

SPAR 2/IP16

SC7324 WP4

## DATA CATALOGUE TUNA AND BILLFISH ASSESSMENT PROGRAMME

Revised May 1989

### Background

The Tuna and Billfish Assessment Programme was established in September 1981 after completion of the Skipjack Survey and Assessment Programme of the South Pacific Commission. The establishment of the Programme arose from the Twelfth Regional Technical Meeting on Fisheries (17-21 November 1980) which recommended the creation of a "...regional fisheries statistics programme to obtain and analyse catch and effort and other scientific data as the base for the approved research programme on highly migratory species".\* Since the inception of the TBAP, the establishment and maintenance of the regional catch and effort database has been the highest priority of the Programme. Practical work on the statistical system began in January 1982 with the recruitment of the first fisheries statistician to the staff of the SPC.

### Overview

This catalogue describes the major data holdings of the Tuna and Billfish Assessment Programme as at May 1989. The principal source of data are daily catch and effort logsheets supplied to SPC by member countries of the region. Other data held by the TBAP include (i) summarised statistics of catch and effort supplied by the DWFN countries of Japan, Korea, Taiwan and the American Tunaboat Association, (ii) information from the tagging project undertaken by the Skipjack Survey and Assessment Programme, (iii) various data on length frequency sampling, and (iv) unloading statistics and cannery receipt data from American Samoa, Fiji, Guam and the Northern Marianas. The data described are stored in hard copy form (logsheets, statistical bulletins on catch and effort and miscellaneous reports and papers) and electronic media (magnetic computer tape).

The catalogue is made up of tables on (i) catch and effort data, (ii) tagging data, and (iii) length frequency data, each describing the year, source of the data, the time and area stratification and some quantitative indicator of the amount of data in this category (electronic media only). Other information unique to each table (such as gear type used), is detailed to give a better picture of the data holdings. Key code reference tables are provided in the Appendices to explain the coding used throughout the catalogue. Unloading statistics and cannery receipt data are to be incorporated in future versions of the data catalogue.

\* Report of Meeting. *Twelfth Regional Technical Meeting on Fisheries, 17-21 November 1980, Noumea, New Caledonia.* South Pacific Commission, Noumea, New Caledonia.

**TABLE 1 : CATCH AND EFFORT DATA HOLDINGS****Key to columns**

<b>Year</b>	=	<b>Year of fishing effort</b>
<b>Flag</b>	=	<b>Nationality of fishing vessels</b> (refer to APPENDIX A)
<b>Gear</b>	=	<b>Gear type of the fishing vessels</b> (refer to APPENDIX C)
<b>Source</b>	=	<b>Source providing the data</b> (refer to APPENDIX A)
<b>Units of Area</b>	=	<b>Area stratification</b> (refer to APPENDIX D)
<b>Units of Time</b>	=	<b>Time stratification</b> (refer to APPENDIX E)
<b>Units of Catch/Effort</b>	=	<b>Units of catch and effort</b> (refer to APPENDIX H)
<b>SPECIES COVERAGE</b>	=	<b>Fish species types covered for this group</b> (refer to APPENDIX B)
<b>Media</b>	=	<b>Type of media the data is stored on</b> (refer to APPENDIX F)
<b>Number of Records</b>	=	<b>Number of records</b> (in units of time stratification) for this group of data

**Comments**

Under "SPECIES COVERAGE", the "OTH" species category includes data for (1) species not covered in the other principal species categories and (2) unknown species.

TABLE 1 : CATCH AND EFFORT DATA HOLDINGS

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records
				Area, Time	Catch/ Effort			
62	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	2,393
63	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,976
64	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	4,190
	PV	P	PU	X,D	F	Skj Yft Oth	B	412
65	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,866
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,414
66	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	4,101
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,366
67	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	4,198
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,400
	TW	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	133
68	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,974
		P	JB	1,M	E	Skj Bet Yft Oth	H	
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,532
	TW	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	382
69	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,753
		P	JB	1,M	E	Skj Bet Yft Oth	H	
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,196
	TW	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	179
70	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	4,026
		P	JB	1,M	E	Skj Bet Yft Oth	H	
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,623
	TW	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	337
71	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,389
		P	JB	1,M	E	Skj Bet Yft Oth	H	
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,640
	TW	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	545
72	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,156
		P	JB	1,M	E	Skj Bet Yft Oth	B	9,333
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,060
	TW	L	TB	5,Y	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	562
73	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	2,999
		P	JB	1,M	E	Skj Bet Yft Oth	B	9,512
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,162
	TW	L	TB	5,Y	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	487

TABLE 1 : CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records
				Area, Time	Catch/Effort			
74	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,106
		P	JB	1,M	E	Skj Bet Yft Oth	B	10,719
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,757
	TW	L	TB	5,Y	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	398
75	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	2,783
		P	JB	1,M	E	Skj Bet Yft Oth	B	11,804
	KR	L	KB	5,M	A	Alb Bet Yft Bft Mls Bum Swo Sai Shk Oth	H	
	NZ	S	NZ	X,D	G	Skj	T	92
	PV	P	PU	X,D	F	Skj Yft Oth	B	2,034
	TW	L	TB	5,Y	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	372
76	FJ	P	FJ	X,D	F	Skj Yft Oth	B	468
	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,341
		P	JB	1,M	E	Skj Bet Yft Oth	B	10,500
	KR	L	KB	5,M	A	Alb Bet Yft Bft Mls Bum Swo Sai Shk Oth	H	
	NZ	S	NZ	X,D	G	Skj	T	620
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,644
	TW	L	TB	5,Y	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	287
77	FJ	P	FJ	X,D	F	Skj Yft Oth	B	835
	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	2,961
		P	JB	1,M	E	Skj Bet Yft Oth	B	13,844
	KR	L	KB	5,M	A	Alb Bet Yft Bft Mls Bum Swo Sai Shk Oth	H	
	NZ	S	NZ	X,D	G	Skj	T	1,035
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,123
	TW	L	TB	5,Y	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	465
78	FJ	P	FJ	X,D	F	Skj Yft Oth	B	987
	JP	L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	2,994
		L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	196
		L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	206
		P	JB	1,M	E	Skj Bet Yft Oth	B	11,291
		P	KI	X,D	F	Skj Yft Oth	B	41
		P	SB	X,D	F	Skj Yft Oth	B	9
	KR	L	KB	5,M	A	Alb Bet Yft Bft Mls Bum Swo Sai Shk Oth	H	
	NZ	S	NZ	X,D	G	Skj	T	1,141
	PV	P	PU	X,D	F	Skj Yft Oth	B	2,245
	TW	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	299
79	JP	L	AU	X,D	J	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	884
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	11,941
		L	JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	3,350
		L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,440
		L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	19
		L	NZ	X,D	C	Alb Bft Oth	T	11

TABLE 1 : CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records		
				Area, Time	Catch/Effort					
79	JP	L	PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,110		
		L	PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,551		
		L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,434		
		P	FM	X,D	F	Skj Yft Oth	B	5,893		
		P	JB	1,M	E	Skj Bet Yft Oth	B	7,564		
		P	KI	X,D	F	Skj Yft Oth	B	569		
		P	MI	X,D	F	Skj Yft Oth	B	27		
		P	PG	X,D	F	Skj Yft Oth	B	54		
		P	SB	X,D	F	Skj Yft Oth	B	118		
		S	FM	X,D	G	Skj Yft Oth	B	284		
		S	PG	X,D	G	Skj Yft Oth	B	127		
		KR	L	KB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	878	
			L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	56	
		NZ	S	NZ	X,D	G	Skj	T	1,390	
		PV	P	PU	X,D	F	Skj Yft Oth	B	1,764	
		TW	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	294	
		80	FJ	P	FJ	X,D	F	Skj Yft Oth	B	505
JP	L			AU	X,D	J	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	2,133	
	L			FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	11,898	
	L			JB	5,M	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	4,229	
	L			KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	4,620	
	L			MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	3,106	
	L			NZ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	T	10,736	
	L			PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	11,055	
	L			PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	704	
	L			SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,339	
	P			FM	X,D	F	Skj Yft Oth	B	5,593	
	P			KI	X,D	F	Skj Yft Oth	B	2,259	
	P			MI	X,D	F	Skj Yft Oth	B	1,480	
	P			PG	X,D	F	Skj Yft Oth	B	19	
	P			SB	X,D	F	Skj Yft Oth	B	147	
	S			FM	X,D	G	Skj Yft Oth	B	224	
	S			PG	X,D	G	Skj Yft Oth	B	901	
	S			SB	X,D	G	Skj Yft Oth	B	112	
	KR			L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	230
				S	FM	X,D	G	Skj Yft Oth	B	5
NZ	S	NZ	X,D	G	Skj	T	1,920			
PV	P	PU	X,D	F	Skj Yft Oth	B	1,238			
TW	L	PU	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	3,089			
	L	SB	X,D	C	Skj Alb Bet Yft Mls Bum Blm Swo Sai Shk Oth	B	77			
	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	371			
81	FJ	P	FJ	X,D	F	Skj Yft Oth	B	1,320		
		JP	L	AU	X,D	J	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	6,483	
			L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	15,039	

TABLE 1 : CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records	
				Area, Time	Catch/ Effort				
81	JP	L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,668	
		L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	5,490	
		L	NZ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	T	10,345	
		L	PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	14,702	
		L	PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,513	
		L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	4,891	
		P	FM	X,D	F	Skj Yft Oth	B	3,685	
		P	KI	X,D	F	Skj Yft Oth	B	1,787	
		P	MI	X,D	F	Skj Yft Oth	B	2,267	
		P	SB	X,D	F	Skj Yft Oth	B	148	
		S	FM	X,D	G	Skj Yft Oth	B	662	
		S	PG	X,D	G	Skj Yft Oth	B	1,404	
		S	SB	X,D	G	Skj Yft Oth	B	189	
		KR	L	SB	X,D	C	Skj Alb Bet Yft Mls Bum Blm Swo Sai Shk Oth	B	228
			L	TV	X,D	C	Skj Alb Bet Yft Bft Mls Bum Swo Shk Oth	B	13
	S		FM	X,D	G	Skj Yft Oth	B	33	
	NC	P	NC	X,D	F	Skj Yft Oth	B	127	
		NZ	S	NZ	X,D	G	Skj	T	2,008
	PV	P	PU	X,D	F	Skj Yft Oth	B	1,819	
		SB	L	SB	X,D	C	Skj Alb Bet Yft Mls Bum Blm Swo Sai Shk Oth	B	121
	P		SB	X,D	F	Skj Yft Oth	B	5,883	
	ST	P	SB	X,D	F	Skj Yft Oth	B	2,262	
	TW	L	FJ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	326	
		L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	369	
	82	FJ	P	FJ	X,D	F	Skj Yft Oth	B	2,494
			JP	L	AU	X,D	J	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T
		L		FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	10,942
L		KI		X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	6,149	
L		MI		X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	5,825	
L		NZ		X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	T	8,864	
L		PG		X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	12,802	
L		PU		X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,115	
L		SB		X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	3,569	
P		FM		X,D	F	Skj Yft Oth	B	741	
P		KI		X,D	F	Skj Yft Oth	B	933	
P		MI		X,D	F	Skj Yft Oth	B	2,803	
P		PG		X,D	F	Skj Yft Oth	B	27	
P		SB		X,D	F	Skj Yft Oth	B	90	
S		FM		X,D	G	Skj Yft Oth	B	1,254	
S		PG		X,D	G	Skj Yft Oth	B	3,954	
S		SB	X,D	G	Skj Yft Oth	B	184		
KR		L	TV	X,D	C	Skj Alb Bet Yft Bft Mls Bum Swo Shk Oth	B	651	
		S	PG	X,D	G	Skj Yft Oth	B	194	
NC		P	NC	X,D	F	Skj Yft Oth	B	674	
NZ		S	NZ	X,D	G	Skj	T	1,077	

TABLE 1: CATCH AND EFFORT DATA HOLDINGS (cont.)

Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records	
			Area, Time	Catch/Effort				
PH	S	MI	X,D	G	Skj Yft Oth	B	147	
PV	P	PU	X,D	F	Skj Yft Oth	B	964	
SB	L	SB	X,D	C	Skj Alb Bet Yft Mls Bum Blm Swo Sai Shk Oth	B	393	
	P	SB	X,D	F	Skj Yft Oth	B	6,421	
ST	P	SB	X,D	F	Skj Yft Oth	B	2,588	
TO	L	TO	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	155	
TW	L	FJ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,672	
	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Oth	B	249	
FJ	P	FJ	X,D	F	Skj Yft Oth	B	1,450	
HN	S	PG	X,D	G	Skj Yft Oth	B	25	
JP	L	AU	X,D	J	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	5,213	
	L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	8,095	
KR	L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	3,127	
	L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	5,457	
	L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	106	
	L	NZ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	T	5,736	
	L	PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	9,197	
	L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,374	
	P	FM	X,D	F	Skj Yft Oth	B	1,031	
	P	KI	X,D	F	Skj Yft Oth	B	390	
	P	MI	X,D	F	Skj Yft Oth	B	4,213	
	P	NC	X,D	F	Skj Yft Oth	B	13	
	P	PG	X,D	F	Skj Yft Oth	B	202	
	S	FM	X,D	G	Skj Yft Oth	B	839	
	S	PG	X,D	G	Skj Yft Oth	B	4,606	
	S	SB	X,D	G	Skj Yft Oth	B	240	
	L	TV	X,D	C	Skj Alb Bet Yft Bft Mls Bum Swo Shk Oth	B	707	
	S	FM	X,D	G	Skj Yft Oth	B	7	
	S	PG	X,D	G	Skj Yft Oth	B	359	
	KY	S	PG	X,D	G	Skj Yft Oth	B	16
		L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	41
	NC	P	NC	X,D	F	Skj Yft Oth	B	279
S		FJ	X,D	G	Skj Yft Oth	B	97	
PA	S	PG	X,D	G	Skj Yft Oth	B	14	
SB	L	SB	X,D	C	Skj Alb Bet Yft Mls Bum Blm Swo Sai Shk Oth	B	406	
	P	SB	X,D	F	Skj Yft Oth	B	7,487	
ST	P	SB	X,D	F	Skj Yft Oth	B	2,930	
TO	L	TO	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	147	
TW	L	FJ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	199	
	L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Shk Oth	H		
	L	VU	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	774	
	S	PG	X,D	G	Skj Yft Oth	B	229	
84	FJ	P	FJ	X,D	F	Skj Yft Oth	B	1,189
	HN	S	PG	X,D	G	Skj Yft Oth	B	22

TABLE 1 : CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records
				Area, Time	Catch/ Effort			
84	JP	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai-	T	4,173
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	18,272
		L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	6,339
		L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	3,701
		L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	215
		L	NZ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	T	4,431
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	324
		L	PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	6,614
		L	PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,646
		L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,034
		P	FM	X,D	F	Skj Yft Oth	B	3,141
		P	KI	X,D	F	Skj Yft Oth	B	589
		P	MI	X,D	F	Skj Yft Oth	B	1,360
		P	NC	X,D	F	Skj Yft Oth	B	20
		P	PF	X,D	F	Skj Yft Oth	B	6
		P	PG	X,D	F	Skj Yft Oth	B	37
		P	PU	X,D	F	Skj Yft Oth	B	43
		P	SB	X,D	F	Skj Yft Oth	B	39
		S	FM	X,D	G	Skj Yft Oth	B	2,738
		S	PG	X,D	G	Skj Yft Oth	B	3,841
	S	PU	X,D	G	Skj Yft Oth	B	622	
	S	SB	X,D	G	Skj Yft Oth	B	245	
	KR	L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	286
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	12
		L	TV	X,D	C	Skj Alb Bet Yft Bft Mls Bum Swo Shk Oth	B	258
		S	FM	X,D	G	Skj Yft Oth	B	115
		S	PG	X,D	G	Skj Yft Oth	B	539
	KY	S	PG	X,D	G	Skj Yft Oth	B	33
	MX	S	FM	X,D	G	Skj Yft Oth	B	111
		S	PG	X,D	G	Skj Yft Oth	B	193
	NC	L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	156
	NZ	S	FJ	X,D	G	Skj Yft Oth	B	70
	PA	L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	6
		S	PG	X,D	G	Skj Yft Oth	B	213
	PH	S	PG	X,D	G	Skj Yft Oth	B	322
	SB	L	SB	X,D	C	Skj Alb Bet Yft Mls Bum Blm Swo Sai Shk Oth	B	471
		P	SB	X,D	F	Skj Yft Oth	B	8,158
	ST	P	SB	X,D	F	Skj Yft Oth	B	3,458
	TO	L	TO	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	105
	TW	L	FJ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	778
		L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Shk Oth	H	
		L	VU	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	4,910
		S	FM	X,D	G	Skj Yft Oth	B	188
		S	PG	X,D	G	Skj Yft Oth	B	448
	US	S	AT	-,D	G	Skj Bet Yft Oth	T	4,929
		S	AT	-,D	G	Skj Bet Yft Oth	T	3,197



TABLE 1: CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records
				Area, Time	Catch/ Effort			
84	US	S	AT	X,D	G	Skj Bet Yft Oth	T	5,033
		S	AT	X,D	G	Skj Bet Yft Oth	T	3,685
		S	AT	X,D	G	Skj Bet Yft Oth	T	528
		S	AT	X,D	G	Skj Bet Yft Oth	T	91
		S	AT	-,D	G	Skj Bet Yft Oth	T	464
		S	AT	-,D	G	Skj Bet Yft Oth	T	11
		S	PG	X,D	G	Skj Yft Oth	B	721
85	AU	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	12
	FJ	P	FJ	X,D	F	Skj Yft Oth	B	982
	HN	L	TV	X,D	C	Alb Bet Yft Oth	B	51
	JP	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	3,928
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	16,821
	L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	4,186	
	L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	3,961	
	L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	250	
	L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	859	
	L	PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	7,213	
	L	PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,538	
	L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,832	
	P	FM	X,D	F	Skj Yft Oth	B	1,602	
	P	KI	X,D	F	Skj Yft Oth	B	715	
	P	MI	X,D	F	Skj Yft Oth	B	1,222	
	P	NC	X,D	F	Skj Yft Oth	B	10	
	P	PG	X,D	F	Skj Yft Oth	B	135	
	P	PU	X,D	F	Skj Yft Oth	B	2	
	P	SB	X,D	F	Skj Yft Oth	B	460	
	S	FM	X,D	G	Skj Yft Oth	B	1,958	
	S	PG	X,D	G	Skj Yft Oth	B	3,950	
	S	PU	X,D	G	Skj Yft Oth	B	617	
	KR	L	CK	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	141
		L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,822
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	529
		L	TV	X,D	C	Skj Alb Bet Yft Bft Mls Bum Swo Shk Oth	B	107
		S	FM	X,D	G	Skj Yft Oth	B	243
	S	PG	X,D	G	Skj Yft Oth	B	483	
	KY	S	PG	X,D	G	Skj Yft Oth	B	221
	NC	L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	330
	NZ	S	FJ	X,D	G	Skj Yft Oth	B	114
	PA	L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	30
S		PG	X,D	G	Skj Yft Oth	B	87	
PH	S	PG	X,D	G	Skj Yft Oth	B	456	
SB	L	SB	X,D	C	Skj Alb Bet Yft Mls Bum Blm Swo Sai Shk Oth	B	250	
	P	SB	X,D	F	Skj Yft Oth	B	4,396	
	S	SB	X,D	G	Skj Yft Oth	B	47	
SO	S	SB	X,D	G	Skj Yft Oth	B	67	

TABLE 1: CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records
				Area, Time	Catch/Effort			
85	ST	P	SB	X,D	F	Skj Yft Oth	B	1,282
	SU	S	KI	X,D	G	Skj Yft Oth	B	274
	TO	L	TO	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	86
	TW	L	FJ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	430
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	736
		L	TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Shk Oth	H	
		L	VU	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,992
		S	FM	X,D	G	Skj Yft Oth	B	836
		S	PG	X,D	G	Skj Yft Oth	B	1,247
	US	S	PG	X,D	G	Skj Yft Oth	B	844
	86	AU	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T
FJ		P	FJ	X,D	F	Skj Yft Oth	B	1,016
ID		S	FM	X,D	G	Skj Yft Oth	B	42
		S	PG	X,D	G	Skj Yft Oth	B	99
JP		L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	3,542
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	8,276
		L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,035
		L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,850
		L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	H	
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	454
		L	PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	5,559
		L	PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	351
		L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,619
		P	FM	X,D	F	Skj Yft Oth	B	4,169
		P	KI	X,D	F	Skj Yft Oth	B	1,280
		P	MI	X,D	F	Skj Yft Oth	B	611
		P	PG	X,D	F	Skj Yft Oth	B	22
		P	PU	X,D	F	Skj Yft Oth	B	8
		P	SB	X,D	F	Skj Yft Oth	B	14
		P	TV	X,D	F	Skj Yft Oth	B	26
		S	FM	X,D	G	Skj Yft Oth	B	3,506
S		PG	X,D	G	Skj Yft Oth	B	2,748	
S		PU	X,D	G	Skj Yft Oth	B	98	
KI		P	KI	X,D	F	Skj Yft Oth	B	301
KR		L	CK	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	505
		L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	836
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	775
		S	FM	X,D	G	Skj Yft Oth	B	307
		S	PG	X,D	G	Skj Yft Oth	B	230
KY		S	FM	X,D	G	Skj Yft Oth	B	38
		S	PG	X,D	G	Skj Yft Oth	B	168
NC		L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	H	
PA	L	CK	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	18	
	L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	65	
	L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	153	

TABLE 1 : CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records	
				Area, Time	Catch/ Effort				
86	PH	S	FM	X,D	G	Skj Yft Oth	B	239	
	SB	S	SB	X,D	G	Skj Yft Oth	B	178	
	SU	S	KI	X,D	G	Skj Yft Oth	B	1,055	
	TO	L	TO	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	132	
	TW	L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	20	
			TB	5,Q	A	Alb Bet Yft Bft Mls Bum Blm Swo Shk Oth	H		
		L	VU	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	165	
		S	FM	X,D	G	Skj Yft Oth	B	819	
		S	PG	X,D	G	Skj Yft Oth	B	923	
	US	S	PG	X,D	G	Skj Yft Oth	B	584	
	VU	S	FM	X,D	G	Skj Yft Oth	B	135	
			PG	X,D	G	Skj Yft Oth	B	22	
	87	AU	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	1,052
		FJ	P	FJ	X,D	F	Skj Yft Oth	B	1,022
ID		S	FM	X,D	G	Skj Yft Oth	B	58	
			PG	X,D	G	Skj Yft Oth	B	143	
JP		L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	4,535	
			FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	12,120	
		L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	943	
		L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	3,835	
		L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	H		
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	668	
		L	PG	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	375	
		L	PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	104	
		L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	692	
		P	FJ	X,D	F	Skj Yft Oth	B	282	
		P	FM	X,D	F	Skj Yft Oth	B	1,012	
		P	KI	X,D	F	Skj Yft Oth	B	948	
		P	MI	X,D	F	Skj Yft Oth	B	1,201	
		P	PG	X,D	F	Skj Yft Oth	B	3	
		P	SB	X,D	F	Skj Yft Oth	B	17	
		S	FM	X,D	G	Skj Yft Oth	B	4,970	
S		PG	X,D	G	Skj Yft Oth	B	1,389		
S		PU	X,D	G	Skj Yft Oth	B	161		
S		SB	X,D	G	Skj Yft Oth	B	25		
KI		P	KI	X,D	F	Skj Yft Oth	B	684	
KR		L	CK	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	171	
			FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	17	
		L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,918	
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,191	
		L	US	0,D	J	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Oth	T	6,561	
		S	FM	X,D	G	Skj Yft Oth	B	1,610	
		S	KI	X,D	G	Skj Yft Oth	B	64	
		S	PG	X,D	G	Skj Yft Oth	B	1,060	
KY	S	KI	X,D	G	Skj Yft Oth	B	39		

TABLE 1: CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records
				Area, Time	Catch/ Effort			
87	KY	S	PG	X,D	G	Skj Yft Oth	B	3
	NC	L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	H	
	PA	L	CK	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	50
		L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	815
		L	PF	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	127
		S	FM	X,D	G	Skj Yft Oth	B	28
	PH	S	PG	X,D	G	Skj Yft Oth	B	715
	SB	P	SB	X,D	F	Skj Yft Oth	B	6,903
		S	SB	X,D	G	Skj Yft Oth	B	189
	TO	L	TO	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	196
	TV	P	SB	X,D	F	Skj Yft Oth	B	153
	TW	L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	949
		L	US	0,D	J	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Oth	T	7,355
		L	VU	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	43
		S	FM	X,D	G	Skj Yft Oth	B	2,377
	US	S	PG	X,D	G	Skj Yft Oth	B	1,768
		S	FM	X,D	G	Skj Yft Oth	B	252
		S	KI	X,D	G	Skj Yft Oth	B	503
		S	PG	X,D	G	Skj Yft Oth	B	104
	VU	S	FM	X,D	G	Skj Yft Oth	B	108
S		PG	X,D	G	Skj Yft Oth	B	93	
88	AU	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	781
		S	PG	X,D	G	Skj Yft Oth	B	27
	FJ	P	FJ	X,D	F	Skj Yft Oth	B	619
	HN	L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	30
	ID	S	FM	X,D	G	Skj Yft Oth	B	54
		S	PG	X,D	G	Skj Yft Oth	B	83
	JP	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	6,865
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	10,940
		L	KI	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	712
		L	MI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,298
		L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	H	
		L	PU	X,D	C	Skj Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	105
		L	SB	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	4,191
		P	FM	X,D	F	Skj Yft Oth	B	1,787
		P	KI	X,D	F	Skj Yft Oth	B	676
		P	MI	X,D	F	Skj Yft Oth	B	2,977
		P	SB	X,D	F	Skj Yft Oth	B	15
		P	TV	X,D	F	Skj Yft Oth	B	261
		S	FM	X,D	G	Skj Yft Oth	B	6,304
		S	PU	X,D	G	Skj Yft Oth	B	162
KI	P	KI	X,D	F	Skj Yft Oth	B	763	
KR	L	CK	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	90	
	L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	16	
	L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	1,357	

TABLE 1 : CATCH AND EFFORT DATA HOLDINGS (cont.)

Year	Flag	Gear	Source	UNITS		SPECIES COVERAGE	Media	Number of Records
				Area, Time	Catch/ Effort			
88	KR	S	FM	X,D	G	Skj Yft Oth	B	1,002
		S	PG	X,D	G	Skj Yft Oth	B	1,236
	KY	S	PG	X,D	G	Skj Yft Oth	B	17
	NC	L	NC	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	H	
	NZ	P	FJ	X,D	F	Skj Yft Oth	B	45
	PA	L	KI	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	198
		S	FM	X,D	G	Skj Yft Oth	B	86
		S	PG	X,D	G	Skj Yft Oth	B	68
	PH	S	PG	X,D	G	Skj Yft Oth	B	719
	SB	P	SB	X,D	F	Skj Yft Oth	B	6,466
		S	SB	X,D	G	Skj Yft Oth	B	179
	TO	L	TO	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	173
	TV	P	SB	X,D	F	Skj Yft Oth	B	175
	TW	L	FJ	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	760
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	2,513
		L	VU	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	35
		S	FM	X,D	G	Skj Yft Oth	B	3,085
		S	PG	X,D	G	Skj Yft Oth	B	2,373
		S	SB	X,D	G	Skj Yft Oth	B	52
		US	S	FM	X,D	G	Skj Yft Oth	B
	S		KI	X,D	G	Skj Yft Oth	B	132
	S		PG	X,D	G	Skj Yft Oth	B	220
	S		TT	X,D	G	Skj Yft Oth	B	5,768
VU	S	FM	X,D	G	Skj Yft Oth	B	135	
	S	PG	X,D	G	Skj Yft Oth	B	146	
89	AU	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	3
	JP	L	AU	X,D	C	Alb Bet Yft Mls Bft Bum Blm Swo Sai	T	32
		L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	593
		P	FM	X,D	F	Skj Yft Oth	B	7
		S	FM	X,D	G	Skj Yft Oth	B	532
	KR	S	PG	X,D	G	Skj Yft Oth	B	2
	TW	L	FM	X,D	C	Alb Bet Yft Bft Mls Bum Blm Swo Sai Shk Oth	B	59
		S	PG	X,D	G	Skj Yft Oth	B	417
	US	S	TT	X,D	G	Skj Yft Oth	B	260
	VU	S	PG	X,D	G	Skj Yft Oth	B	39

TABLE 2 : SKIPJACK PROGRAMME TAG DATA HOLDINGS

## Key to columns

Year	=	Year of release.
Geog. Area	=	Geographic area where tagging took place (refer to APPENDIX A).
SKJ Tag'd	=	The number of skipjack released.
SKJ Cpt'd	=	The number of skipjack recaptured.
YFT Tag'd	=	The number of yellowfin released.
YFT Cpt'd	=	The number of yellowfin recaptured.
OTH Tag'd	=	The number of other species released.
OTH Cpt'd	=	The number of other species recaptured.
Total Tag'd	=	The number of all species released.
Total Cpt'd	=	The number of all species recaptured.

## Comments

This table represents data holdings for the release and recapture of tuna and associated species as a result of the Skipjack Survey and Assessment Programme conducted from 1977 to 1981. The data are presented by geographic area and year of release. The number of recaptures represents recaptures in the geographic area from fish tagged in all geographic areas combined, and not the number of recaptures from fish tagged within the given geographic area. Species presented include Skipjack, Yellowfin and Other. Other species include: mackerel tuna (*Euthynnus affinis*), rainbow runner (*Elagatis bipinnulatus*), bigeye tuna (*Thunnus obesus*), albacore (*Thunnus alalunga*), frigate tuna (*Auzis thazard*). This data coverage includes recaptures by the tagging vessel.

The Skipjack Programme also generated data on the baitfish fishery, and on biological data for tuna including stomach contents and gonad indices. These data will be incorporated in future versions of this catalogue.

TABLE 2 : SKIPJACK PROGRAMME TAG DATA HOLDINGS

Year	Geog. Area	SKJ Tag'd	SKJ Cpt'd	YFT Tag'd	YFT Cpt'd	OTH Tag'd	OTH Cpt'd	Total Tag'd	Total Cpt'd
77	NC	6,665	13	45				6,710	13
	PG	936	5	20				956	5
	SB	2,569	83	121	1	3		2,693	84
	VU	54	1					54	1
78	AS	75						75	
	FJ	8,265	820	847	79	471	41	9,583	940
	JP	112	14					112	14
	KI	4,553	452	45				4,598	452
	KS	137	3	1				138	3
	MI	296	5	8				304	5
	MR	8						8	
	NC	3,670	25	14				3,684	25
	NK	1,250	1					1,250	1
	PP	928	53	60	1	50		1,038	54
	PU	747	54					747	54
	SI	834	23					834	23
	TI	2,344	15	62	1			2,406	16
	TK	64	1				1	65	1
	TO	1,423	13	260	1	3		1,686	14
	TR	738	38					738	38
	TV	2,711	23	136				2,847	23
	VU	1,155	6	195	2	163		1,513	8
	WF	14,059	112	214	2			14,273	114
WS	1,797	14	78				1,875	14	
YP	827	25	10	1			837	26	
79	KI	214	2	10				224	2
	KS	177	2	601		1		779	2
	MI	41		89	1			130	1
	MQ	10,087	27	165		1		10,253	27
	MR	187	9					187	9
	NW	4,391	29	8		16		4,415	29
	NZ	11,853	614			3		11,856	614
	PG	7,864	1,043	795	32	59	6	8,718	1,081
	PP	954	3	152	1	2		1,108	4
	PX	373	1	17				390	1
	QL	2,724	36	58				2,782	36
	SI	917	13	4				921	13
	SK	9						9	
	TI	2,468	11	32				2,500	11
TR	343	14					343	14	
80	AS	761	4					761	4
	FJ	17,735	1,498	1,658	57	3		19,396	1,555
	GA	177		308		34		519	
	IT					1		1	
	MQ	10,706	22	25		1		10,732	22

TABLE 2 : SKIPJACK PROGRAMME TAG DATA HOLDINGS (cont.)

Year	Geog. Area	SKJ Tag'd	SKJ Cpt'd	YFT Tag'd	YFT Cpt'd	OTH Tag'd	OTH Cpt'd	Total Tag'd	Total Cpt'd
80	NC	26		27				53	
	NF	1,131	3	256	1			1,387	4
	NU	93		31				124	
	NZ	1,149	12					1,149	12
	PN	62		298	2			360	2
	PP	3,757	163	53	1			3,810	164
	PU	6,600	399	1,298	66	18		7,916	465
	SB	3,818	506	760	16	4		4,582	522
	SI	1		34	3			35	3
	SK	50						50	
	TI	825	2	668	4			1,493	6
	TO	580	1	4				584	1
	TV	328	3					328	3
	WF	2,635	26	535	1	2		3,172	27
	WS	162	5			1		163	5
81	PG					1		1	
82	NZ	2,020	97	3		4		2,027	97
		151,435	6,344	10,005	273	842	47	162,282	6,664



TABLE 3 : LENGTH FREQUENCY DATA HOLDINGS

*Key to columns*

Country of Sample	=	Country where length frequency sampling took place (refer to APPENDIX A)
Source	=	Country or source providing the data (refer to APPENDIX A)
Area	=	Area stratification (refer to APPENDIX D)
Time	=	Time stratification (refer to APPENDIX E)
SKJ Sampled	=	Number of skipjack sampled
YFT Sampled	=	Number of yellowfin sampled
OTH Sampled	=	Number of other species sampled
Total Sampled	=	Number of all species sampled

*Comments*

This table incorporates logsheets of length frequency sampling sent to SPC by member countries, information from the Skipjack Survey and Assessment Programme, various observer trips and published material. The species types detailed are *Skipjack*, *Yellowfin* and *Other*.

The data submitted to SPC have been received in various formats, including lengths of individual fish or the numbers of fish in each of a series of size intervals. All data represented in this table have been converted to the numbers of fish in one centimetre size intervals.

TABLE 3: LENGTH FREQUENCY DATA HOLDINGS

Year of Sample	Country	Source	Time	Area	SKJ Sampled	YFT Sampled	OTH Sampled	Total Sampled
71	??	SR	M	V	4,326			4,326
72	??	SR	M	V	18,973			18,973
74	??	SR	M	V	11,134			11,134
75	??	SR	M	V	15,545			15,545
76	??	SR	M	V	34,881			34,881
77	NC	SP	D	X	6,665	45		6,710
	PG	SP	D	X	936	20		956
	SB	SP	D	X	2,569	121	3	2,693
	VU	SP	D	X	54			54
	??	SR	M	V	77,340			77,340
78	AS	SP	D	X	75			75
	FJ	SP	D	X	8,265	847	471	9,583
	JP	SP	D	X	112			112
	KI	SP	D	X	4,553	45		4,598
	KS	SP	D	X	137	1		138
	MI	SP	D	X	296	8		304
	MR	SP	D	X	8			8
	NC	SP	D	X	3,670	14		3,684
	NK	SP	D	X	1,250			1,250
	PP	SP	D	X	928	60	50	1,038
	PU	SP	D	X	747			747
	SI	SP	D	X	834			834
	TI	SP	D	X	2,344	62		2,406
	TK	SP	D	X	64		1	65
	TO	SP	D	X	1,423	260	3	1,686
	TR	SP	D	X	738			738
	TV	SP	D	X	2,711	136		2,847
	VU	SP	D	X	1,155	195	163	1,513
	WF	SP	D	X	14,059	214		14,273
	WS	SP	D	X	1,797	78		1,875
	YP	SP	D	X	827	10		837
	??	JB	M	V	11,358			11,358
	??	NZ	D	V	201			201
	??	SR	M	V	49,604			49,604
79	KI	SP	D	X	214	10		224
	KS	SP	D	X	177	601	1	779
	MI	SP	D	X	41	89		130
	MQ	SP	D	X	10,087	165	1	10,253
	MR	SP	D	X	187			187
	NW	SP	D	X	4,391	8	16	4,415

TABLE 3 : LENGTH FREQUENCY DATA HOLDINGS (cont.)

Year	Country of Sample	Source	Time	Area	SKJ Sampled	YFT Sampled	OTH Sampled	Total Sampled
79	NZ	SP	D	X	11,853		3	11,856
	PG	SP	D	X	7,864	795	59	8,718
	PP	SP	D	X	954	152	2	1,108
	PX	SP	D	X	373	17		390
	QL	SP	D	X	2,724	58		2,782
	SI	SP	D	X	917	4		921
	SK	SP	D	X	9			9
	TI	SP	D	X	2,468	32		2,500
	TR	SP	D	X	343			343
	??	JB	M	V	19,775			19,775
	??	NZ	D	V	25,066			25,066
	??	SR	M	V	20,006			20,006
80	AS	SP	D	X	761			761
	FJ	SP	D	X	17,735	1,658	3	19,396
	GA	SP	D	X	177	308	34	519
	MQ	SP	D	X	10,706	25	1	10,732
	NC	SP	D	X	26	27		53
	NF	SP	D	X	1,131	256		1,387
	NU	SP	D	X	93	31		124
	NZ	SP	D	X	1,149			1,149
	PN	SP	D	X	62	298		360
	PP	SP	D	X	3,757	53		3,810
	PU	SP	D	X	6,600	1,298	18	7,916
	SB	SP	D	X	3,818	760	4	4,582
	SI	SP	D	X	1	34		35
	SK	SP	D	X	50			50
	TI	SP	D	X	825	668		1,493
	TO	SP	D	X	580	4		584
	TV	SP	D	X	328			328
	WF	SP	D	X	2,635	535	2	3,172
	WS	SP	D	X	162		1	163
	??	JB	M	V	941			941
	??	NZ	D	V	41,700			41,700
	??	SR	M	V	22,006			22,006
81	SB	SB	D	1	4,819	2,870		7,689
	??	IA	D	V	300	200	100	600
	??	NZ	D	V	71,617			71,617
82	NZ	SP	D	X	2,020	3	4	2,027
	SB	SB	D	1	2,706	1,622		4,328
	??	IA	D	V	50	100		150
	??	IA	M	V	1,850	1,700	54	3,604
	??	OB	D	V	843	413	67	1,323

TABLE 3 : LENGTH FREQUENCY DATA HOLDINGS (cont.)

Year	Country of Sample	Source	Time	Area	SKJ Sampled	YFT Sampled	OTH Sampled	Total Sampled
83	SB	SB	D	1	4,522	1,868		6,390
	??	IA	D	V	50			50
	??	IA	M	V	50	50		100
84	PG	PG	D	-				
	SB	SB	D	1	4,261	215		4,476
85	FM	FM	D	X				
	PG	PG	D	-	26,246	12,136		38,382
	SB	SB	D	1	10,877	2,851		13,728
86	SB	SB	D	1	13,481	3,352		16,833
87	SB	SB	D	1	4,517	2,592		7,109

## APPENDIX A : SOURCE AND GEOGRAPHIC AREA CODES

*Code Source/Geographic Area*

?? Unknown/Not specified  
 AT AMERICAN TUNABOAT ASSOCIATION (ATA)  
 AS AMERICAN SAMOA  
 AU AUSTRALIA  
 CK COOK ISLANDS  
 FJ FIJI  
 FM FEDERATED STATES OF MICRONESIA  
 GA GAMBIER ISLANDS (France)  
 HB HOWLAND AND BAKER (United States)  
 HN HONDURAS  
 HW HAWAII  
 IA INTER-AMERICAN TROPICAL TUNA COMMISSION (IATTC)  
 ID INDONESIA  
 IT INTERNATIONAL  
 JB JAPAN PUBLICATIONS (refer to APPENDIX G)  
 JP JAPAN  
 KB KOREA PUBLICATIONS (refer to APPENDIX G)  
 KI KIRIBATI  
 KR KOREA  
 KS KOSRAE (Federated States of Micronesia)  
 KY CAYMAN ISLANDS  
 LN LINE ISLANDS (Kiribati)  
 MI MARSHALL ISLANDS (France)  
 MQ MARQUESAS ISLANDS (France)  
 MR MARIANAS ISLANDS  
 MT MINAMI TORI SHIMA (Japan)  
 MX MEXICO  
 NC NEW CALEDONIA (France)  
 NF NORFOLK (Australia)  
 NK NORTHERN COOK ISLANDS  
 NR NAURU  
 NU NIUE  
 NW NEW SOUTH WALES (Australia)  
 NZ NEW ZEALAND  
 OB SPC OBSERVER TRIPS  
 PA PANAMA  
 PF FRENCH POLYNESIA (France)  
 PG PAPUA NEW GUINEA  
 PH PHILIPPINES  
 PN PITCAIRN (United Kingdom)  
 PP PONAPE (Federated States of Micronesia)  
 PU PALAU

## APPENDIX A : SOURCE AND GEOGRAPHIC AREA CODES (cont.)

## Code Source/Geographic Area

PV VAN CAMP - Palau  
 PX PHOENIX (Kiribati)  
 PY PALMYRA (United States)  
 QL QUEENSLAND (Australia)  
 SB SOLOMON ISLANDS  
 SI SOCIETY ISLANDS (France)  
 SK SOUTHERN COOK ISLANDS  
 SP SOUTH PACIFIC COMMISSION SKIPJACK PROGRAMME (refer to APPENDIX G)  
 SR SOLOMON ISLANDS (refer to APPENDIX G)  
 TB TAIWAN PUBLICATIONS (refer to APPENDIX G)  
 TI TUAMOTU ISLANDS (France)  
 TK TOKELAU (New Zealand)  
 TO TONGA  
 TR TRUK (Federated States of Micronesia)  
 TT USA MULTILATERAL TREATY  
 TV TUVALU  
 TW TAIWAN  
 US UNITED STATES OF AMERICA  
 VU VANUATU  
 WF WALLIS AND FUTUNA (France)  
 WK WAKE (United States)  
 WS WESTERN SAMOA  
 YP YAP (Federated States of Micronesia)

## APPENDIX B : SPECIES CODES

## Species

Code	Common Name	Scientific Name
ALB	ALBACORE	<i>Thunnus alalunga</i>
BET	BIGEYE	<i>Thunnus obesus</i>
BFT	BLUEFIN	<i>Thunnus thynnus</i>
BLM	BLACK MARLIN	<i>Makaira indicus</i>
BUM	BLUE MARLIN	<i>Makaira nigricans</i>
MLS	STRIPED MARLIN	<i>Tetrapturus audax</i>
OTH	'Other species'	
SAI	SAILFISH	<i>Istiophorus platypterus</i>
SHK	SHARK	<i>Elasmobranchi</i>
SKJ	SKIPJACK	<i>Katsuwonus pelamis</i>
SWO	BROADBILL SWORDFISH	<i>Xiphias gladius</i>
YFT	YELLOWFIN	<i>Thunnus albacares</i>

**APPENDIX C : GEAR TYPES**

*Gear*  
*Code Gear Description*

L Longline  
 S Purse seine  
 P Pole-and-line

**APPENDIX D : AREA STRATIFICATION**

*Area*  
*Code Area Stratification Description*

X Latitude/longitude coordinates to the nearest minute  
 1 One degree grid squares  
 5 Five degree grid squares  
 0 Ten degree grid squares  
 V Variation of multiple degree grid squares  
 - Not supplied

**APPENDIX E : TIME STRATIFICATION**

*Time*  
*Code Time Stratification Description*

D Daily recordings  
 M Monthly recordings  
 Q Quarterly recordings  
 Y Yearly recordings

**APPENDIX F : MEDIA TYPES**

*Media*  
*Code Media Description*

H Hard copy material only. This is in the form of logsheets, statistical bulletins, miscellaneous reports, etc.  
 T The data are stored on electronic media (i.e. magnetic tape) only.  
 B The data are stored in hard copy form and on magnetic tape.

## APPENDIX G : SOURCE DETAILS

## Source

## Code    Details

JB      63, 65 - 66, 71 - 72, 74 - 80 Longline

*ANNUAL REPORT OF EFFORT AND CATCH STATISTICS BY AREA ON  
JAPANESE TUNA LONGLINE FISHERY*

Published by

Research Department  
Fisheries Agency of Japan

68 - 80 Pole-and-line

*ANNUAL REPORT OF EFFORT AND CATCH STATISTICS BY AREA ON  
JAPANESE SKIPJACK BAITBOAT FISHERY*

Published by

Research Department  
Fisheries Agency of Japan

KB      75 - 79 Longline

*ANNUAL REPORT OF CATCH AND EFFORT STATISTICS AND  
FISHING GROUNDS ON KOREAN TUNA LONGLINE FISHERY*

Published by

Fisheries Research and Development Agency  
Busan, Korea  
(Last publication for 1979, published in December 1981)

SP      SOUTH PACIFIC COMMISSION SKIPJACK SURVEY AND ASSESSMENT  
PROGRAMME CONDUCTED THROUGHOUT THE REGION  
FROM 1977 TO 1981

SR      71 - 80 Pole-and-line

SOLOMON ISLAND SKIPJACK DATA FROM POLE-AND-LINE VESSELS  
GIVEN BY MONTH FOR ENTIRE AREA

Fisheries Division, Ministry of Natural Resources,  
Solomon Islands



## APPENDIX G : SOURCE DETAILS (cont.)

<i>Source Code</i>	<i>Details</i>
TB	72 - 86 Longline

*ANNUAL CATCH STATISTICS OF TAIWAN'S TUNA LONGLINE FISHERY*

Published by

Tuna Research Center  
c/o Institute of Oceanography  
National Taiwan University  
Taipei, Republic of China  
(Last publication for 1986, published in December 1987)

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## APPENDIX H : CODES FOR UNITS OF CATCH AND EFFORT

<i>Code</i>	<i>Gear Type</i>	<i>Units of Catch</i>	<i>Units of Effort</i>	<i>Raised/ Unraised Data</i>
A	L	Number of fish	Number of hooks Number of days fished	Raised
C	L	Number of fish Catch in metric tonnes	Number of hooks Number of days fished	Unraised
E	P	Catch in metric tonnes	Number of days fished	Raised
F	P	Catch in metric tonnes	Number of days fished	Unraised
G	S	Catch in metric tonnes	Number of days fished Number of sets	Unraised
J	L	Number of fish	Number of hooks Number of days fished	Unraised