

# PACIFIC TUNA TAGGING PROJECT PHASE 2

## CRUISE REPORT No. 6

31<sup>st</sup> October- 22<sup>nd</sup> November 2008

### INTRODUCTION

This report summarizes activities of the sixth cruise of the Pacific Tuna Tagging Project (PTTP) Phase 2 during a twenty three day period in Papua New Guinea waters, from arrival in Vanimo from Jayapura, Indonesia, on October 31<sup>st</sup> to the departure from PNG waters on 22<sup>nd</sup> November 2008 for Noro Solomon Islands, where the vessel arrived and the charter concluded on November 22<sup>nd</sup>.

Personnel onboard the vessel during the cruise are listed below. Changes were made during the cruise, in Wewak on November 1<sup>st</sup>, and in Manus on November 11<sup>th</sup>.

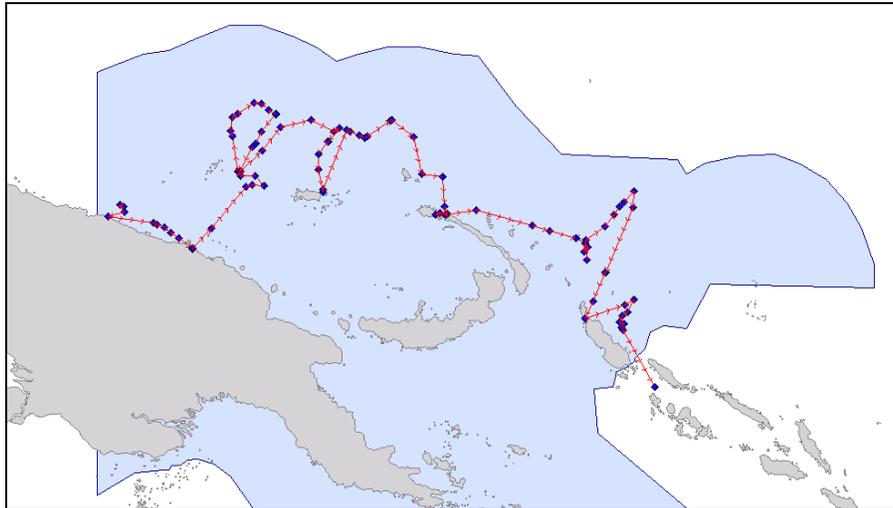
Name	Designation	Affiliation	Dates
Bruno Leroy	Cruise Leader	SPC	31/10-23/11
Dr Antony Lewis	Project Coordinator	SPC consultant	11/11-23/11
Thomas Usu Jr	Scientist/Deputy CL	NFA, PNG	31/10–11/11
Cynthia Wickham	Tagging technician	SPC consultant	31/10-23/11
Peter Williams	Database Manager	SPC	31/10–11/11
Russell Price	Visiting IT Manager	NOAA, Honolulu	31/10-23/11

### GENERAL DESCRIPTION OF FISHING ACTIVITY

Following clearance into PNG from Indonesia in Vanimo, the vessel steamed towards Wewak. Several FADs were unsuccessfully fished on the following morning before arriving in Wewak where personnel were embarked. Unscheduled baiting (due to non-arrival of baggage) took place in Wewak Harbor but only poor quality bait was taken and subsequently few fish were found en route to Hermit Islands. In line with cruise objectives to fish the more distant parts of the PNG EEZ, the vessel fished FADs near the Equator (including TAO Eq 147E) for six days, baiting at Hermit Islands, with good success (and a good percentage of bigeye) before heading in to Manus for refueling and personnel changes. Fishing north east along the Equator, then south to Tench Island, moderate fishing was experienced. After the full moon break and following outwards clearance from Kavieng, the vessel found good fishing on drifting FADs en route for, and adjacent to Nuguria Atoll. The TAO 2S 156E buoy produced few fish before running south to Buka for the final baiting of the cruise. With good bait supplies, good catches were made on the FAD array east of Buka before turning for home, with bait supplies exhausted, and steaming to Noro, Solomon Islands.

The track of the cruise, based on school and noon positions, is found below as **Figure 1**. A summary of general movements during the cruise and daily tag release numbers follows as **Table 1**. A compilation of the daily log extracts, detailing daily activities, is provided as **Appendix 1**.

**Figure 1. Track during PTPP Phase 2 Cruise 6, 31<sup>st</sup> October – 23<sup>rd</sup> November 2008, showing the positions of schools fished and the 1800 hrs position each day**



**Table 1. Summary of Cruise 6 activity, with number of tagged fish released per day**

Dates	Activity	Tag releases			
		BE	SJ	YF	Total
October 31 <sup>st</sup>	Clear in to Vanimo from Indonesia				0
Nov 1 <sup>st</sup>	Half day fishing towards Wewak then bait Wewak				0
Nov 2 <sup>nd</sup>	Half day fishing towards Hermit Islands				0
Nov 3 <sup>rd</sup>	Fishing towards Hermit then bait		12		12
Nov 4 <sup>th</sup>	Fishing FADs at Equator	84	129	477	610
Nov 5 <sup>th</sup>	Fishing FADs at Equator	101	67	105	273
Nov 6 <sup>th</sup>	Fishing towards Hermit then bait		7	15	22
Nov 7 <sup>th</sup>	Fishing toward TAO buoy Eq 147E				0
Nov 8 <sup>th</sup>	Fishing TAO buoy and FADs SE of TAO	132	1332	734	2197
Nov 9 <sup>th</sup>	Fishing FADs to Manus and bait Seeadler Hrb	1	117	114	232
Nov 10 <sup>th</sup>	In Lorengau, refuel, water, provisioning, personnel				-
Nov 11 <sup>th</sup>	Fishing FADs 100 nm NNE from Manus	5	399	141	545
Nov 12 <sup>th</sup>	Fish FADs north of Mussau then towards Tench Is	72	629	114	815
Nov 13 <sup>th</sup>	Fishing around Tench Is then towards Kavieng				0
Nov 14 <sup>th</sup>	In port Kavieng for full moon break				-
Nov 15 <sup>th</sup>	End of break then bait Nusandaula				-
Nov 16 <sup>th</sup>	Outwards clearance, then fish towards Nuguria				0
Nov 17 <sup>th</sup>	Fishing towards Nuguria then baiting Nuguria	42	302	1652	1996
Nov 18 <sup>th</sup>	Fishing around Nuguria then baiting Nuguria	27	93	733	853
Nov 19 <sup>th</sup>	Fishing towards TAO buoy at 2S156E then south	2	16	143	157
Nov 20 <sup>th</sup>	Fishing towards Buka then bait Matchin Bay	28	314	283	625
Nov 21 <sup>st</sup>	Fishing towards Mortlock Is and FAD array	131	829	1173	2131
Nov 22 <sup>nd</sup>	Arrive in Noro PM; end of charter for 2008				
<b>TOTAL</b>		<b>625</b>	<b>4197</b>	<b>5726</b>	<b>10548</b>

## TAG RELEASES

23 days of charter were spent in PNG waters. Of these days, five days were spent in port, and the remainder of the time fishing.

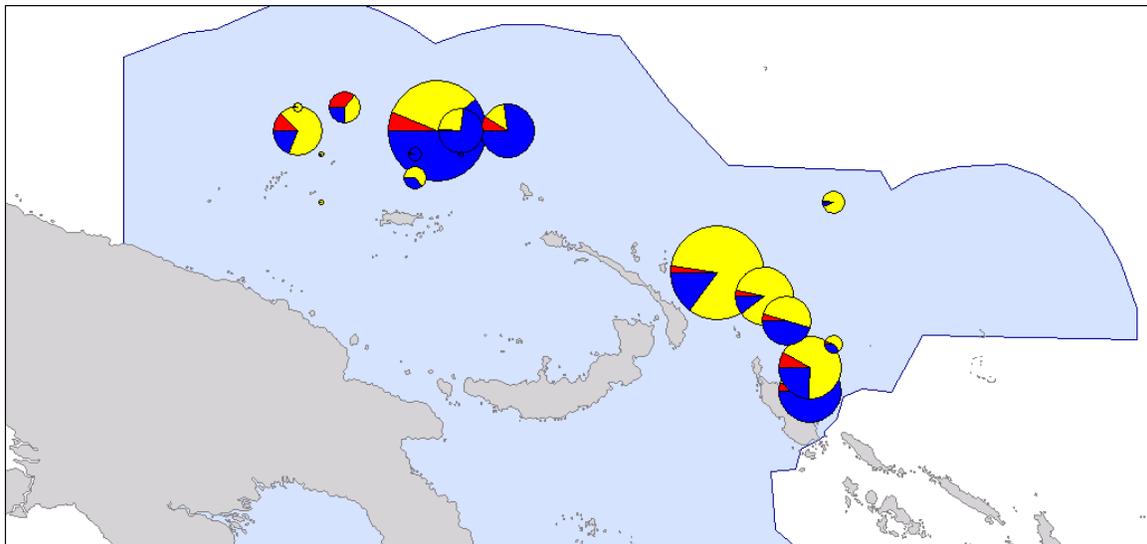
In total, 10,512 tuna were tagged with conventional tags, at an average of around 580 fish per fishing day. 36 archival tags were released (32 bigeye, 4 yellowfin). The releases of conventional tags comprised 5722 yellowfin (54.3%), 4197 skipjack (39.8%) and 593 bigeye (5.9%). The “yellowfin plus bigeye” proportion of the catch, at 60.2%, was higher than almost any previous cruise.

Over 96% of the cruise releases were from anchored or drifting FADs, with only a minor number of releases from unassociated (free) schools, and other school types.

With the great majority of releases from associated schools, 47% of releases of conventional tags were the smaller 11cm Z tags, and 53 % the larger 13cm P tags.

The Cruise 6 releases are summarized by school in **Table 3**, while **Figure 2** below shows the distribution of the releases in northern and eastern PNG waters by 0.5 degree square, by species.

**Figure 2. Distribution of releases in Papua New Guinea waters by half degree square, by species, for PTPP Phase 2 Cruise 6 (31/10 to 22/11/2008)**



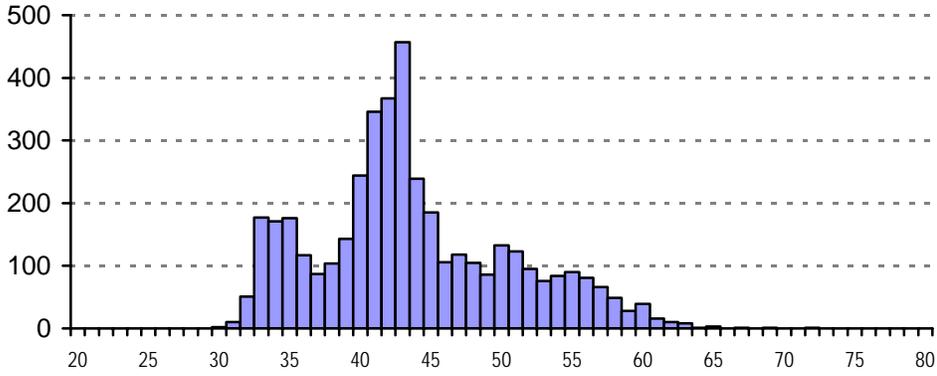
## SIZE DISTRIBUTION OF TAGGED FISH

**Figure 3** shows the size distribution of fish tagged during the cruise leg.

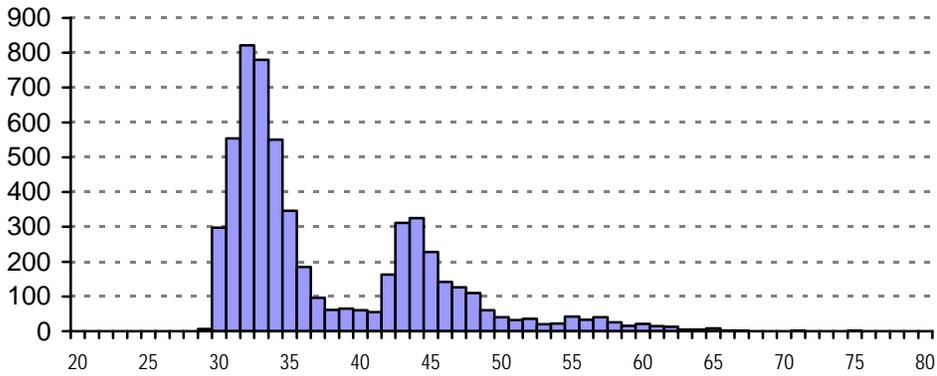
Skipjack were of a broad size range, with a major mode at around 43cm. The yellowfin size range was similarly wide (fish > 80 cm not shown), but most fish below 40cm. The good number of bigeye tagged (624) were mostly larger than 40 cm. Skipjack < 33cm and yellowfin < 30cm were generally rejected for tagging.

**Figure 3. Size distribution of fish tagged during Cruise 6 (31/10 to 22/11/2008)**

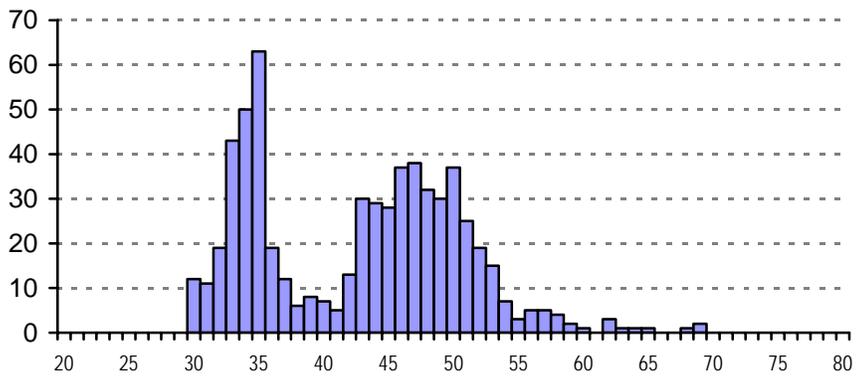
**SKIPJACK n = 4196**



**YELLOWFIN n = 5721**



**BIGEYE n = 624**



## BAITING

Lights for baiting by the vessel were set on eight nights in six different locations, with the general strategy to load the vessel as fully as possible, expecting to fish some distance from the baiting ground. The average bait catch per night was a reasonable 200 buckets, for 3 hauls per night on average. The tanks filled on only two occasions, anchovy being involved in both cases. Though not a major constraint, baiting was generally less satisfactory than on previous visits to several locations, both in terms of quality (species taken) and the quantity of bait.

**Table 2. Summary of bait fishing activity during PTP Phase 2 Cruise 6**

<b>Date</b>	<b>Location</b>	<b>Catch loaded (bkts, hauls)</b>	<b>Species</b>
1 <sup>st</sup> Nov	Wewak Harbor	82 (2)	Sardine, ponyfish, scad (mac.)
3 <sup>rd</sup> Nov	Hermit Islands	270 (4)	Small sprat (g), T baelama, cardinal
6 <sup>th</sup> Nov	Hermit Islands	198 (4)	Small sprat (g), T balaema, hardyhead
9 <sup>th</sup> Nov	Seeadler Harbor	307 (3)	Anchovy (devisi)
15 <sup>th</sup> Nov	Nusandaula	140 (4)	Blue sprat, sardine, herring
17 <sup>th</sup> Nov	Nuguria (Akani)	142 (2)	Sardine, hh, sprat (l), fusiliers
18 <sup>th</sup> Nov	Nuguria (Akani)	140 (3)	Sardine, hh, sprat, fusiliers
20 <sup>th</sup> Nov	Matchin Bay, Buka	300(2)	Anchovy (punctifer)
<b>TOTAL</b>		<b>1579 (24)</b>	

## CONCLUSIONS

The cruise provided an excellent conclusion to the 2008 charter period, with over 10,000 fish tagged in the 3 week period. Good numbers of bigeye (and yellowfin) were tagged and 36 archival tag releases made, mostly involving medium sized bigeye.

The vessel spent most time in northern parts of the PNG EEZ where limited tagging had previously been carried out. Fishing in this area highlighted the difficulties of tagging at some distances from bait grounds having so to keep the baits for more than 2 days in the tanks. Strong bait species, not tank over-loaded, constant bait watch onboard with water circulation set-up properly and chummer saving the baits on the schools are the key points that are not always easy to get all together...

**TABLE 3. Tag releases (all tags) by school during PTP Phase 2 Cruise 6**

Project WTP Phase 2		Cruise 6 To 6		Vessel SOLTAI 105		TAG TOTALS								
Event no	Tagged sch no.	Date	Lat	Lon	Sch type	Assoc.	Start	Stop	YFT	BET	SKJ	OTH	TOTAL	SHK bite
155	1	03-Nov-2008	0151.910S	14508.827E	1	3	0550	0555	12	0	0	0	12	0
158	2	04-Nov-2008	0018.490S	14444.164E	2	3	1255	1346	448	83	128	0	659	5
159	3	04-Nov-2008	0003.390N	14446.060E	1	3	1645	1655	29	1	1	0	31	0
161	4	05-Nov-2008	0015.900N	14548.140E	1	3	1400	1444	84	50	62	0	196	7
162	5	05-Nov-2008	0008.800N	14559.233E	4	3	1625	1655	21	51	5	0	77	0
163	6	06-Nov-2008	0009.130N	14559.340E	1	3	0534	0605	0	0	2	0	2	0
165	7	06-Nov-2008	0046.200S	14519.440E	3	9	1253	1334	15	0	5	0	20	0
167	8	08-Nov-2008	0020.520S	14737.900E	1	3	1140	1228	384	84	793	0	1261	20
168	9	08-Nov-2008	0014.490S	14746.630E	1	3	1356	1440	350	48	538	0	936	22
169	10	09-Nov-2008	0036.320S	14727.330E	1	3	0536	0551	1	0	5	0	6	1
170	11	09-Nov-2008	0057.400S	14711.835E	4	1	0840	0852	0	0	46	0	46	0
171	12	09-Nov-2008	0122.840S	14711.400E	1	3	1154	1210	113	1	66	0	180	1
172	13	11-Nov-2008	0020.373S	14804.336E	1	3	0646	0721	139	5	387	0	531	9
174	14	11-Nov-2008	0030.850S	14828.990E	1	3	1111	1116	2	0	12	0	14	0
175	15	12-Nov-2008	0000.874S	14915.100E	1	3	0155	0300	5	13	0	0	18	0
176	16	12-Nov-2008	0000.805S	14915.162E	1	3	0535	0605	109	59	629	0	797	4
177	17	17-Nov-2008	0305.219S	15339.960E	1	4	1015	1240	1652	42	302	0	1996	25
178	18	18-Nov-2008	0338.700S	15437.180E	2	1	0718	0750	223	0	43	0	266	4
179	19	18-Nov-2008	0330.809S	15443.849E	1	4	1040	1155	510	27	50	0	587	1
182	20	19-Nov-2008	0158.899S	15601.767E	1	3	1442	1507	143	2	12	0	157	0
183	21	20-Nov-2008	0413.198S	15513.592E	1	4	0546	0650	314	28	283	0	625	7
184	22	21-Nov-2008	0458.180S	15601.000E	4	3	0813	0835	64	5	40	0	109	0
185	23	21-Nov-2008	0518.380S	15550.600E	3	4	1139	1205	211	52	169	0	432	5
186	24	21-Nov-2008	0524.450S	15542.430E	3	3	1303	1330	507	36	91	0	634	0
187	25	21-Nov-2008	0534.561S	15537.523E	1	3	1450	1505	134	12	58	0	204	3
188	26	21-Nov-2008	0537.900S	15545.000E	3	3	1558	1623	216	19	53	0	288	2
189	27	21-Nov-2008	0544.400S	15540.600E	1	3	1710	1728	40	7	417	0	464	19
<b>CRUISE 6 TOTALS</b>									<b>5726</b>	<b>625</b>	<b>4197</b>	<b>0</b>	<b>10548</b>	<b>135</b>
<b>PROJECT TOTALS</b>									<b>5726</b>	<b>625</b>	<b>4197</b>	<b>0</b>	<b>10548</b>	<b>135</b>

## APPENDIX 1

### DAILY LOG EXTRACTS

logdate	Notes
31/10/2008	Reach first FAD position at 0200 hrs then drift till day light. Start chumming at 0514 hrs but no success, only big YF. Second Fad (7796) is missing and third too (8069). Decided to check another one before going to Vanimo. Fad 8083 was there but the medium size YF associated stayed away from the spray..Start steaming to Vanimo at 0900 hrs PNG time. Arrived at Vanimo dock at noon, being advised by customs to wait for quarantine. All clearance process went smoothly. No cash from cheque book in Wespac or BSP; so got cash for crew advances and shopping with credit cards from BSP bank. NFA provincial officer really helpful and drove us everywhere we needed. Left Vanimo at 1830 hrs for fishing 3 FADs (still have 2.5 bait tanks ) before coming into Wewak in the afternoon to pick up personnel.
1/11/2008	Steamed until 0200 hrs, then drifted near first fad (8067); start fishing 0545 hrs but no tuna at the FAD. Second FAD 7726 with a school of large YF associated. FAD 7953 no fish. A current line with logs was encountered at 10:15 but only YFT. Arrived inside Wewak Harbor at about 1500 hrs. No answer to the VHF either at the mobile phone trying to contact port authorities or Provincial Fishing Officer; sent the dinghy to the wharf and after a long toktok with security guards, one of them came with us in the dinghy to the PFO's (Willy Sange) residence. Finally found him and the guy started straight away to be very defensive about Muschu people, saying that we didn't do the right things last time (not asking before coming) and now people do not want to see us. But some of these people came to see him and there was may be a possibility (because this time we asked through NFA) if paying some access fees. But no more precision.... Anyway, Willy help us with his car to make a bit of shopping (mainly rice for the crew) and then to pickup Russell and Cynthia at the airport at 1800 hrs.. Unfortunately some of their luggage had been offloaded in Madang for some reasons, meaning we have to wait until tomorrow 11am for the plane to come back from Madang with hopefully the baggage...CL asked to Willy if he would come on the boat for the night to Muschu bait ground to be the "interpreter"; Willy accepted to be picked up at 2000 hrs at his place with the dinghy but when we phone to say we were coming he said that some Muschu people came to say they don't want us...That was over. No choice except baiting in Wewak Harbor. Set the lights at 0830 in 33 meters of water.
2/11/2008	First set at 0010 hrs for 42 bkts of a mixed bag of big rubbish baits, pony fish, rainbow sardine and macarellus...second set at 0400 hrs for forty bkts of weak sardines...A bit of shopping at the market was done in the morning with the assistance of Willy; then plane from Madang arrived at 1130 hrs , CYW and RPN hopefully got back their luggage and the z tag carton; left Wewak at 1300 hrs for Hermit Islands without regret...Reach FAD F725 position before dark but no raft. Continue toward FADs east of Hermit in a calm sea. Good sleep tonight...
3/11/2008	Arrived at first FAD (7962) position at 0400hrs then drift; start chumming at 0550 hrs but only small YF around (12 tagged between 30 and 32 cm). Second FAD 7927 nothing, third FAD 7859 missing...7970 only mahi, 7307 and 7895 missing...50% FADs missing from the September updated RD list...Started heading to Hermit at 1130 hrs through an area that looks completely fish-less. Discard the big baits (those few still alive) from Wewak before entering lagoon at 1600 hrs. At anchor at 1630 hrs. Went trolling with the dinghy at the pass. First bait net at 2230 hrs for 107 buckets of mixed species (cardinal, sprat, little priest, few sardines). Second set from light boat for 37 bkts at 2330 hrs.
4/11/2008	Third set at 0330 for 64 bkts; fourth on light boat at 0415 hrs for 62 bkts. Start steaming at 0515 hrs. First sighted FAD X13 at 12:55 with immediate response. In just under an hour, there were 659 fish tagged, including 6 archival tags placed in BET. The species composition was 128 SKJ (19%), 448 YFT (68%) and 83 BET (12%). FAD X12 was missing, as was FAD X11. Arrived at FAD X2 at 1645 hrs and the school responded to chumming with 31 tagged (1 SKJ, 29 YFT, 1 BET). Tied to FAD at 1715 hrs for the night. Strong south to north current and wind prevented jigging in early evening. Same thing at 0130 hrs in the morning, very strong current prevent any jig fishing..
5/11/2008	Start engine at 0430 hrs, heading to Fad X1 but this one was missing. Next one X7 and X6 were missing or were not on the supposed plotted position. Found a FAD between X6 and X3 named X14 but no fish around; Probably X14 =X3 as a strong current and wind are pushing to the west...Then the next FAD , X4 was missing. X5 was found closed to the estimated position and was labeled "TPJ 134": 196 tags release included 4 AT (Bet) and 50 bet. Next FAD was found about 6 miles NNW from the estimated X9 position and named X15. A big school of small SJ actively feeding was not interested in our bait but we tagged 71 fish with 65 % of BE (3 AT). Decided to tie-up to this one as it was too late to reach the last FAD position (X10). Strong current prevented to do any efficient rod fishing alas as we would have catch plenty BE
6/11/2008	Tried to jig at 0130 hrs without success, current still there and strong. Let go the FAD at 0530 hrs and fish

logdate	Notes
	but although nice detection on the sounder, we only tagged a couple of SJ, the bigeye stayed in the deep. Start steaming toward Hermit at 0615 hrs. At 0645 hrs, observed a purse-seine vessel with carrier in the process of a set on our FAD X9 (00°03.558N 146°02.400E). Tried to fish schools associated to Sae island on the way but they were actively feeding on punctifer and just tagged 20 fish when passing through breezers.; no more bait at the end, steamed t Hermit , 50 nm away at 1335 hrs. At anchor at 1915 hrs; first set at 2300 hrs for 25 bkts of small sprats
7/11/2008	Second set on light boat at midnight for 32 bkts; third set at 0300 hrs for 82 bkts and last set for 55 bkts. Steamed out at 0450 hrs. Went past a Frabelle FAD position but wasn't there. Caught a small YF close to Kaniet on the trolling line. Strong current slow down boat speed and then FAD X10 was too far to be reached before dark... checked one "scientifically estimated fad positions" on the way but nothing found; no sight of any free school as well. Headed straight to TAO buoy at 1700 hrs
8/11/2008	arrived at TAO at 0045 hrs, tie-up and tried jigging; current not too strong but no success. Let go the buoy at 0515 hrs and start chumming at 0525 hrs; found a nice looking school at echo sounder about 200 m up-current but it went down instead of coming-up, staying at 40+ m; current stronger than it was at night probably prevent the bait (quite small) to go deep enough to attract the tuna. Give up at 0610 hrs after spending a full bait tank. First RD FAD 7720 visited was missing. Then RD/8080 produced an immediate response and 1,261 fish were tagged in 45 minutes. Then on to FAD RD/8031 where we tagged 937 in about 45 minutes, but decided to stop tagging to keep one bait tank for tomorrow. On arrival to RD/8031, there was a longline vessel, F/V Stella Stallion (with a PNG license number) standing by - not sure what they were doing there, but they soon left. In transit to FAD RD/7866 we came across a FAD (Frabelle?) which we decided to tie to for the night for jigging and fishing tomorrow. While tying up, a purse seine vessel was standing by for about 15 minutes in the vicinity, but too far away to identify (did we take their FAD?).
9/11/2008	let go the rope on FAD X17 at 05:15, but school do not really answer to the bait. RD/7866 was missing. We tagged a SJ free school closed to this last position. Frabelle /D660 was missing. Then, with only bait left in the chumming tanks we tagged some small fish on one unknown FAD (probably Frabelle). Then we run out of bait and steam to Seeadler Hbr where we arrived at 1615 hrs. Went onshore with ambassador Thomas for checking wharf water depth, fuel and water arrangement; First bait net at 0845 hrs for 30 bkts of small heterobuus; second set on light boat aborted as light failed due to electrical connection problems. Came back to first place and set the light again waiting for moon set.
10/11/2008	Second set at 0320 hrs for 127 bkts (put back in the lagoon about 30 bkts); third set at 0440 hrs for 150 bkts (another 50+ bkts released). Full tanks, with 300 bkts plus. Alongside at Harbours wharf (#1) at 0645 hrs. Shallow tide, but managed to dock the boat in ~ 2m, with stern anchor dropped several hundred metres seaward; water and fuel (20 Kl) organized; others to market; organized hire car, collected Coordinator and dropped off PGW ~ noon; more shopping (but Manus out of flour(so no bread), sugar and various other items; despite al that, most things done, all vendors and Govt agents paid off and cast off 1700 hrs, with tearful farewells to Thomas; winched out on stern anchor and set sail for FADs at 100nm to NNE, near where good success (and plenty BE) just a few days ago; losing some bait (mostly small devisi) but plenty left; fair weather, beautiful moon and good steam overnight;
11/11/2008	Good steam overnight in calm seas - p/s setting on 8009 on way past; festive early birthday breakfast for newly 45 years of age CL; RD FAD 8010 not there (arrived 0545 hrs), then headed for 8011; good bite before calling a halt, with two tanks used and very few BE; 531 tagged (73% SJ, 5 BE); 7754 and 7748 missing; nice radio buoy near 7754 position but some small fish and mahi only; 7975 with appendages trailing at surface - small SJ only, with 14 tagged; stood down for two hours and heading for 8004 on Mussau Ridge; strong head current, so arrived just after dark; tied up, with good fish signs beneath; 545 for the day, and second bonus, plus the AT bonus; 50,000 up for Phase 2, and 3972 for the cruise (PNG only); happy birthday Bruno !!
12/11/2008	Good fish signs under boat as tied up; numerous BE and YF jigged from 0200 hrs, with fish right at surface under (almost) full moon and splashing, daruma-style; 18 tagged (14 BE) before downing rods at 0315 hrs; good bite but stopped after 30 minutes with many small fish, false killer whales etc; 797 fish tagged (59 BE, 109 YF, including 2 BE ATs ); FADs 7972 and 7981 both missing, and nothing else reported in the area, so headed for New Hanover and possible baiting on northern side; searched all afternoon but no sightings in the deeper water (Mussau Trench); one YF trolled just on dusk; opted to head for Tench (~ 40 nm) and fish tomorrow morning, with 1.5 tanks left; daily total 815 (including 18 jigged fish and 2 AT BE) - another bonus; cruise total nearly 5,000, with 395 BE (8%) and 36% YF; arrived at Tench 2200 hrs - shut down and drift.
13/11/2008	Drifted 8 nm to WSW during night - strong west-setting current of maybe 1.5 kts; engine start 0500 hrs and head for Tench; alas, nothing to be seen on a careful search around the island at 4 nm off - no birds, or any activity at all; headed for Kavieng , with still ~ 50 bkts of excellent strong bait, at 0800 hrs, searching en route; nothing seen other the usual MT/AT schools just outside the pass with hundreds of frigates in

logdate	Notes
	attendance; inside reef at 1330 hrs and alongside at Fisheries wharf 1410 hrs; early contact with Hugh Walton and vehicle kindly provided; banking and shopping started; water and 10 KI fo fuel organized; evening at beach residence anf some interaction with observer training lecturers.
14/11/2008	Market at early hour, shopping , 8 KI fuel taken, crew advances etc; arrangements made with Customs for Sunday clearance; email at new high speed internet café; brief visit by Aust High Commissioner Chris Moraitis in afternoon with NIP Governor Sir Julius Chan, then working evening at Nusa Resort
15/11/2008	Market again early and shopping completed; departed 1445 hrs for Nusandaula and baiting with three Nature Conservation Society folks onboard; dive for them in Planet Channel; baiting under bright moon (full moon plus 2) in 24m; 113 bkts in first net at 2030 hrs (sprats, herring and large sardine), then 15 bkts in second at 2120 hrs;
16/11/2008	Third haul 0320 hrs under bright moon - 10 bkts of blue sprats; 0400 hrs on light boat for another 2 bkts (140 total); steamed back into Kavieng for outwards clearance - alongside 0730 hrs; clearance completed 1045 hrs and cast off 1130 hrs, after final shopping and farewells; steaming direct for Nuguria, with necessary baiting approvals apparently available for Nuguria and Matchin Bay; good steam until weather change in early morning;
17/11/2008	Rough weather all morning with ESE wind 15 kts or so, driving rain and sizable chop .. then a miraculous sighting around 1000 hrs by FM ewok of an almost submerged drifting FAD; after sorting out the tangled mess in the tagging boxes, got into it with a gusto; initially all small YF with the odd BE but larger fish gradually came on during successive passes (sea still at least moderate); plenty of large YF to 87cm and SJ to 68cm, but YF not easy to wrestle onboard in the conditions; 4 YF ATs by the resolute Dr Bruno; bite lasted for 2.5 hrs for eventually 1996 fish (1652 YF, 302 SJ and 42 BE) - most SJ > 40 and about 200 YF > 40, with most 30-35cm; one tank of mostly large pilchards left when shut down and headed for Nuguria with time short; contact established with folks on Nuguria by radio - dinghy waited in the pass to guide us in; arrived off pass 1945 hrs and gingerly headed in - plotter not accurate, as noted last time; hard to find good depth but settled for 25m eventually; anchored 2140 hrs, just as moon rising but plenty of cloud - pissing down, in fact. A day to be thankful for, despite the elements. Will opt to stay around here tomorrow then head for TAO 2S if enough bait tomorrow night. Another 2 bonuses.. nearly 53,000 for Phase 2, and close to 7,000 for the cruise; no light boat - first haul 2315 hrs with good signs in two layers; much lost but 90 bkts of mixed sprats and sardines;
18/11/2008	Second net 0400 hrs for 52 bkts of mostly large sardine; net torn at stern as not shortened for the haul; anchor up 0445 hrs and out through pass after collecting four fishers from the village near the pass; most bait (large sardines) in one tank died since all 52 bkts form last set inexplicably all in one tank; fished south to Sable Island; one area of birds at 0715 hrs - 266 tagged with 84% good size YF to 71cm; little seen after that but once again, after heading in, FM spotted a drifting FAD with the low profile echo/GPS buoy along a current line just south of the main island; gentle bite for 1.5 hrs - numerous passes, and eventually fish some distance from FAD; 587 tagged - 87% YF (mostly small), 50 SJ and 27 BE; bait finished and headed in to tie up at village wharf to repair net (1330 hrs); 853 for the day (another bonus) - 86% YF; afternoon at Akani wharf mending net; school children richly entertained by Cynthia and Mr Bean; left warf 1630 hrs but difficult to find right depth (again); anchored only 1800 hrs in 25-29m (swinging); first net 2000 hrs in pitch black and calm for 138 bkts - mix of sardines and sprats; good result with shallower light on dinghy; light boat 2115 hrs in 25m for 41 bkts; Mr Bean hovering; last net 2300 hrs (with some fortuitous cloud cover) for 31 bkts - 210 overall; with very bright moon and reasonable bait, decided to head for TAO 2S; outside passage just after midnight in good weather.
19/11/2008	Good passage overnight with ETA at TAO 2S 1400 hrs; a slow day, with a few desultory bird flocks in the morning, then a drifting FAD at 1040 hrs but alas no fish with it; TAO 2S pretty much on position - a few birds but not much underneath, and just 157 tagged (91% YF, mostly 32-35cm), even though some larger fish around the outskirts which did not come in ; searched desperately for the rest of the day but nothing to be seen; headed for inside of Carteret Atoll thence to Buka for baiting - probable ETA 1600 hrs tomorrow afternoon (Thursday); cruise total 7793, and maybe just 1300 short now of the magical 160,000 for PTTT.
20/11/2008	Bowling along at 10 kts overnight - 2 seiners at ~ 3/50 155/20; marlin ~ 80 kg trolled 0530 hrs, then soon after, dFAD with radio buoy and very large area of breezing/boiling SJ with some small and medium YF; 625 tagged in numerous passes until bait finished 0650hrs - 314 YF (50%), mostly small, 28 BE and 283 SJ ; we peaked early but another bonus; heading for Buka for baiting, with ETA 1600 hrs; good run through passage, then anchored 1535 hrs in 41m; first haul 0800 hrs with fish in quantity since nightfall, but many predators; 175 bkts loaded, nearly all punctifer; second net on light boat 0900 hrs for 126 bkts and just a few discarded - perfect judgment; up anchor 2155 hrs and headed out via Sohano passage for FADs near TAO 5S;
21/11/2008	Day dawned with clear sky, light SE wind and full tanks of medium sized punctifer; first FAD (7665) not there at 0700; TAO 5S at 0815 hrs; nice weather, good bait but higher mortality than hoped; only modest

logdate	Notes
	<p>catch on TAO 5S (109 fish) so opted to fish the closer array initially; meanwhile two marlin trolled, after the one yesterday, and duly processed in the for'ard marlin factory for Noro families; drifting FAD en route for the next FAD produced 432 fish, mostly Z tags, but 52 BE and 211YF; first RD FAD at 1300 hrs produced good bite and 635 fish (36 BE and 507 YF), then another at 1500 hrs (204 - 12 BE and 34 YF), and 1600 hrs (288 - 19 BE and 216 YF); mostly small fish till now, and bait now critically low, so opted to commit the last tank (only half survived) on a final FAD, hoping for bigger fish - meaning an early arrival in Noro (by one day); last FAD however produced on dusk (1700 hrs this far east), with 467 tagged, mostly large SJ (89%) to 70cm; a useful 2135 for the day, with 131 BE, 1175 YF and 829 SJ; the end of 2008 greeted with spontaneous bell ringing and open weeping - it has been a long road ...</p> <p>All sorts of records but they will be recounted over good reds at a later time - but just to perhaps note that over 160,000 for PTPP in total now (by quite a bit) and perilously close to 100,000 for the year on Soltai vessels ... hallelujah ..</p>
22/11/2008	<p>Crossed into Solomons just before midnight Solomons time and changed clocks; easy run into Noro with much cleanup, inventory etc; stopped in Hathorn Sound top clean bait net then alongside ~ 1200 hrs to collect customs/Immigration staff; after feeding them, cleared in the stream and alongside 1400 hrs, with many families patiently waiting; end of charter for 2008.</p>