	+	4	-	-	-
MACKEREL	WESTERN ENG. CHANNEL	107E	+	+	-	87	10684	-
	BRISTOL CHANNEL	107F	+	+	-	2	362	-
MEGRIMS	NORTH SEA	104	+	+	158	-	-	-
	WESTERN ENG. CHANNEL	107E	+	+	20	11	1484	37
	BRISTOL CHANNEL	107F	+	+	1	3	404	-
	S.E. OF IRELAND	107G	+	+	96	-	-	-
	LITTLE SOLE BANK	107H	+	+	232	7	878	-
	GREAT SOLE BANK	107J	+	+	95	-	-	-
	BISCAY	108	+	+	113	-	-	-
MONKS OR ANGLERS	IRISH SEA	107A	+	+	3	-	-	-
	WESTERN ENG. CHANNEL	107E	+	+	55	7	1060	-
	BRISTOL CHANNEL	107F	+	+	54	1	120	-
	S.E. OF IRELAND	107G	+	+		2	337	-
	LITTLE SOLE BANK	107H	+	+	41	3	483	-
	GREAT SOLE BANK	107J	+	+	28	-	-	-
	BISCAY	108	+	+	76	-	-	-
PLAICE	NORTH SEA	104A	+	+		25	5578	570
		104B	+	+	469	144	25295	2885
		104C	+	+		-	-	-
	IRISH SEA	107A	+	+	1189	78	12775	1607
	EASTERN ENG. CHANNEL	107D	+	+	-	71	2879	198
	WESTERN ENG. CHANNEL	107E	+	+	85	106	13078	1188
	BRISTOL CHANNEL	107F	+	+	4	14	2025	331
	S.E. OF IRELAND	107G	+	+	2	3	431	38
	LITTLE SOLE BANK	107H	+	+	18	-	-	-
	GREAT SOLE BANK	107J	+	+	1	-	-	-
SAITHE	NORTH SEA	104A	+	+		40	4557	496
		104B	+	+	383	2	35	38
		104C	+	+		-	-	-
	WESTERLY	106A	+	+	-	28	2962	372
		106B	+	+	79	2	205	74

U.K. SAMPLING 1983

SPECIES	AREA		RESEARCH VESSEL NO. OF FISH SAMP.	MEAS.	OTO'D	MARKET NO. OF FISH SAMP.	MEAS'D	OTO'D
SOLE	NORTH SEA	104A	+	+		-	-	-
		104B	+	+	2	58	6729	397
		104C	+	+		52	8051	792
	IRISH SEA	107A	+	+	208	56	8163	280
	EASTERN ENG. CHANNEL	107D	+	+	-	80	3230	232
	WESTERN ENG. CHANNEL	107E	+	+	20	89	13064	627
	BRISTOL CHANNEL	107F	+	+	12	18	3060	57
	S.E. OF IRELAND	107G	+	+	2	4	661	-
	LITTLE SOLE BANK	107H	+	+	19	1	160	-
	BISCAY	108	+	+	6	-	-	-
WHITING	NORTH SEA	104A	+	+		59	4678	59
		104B	+	+	1322	217	16795	1812
		104C	+	+		1	100	-
	IRISH SEA	107A	+	+	750	102	11157	1106
	EASTERN ENG. CHANNEL	107D	+	+	-	15	768	124
	WESTERN ENG. CHANNEL	107E	+	+	137	107	13806	487
	BRISTOL CHANNEL	107F	+	+	42	10	879	80
	S.E.IRELAND	107G	+	+	75	4	492	64
	LITTLE SOLE BANK	107H	+	+	47	-	-	-
	BISCAY	108	+	+	5	-	-	-
SKATES & RAYS	WESTERLY	106A	+	+	-	5	526	-
	IRISH SEA	107A	+	+	-	45	3484	-
SAMPLES TAKEN ON RESEARCH CRUISES ONLY								
BLUE WHITING	PELAGIC AREA 7 *		+	+	18	-	-	-
	PELAGIC AREA 8 *		+	+	64	-	-	-
	PELAGIC AREA 10 *		+	+	87	-	-	-
	PELAGIC AREA 11 *		+	+		-	-	-
	* CIROLANA 11/83		+	+				
KING	BRISTOL CHANNEL	107F	+	+	9	-	-	-
	S.E. OF IRELAND	107G	+	+		-	-	-
	LITTLE SOLE BANK	107H	+	+	2	-	-	-
	BISCAY	108	+	+	9	-	-	-
NORWAY POUT	NORTH SEA	104	+	+	309	-	-	-
			+	+				
POLLACK	WESTERN ENG. CHANNEL	107E	+	+	2	-	-	-
	BRISTOL CHANNEL	107F	+	+	1	-	-	-
	S.E. OF IRELAND	107G	+	+		-	-	-
	BISCAY	108	+	+	1	-	-	-
RED SEA BREAM	GREAT SOLE BANK	107J	+	+	2	-	-	-
	BISCAY	108	+	+	9	-	-	-
SANDSOLE	WESTERN ENG. CHANNEL	107E	+	+	1	-	-	-
WITCHES	GREAT SOLE BANK	107J	+	+	3	-	-	-

U.S.A.

(M.P. Sissenwine)

The USA did not fish or conduct field research concerning demersal species during 1983. A report of USA research in the Northwest Atlantic area can be found in the annual Report to NAFO.

U.S.S.R.

(S.A. Studenetsky)

In 1983 as in previous years the researches were aimed at estimating the abundance of main commercial fishes using the total trawl survey method, investigating the recruitment to cod, haddock, redfish and other fishes stocks, young fish in the Barents Sea and adjacent waters being researched.

Previous studies to reveal the relationships between the distribution peculiarities and fish behaviour, on the one hand, and the hydrological conditions and food supply, on the other, were continued. The stock structure of main commercial fishes, their biological indices and migrations were investigated.

In the year under consideration data were collected on the size-age composition, distribution and feeding of cod, haddock, redfishes, catfish, Greenland halibut and other fishes in the main ICNAF Subareas: I, IIa, IIb. Tables 1-3 show the data collected by research, scouting and commercial ships in 1983.

Table 1. Biological data on cod for 1983.

ICES Subareas	Season	Number of fish		
		Measured	For food analysis	Aged
I	I	I44I9	3264	970
	II	9I66	II98	3II
	III	I9355	2500	500
	IV	3052	-	-
IIb	I	4525	665	I40
	II	II08	242	-
	III	24395	3552	I406
	IV	3I75	325	-
IIa	I	II052	2508	520
	II	I2546	2465	582
	III	I068	95	-
	IV	-	-	-
Total		I0386I	I68I4	4429
All fish combined		4282I7	43976	I76II

Table 2. Biological data on haddock for 1983.

ICES Subareas	Season	Number of fish		
		Measured	Analysed for food	Aged
I	I	5193	551	420
	II	2083	67	-
	III	12546	211	232
	IV	7450	-	-
IIb	I	608	78	78
	II	2	-	-
	III	240	40	10
	IV	-	-	-
IIa	I	2045	609	488
	II	1636	837	750
	III	-	143	-
	IV	-	-	-
Total		31803	2536	1978

Table 3. Biological data on redfish for 1983.

ICES Subareas	Season	Number of fish		
		Measured	Analysed for food	Aged
I	I	I2377	I268	I268
	II	9845	I04I	300
	III	4466	25	-
	IV	909	-	-
IIb	I	I355I	960	535
	II	I07I8	I350	600
	III	50I24	2025	I373
	IV	I079	200	-
IIa	I	334I2	I778	II00
	II	46036	5490	2I00
	III	I68I	I80	-
	IV	33I	-	-
Total		I84529	I43I7	7276

Table 4. Biological data on Greenland halibut for 1983.

ICES Subarea	Season	Number of fish		
		Measured	Analysed for food	Aged
I	I	518	75	-
	II	445	119	-
	III	11	-	-
	IV	2	-	-
IIb	I	5851	1082	589
	II	1540	200	787
	III	11380	1332	-
	IV	1132	100	-
IIa	I	2396	348	-
	II	419	134	-
	III	4364	552	-
	IV	-	-	-
Total		28058	3942	1376

Table 5. Biological data on saithe for 1983.

ICES Subareas	Season	Number of fish		
		Measured	Analysed for food	Aged
I	I	203	-	-
	II	1735	117	-
	III	32	-	-
	IV	5	-	-
IIb	I	83	-	-
	II	1	-	-
	III	35	-	-
	IV	-	-	-
IIa	I	3110	404	100
	II	3210	175	403
	III	1165	30	-
	IV	-	-	-
Total		9579	726	503

Table 6.Biological data on catfish for 1983.

ICES Subareas	Season	Number of fish		
		Measured	Analysed for food	Aged
I	I	512	-	-
	II	366	99	21
	III	272	-	-
	IV	24	-	-
IIb	I	1026	113	-
	II	161	-	-
	III	2477	180	-
	IV	28	-	-
IIa	I	377	-	-
	II	129	66	21
	III	-	-	-
	IV	-	-	-
Total		5372	458	42

Table 7. Biological data on plaice for 1983.

ICES Subareas	Season	Number of fish		
		Measured	Analysed for food	Aged
I	I	7047	650	401
	II	1859	499	300
	III	8632	826	301
	IV	687	650	-
IIa	I	-	-	-
	II	-	-	-
	III	-	-	-
	IV	-	-	-
IIa	I	-	-	-
	II	-	-	-
	III	-	-	-
	IV	-	-	-
Total		18225	2625	1002

Table 8. Biological data on long rough dab for 1983.

ICES Subareas	Season	Number of fish		
		Measured	Analysed for food	Aged
I	I	12979	-	-
	II	5469	828	200
	III	2692	-	-
	IV	79	-	-
IIb	I	9585	380	200
	II	7	-	-
	III	7772	500	400
	IV	110	-	-
IIa	I	2772	-	-
	II	5325	850	205
	III	-	-	-
	IV			
Total		46790	2558	1005