

SECRETARIAT OF THE PACIFIC COMMUNITY

REGIONAL TUNA TAGGING PROJECT

DATA SUMMARY

Babera Kaltongga

**Oceanic Fisheries Programme
Technical Report No. 35**

**Noumea, New Caledonia
1998**

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Original text : English

Secretariat of the Pacific Community cataloguing-in-publication data

Kaltongga, Babera

Regional Tuna Tagging Project : Data Summary / by Babera Kaltongga

(Oceanic Fisheries Programme Technical Report No.35)

1. Fish Tagging—Oceania 1. Tuna Fishes—Oceania
I. Title II. Series III. Secretariat of the Pacific Community

639.2028

AACR2

ISBN 982 - 203 - 615 - 9

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Funded by the 6th European Development Fund,
European Community.

ACKNOWLEDGEMENTS

A big thank you to Peter Williams (Fisheries Database Supervisor) of whom I can never say 'he never does anything for me!'. Thanks also to Dr John Hampton and Dr Antony Lewis for checking the document.

ABSTRACT

The Regional Tuna Tagging Project (RTTP) covered the EEZs of the following countries and territories; Solomon Islands, Papua New Guinea, Federated States of Micronesia (FSM), Palau, Philippines, Kiribati, Tuvalu, Indonesia, Marshall Islands, Australia, New Caledonia, Fiji, Wallis and Futuna, Nauru and the international waters enclosed within these zones.

The large databases generated by the project are a regional asset, providing a wealth of information on skipjack tuna (*Katsuwonus pelamis*), yellowfin tuna (*Thunnus albacares*) and bigeye tuna (*Thunnus obesus*) for use in biological and stock assessment.

The objective of this technical report is to provide a convenient summary of these tagging data collected during the RTTP. The report consists of a page summary for each tagging cruise period, which was usually conducted within a single country's EEZ. Each page summary contains information on release and subsequent recapture numbers by species; recapture numbers by gear and vessel flag; size composition of fish released; temporal pattern of tag returns, and movements of tagged fish greater than 200nm nett displacement.

Also included are one-page summaries of the Solomon Islands, Kiribati, Fiji and Philippines in-country tagging projects, jointly developed by the Fisheries divisions and departments of the involved countries along with the Oceanic Fisheries Programme (OFP), previously known as the Tuna and Billfish Assessment Programme (TBAP).

There is also other data available regarding the RTTP on the OFP website under the Research section, <http://www.spc.org.nc/OceanFish/Html/Research/Index.htm>.

Inquiries regarding the information presented in this report should be directed to:

The Oceanic Fisheries Coordinator
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RÉSUMÉ

Le projet régional de marquage des thonidés a porté sur les ZEE des États et territoires suivants : Îles Salomon, Papouasie-Nouvelle-Guinée, États fédérés de Micronésie, Palau, Philippines, Kiribati, Tuvalu, Indonésie, Îles Marshall, Australie, Nouvelle-Calédonie, Fidji, Wallis et Futuna, Nauru et les eaux internationales comprises entre ces zones.

Les vastes bases de données qui ont pu ainsi être établies sont un atout précieux pour la région et fournissent une profusion d'informations utiles pour l'évaluation des stocks de bonites (*Katsuwonus pelamis*), de thons jaunes (*Thunnus albacares*) et de thons obèses (*Thunnus obesus*) et la connaissance de leur biologie.

L'objectif de ce rapport technique est de présenter un résumé pratique des données de marquage recueillies. On y trouvera un résumé d'une page pour chaque mission de marquage, généralement menée dans la ZEE d'un seul pays. Chacun de ces résumés comporte une ventilation par espèce du nombre de poissons relâchés et recapturés par la suite; le nombre de poissons recapturés par engin de pêche et par nationalité de pavillon; la taille des poissons relâchés; les délais de récupération des marques; et les parcours de plus de 200 milles accomplis par les poissons marqués.

On trouvera aussi des résumés d'une page des projets de marquage locaux menés aux Îles Salomon, à Kiribati, à Fidji et aux Philippines. Ces projets ont été élaborés conjointement par les divisions et services des pêches des pays en question et le programme Pêche hauturière (anciennement le programme d'évaluation des thonidés et marlins).

On pourra trouver d'autres informations sur le projet régional de marquage des thonidés en consultant les pages Web de la section Recherche du programme Pêche hauturière :

<http://www.spc.org.nc/OceanFish/Html/Research/index.htm>

Pour tout renseignement concernant les informations figurant dans ce rapport, prière de s'adresser au :

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Period	Country
21/12/89 to 03/01/90	Solomon Islands
04/01/90 to 27/02/90	Papua New Guinea
28/02/90 to 31/03/90	Solomon Islands
01/04/90 to 06/05/90	Papua New Guinea
07/05/90 to 28/05/90	Federated States of Micronesia
29/05/90 to 23/06/90	Papua New Guinea
24/06/90 to 10/07/90	Palau
11/07/90 to 16/08/90	Philippines
17/08/90 to 25/08/90	Palau
26/08/90 to 25/09/90	Federated States of Micronesia
03/10/90 to 14/10/90	Kiribati
15/10/90 to 18/10/90	Tuvalu
31/01/91 to 16/02/91	Papua New Guinea
17/02/91 to 20/02/91	Federated States of Micronesia
21/02/91 to 06/03/91	Papua New Guinea
06/03/91 to 29/03/91	Indonesia
29/03/91 to 16/04/91	Philippines
18/04/91 to 08/05/91	Palau
09/05/91 to 20/05/91	Papua New Guinea
21/05/91 to 07/06/91	Federated States of Micronesia
08/06/91 to 21/06/91	Papua New Guinea
22/06/91 to 24/07/91	Federated States of Micronesia
25/07/91 to 09/08/91	Marshall Islands
10/08/91 to 22/08/91	Kiribati
22/08/91 to 01/09/91	Tuvalu
01/09/91 to 17/09/91	Kiribati
13/09/91 to 14/09/91	Solomon Islands
18/09/91 to 10/10/91	Papua New Guinea
12/10/91 to 22/11/91	Australia
23/11/91 to 05/12/91	New Caledonia
06/12/91 to 07/12/91	Fiji
06/03/92 to 09/03/92	Wallis & Futuna
10/03/92 to 16/03/92	Tuvalu
17/03/92 to 09/04/92	Kiribati
09/04/92 to 13/04/92	Marshall Islands
14/04/92 to 28/04/92	Kiribati
15/06/92 to 03/07/92	Wallis & Futuna
11/07/92 to 14/07/92	Nauru
15/07/92 to 24/07/92	PNG, Nauru, Indonesia & international waters

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FOREWORD

The RTTP was a three-year project undertaken by the South Pacific Commission's (now known as the Secretariat of the Pacific Community (SPC)) Oceanic Fisheries Programme (OFP), with funding support from the European Community Sixth European Development Fund (Lomé III) under the Pacific Marine Resources Programme.

The Project was designed to provide practical answers to questions raised concerning tuna fisheries interaction and tuna exploitation generally within the region. The project was completed in December 1992 in terms of fieldwork, but continues to provide information on the population characteristics of yellowfin, skipjack and, to a lesser extent, bigeye, so that these questions can be addressed using various modelling approaches.

The primary objective of the Project was to gather information on the population dynamics of western Pacific yellowfin, with emphasis on the estimation of movement patterns, mortality rates and growth. This information is enabling an assessment of the status of the stock and allowing a variety of interaction questions to be addressed. Similar information was also collected for skipjack and bigeye. The project also investigated interactions between artisanal and industrial tuna fisheries and gear types that compete for this valuable resource in the tropical western Pacific Ocean.

The RTTP commenced in late 1989, with the field work scheduled to run for two years. The majority of the work was done from the Project's chartered Tuvaluan pole-and-line vessel, M.F.V. *Te Tautai*, but tagging from commercial vessels under short-term charter arrangements or cooperative arrangements was also carried out.

The *Te Tautai* was a 173.12 gross tonne Japanese-style pole-and-line tuna vessel, 39.2 metres in overall length, that was owned by the Tuvalu Government. The vessel and equipment used on board during the RTTP are described in Appendix II. The crew of the *Te Tautai*, SPC scientists and staff directly involved in the RTTP field work or office support are listed in Appendix III.

Field operations concentrated on the productive areas along the Equator and equatorial current boundaries and in areas with active surface fisheries for tropical tunas (including those of adjacent southeast Asian states). This area roughly coincides with the western Pacific purse-seine fishery and is also exploited by pole-and-line, longline, troll and handline tuna vessels. Tagging was carried out in tropical waters between the Philippines (115°E) and Kiribati (170°W).

Field work for the Project proper was completed at the end of July 1992. However, extensions of the project were carried out in north-eastern Australia in the Coral Sea (November 1992) and New Caledonia (3.5 weeks in November – December 1992).

Tags have been returned from a wide variety of sources and areas, including directly from vessels (mostly purse seiners) and processing and unloading facilities throughout the Asia-Pacific region and beyond. The range of recapture sources for the RTTP includes purse seiners from the Solomon Islands, USA, Japan, Korea, Philippines, Taiwan, Indonesia, FSM, and Australia; pole-and-line vessels from Solomon Islands, Japan, Palau, Indonesia, Kiribati, Fiji and Australia; longline vessels from Australia, Japan, Korea, Philippines, Taiwan, FSM and the Solomon Islands, and artisanal vessels from the entire western Pacific region.

AVANT-PROPOS

Le projet régional de marquage des thonidés était un projet sur trois ans dont la réalisation avait été confiée au programme Pêche hauturière de la Commission du Pacifique Sud (devenue maintenant le secrétariat général de la Communauté du Pacifique—CPS), grâce à une aide financière accordée par la Communauté européenne dans le cadre du sixième Fonds européen de développement (Lomé III) au titre du programme des ressources marines du Pacifique.

Le projet visait à apporter des réponses concrètes aux interrogations que soulevaient les interactions entre pêcheries de thonidés et, plus généralement, l'exploitation des thonidés dans la région. Le travail de marquage proprement dit s'est terminé en décembre 1992, mais ce projet permet toujours d'obtenir des informations sur les caractéristiques des populations de thons jaunes, de bonites et, dans une moindre mesure, de thons obèses, de sorte qu'il est possible de traiter ces questions à l'aide de diverses démarches de modélisation.

Le principal objectif du projet consistait à recueillir des informations sur la dynamique des populations de thons jaunes du Pacifique occidental, en insistant surtout sur l'estimation des schémas de déplacement, des taux de mortalité et de la croissance. Grâce à ces informations, on peut procéder à une évaluation de l'état du stock et répondre à diverses questions concernant les interactions. Des renseignements analogues ont aussi été recueillis en ce qui concerne la bonite et le thon obèse. Les chercheurs ont également étudié les interactions entre pêcheries artisanales et industrielles de thonidés et les types d'engins de pêche utilisés en concurrence pour capturer cette précieuse ressource dans l'océan Pacifique tropical occidental.

Le projet a débuté fin 1989, et le travail de marquage proprement dit a duré deux ans. L'essentiel du travail a été réalisé à partir du canneur *Te Tautai* de Tuvalu, affrété pour les besoins du projet, mais le marquage a aussi été effectué à bord de navires commerciaux affrétés pour de courtes durées ou mis à la disposition du projet dans le cadre d'accords et de coopération.

Le *Te Tautai* était un canneur de style japonais de 173,12 tonnes de jauge brute utilisé pour la pêche au thon, d'une longueur totale de 39,2 mètres et appartenant au gouvernement de Tuvalu. On trouvera à l'annexe II une description de ce navire et du matériel utilisé à bord durant le déroulement du projet, et à l'annexe III la liste des membres d'équipage du *Te Tautai*, des chercheurs de la CPS et des agents ayant participé directement au travail de marquage ou ayant apporté un soutien administratif au projet.

Les activités de marquage ont été concentrées sur les régions productives situées à proximité de l'équateur et des limites du courant équatorial, ainsi que dans les régions où la pêche au thon tropical en surface est particulièrement intense (y compris à proximité des États d'Asie du Sud-Est). Cette zone coïncide en gros avec la région du Pacifique occidental exploitée par les senneurs, ainsi que les canneurs, les palangriers et les bateaux de pêche à la traîne et à la ligne à main qui ciblent tous les thonidés. Elle correspond aux eaux tropicales situées entre les Philippines (115°E) et Kiribati (170°O).

Le travail de marquage a été terminé fin juillet 1992. Toutefois, des activités complémentaires ont été menées au nord-est de l'Australie, dans la mer de Corail (novembre 1992) et en Nouvelle-Calédonie (3,5 semaines en novembre-décembre 1992).

Les marques récupérées proviennent d'une grande variété d'endroits et de sources très diverses, notamment directement des navires (principalement des senneurs) et des établissements de transformation et de déchargement situés un peu partout dans la région Asie-Pacifique et même au-delà. Les navires à bord desquels les marques sont récupérées sont très variés : senneurs des Îles Salomon, des États-Unis d'Amérique, du Japon, de Corée, des Philippines, de Taiwan, d'Indonésie, des États fédérés de Micronésie et d'Australie; canneurs des Îles Salomon, du Japon, de Palau, d'Indonésie, de Kiribati, de Fidji et d'Australie; palangriers d'Australie, du Japon, de Corée, des Philippines, de Taiwan, des États fédérés de Micronésie et des Îles Salomon; et navires de pêche artisanale de toute la région du Pacifique occidental.

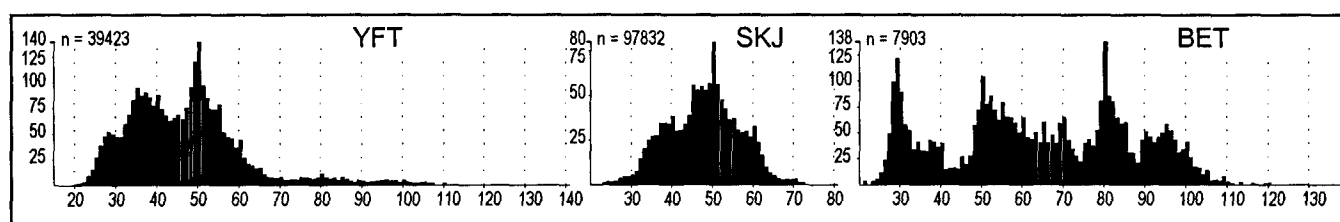
A grand summary of the Regional Tuna Tagging Project (RTTP), Solomon Islands In-country Tuna Tagging Project (SIITTP), Kiribati In-country Tuna Tagging Project (KITTP), Fiji In-country Tuna Tagging Project (FITTP) and Philippines In-country Tuna Tagging Project (PITTP).

Total release and recovery by species

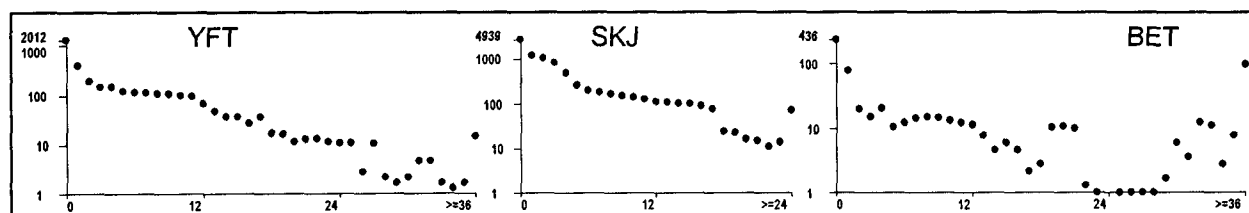
	YFT	SKJ	BET	Other	Total
Releases (% Total)	40075 (27.3%)	98401 (67.1%)	8074 (5.5%)	83	146633
Recaptures (% Total)	4950 (26.9%)	12447 (67.7%)	975 (5.3%)	4	18376
Recovery Rate (%)	12.4	12.6	12.1	0.0	12.5

Recoveries by vessel flag and gear

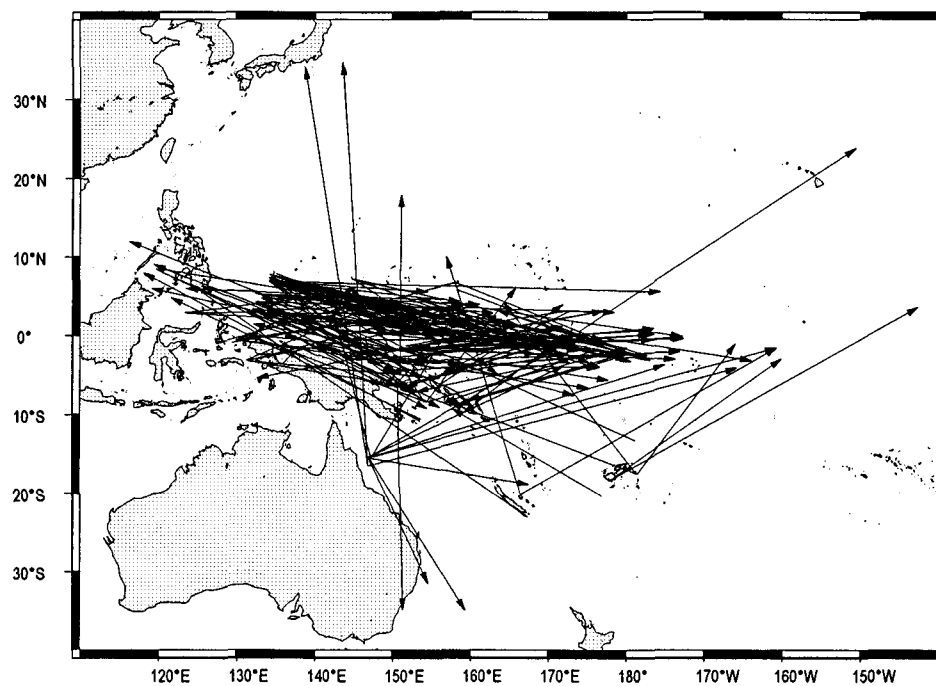
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	205	983	139	40	757	-	1	-	2	13	75	1	259	1815	142
United States	429	1899	-	-	-	-	-	1	-	1	-	-	430	1900	-
Japan	452	1357	53	1	110	-	17	1	34	9	9	3	479	1477	90
Korea	267	600	13	-	-	-	3	-	10	-	-	-	270	600	23
Philippines	2085	3308	379	-	-	-	4	-	-	312	588	40	2401	3896	419
Taiwan	251	756	12	-	-	-	3	2	3	-	-	-	254	758	15
Palau	-	-	-	8	52	-	-	-	-	1	1	-	9	53	-
Indonesia	41	40	2	423	775	8	-	-	1	26	35	2	490	850	13
FSM	16	37	2	-	-	-	2	-	-	6	12	-	24	49	2
Kiribati	-	-	-	5	68	-	-	-	-	2	5	-	7	73	-
Fiji	-	-	-	35	486	1	-	-	1	1	-	-	36	486	2
Australia	35	40	1	4	-	7	35	-	186	-	1	-	74	41	194
Other	157	271	11	41	163	48	4	-	6	15	15	1	217	449	66
Total	3938	9291	612	557	2411	64	69	4	243	386	741	47	4950	12447	966



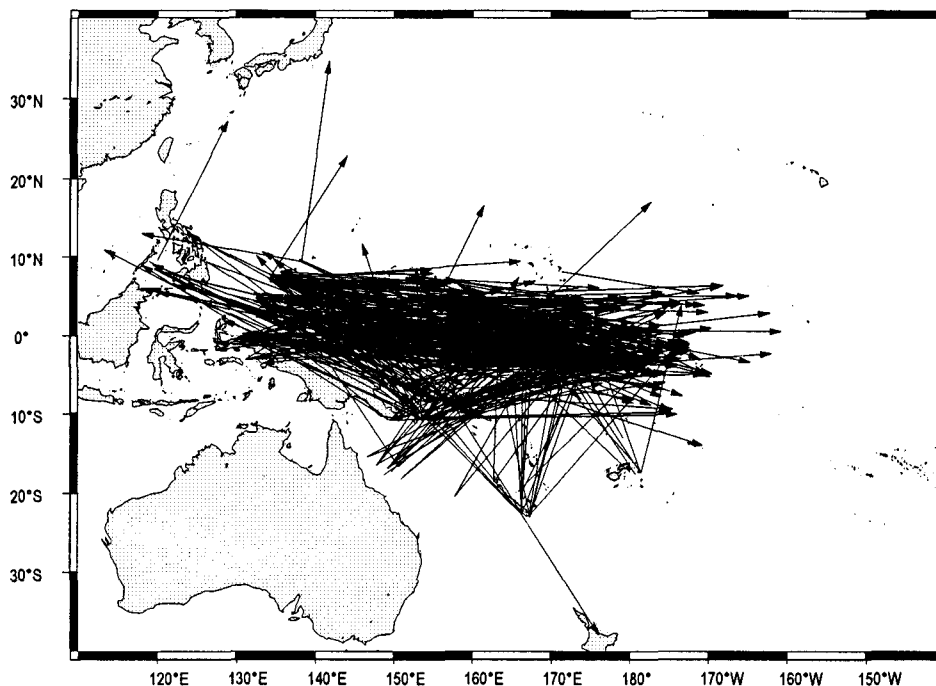
Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



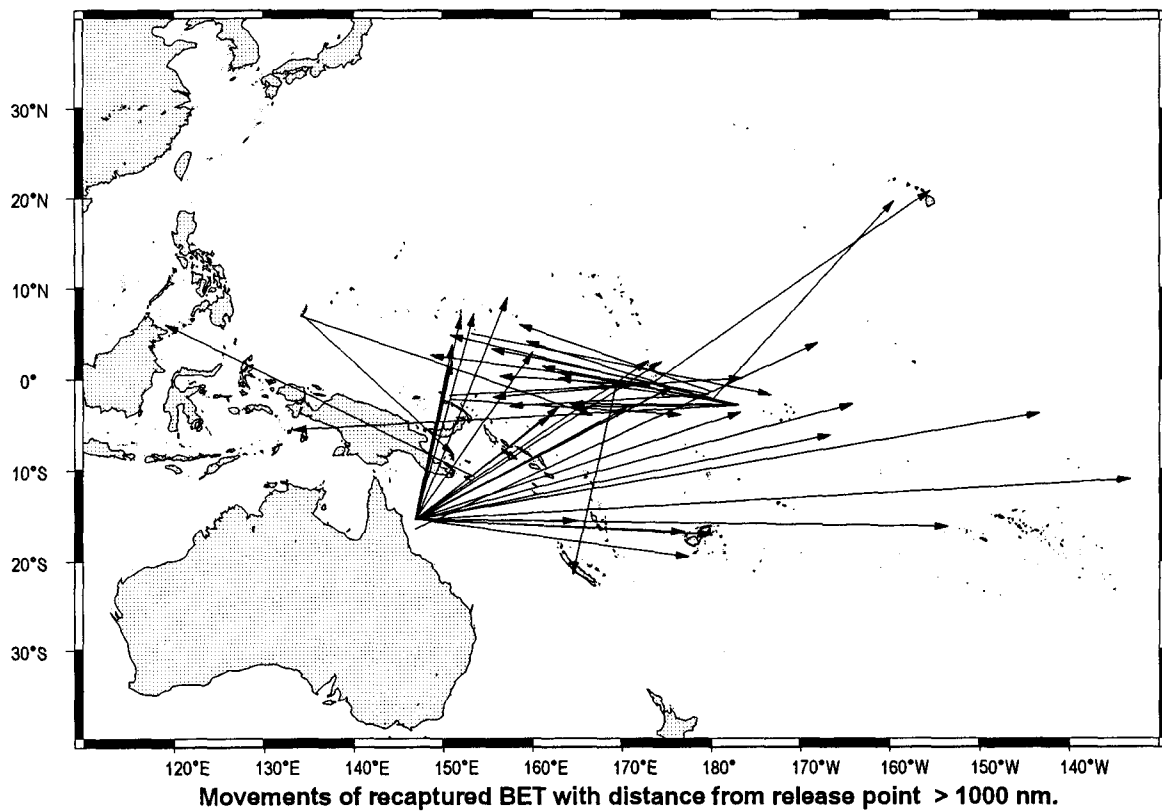
Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



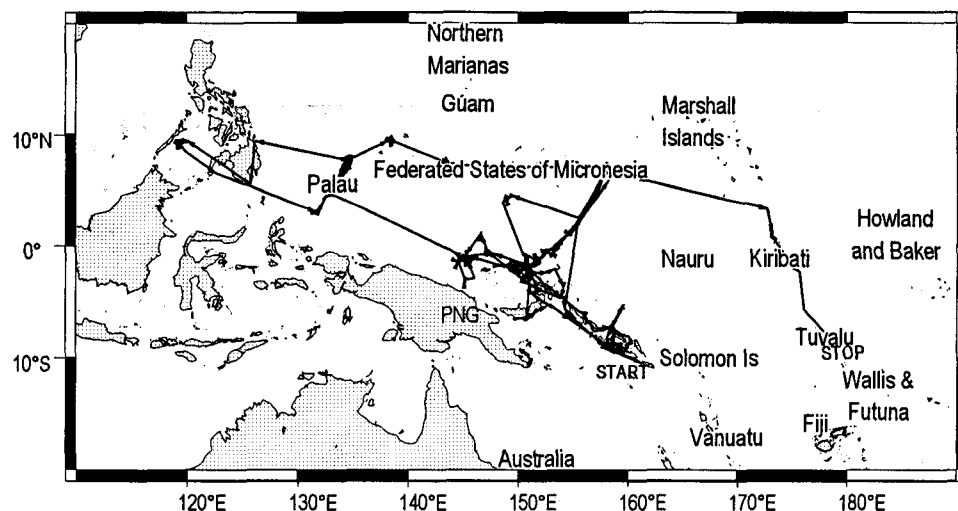
Movements of recaptured YFT with distance from release point > 1000 nm.



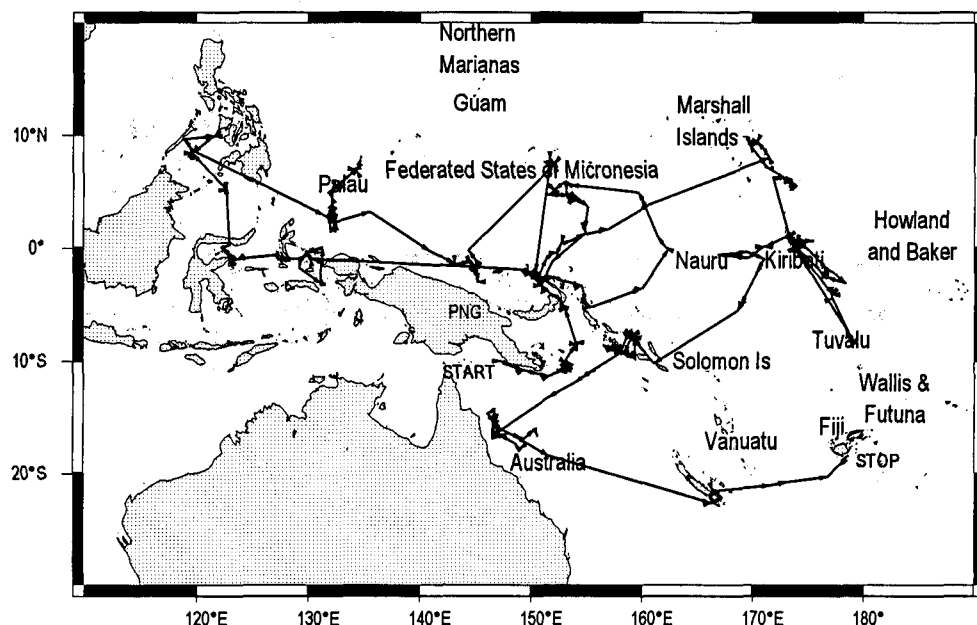
Movements of recaptured SKJ with distance from release point > 1000 nm.



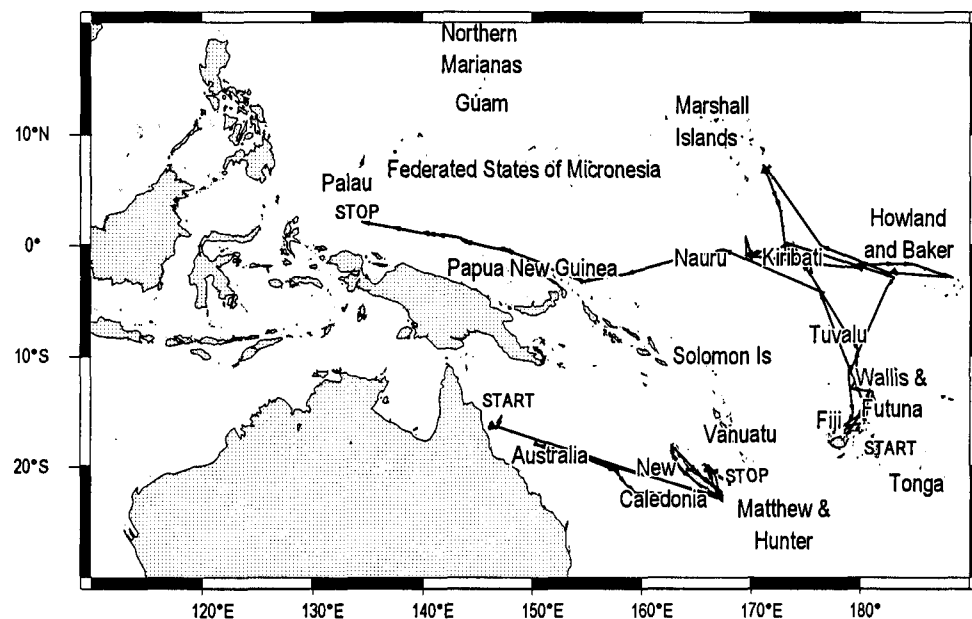
Regional Tuna Tagging Project (RTTP)



RTTP cruise track during 21 December 1989 to 18 October 1990.



RTTP cruise track during 31 January 1991 to 07 December 1991.



RTTP cruise track during 06 March 1992 to 17 October 1992.

Periods & Cruises:

21/12/89 to 17/10/90: TET89-001, TET89-002, TET90-003 to TET90-035, K0290-019

31/01/91 to 07/12/91: TET91-036 to TET91-043, TET91-045 to TET91-069, TET91-071, TET91-072

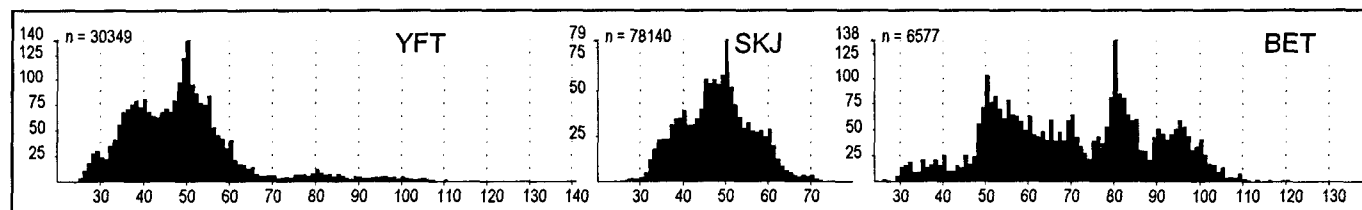
06/03/92 to 19/12/92: INQ92-001, TET92-073 - TET92-092

Total release and recovery by species

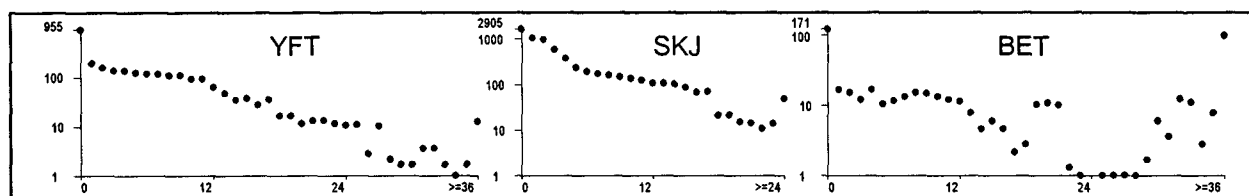
	YFT	SKJ	BET	Other	Total
Releases (% Total)	30960 (26.6%)	78658 (67.5%)	6748 (5.8%)	82	116448
Recaptures (% Total)	3322 (25.4%)	9133 (69.9%)	615 (4.7%)	3	13073
Recovery Rate (%)	10.7	11.6	9.1	0.0	11.2

Recoveries by vessel flag and gear

	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	152	439	139	32	390	-	1	-	2	13	70	1	198	899	142
United States	399	1813	-	-	-	-	-	1	-	1	-	-	400	1814	-
Japan	449	1346	52	1	100	-	16	1	34	9	8	3	475	1455	89
Korea	264	592	13	-	-	-	2	-	10	-	-	-	266	592	23
Philippines	851	1880	62	-	-	-	2	-	-	78	257	1	931	2137	63
Taiwan	246	753	12	-	-	-	3	1	3	-	-	-	249	754	15
Palau	-	-	-	8	52	-	-	-	-	1	1	-	9	53	-
Indonesia	41	40	2	419	774	8	-	-	-	25	35	2	485	849	12
FSM	13	35	2	-	-	-	2	-	-	6	12	-	21	47	2
Kiribati	-	-	-	3	52	-	-	-	-	2	5	-	5	57	-
Fiji	-	-	-	-	10	-	-	-	1	-	-	-	-	10	1
Australia	35	40	1	4	-	7	35	-	186	-	1	-	74	41	194
Other	157	268	11	35	143	47	2	-	6	15	14	1	209	425	65
Total	2607	7206	294	502	1521	62	63	3	242	150	403	8	3322	9133	606



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



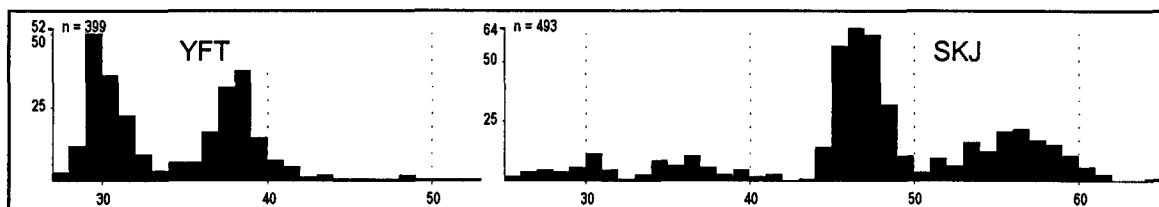
Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis

Total release and recovery by species

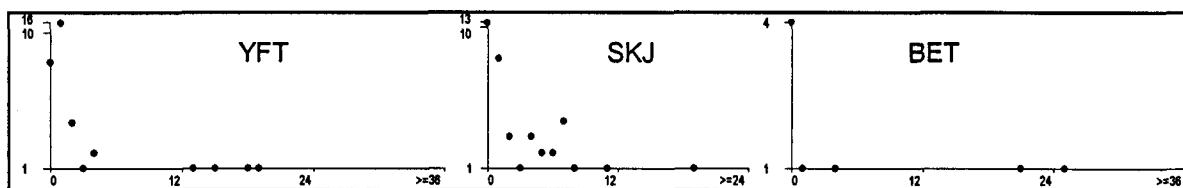
	YFT	SKJ	BET	Other	Total
Releases (% Total)	400 (43.4%)	493 (53.5%)	29 (3.1%)	0	922
Recaptures (% Total)	35 (42.7%)	39 (47.6%)	8 (9.8%)	0	82
Recovery Rate (%)	8.8	7.9	27.6	0.0	8.9

Recoveries by vessel flag and gear

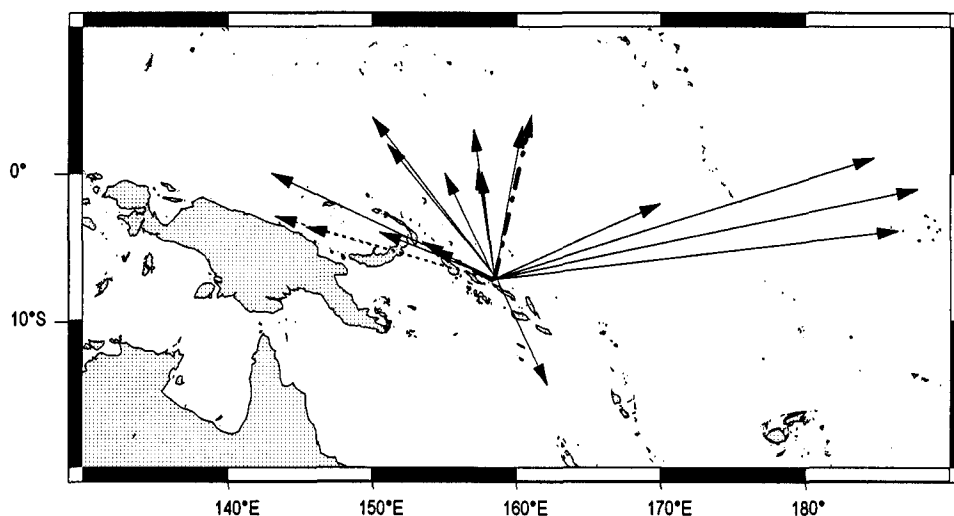
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	31	22	6	1	-	-	-	-	-	-	-	-	32	22	6
United States	1	5	-	-	-	-	-	-	-	-	-	-	1	5	-
Japan	-	10	-	-	-	-	-	-	1	-	-	-	-	10	1
Philippines	2	1	1	-	-	-	-	-	-	-	-	-	2	1	1
Taiwan	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Total	34	39	7	1	-	-	-	-	1	-	-	-	35	39	8



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



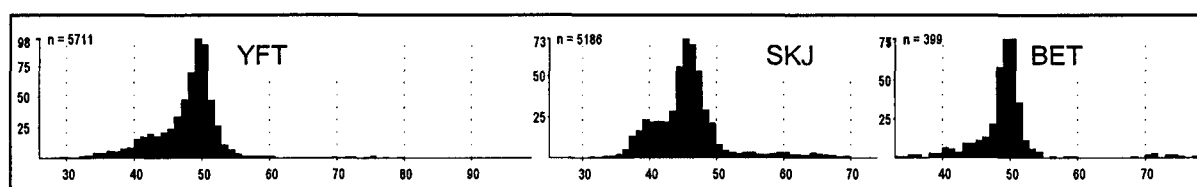
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

Total release and recovery by species

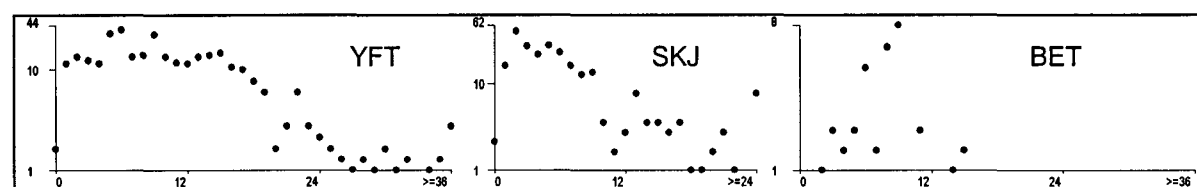
	YFT	SKJ	BET	Other	Total
Releases (% Total)	5870 (51.0%)	5238 (45.5%)	400 (3.5%)	0	11508
Recaptures (% Total)	446 (50.7%)	401 (45.6%)	33 (3.8%)	0	880
Recovery Rate (%)	7.6	7.7	8.3	0.0	7.6

Recoveries by vessel flag and gear

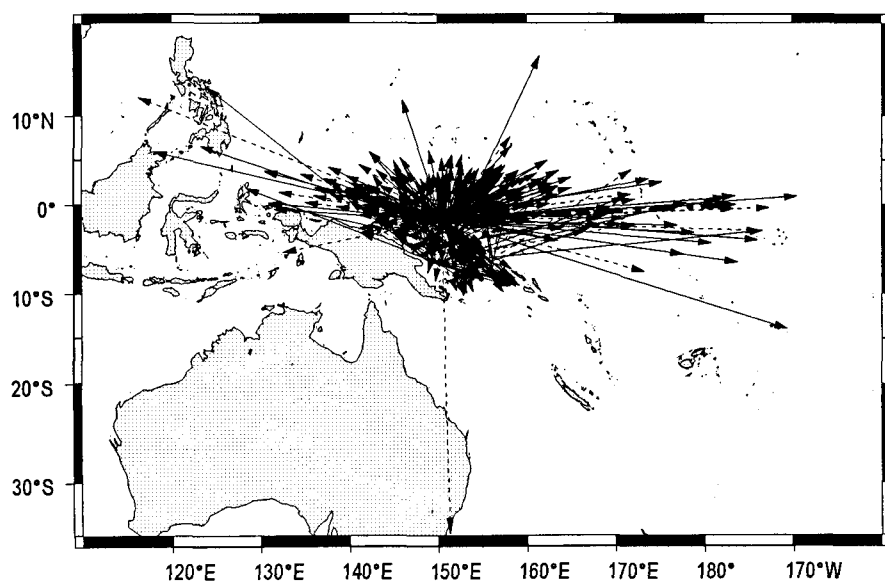
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	13	9	2	-	18	-	-	-	-	-	1	-	13	28	2
United States	62	56	-	-	-	-	-	-	-	-	-	-	62	56	-
Japan	58	168	7	-	2	-	-	1	-	6	1	1	64	172	8
Korea	78	34	4	-	-	-	-	-	-	-	-	-	78	34	4
Philippines	107	48	13	-	-	-	-	-	-	1	2	-	108	50	13
Taiwan	41	17	1	-	-	-	-	-	-	-	-	-	41	17	1
Indonesia	8	-	1	-	3	-	-	-	-	-	1	-	8	4	1
FSM	1	-	-	-	-	-	-	-	-	1	-	-	2	-	-
Kiribati	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
Australia	13	10	-	-	-	-	1	-	-	-	-	-	14	10	-
Other	49	26	4	2	1	-	-	-	-	5	2	-	56	29	4
Total	430	368	32	2	24	-	1	1	-	13	8	1	446	401	33



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



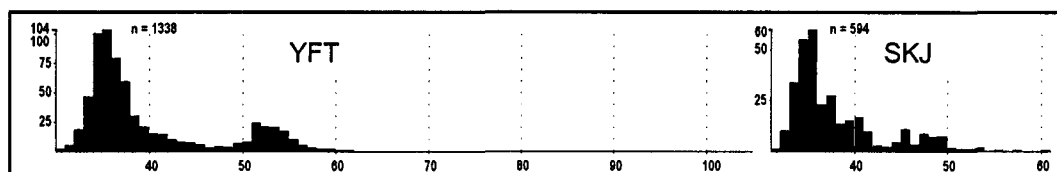
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

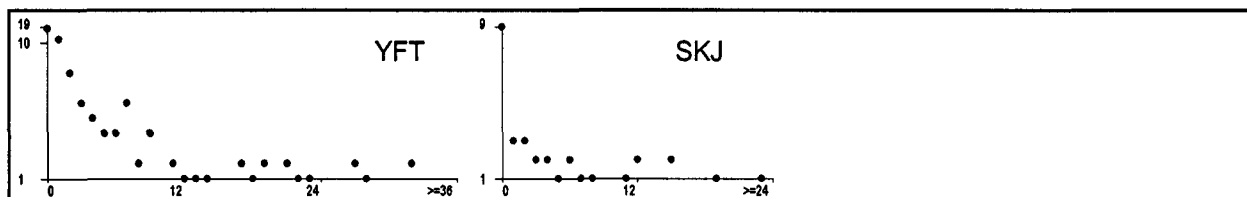
	YFT	SKJ	BET	Other	Total
Releases (% Total)	1349 (69.0%)	594 (30.4%)	11 (0.6%)	0	1954
Recaptures (% Total)	81 (74.3%)	28 (25.7%)	0	0	109
Recovery Rate (%)	6.0	4.7	0.0	0.0	5.6

Recoveries by vessel flag and gear

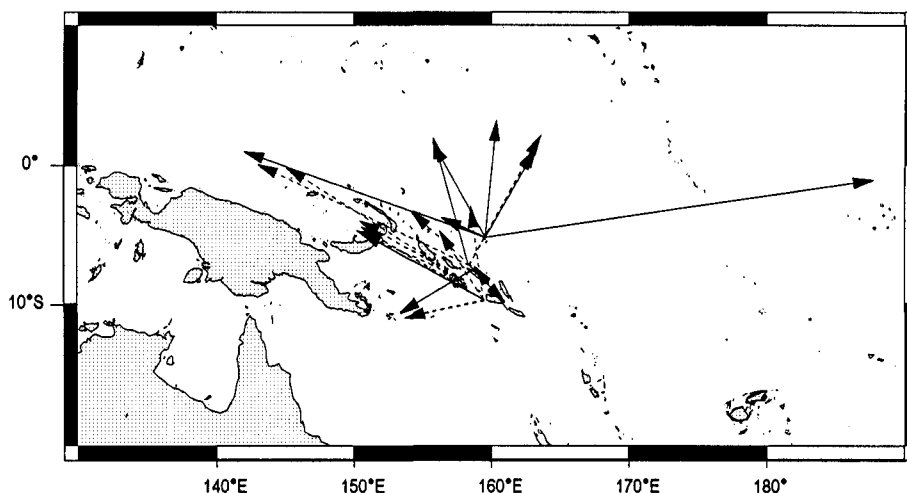
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	43	10	-	15	7	-	-	-	-	2	-	-	60	17	-
United States	1	3	-	-	-	-	-	-	-	-	-	-	1	3	-
Japan	3	4	-	-	-	-	-	-	-	-	-	-	3	4	-
Korea	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Philippines	9	2	-	-	-	-	-	-	-	-	-	-	9	2	-
Taiwan	2	1	-	-	-	-	-	-	-	-	-	-	2	1	-
Other	5	1	-	-	-	-	-	-	-	-	-	-	5	1	-
Total	64	21	-	15	7	-	-	-	-	2	-	-	81	28	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



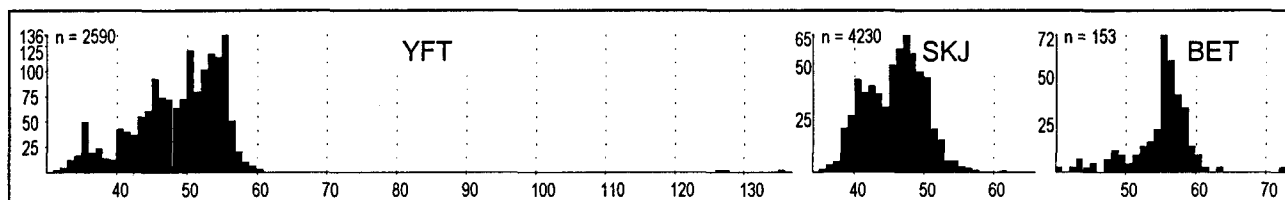
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

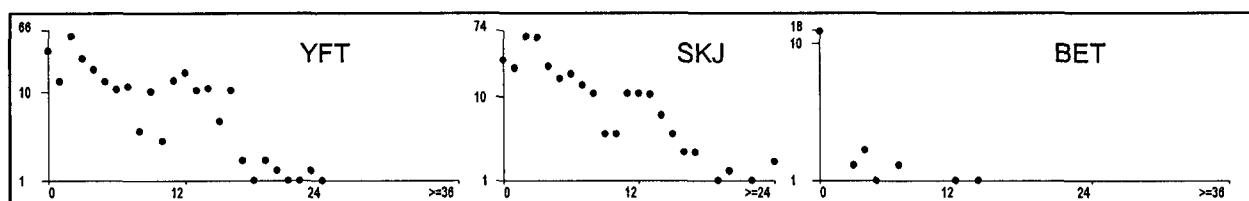
	YFT	SKJ	BET	Other	Total
Releases (% Total)	2628 (37.4%)	4247 (60.4%)	153 (2.2%)	0	7028
Recaptures (% Total)	377 (44.1%)	449 (52.6%)	28 (3.3%)	0	854
Recovery Rate (%)	14.3	10.6	18.3	0.0	12.2

Recoveries by vessel flag and gear

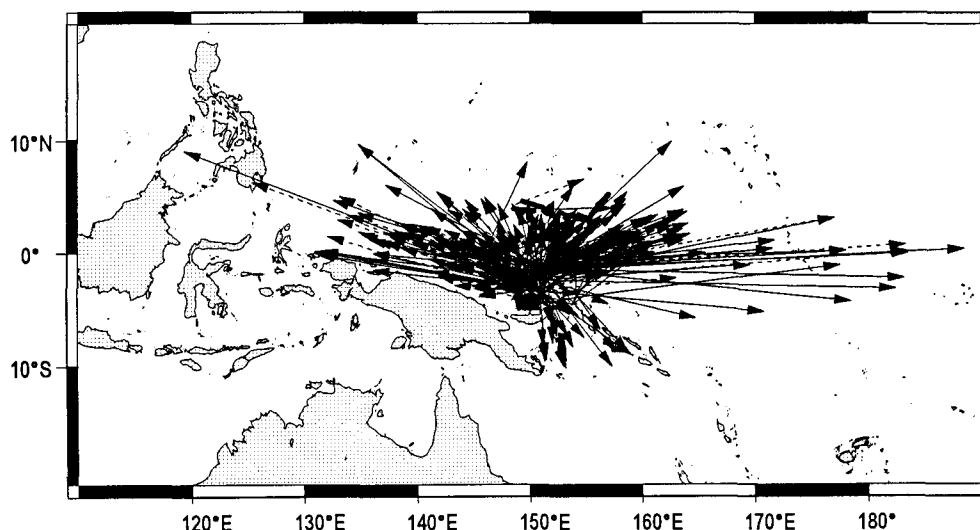
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	6	14	-	2	-	-	-	-	-	-	-	1	8	14
United States	61	47	-	-	-	-	-	-	-	-	-	-	61	47	-
Japan	49	131	9	-	9	-	1	-	-	1	-	-	51	140	9
Korea	33	40	2	-	-	-	-	-	-	-	-	-	33	40	2
Philippines	157	106	-	-	-	-	-	-	-	1	1	-	158	107	-
Taiwan	39	30	1	-	-	-	-	-	-	-	-	-	39	30	1
Indonesia	6	7	-	-	3	-	-	-	-	-	1	-	6	11	-
FSM	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-
Australia	3	11	-	-	-	-	-	-	-	-	-	-	3	11	-
Other	23	54	2	1	-	-	-	-	-	1	-	-	25	54	2
Total	373	433	28	1	14	-	1	-	-	3	2	-	378	449	28



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — Left axis



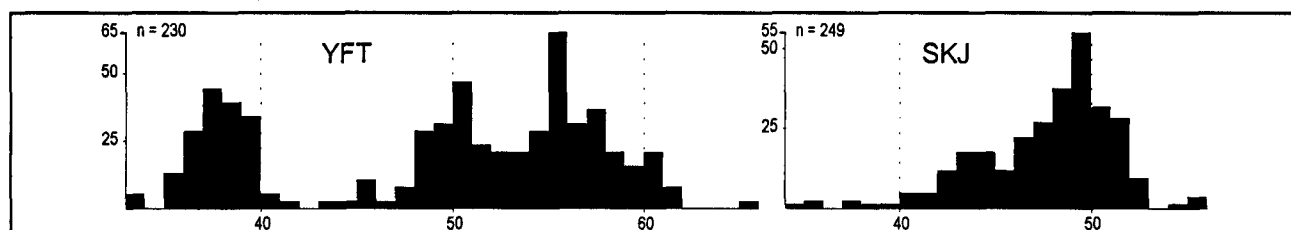
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

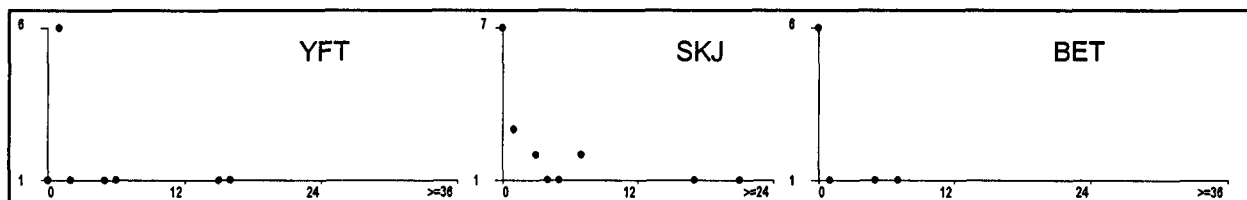
	YFT	SKJ	BET	Other	Total
Releases (% Total)	242 (45.8%)	250 (47.3%)	36 (6.8%)	0	528
Recaptures (% Total)	12 (30.8%)	18 (46.2%)	9 (23.1%)	0	39
Recovery Rate (%)	5.0	7.2	25.0	0.0	7.4

Recoveries by vessel flag and gear

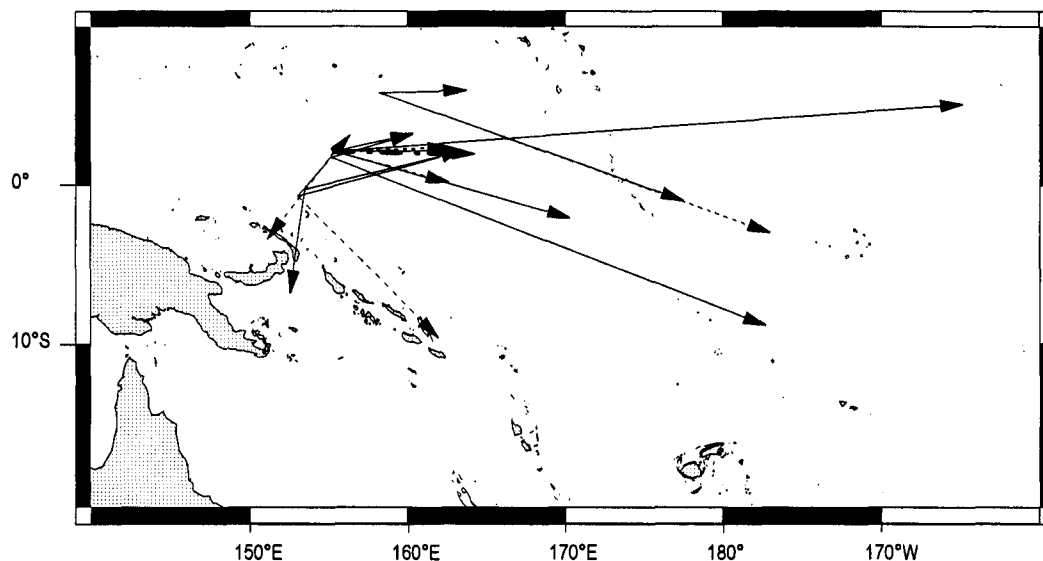
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2
United States	1	7	-	-	-	-	-	-	-	-	-	-	1	7	-
Japan	8	11	7	-	-	-	-	-	-	-	-	-	8	11	7
Philippines	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
Other	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Total	12	18	9	-	-	-	-	-	-	-	-	-	12	18	9



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



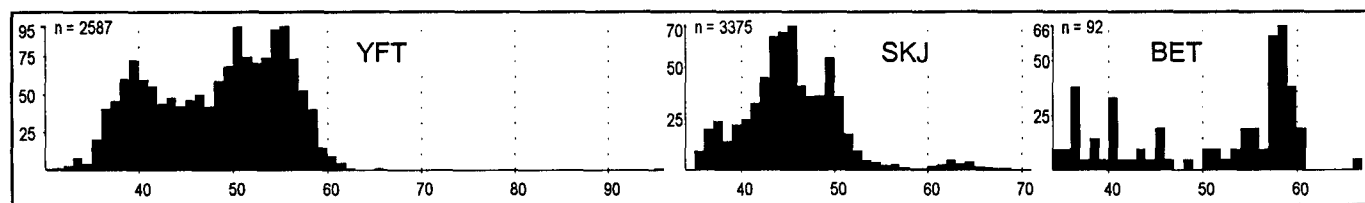
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

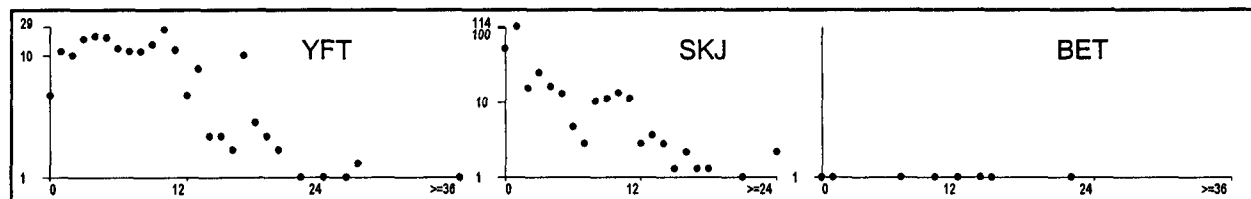
	YFT	SKJ	BET	Other	Total
Releases (% Total)	2611 (42.9%)	3389 (55.6%)	92 (1.5%)	0	6092
Recaptures (% Total)	256 (37.8%)	414 (61.1%)	8 (1.2%)	0	678
Recovery Rate (%)	9.8	12.2	8.7	0.0	11.1

Recoveries by vessel flag and gear

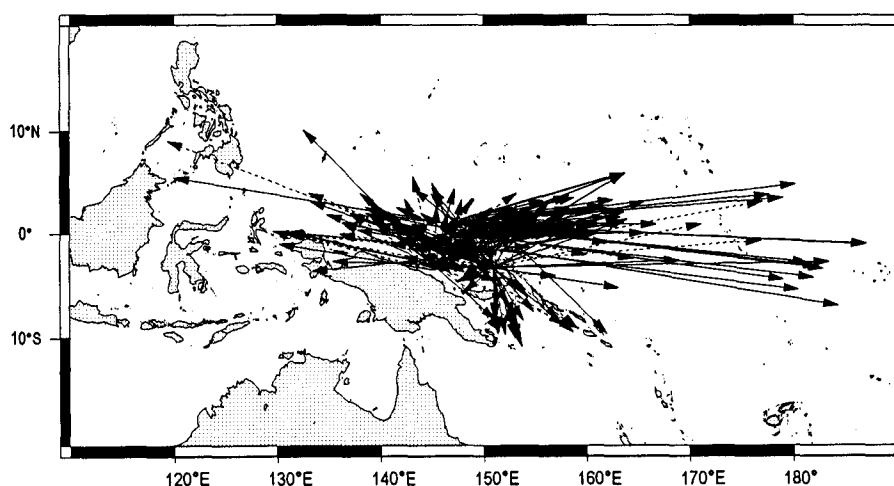
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	1	-	1	-	-	-	-	-	-	-	-	2	1	-
United States	39	29	-	-	-	-	-	-	-	-	-	-	39	29	-
Japan	19	147	2	-	7	-	-	-	-	-	1	-	19	155	2
Korea	48	44	1	-	-	-	-	-	-	-	-	-	48	44	1
Philippines	40	115	-	-	-	-	-	-	-	1	-	-	41	115	-
Taiwan	40	27	3	-	-	-	-	-	-	-	-	-	40	27	3
Indonesia	6	6	-	9	5	-	-	-	-	6	-	1	21	11	1
FSM	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Australia	5	2	-	-	-	-	-	-	-	-	-	-	5	2	-
Other	37	30	1	-	-	-	-	-	-	3	-	-	40	30	1
Total	236	401	7	10	12	-	-	-	-	10	1	1	256	414	8



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Project: RTTP – Palau 1
Cruise(s): TET90-024, TET90-025

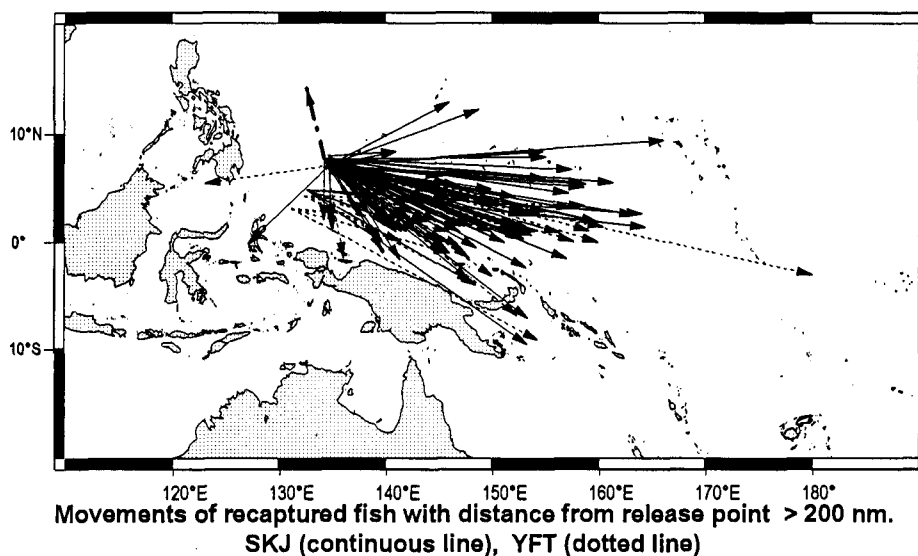
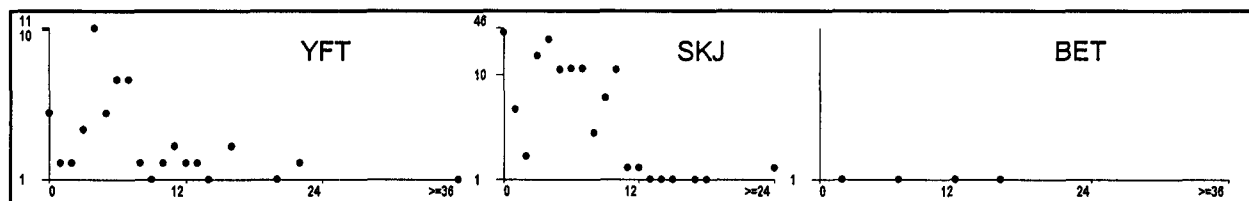
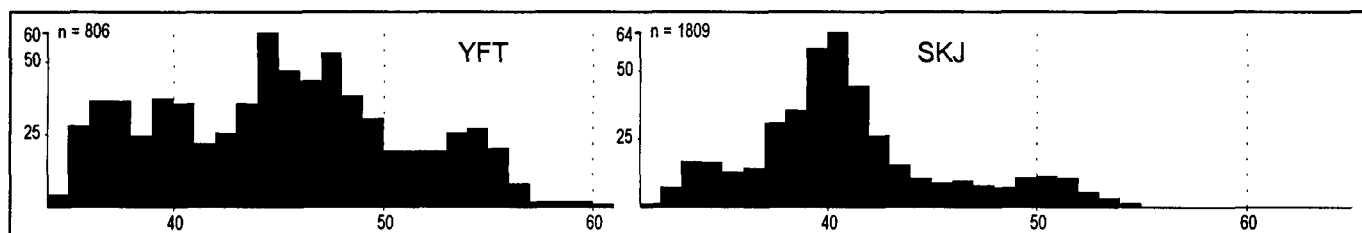
Period: 24/06/90 to 10/07/90

Total release and recovery by species

	YFT	SKJ	BET	Other	Total
Releases (% Total)	806 (30.5%)	1814 (68.7%)	22 (0.8%)	0	2642
Recaptures (% Total)	63 (23.2%)	204 (75.3%)	4 (1.5%)	0	271
Recovery Rate (%)	7.8	11.2	18.2	0.0	10.3

Recoveries by vessel flag and gear

	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	8	10	-	-	-	-	-	-	-	-	-	-	8	10	-
Japan	13	54	1	-	17	-	-	-	1	1	1	-	14	72	2
Korea	10	15	1	-	-	-	-	-	-	-	-	-	10	15	1
Philippines	2	2	-	-	-	-	-	-	-	1	1	-	3	3	-
Taiwan	13	31	-	-	-	-	-	-	-	-	-	-	13	31	-
Palau	-	-	-	7	52	-	-	-	-	1	1	-	8	53	-
Indonesia	2	3	1	-	1	-	-	-	-	-	-	-	2	4	1
Other	5	15	-	-	1	-	-	-	-	-	-	-	5	16	-
Total	53	130	3	7	71	-	-	-	1	3	3	-	63	204	4



Project: RTTP – Philippines 1
Cruise(s): TET90-025, TET90-026, TET90-027, TET90-028

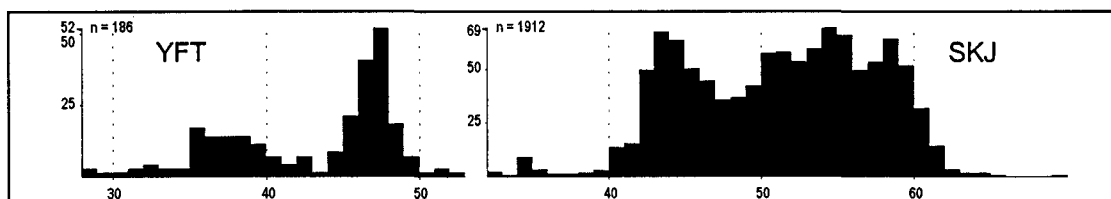
Period: 11/07/90 to 16/08/90

Total release and recovery by species

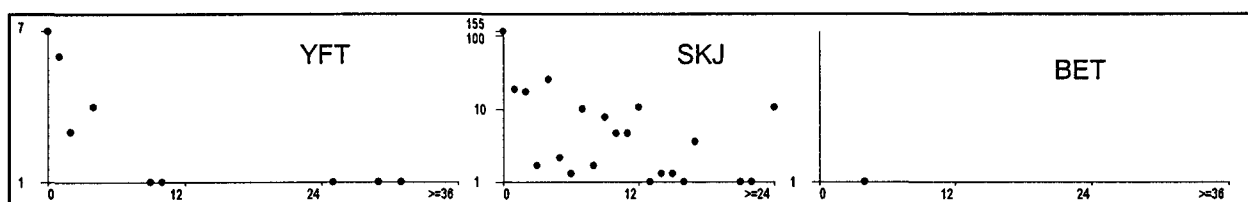
	YFT	SKJ	BET	Other	Total
Releases (% Total)	186 (8.8%)	1915 (90.5%)	8 (0.4%)	8	2117
Recaptures (% Total)	25 (6.6%)	349 (92.3%)	1 (0.3%)	3	378
Recovery Rate (%)	13.4	18.2	12.5	37.5	17.9

Recoveries by vessel flag and gear

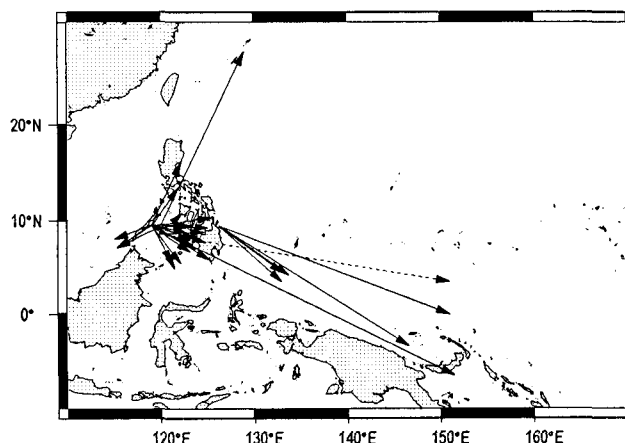
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
Japan	-	2	-	-	1	-	-	-	-	-	-	-	-	3	-
Korea	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Philippines	10	160	1	-	-	-	-	-	-	15	172	-	25	332	1
Taiwan	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Other	-	-	-	-	9	-	-	-	-	-	-	-	-	9	-
Total	10	167	1	-	10	-	-	-	-	15	172	-	25	349	1



Size-frequency distribution of fish released:
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



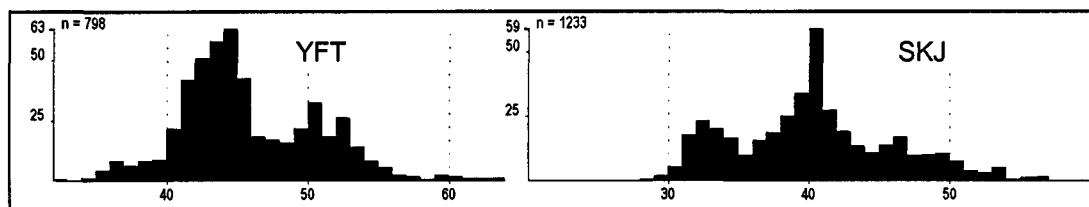
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

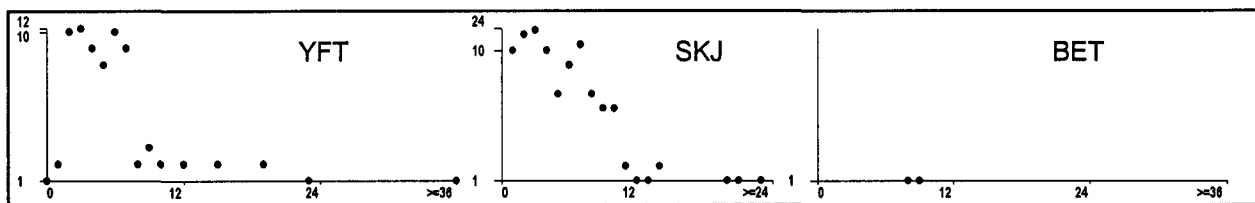
	YFT	SKJ	BET	Other	Total
Releases (% Total)	803 (38.6%)	1238 (59.5%)	41 (2.0%)	0	2082
Recaptures (% Total)	75 (37.5%)	123 (61.5%)	2 (1.0%)	0	200
Recovery Rate (%)	9.3	9.9	4.9	0.0	9.6

Recoveries by vessel flag and gear

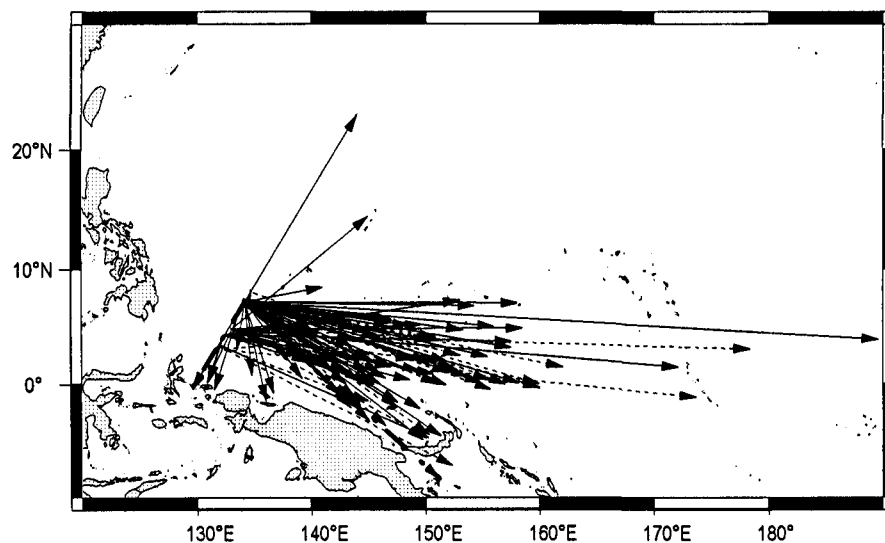
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	13	10	-	-	-	-	-	-	-	-	-	-	13	10	-
Japan	19	42	-	-	6	-	-	-	-	-	-	-	19	48	-
Korea	13	15	1	-	-	-	-	-	-	-	-	-	13	15	1
Philippines	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
Taiwan	16	27	-	-	-	-	-	-	-	-	-	-	16	27	-
Palau	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-
Indonesia	1	3	-	-	6	1	-	-	-	-	1	-	1	10	1
FSM	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
Other	10	9	-	-	-	-	-	-	-	2	-	-	12	9	-
Total	72	109	1	1	12	1	-	-	-	2	2	-	75	123	2



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



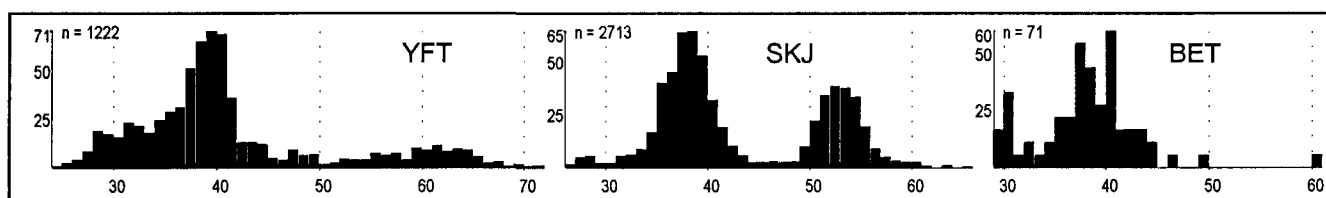
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

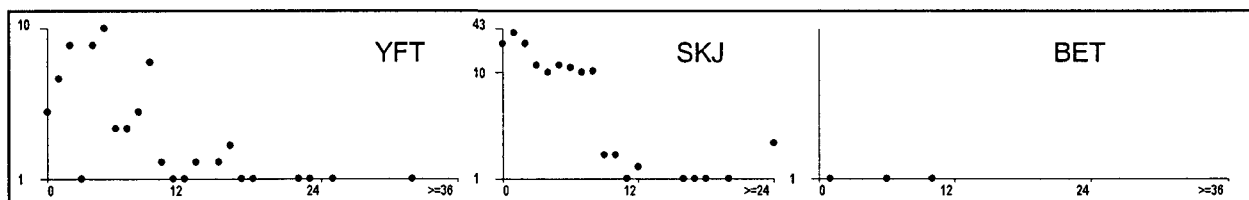
	YFT	SKJ	BET	Other	Total
Releases (% Total)	1253 (30.7%)	2759 (67.6%)	71 (1.7%)	0	4083
Recaptures (% Total)	80 (27.8%)	205 (71.2%)	3 (1.0%)	0	288
Recovery Rate (%)	6.4	7.4	4.2	0.0	7.1

Recoveries by vessel flag and gear

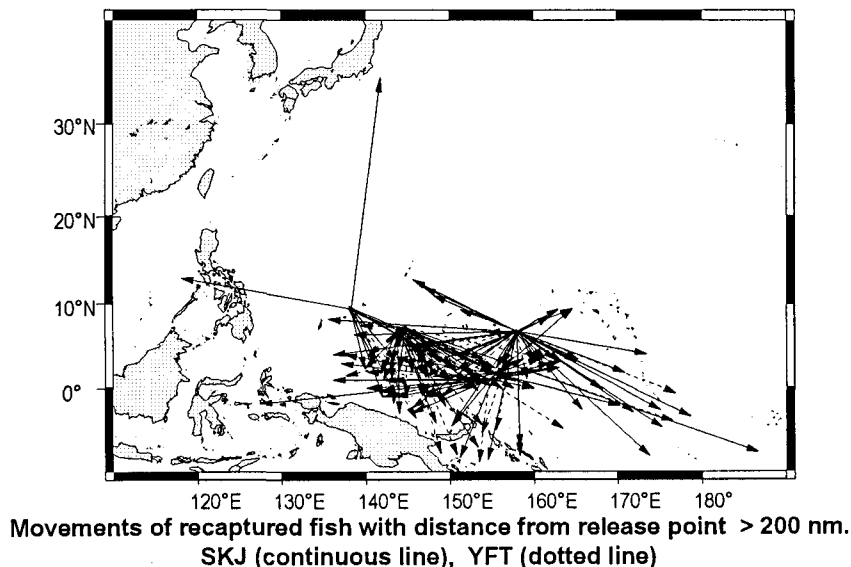
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
United States	8	23	-	-	-	-	-	-	-	-	-	-	8	23	-
Japan	24	82	3	-	31	-	-	-	-	1	-	-	25	113	3
Korea	17	27	-	-	-	-	-	-	-	-	-	-	17	27	-
Philippines	5	2	-	-	-	-	-	-	-	-	1	-	5	3	-
Taiwan	11	14	-	-	-	-	-	-	-	-	-	-	11	14	-
Indonesia	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
FSM	1	-	-	-	-	-	1	-	-	5	9	-	7	9	-
Australia	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
Other	3	14	-	-	-	-	-	-	-	1	1	-	4	15	-
Total	72	162	3	-	32	-	1	-	-	7	11	-	80	205	3



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis

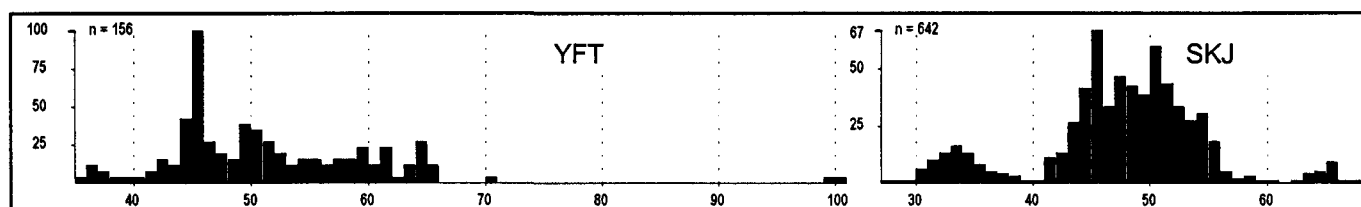


Total release and recovery by species

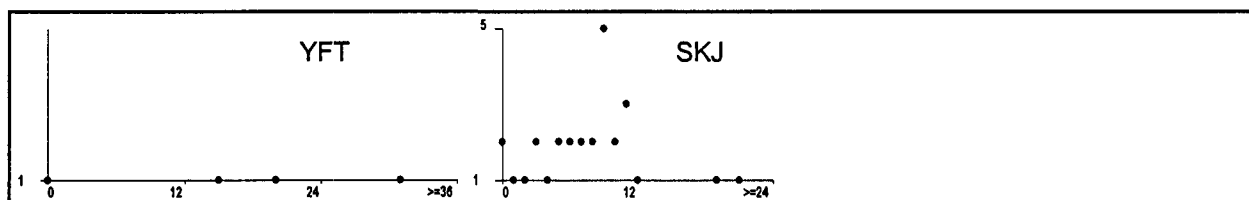
	YFT	SKJ	BET	Other	Total
Releases (% Total)	156 (19.5%)	644 (80.5%)	0	0	800
Recaptures (% Total)	4 (12.5%)	28 (87.5%)	0	0	32
Recovery Rate (%)	2.6	4.3	0.0	0.0	4.0

Recoveries by vessel flag and gear

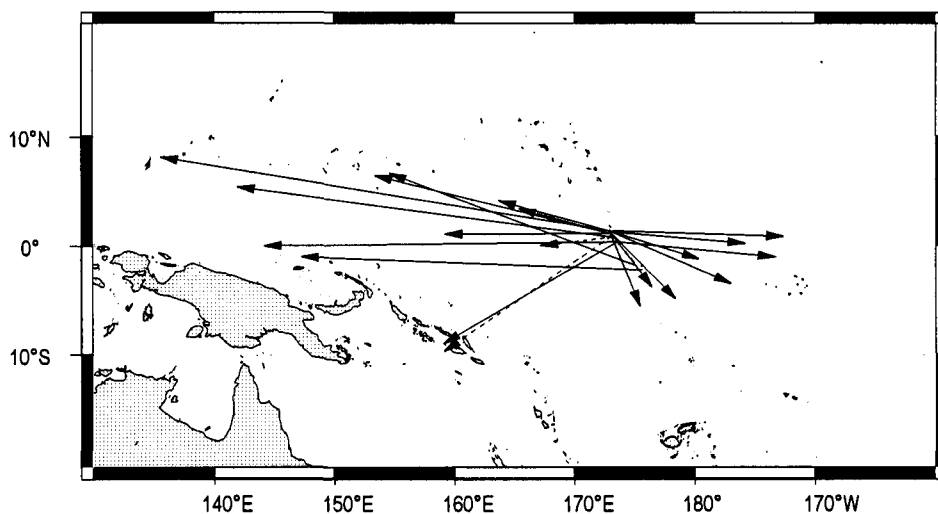
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	-	-	1	-	-	-	-	-	-	-	1	1	-
United States	1	12	-	-	-	-	-	-	-	-	-	-	1	12	-
Japan	-	2	-	-	5	-	-	-	-	-	-	-	-	7	-
Korea	1	4	-	-	-	-	-	-	-	-	-	-	1	4	-
Kiribati	-	-	-	-	1	-	-	-	-	-	1	-	-	2	-
Other	-	1	-	-	-	-	-	-	-	1	1	-	1	2	-
Total	3	19	-	-	7	-	-	-	-	1	2	-	4	28	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



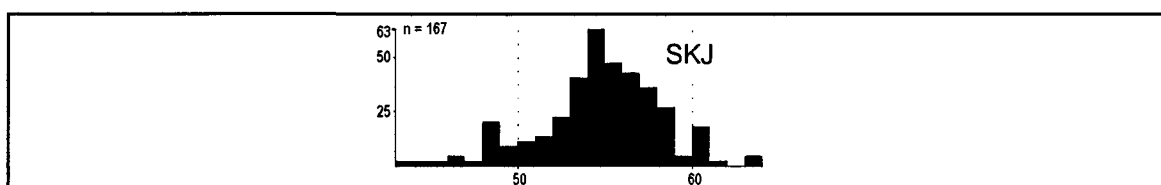
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

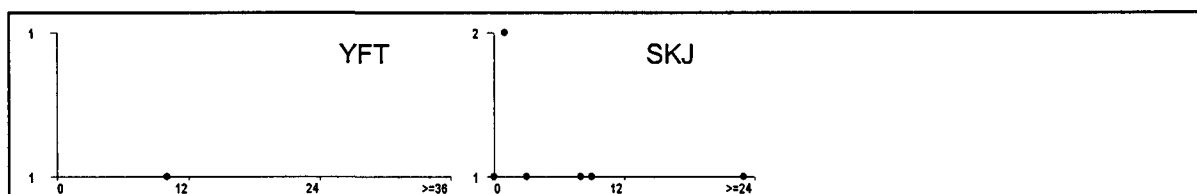
	YFT	SKJ	BET	Other	Total
Releases (% Total)	36 (17.7%)	167 (82.3%)	0	0	203
Recaptures (% Total)	1 (12.5%)	7 (87.5%)	0	0	8
Recovery Rate (%)	2.8	4.2	0.0	0.0	3.9

Recoveries by vessel flag and gear

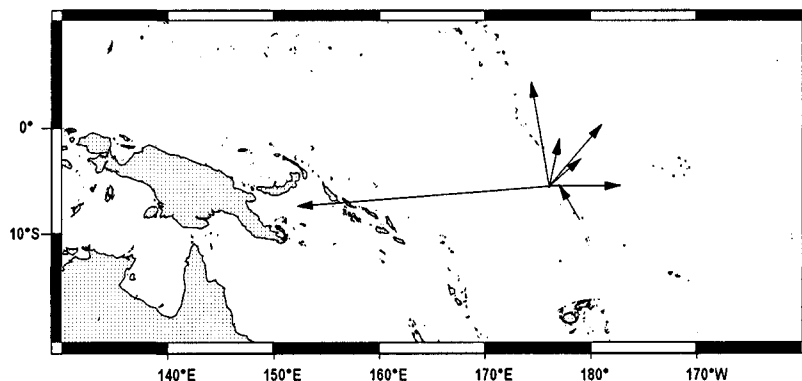
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	-	7	-	-	-	-	-	-	-	-	-	-	-	7	-
Korea	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Total	1	7	-	-	-	-	-	-	-	-	-	-	1	7	-



Size-frequency distribution of fish released.
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



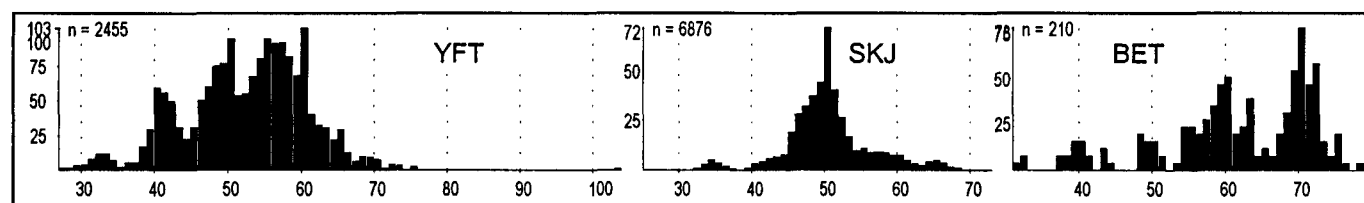
Movements of recaptured SKJ with distance from release point > 200 nm.

Total release and recovery by species

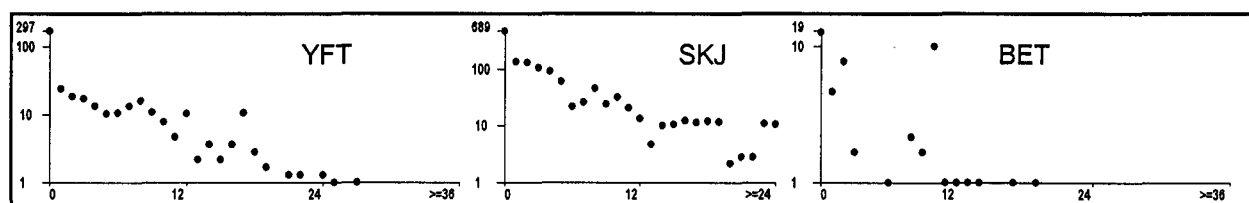
	YFT	SKJ	BET	Other	Total
Releases (% Total)	2508 (26.0%)	6918 (71.8%)	210 (2.2%)	0	9636
Recaptures (% Total)	507 (22.4%)	1711 (75.4%)	50 (2.2%)	0	2268
Recovery Rate (%)	20.2	24.7	23.8	0.0	23.5

Recoveries by vessel flag and gear

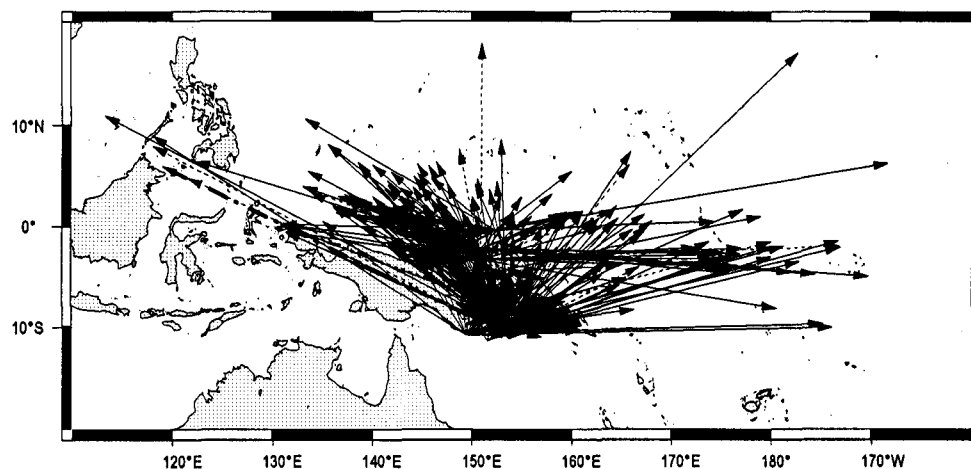
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	15	67	1	6	117	-	-	-	-	4	15	1	25	199	2
United States	18	180	-	-	-	-	-	1	-	-	-	-	18	181	-
Japan	8	41	-	-	1	-	1	-	-	-	1	-	9	43	-
Korea	17	102	-	-	-	-	-	-	-	-	-	-	17	102	-
Philippines	402	1041	42	-	-	-	-	-	-	-	-	-	402	1041	42
Taiwan	18	83	-	-	-	-	-	-	-	-	-	-	18	83	-
Indonesia	-	4	-	1	8	-	-	-	-	-	2	-	1	14	-
FSM	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
Fiji	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
Australia	1	7	-	-	-	-	-	-	-	-	-	-	1	7	-
Other	16	31	4	-	3	-	-	-	-	-	4	-	16	38	4
Total	495	1558	47	7	130	-	1	1	-	4	22	1	507	1711	48



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



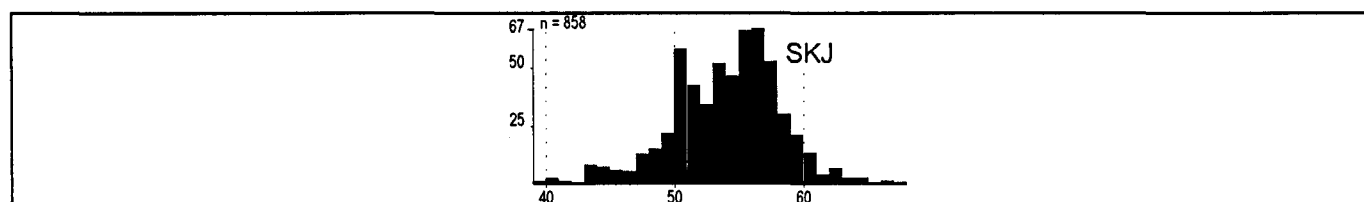
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

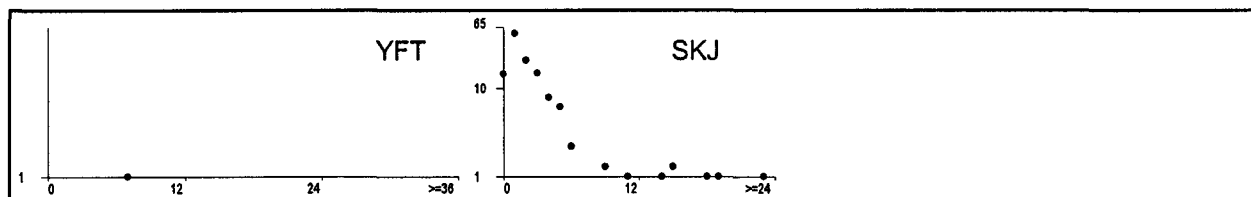
	YFT	SKJ	BET	Other	Total
Releases (% Total)	5 (0.6%)	858 (99.3%)	1 (0.1%)	0	864
Recaptures (% Total)	1 (0.6%)	180 (99.4%)	0	0	181
Recovery Rate (%)	20.0	21.0	0.0	0.0	20.9

Recoveries by vessel flag and gear

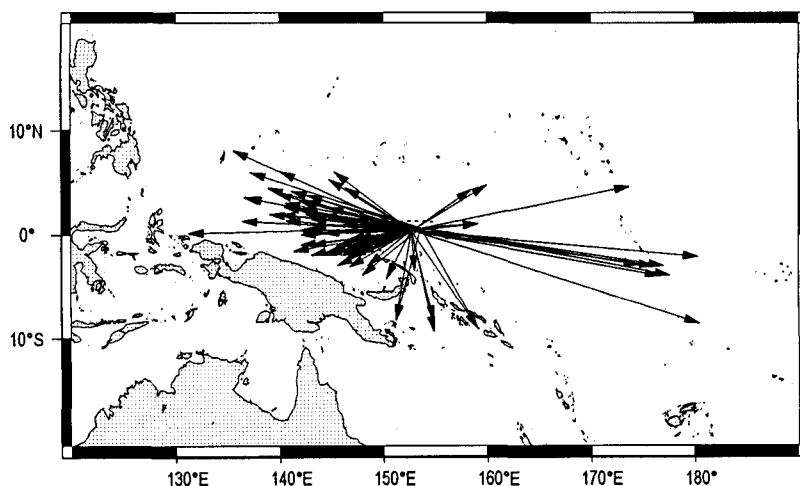
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
United States	-	48	-	-	-	-	-	-	-	-	-	-	-	48	-
Japan	-	12	-	-	-	-	-	-	-	-	-	-	-	12	-
Korea	-	55	-	-	-	-	-	-	-	-	-	-	-	55	-
Philippines	-	5	-	-	-	-	-	-	-	-	-	-	-	5	-
Taiwan	1	33	-	-	-	-	-	-	-	-	-	-	1	33	-
Indonesia	-	2	-	-	-	-	-	-	-	-	1	-	-	3	-
Australia	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
Other	-	20	-	-	-	-	-	-	-	-	-	-	-	20	-
Total	1	179	-	-	-	-	-	-	-	-	1	-	1	180	-



Size-frequency distribution of fish released.
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



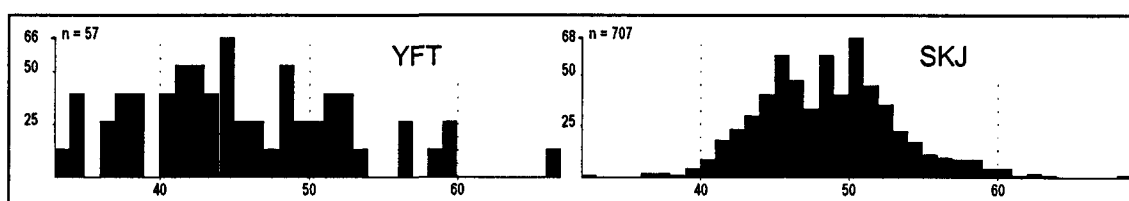
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

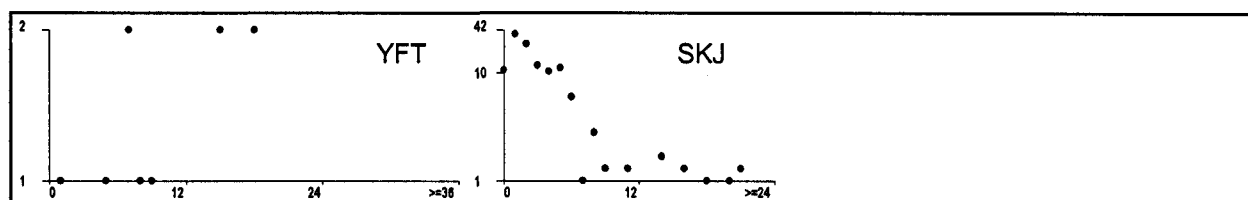
	YFT	SKJ	BET	Other	Total
Releases (% Total)	57 (7.4%)	707 (91.9%)	5 (0.7%)	0	769
Recaptures (% Total)	7 (4.4%)	151 (95.6%)	0	0	158
Recovery Rate (%)	12.3	21.4	0.0	0.0	20.5

Recoveries by vessel flag and gear

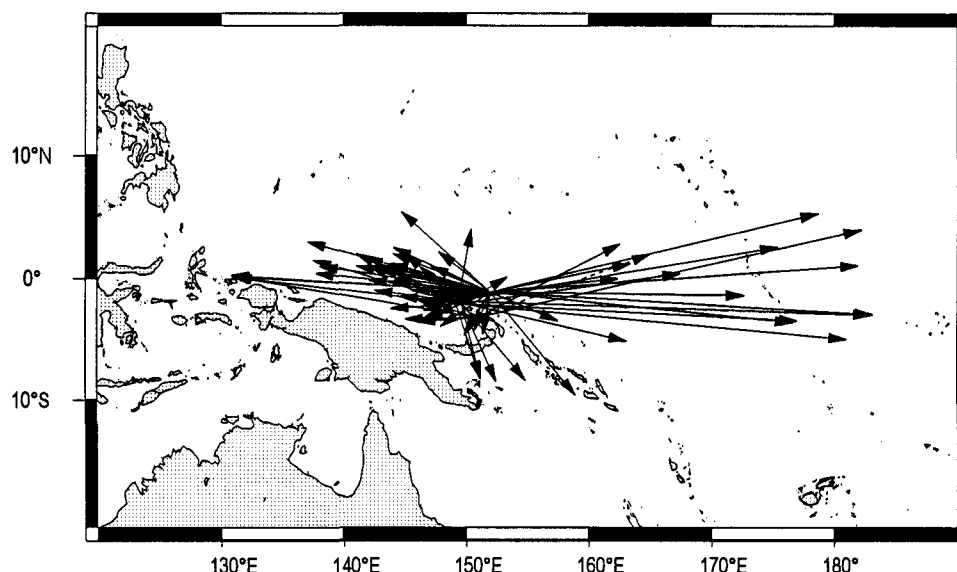
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
United States	2	57	-	-	-	-	-	-	-	-	-	-	2	57	-
Japan	-	8	-	-	1	-	-	-	-	-	1	-	-	10	-
Korea	-	36	-	-	-	-	-	-	-	-	-	-	-	36	-
Philippines	2	4	-	-	-	-	-	-	-	-	-	-	2	4	-
Taiwan	2	26	-	-	-	-	-	-	-	-	-	-	2	26	-
Indonesia	-	2	-	-	4	-	-	-	-	-	-	-	-	6	-
Australia	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-
Other	-	9	-	-	1	-	-	-	-	-	-	-	-	10	-
Total	7	144	-	-	6	-	-	-	-	-	1	-	7	151	-



Size-frequency distribution of fish released.
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



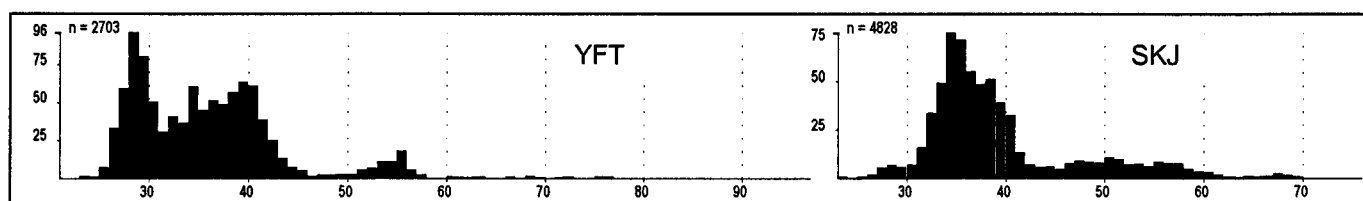
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

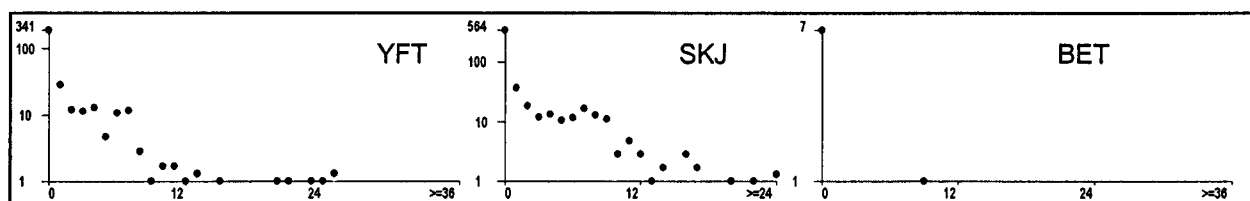
	YFT	SKJ	BET	Other	Total
Releases (% Total)	2703 (35.3%)	4830 (63.1%)	46 (0.6%)	74	7653
Recaptures (% Total)	503 (37.7%)	823 (61.7%)	8 (0.6%)	0	1334
Recovery Rate (%)	18.6	17.0	17.4	0.0	17.4

Recoveries by vessel flag and gear

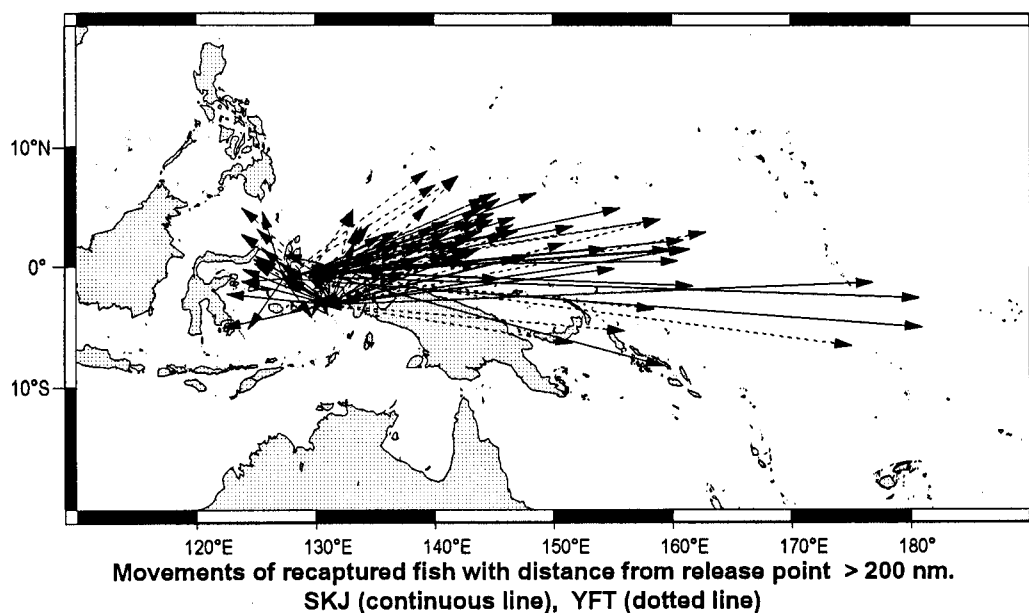
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
United States	2	8	-	-	-	-	-	-	-	-	-	-	2	8	-
Japan	24	21	-	-	-	-	-	-	-	-	-	-	24	21	-
Korea	-	6	-	-	-	-	-	-	-	-	-	-	-	6	-
Philippines	-	1	-	-	-	-	-	-	-	4	-	-	4	1	-
Taiwan	13	18	-	-	-	-	-	-	-	-	-	-	13	18	-
Indonesia	16	2	-	404	720	7	-	-	-	19	24	1	439	746	8
FSM	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Australia	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Other	2	2	-	17	19	-	-	-	-	1	-	-	20	21	-
Total	58	59	-	421	740	7	-	-	-	24	24	1	503	823	8



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



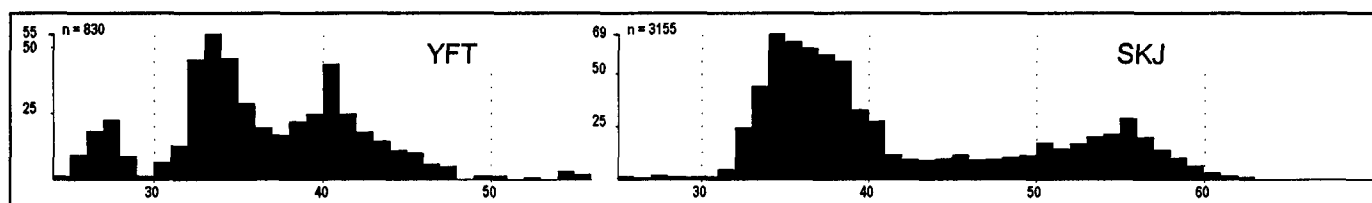
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

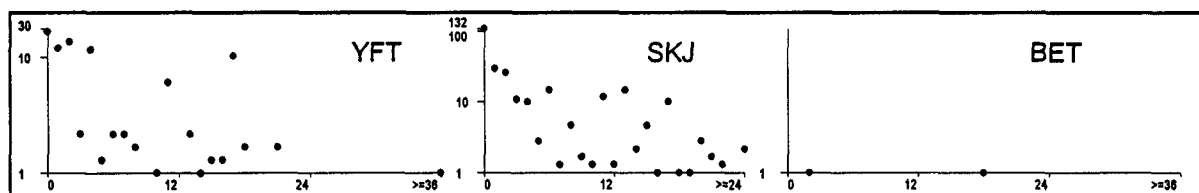
	YFT	SKJ	BET	Other	Total
Releases (% Total)	831 (20.8%)	3158 (79.0%)	11 (0.3%)	0	4000
Recaptures (% Total)	131 (26.6%)	359 (73.0%)	2 (0.4%)	0	492
Recovery Rate (%)	15.8	11.4	18.2	0.0	12.3

Recoveries by vessel flag and gear

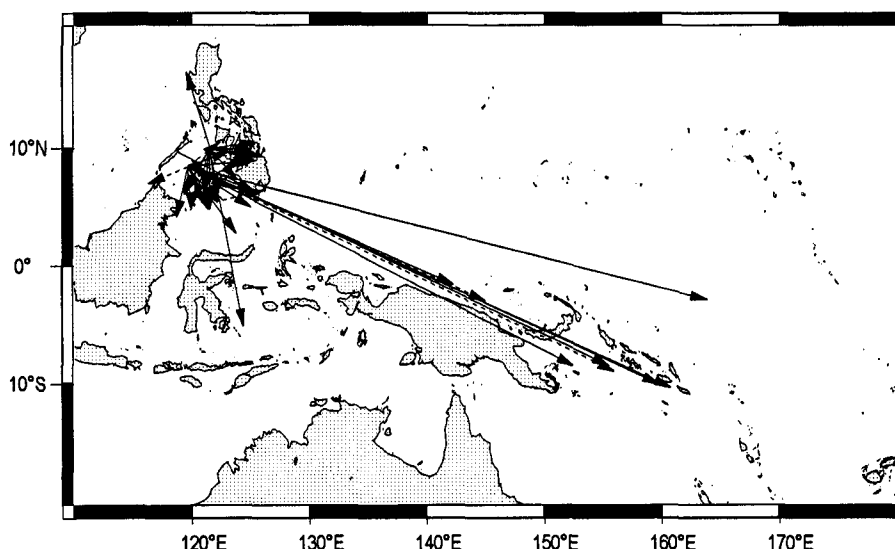
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Philippines	64	194	1	-	-	-	1	-	-	53	77	1	118	271	2
Indonesia	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
Other	2	1	-	11	85	-	-	-	-	-	1	-	13	87	-
Total	66	195	1	11	85	-	1	-	-	53	79	1	131	359	2



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



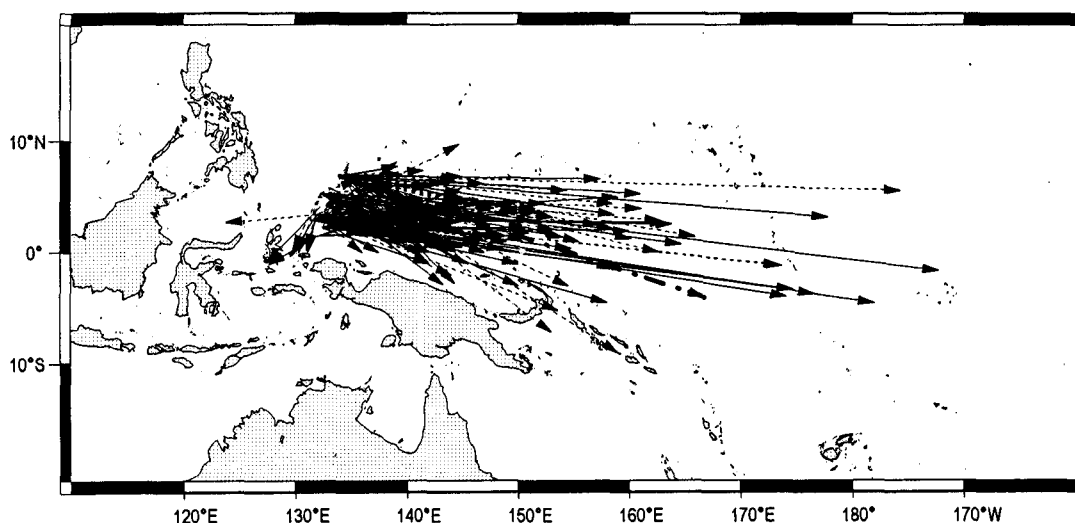
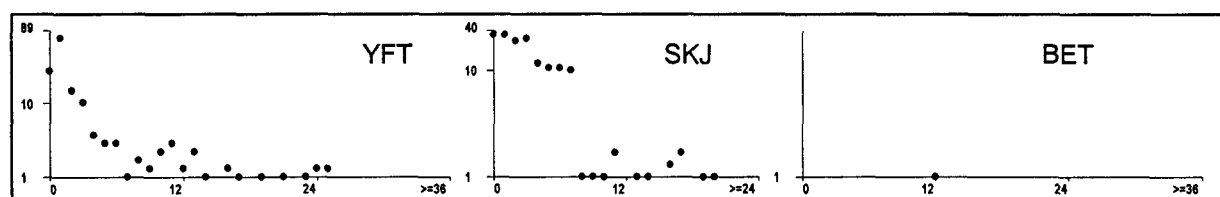
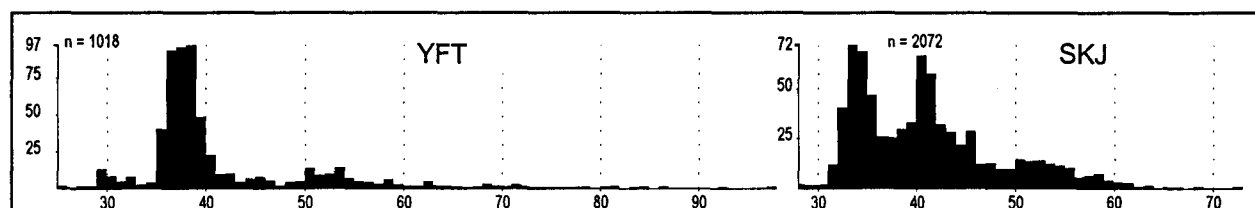
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

	YFT	SKJ	BET	Other	Total
Releases (% Total)	1030 (33.2%)	2072 (66.7%)	4 (0.1%)	0	3106
Recaptures (% Total)	182 (45.8%)	214 (53.9%)	1 (0.3%)	0	397
Recovery Rate (%)	17.7	10.3	25.0	0.0	12.8

Recoveries by vessel flag and gear

	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
United States	11	15	-	-	-	-	-	-	-	-	-	-	11	15	-
Japan	120	87	1	-	-	-	-	-	-	-	1	-	120	88	1
Korea	7	16	-	-	-	-	-	-	-	-	-	-	7	16	-
Philippines	6	6	-	-	-	-	-	-	-	1	-	-	7	6	-
Taiwan	20	61	-	-	-	-	-	-	-	-	-	-	20	61	-
Indonesia	2	2	-	5	14	-	-	-	-	-	1	-	7	17	-
Australia	8	-	-	-	-	-	-	-	-	-	-	-	8	-	-
Other	1	10	-	-	1	-	-	-	-	-	-	-	1	11	-
Total	176	197	1	5	15	-	-	-	-	1	2	-	182	214	1

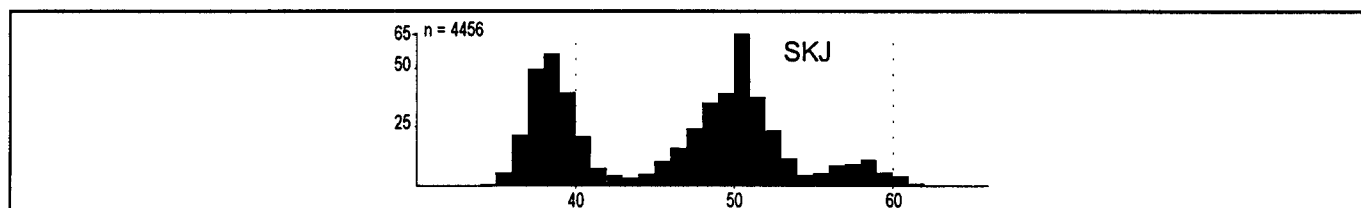


Total release and recovery by species

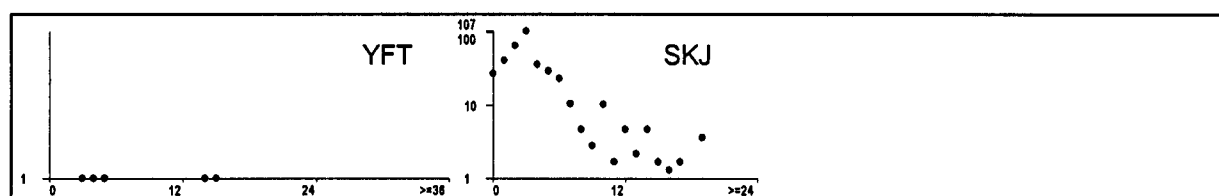
	YFT	SKJ	BET	Other	Total
Releases (% Total)	31 (0.7%)	4457 (99.3%)	0	0	4488
Recaptures (% Total)	5 (0.9%)	529 (99.1%)	0	0	534
Recovery Rate (%)	16.1	11.9	0.0	0.0	11.9

Recoveries by vessel flag and gear

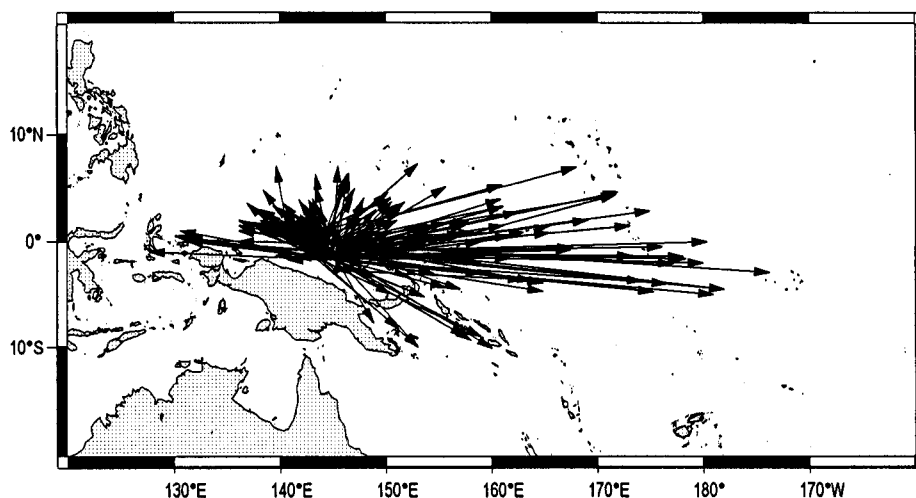
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	5	-	-	-	-	-	-	-	-	-	-	-	5	-
United States	2	46	-	-	-	-	-	-	-	-	-	-	2	46	-
Japan	-	73	-	-	-	-	-	-	-	-	-	-	-	73	-
Korea	1	56	-	-	-	-	-	-	-	-	-	-	1	56	-
Philippines	-	32	-	-	-	-	-	-	-	-	-	-	-	32	-
Taiwan	2	267	-	-	-	-	-	-	-	-	-	-	2	267	-
Indonesia	-	9	-	-	9	-	-	-	-	-	3	-	-	21	-
FSM	-	4	-	-	-	-	-	-	-	-	-	-	-	4	-
Kiribati	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
Australia	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Other	-	16	-	-	5	-	-	-	-	-	2	-	-	23	-
Total	5	509	-	-	14	-	-	-	-	-	6	-	5	529	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



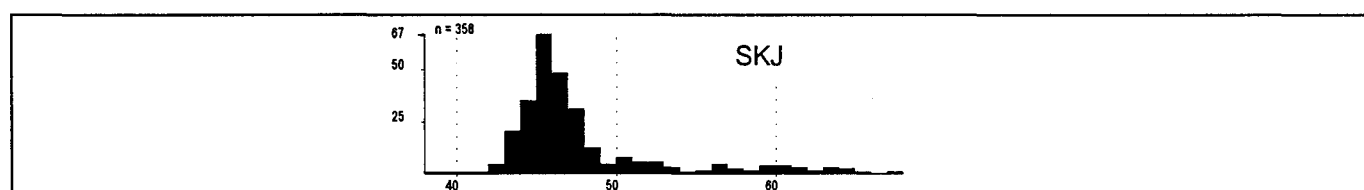
Movements of recaptured SKJ with distance from release point > 200 nm.

Total release and recovery by species

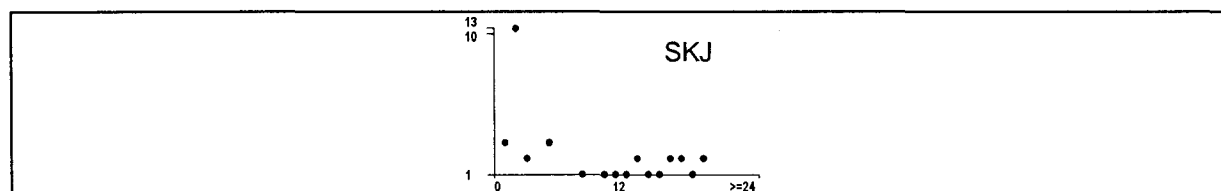
	YFT	SKJ	BET	Other	Total
Releases (% Total)	27 (6.9%)	364 (93.1%)	0	0	391
Recaptures (% Total)	0	36 (100%)	0	0	36
Recovery Rate (%)	0.0	9.9	0.0	0.0	9.2

Recoveries by vessel flag and gear

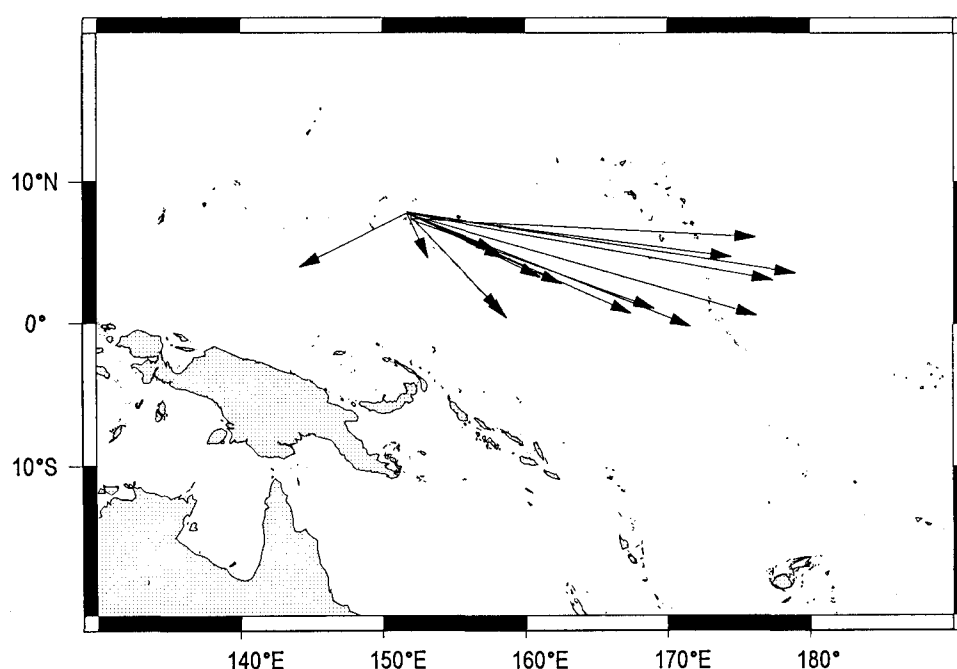
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	-	10	-	-	-	-	-	-	-	-	-	-	-	10	-
Japan	-	19	-	-	1	-	-	-	-	-	-	-	-	20	-
Philippines	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Taiwan	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
FSM	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-
Total	-	33	-	-	1	-	-	-	-	-	2	-	-	36	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



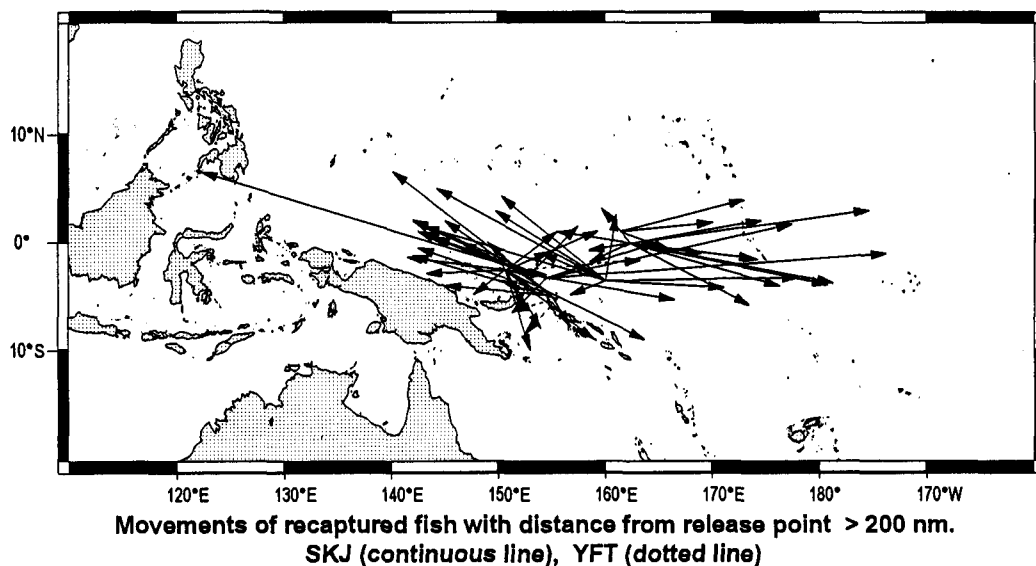
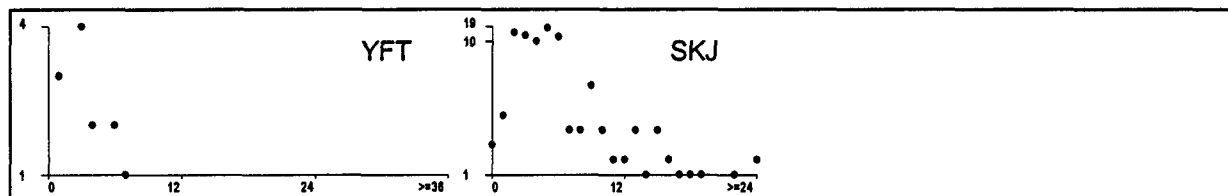
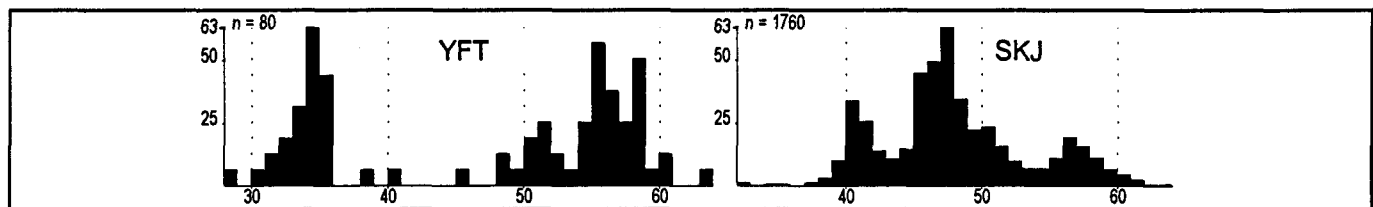
Movements of recaptured SKJ with distance from release point > 200 nm.

Total release and recovery by species

	YFT	SKJ	BET	Other	Total
Releases (% Total)	81 (4.4%)	1781 (95.6%)	0	0	1862
Recaptures (% Total)	7 (7.8%)	83 (92.2%)	0	0	90
Recovery Rate (%)	8.6	4.7	0.0	0.0	4.8

Recoveries by vessel flag and gear

	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
United States	-	26	-	-	-	-	-	-	-	-	-	-	-	26	-
Japan	-	10	-	1	1	-	-	-	-	-	-	-	1	11	-
Korea	1	11	-	-	-	-	-	-	-	-	-	-	1	11	-
Philippines	4	16	-	-	-	-	-	-	-	-	-	-	4	16	-
Taiwan	1	14	-	-	-	-	-	-	-	-	-	-	1	14	-
Australia	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
Other	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Total	6	81	-	1	2	-	-	-	-	-	-	-	7	83	-

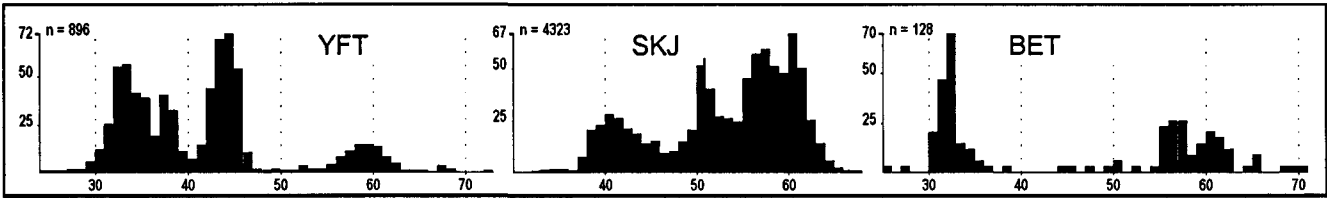


Total release and recovery by species

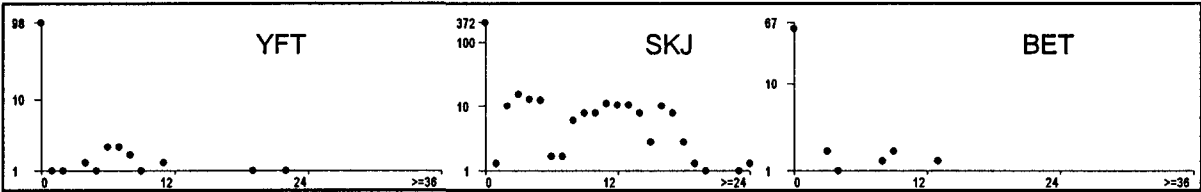
	YFT	SKJ	BET	Other	Total
Releases (% Total)	901 (16.7%)	4364 (80.9%)	130 (2.4%)	0	5395
Recaptures (% Total)	102 (14.7%)	550 (79.3%)	42 (6.1%)	0	694
Recovery Rate (%)	11.3	12.6	32.3	0.0	12.9

Recoveries by vessel flag and gear

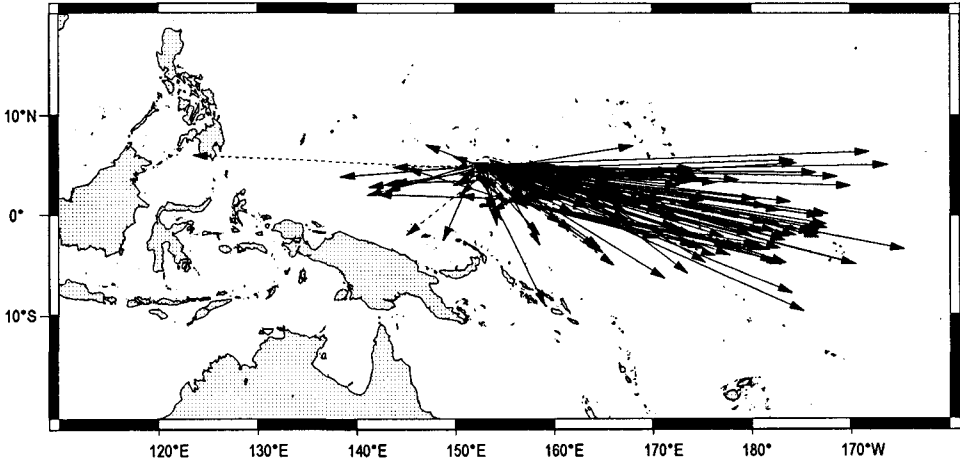
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	1	33	-	-	-	-	-	-	-	-	-	-	1	33
United States	32	208	-	-	-	-	-	-	-	-	-	-	32	208	-
Japan	67	306	7	-	10	-	-	-	-	-	1	-	67	317	7
Korea	1	8	1	-	-	-	-	-	-	-	-	-	1	8	1
Philippines	-	1	-	-	-	-	1	-	-	-	-	-	1	1	-
Taiwan	-	5	1	-	-	-	-	1	-	-	-	-	-	6	1
FSM	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Kiribati	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
Australia	1	2	-	-	-	-	-	-	-	-	-	-	1	2	-
Other	-	1	-	-	3	-	-	-	-	-	1	-	-	5	-
Total	101	533	42	-	13	-	1	1	-	-	3	-	102	550	42



Size-frequency distribution of fish released
 Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
 Months at liberty — bottom axis, Returns — left axis



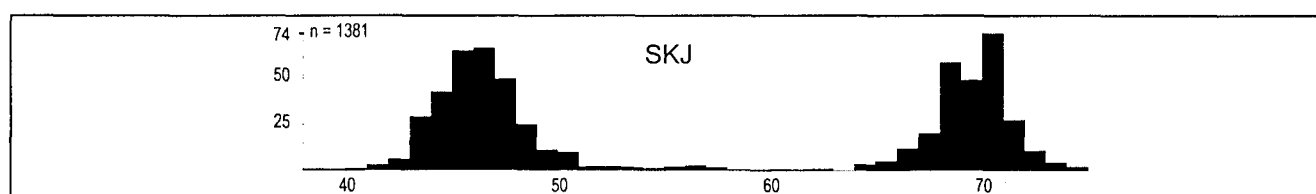
Movements of recaptured fish with distance from release point > 200 nm.
 SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

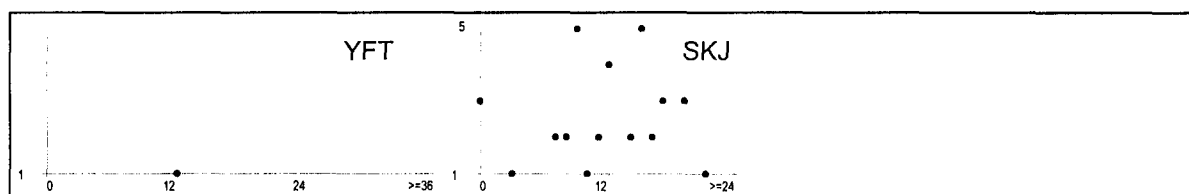
	YFT	SKJ	BET	Other	Total
Releases (% Total)	17 (1.2%)	1386 (98.8%)	0	0	1403
Recaptures (% Total)	1 (2.7%)	36 (97.3%)	0	0	37
Recovery Rate (%)	5.9	2.6	0.0	0.0	2.6

Recoveries by vessel flag and gear

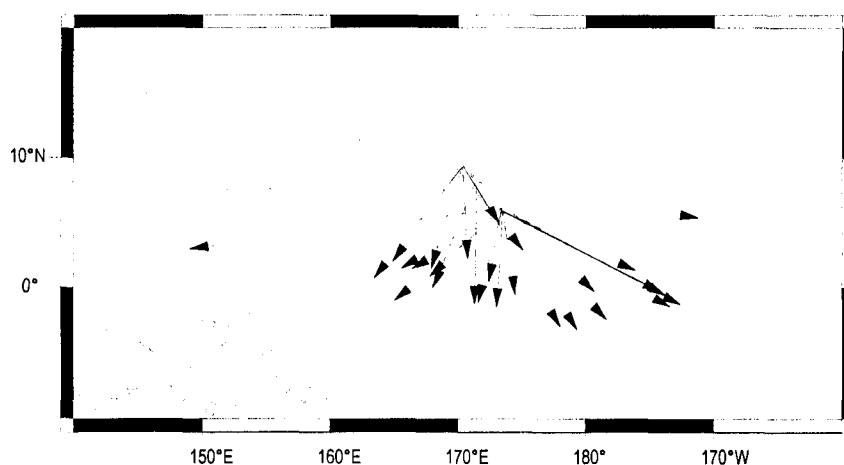
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	1	30	-	-	-	-	-	-	-	-	-	-	1	30	-
Japan	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
FSM	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
Other	-	-	-	-	3	-	-	-	-	-	-	-	-	3	-
Total	1	32	-	-	4	-	-	-	-	-	-	-	1	36	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



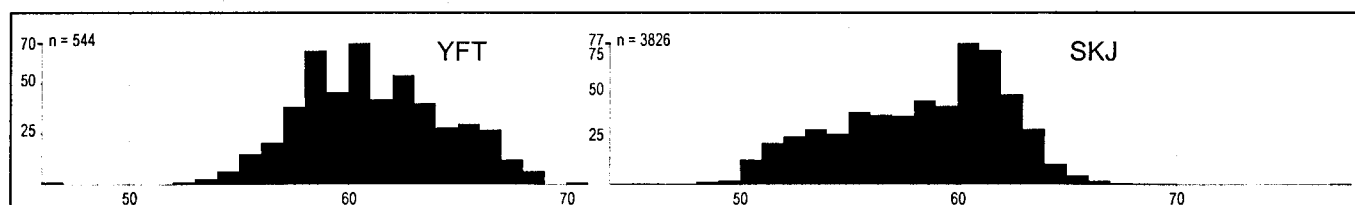
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

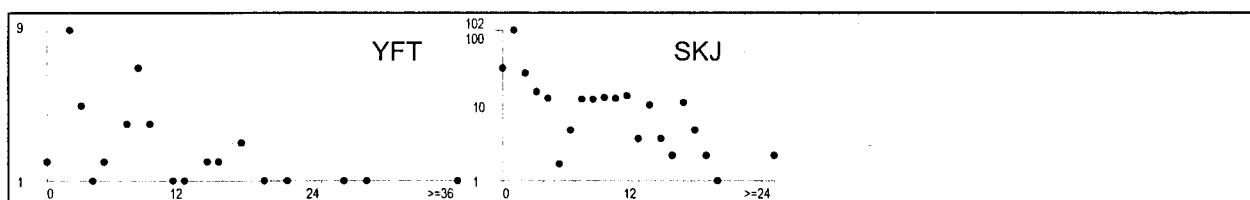
	YFT	SKJ	BET	Other	Total
Releases (% Total)	610 (13.6%)	3887 (86.4%)	1	0	4498
Recaptures (% Total)	48 (10.3%)	416 (89.7%)	0	0	464
Recovery Rate (%)	7.9	10.7	0.0	0.0	10.3

Recoveries by vessel flag and gear

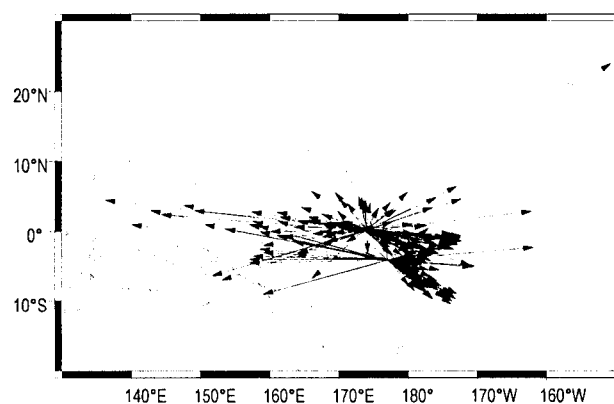
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
United States	34	306	-	-	-	-	-	-	-	-	-	-	34	306	-
Japan	2	3	-	-	5	-	1	-	-	-	-	-	3	8	-
Korea	1	21	-	-	-	-	-	-	-	-	-	-	1	21	-
Philippines	-	2	-	-	-	-	-	-	-	-	1	-	-	3	-
Taiwan	-	5	-	-	-	-	-	-	-	-	-	-	-	5	-
FSM	4	6	-	-	-	-	1	-	-	-	-	-	5	6	-
Kiribati	-	-	-	3	49	-	-	-	-	2	-	-	5	49	-
Australia	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Other	-	14	-	-	2	-	-	-	-	-	-	-	-	16	-
Total	41	359	-	3	56	-	2	-	-	2	1	-	48	416	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Project: RTTP – Tuvalu 1
Cruise(s): TET91-057, TET91-058, TET91-059

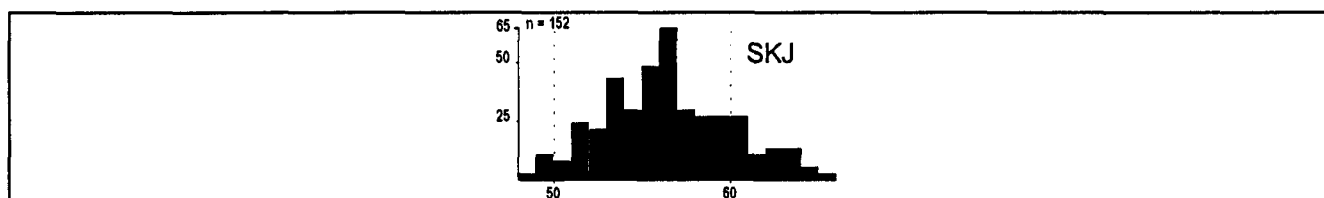
Period: 22/08/91 to 01/09/91

Total release and recovery by species

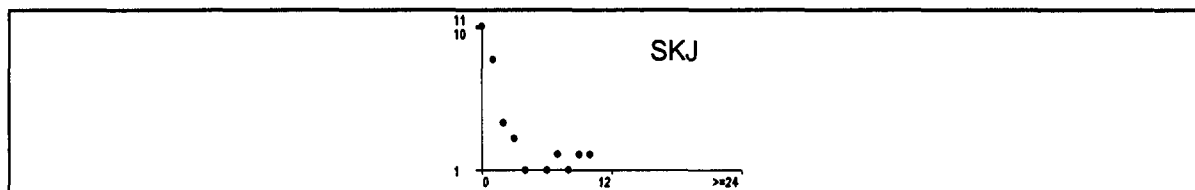
	YFT	SKJ	BET	Other	Total
Releases (% Total)	0	152 (100%)	0	0	152
Recaptures (% Total)	0	35 (100%)	0	0	35
Recovery Rate (%)	0.0	23.5	0.0	0.0	23.0

Recoveries by vessel flag and gear

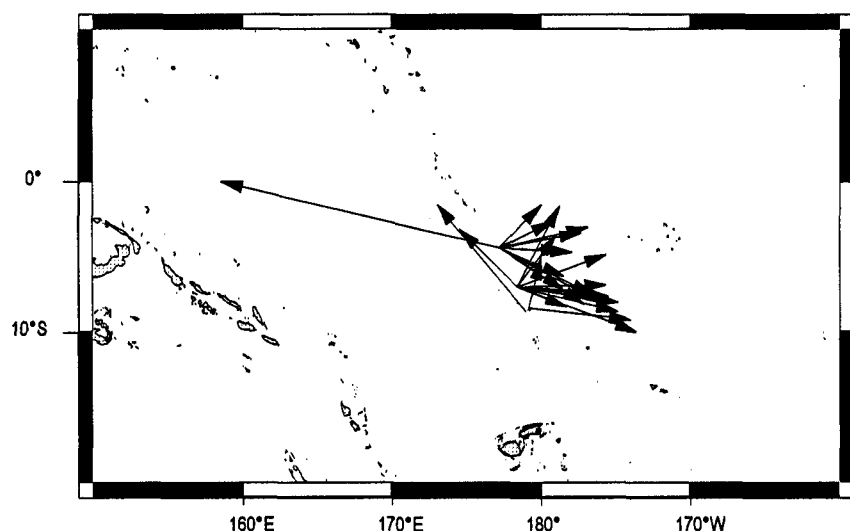
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	-	32	-	-	-	-	-	-	-	-	-	-	-	32	-
Korea	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Other	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
Total	-	35	-	-	-	-	-	-	-	-	-	-	-	35	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



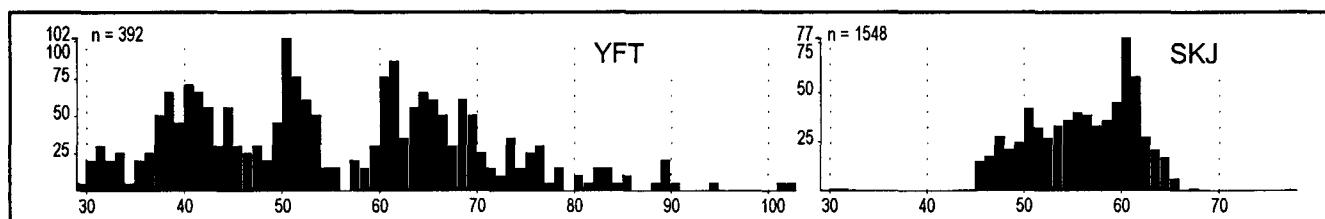
Movements of recaptured SKJ with distance from release point > 200 nm.

Total release and recovery by species

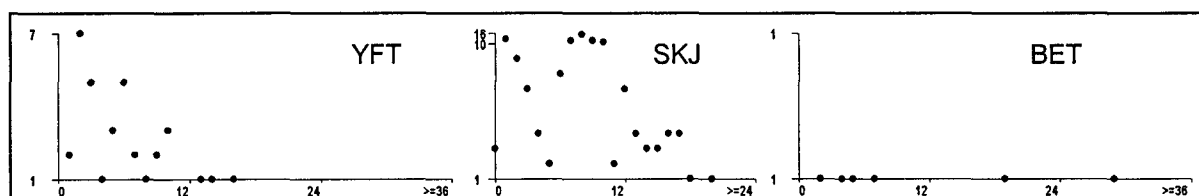
	YFT	SKJ	BET	Other	Total
Releases (% Total)	399 (20.1%)	1549 (78.0%)	39 (2.0%)	0	1987
Recaptures (% Total)	34 (20.5%)	126 (75.9%)	6 (3.6%)	0	166
Recovery Rate (%)	8.5	8.1	15.4	0.0	8.4

Recoveries by vessel flag and gear

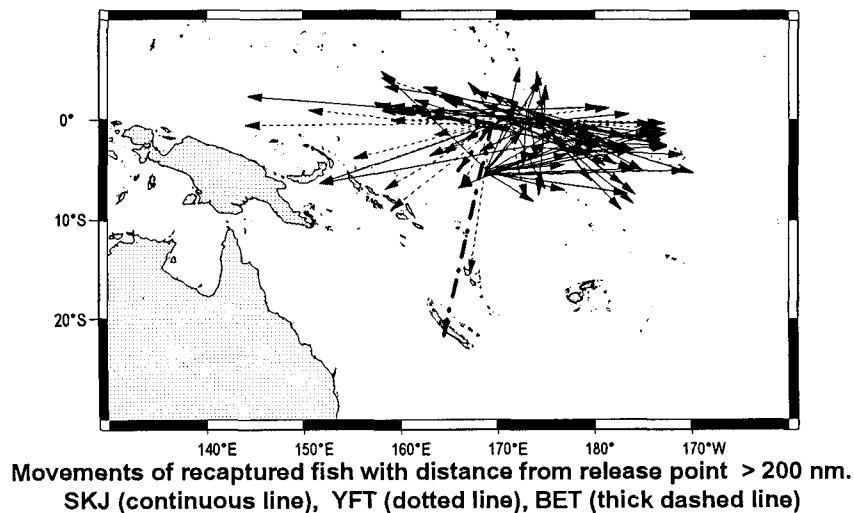
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	2	-	-	-	-	-	-	-	-	-	1	-	2
United States	23	108	-	-	-	-	-	-	-	1	-	-	24	108	-
Japan	2	8	2	-	-	-	1	-	-	-	-	-	3	8	2
Korea	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-
Philippines	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Taiwan	3	-	-	-	-	-	1	-	-	-	-	-	4	-	-
FSM	-	6	1	-	-	-	-	-	-	-	-	-	-	6	1
Kiribati	-	-	-	-	2	-	-	-	-	-	1	-	-	3	-
Other	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Total	31	123	5	-	2	-	2	-	1	1	1	-	34	126	6



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



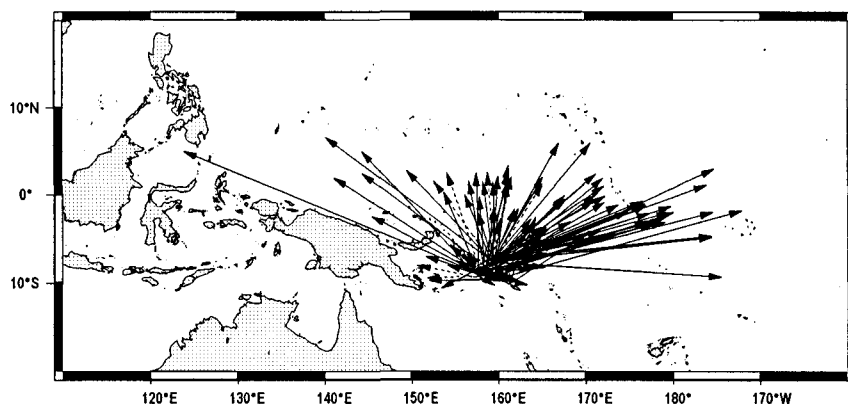
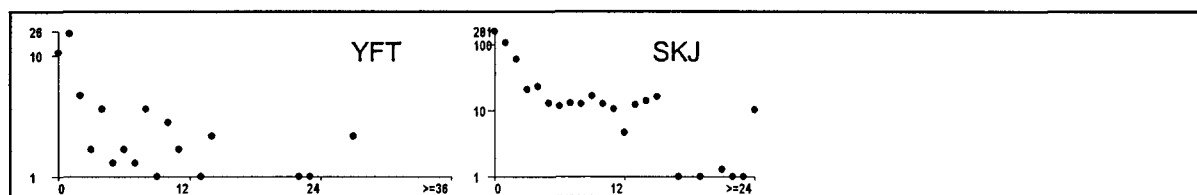
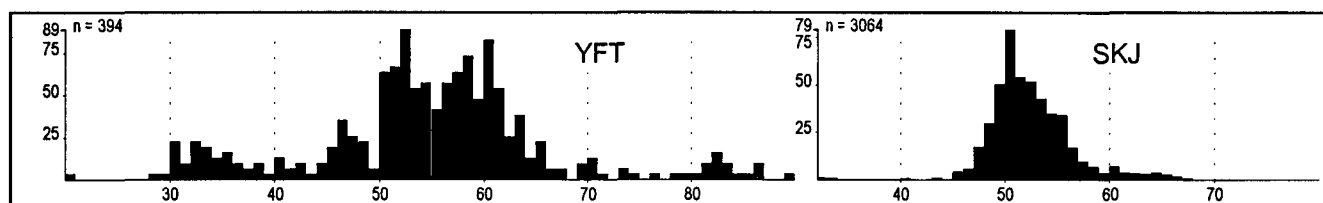
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

Total release and recovery by species

	YFT	SKJ	BET	Other	Total
Releases (% Total)	402 (11.5%)	3076 (88.2%)	11 (0.3%)	0	3489
Recaptures (% Total)	89 (10.0%)	800 (90.0%)	0	0	889
Recovery Rate (%)	22.1	26.0	0.0	0.0	25.5

Recoveries by vessel flag and gear

	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	32	303	-	8	220	-	-	-	-	6	51	-	46	574	-
United States	1	53	-	-	-	-	-	-	-	-	-	-	1	53	-
Japan	5	29	-	-	1	-	-	-	-	-	-	-	5	30	-
Korea	5	19	-	-	-	-	-	-	-	-	-	-	5	19	-
Philippines	26	102	-	-	-	-	-	-	-	-	2	-	26	104	-
Taiwan	3	9	-	-	-	-	-	-	-	-	-	-	3	9	-
FSM	2	4	-	-	-	-	-	-	-	-	-	-	2	4	-
Fiji	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
Other	-	5	-	-	-	-	-	-	-	1	-	-	1	5	-
Total	74	524	-	8	223	-	-	-	-	7	53	-	89	800	-

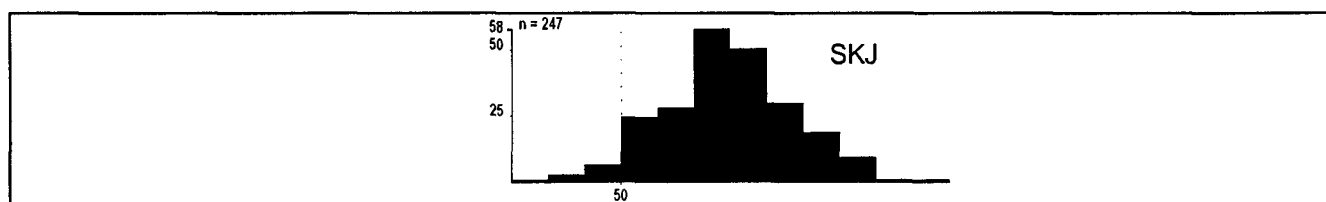


Total release and recovery by species

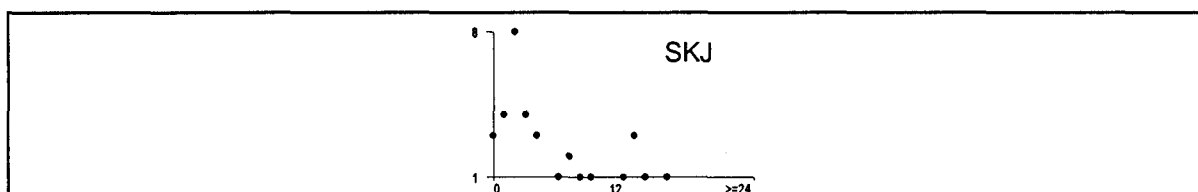
	YFT	SKJ	BET	Other	Total
Releases (% Total)	0	248 (100%)	0	0	248
Recaptures (% Total)	0	33 (100%)	0	0	33
Recovery Rate (%)	0.0	13.3	0.0	0.0	13.3

Recoveries by vessel flag and gear

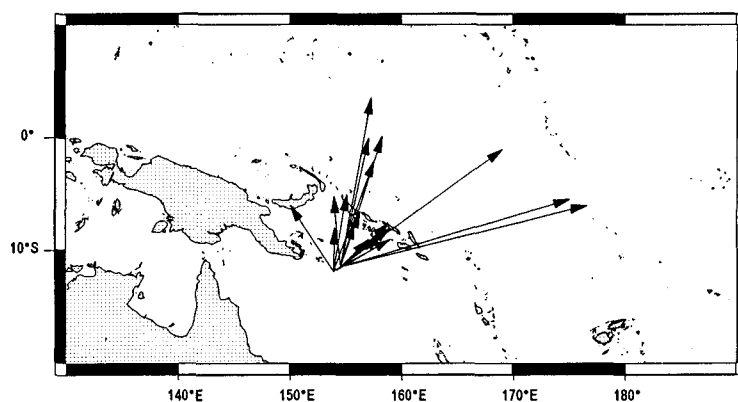
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	3	-	-	5	-	-	-	-	-	1	-	-	9	-
United States	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
Japan	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Korea	-	4	-	-	-	-	-	-	-	-	-	-	-	4	-
Philippines	-	16	-	-	-	-	-	-	-	-	-	-	-	16	-
Total	-	27	-	-	5	-	-	-	-	-	1	-	-	33	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



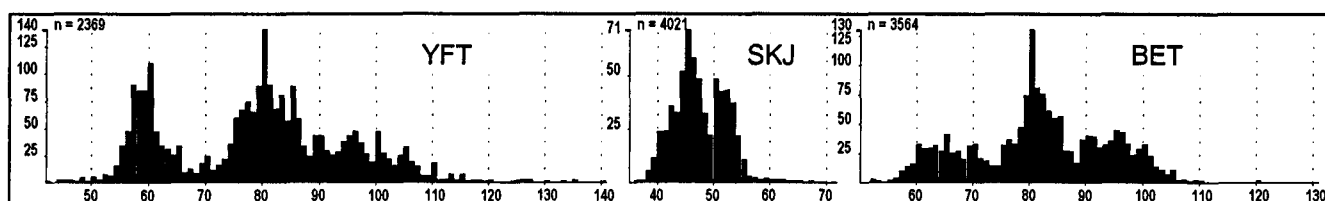
Movements of recaptured SKJ with distance from release point > 200 nm.

Total release and recovery by species

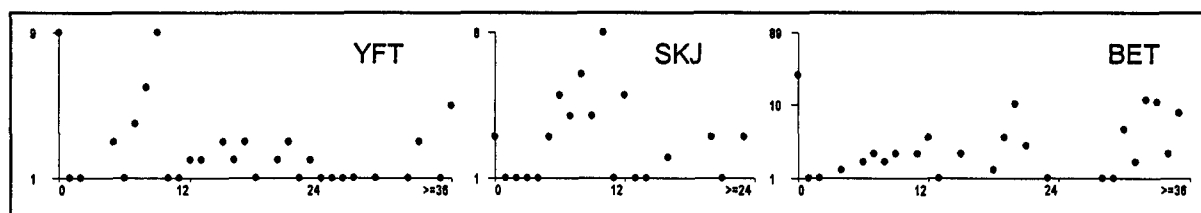
	YFT	SKJ	BET	Other	Total
Releases (% Total)	2511 (24.5%)	4040 (39.3%)	3716 (36.2%)	0	10267
Recaptures (% Total)	74 (19.1%)	54 (14.0%)	259 (66.9%)	0	387
Recovery Rate (%)	2.9	1.3	7.0	0.0	3.8

Recoveries by vessel flag and gear

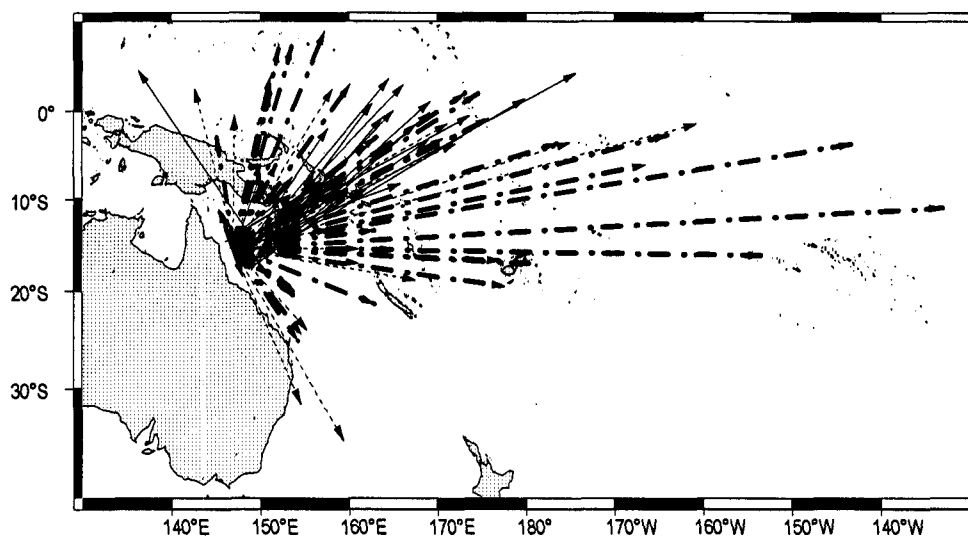
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	9	7	1	1	13	-	1	-	1	-	1	-	11	21	2
United States	2	14	-	-	-	-	-	-	-	-	-	-	2	14	-
Japan	-	1	-	-	-	-	9	-	25	-	-	-	9	1	25
Korea	3	3	-	-	-	-	2	-	7	-	-	-	5	3	7
Philippines	5	7	3	-	-	-	-	-	-	-	-	-	5	7	3
Taiwan	3	4	-	-	-	-	1	-	2	-	-	-	4	4	2
Fiji	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Australia	-	-	1	4	-	7	29	-	162	-	1	-	33	1	170
Other	-	-	-	4	3	46	1	-	3	-	-	-	5	3	49
Total	22	36	5	9	16	53	43	-	201	-	2	-	74	54	259



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



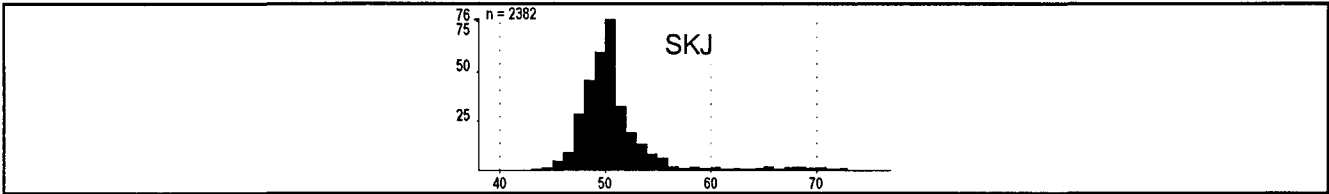
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

Total release and recovery by species

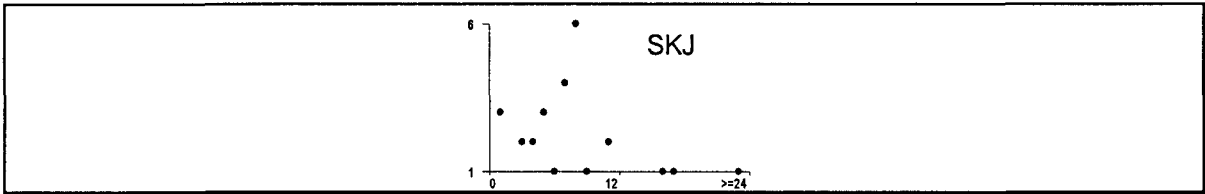
	YFT	SKJ	BET	Other	Total
Releases (% Total)	0	2431 (100%)	0	0	2431
Recaptures (% Total)	0	27 (100%)	0	0	27
Recovery Rate (%)	0.0	1.1	0.0	0.0	1.1

Recoveries by vessel flag and gear

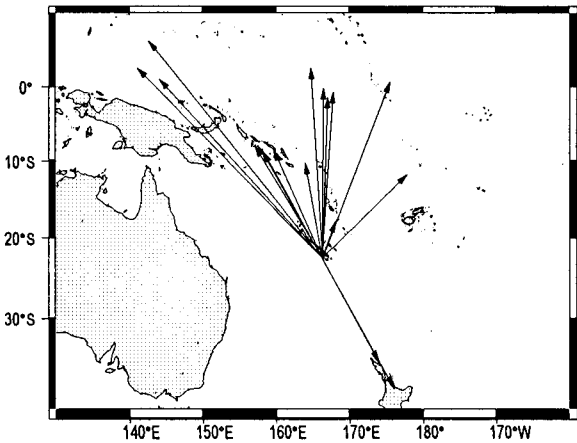
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	1	-	-	4	-	-	-	-	-	-	-	-	5	-
United States	-	9	-	-	-	-	-	-	-	-	-	-	-	9	-
Japan	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Korea	-	6	-	-	-	-	-	-	-	-	-	-	-	6	-
Taiwan	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
Other	-	2	-	-	-	-	-	-	-	-	1	-	-	3	-
Total	-	22	-	-	4	-	-	-	-	-	1	-	-	27	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



Movements of recaptured SKJ with distance from release point > 200 nm.

Project: RTTP – Fiji EEZ
Cruise(s): TET91-072

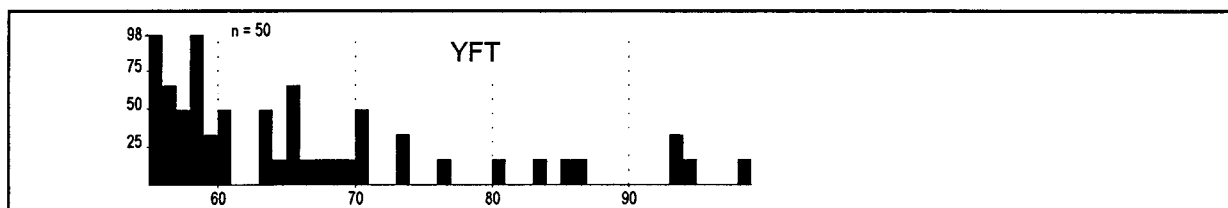
Period: 06/12/91 to 07/12/91

Total release and recovery by species

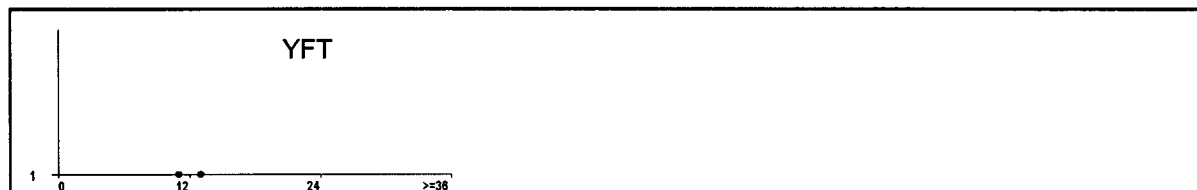
	YFT	SKJ	BET	Other	Total
Releases (% Total)	50 (89.3%)	6 (10.7%)	0	0	56
Recaptures (% Total)	2 (100%)	0	0	0	2
Recovery Rate (%)	4.0	0.0	0.0	0.0	3.6

Recoveries by vessel flag and gear

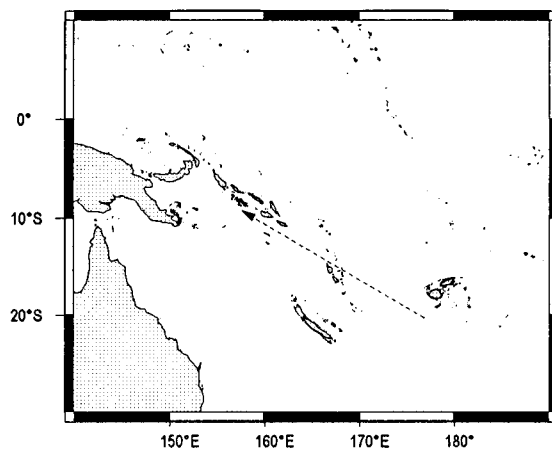
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Philippines	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Other	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
Total	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



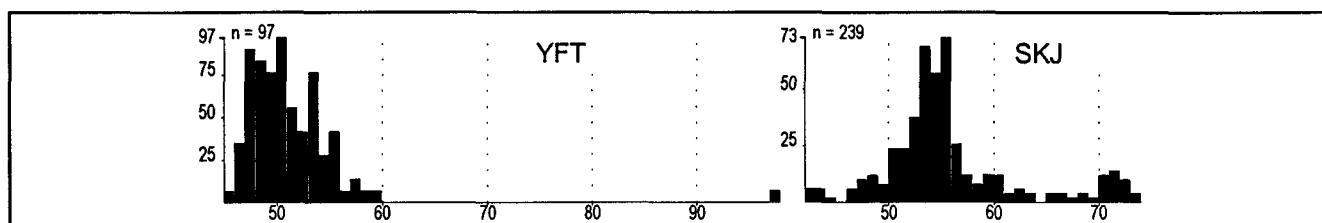
Movements of recaptured YFT with distance from release point > 200 nm.

Total release and recovery by species

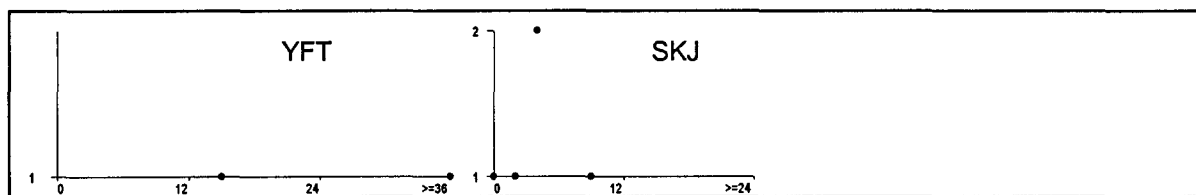
	YFT	SKJ	BET	Other	Total
Releases (% Total)	97 (28.9%)	239 (71.1%)	0	0	336
Recaptures (% Total)	2 (28.6%)	5 (71.4%)	0	0	7
Recovery Rate (%)	2.1	2.1	0.0	0.0	2.1

Recoveries by vessel flag and gear

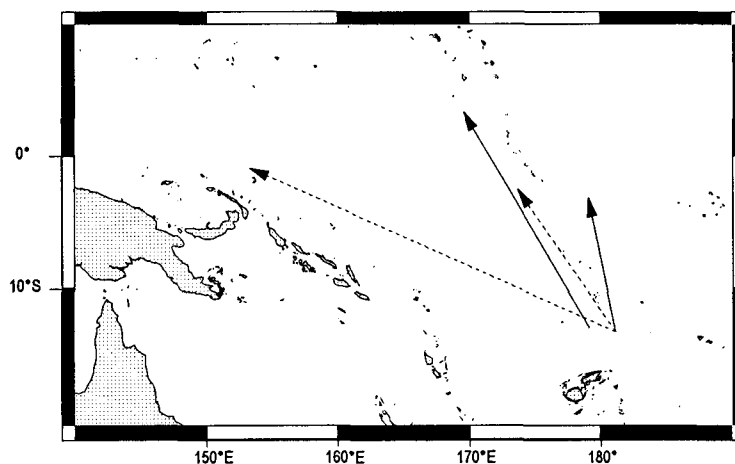
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	2	3	-	-	-	-	-	-	-	-	-	-	2	3	-
Japan	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Fiji	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
Total	2	4	-	-	1	-	-	-	-	-	-	-	2	5	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Project: RTTP – Tuvalu 1
Cruise(s): TET92-074

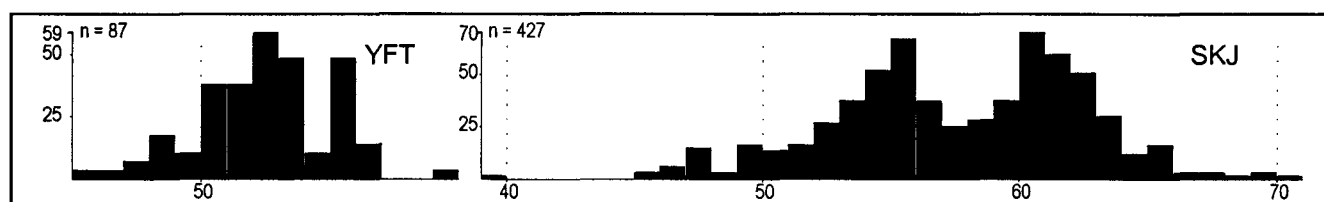
Period: 10/03/92 to 16/03/92

Total release and recovery by species

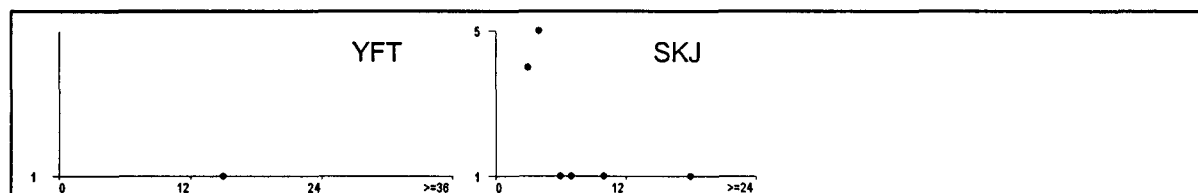
	YFT	SKJ	BET	Other	Total
Releases (% Total)	87 (16.6%)	427 (81.3%)	11 (2.1%)	0	525
Recaptures (% Total)	1 (7.1%)	13 (92.9%)	0	0	14
Recovery Rate (%)	1.1	3.0	0.0	0.0	2.7

Recoveries by vessel flag and gear

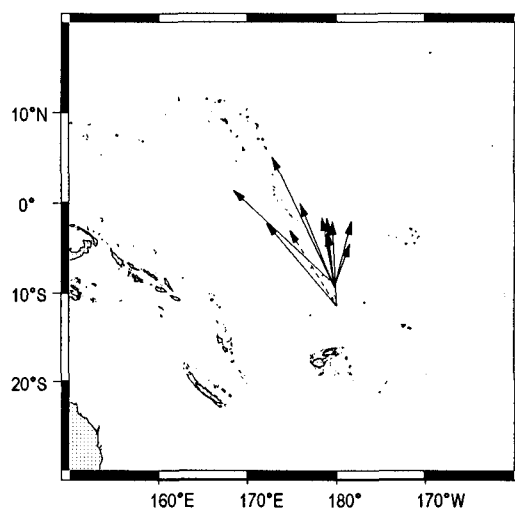
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	1	12	-	-	-	-	-	-	-	-	-	-	1	12	-
Korea	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Total	1	13	-	-	-	-	-	-	-	-	-	-	1	13	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty: YFT (left), SKJ (centre).
Months at liberty — bottom axis, Returns — left axis



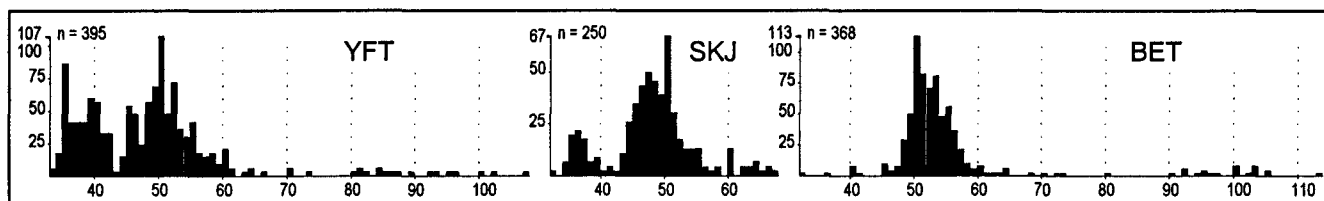
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

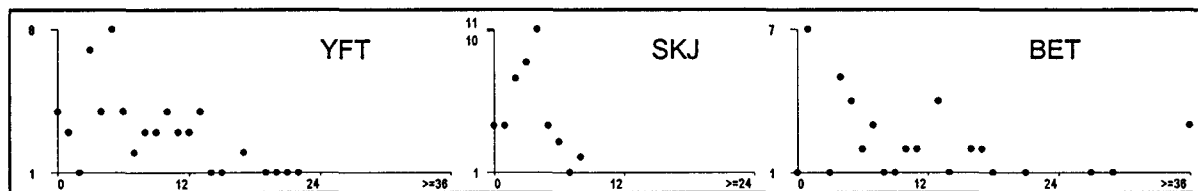
	YFT	SKJ	BET	Other	Total
Releases (% Total)	396 (38.9%)	254 (25.0%)	368 (36.1%)	0	1018
Recaptures (% Total)	61 (40.4%)	45 (29.8%)	45 (29.8%)	0	151
Recovery Rate (%)	15.4	17.7	12.2	0.0	14.8

Recoveries by vessel flag and gear

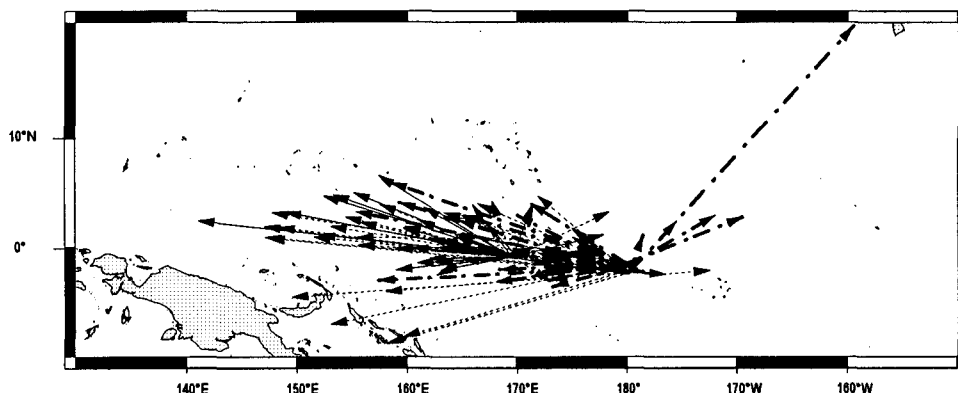
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	33	-	-	-	-	-	-	1	-	-	2	-	33
United States	24	18	-	-	-	-	-	-	-	-	-	-	24	18	-
Japan	9	13	4	-	-	-	-	-	1	-	1	-	9	14	5
Korea	9	6	2	-	-	-	-	-	1	-	-	-	9	6	3
Philippines	4	1	-	-	-	-	-	-	-	-	-	-	4	1	-
Taiwan	9	5	1	-	-	-	-	-	1	-	-	-	9	5	2
FSM	3	-	-	-	-	-	-	-	-	-	-	-	3	-	-
Other	1	1	-	-	-	-	-	-	2	-	-	-	1	1	2
Total	60	44	40	-	-	-	-	-	5	1	1	-	61	45	45



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



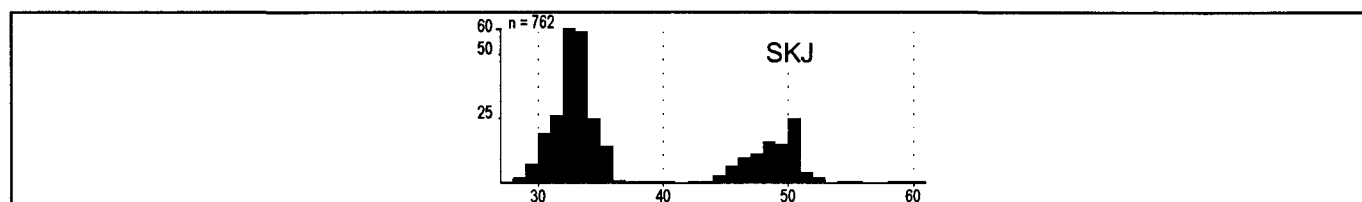
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

Total release and recovery by species

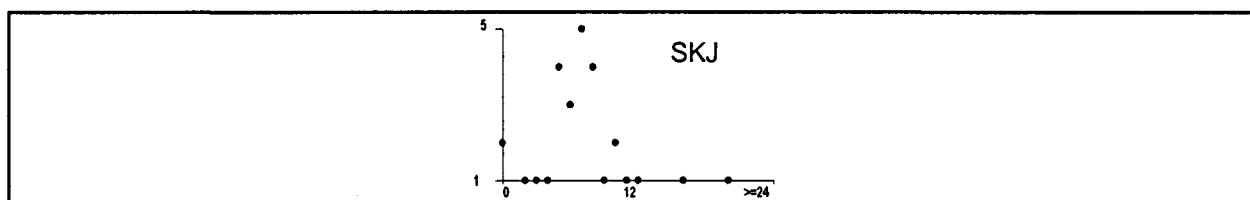
	YFT	SKJ	BET	Other	Total
Releases (% Total)	0	762 (100%)	0	0	762
Recaptures (% Total)	0	28 (100%)	0	0	28
Recovery Rate (%)	0.0	3.7	0.0	0.0	3.7

Recoveries by vessel flag and gear

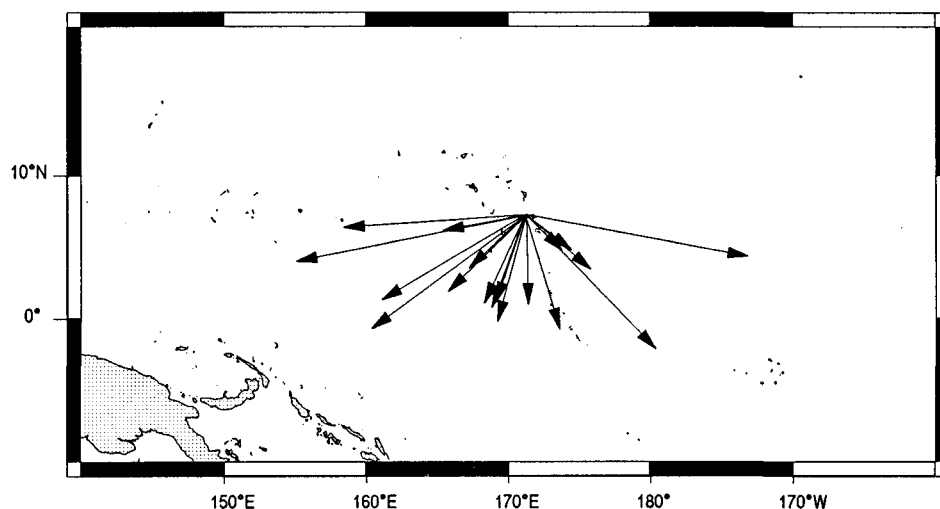
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	-	20	-	-	-	-	-	-	-	-	-	-	-	20	-
Japan	-	4	-	-	-	-	-	-	-	-	-	-	-	4	-
Taiwan	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
FSM	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Other	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
Total	-	26	-	-	2	-	-	-	-	-	-	-	-	28	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty: YFT (left), SKJ (centre), BET (right).
Months at liberty — bottom axis, Returns — left axis



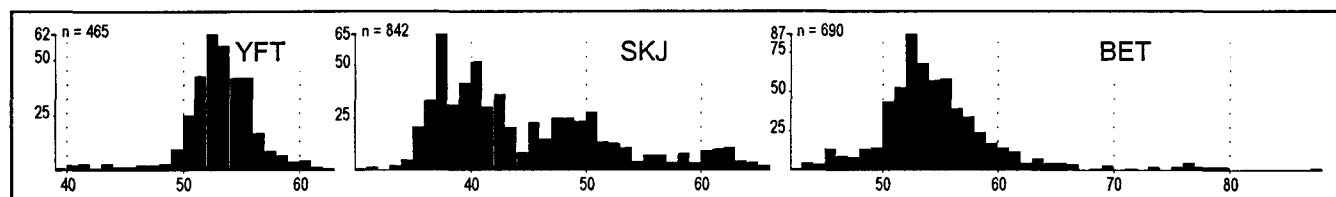
Movements of recaptured SKJ with distance from release point > 200 nm.

Total release and recovery by species

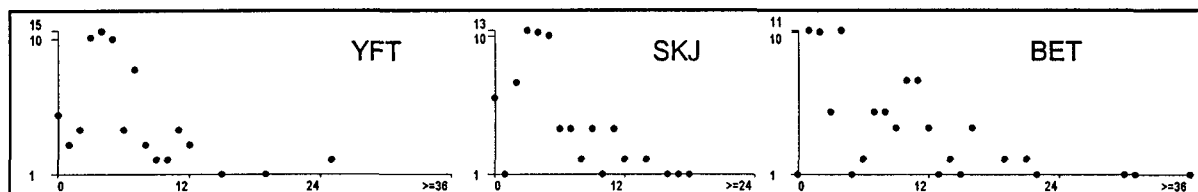
	YFT	SKJ	BET	Other	Total
Releases (% Total)	467 (23.2%)	842 (41.9%)	700 (34.8%)	0	2009
Recaptures (% Total)	68 (32.1%)	73 (34.4%)	71 (33.5%)	0	212
Recovery Rate (%)	14.6	8.7	10.1	0.0	10.6

Recoveries by vessel flag and gear

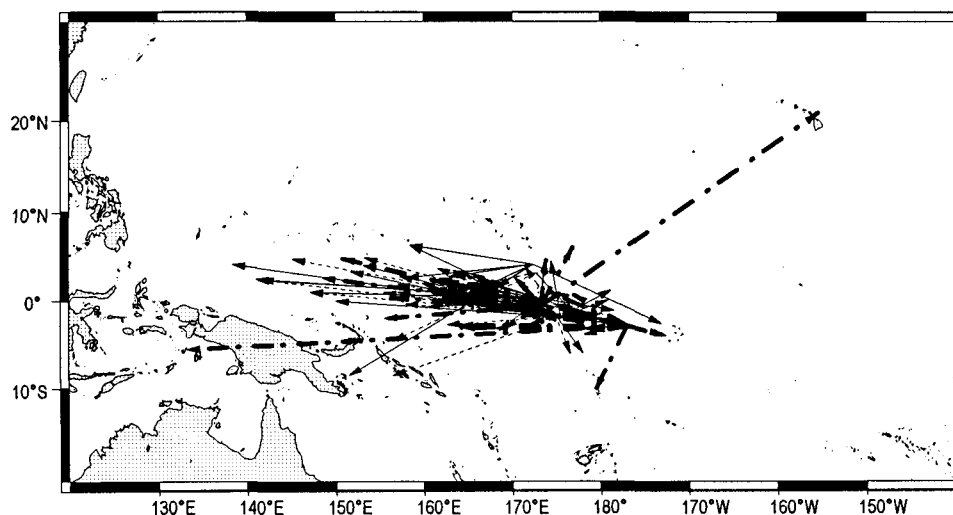
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	51	-	-	-	-	-	1	-	-	-	1	-	52
United States	40	42	-	-	-	-	-	-	-	-	-	-	40	42	-
Japan	11	13	6	-	-	-	-	-	2	-	-	2	11	13	10
Korea	11	7	1	-	-	-	-	-	1	-	-	-	11	7	2
Philippines	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
Taiwan	5	5	5	-	-	-	-	-	-	-	-	-	5	5	5
FSM	-	2	1	-	-	-	-	-	-	-	-	-	-	2	1
Other	-	1	-	-	1	-	-	-	-	-	-	1	-	2	1
Total	68	72	64	-	1	-	-	-	4	-	-	3	68	73	71



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — Left axis



Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

Project: RTTP – Wallis & Futuna 1
Cruise(s): TET92-084, TET92-085

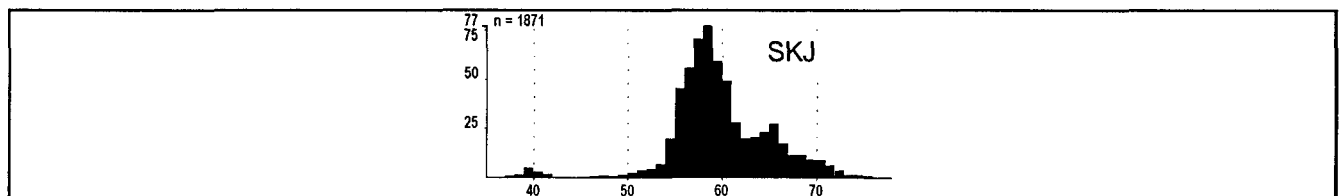
Period: 15/06/92 to 03/07/92

Total release and recovery by species

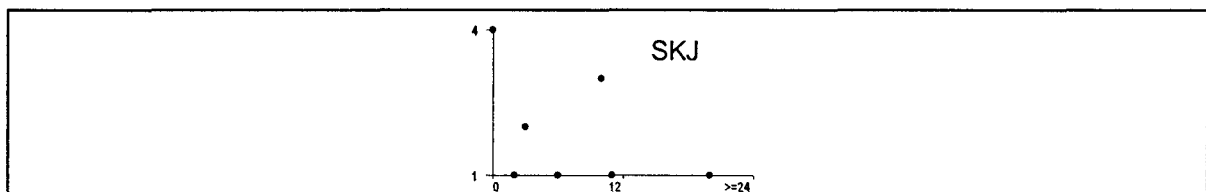
	YFT	SKJ	BET	Other	Total
Releases (% Total)	30 (1.6%)	1882 (98.4%)	0	0	1912
Recaptures (% Total)	0	13 (100%)	0	0	13
Recovery Rate (%)	0.0	0.7	0.0	0.0	0.7

Recoveries by vessel flag and gear

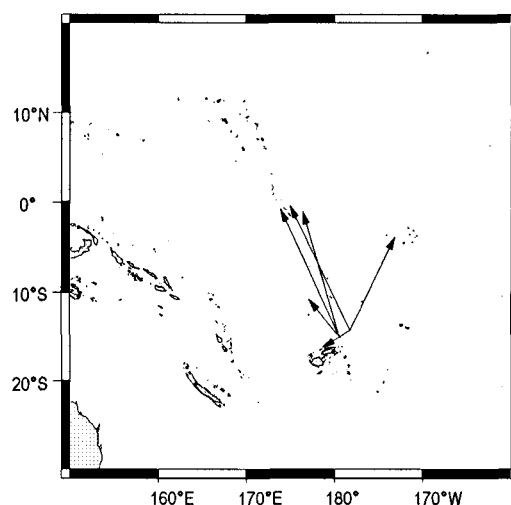
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	-	5	-	-	-	-	-	-	-	-	-	-	-	5	-
Fiji	-	-	-	-	6	-	-	-	-	-	-	-	-	6	-
Other	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
Total	-	5	-	-	8	-	-	-	-	-	-	-	-	13	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



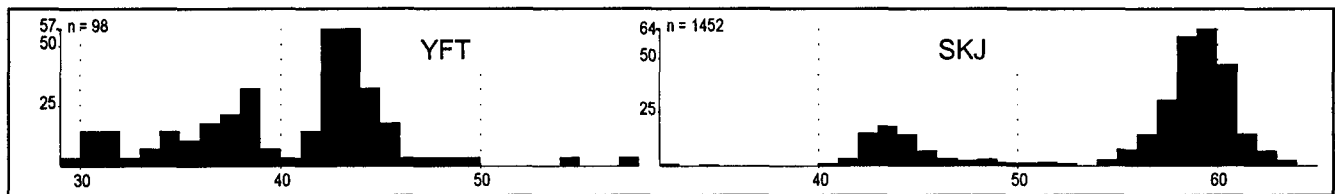
Movements of recaptured SKJ with distance from release point > 200 nm.

Total release and recovery by species

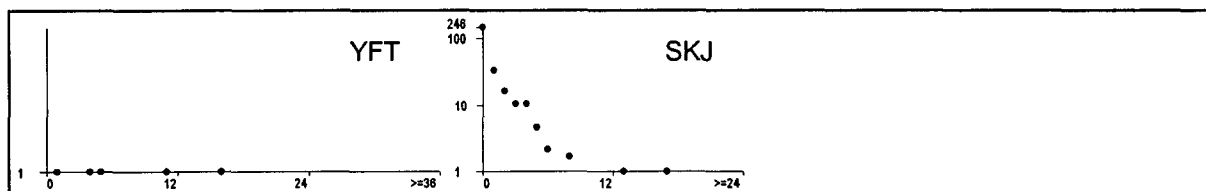
	YFT	SKJ	BET	Other	Total
Releases (% Total)	98 (6.3%)	1456 (93.6%)	1 (0.1%)	0	1555
Recaptures (% Total)	5 (1.3%)	372 (98.7%)	0	0	377
Recovery Rate (%)	5.1	25.5	0.0	0.0	24.2

Recoveries by vessel flag and gear

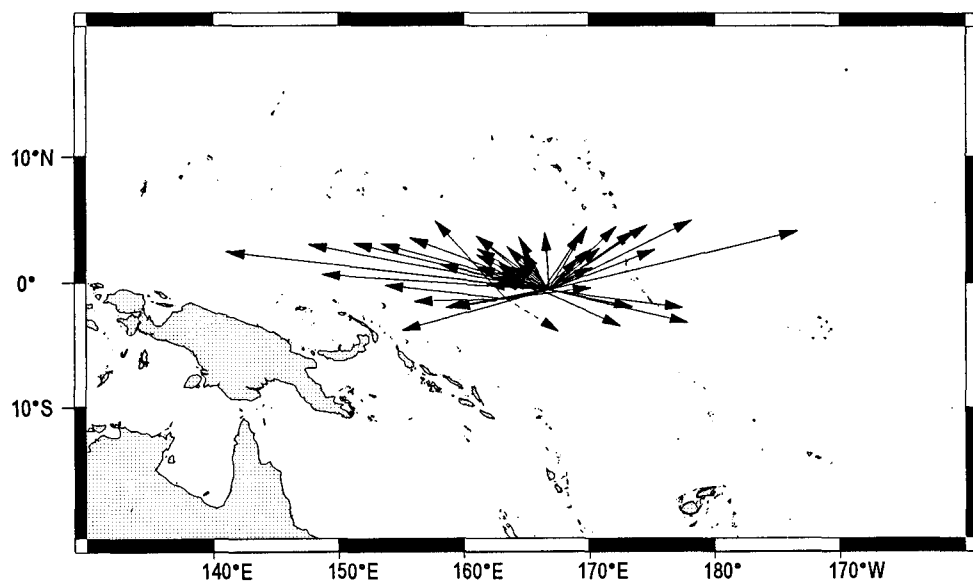
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	1	312	-	-	-	-	-	-	-	-	-	-	1	312	-
Japan	-	6	-	-	-	-	-	-	-	-	-	-	-	6	-
Korea	3	34	-	-	-	-	-	-	-	-	-	-	3	34	-
Philippines	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
Taiwan	-	12	-	-	-	-	-	-	-	-	-	-	-	12	-
FSM	-	4	-	-	-	-	-	-	-	-	-	-	-	4	-
Other	1	-	-	-	-	-	-	-	-	-	1	-	1	1	-
Total	5	371	-	-	-	-	-	-	-	-	1	-	5	372	-



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



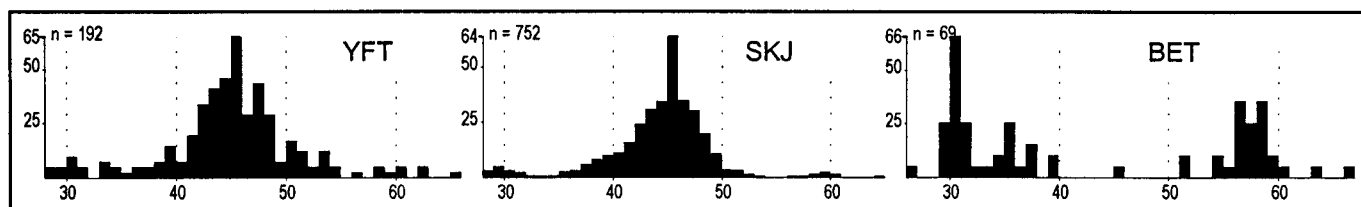
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species during the tagging period

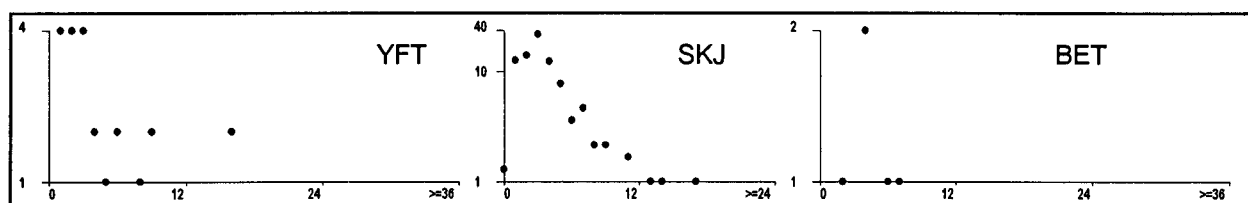
	YFT	SKJ	BET	Other	Total
Releases (% Total)	194 (18.7%)	775 (74.7%)	69 (6.6%)	0	1038
Recaptures (% Total)	22 (13.3%)	138 (83.6%)	5 (3.0%)	0	165
Recovery Rate (%)	11.3	17.8	7.2	0.0	15.9

Recoveries by vessel flag and gear

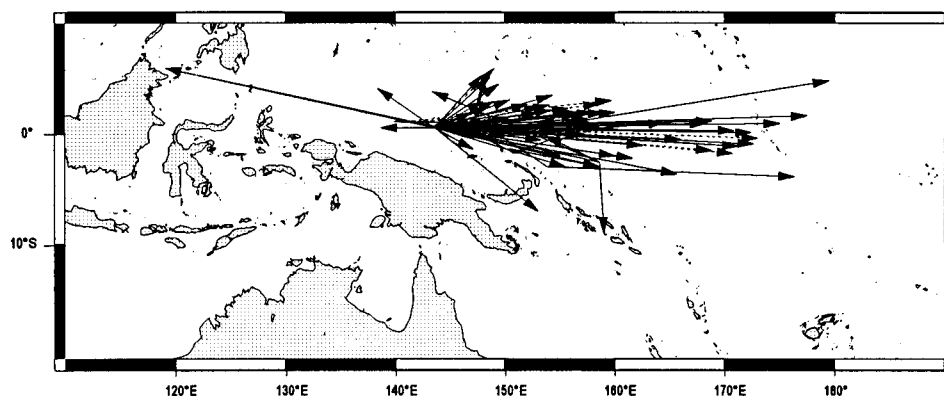
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	-	1	-	-	-	-	-	-	-	1	-	-	1	1
United States	6	20	-	-	-	-	-	-	-	-	-	-	6	20	-
Japan	7	36	3	-	1	-	-	-	-	-	-	-	7	37	3
Korea	2	19	-	-	-	-	-	-	-	-	-	-	2	19	-
Philippines	3	7	1	-	-	-	-	-	-	-	-	-	3	7	1
Taiwan	4	50	-	-	-	-	-	-	-	-	-	-	4	50	-
FSM	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Other	-	2	-	-	1	-	-	-	-	-	-	-	-	3	-
Total	22	135	5	-	2	-	-	-	-	-	1	-	22	138	5



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty: YFT (left), SKJ (centre), BET (right).
Months at liberty — bottom axis, Returns — left axis



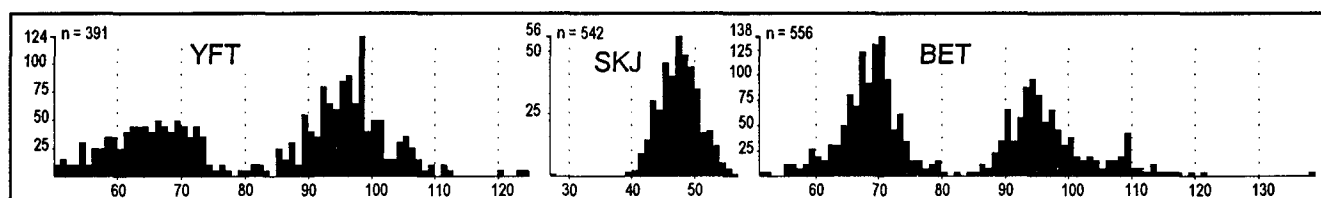
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

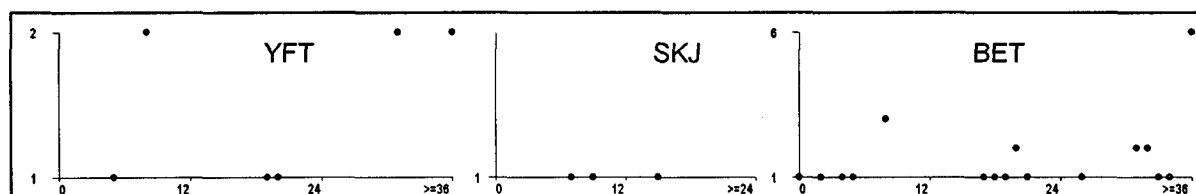
	YFT	SKJ	BET	Other	Total
Releases (% Total)	393 (26.3%)	542 (36.2%)	561 (37.5%)	0	1496
Recaptures (% Total)	10 (23.3%)	3 (7.0%)	30 (69.8%)	0	43
Recovery Rate (%)	2.5	0.6	5.3	0.0	2.9

Recoveries by vessel flag and gear

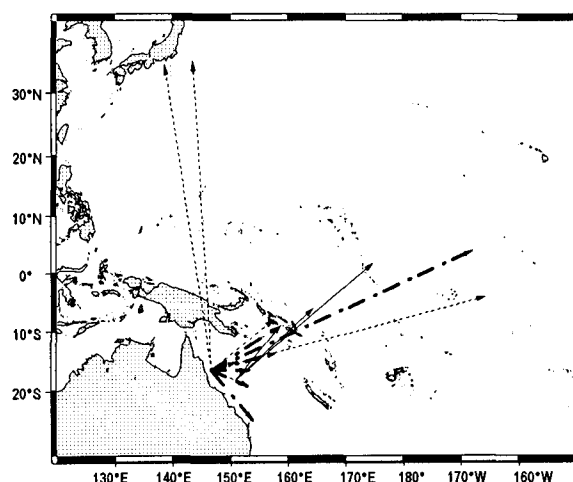
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	1	-	1	-	-	-	-	-	-	-	1	1	1
United States	1	2	-	-	-	-	-	-	-	-	-	-	1	2	-
Japan	1	-	-	-	-	-	2	-	4	-	-	-	3	-	4
Korea	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Australia	-	-	-	-	-	-	5	-	24	-	-	-	5	-	24
Other	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Total	3	2	1	-	1	1	7	-	29	-	-	-	10	3	31



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



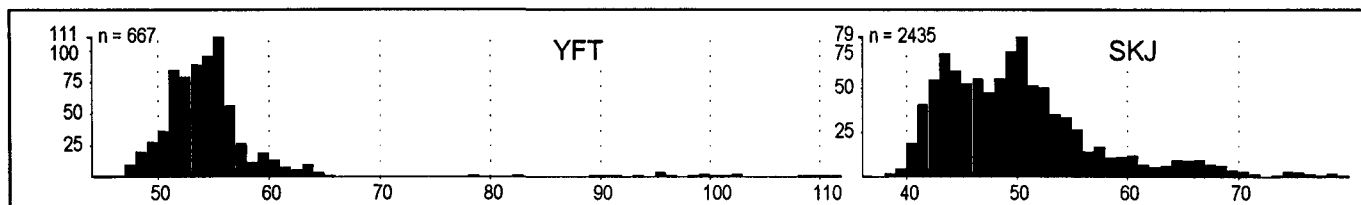
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

Total release and recovery by species

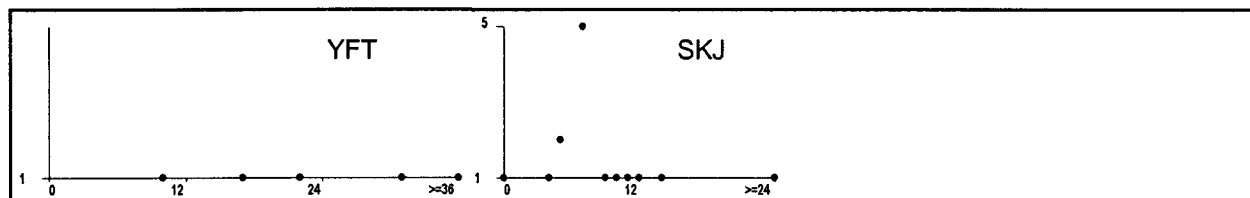
	YFT	SKJ	BET	Other	Total
Releases (% Total)	695 (22.1%)	2447 (77.9%)	1	0	3143
Recaptures (% Total)	5 (25.0%)	15 (75.0%)	0	0	20
Recovery Rate (%)	0.7	0.6	0.0	0.0	0.6

Recoveries by vessel flag and gear

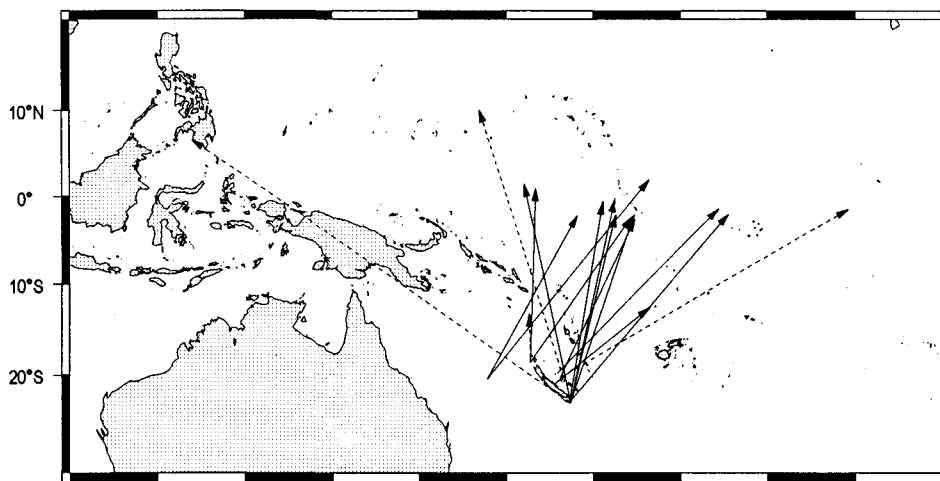
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	1	14	-	-	-	-	-	-	-	-	-	-	1	14	-
Japan	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
Philippines	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-
Taiwan	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
Other	1	-	-	-	1	-	-	-	-	-	-	-	1	1	-
Total	2	14	-	-	1	-	2	-	-	1	-	-	5	15	-



Size-frequency distribution of fish released
 Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
 Months at liberty — bottom axis, Returns — left axis



Movements of recaptured fish with distance from release point > 200 nm.
 SKJ (continuous line), YFT (dotted line)

IN-COUNTRY TUNA TAGGING PROJECTS

Solomon Islands In-country Tuna Tagging Project

Kiribati In-country Tuna Tagging Project

Fiji In-country Tuna Tagging Project

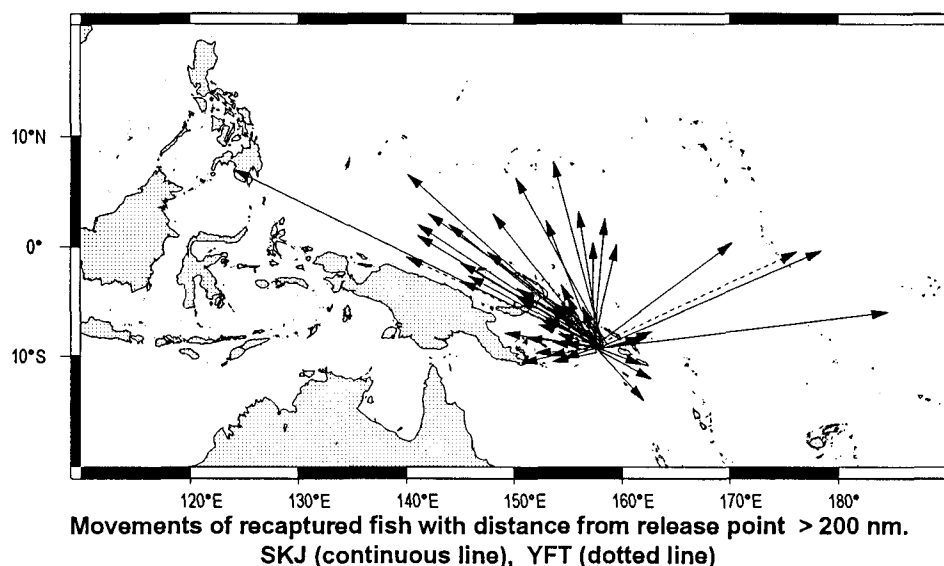
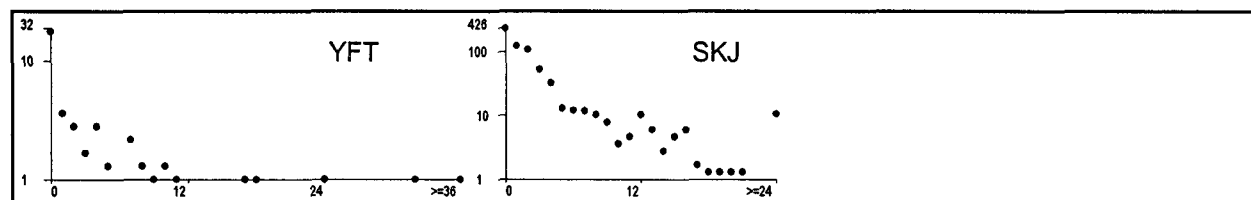
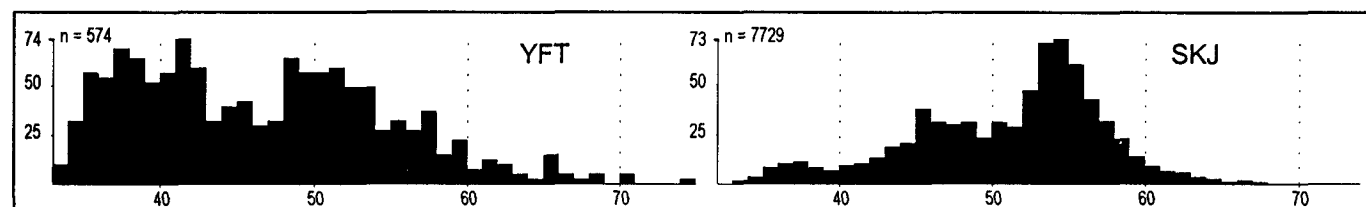
Philippines In-country Tuna Tagging Project

Total release and recovery by species

	YFT	SKJ	BET	Other	Total
Releases (% Total)	574 (6.9%)	7729 (93.1%)	1	1	8305
Recaptures (% Total)	67 (6.3%)	995 (93.6%)	0	1	1063
Recovery Rate (%)	11.7	12.9	0.0	100.0	12.8

Recoveries by vessel flag and gear

	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	52	543	-	8	367	-	-	-	-	-	5	-	60	915	-
United States	2	6	-	-	-	-	-	-	-	-	-	-	2	6	-
Japan	-	8	-	-	2	-	-	-	-	-	-	-	-	10	-
Korea	1	7	-	-	-	-	-	-	-	-	-	-	1	7	-
Philippines	3	51	-	-	-	-	-	-	-	-	2	-	3	53	-
Taiwan	1	2	-	-	-	-	-	-	-	-	-	-	1	2	-
Other	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
Total	59	619	-	8	369	-	-	-	-	-	7	-	67	995	-

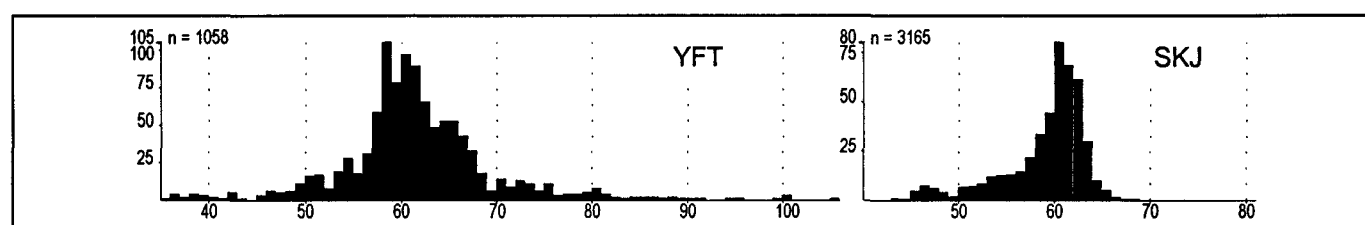


Total release and recovery by species during the tagging period

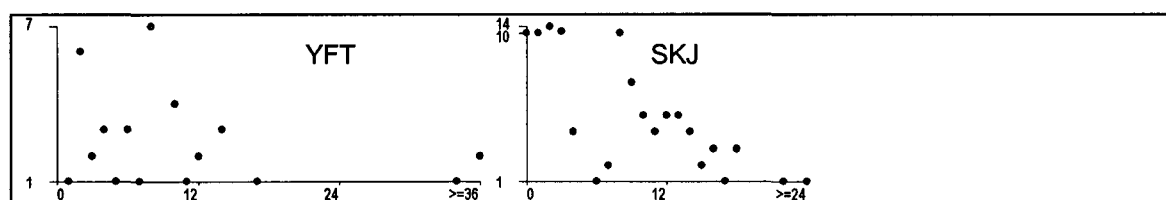
	YFT	SKJ	BET	Other	Total
Releases (% Total)	1058 (24.8%)	3165 (74.2%)	43 (1.0%)	0	4266
Recaptures (% Total)	38 (26.8%)	103 (72.5%)	1 (0.7%)	0	142
Recovery Rate (%)	3.6	3.3	2.3	0.0	3.3

Recoveries by vessel flag and gear

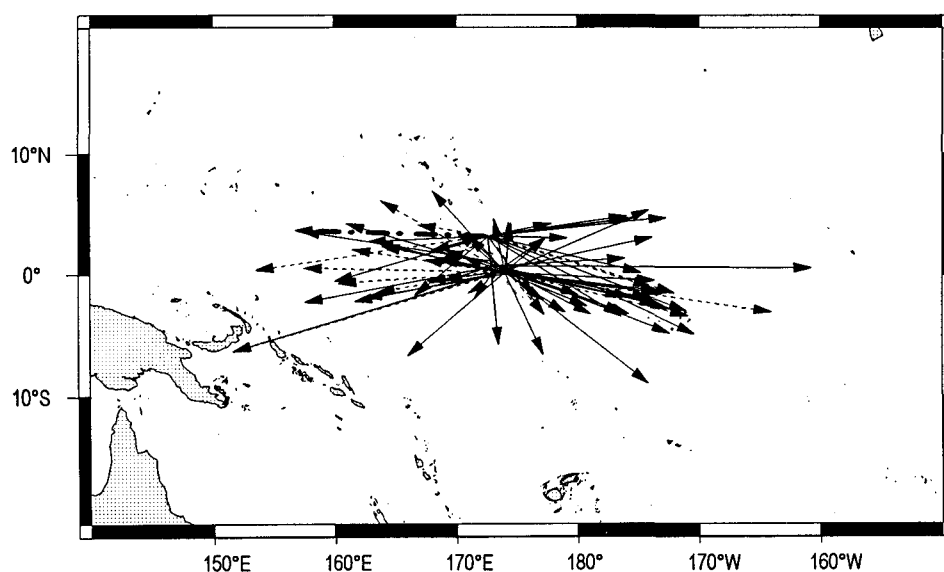
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
United States	24	71	-	-	-	-	-	-	-	-	-	-	24	71	-
Japan	2	3	1	-	7	-	-	-	-	-	-	-	2	10	1
Korea	2	1	-	-	-	-	1	-	-	-	-	-	3	1	-
Taiwan	3	-	-	-	-	-	-	-	-	-	-	-	3	-	-
FSM	3	2	-	-	-	-	-	-	-	-	-	-	3	2	-
Kiribati	-	-	-	2	16	-	-	-	-	-	-	-	2	16	-
Other	-	1	-	-	1	-	1	-	-	-	1	-	1	3	-
Total	34	78	1	2	24	-	2	-	-	-	1	-	38	103	1



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

Project: Fiji In-country Project

Period: 25/01/92 to 30/03/92

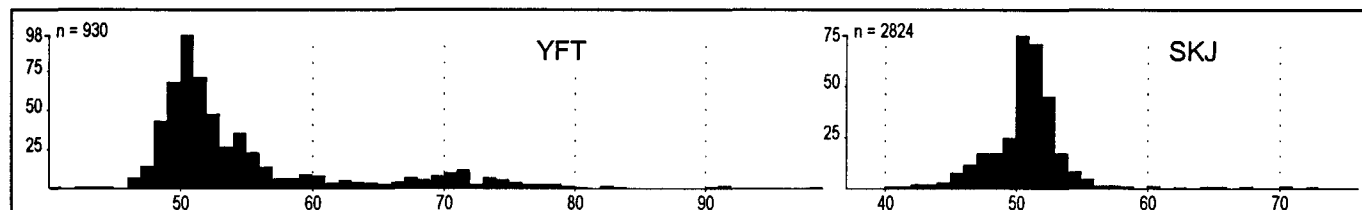
Cruise(s): TRA92-001, TRA92-002, TRA92-003, TRA92-003, TRA92-004, TRA92-005, TRA92-006, TRA92-007, SUN92-008

Total release and recovery by species

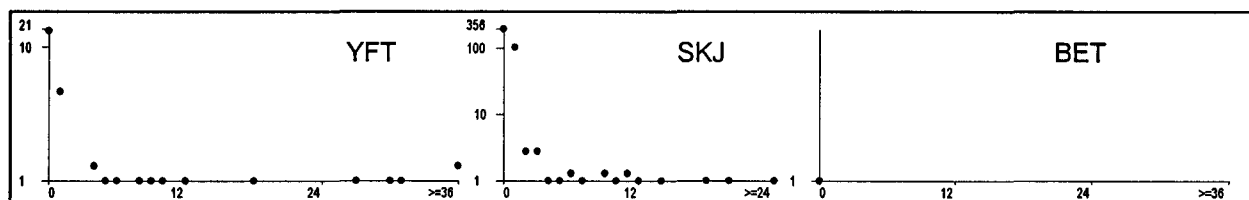
	YFT	SKJ	BET	Other	Total
Releases (% Total)	930 (24.7%)	2824 (75.1%)	4 (0.1%)	0	3758
Recaptures (% Total)	42 (7.9%)	489 (91.9%)	1 (0.2%)	0	532
Recovery Rate (%)	4.5	17.3	25.0	0.0	14.2

Recoveries by vessel flag and gear

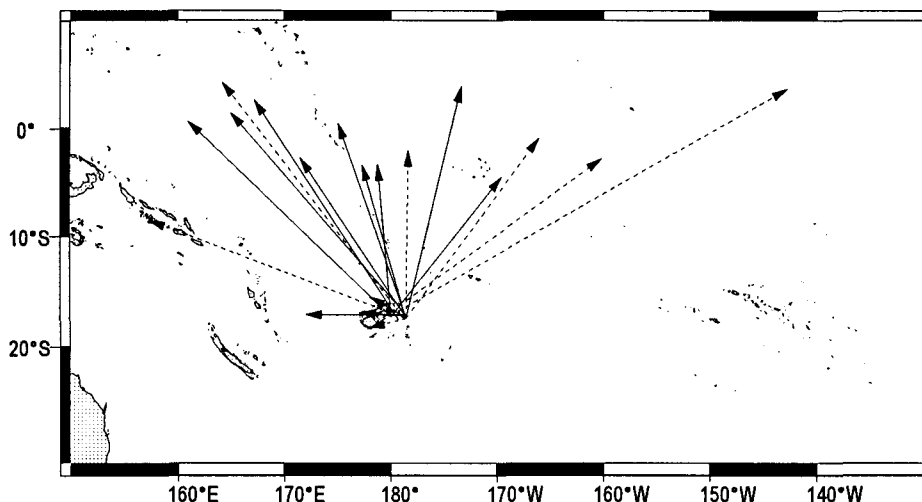
	Purse Seine			Pole & Line			Longline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
United States	3	9	-	-	-	-	-	-	-	-	-	-	3	9	-
Japan	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
Philippines	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
Taiwan	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-
Fiji	-	-	-	35	476	1	-	-	-	1	-	-	36	476	1
Other	-	-	-	-	2	-	1	-	-	-	-	-	1	2	-
Total	4	9	-	35	478	1	2	1	-	1	1	-	42	489	1



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



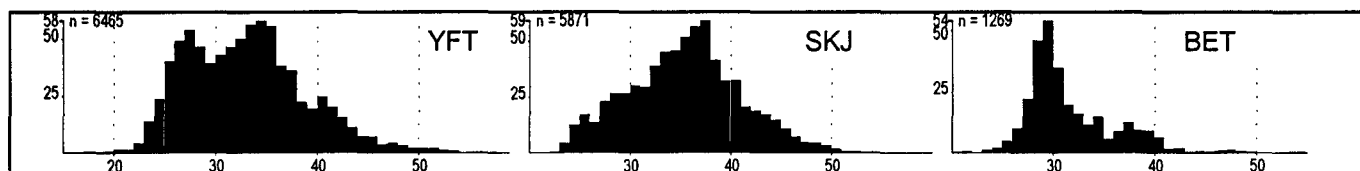
Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line)

Total release and recovery by species

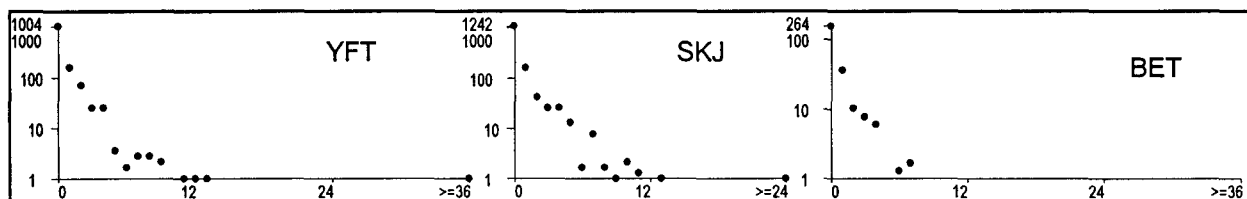
	YFT	SKJ	BET	Other	Total
Releases (% Total)	6553 (47.3%)	6025 (43.5%)	1278 (9.2%)	0	13856
Recaptures (% Total)	1481 (41.5%)	1727 (48.4%)	357 (10.0%)	0	3565
Recovery Rate (%)	22.6	28.7	27.9	0.0	25.7

Recoveries by vessel flag and gear

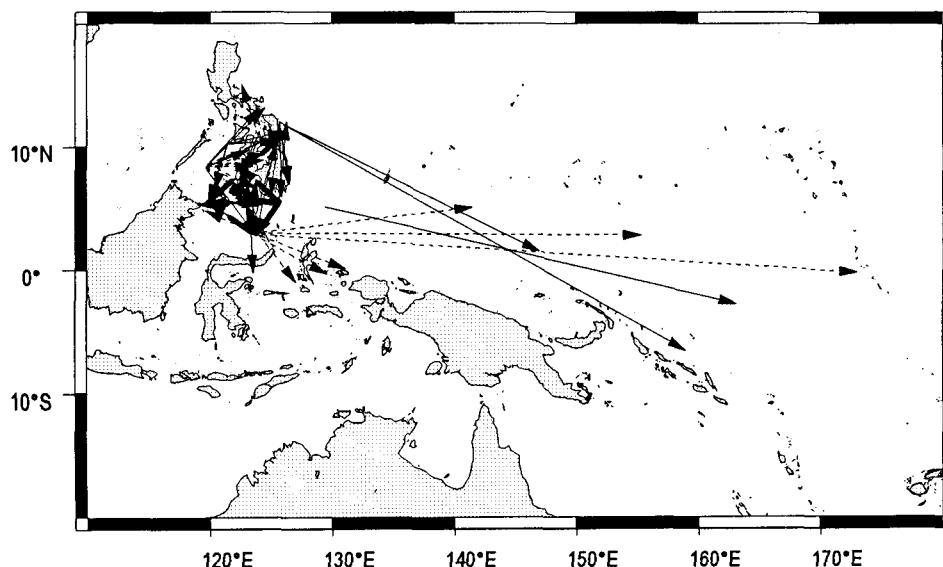
	Ring Net and Purse Seine			Longline and Pole & Line			Handline			Other			Total		
	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET	YFT	SKJ	BET
Solomon Islands	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
United States	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Japan	1	-	-	-	1	-	-	-	-	-	1	-	1	2	-
Philippines	1231	1377	317	2	-	-	204	269	33	30	59	6	1467	1705	356
Taiwan	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-
Indonesia	-	-	-	4	1	-	-	-	-	1	-	-	5	1	-
Other	-	-	-	6	17	1	-	-	-	-	-	-	6	17	1
Total	1234	1379	317	12	19	1	204	269	33	31	60	6	1481	1727	357



Size-frequency distribution of fish released
Fork length (cm) — bottom axis, Numbers released — left axis



Numbers of fish returned by months at liberty
Months at liberty — bottom axis, Returns — left axis



Movements of recaptured fish with distance from release point > 200 nm.
SKJ (continuous line), YFT (dotted line), BET (thick dashed line)

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Note: No Activity Report – PNG EEZ. 11 October 1991.

No Activity Report – FIJI EEZ. 06 December 1991 to 07 December 1991.

No Activity Report – BETWEEN NAURU & PNG & INDONESIA. 15 July 1992 to 24 July 1992.

Appendix I: Objectives of the Regional Tuna Tagging Project

1. To estimate interactions between tuna fisheries in areas where several different fisheries operate concurrently;
2. to further use the description of tuna movements to predict interactions for projected fishery developments;
3. to provide estimates of yellowfin tuna population parameters for selected areas of currently intense fisheries;
4. to provide *updated estimates of skipjack tuna population parameters for selected areas where fishing has increased since 1980 and;*
5. to provide assessments of the potential for further expansion of tuna fishing in the region.

Appendix II: Vessel and Gear Specifications - M.F.V. *Te Tautai*

Construction	Iisaku Shipyard Co. Ltd, Japan
Date of Launch	4 February 1982
Call Sign	T2fa
Gross Tonnage	173.12 mt
Net Tonnage	53.14 mt
Length (overall)	39.20 m
Length (registered)	31.47 m
Breadth	6.80 m
Depth	3.05 m
Draft	2.86 m
Fuel Capacity	8.96 kl @ 10 kt
Operating Range	6720 nm/28 days
Freshwater Capacity	29 kl
Speed	
Trial Maximum	12.72 kts
Service	11.35 kts
Main Engine	
Yanmar T260-ST	1100 PS x 645 RPM
Auxiliary Engines	
Yanmar 6KFL-T	185 PS x 1500 RPM (x2)
Yanmar 4ESDL	62 PS x 1500 RPM
Generators	
Shinko TVK1-A-524	150 KVA (x2)
Shinko TVK1-G-410	40 KVA
Refrigeration	
Mayekawa F8AZ	55 kw x 11.1 RT (x2)
Mayakewa F6AZ	37 kw x 8.2 RT
Desalinator	2.9 kilolitres/day nominal (1.9 kilolitres/day in practice)
Bait Tank Capacity	93.26 m ³ in 8 tanks
Freezer Capacity	70 mt nominal
Refrigeration Method	Brine

ELECTRONIC EQUIPMENT

Radar	
Koden MDC-411 Colour Radar (96 nm range)	
Koden MD-3000 (32 nm range)	
Depth Sounders	
JRC NJA-550 Echo Sounder	
Koden CVS-8812 Chromascope	
Shipmate RS 5100 Satellite Navigator	
Koden Facsimile Receiver FX 7181	
NEI Fan Anemometer and Wind Vane	
JRC Sea Temperature Recorder	

Koden Radio Direction Finder KS-541

Radios

Kenwood TS-430S SSB

Anritsu SS25A SSB

ICOM IC-M56 VHF radio

ICOM IC-M11 handheld VHF radio (2)

Radio Buoys

Anritsu AV 211 (3)

Ryokuseisha type SV-L3

Sea Star

Appendix III: SPC personnel directly involved in and/or supporting the RTTP

SPC staff directly supporting the RTTP

Antony D. Lewis	Chief Fisheries Scientist	Australia
John Hampton	Principal Fisheries Scientist	Australia
David G. Itano	Fisheries Scientist (vessel cruise leader - CL)	United States
Kevin N. Bailey	Fisheries Scientist (vessel cruise leader - CL)	New Zealand
L. Joel Opnai	Fisheries Scientist	Papua New Guinea
Felipe Viala	Fisheries Experimental Officer	Fiji
Etimoni Palu	Fisheries Experimental Officer	Tonga
Veronica Logez	Fisheries Research Officer	New Zealand
Peter Sharples	Albacore Tagging Project Officer	New Zealand
Jeffrey Stander	Tuna Systems Manager	United States
Peter Williams	Assistant Fisheries Statistician	Australia
Russell Price	Programmer/Research Officer	United States
Patricia Townsend	Secretary to the TBAP	France

Tuvalu Crew on M.F.V *Te Tautai*

Iefata Paeniu	Captain
Kepasi Tefau	Fishing Master
Lopati Lopati	Chief Engineer
Pauna Pauna	Bosun
Pukola Vaega	1 st Officer
Malua Kilifi	2 nd Officer
Makolo Pole	Coxswain
Ieti Ieti	2nd Engineer
Titana Taumafi	Fisherman
Siketi Taupale	Fisherman
Teokila Usia	Fisherman (spymaster)
Efalaima Temai	Fisherman (chummer)
Malaefono Makaki	Fisherman (chummer)
Paulo Teafimla	Fisherman
Lepaio Tauamatua	Fisherman
Lepeni Tinatali	Fisherman
Sapoa Nitz	Fisherman
Naniseni Sualo	Fisherman
Tetaa Pakaina	Cook
Bruce Pelesala	Steward

PAPUA NEW GUINEA 1

SPC personnel on-board M.F.V. *Te Tautai* during 04/01/90 to 27/02/90

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist
David G. Itano	Fishery Research Scientist (Cruise Leader)
Lepan Joel Opnai	Fishery Research Scientist

Benoit Caillart	Fishery Research Scientist
Filipe M. Viala	Fishery Experimental Officer
Etimoni T. Palu	Fishery Experimental Officer

SPC Staff – Short Term Contracts

Eroni Dolodai
Evote Tuibua

PNG Observer

Polon Philip Fisheries Biologist, Fisheries Research Station, Daru PNG.

SOLOMON ISLANDS 1

SPC personnel on-board M.F.V. *Te Tautai* during 28/12/89 to 03/01/90

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist (CL)	21/12/89 - 03/01/90
John Hampton	Principal Fisheries Scientist	10/03/90 - 31/03/90
David Itano	Fisheries Scientist (CL)	28/02/89 - 02/03/90
Kevin Bailey	Fisheries Scientist (CL)	02/03/90 - 31/03/90
Joel Opnai	Fisheries Scientist	21/12/89 - 03/01/90
		28/02/90 - 31/03/90
Benoit Caillart	Fisheries Scientist	28/02/90 - 31/03/90
Peter Williams	Assistant Fisheries Statistician	05/03/90 - 22/03/90
Bernard Smith	Fisheries Coordinator	07/03/90 - 10/03/90
Felipe Viala	Fisheries Experimental Officer	21/12/89 - 03/01/90
		28/02/90 - 09/03/90
Etimoni Palu	Fisheries Experimental Officer	21/12/89 - 03/02/90
		28/02/90 - 10/03/90

SPC Staff – Short Term Contracts

Eroni Dolodai	21/12/89 - 03/02/90
	28/02/90 - 10/03/90
Tuibua Evote	21/12/89 - 03/02/90

PAPUA NEW GUINEA 2

SPC personnel on-board M.F.V. *Te Tautai* during 01/04/90 to 06/05/90 and 29/05/90 to 23/06/90

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist	04/04/90 - 19/04/90
John Hampton	Principal Fisheries Scientist	01/04/90 - 03/04/90
Kevin Bailey	Fisheries Scientist (CL)	01/04/90 - 06/05/90
David Itano	Fisheries Scientist (CL)	29/05/90 - 23/06/90
Joel Opnai	Fisheries Scientist	04/04/90 - 06/05/90
		29/05/90 - 06/06/90
Benoit Caillart	Fisheries Scientist	01/04/90 - 03/04/90
		08/06/90 - 23/06/90
Filipe Viala	Fisheries Experimental Officer	22/04/90 - 06/05/90
		29/05/90 - 09/06/90
Etimoni Palu	Fisheries Experimental Officer	08/06/90 - 23/06/90
Russel Price	Programme/Research Officer	04/04/90 - 06/05/90
Jeffrey Stander	Computer Systems Manager	29/05/90 - 09/06/90

SPC Staff – Short Term Contracts

Peter Sharples	08/06/90 - 23/06/90
Eroni Dolodai	01/04/90 - 06/05/90
	29/05/90 - 23/06/90

Observers

Jack Kaivovo	Rabaul business man	03/04/90 - 04/04/90
Chris Martinello	Manager, Kokopo Fish Process. Plant	03/04/90 - 04/04/90
Alois Wafy	Dept Fisheries & Marine Resources	04/04/90 - 19/04/90
Paul Lokani	Fishery Biologist, DFMR, Kavieng	22/04/90 - 04/05/90

PHILIPPINES 1

SPC personnel on-board M.F.V. *Te Tautai* during 11/07/90 to 16/08/90

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist	11/07/90 - 24/07/90
John Hampton	Principal Fisheries Scientist	14/07/90 - 31/07/90
Kevin Bailey	Fisheries Scientist (CL)	11/07/90 - 16/08/90
Etimoni Palu	Fisheries Experimental Officer	11/07/90 - 08/08/90
Joel Opnai	Fisheries Scientist	08/08/90 - 16/08/90
Filipe Viala	Fisheries Experimental Officer	08/08/90 - 16/08/90
Russel Price	Programme/Research Officer	08/08/90 - 16/08/90

SPC Staff – Short Term Contracts

Eroni Dolodai	01/07/90 - 16/08/90
Peter Sharples	01/07/90 - 08/08/90

Bureau of Fisheries and Aquatic Resources (BFAR) Observers

Homerto	Jun. Fisheries Biologist (Manila)	14/07/90 - 24/07/90
Rolando Obispo	(Cebu City)	14/07/90 - 24/07/90
Romero Alvarez	Tuna Port Sampler (Zamboanga)	20/07/90 - 24/07/90
Noel Barut	Sen. Fisheries Biologist (Manila)	25/07/90 - 06/08/90

FSM 1

SPC personnel on-board M.F.V. *Te Tautai* during 07/05/90 to 28/05/90 and 26/08/90 to 25/09/90

SPC Staff

David Itano	Fisheries Scientist (CL)	11/05/90 - 28/05/90 07/09/90 - 25/09/90
Kevin Bailey	Fisheries Scientist (CL)	07/05/90 - 11/05/90 26/08/90 - 07/09/90
Joel Opnai	Fisheries Scientist	07/05/90 - 28/05/90 26/08/90 - 25/09/90
Filipe Viala	Fisheries Experimental Officer	07/05/90 - 28/05/90 26/08/90 - 25/09/90
Etimoni Palu	Fisheries Experimental Officer	21/09/90 - 25/09/90
Jeffrey Stander	Computer Systems Manager	09/05/90 - 28/05/90
Russel Price	Programme/Research Officer	07/05/90 - 11/05/90 26/08/90 - 31/08/90

SPC Staff – Short Term Contracts

Eroni Dolodai	Fisherman/consultant	07/05/90 - 28/05/90 26/08/90 - 25/09/90
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Observers

John Diplock	Tuna Biologist, Micronesian Maritime Authority	12/05/90 - 15/05/90 10/09/90 - 17/09/90
Martin Valentin	Pohnpei Marine Resources Division	12/05/90 - 14/05/90
Donald David	Pohnpei Marine Resources Division	15/05/90 - 24/05/90
Teruo Remoket	Palau Marine Resources Division	26/08/90 - 27/08/90
George	Yap Marine Resources & Management	01/09/90 - 09/09/90
Bill Bridgland	U.S. Peace Corps volunteer	01/09/90 - 04/09/90

PALAU 1

SPC personnel on-board M.F.V. *Te Tautai* during 24/06/90 to 10/07/90 and 17/08/90 to 25/08/90

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist	07/07/90 - 10/07/90
Kevin Bailey	Fisheries Scientist (CL)	06/07/90 - 10/07/90 17/08/90 - 25/08/90
David Itano	Fisheries Scientist (CL)	24/06/90 - 26/06/90
Benoit Caillart	Fisheries Scientist (CL)	24/06/90 - 09/07/90
Joel Opnai	Fisheries Scientist	17/08/90 - 25/08/90
Filipe Viala	Fisheries Experimental Officer	17/08/90 - 25/08/90
Etimoni Palu	Fisheries Experimental Officer	24/06/90 - 10/07/90
Russel Price	Programme/Research Officer	17/08/90 - 25/08/90

SPC Staff – Short Term Contracts

Peter Sharples	24/06/90 - 10/07/90
Eroni Dolodai	24/06/90 - 10/07/90 17/08/90 - 25/08/90

Observers from Palau Marine Resources Division and others

Dr Clive Crossley	Associate Professor, Uni. Sydney	27/06/90 - 05/07/90
Ann Kitalong	Fisheries Biologist	02/07/90 - 06/07/90
McCarthy Kotaro	Fisheries Extension Officer	02/07/90 - 06/07/90

Teruo Remoket	Fisheries Extension Officer	02/07/90 - 06/07/90 25/08/90
David Idip	Director Resources & Develop.	06/07/90
Toshiro Paulis	Ex-chief of Marine Resources Div.	08/07/90 - 09/07/90

PAPUA NEW GUINEA 3

SPC personnel on-board M.F.V. *Te Tautai* during 31/01/91 to 16/02/91 and 21/02/91 to 06/03/91

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist	31/01/91 - 09/02/91
John Hampton	Principal Fisheries Scientist	04/03/91 - 06/03/91
Kevin Bailey	Fisheries Scientist (CL)	31/01/91 - 16/02/91 21/02/91 - 05/03/91
David Itano	Fisheries Scientist (CL)	04/03/91 - 06/03/91
Joel Opnai	Fisheries Scientist	31/01/91 - 16/02/91 21/02/91 - 06/03/91
Filipe Viala	Fisheries Experimental Officer	31/01/91 - 16/02/91 21/02/91 - 05/03/91
Etimoni Palu	Fisheries Experimental Officer	31/01/91 - 16/02/91 21/02/91 - 05/03/91
Eroni Dolodai	Specialist Fisherman	31/01/91 - 16/02/91 21/02/91 - 06/03/91

Observers

Kapa Poita	Dept. Fisheries & Marine Resources	01/02/91 - 09/02/91
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INDONESIA 1

SPC personnel on-board M.F.V. *Te Tautai* during 06/03/91 to 29/03/91

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist	06/03/91 - 18/03/91
John Hampton	Principal Fisheries Scientist	06/03/91 - 29/03/91
David Itano	Fisheries Scientist (CL)	06/03/91 - 29/03/91
Joel Opnai	Fisheries Scientist	06/03/91 - 29/03/91

SPC Staff – Short Term Contracts

Eroni Dolodai		06/03/91 - 18/03/91
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Observers

Bachtiar Gafa	Tuna Biologist, RIMF	09/03/91 - 18/03/91
Kusno Susanto	Tuna Biologist, RIMF	09/03/91 - 28/03/91
Amir Suid	Major Laut, Security Liaison Officer	09/03/91 - 28/03/91
Jefri Tompunu	Operation staff, PT Usaha Mina	21/03/91 - 22/03/91

PHILIPPINES 2

SPC personnel on-board M.F.V. *Te Tautai* during 29/03/91 to 16/04/91

SPC Staff

David Itano	Fisheries Scientist (CL)	29/03/91 - 16/04/91
Filipe Viala	Fisheries Experimental Officer	01/04/91 - 16/04/91
Etimoni Palu	Fisheries Experimental Officer	08/04/91 - 16/04/91
John Hampton	Principal Fisheries Scientist	29/03/91 - 31/03/91
Joel Opnai	Fisheries Scientist	29/03/91 - 31/03/91
Eroni Dolodai	Specialist Fisherman	29/03/91 - 16/04/91

Observers/visiting researchers

Tim Davis	Principal Fisheries Scientist (CSIRO)	01/04/91 - 15/04/91
Noel Barut	Senior Aquatic Resources Development, Specialist, BFAR	01/04/91 - 15/04/91
Val Borja	Fisheries Biologist, BFAR	01/04/91 - 15/04/91

PALAU 2SPC personnel on-board M.F.V. *Te Tautai* during 18/04/91 to 08/05/91**SPC Staff**

David Itano	Fisheries Scientist (CL)	18/04/91 - 30/04/91
Kevin Bailey	Fisheries Scientist (CL)	01/05/91 - 08/05/91
Filipe Viala	Fisheries Experimental Officer	18/04/91 - 08/05/91
Etimoni Palu	Fisheries Experimental Officer	18/04/91 - 08/05/91
Peter Williams	Assistant Fisheries Statistician	01/05/91 - 08/05/91
Eroni Dolodai	Specialist Fisherman/Asst Fishing Master	18/04/91 - 08/05/91

Observers

Mash Tkel	Palau Marine Resources Div.	26/04/91 - 29/04/91
Maruia Kamatie	Kiribati Fisheries Officer	30/04/91 - 08/05/91

PAPUA NEW GUINEA 4SPC personnel on-board M.F.V. *Te Tautai* during 09/05/91 to 20/05/91 and 08/06/91 to 21/06/91**SPC Staff**

Kevin Bailey	Fisheries Scientist (CL)	09/05/91 - 20/05/91 08/06/91 - 21/06/91
Joel Opnai	Fisheries Scientist	08/06/91 - 21/06/91
Filipe Viala	Fisheries Experimental Officer	09/05/91 - 20/05/91
Etimoni Palu	Fisheries Experimental Officer	09/05/91 - 20/05/91
Peter Williams	Assistant Fisheries Statistician	09/05/91 - 20/05/91
Eroni Dolodai	Specialist Fisherman/Asst Fishing Master	09/05/91 - 20/05/91 08/06/91 - 21/06/91
Benoit Caillart	Fisheries Scientist (short term contract)	08/06/91 - 21/06/91

Observers

Maruia Kamatie	Kiribati Fisheries Division	09/05/91 - 20/05/91
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MARSHALL ISLANDS 1SPC personnel on-board M.F.V. *Te Tautai* during 26/09/91 to 02/10/91 and 25/07/91 to 09/08/91**SPC Staff**

David Itano	Fisheries Scientist (CL)	26/09/90 - 02/10/90 25/07/91 - 09/08/91
Joel Opnai	Fisheries Scientist	26/09/90 - 01/10/90 25/07/91 - 27/07/91
Filipe Viala	Fisheries Experimental Officer	26/09/90 - 02/10/90 27/07/91 - 01/08/91
Etimoni Palu	Fisheries Experimental Officer	26/09/90 - 01/10/90 27/07/91 - 09/08/91
Peter Sharples	Albacore Project Officer	27/07/91 - 09/08/91

SPC Staff - Contracts

Eroni Dolodai	Fisherman/Specialist	25/09/90 - 02/10/90
Benoit Caillart	Consultant Fisheries Scientist	25/07/91 - 28/07/91

Observers/visiting researchers

John Gunn	Fisheries Scientist, CSIRO	27/07/91 - 09/08/91
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KIRIBATI 1SPC personnel on-board M.F.V. *Te Tautai* during 03/10/91 to 14/10/91, 10/08/91 to 22/08/91 and 01/09/91 to 17/09/91**SPC Staff**

David Itano	Fisheries Scientist (CL)	03/10/90 - 14/10/90
		10/08/91 - 22/08/91
Kevin Bailey	Fisheries Scientist (CL)	01/09/91 - 13/09/91
		15/09/91 - 17/09/91
Joel Opnai	Fisheries Scientist	03/10/90 - 14/10/90
Filipe Viala	Fisheries Experimental Officer	03/10/90 - 14/10/90
		12/08/91 - 22/08/91
		01/09/91 - 03/09/91
Etimoni Palu	Fisheries Experimental Officer	03/10/90 - 14/10/90
		10/08/91 - 12/08/91
		01/09/91 - 13/09/91
		15/09/91 - 17/09/91
Eroni Dolodai	Specialist Fisherman/Asst Fishing Master	03/10/90 - 14/10/90
		10/08/91 - 22/08/91
		01/09/91 - 13/09/91
		15/09/91 - 17/09/91
Peter Sharples	Albacore Tagging Officer	10/08/91 - 22/08/91
Tim Lawson	Fisheries Statistician	11/09/91 - 13/09/91
		15/09/91 - 17/09/91
Observers		
Johnny Langley	Kiribati Fisheries Division	06/10/90 - 12/10/90
Nick Rawlinson	CSIRO Baitfish project	06/10/90 - 12/10/90

SOLOMON ISLANDS 2

SPC personnel on-board M.F.V. *Te Tautai* during 18/09/91 to 10/10/91

SPC Staff

Kevin Bailey	Fisheries Scientist (CL)	18/09/91 - 10/10/91
Joel Opnai	Fisheries Scientist	24/09/91 - 10/10/91
Etimoni Palu	Fisheries Experimental Officer	18/09/91 - 26/09/91
Tim Lawson	Fisheries Statistician	18/09/91 - 26/09/91
Russel Price	Programmer/Research Officer	25/09/91 - 10/10/91
Eroni Dolodai	Specialist Fisherman/Asst Fishing Master	18/09/91 - 10/10/91

Solomon Islands Fisheries Division Observers

Luc Paul Taula	Fisheries Officer, Temotu Province	20/09/91 - 21/09/91
Peter Lausu	Fisheries Officer, Honiara	26/09/91 - 08/10/91

AUSTRALIA 1

SPC personnel on-board M.F.V. *Te Tautai* during 12/10/91 to 22/11/91

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist	14/10/91 - 29/10/91
Kevin Bailey	Fisheries Scientist (CL)	12/10/91 - 30/10/91
David Itano	Fisheries Scientist (CL)	29/10/91 - 22/11/91
Joel Opnai	Fisheries Scientist	12/10/91 - 22/11/91
Etimoni Palu	Fisheries Experimental Officer	29/10/91 - 22/11/91
Filipe Viala	Fisheries Experimental Officer	29/10/91 - 22/11/91
Russel Price	Programmer/Research Officer	12/10/91 - 30/10/91
Eroni Dolodai	Specialist Fisherman/Asst Fishing Master	12/10/91 - 22/11/91

Australian Observers and Scientists

John Gunn	Fisheries Scientist, CSIRO	15/10/91 - 29/10/91
Kevin Williams	Fisheries Consultant to CSIRO	15/10/91 - 29/10/91
Peter Neave	Fisheries Manager, AFS, Canberra	31/10/91 - 12/11/91
Thor Carter	Technical Officer, CSIRO	31/10/91 - 12/11/91
Peter Ward	Fisheries Biologist, BRR, Canberra	13/10/91 - 22/11/91

MARSHALL ISLANDS 2

SPC personnel on-board M.F.V. *Te Tautai* during 09/04/92 to 13/04/91

SPC Staff

David Itano	Fisheries Scientist (CL)
Joel Opnai	Fisheries Scientist
Etimoni Palu	Fisheries Experimental Officer

Eroni Dolodai	Specialist Fisherman/Asst Fishing Master
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KIRIBATI 2

SPC personnel on-board M.F.V. *Te Tautai* during 17/03/92 to 09/04/92 and 14/04/92 to 28/04/92

SPC Staff

David Itano	Fisheries Scientist (CL)
Joel Opnai	Fisheries Scientist
Etimoni Palu	Fisheries Experimental Officer

Eroni Dolodai	Specialist Fisherman/Asst Fishing Master
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Observers

Kintoba Tearo	Assistant Fisheries Officer, Kiribati Fisheries Division
Herman Taaia	Fleet Manager, Te Mautari Ltd, Tarawa

NAURU 1

SPC personnel on-board M.F.V. *Te Tautai* during 13/09/91 to 14/09/91 and 11/07/92 to 14/07/92

SPC Staff

Kevin Bailey	Fisheries Scientist (CL)	13/09/91 - 14/09/91 11/07/92 - 14/07/92
Filipe Viala	Fisheries Experimental Officer	11/07/92 - 14/07/92
Etimoni Palu	Fisheries Experimental Officer	13/09/91 - 14/09/91
Tim Lawson	Fisheries Statistician	13/09/91 - 14/09/91
Eroni Dolodai	Specialist Fishing Master	13/09/91 - 14/09/91

WALLIS AND FUTUNA 1

SPC personnel on-board M.F.V. *Te Tautai* during 06/03/92 to 09/03/92 and 15/06/92 to 03/07/92

SPC Staff

Kevin Bailey	Fisheries Scientist (CL)	16/06/92 - 03/07/92
David Itano	Fisheries Scientist (CL)	06/03/92 - 09/03/92
Joel Opnai	Fisheries Scientist	06/03/92 - 09/03/92
Filipe Viala	Fisheries Experimental Officer	16/06/92 - 03/07/92
Etimoni Palu	Fisheries Experimental Officer	06/03/92 - 09/03/92
Veronica Logez	Fisheries Research Officer	16/06/92 - 29/06/92
Eroni Dolodai	Specialist Fishing Master	06/03/92 - 09/03/92

TUVALU 1

SPC personnel on-board M.F.V. *Te Tautai* during 15/10/90 to 18/10/90, 22/08/91 to 01/09/91 and 10/03/91 to 16/03/91, 29/04/92 to 02/05/92, 15/06/92 to 18/06/92 and 02/07/92 to 07/07/92

SPC Staff

David Itano	Fisheries Scientist (CL)	15/10/90 - 18/10/90 22/08/91 - 27/08/91 10/03/92 - 16/03/92 29/04/92 - 02/05/92
Kevin Bailey	Fisheries Scientist (CL)	28/08/91 - 01/09/91 16/06/92 - 18/06/92 02/07/92 - 07/07/92
Joel Opnai	Fisheries Scientist	15/10/90 - 18/10/90

Filipe Viala	Fisheries Experimental Officer	10/03/92 - 16/03/92
		29/04/92 - 02/05/92
		15/10/90 - 18/10/90
		22/08/91 - 01/09/91
		16/06/92 - 18/06/92
Etimoni Palu	Fisheries Experimental Officer	02/07/92 - 07/07/92
		15/10/90 - 18/10/90
		26/08/91 - 01/09/91
		10/03/92 - 16/03/92
		29/04/92 - 02/05/92
Veronica Logez Eroni Dolodai	Fisheries Research Officer Specialist Fishing Master	16/06/92 - 18/06/92
		15/10/90 - 18/10/90
		22/08/91 - 01/09/91
		10/03/92 - 16/03/92
		29/04/92 - 02/05/92
Peter Sharples	Albacore Tagging Officer	22/08/91 - 27/08/91

AUSTRALIA 2

SPC personnel on-board M.F.V. *Te Tautai* during 05/11/92 to 21/11/92

SPC Staff

David Itano	Fisheries Scientist (CL)	05/11/92 - 17/11/92
Kevin Bailey	Fisheries Scientist (CL)	05/11/92 - 21/11/92
Etimoni Palu	Fisheries Experimental Officer	05/11/92 - 17/11/92
John Hampton	Principal Fisheries Scientist	18/11/92 - 21/11/92

Australian Fisheries Scientist

Tim Davis	Research Scientist, CSIRO Fisheries	06/11/92 - 17/11/92
John Gunn	Research Scientist, CSIRO Fisheries	05/11/92 - 17/11/92
Thor Carter	Research Technician, CSIRO Fisheries	06/11/92 - 17/11/92
Geoff McPherson	Fisheries Biologist, Queensland NFC, DPI	06/11/92 - 13/11/92
Wade Whitelaw	Industry Liaison Officer, CSIRO Fisheries	12/11/92 - 17/11/92

NEW CALEDONIA 1

SPC personnel on-board M.F.V. *Te Tautai* during 23/11/92 to 05/12/92 and 22/11/92 to 19/12/92

SPC Staff

Antony D. Lewis	Chief Fisheries Scientist	15/12/92 - 17/12/92
John Hampton	Principal Fisheries Scientist	22/11/92 - 26/11/92
Kevin Bailey	Fisheries Scientist (CL)	01/12/91 - 05/12/91
David Itano	Fisheries Scientist (CL)	22/11/92 - 17/12/92
		23/11/91 - 30/11/91
		08/12/92 - 14/12/92
Joel Opnai	Fisheries Scientist	23/11/91 - 30/11/91
Filipe Viala	Fisheries Experimental Officer	23/11/91 - 30/11/91
Etimoni Palu	Fisheries Experimental Officer	01/12/91 - 05/12/91
Veronica Logez	Fisheries Research Officer	02/12/91 - 05/12/91
Russel Price Peter Sharples Patrician Townsend Hélène Ixeko Alexis Bensch Eroni Dolodai	Tuna System Manager Ex-Albacore Tagging Project Officer Secretary Document/Project Assistant Albacore Research Project Officer Assistant Fishing Master	27/11/92 - 04/12/92
		27/11/92 - 30/12/92
		30/11/92 - 08/12/92
		04/12/92 - 08/12/92
		04/12/92 - 08/12/92
		08/12/92 - 17/12/92
		23/11/91 - 05/12/91

Visitors and observers

Hélène Courte	Director of Programmes, SPC	29/12/92 - 30/12/92
Peter Cusack	Fisheries Development Officer, SPC	29/11/91
Jean-Paul Gaudechoux	Fisheries Information Officer, SPC	14/12/92 - 17/12/92
Paul Dalzell	Inshore Fisheries Scientist, SPC	14/12/92 - 17/12/92
Fizin Xenie	Assistant Printer, SPC	29/11/92 - 30/11/92
Galu Baiteke	Son of SPC Secretary General	27/11/92 - 08/12/92
Rajah Bidin B Rajah Hassan	Fisheries Officer, Malaysia	08/12/92 - 14/12/92
Patrick Caillart	Journalist, RFO	29/11/92 - 30/11/92
Wayenece Wayenece	Cameraman, RFO	29/11/92 - 30/11/92
Jean-Pierre Debien	Animateur des Pêches, Province Sud	30/11/92 - 04/12/92
Faroetau Silivelio	Service des Pêches, Marine Marchande	30/11/92 - 04/12/92
Charles Poithily	Animateur des Pêches, Province Nord	08/12/92 - 10/12/92
Peter Ward	Bureau of Rural Resources, Canberra	23/11/91 - 27/11/91

Appendix IV: Tagging equipment used by the RTTP

Tags

manufacturer	Hallprint Pty, Ltd 27 Jacobsen Crescent Holden Hill 5088 South Australia
legend material	SPC NOUMEA REWARD yellow plastic

	X Series Tags	Y Series Tags
streamer length	13.0 cm	10.5 cm
streamer diameter	2.0 mm	1.2 mm

Applicator

material	stainless steel	stainless steel
length overall	15.5 cm	13.8 cm
outside diameter	4.15 cm	2.95 cm
inside diameter	3.20 mm	2.35 mm

Tag applicator magazine	hardwood, 37 x 12 x 7 cm capacity 100, serially numbered
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Tagging cradle frames

material	galvanized steel water pipe, 34 mm OD
dimension	23 x 97 x 163 cm OD, 15 x 10 cm nose pad

Cradle covers	Vinyl Shelterite, marked in cm gradations
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Data recorders	portable cassette type AA (x2) alkaline powered
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Appendix V: Baitfishing gear and auxiliary equipment used during RTTP

Bouke-ami lift net	Floating boom length	30.4 m
	Bamboo frame (width)	14.5 m
	Mesh size	9 mm stretched, 4 mm square
	Leadline length	33.0 m
	Side length	24.3 m
	Maximum fishing depth	29.0 m
	Lead weights	4.1 kg (14)
Lights	2000 W, 240 V underwater type (3)	
	2500 volt surface type (1)	
Light boat	5.6 x 1.55 m plywood with 2000W, 240 underwater light	
Generator	Robin RDX 3500 brushless 240V, petrol powered	
Light - Transducer boom	Bamboo, 9.4 m to transducer, 10.4 m to light	
Depth sounder	Furuno FE 400	
Rheostat	Yamabishi volt slider, type S-260 @ 0-260 V	
Auxiliary vessels	Yamaha FRP skiff	5.94 m
	Yamaha 40 HP	
	Zodiac MK-1 inflatable	3.3 m overall
	Yamaha 8 HP	

Appendix VI: Abbreviations of species used in the summaries

YFT - Yellowfin tuna (*Thunnus albacares*)
 BET - Bigeye tuna (*Thunnus obesus*)
 SKJ - Skipjack tuna (*Katsuwonus pelamis*)

Appendix VII: Cruise Identification Code

A nine-character code consisting of i) a three-character vessel identification code, ii) a two-digit year, iii) dash and iv) three-digit consecutive cruise number, e.g. TET91-051 (which stands for Te Tautai cruise 51, conducted in 1991). On the RTTP vessel, the cruise number changes when the vessel leaves a port for fishing or moves into a new area or country EEZ (e.g. 001-89 around Guadalcanal, followed by 002-89 around Santa Isabel). The cruise number does not revert back to 001 at the start of a new year, but carries on from the last cruise of the previous year.

Vessel identification codes, flag & gear type:

ID	VESSEL NAME	FLAG	GEAR	PROJECT, COUNTRY & PERIOD
TET	TE TAUTAI	TV	PL	RTTP
KO2	KOTOBUKI 23	JP	PS	RTTP, Papua New Guinea, 01/04/90 to 05/05/90
INQ	INQUIRER	AU	PH	RTTP, Australia, 05/11/92 to 21/11/92
SO6	SOLTAI 6	SB	LL	Solomon Islands In-country, 19/07/89 to 24/06/90
SO8	SOLTAI 8	SB	LL	"
SO1	SOLTAI 12	SB	LL	"
NEK	NEI KANEATI	KI	PL	Kiribati In-country, 06/08/91 to 18/09/91
SUN	SUNBIRD	FJ	LL	Fiji In-country, 25/01/92 to 30/03/02
TRA	TRAPPER	FJ	PL	"