

BLUEFIN TUNA CATCH AND SIZE HISTORICAL DATA RECOVERED UNDER THE ATLANTIC-WIDE RESEARCH PROGRAMME FOR BLUEFIN TUNA (ICCAT-GBYP PHASES 1 TO 3)

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SUMMARY

The Atlantic-wide research programme on bluefin tuna, conventionally GBYP, among several objectives, has the duty to improve the knowledge of bluefin tuna biology, ecology and ethology, with a particular attention to the identification of sub-populations. The results of the first three years of the data recovery and data mining activity are here presented. The GBYP has been able to recover a considerable amount of historical and recent data sets, which concern most of the gears and many fishing grounds. The data related to fishing gears used by vessels cover the years from 1903 to 2010, while the data related to tuna traps constitutes a very long historical series, from the year 1512 to 2009, constituting the largest time series among all RFMOs. Data were also recovered from farmed fish. Most of the data concern Task II (length, weight, effort), but catch data are also in high number. Data on other by-catch species are included in several data sets. The data were all cross-checked against the ICCAT bluefin tuna data base, and then individually quality checked. This report includes a general overview of the various data sets.

RÉSUMÉ

Le Programme de recherche sur le thon rouge englobant tout l'Atlantique, dénommé conventionnellement « GBYP », a parmi plusieurs objectifs la mission d'améliorer les connaissances sur la biologie, l'écologie et l'éthologie du thon rouge, en accordant une attention particulière à l'identification des sous-populations. Le présent document fournit les résultats des trois premières années d'activités de récupération des données et d'exploration des données. Le GBYP a pu récupérer un volume considérable de jeux de données historiques et récentes qui se rapportent à la plupart des engins et à de nombreuses zones de pêche. Les données relatives aux engins de pêche utilisés par les navires couvrent les années allant de 1903 à 2010, alors que les données relatives aux madragues thonières constituent une série historique très longue, partant de 1512 à 2009, ce qui constitue la plus longue série temporelle de toutes les ORGP. Des données relatives aux poissons d'élevage ont également été récupérées. La plupart des données appartiennent à la Tâche II (longueur, poids, effort), mais il existe aussi un grand volume de données de capture. Les données sur d'autres espèces accessoires sont incluses dans plusieurs jeux de données. Les données ont toutes été vérifiées par croisement par rapport à la base de données de l'ICCAT sur le thon rouge et la qualité de chaque donnée a été individuellement vérifiée. Le présent rapport inclut un aperçu général des divers jeux de données.

RESUMEN

El Programa de investigación de atún rojo para todo el Atlántico, denominado GBYP, entre otros objetivos, tiene la tarea de mejorar los conocimientos de la biología, la ecología y la etología del atún rojo, prestando especial atención a la identificación de las subpoblaciones. Se presentan los resultados de los tres primeros años de actividades de recuperación y minería de datos. El GBYP pudo recuperar una cantidad considerable de conjuntos de datos históricos y recientes, que afectan a la mayoría de los artes y a muchos caladeros. Los datos relacionados con los artes pesqueros utilizados por los buques cubren los años desde 1903 a 2010, mientras que los datos relacionados con las almadrabas constituyen una serie histórica muy larga, desde el año 1512 hasta 2009, lo que constituye la serie temporal más larga de todas las OROP. También se recuperaron datos de peces engordados. La mayoría de los datos se refieren a la Tarea II (talla, peso, esfuerzo) pero también hay una gran cantidad de datos de captura. En varios conjuntos de datos hay incluidos datos sobre otras especies de captura fortuita. Los datos fueron verificados con la base de datos de atún rojo de ICCAT y posteriormente se comprobó su calidad individualmente. Este informe incluye una perspectiva general de los diversos conjuntos de datos.

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KEYWORDS

Bluefin tuna, Large pelagic species, ICCAT, Data collection, Data recovery, Data analyses, Mediterranean Sea, Atlantic Ocean

1. Introduction

Bluefin tuna data used in the assessment were officially classified as “unreliable” by the SCRS in most of the reports over the last decade and, for this reason, data mining and data recovery was set by the Commission as one among the first priorities of this programme.

As usual, the first preliminary activity was conducted at the ICCAT Secretariat. An updated analysis of the ICCAT data base on bluefin tuna was carried out, with the purpose to identify the most relevant gaps in the data series which are potentially useful for the stock assessment, taking into account the data already collected under GBYP Phase 1; this gap analysis was provided by GBYP to the SCRS Scientists and National statistical correspondents to help them in detecting the lacking data.

2. Objectives of the data mining and data recovery

The objective of data recovery and data mining activities is to fill the many gaps existing in several data series currently present in the ICCAT data base, concerning both recent and historical data, which causes a large amount of substitutions in the assessment process, increasing uncertainties. At the same time, data mining activities should provide reliable data series, longer than those currently available, recovering data from many sources, including archives having difficulties for the access. This activity will allow for a better understanding of the long-time catch series by gear, improving the data available for the assessment and possibly for replacing substitutions used for data gaps.

For Phase 3, the GBYP Steering Committee limited the data mining only to an exploratory work to be done for the Ottoman archives and, if this was not be possible, to a further data recovery for historical trap data. The GBYP Steering Committee excluded again any possibility for recovering more recent data from other fisheries.

3. Data recovered in Phase 1, 2 and 3

ICCAT-GBYP issued one Call for Tenders under this activity in Phase 3, releasing one contract. In total, the data recovery and data mining activities in Phase 1, Phase 2 and Phase 3 were carried out by issuing 11 Calls for Tenders and 18 contracts.

The results of the data recovery and data mining contracted activities in Phase 3 are summarized on **Table 1**. This first exploratory work carried out in various archives concerning the Ottoman period provided for the first time an in-depth overview of the data and information included in many million documents, which have never been previously studied in correlation with the bluefin tuna fishery. It is possible that additional work will be necessary in future GBYP Phases for trying to have more data from all these archives, but this will be decided after a direct discussion with the Turkish specialist.

Additional historical trap data from 1512 to 1916 were provided, as a donation in kind, by the GBYP Coordinator.

The amount of data recovered by GBYP in Phase 1, Phase 2 and Phase 3 is very relevant. **Tables 2 and 3** show the results for the major components.

In terms of number of records and number of fish sampled (Task II), most of the data are originating from various gears (BB, LL, HP, HL), while in terms of number of tunas and total bluefin tuna weight in the catches, the large majority of the data are from tuna traps. Data recovered under GBYP Phase 3 did not include any new bluefin tuna samples dataset.

These data are clearly showing the enormous improvement provided by GBYP to the ICCAT bluefin tuna data base in these first Phases and it is the clear demonstration that the data recovery activity is able to find data sets which are sitting in various archives and which are not usually available for ICCAT scientists.

This third round of data mining and data recovery brings the full total to 23,282,419 tunas and 118,684 fishing operations, which constitutes a considerable improvement of the data available for scientific uses in the ICCAT data base. Even this data recovery and data mining was possible thanks to the passion, the dedication and the availability of several scientists, who worked well over the scheduled amount of workload established by the contracts.

In particular, it was extremely remarkable the amount of additional reliable data series provided for tuna traps, which currently start from the year 1512. This fact labels the ICCAT bluefin tuna data base as the longest among those held by all others RFMOs and possibly as the most extended among all fishery data series.

The above reported data do not include a considerable amount (129,839 records of market and auction bft individual records) of individually traded bluefin tuna data and millions of other commercial information data, provided as a donation in kind by Mr. Roberto Mialgo Bregazzi; these data will be checked and analysed under a specific contract in Phase 4.

4. Bluefin tuna fishery data analyses

For the first time, it was possible to in-depth analyse all bluefin tuna size data existing in the ICCAT data base and the results of this exercise were provided to SCRS (see document SCRS/2012/116). The analyses of the data presented in this document are still valid, with the only exception of the most recently recovered data sets, which are not concerning individual bluefin tuna data analyses because they are related to tuna trap task I catches.

The analyses of data recovered in Phase 1 and Phase 2 were the main goal for Phase 3; for this reason, a first set of basic analyses were provided to the BFT Species Group and the SCRS in 2012. The detailed information is provided by document SCRS/2012/141. The difference in total number of fishing operations and total BFT tons reported in this document are due to a recent revision of some data series on catches carried out in the Bay of Biscay between 1921 and 1996. Said revision resulted in the removal of 73 fishing operations (and the corresponding 4631 tons of BFT catches) from the data base.

The GBYP data were not used during the last bluefin tuna assessment in 2012 because, as planned, the working group limited the assessment to a simple updating, using the same data sets used before and the new official data sets provided by ICCAT CPCs.

The first part of the work concerned the fine quality control for incorporating the data in the ICCAT data base and this was done by individually cross-checking all data, at first against the existing data sets in the ICCAT bluefin tuna data base, for confirming that there was not any potential duplication, and then by an in-depth control. This first part of the work is essential for going on with the regular ICCAT data process and for finally having these data usable for SCRS scientists.

Immediately after the first essential quality control, which required a lot of time and several internal meetings, because it was necessary to individually check a total of 118,684 records and many correlated data, it was decided to initiate a series of basic analyses in strict cooperation with the ICCAT Statistical Department for providing a detailed overview of all data recovered and some very preliminary elaborations (length-weight correlations, length frequencies, etc.).

A particular attention was devoted to trap data sets (see the following **Table 4**), both for the specificity of this gear type and for the extremely long data series, and for these reasons the analyses were conducted separately. The list of 188 traps from which data series have been recovered is shown on **Table 5**; the Turkish data are listed under "Istanbul port", because the several tuna traps which were active in the Marmara Sea were selling their fish in Istanbul and those fish were statistically recorded in total without the distinction of the individual tuna traps.

The analytical work is essential for including all data recovered so far and those that will be collected in the future in the bluefin tuna stock assessment process. All GBYP data are now in a dedicated data base, which will be officially incorporated in the ICCAT data base as soon as the process will be completed.

5. Limits and opportunities for GBYP data mining and data recovery

With the purpose of better understanding where it will be necessary to focus the data recovery activities in future years and for getting an independent opinion “*pro-veritate*” about the interpretation of the various ICCAT rules and provisions concerning Task II data obligations, the GBYP coordination decided to propose a questionnaire (**Figure 1**) to 20 persons among managers (senior members of various CPCs delegations to ICCAT Commission) and senior tuna scientists who were participating to the ICCAT Commission meeting in Agadir (November 2012), considering that all these experts have a long experience in ICCAT and so they can provide a better interpretation of ICCAT rules on this issue. This was considered necessary after the various discussions in several meetings of the GBYP Steering Committee, which resulted in limiting the data recovery exercise only to historical data and avoiding the collection of more recent data, changing the policy adopted in Phase 1 following the opinion of the first GBYP Steering Committee and the Commission.

The results of this exercise, which was carried out in a very discrete manner, keeping confidential all the experts’ names (the original questionnaires are kept in the GBYP files), are very interesting because they show a partly different opinion about obligations for providing data to ICCAT between scientists and managers, while several questionnaires have many notes about the different situations in various CPCs concerning the ownership of data which were not collected using public money or outside the official statistical framework. Most of the experts have the opinion that the obligation to transmit Task II data to ICCAT is referred only to official data, while all experts agree that additional Task II data outside the mandatory ones can be acquired by GBYP.

The final opinion, which was the main objective of this survey, clearly indicated that a large majority (70.6%) believes that GBYP data recovery should have no limitations and shall work for recovering all available data sets, fully in agreement with the original ICCAT Commission’s decision; 23.5% of the opinions indicate that GBYP should concentrate the efforts for recovering only recent data sets, while only 5.9% of the opinions restricted the GBYP recovery activities to ancient data sets (**Figure 2**).

The results of the survey were presented to the GBYP Steering Committee in December 2012, but the recommendation was to continue only by recovering ancient data sets in Phase 4.

6. Conclusions

These first three phases of ICCAT-GBYP activities confirmed both the good opportunities to recover and make available many bluefin tuna data sets and the high importance of this work for improving our understanding of bluefin tuna fisheries.

The data mining concerning ancient data is now showing some limits, because finding additional data sets may imply very considerable efforts, either in terms of funds or in time required for carrying out the mining in ancient archives. Furthermore, some promising archives (like the Ottoman one) showed that data were very limited, even if important scientific information can be always recovered.

The data recovery activity, as also indicated by the opinion of both managers and senior scientists, has many additional opportunities and could also provide several additional recent data sets that might better explain some aspects of the bluefin tuna fisheries in more recent times.

For sure, the use of bluefin tuna data recovered under GBYP activities must be limited to scientific uses, excluding any possibility of using these data for any compliance issue.

The procedures for incorporating all GBYP data sets in the ICCAT data base should be speeded-up, of course excluding any detrimental effect on the necessary quality controls and taking into account all the established ICCAT procedures.

Bibliography

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- JUSTEL-RUBIO, A. et al. 2012. Review and preliminary analyses of size frequency samples of bluefin tuna (*Thunnus thynnus*) 1952-2010. SCRS/2012/116.

Table 1. Numerical data recovered as a result of the data recovery and data mining contracted activities in Phase 3.

2012-05							
Summary table - Data Recovery Plan							
Source	Fishing zone	#traps	Flag	Gear Type	Start-Date	End-Date	# Records
Prof. ALI FUAT ÖRENC	Istanbul	UND	TUR	TP	01/03/1921	28/02/1924	34

BFT (# and/or kg)	
Number	Catch
-	238,623

Table 2. Total data recovered by GBYP in Phase 1, Phase 2 and Phase 3. (TP = Traps; OG = Other gears).

TOTAL PHASE 1 + PHASE 2 + PHASE 3		Total	Total OG+TP
# Records	OG	87,761	118,684
	TP	30,923	
BFT (n)	OG	34,753	23,282,419
	TP	23,247,666	
BFT (t)	OG	114,596	858,823
	TP	744,227	
# Fish Sampled	OG	94,932	102,542
	TP	7,610	

Table 3. Total data recovered by GBYP in Phase 1, Phase 2 and Phase 3 by centuries (1500-1900) and by decades (1900 onwards) (TP = Traps; OG = Other gears).

		1500	1600	1700	1800	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	Blank
#Records	OG					9	10	87	11509	15616	29982	17946	6201	1781	1174	3210	236	
	TP	252	170	211	6100	3005	4353	6705	2301	1021	1040	2032	184	777	1221	1548		3
BFT (n)	OG												107	70	9937	21559	3080	
	TP	3978087	1292782	425335	4472749	1613889	1883967	2971129	2013583	1787209	1566956	614611	51510	178743	204806	186199		6111
BFT (t)	OG					44	163	601	2497	6057	29059	14842	24461	17880	17086	1704	203	
	TP	0			141907	40327	70723	75579	83592	86204	111417	71842	11981	8755	19568	22332		
# Fish sampled	OG										18614	18548	9053	804	18569	28000	1344	
	TP						153	170							2225	5062		

Table 4. Details of the data recovered from tuna traps by GBYP in Phase 1, Phase 2 and Phase 3.

GBYP DATA RECOVERY AND DATA MINING: TUNA TRAPS					
Reference: EXTRA					
Country	1st year	last year	no. of Traps	no. of matanzas	no. of BFT
Turkey	1909	1916	1	18	-
Italy	1862	1911	3	65	10.342
Spain	1512	1516	1	71	46.224
Total EXTRA Traps	1512	1916	5	154	56.566
Reference: Call 05/2012 (Phase3)					
Country	1st year	last year	no. of Traps	no. of matanzas	no. of BFT
Turkey	1921	1924	1	34	-
Total PH3 Traps	1921	1924	1	34	-
Reference: Calls for Tenders 01/2011, 02/2011, 11/2011 (Phase 2)					
Country	1st year	last year	no. of Traps	no. of matanzas	no. of BFT
Italy	1708	1935	73	10.003	3.427.076
Libya	1915	1942	18	1.203	339.509
Morocco	1927	2007	13	1.080	399.538
Portugal	1837	1972	23	10.029	5.404.873
Spain	1525	2009	51	7.190	12.581.269
Tunisia	1863	1932	8	1.174	1.035.940
Total Phase 2 Traps	1525	2009	186	30.679	23.188.205
Reference: Calls for Tenders 02/2010 (Phase 1)					
Country	1st year	last year	no. of Traps	no. of matanzas	no. of BFT
Italy	1994	2008	6	56	2.895
Total PH2 Traps	1994	2008	6	56	2.895
Total bluefin tuna trap fishery data recovered by GBYP in Phase 1 and Phase 2					
	1st year	last year	no. of Traps	no. of matanzas	no. of BFT
TOTAL	1525	2009	187	30.735	23.191.100
TOTAL PHASE 1 + 2 +3 + extra					
	1st year	last year	no. of Traps	no. of matanzas	no. of BFT
TOTAL	1512	2009	188	30.923	23.247.666

Note: “EXTRA” means data recovered by donations in kind and not through a Call for tenders.

Table 5. List of tuna traps concerned by the GBYP data mining and data recovery activities.

GBYP DATA MINING - LIST OF TUNA TRAPS FROM WHERE DATA HAVE BEEN RECOVERED IN PHASE 1, 2 AND 3		
FlagTrap	TrapName	
LYB	1	Marsa Marrecan
LYB	2	Marsa Zuaga
LYB	3	Marsa Sabratha
LYB	4	Marsa Soman
LYB	5	Marsa Dila
LYB	6	Gebbana Sidi Mahfud o Sidi Bilal
LYB	7	Sidi Abdul Gelil o Zanzur
LYB	8	Ras Lahmar o Gargaresch
LYB	9	Mellaha Ras Tagiura o Sidi Azus
LYB	10	Sidi Sbeh Lahman
LYB	11	Marsa al Hamra o Marsa Beltan
LYB	12	Punta Lebdi
LYB	13	Zliten o Sidi Burgheira
LYB	14	Ras Urih
LYB	15	Sidi Bu Mefta o Sidi Bu Fatma
LYB	16	Dzeira
LYB	17	Ras el Msel o Ras el Mouen
LYB	18	Mongar el Chebir - Cirenaica
MOR	1	Cap Spartel
MOR	2	Garifa
MOR	3	Cuevas
MOR	4	Cenizosos
MOR	5	Es Sahel
MOR	6	Punta Negra
MOR	7	Jolot
MOR	8	Kenitra 1
MOR	9	Kenitra 2
MOR	10	Kenitra 3
MOR	11	Capo negro
MOR	12	Tahadart
MOR	13	Principe
TUN	1	Sidi Daoud
TUN	2	Ras el Ahmar
TUN	3	El Aouaria
TUN	4	Cap Zebib
TUN	5	Bordj Kadidja
TUN	6	Conigliera
TUN	7	Monastir
TUN	8	Kuriat
FlagTrap	TrapName	
UE.PRT	1	Vau
UE.PRT	2	Torre da Barra
UE.PRT	3	Torre Altinha
UE.PRT	4	Torre Alta
UE.PRT	5	Sul do Cabo Carvoeiro
UE.PRT	6	Sul da Ponta do Zavial
UE.PRT	7	Sul da Ponta Baleeira
UE.PRT	8	Senhora da Rocha
UE.PRT	9	Pedra da Galé
UE.PRT	10	Olhos d'Água
UE.PRT	11	Medo das Cascas
UE.PRT	12	Medo Branco (Ramalhete)
UE.PRT	13	Srª do Livramento
UE.PRT	14	Forte Novo
UE.PRT	15	Farol
UE.PRT	16	Cabo de Santa Maria
UE.PRT	17	Cabeço
UE.PRT	18	Burgau
UE.PRT	19	Bias
UE.PRT	20	Beliche
UE.PRT	21	Barril (3 Irmãos)
UE.PRT	22	Abóbora
UE.PRT	23	Penedo do Sono
UE.ESP	1	Reina Regente
UE.ESP	2	Las Cabezas
UE.ESP	3	Punta Umbria
UE.ESP	4	El terron
UE.ESP	5	Nuestra Senora de la Cinta
UE.ESP	6	Las Torres
UE.ESP	7	La Higuera
UE.ESP	8	Arroyo Hondo
UE.ESP	9	Rota
UE.ESP	10	Torre Gorda
UE.ESP	11	Punta de la Isla
UE.ESP	12	Torre del Puerco
UE.ESP	13	Torre Atalaya
UE.ESP	14	Conil de la Frontera (up tp 1914)
UE.ESP	15	Barbate
UE.ESP	16	Zahara
UE.ESP	17	Lances de Tarifa
UE.ESP	18	Carbonera
UE.ESP	19	La Barrosa
UE.ESP	20	La Tuta
UE.ESP	21	Conilejo
UE.ESP	22	San Sebastian
UE.ESP	23	La Mojarrá
UE.ESP	24	El Portil
UE.ESP	25	Lentiscar
UE.ESP	26	Aguas de Ceuta
UE.ESP	27	La Atunara/ La Linea
UE.ESP	28	Estepona
UE.ESP	29	San Miguel
UE.ESP	30	Ancon de Cabo de Gata
UE.ESP	31	Agua Amarga
UE.ESP	32	La Azohia
UE.ESP	33	Calabardina de Cope
UE.ESP	34	Escomberas
UE.ESP	35	Isla de Tabarca
UE.ESP	36	Cala Punta
UE.ESP	37	Cala del Charco
UE.ESP	38	Rio Torres
UE.ESP	39	Benidorm
UE.ESP	40	La Caleta
UE.ESP	41	Calpe
UE.ESP	42	Moraira
UE.ESP	43	Granadella
UE.ESP	44	Nuestra Señora del Carmen
UE.ESP	45	Formentera
UE.ESP	46	Suratlantica
UE.ESP	47	Surmediterránea
UE.ESP	47	Levante
UE.ESP	49	Tramontana
UE.ESP	50	Baleares
UE.ESP	51	La Espada
UE.ITA	1	Capo Altano
UE.ITA	2	Camogli
UE.ITA	3	Bagno di Marciana
UE.ITA	4	Enfola (Capo d'Enfola)
UE.ITA	5	Bivona
UE.ITA	6	Langhione
UE.ITA	7	Angitola (from 1924 Mezzapraia)
UE.ITA	8	Pizzo
UE.ITA	9	Torre di Pizzo
UE.ITA	10	Gallipoli
UE.ITA	11	S. Caterina
UE.ITA	12	Torre Sant'Isidoro
UE.ITA	13	Torre Squillace
UE.ITA	14	Porto Paglia
UE.ITA	15	Porto Scuso
UE.ITA	16	Isola Piana
UE.ITA	17	Saline
UE.ITA	18	Trabucato
UE.ITA	19	del Tono
UE.ITA	20	S. Giorgio
UE.ITA	21	Oliveri
UE.ITA	22	Salicà
UE.ITA	23	S. Antonino
UE.ITA	24	La Punta
UE.ITA	25	Brucoli
UE.ITA	26	S. Panagia
UE.ITA	27	Terrauzza
UE.ITA	28	Fontane Bianche
UE.ITA	29	Avola
UE.ITA	30	Fiume di Noto
UE.ITA	31	Bafuto o Vindicari
UE.ITA	32	Marzamemi
UE.ITA	33	Capo Passero grande
UE.ITA	34	Capo Passero piccolo
UE.ITA	35	S. Giuseppe
UE.ITA	36	Portopalo
UE.ITA	37	Pozzallo
UE.ITA	38	Palma di Montechiaro
UE.ITA	39	Sciacca - Lo Tono
UE.ITA	40	Siciliana
UE.ITA	41	del Pepe o Capo Bianco
UE.ITA	42	Capo Feto
UE.ITA	43	S. Giuliano
UE.ITA	44	Asinelli(S. Cusumano)
UE.ITA	45	Bonagia
UE.ITA	46	Curto
UE.ITA	47	S. Vito lo Capo / Capo S. Vito
UE.ITA	48	Secco (Monte S. Giuliano)
UE.ITA	49	Sibilliana
UE.ITA	50	Magazzinazzi
UE.ITA	51	Scopello
UE.ITA	52	Castellammare del Golfo
UE.ITA	53	Cala Pozzillo
UE.ITA	54	Isola delle Femmine
UE.ITA	55	Vergine Maria
UE.ITA	56	Arenella
UE.ITA	57	S. Elia
UE.ITA	58	Solanto
UE.ITA	59	S. Nicolò o Nicola
UE.ITA	60	Trabia
UE.ITA	61	Cefalù
UE.ITA	62	Torre Caldura
UE.ITA	63	Detta
UE.ITA	64	Dell'Orsa
UE.ITA	65	Santa Lucia
UE.ITA	66	Puntanera
UE.ITA	67	Vaccarella
UE.ITA	68	Calavinagra
UE.ITA	69	Columbargia
UE.ITA	70	Fumentorgiu
UE.ITA	71	Peloso
UE.ITA	72	Mondello
UE.ITA	73	Favignana
UE.ITA	74	Formica
FlagTrap	TrapName	
TUR	1	Istanbul port (traps combined)
TOTAL: 188 traps		

LEGAL FRAMEWORK FOR PROVIDING TASK II DATA (LENGTH & WEIGHT) TO ICCAT

ICCAT BASIC TEXT

Art. IV
 1. OMISSIS...The Commission, in carrying out these responsibilities shall, insofar as feasible, utilise the technical and scientific services of, and information from, official agencies of the Contracting Parties and their political sub-divisions and may, when desirable, utilise the available services and information of any public or private institution, organization or individual, and may undertake within the limits of its budget independent research to supplement the research work being done by governments, national institutions or other international organizations

2. The carrying out of the provisions in paragraph 1 of this Article shall include:
 (a) collecting and analysing statistical information relating to the current conditions and trends of the tuna fishery resources of the Convention area; OMISSIS
 Art. IX
 OMISSIS
 2. The Contracting Parties agree:
 (a) to furnish, on the request of the Commission, any available statistical, biological and other scientific information the Commission may need for the purposes of this Convention;
 (b) when their official agencies are unable to obtain and furnish the said information, to allow the Commission, through the Contracting Parties, to obtain it on a voluntary basis direct from companies and individual fishermen.
 OMISSIS

REC. 2006.07 RECOMMENDATION BY ICCAT ON BLUEFIN TUNA FARMING

Art. 2
 c) ensure that the tuna farms and the national scientific institutes obtain data as specified in the following paragraph on the size composition of the fish caught as well as the date, time and area of catch and the fishing method used, in order to improve statistics for stock assessment purposes:
 To this end, establish a sampling program for the estimation of the numbers-at-size of the bluefin tuna caught which requires notably that size sampling (length or weight) at cages must be done on one sample (=100 specimens) for every 100 t of live fish, or on a 10% sample of the total number of the caged fish. Size samples will be collected during harvesting at the farm and on the dead fish during transport, following the ICCAT methodology for reporting Task II. The sampling should be conducted during any harvesting, covering all cages. Data must be transmitted to ICCAT, by 31 July for the sampling conducted the previous year.

REC. 2010.04 RECOMMENDATION BY ICCAT AMENDING THE RECOMMENDATION BY ICCAT TO ESTABLISH A MULTI-ANNUAL RECOVERY PLAN FOR BLUEFIN TUNA IN THE EASTERN ATLANTIC AND MEDITERRANEAN

No provision for Task II data (individual weight and size measures)

2011 SCRS REPORT

Page 247 – SUBCOMSTAT Report
 Point 8.7
 It was indicated that in the case of bluefin tuna there is a precedent that requires a minimum of 10% sampling. It was indicated that for some large fisheries a 10% sampling effort might not be necessary and instead of quantity it is more important to obtain representative samples from the different fishery strata.
 The Sub-Committee reiterated that there is a need to quantify the quality of the information reported and the quality/representativeness of size samples from different fisheries is a question that fits within this issue. **It was commented that a 10% sampling could be adopted as a general rule that could be revised on a fisheries basis.** It was also indicated that for the future analysis to better characterize the level of sampling that will provide information to improve management recommendations should be conducted. However, this decision will still not address the problem of assuring that the collected samples are representative.

ICCAT CIRCULAR 0796/2012

Task II size sampling	ST04-T2SZ	Actual size frequencies (numbers) of fish sampled (disaggregated by fleet, gear, sample unit, month, sampling area, and/or geographic square)	For reporting observed samples (i.e. without any substitution or raising procedure) only. Use one form per species/year.

NATIONAL STATISTICAL DATA COLLECTION FOR ICCAT TASK II

Each CPC collect Task II data (individual size or weight data) according to the domestic statistical rules. These rules or systems are not reported to ICCAT. EU Members collect these data according to the limits established by the EC Data Collection Framework, but additional data can be collected according to domestic regulations.

ADDITIONAL DATA COLLECTION

It is known that several entities are regularly or occasionally collecting individual size & weight data for various purposes. These data are not usually transmitted to the CPCs or to ICCAT.

INDEPENDENT OPINION PRO VERITATE

According to the legal framework reported above, concerning the obligation of each CPC to transmit to ICCAT the Tasks II data (in this case, limiting the discussion to bluefin tuna and to individual length and/or weight frequencies by fishery), what is your personal opinion about the following points:

- 1) Is each ICCAT CPC obliged to provide annually Task II data by fishery to ICCAT?
 YES NO Other opinion _____
 - 2) If your answer is yes, which data shall be submitted?
 The official data originating from the national statistical services, fulfilling the ICCAT obligations.
 All available data, independently from the source, their ownership and the statistical system used for collecting them.
 Others _____
 - 3) Do you think that each CPC has the right to oblige private or public institutions, collecting BFT Task II Data outside the official statistical framework, to provide these data to the national fishery authorities and/or to ICCAT?
 YES NO Other opinion „This is a function of CPCs’ Sovereignty to regulate domestically. I would need more time to consult with our domestic lawyers to see if Canada could oblige private or public institutions.“
 - 4) If your answer is no or another opinion, do you think that ICCAT can consider these additional data sets according to art. IV point 1) of the ICCAT Basic text?
 YES NO Other opinion _____
 - 5) If your answer is yes, taking into account that BFT data were several times qualified as “not reliable” by SCRS Reports and, for this reason, the Commission set, as one of the three highest priorities for the GBYP, the Data recovery and data mining activity with the purpose of recovering trustworthy data (pages 42 and 285 of the Commission Meeting Report in 2009), do you think that ICCAT-GBYP has the faculty to acquire these data from the entities having their ownership?
 XYES NO Other _____ opinion _____
 - 6) If your answer is yes, do you think that this GBYP data recovery should have any limitation?
 YES - Should be limited to historical (ancient) data
 YES - Should be limited to recent data
 NO - GBYP should continue to make any possible effort for recovering all reliable data sets currently not incorporated in the ICCAT BFT data base
 Other opinion _____
- If you have any other comment which can help GBYP for better defining this specific issue, your comments are more than welcome and they will be taken into account: _____

We would like to sincerely thank you for the time you kindly dedicated to this list of points. Your opinion is very important for us and it will be taken into account as your personal opinion, just for better assessing this particular issue within the GBYP internal decision process.

YOUR NAME: _____

SIGNATURE: _____

DATE: November, 2012 _____

Figure 1. Questionnaire concerning the interpretation of the ICCAT Task II rules and obligations and where GBYP should focus the efforts for data recovery.

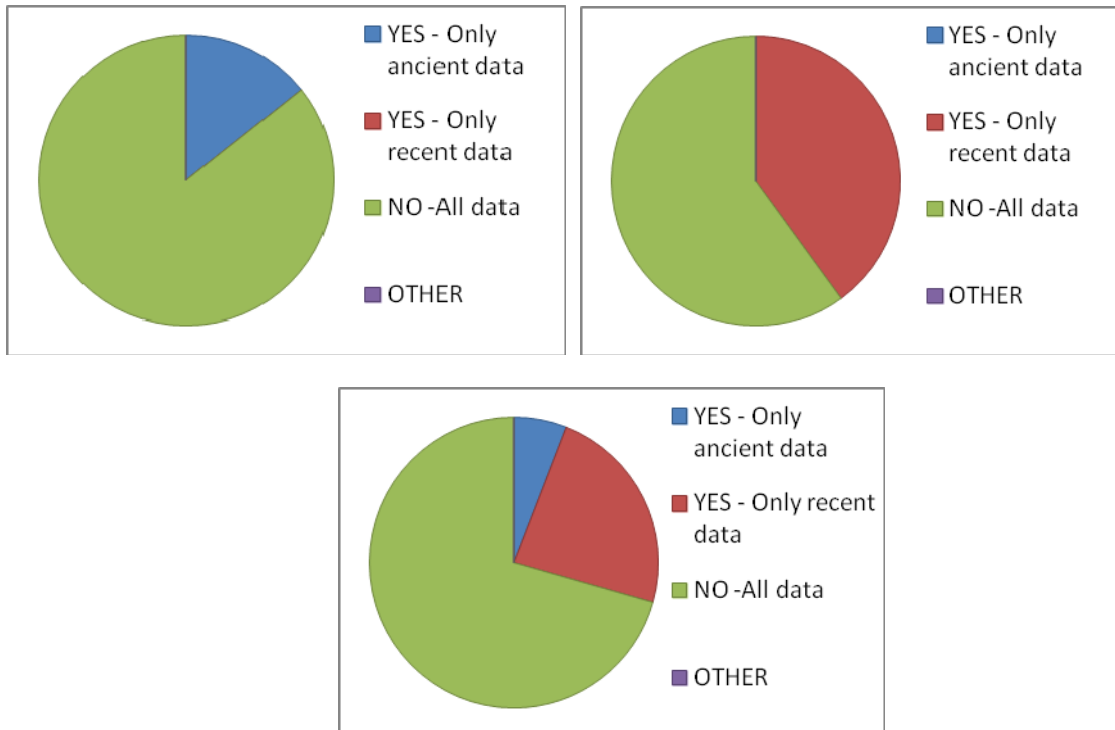


Figure 2. Final results coming from the questionnaire (question 6: Do you think that GBYP data recovery should have any limitation?). The graph on upper left shows the opinions expressed by senior scientists; the graph on upper right shows the opinions expressed by managers, while the graph in the center shows the combined opinions.