

BLUEFIN DATA SUBSTITUTIONS AND RAISING MADE FOR 1991 SCRS

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The catch-at-size data base created in the past has been up-dated, accounting for changes in Task I catch data as well as including any new size data (Japan, 1989, east Atlantic and the Mediterranean). The work done is described in Table 1.

West Atlantic stock

The data base was created for 1990 fisheries. Canadian sampling covers 100% of the tended line catches. The Canadian longline catches were raised by the total number of fish in catches and in samples. Therefore, the catch of months for which we have no size (January-June) was redistributed to the months which had size data. Five fish caught by rod-and-reel were matched with trap catches, since their average weight were very similar. Two fish seized were entered, converting the average weight into size. Japan and the U.S. have provided raised catch-at-size data which were used for substituting sizes for minor fisheries (see Table 1).

East Atlantic

Although the SCRS decided at its 1990 meeting that this year's stock assessment will be made only on west Atlantic bluefin, the Secretariat, fearing that not updating the eastern stock catch-at-size data base for one year could make it difficult to update the following year, tried to update the base for east as well as west Atlantic. However, this was unsuccessful since the data for the east Atlantic and the Mediterranean were very incomplete.

Even the catch data for France (east Atlantic and the Mediterranean) were not available as of October 18, 1991. Size data are available only for Spain (Canary Islands

BB, Atlantic BB, Atlantic TRAP, Mediterranean HAND and Mediterranean LLHB). No size data are reported for any other fisheries.

Level of sampling

In spite of the SCRS recommendations, most of the countries still have not reported the number of fish actually measured. Unless such information is sent together with the catch-at-size data, it is impossible to evaluate the adequacy of sampling. However, among the total west Atlantic bluefin catch of 2,819 MT, only 3 MT are estimated catches by the Secretariat. Unless there are some countries misreporting the catches, the catch is well covered. It seems that the sampling coverage for the west Atlantic bluefin tuna is also quite good. All of the west Atlantic catch of 3,083 MT was sampled in one way or another.

Date of sample and date of catch

A minor change has been introduced into the data base format by adding an extra field for time of samples. In the past, there have been discussions as to whether the time of catch or the time from which the sample came should be assigned to a catch-at-size. This is a problem only when size data from a time stratum other than catch is substituted. The Secretariat used the date of the catch while the U.S. scientists maintained a policy of using the date of the original samples. The arguments were that for the growth studies, the time of the original size is more appropriate but for the cohort studies, the time of the catch is more appropriate to use.

In order to give an alternative choice for the scientists, depending on the analysis, both times are now kept in the base. However, this has not been retroactive.

Table 1. Data substitution and raising made by the Secretariat, (October 18, 1991).

Area	Country	REPORTED CATCH				R. F.	I	SIZE DATA USED FOR RAISING				Remarks	
		Gear	Yr	T	TASK I (MT)			Area	Country	Gear	Yr		T
					New	Old							
Updating of existing data base													
MEDI	TURKEY	PS	88	0	973	910	1.06923	I	TURKEY	PS	88	0	TASKI CHGD. RE-RAISED
EAST	JAPAN	LL	89	0	838	832	1.00000	I	EAST JAPAN	LL	89	0	REVISED BY NAT SCIENT.
WEST	ST LUCIA	HAND	89	0	2	3	0.66667	I	WEST ST LUCIA	HAND	89	0	TASKI CHGD. RE-RAISED
MEDI	JAPAN	LL	89	0	127	200	1.00000	I	MEDI JAPAN	LL	89	0	REVISED BY NAT SCIENT.
MEDI	MALTA	UNCL	89	0	34	25	1.36000	I	MEDI MALTA	UNCL	89	0	TASKI CHGD. RE-RAISED
MEDI	TURKEY	PS	89	0	640	910	0.70330	I	MEDI TURKEY	PS	89	0	TASKI CHGD. RE-RAISED
EAST ATLANTIC													
EAST	FRANCE	UNCL	90		101*		ERR	I	NO DATA				NOTHING DONE
EAST	FRANCE	BB	90		305		ERR	I	NO DATA				NOTHING DONE
EAST	FRANCE	GILL	90		31*		ERR	I	NO DATA				NOTHING DONE
EAST	FRANCE	MWTD	90		22*		ERR	I	NO DATA				NOTHING DONE
EAST	JAPAN	LLHB	90		838		ERR	I	NO DATA				NOTHING DONE
EAST	MAROC	LL	90		6		ERR	I	NO DATA				NOTHING DONE
EAST	MAROC	PS	90		6		ERR	I	NO DATA				NOTHING DONE
EAST	MAROC	TRAP	90		228		ERR	I	NO DATA				NOTHING DONE
EAST	MAROC	SURF	90		49		ERR	I	NO DATA				NOTHING DONE
EAST	PORT-MAIN	SURF	90		14		ERR	I	NO DATA				NOTHING DONE
EAST	PORT-MDR	BB	90		12		ERR	I	NO DATA				NOTHING DONE
EAST	PORT-MDR	HAND	90		1		ERR	I	NO DATA				NOTHING DONE
EAST	SPAIN	LLHB	90		32		ERR	I	NO DATA				NOTHING DONE
EAST	SPAIN	TRAP	90		1911		1.00000	I					BY NAT. SCIENT.
EAST	SPAIN	BB	90		1493		1.00000	I					BY NAT. SCIENT.
EAST	SPN-CAN	BB	90		121		1.00000	I					BY NAT. SCIENT.
WEST ATLANTIC													
WEST	ARGENTIN	UNCL	90	0	2	188	0.01062	I	USA	HAND	90	0	SUBST. RAISED SECR
52	CANADA	LLHB	90	6	2		2.14754	I	52 CANADA	LLHB	90	6	1953 14 RAISED #CAT/SMPL
52	CANADA	LLHB	90	7	0		2.14754	I	52 CANADA	LLHB	90	7	140 1 RAISED #CAT/SMPL
52	CANADA	LLHB	90	8	3		2.14754	I	52 CANADA	LLHB	90	8	3318 10 RAISED #CAT/SMPL
52	CANADA	LLHB	90	9	4		2.14754	I	52 CANADA	LLHB	90	9	3529 10 RAISED #CAT/SMPL
52	CANADA	LLHB	90	12	6		2.14754	I	52 CANADA	LLHB	90	12	2253 26 RAISED #CAT/SMPL
51	CANADA	TRAP	90	7	1		1.00000	I	51 CANADA	TRAP	90	7	1300 5 100% SAMPLING
51	CANADA	TRAP	90	8	0		1.00000	I	51 CANADA	TRAP	90	8	320 1 100% SAMPLING
52	CANADA	TL	90	8	67		1.00000	I	52 CANADA	TL	90	8	66600 218 100% SAMPLING
52	CANADA	TL	90	9	38		1.00000	I	52 CANADA	TL	90	9	37900 129 100% SAMPLING
52	CANADA	TL	90	10	12		1.00000	I	52 CANADA	TL	90	10	12000 38 100% SAMPLING
52	CANADA	TL	90	11	4		1.00000	I	52 CANADA	TL	90	11	3500 10 100% SAMPLING
51	CANADA	TL	90	8	84		1.00000	I	51 CANADA	TL	90	8	84000 521 100% SAMPLING
51	CANADA	TL	90	9	137		1.00000	I	51 CANADA	TL	90	9	137200 883 100% SAMPLING
51	CANADA	TL	90	10	50		1.00000	I	51 CANADA	TL	90	10	49500 267 100% SAMPLING
51	CANADA	TL	90	11	4		1.00000	I	51 CANADA	TL	90	11	4300 35 100% SAMPLING
51	CANADA	TLD	90	9	275		1.00000	I	51 CANADA	TLD	90	9	540 2 AV. WGT CONVTD
52	CANADA	RR	90	0	2		1.00000	I	52 CANADA	RR	90	0	SUB & RAISED BY SECRET
WEST	CHI. TAI	LLFB	90	0	5	550	0.00909	I	JAPAN	LL	90	0	SUBST. RAISED SECR
WEST	JAPAN	LLHB	90		550		1.00000	I					RAISED BY NAT SCIENT
WEST	USA	LL	90		160		1.00000	I					RAISED BY NAT SCIENT
WEST	USA	PS	90		384		1.00000	I					RAISED BY NAT SCIENT
WEST	USA	UNCL	90		1		1.00000	I	US	GILL	90		RAISED BY NAT SCIENT
WEST	USA	HARP	90		129		1.00000	I					RAISED BY NAT SCIENT
WEST	USA	HAND	90		210		1.00000	I					RAISED BY NAT SCIENT
WEST	USA	R R	90		820		1.00000	I					RAISED BY NAT SCIENT
WEST	USA	LLD	90		133		1.00000	I					RAISED BY NAT SCIENT
WEST	BRAS-JAPAN	LLFB	90	0	1	188	0.00531	I	USA	HAND	90	ER	SUBST. RAISED SECR

Table 1. Continued..

Area	Country	REPORTED CATCH		TASK I (MT)	R. F.	I	SIZE DATA USED FOR RAISING			Remarks
		Gear	Yr T				New	Old	I	
MEDITERRANEAN										
MEDI	ALGERIA	UNCL	90	820		ERR	I	NO DATA		NOTHING DONE
MEDI	FRANCE	SPOR	90	30*		ERR	I	NO DATA		NOTHING DONE
MEDI	FRANCE	PSM	90	4404*		ERR	I	NO DATA		NOTHING DONE
MEDI	GREECE	UNCL	90	131		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	HARP	90	2		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	TRAP	90	246		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	SPOR	90	51*		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	UNCL	90	960		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	HAND	90	10*		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	R R	90	50*		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	PSFB	90	466		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	PSFS	90	110		ERR	I	NO DATA		NOTHING DONE
MEDI	ITALY	PSFS	90	2000		ERR	I	NO DATA		NOTHING DONE
MEDI	JAPAN	LLHB	90	127		ERR	I	NO DATA		NOTHING DONE
MEDI	LIBYA	UNCL	90	84		ERR	I	NO DATA		NOTHING DONE
MEDI	MALTA	UNCL	90	49		ERR	I	NO DATA		NOTHING DONE
MEDI	MAROC	LL	90	3		ERR	I	NO DATA		NOTHING DONE
MEDI	MAROC	TRAP	90	580		ERR	I	NO DATA		NOTHING DONE
MEDI	MAROC	SURF	90	18		ERR	I	NO DATA		NOTHING DONE
MEDI	SPAIN	LLHB	90	59	1.00000	I				PARTLY RSED NAT. SCIENT
MEDI	SPAIN	TRAP	90	470		ERR	I	NO DATA		NOTHING DONE
MEDI	SPAIN	SURF	90	247		ERR	I	NO DATA		NOTHING DONE
MEDI	SPAIN	HAND	90	296	1.00000	I				RAISED BY NAT. SCIENT
MEDI	TUNISIE	PS	90	50*		ERR	I	NO DATA		NOTHING DONE
MEDI	TUNISIE	TRAP	90	55		ERR	I	NO DATA		NOTHING DONE
MEDI	TURKEY	PS	90	640		ERR	I	NO DATA		NOTHING DONE
MEDI	YGOSLAV	PS	90	940		ERR	I	NO DATA		NOTHING DONE