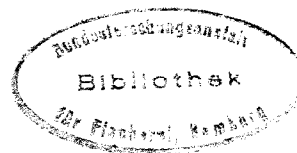


Institut für Seefischerei
Hamburg

International Council for the
Exploration of the Sea.

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C.M. 1954
Special Scientific Meeting
"Herring Tagging Techniques
and Results."
No.3



MARQUAGE DE HARENGS EN BELGIQUE

Ch. Gilis

 THÜNEN
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1.- Marquages effectués en collaboration avec la France.

C'est en janvier 1951 que les premiers essais de marquage de harengs (guais) ont été entrepris sur les côtes franco-belges. Ceci à l'initiative du Dr. ANCELLIN, Directeur du Laboratoire de l'Institut Scientifique et Technique des Pêches Maritimes à Boulogne-sur-Mer, mais en collaboration avec la Belgique, qui a prêté le bateau de recherches "Hinders" ainsi que le personnel technique de l'Institut d'Etudes Maritimes d'Ostende.

En janvier 1952, le Dr. Ancellin, ayant repris ces expériences sur les côtes franco-belges, la Belgique lui a encore prêté son concours en hommes et en matériel.

Comme ces marquages ont été faits à l'initiative de la France, nous supposons que le Dr. Ancellin communiquera les détails sur les méthodes employées et les résultats obtenus.

2. - Marquages effectués par l'Institut d'Etudes Maritimes d'Ostende.

La Belgique a effectué les premiers essais de marquage pendant l'hiver 1952-53. Comme le temps était peu propice pour ce genre d'opérations, au cours des sorties, on est parvenu à marquer 176 harengs seulement dans les conditions requises.

Jusqu'ici aucune recapture nous a été signalé, ce qui n'est pas étonnant étant donné le petit nombre d'individus marqués.

Ces marquages ont été effectués au moyen de la marque de "Lea".

Le programme de travail de 1954 de l'Institut Maritimes prévoit la reprise des marquages de harengs au cours du mois de décembre.

ENGLISH TAGGING EXPERIMENTS

G. C. Bolster

In 1951 experiments were carried out from Lowestoft with two types of herring tag. These were the Lea hydrostatic and the Lowestoft metal tag. The latter was made of aluminium alloy and measured 1" x 1/4" x 1/16". It was painted red, carried a serial number and was attached to the fish by a wire bridle similar to that used with the Lea.

The Hodgson tag which was evolved from the metal tag, is made of flat transparent plastic material, embedded in which instructions to the finder and a serial number are printed on yellow base. The tag measures 37.5 x 10 mm. and is 6 mm. thick. During 1952 this tag was fitted to the fish by a wire bridle placed in front of the dorsal fin in the same manner as the Lea hydrostatic tag. The recaptures during the year were 76% for the Lea, 29% for the Hodgson and, for the Scottish One Man tag (fitted in front of the dorsal fin but with a wire and nylon toggle) 57%.

In 1953 it was decided to adapt a toggle fitment similar to that used with the Scottish One Man tag for the Hodgson tag. This, it was considered, would allow of a quick method of tagging with the Hodgson tag, and one which would give a higher percentage return. (In 1952 Scottish One Man with wire and nylon toggles 57%, Hodgson with wire bridles 29%).

As well as altering the fitment of the Hodgson, the position in which the tag was attached the fish was changed from in front of the dorsal fin to just behind it. The advantage of this innovation is thought to be twofold:

- 1) In this position the tag is less likely to interfere with the stabilizing function of the dorsal fin.
- 2) When fish are recaptured in gill nets, there is less likelihood of the tag, because of its more distal position, being torn out or snagged by the nets. The percentage return of this tag thus fitted increased in 1953 to 45%.

During 1951 and 1952, all tagging was carried out from the research vessels Onaway and Platessa. Beginning in September 1953 tagging was operated from commercial drifters. At first fish were taken from the nets and placed in a rubber tank containing sea water from which they were subsequently tagged and released. Later, working on commercial vessels, and using the Hodgson tag with wire and nylon toggles, it was found that less time was required if the fish were tagged as they came out of the net than if they were placed in a collecting tank first. This method obviated the necessity of handling the fish twice. Furthermore, in rough weather tagging from a tank is not practicable. By this method 8% returns have resulted to date with the Hodgson tag from one experiment using 1000 fish in North Shields during May 1954.

Experiments comprising comparison of Lea and Hodgson tags attached by the same type of toggle are being undertaken in 1954.

Herring Tagging 1951.

The following is a list of the number of tags used on herrings during 1951.

Date	Vessel	Number of Fish Tagged	Area	By Whom
12.12.51	Onaway	81	Channell	Taylor
14.12.51	"	3	"	"
17.12.51	"	34	"	"
		Total for Onaway, Cruise VIII, 1951.....118		

Herring Tagging, 1952.

The following is a list of the number of tags used on herring during 1952.

Date	Vessel	Number of Fish Tagged	Area	By Whom
25.8.52	Platessa	295	Whitby	Bolster/Rout
26.8.52	"	434	"	" "
29.8.52	"	395	"	" "
3.9.52	"	221	"	" "
Total for Cruise X, 1952, Platessa				1345
16.10.52	Platessa	332	E. Anglia	Bolster/Calver
2.11.52	"	510	"	" "
12.11.52	"	10	"	" "
13.11.52	"	339	"	" "
15.11.52	"	7	"	" "
16.11.52	"	38	"	" "
Total for Cruise XIII, 1952, Platessa				1266
13.12.52	Onaway	95	Channel	Bolster/Humfries
14.12.52	"	71	"	" "
Total for Cruise VIII, 1952, Onaway				166
14.11.52	Onaway	36	E. Anglia	Taylor
Total for Cruise VII, 1952, Onaway				36
23.1.52	Onaway	101	Channel	Bridger
Total for Cruise I, 1952, Onaway				101
16.2.52	Onaway	7	Channel	Taylor
Total for Cruise II, 1952, Onaway				7
Research vessels		Commercial vessels		
Whitby	1345	-	1345	
E. Anglia	1302	-	1302	
Channel	274	-	274	
TOTAL for 1952				2921

Herring Tagging, 1953.

The following is a list of all tags used on herrings from Research Vessels and Commercial Drifters during 1953.

Date	Vessel	Number of Fish Tagged	Area	By Whom
14.1.53	Onaway	9	Channel	Calver
19.1.53	"	77	"	"
22.1.53	"	9	"	"
23.1.53	"	19	"	"
Total for Cruise I, Onaway, 1953				114
15.2.53	Platessa	72	E.Anglia	Bolster/Bridger
19.2.53	"	14	W.deep water	" "
Total for Cruise III, Platessa, 1953				86
20.2.53	Onaway	3	Channel	Taylor
Total for Cruise II, Onaway, 1953				3
14.8.53	Onaway	9	Whitby	Bolster/Humfries
18.8.53	"	231	"	" "
19.8.53	"	105	"	" "
21.8.53	"	62	"	" "
Total for Cruise V, Onaway, 1953				407
7.9.53	Honeydew	47	Whitby	Bolster
8.9.53	BF 307	103	"	"
11.9.53	"	17	"	"
14.9.53	"	43	"	"
17.9.53	"	84	"	"
18.9.53	Margaret Read	36	"	"
Total for Commercial Vessels, Whitby				330
5.10.53	Platessa	255	E.Anglia	Bolster/Mumford
7.10.53	"	20	"	" "
8.10.53	"	28	"	" "
Total for Cruise XIII, Platessa				303
26.10.53	Lilacina	6	E.Anglia	Bolster 6
3.11.53	Platessa	45	E.Anglia	Bolster/Bridger
5.11.53	"	53	"	" "
6.11.53	"	67	"	" "
10.11.53	"	170	"	" "
13.11.53	"	89	"	" "
Total for Cruise XV, Platessa, 1953				424
6.11.53	Onaway	20	E.Anglia	Taylor
10.11.53	"	80	"	"
19.11.53	"	110	"	"
20.11.53	"	50	"	"
30.11.53	"	64	"	"
1.12.53	"	24	"	"
4.12.53	"	7	"	"
11.12.53	"	114	"	"
Total for Onaway, Cruise VI, 1953				469
17.11.53	Lilacina	89	E.Anglia	Bolster
18.11.53	"	146	"	" 235

(continue on next page)

Date	Vessel	Number of Fish Tagged	Area	By Whom
3.12.53	Betty Leslie	200	Channel	Bolster
4.12.53	" "	299	"	"
				499
15.12.53	Onaway	60	Channel	Bolster/Mumford
	"	9	"	" "
	"	1	"	" "
	Total for Cruise VII, Onaway, 1953			70
20.10.53	Vesper Star	60	E.Anglia	Mumford
5.11.53	" "	8	"	"
28.10.53	Kindred Star	11	"	"
30.10.53	" "	17	"	"
8.12.53	Friendly Star	136	Channel	"
10.12.53	" "	198	"	"
				430
	Research Vessels		Commercial Vessels	
Whitby	407		330	737
	86		6	
	303		235	
	424		96	
	<u>469</u>			
E.Anglia	<u>1282</u>		<u>337</u>	1619
	114		499	
	3		334	
	<u>70</u>			
Channel	<u>187</u>		<u>833</u>	1020
	1876		1500	
			Total for 1953	3376

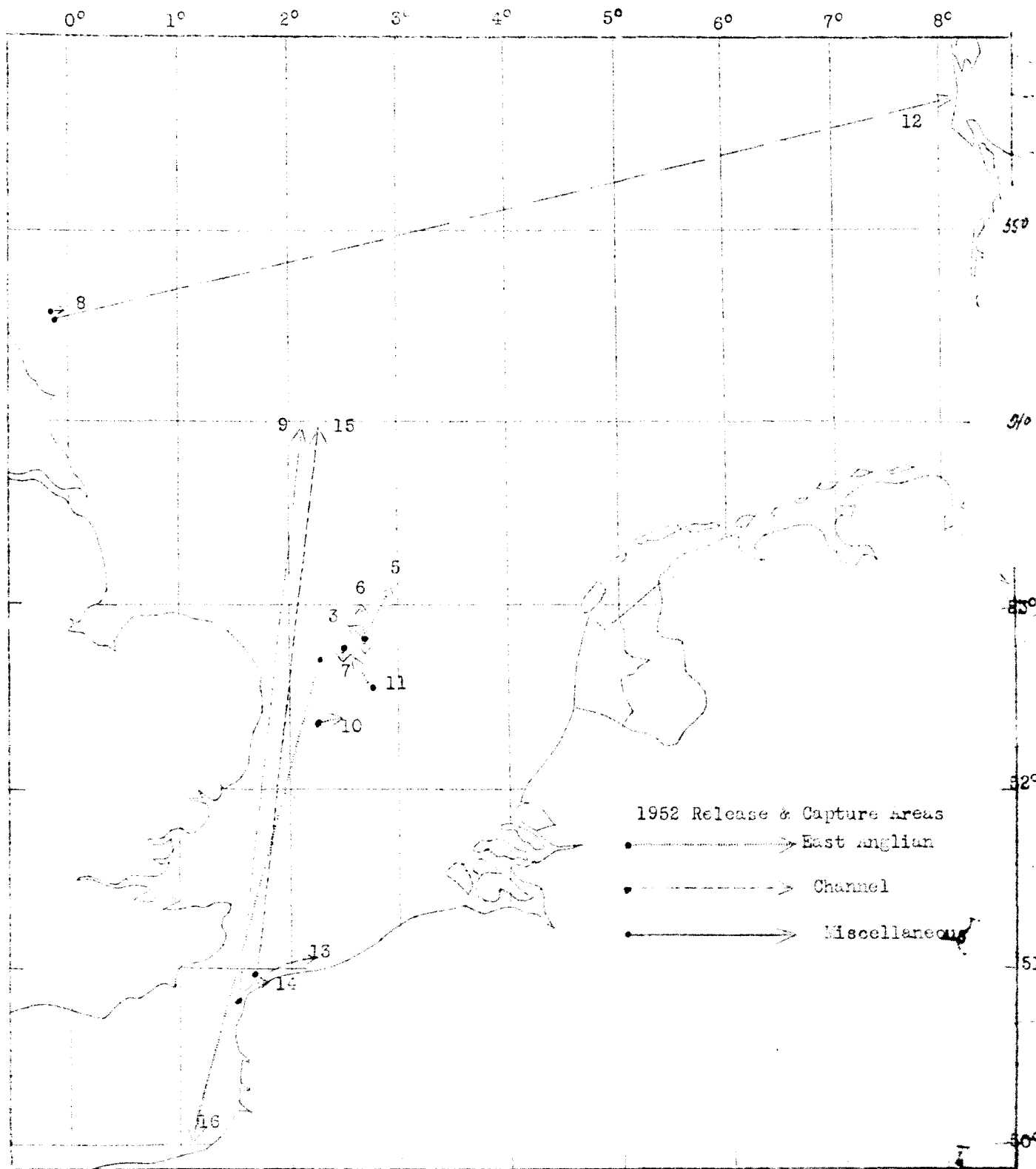
Herring Tagging

Types of Tag

Year	METAL	LEA	HODGSON	SOM.	TOT.
1951	99	19	-	-	118
1952	-	433	432	480	1345
E.Anglia	-	78	264	960	1302
Channel	-	148	-	126	274
1953	-	20	717		737
E.Anglia	-	454	1164	1	1619
Channel	-	3	908	109	1020
	<u>99</u>	<u>1155</u>	<u>3485</u>	<u>1676</u>	<u>6415</u>

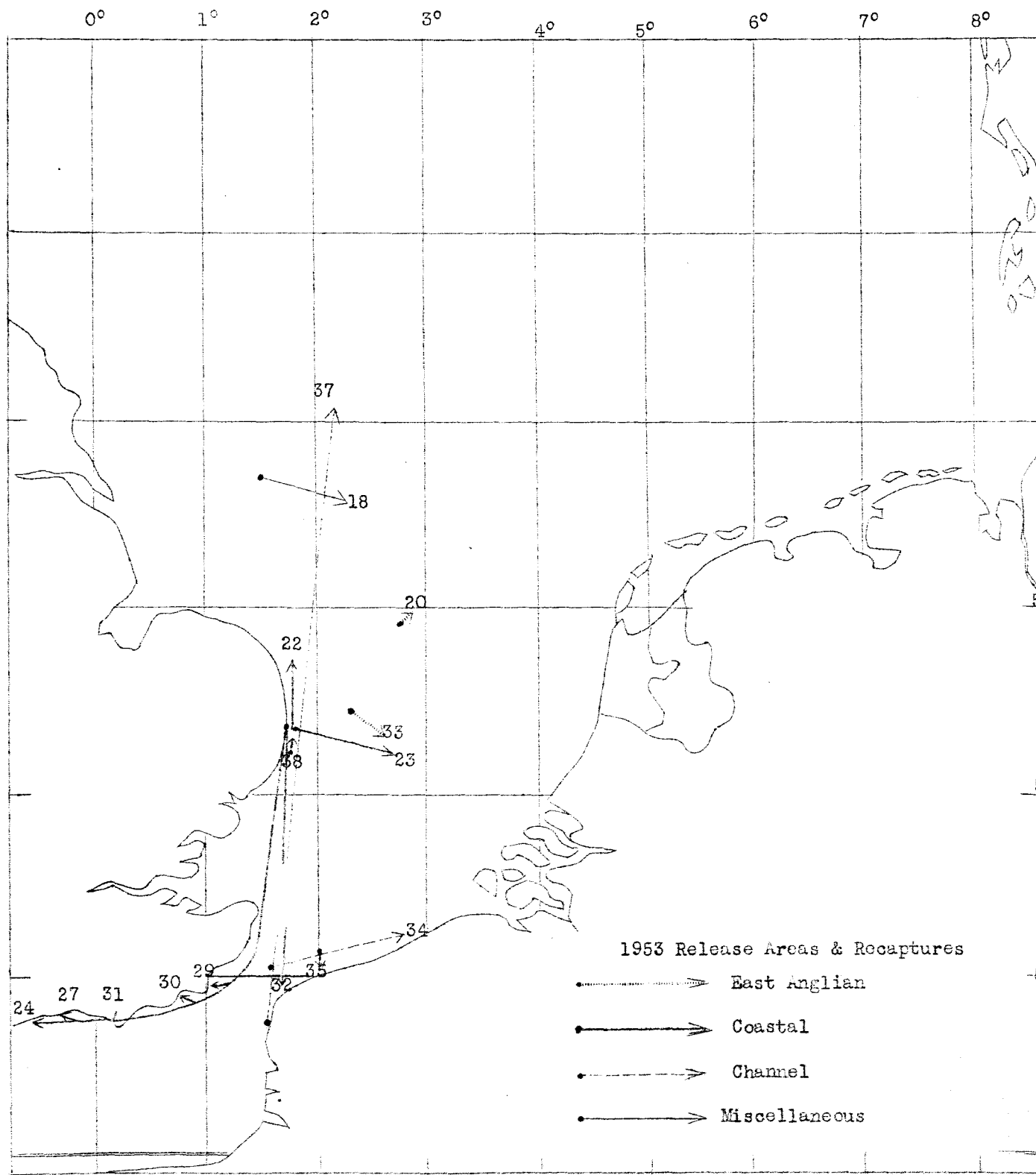
Herring Migration 1952.

No.	Released			Recaptured			Days Free	Distance Travelled	Remarks
	Date	Lat.	Long.	Date	Lat.	Long.			
1	2.11.52	52°49'N.	2°38.5'E.	3/4.11.52	52°46.5'N.	2°38'E.	1	3 m.	Insufficient data. Not plotted.
2	2.11.52	52°49'N.	2°38.5'E.	3/4.11.52	Smith's Knoll Area		1	?	
3	2.11.52	52°49'N.	2°38.5'E.	4.11.52	52°53'N.	2°31'E.	2	5 1/2	
4	2.11.52	52°49'N.	2°38.5'E.	3/4.11.52	Smith's Knolls Area		1-2	?	
5	16.10.52	52°49'N.	2°36'E.	18/19.11.52	53°06'N.	2°53'E.	2	20	
6	2.11.52	52°49'N.	2°38.5'E.	6.11.52	53°0'N.	2°38'E.	4	11 1/2	
7	16.11.52	52°48'N.	2°30'E.	17/17.11.52	52°44.5'N.	2°30'E.	1	3	
8	29.8.52	54°35'N.	0°15.5'W.	29/30.8.52	54°35'N.	0°10'W.	1	3	
9	16.2.52	50°53'N.	1°30'E.	10.9.52	54°04'N.	2°0'E.	208	200 approx.	German trawler.
10	12.11.52	52°23'N.	2°15'E.	15.11.52	52°24'N.	2°26'E.	3	6	Tag only found on beach
11	16.11.52	52°35'N.	2°43'E.	? 17.11.52	52°46'N.	2°33'E.	? 1	12	
12	4.9.52	54°31'N.	0°10'W.	23.12.52	55°42'N.	8°8'E.	110	? 310	
13	14.12.52	50°48'N.	1°30'E.	10-20/1.53	"Flemish Coast"		? 30	45-80	
14	23.1.52	50°50'N.	1°32'E.	? 28.1.53	Near Calais		5	? 20	
15	17.12.51	50°55'N.	1°40'E.	15.3.52	54°5'N.	2°20'E.	89	200	
16	2-16.11.52	52°43'N.	2°18'E. (approx)	24.11.52	49°46'N.	1°5'E.	8-22	170	
17	2.11.52	52°49'N.	2°38.5'E.	Sept.52) -Nov.52)	Smith's Knoll Area		?	?	Insufficient data. Not plotted.



Herring Migration 1953

No.	Released			Recaptured			Days Free	Distance Travelled	Remarks
	Date	Lat.	Long.	Date	Lat.	Long.			
18	5.10.53	53°40'N.	1°31'E.	7.10.53	53°34'N.	2°20'E.	2	29 m.	
19	20.10.53	52°34'N.	2°11'E.	21.10.53	?	?	1	?	Insufficient data. Not plotted
20	30.10.53	52°54'N.	2°48'E.	30.10.53	52°56'N.	2°54'E.	1	4	
21	10.11.53	52°43'N.	2°10'E.	13.11.53	?	?	3	?	" " " "
22	19.11.53	52°22'N.	1°47'E.	22.11.53	52°43'N.	1°43.5'E.	2 1/2	21	
23	19.11.53	52°22'N.	1°47'E.	26.11.53	52°12.5'N.	2°42'E.	7	35	
24	20.XI.53	52°26'N.	1°46'E.	4.12.53	50°47'N.	0°26'E.	14	170	
25	4.12.53	50°45'N.	1°33'E.	5.12.53	?	?	1	?	" " " "
26	3.12.53	50°45'N.	1°33'E.	3-5.12.53	?	?	1-2	?	" " " "
27	19.11.53	52°22'N.	1°47'E.	1.12.53	50°48'N.	0°20'E.	12	160	
28	4.12.53	50°45'N.	1°33'E.	7.12.53	?	?	3	?	" " " "
29	30.11.53	52°23'N.	1°47'E.	7.12.53	50°54'N.	0°58'E.	7	112	
30	19.11.53	52°24'N.	1°47'E.	17.12.53	50°55'N.	0°45'E.	28	126	
31	30.11.53	52°23'N.	1°47'E.	6.12.53	50°46'N.	0°20'E.	6	140	
32	20.11.53	52°21'N.	1°47'E.	7.12.53	English Channel		10-20?	? 80	
33	5.11.53	52°28'N.	2°18'E.	7.11.53	52°20'N.	2°36'E.	2	13	
34	11.1.54	51°2'N.	1°35'E.	11.2.54	? Ostende		31	? 50	
35	18.11.53	51°6'N.	2°0'E.	23.11.53	51°4'N.	2°0'E.	5	3	
36	18.11.53	51°6'N.	2°0'E.	? 27.11.53	?	?	?	?	" " " "
37	3.12.53	50°45'N.	1°33'E.	3. 54	54°5'N.	2°10'E.	90-120	200	
38	30.11.53	52°22'N.	1°46'E.	12.5.54	52°23'N.	1°46'E.	163	?	



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