

UPDATE OF ALBACORE TAG RELEASE-RECAPTURE INFORMATION IN THE NORTH-ATLANTIC AND MEDITERRANEAN FOR THE PERIOD 1968-1999.

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SUMMARY

This paper updates and completes the ICCAT database on albacore tag release–recapture from the North Atlantic including the Mediterranean Sea. In this revision French tag release–recapture data from the sixties and seventies is included, as well as additional information obtained from existing bibliography.

RÉSUMÉ

Le présent document actualise et complète la base de données de l'ICCAT sur le marquage et la recapture de germon de l'Atlantique nord, Méditerranée comprise. Cette révision comporte des données françaises de marquage/recapture des années 1960 et 1970, ainsi que des informations additionnelles extraites de la bibliographie disponible.

RESUMEN

En el presente documento se actualiza y completa la base ICCAT de datos de marcado-recaptura de atún blanco del Atlántico Norte, incluyendo el Mediterráneo. En esta revisión se incluyen los datos de marcado-recaptura franceses de los años sesenta y setenta, así como otras informaciones procedentes de revisiones bibliográficas.

KEYWORDS

*Tagging. Albacore. *Thunnus alalunga*.*

1. INTRODUCTION

This document aims to implement the SCRS of ICCAT recommendation on albacore research which reads: ‘Combined effort by the Secretariat and the scientists involved should be continued in order to complete the northern albacore tag release-recapture ICCAT database, including the records obtained by French scientists in the sixties and early seventies’ (ICCAT, 1999).

2. MATERIAL AND METHODS

According to the recommendation mentioned in the introduction, the most recent information available in its albacore tag release-recapture database was requested to the ICCAT Secretariat. This information was kindly supplied in November 2000. This paper added to the ICCAT database tag release-recapture information obtained in the sixties by French scientists and reported by Aloncle and Delaporte (1976, 1980) and Aloncle *et al.* (1976). Tag release-recapture information supplied by González-Garcés (1997), Ortiz de Zárate and Cort (1998), De Metrio *et al.* (1997) and Prince *et al.* (1995) was also introduced in the database.

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This data collection had many blanks due to the lack of information. Blanks were covered by adding codes which specify the non-availability of information, according to the ICCAT codes nomenclature (version of January 2001) that can be found at the ICCAT web site (<http://www.iccat.es/>).

In the case of tag release-recapture information supplied by Aloncle and Delaporte (1976, 1980) and Aloncle *et al.* (1976), fictitious tagging letters (ZZ) and numbers (from 1 to 131) were assumed, with the aim to identify this information in the database. For tag ZZ 130, information on the recapture place, which was reported as 'at the north of the Lipari Islands' by Aloncle and Delaporte (1976) and Aloncle *et al.* (1976), was translated as 39° 00' E; 15° 00' N.

The tag reported by Prince *et al.* (1995), was fictitiously assigned letters 'AL' and number '1'.

In the data collection as a whole, a verification on possible repeated information was carried out. In case a repeated tag with exactly equal information was found, the second occurrence was eliminated. In case repeated tags had slightly different information, the apparently most coherent one was kept (i.e., most probable tagging or recapture quadrant according to the tagging year or season).

In four cases, tags ES 539, NO 7305, TN 5141 and YF 6514, a slight modification was made in the reported recapture place in order to avoid a land coordinate. In one case, tag ZZ 13 the same modification was made due to the same reason but in the tagging place.

3. RESULTS AND DISCUSSION

According to the previously mentioned criteria, an initial database collecting 697 tag release-recapture cases was made. This initial database, which should be considered as 'gross' as it does not contain any kind of correction, has been made available to the ICCAT Secretariat in Excel format.

In this 'gross' database, 18 tag release-recapture reports repeated were detected, and according to the previously mentioned criteria, the following tags were eliminated: 3522, 5488, 6290, 6871, 19175, 19415, 20358, FT 61, FT 20796, KA 8020, S 2169, WH 19199, WH 19541, YF 4962, YF 5484, ZZ 117, ZZ 125, ZZ 126.

The previously mentioned modifications were subsequently made on the tags ES 539, NO 7305, TN 5141, YF 6514 and ZZ 13.

As a consequence, a 'corrected' database without repetitions was obtained which collects information on 679 cases of tag released and recaptured albacores. This database is annexed as Table 1. (This database has been also made available to the ICCAT Secretariat in Excel format).

It is important to point out that in this 'corrected' database, lacks of information detected have been maintained and identified with their corresponding ICCAT codes. This allows us to know, in each case, the limitations and utility of the available information.

4. ACKNOWLEDGEMENTS

We want to thank the ICCAT Secretariat for its help making their tag release-recapture database available to us. We would also like to thank José Antonio Cardoso for his essential contribution in the computerized treatment of the tag release-recapture information we have used for this paper.

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Table 1. Updated and corrected albacore tag-recapture database

CRUISE	TAG	RELEASE						DATE	POSITION	SIZE	WEITH	DATE	RECOVERIES							
		CUAD.	YEAR	MOTH	DAY	AREA	CWP						1/10 Kg	TIPe	TIPE	RECov	GEAR	SEX	2 TAG	
NUMBER	NUMBER	SPECIES	TIPE	CUAD.	YEAR	MONTH	DAY	LAT.	GR	MI	LON.	GR	MI	MM	LAT.	GR	MI	LON.	GR	MI
8 5 9	34	2 4 23	8 90	1	42 26	4 25	2	610	0	0	0	0	0	0 91	1	99 99	99 99	0	0 0	0 0 0 0 0 20 8 8 4
8 5 9	61	2 4 24	8 90	1	42 20	4 26	2	630	0	0	0	0	0 17	9 90	1	41 14	2 56	0	0 0	0 0 0 0 0 20 8 8 4
8 5 9	115	2 4 25	8 90	1	42 26	4 59	2	680	0	0	0	0	0 14	10 91	4	36 8	2 35	0	0 2	80 0 0 17 21 21 4
8 5 9	144	2 4 30	8 90	1	42 20	4 30	2	710	0	0	0	0	0 12	9 91	1	42 6	4 10	0	0 0	0 0 0 0 0 20 8 8 4
8 5 9	152	2 4 3	9 90	1	42 37	5 19	2	690	0	0	0	0	0 15	9 91	1	42 33	4 8	0	0 2	62 0 0 20 8 8 4
8 5 9	163	2 4 3	9 90	1	42 27	5 16	2	660	0	0	0	0	0 5	9 91	1	42 15	4 0	2	670	2 55 0 0 20 8 8 4
8 5 9	168	2 4 3	9 90	1	42 31	5 14	2	550	1	30	0	0	0 19	8 94	1	41 23	4 3	1	500	1 45 0 0 20 8 8 4
99 30 9	256	2 4 4	7 72	4	40 15	23 55	0	0	0	0	0	0	0 3	9 79	4	44 35	3 20	0	0 0	0 0 0 0 9 21 21 4
8 5 9	318	2 4 16	9 90	1	42 13	4 35	2	650	0	0	0	0	0 14	9 91	1	42 6	4 11	2	690	2 62 0 0 20 8 8 4
8 61 9	657	2 4 21	6 91	1	39 47	6 54	2	600	0	0	0	0	0 14	9 91	1	42 6	4 9	0	0 1	42 0 0 20 8 8 4
8 61 9	687	2 4 26	6 91	1	40 25	3 35	2	600	0	0	0	0	0 5	9 91	1	42 21	3 59	0	0 0	0 0 0 0 0 20 8 8 4
8 62 9	711	2 4 3	9 91	1	42 19	4 19	2	630	0	0	0	0	0 5	9 91	1	42 15	4 0	0	0 0	0 0 0 0 0 20 8 8 4
99 30 13	5568	2 4 20	6 76	4	41 5	20 20	0	760	0	0	0	0	0 3	9 79	4	45 10	4 20	0	920	0 0 0 0 0 21 21 4
99 30 9	8952	2 4 25	8 80	4	48 13	13 35	0	560	0	0	0	0	0 2	10 80	4	46 13	4 30	0	570	0 37 0 0 17 21 21 4
99 30 9	12522	2 4 11	6 80	4	41 9	26 33	0	500	0	0	0	0	0 15	9 80	4	46 10	2 50	0	560	0 35 0 0 0 21 21 4
8 4 9	19056	2 4 17	9 89	1	42 22	5 9	2	650	0	0	0	0	0 0	9 91	1	99 99	99 99	0	0 2	64 0 0 20 8 8 4
8 4 9	19134	2 4 21	9 89	1	42 44	5 22	2	640	0	0	0	0	0 29	8 90	1	99 99	99 99	0	0 1	53 0 0 20 8 8 4
8 4 9	19140	2 4 21	9 89	1	42 44	5 22	2	680	0	0	0	0	0 26	10 91	4	36 11	2 14	0	0 2	80 0 0 17 21 21 4
8 4 9	19156	2 4 21	9 89	1	42 43	5 20	2	700	1	60	0	0	0 20	8 94	4	44 8	2 40	2	740	1 70 0 0 17 21 21 4
8 4 9	19195	2 4 22	9 89	1	42 44	5 15	2	640	0	0	0	0	0 14	9 91	1	42 6	4 9	0	0 1	43 0 0 20 8 8 4
8 4 9	19199	2 4 22	9 89	1	42 44	5 16	2	630	0	0	0	0	0 28	9 90	1	99 99	99 99	0	0 2	56 0 0 20 8 8 4
8 4 9	19264	2 4 22	9 89	1	42 44	5 15	2	660	0	0	0	0	0 14	9 91	1	42 0	4 11	1	720	0 0 0 0 0 20 8 8 4

8 0 9ZZ	9 2 4 24 8 69 4 46 26 7 1 2 560 0 0 0 0 1 10 69 4 44 20 4 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	10 2 4 23 9 69 4 43 55 4 15 2 560 0 0 0 0 5 10 69 4 45 0 4 0 2 590 0 0 0 0 13 99 99 4
8 0 9ZZ	11 2 4 24 8 69 4 46 17 8 13 2 520 0 0 0 0 29 10 69 4 44 50 3 27 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	12 2 4 24 6 68 4 43 0 13 35 2 600 0 0 0 0 10 7 69 4 42 0 17 5 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	13 2 4 7 9 68 4 43 30 4 45 2 540 0 0 0 0 3 9 69 4 43 30 2 30 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	14 2 4 29 6 68 4 43 35 10 47 2 640 0 0 0 0 9 7 69 4 42 10 16 10 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	15 2 4 7 9 68 4 44 10 4 44 2 560 0 0 0 0 21 8 69 4 43 45 3 45 2 700 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	16 2 4 22 8 68 4 46 47 7 21 2 770 0 0 0 0 14 8 69 4 44 37 3 50 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	17 2 4 28 6 69 4 40 12 9 50 2 570 0 0 0 0 5 9 69 4 45 8 3 45 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	18 2 4 28 6 69 4 40 26 9 43 2 550 0 0 0 0 4 9 69 4 44 20 4 7 2 590 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	19 2 4 28 6 69 4 40 20 9 58 2 620 0 0 0 0 1 8 69 4 47 0 5 0 0 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	20 2 4 24 8 70 4 44 26 10 36 2 500 0 0 0 0 22 9 70 4 44 30 7 20 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	21 2 4 24 9 69 4 46 17 8 13 2 700 0 0 0 0 30 8 70 4 44 50 3 45 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	22 2 4 21 8 68 4 46 57 8 24 2 650 0 0 0 0 12 8 70 4 43 0 15 0 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	23 2 4 7 9 68 4 44 25 4 31 2 540 0 0 0 0 22 9 70 4 45 14 5 42 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	24 2 4 30 8 70 4 48 20 11 14 2 530 0 0 0 0 3 10 70 4 44 40 4 44 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	25 2 4 15 8 70 4 44 32 11 16 2 0 0 0 0 26 10 70 4 45 10 9 45 2 900 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	26 2 4 22 6 70 4 42 5 11 42 2 530 0 0 0 0 26 7 70 4 44 2 9 48 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	27 2 4 2 7 70 4 43 53 10 39 2 560 0 0 0 0 10 9 70 4 44 40 3 30 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	28 2 4 13 6 70 4 39 36 11 12 2 700 0 0 0 0 26 8 70 4 45 3 4 27 2 760 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	29 2 4 22 8 68 4 45 47 7 5 2 550 0 0 0 0 22 9 70 4 45 30 7 30 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	30 2 4 11 6 70 4 37 55 12 13 2 530 0 0 0 0 29 7 71 4 45 40 6 45 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	31 2 4 1 7 70 4 43 39 12 12 2 570 0 0 0 0 19 7 71 4 41 40 17 25 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	32 2 4 25 9 71 4 45 46 5 26 2 580 0 0 0 0 4 11 71 4 44 40 4 10 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	33 2 4 25 9 71 4 46 3 5 38 2 540 0 0 0 0 27 10 71 4 43 20 12 15 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	34 2 4 24 9 71 4 46 35 5 57 2 540 0 0 0 0 20 10 71 4 44 40 4 20 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	35 2 4 22 9 71 4 46 33 5 47 2 530 0 0 0 0 3 11 71 4 44 35 5 5 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	36 2 4 24 9 71 4 46 16 5 48 2 530 0 0 0 0 1 11 71 4 45 0 4 0 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	37 2 4 24 9 71 4 44 53 6 4 2 580 0 0 0 0 24 10 71 4 46 33 6 4 2 580 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	38 2 4 19 8 71 4 47 12 9 0 2 550 0 0 0 0 12 10 71 4 44 50 4 50 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	39 2 4 26 9 71 4 45 35 6 19 2 590 0 0 0 0 3 11 71 4 44 35 5 5 0 0 0 0 0 0 0 13 99 99 4
8 0 9ZZ	40 2 4 8 9 71 4 44 1 5 4 2 540 0 0 0 0 6 10 71 4 44 30 7 0 0 0 0 0 0 0 0 13 99 99 4

21	0	17YF	3682	2	4	14	10	89	4	43	46	3	25	2	750	0	0	0	1	5	10	91	4	46	0	5	0	0	0	0	0	1	0	23	8	8	4			
21	0	17YF	4507	2	4	20	8	89	4	44	28	5	20	2	510	0	0	0	1	20	9	90	4	47	0	6	0	0	0	0	0	75	1	0	23	8	8	4		
21	0	17YF	6246	2	4	18	8	90	4	44	13	3	16	2	560	0	0	0	1	15	10	95	4	39	28	72	6	0	1010	0	0	1	0	23	25	25	4			
21	0	17YF	6619	2	4	21	8	90	4	44	3	3	41	2	570	0	0	0	1	22	11	95	4	37	57	29	25	0	1100	0	0	1	0	17	21	21	4			
21	0	17TG	7371	2	4	27	8	90	4	44	16	3	36	1	550	0	0	0	1	17	8	96	4	45	5	3	10	1	830	0	0	1	0	17	21	21	4			
21	0	17TG	7597	2	4	30	8	90	4	44	16	3	15	1	570	0	0	0	1	27	9	96	4	47	40	12	0	1	1020	1	225	1	0	23	8	8	4			
25	0	22R	1E+05	2	4	3	9	94	4	41	0	71	0	2	711	0	0	0	0	13	9	97	4	39	58	69	11	2	1066	0	0	0	0	13	25	25	4			
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11	0	13N	5158	2	4	6	12	94	1	39	55	17	13	2	710	0	0	0	0	7	10	95	1	39	38	17	23	2	735	0	0	0	0	13	11	11	4			

Total

679