

PNG TUNA TAGGING PROJECT (PNGTP)

CRUISE REPORT No. 2

INTRODUCTION

This report summarizes activities of the second cruise of the Papua New Guinea Tagging Project (PNGTP) during a thirty six day period in May-June 2011. The vessel departed Buka for the Bismarck (Area 2) on the 04th of May via the St George Channel. A total of 12 days was spent fishing in areas north of New Britain before calling into Madang for full-moon break on the 17th and 18th of May.

Then six days were spent fishing between Hansa Bay and Hermit Islands, followed by a nine day period fishing in the north EEZ up to the latitude 2 N with 2 days spent in Manus for provisioning and getting baits. The last 4 day of fishing happened in Bismarck Sea, south-east Manus Island toward Dyaul Island and finishing in Kavieng on the afternoon of the 7th of June.

Scientific personnel onboard the FV Soltai 105 during Cruise 2 is listed below in Table 1.

Table 1. SPC and NFA personnel onboard during Cruise 1

Name	Title	Affiliation	Period
Thomas Usu	Cruise Leader	NFA	04/05/11 – 29/05/11
Bruno Leroy	Cruise Leader	SPC	18/05/11 – 08/06/11
Brian Kumasi	Tuna scientist	NFA	30/05/11 – 08/06/11
Sharmaine Siaguru	Tagging Technician	NFA	04/05/11 – 08/06/11
Malo Hosken	Tagging Technician	SPC	04/05/11 – 17/05/11
Benthly Sabub	Tagging Technician	NFA	04/05/11 – 08/06/11

GENERAL DESCRIPTION OF SEARCHING AND FISHING ACTIVITY

The departure from Buka to Bismarck had encountered good schools on current line inside the St George Channel. Fishing on FADs just north of New Britain was generally good with much credit to the excellent baiting of New Britain north coast. Logs and a seamount just south of Circular reef also provided valuable schools before heading to Madang for full moon break. Fishing around Hansa Bay had been hampered by a couple of clear nights at the end of full moon period that prevented good bait catch. The 48m seamount between Hansa bay and Hermit was quite productive and would have been even better with ample quantity of good baits. Attempt for fishing the north west PNG EEZ had been quickly aborted with the Hermit bait ground producing only sardines that were too large. Excellent results were obtained on the seamounts and current lines in the NW of Manus, taking advantage of the good Nares harbor baitground. The baits of Seeadler harbor, although caught in large quantities, were a bit small to attract the yellowfin and bigeye schools associated with the TAO buoys at the equator and 2 N latitudes above Manus.

During the last leg of the cruise in the SE of Manus and around Sherburne reef, fishing on logs and seamount was much more productive than on the anchored FADs. Almost 3,500 tags were released during 2 days with a good 33 % of YF.

The track of the cruise in the Bismarck Sea and North EEZ, based on school and 18:00 positions, is found below as **Figure 1** and a summary of general movements and tag releases follows as **Table 2**.

A compilation of the daily log extracts, detailing daily activities, is provided as **Appendix 2**.

Figure 1: Cruise track during PNGTP Cruise 2

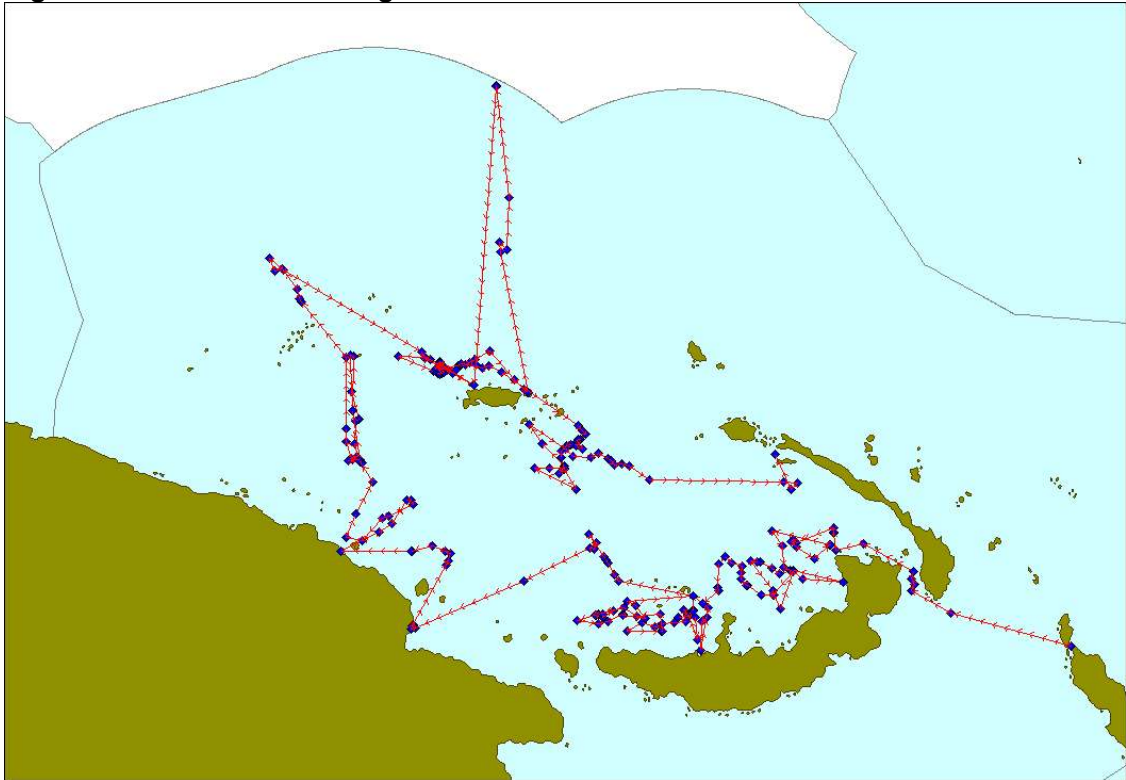


Table 2 Summary of Cruise 2 activity, with the number of conventional and archival tag releases per day

Date	Activity	Conventional releases			Archival releases			Total releases
		SJ	YF	BE	SJ	YF	BE	
May 4 th	Departed Buka for Bismarck							-
May 5 th	Fishing St George Ch., baiting Cape Lambert	1248	81					1329
May 6 th	Fishing north C.Lambert; baiting C Lambert	89	33	1				123
May 7 th	Fishing west of C.Lambert; baiting Pondo	35	89					121
May 8 th	Fishing north Kimbe Bay; baiting Bialla	117	268	1				386
May 9 th	Fishing north Willaumez Peninsula	237	343					580
May 10 th	Fishing north Eleonora Bay; baiting Eleonora	40	78					118
May 11 th	Fishing south Garove; baiting Emeline	436	882	15				1333
May 12 th	Fishing north Emeline Bay; baiting Iboki	571	194	6				771
May 13 th	Fishing Unea; baiting Borgen	183	458	3				644
May 14 th	Fishing north Borgen; baiting Iboki	121	394					515
May 15 th	Fishing west of Bali and towards seamount	240	86	1				327
May 16 th	Fishing seamount and steaming	717	246					963
May 17 th	In port Madang for full moon break							-
May 18 th	In port Madang then baiting Rasch Pass							-
May 19 th	In port Madang then baiting Rasch Pass							-
May 20 th	Fish Fads NE Karkar, bait Hansa Bay	393	307					700
May 21 nd	Fish Fads North Manam, bait Hansa Bay	2	49					51
May 22 rd	Fish Fads toward Hermit isl, drift at night	58	46					104
May 23 th	Fishing 48m seamount, bait Hermit	42	19					61
May 24 th	Fish south Hermit to 48m seamount, drift	175	99	1				275
May 25 th	Fishing 48m seamount, bait Hermit	433	165			2		600
May 26 th	Fishing fads North Ninigo, steam to Manus	98	29					127
May 27 th	Fish toward Manus, bait Nares Hbr	3	6	1				10
May 28 th	Fish fads & seamount N Manus, bait Nares	303	518	12		1		834
May 29 th	Fish Seamount N Manus, bait Seeadler hbr	669	482	18				1169
May 30 th	In Port Manus, bait Seaddler Hbr							
May 31 th	Fish TAO eq/147E and toward TAO 2N	416	8					424
June 1 st	Fish TAO 2N and steam back to Manus	195	5	8			3	211
June 2 nd	In Nares Hbr, bait							
June 3 rd	Fish Seamount N Manus, bait Seeadler hbr	989	287	4				1280
June 4 th	Fish Fads SE Manus, bait Sherburne reef	1334	900	23		1		2257
June 5 th	Fish seam&fads N Sherburne, bait St Andrew	963	274					1237
June 6 th	Fish fads east St Andrew, steam to Dyaul	78	134	3				215
June 7 th	Fish Dyaul seamount am, in Kavieng port pm	158	25					183
	CRUISE 2 TOTAL	10343	6501	97		4	3	16948

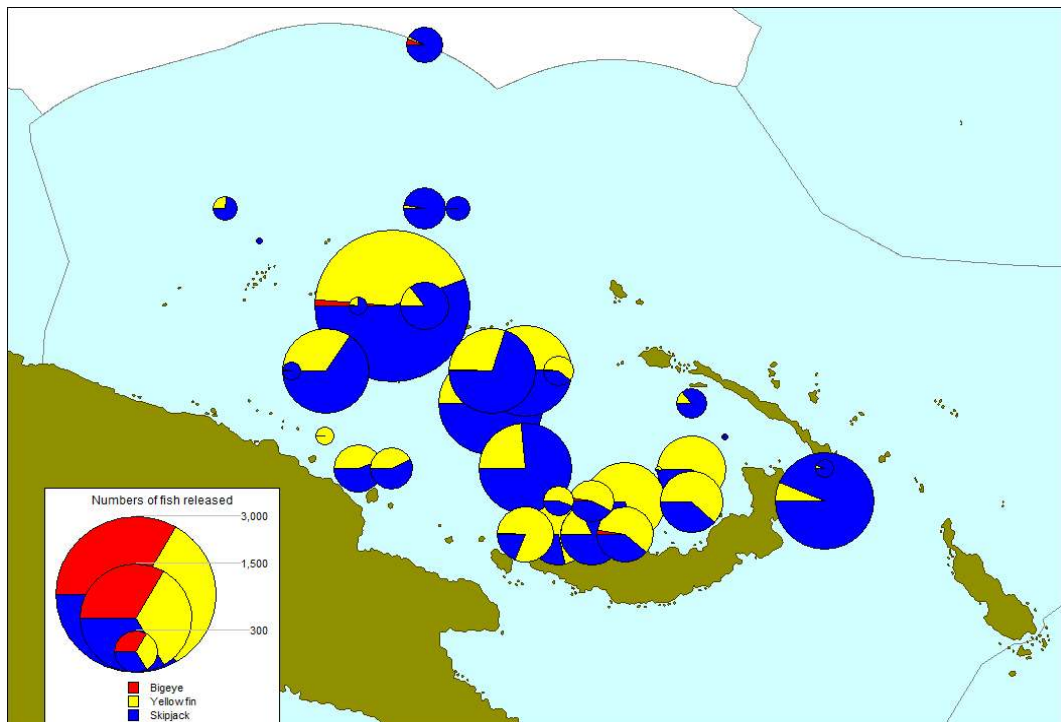
TAG RELEASES

Of the 36 days of the cruise, all or part of six days were spent in port for provisions, water, fuel, personnell change and customs clearance. One day was spent in Nares harbor after spending all baits on a long trip to TAO 2 N. All the other 29 days were spent fishing in PNG waters.

A total of 16,941 fish was tagged and released with conventional tags during the cruise, comprising 10,343 skipjack (61%), 6,501 yellowfin (38.4%) and 97 bigeye (0.6 %). Additionally, 7 archival tags were deployed during the cruise, including 4 yellowfin and 3 bigeye, making a total of **16,948 releases** for the cruise.

12,893 fish were tagged in Bismarck Sea waters in 22 days interrupted fishing and 4,055 in the North Hermit and Manus area (7 days). Figure 2 shows the distribution of tag releases by species during the cruise.

Figure 2: Distribution of tag releases by species during Cruise 2



The average number of fish tagged per day's fishing was 584

During cruise 2, no school type had been really predominant with 42% of the releases involved fishing on drifting objects (logs, current lines, drifting fads and whales), 34% on anchored FADs and 23% on seamounts. Less than 1% of the releases happened on free schools.

The releases per tag type were almost equally divided between the larger P tags (9449, 56 %), and the 11cm Z tags (7492, 44 %) used on smaller skipjack, yellowfin and bigeye (<38 cm).

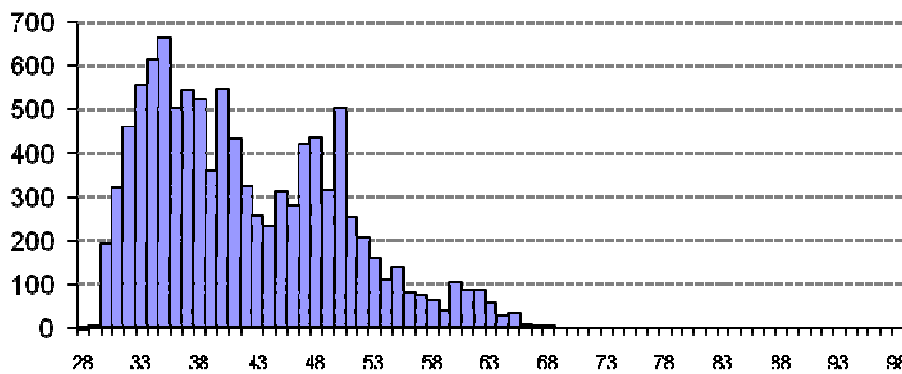
The Cruise 2 releases are summarized by school, location, school type day and area in **Appendix Table 1**.

SIZE DISTRIBUTION OF TAGGED FISH

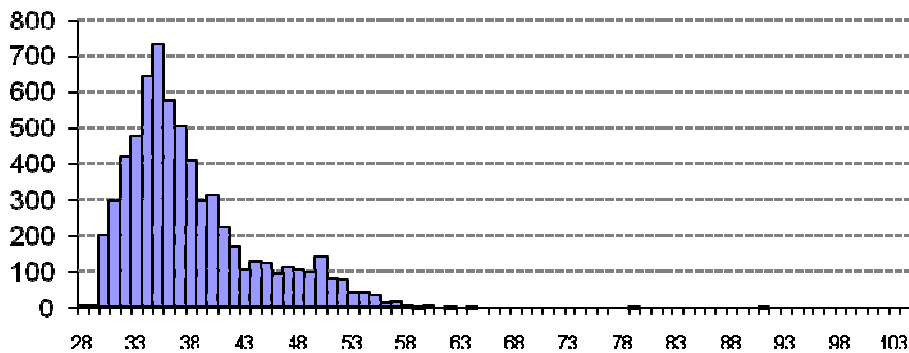
Figure 3 shows the overall size distribution of fish tagged during Cruise 2. The skipjack size distribution shows three modes centered on 36, 48 and 60 cm, while the yellowfin size distribution shows two modes centered on 36 and 50 cm. The small number of bigeye tagged shows 2 class centered respectively on 36 and 55 cm.

Figure 3. Size distribution of fish tagged during Cruise 2

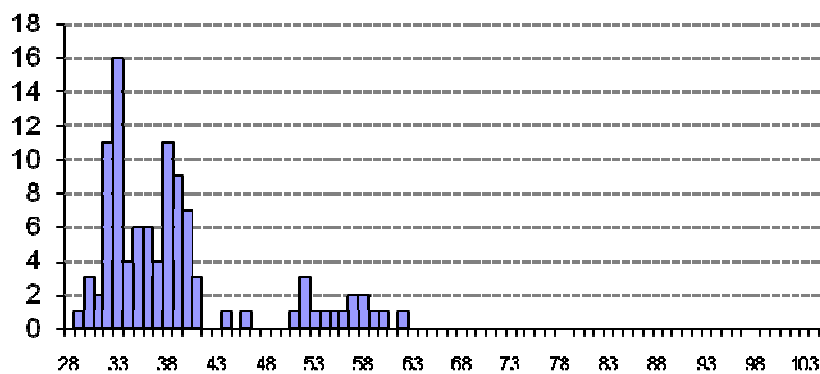
Skipjack n = 10343



Yellowfin n = 6505



Bigeye n = 100



The proportion of larger size skipjack was much higher in the North PNG EEZ than in the Bismarck Sea. Although large size yellowfin and probably bigeye were present around the TAO buoys, these fish were not captured and are not showing up in the release plots.

BAITING

The first ten days saw quite successful baiting sessions in baitgrounds on the north coast of New Britain. Bait supply had been difficult just after full moon resulting in very low catch in Hansa Bay. Bait quality had also hampered the fishing north of Hermit with the large sardine predominance in the lagoon catch at the time.

We also experienced the inverse situation with the baits at Seeadler harbor, being too small to attract the bigeye and yellowfin aggregation around the TAO buoys. Bait catches during the cruise are summarized in the table 4 below.

Table 4 Summary of bait fishing activity during PNGTP Cruise 2

Date	Location	Catch (bkts loaded, hauls)	Species
May 5 th	Cape Lambert	231 (3)	Mixed (ancho, sprats, h/head/sardi)
May 6 th	Cape Lambert	78 (2)	Mixed (ancho, sprats, h/head/sardi)
May 7 nd	Pondo	225 (1)	Anchovies (heter, lew),hh
May 8 th	Bialla	115 (1)	Sardines (rainbow), anch (lew)
May 10 th	Eleonora Bay	240* (1)	Ancho (devisi), hq
May 11 th	Emeline Bay	270* (1)	Ancho (hetero, devisi), hq, hh
May 12 th	Iboki	240* (1)	Ancho (hetero, devisi), hq, hh
May 13 th	Borgen	120 (2)	Ancho (hetero, devisi), pellona
May 14 th	Iboki	150 (2)	Ancho (hetero, devisi), pellona
May 18 th	Rasch Pass	52 (3)	Small sprat, ponyfish
May 19 th	Rasch Pass	102 (2)	Rainbow sardine, anchovies
May 20 th	Hansa Bay	77 (3)	R. Sard., anch (punctifer)
May 21 st	Hansa Bay	11 (4)	R. Sard., anch (punctifer)
May 23 th	Hermit	262 (2)	Sard (Ss), sprat (lew), hh, hq
May 25 th	Hermit	277 (2)	Sard (Ss), sprat (lew), hh, hq
May 27 th	Nares harbor	163 (2)	Anch (heter, ind), blue sprat, hh
May 28 th	Nares harbor	180 (1)	Sard (Ss), sprat (lew), hh, hq
May 29 th	Seeadler	270* (1)	Anch (devi), blue sprat
June 2 nd	Nares harbor	276 (2)	Anch (heter), blue sprat,hh
June 3 rd	Seeadler	200 (1)	Anch (devi)
June 4 th	Sherburne reef	170 (1)	Fusiliers (gym), blue sprat
June 5 th	St Andrew	62 (2)	Silver and blue sprat
Average		97 bkts/haul	

* Partial loading only

CONCLUSIONS

A successful cruise overall, with notably very good fishing on some seamounts and log schools. Lack of bait close to the full moon period hampered the release numbers a bit in the SW Bismarck Sea but the most challenging area still proved to be the north of the EEZ with Hermit bait ground not always producing the right type of bait.

The vessel experienced some mechanical problems and radar has not been repaired but the dedicated engineer team and good captain allowed us to be fully efficient day after day.

APPENDIX TABLE 1

Releases of tagged fish by date, location, school type and species during Cruise 2

Event no	Tagged sch no.	Date	Lat	Lon	Sch type	Assoc.	Start	Stop	YFT	TAG TOTALS			
										OTH	BET	SKJ	
1	1	05-May-2011	0441.416S	15231.689E	1	7	1003	1057	76	0	646	0	722
2	2	05-May-2011	0436.951S	15234.245E	1	7	1149	1200	1	0	420	0	421
3	3	05-May-2011	0432.261S	15232.168E	2	7	1228	1240	0	0	113	0	113
4	4	05-May-2011	0426.697S	15233.615E	2	7	1314	1329	4	0	69	0	73
5	5	06-May-2011	0355.718S	15129.174E	3	1	0735	0744	0	0	3	0	3
6	6	06-May-2011	0354.376S	15128.902E	2	1	0753	0756	0	0	1	0	1
7	7	06-May-2011	0351.479S	15129.243E	2	1	0814	0820	0	1	1	0	2
8	8	06-May-2011	0402.806S	15059.549E	1	1	1155	1207	21	0	19	0	40
9	9	06-May-2011	0400.905S	15056.569E	5	3	1229	1235	12	0	5	0	17
10	10	06-May-2011	0402.527S	15055.166E	5	1	1253	1305	0	0	60	0	60
16	11	07-May-2011	0425.927S	15056.414E	1	3	1301	1350	86	0	35	0	121
18	12	08-May-2011	0425.127S	15056.570E	1	3	0545	0634	74	0	83	0	157
19	13	08-May-2011	0427.952S	15045.014E	1	3	0832	0851	2	0	5	0	7
20	14	08-May-2011	0423.912S	15039.364E	2	3	0944	1018	122	0	2	0	124
23	15	08-May-2011	0442.129S	15040.060E	2	1	1552	1602	7	0	6	0	13
24	16	08-May-2011	0444.984S	15040.934E	1	3	1625	1646	63	1	21	0	85
25	17	09-May-2011	0425.985S	15056.441E	1	3	0530	0637	76	0	55	0	131
26	18	09-May-2011	0444.930S	15030.721E	1	3	0725	0811	265	0	181	0	446
30	19	09-May-2011	0422.289S	15015.668E	1	3	1405	1417	1	0	1	0	2
32	20	09-May-2011	0414.116S	15001.411E	1	3	1637	1701	1	0	0	0	1
33	21	10-May-2011	0441.594S	14956.832E	2	2	0723	0738	26	0	2	0	28
35	22	10-May-2011	0455.194S	14947.981E	2	3	1014	1023	45	0	37	0	82
37	23	10-May-2011	0506.445S	14942.605E	1	3	1231	1243	7	0	1	0	8
38	24	11-May-2011	0455.221S	14947.836E	1	3	0548	0651	264	3	47	0	314
39	25	11-May-2011	0446.005S	14936.219E	2	2	0829	0854	32	0	28	0	60
40	26	11-May-2011	0457.582S	14936.246E	1	3	1007	1053	231	1	133	0	365
41	27	11-May-2011	0457.486S	14928.162E	1	3	1319	1400	172	6	128	0	306
42	28	11-May-2011	0501.888S	14931.796E	1	3	1435	1502	92	2	53	0	147
43	29	11-May-2011	0502.774S	14937.840E	1	3	1542	1604	91	3	47	0	141
44	30	12-May-2011	0502.142S	14932.736E	1	3	0549	0629	84	5	78	0	167
46	31	12-May-2011	0506.890S	14929.699E	1	3	0812	0900	110	1	493	0	604
53	32	13-May-2011	0502.315S	14849.989E	1	3	1027	1055	23	0	47	0	70
54	33	13-May-2011	0458.403S	14831.877E	1	3	1350	1421	37	0	39	0	76
55	34	13-May-2011	0502.825S	14823.271E	2	1	1525	1534	0	0	1	0	1
56	35	13-May-2011	0500.462S	14823.119E	1	3	1555	1611	15	0	7	0	22
57	36	13-May-2011	0501.888S	14819.404E	2	3	1638	1659	148	2	3	0	153
58	37	13-May-2011	0501.375S	14817.366E	2	3	1718	1806	235	1	86	0	322
62	38	14-May-2011	0500.911S	14839.567E	3	2	1329	1436	394	0	121	0	515
63	39	15-May-2011	0453.762S	14849.842E	1	3	0726	0735	50	0	29	0	79
65	40	15-May-2011	0446.005S	14936.219E	3	1	0911	0923	0	0	20	0	20
67	41	15-May-2011	0419.680S	14827.147E	3	2	1311	1333	28	1	142	0	171
68	42	15-May-2011	0416.490S	14825.351E	1	2	1400	1410	7	0	29	0	36
69	43	15-May-2011	0413.933S	14823.489E	1	2	1431	1437	1	0	20	0	21
70	44	16-May-2011	0408.162S	14815.818E	4	8	0704	0831	246	0	717	0	963
72	45	20-May-2011	0411.425S	14620.152E	1	2	0740	0810	131	0	163	0	294
73	46	20-May-2011	0409.635S	14615.700E	1	3	0839	0853	13	0	28	0	41
75	47	20-May-2011	0409.700S	14548.200E	1	2	1207	1245	163	0	202	0	365
77	48	21-May-2011	0329.000S	14544.680E	1	3	1022	1036	0	0	1	0	1
80	49	21-May-2011	0343.700S	14525.160E	1	3	1521	1540	49	0	1	0	50
83	50	22-May-2011	0257.700S	14507.300E	4	8	1515	1521	5	0	11	0	16
84	51	22-May-2011	0258.420S	14509.210E	4	8	1534	1553	41	0	47	0	88
85	52	23-May-2011	0255.980S	14507.360E	4	8	0710	0735	19	0	42	0	61
89	53	24-May-2011	0257.150S	14506.700E	2	8	1610	1640	28	1	112	0	141
90	54	24-May-2011	0256.320S	14505.880E	2	8	1715	1722	11	0	51	0	62
91	55	24-May-2011	0256.520S	14500.990E	2	2	1753	1806	60	0	12	0	72
92	56	25-May-2011	0256.410S	14507.150E	2	8	0605	0750	165	0	349	0	514
95	57	25-May-2011	0241.275S	14456.000E	1	3	1043	1053	2	0	84	0	86
96	58	26-May-2011	0047.000S	14417.900E	1	3	0704	0722	0	0	19	0	19
99	59	26-May-2011	0013.700S	14354.350E	2	3	1406	1440	29	0	79	0	108
101	60	27-May-2011	0134.400S	14559.480E	1	3	0635	0700	6	1	3	0	10
102	61	28-May-2011	0134.200S	14559.400E	1	3	0628	0658	14	0	61	0	75
104	62	28-May-2011	0145.220S	14606.200E	4	1	1409	1412	37	0	12	0	49
105	63	28-May-2011	0146.820S	14609.940E	4	2	1447	1507	139	1	51	0	191
106	64	28-May-2011	0147.445S	14611.300E	3	2	1514	1547	124	1	59	0	184

107	65	28-May-2011	0147.110S	14613.000E	4	2	1558	1613	16	0	14	0	30
108	66	28-May-2011	0146.800S	14613.710E	4	7	1620	1635	56	5	15	0	76
109	67	28-May-2011	0145.600S	14614.500E	3	5	1645	1735	133	5	91	0	229
110	68	29-May-2011	0144.500S	14611.600E	3	8	0623	0717	257	1	246	0	504
111	69	29-May-2011	0137.800S	14611.800E	3	3	0800	0850	167	16	353	0	536
112	70	29-May-2011	0142.300S	14615.900E	4	8	0934	0940	2	0	0	0	2
115	71	29-May-2011	0135.600S	14639.900E	4	2	1231	1255	56	1	70	0	127
117	72	31-May-2011	0001.310S	14659.900E	1	3	0646	0705	8	0	309	0	317
118	73	31-May-2011	0007.030S	14705.480E	3	2	0813	0820	0	0	107	0	107
119	74	01-Jun-2011	0204.450N	14657.150E	1	3	0540	0740	5	11	195	0	211
120	75	03-Jun-2011	0141.115S	14611.170E	1	2	0620	0629	1	0	0	0	1
121	76	03-Jun-2011	0143.120S	14608.540E	3	7	0652	0734	156	3	93	0	252
123	77	03-Jun-2011	0146.330S	14622.100E	4	2	0940	1013	11	0	296	0	307
124	78	03-Jun-2011	0144.415S	14624.810E	4	5	1040	1105	9	0	36	0	45
125	79	03-Jun-2011	0140.600S	14626.500E	3	4	1124	1150	23	0	219	0	242
126	80	03-Jun-2011	0139.000S	14629.080E	3	2	1210	1232	87	1	79	0	167
128	81	03-Jun-2011	0140.350S	14651.500E	4	2	1545	1637	0	0	266	0	266
129	82	04-Jun-2011	0233.100S	14806.320E	1	2	0633	0655	39	5	14	0	58
130	83	04-Jun-2011	0235.800S	14808.800E	1	3	0720	0750	79	5	28	0	112
131	84	04-Jun-2011	0239.500S	14804.600E	3	2	0856	0944	324	13	267	0	604
132	85	04-Jun-2011	0240.300S	14803.300E	4	2	0951	1020	68	0	242	0	310
136	86	04-Jun-2011	0244.800S	14753.800E	1	2	1256	1324	130	0	544	0	674
139	87	04-Jun-2011	0303.590S	14751.600E	4	8	1538	1608	260	0	239	0	499
141	88	05-Jun-2011	0303.280S	14750.800E	1	8	0915	1006	119	0	578	0	697
142	89	05-Jun-2011	0307.800S	14747.760E	4	8	1045	1102	0	0	227	0	227
144	90	05-Jun-2011	0243.500S	14733.700E	4	2	1445	1535	155	0	158	0	313
145	91	06-Jun-2011	0253.970S	14758.500E	1	3	0700	0718	19	2	4	0	25
150	92	06-Jun-2011	0259.700S	14838.200E	1	3	1353	1418	115	1	74	0	190
152	93	07-Jun-2011	0315.160S	15059.950E	4	8	0634	0734	25	0	144	0	169
153	94	07-Jun-2011	0320.400S	15054.850E	4	1	0816	0835	0	0	14	0	14
CRUISE 2 TOTALS								6505	100	10343	0	16948	

APPENDIX 2

DAILY LOG EXTRACTS – PNGTP Cruise 2

logdate	Activity_Desc	Notes
4/05/2011	In port, Buka, refuelling, water, provisions, personnel change.	Alongside main wharf 0700 hrs, for end of cruise 1. Busy day spent in port, with new cruise leader arriving and assuming control. 10KI fuel taken, plus water and provisions; cast off plan for 17000 hrs bound for Rabaul and beyond. 10,288 for the cruise, with 26% YF and 15 Ats - a reasonable start, given all the teething problems. 0800hrs, no space along main wharf, dock alongside a copra carrier. Provisions, water and fuel finished by 1700hrs. All fish in wells given out to schools, hospital and people. Out of Buka at 1810hrs, steaming around the north east coast of Bougainville in gentle NE swell. Mud crab, chicken curry and sashimi for kai kai. New CL briefing crew at 2000hrs.
5/05/2011	Fishing in St George channel and baiting south of cape Lambert	Sunrise at 0545hrs. 10nm SE from St George cape. Administered pain killer and anti-inflammatory to spy master who was complaining of strong muscular pain along bottom left torso and thigh and vomiting, did not sleep last night and cannot lie down because of pain, advised to drink plenty water and also rub tiger balm to ease pain. Found current line as predicted by outgoing CL and searched along into the channel. Plenty birds sitting on floating debris, some dolphins and sightings of a whale at a distance. 0917hrs and still no fish, south of St George channel. First school sighted at 1007hrs. 4 good schools until 1329hrs, all associated with the current line. Total for the day 1251 SJ and 81YF. Anchored at baiting ground south of cape Lambert at 2210hrs, 35m. Spy master feeling better, no vomiting and ate well today but still pain in left thigh, administered one more anti-inflammatory for the night.
6/05/2011	baiting and fishing in Bismarck sea	First net 0040hrs, for 66 buckets only, mix sp, gold anchovy, hh, b sprat, decapterus, herring. Second net on light boat at 0220hrs produced 34 buckets. Lights down again for next set at 0430hrs with 131 buckets of mainly hetrolobus and hh. Anchor up at 0540hrs heading to fishing area N of Cape Lambert. Fished free schools in the morning (big SJ and one BE) feeding on their own bait, not that interested in ours. Md morning until 1300hrs fished FADs W of cape Lambert (small SJ and YF, RRU - 32-33cm), many untaggable. Afternoon, investigated one more FAD empty and finished at 1750hrs on a school of kawakawa, 10 fish sampled for stomachs. Back at cape Lambert 1845hrs. Plan to leave after netting tonight for reaching first FAD early morning and keep FAD fishing in day down to new bait ground further south tomorrow evening. Releases SJ 89, YF 33, BE 1, Total 123. Crew with numbness in lower left leg but no pain or fever. Chief and Naule fitted new golden door knob on office door. Sashimi

		as always for dinner. Not as glorious as yesterday but better than nothing. First haul at 2130hrs, 54 bkts of similar composition as previous with the inclusion of S.gracillis. Haul at light boat - 24 bkts of more hh,misc reef fish and baby baras. Depart baitground at 2317hrs for FAD 8055 NW C Lambert.
7/05/2011	fishing FADs and W of cape Lambert and NW of Open Bay and steaming towards Pondo baiting ground	5 hrs steam from C Lambert to first FAD 8055. However, hit by west winds 30knt with seas 1-3 early hours of the morning 2miles from the FAD. Bow tag boxes knocked overboard by big waves. After rescuing of tags, blocks and boxes decided to head S SW to FADs closer to Open Bay instead of pursuing 8055. Second FAD not found so proceeded to third. Arrived 0855hrs, small subsurface fish, chummed but no bite, difficult conditions, 2m swell, 30knt, gusting 35, rain. Fishing master called off to go to next fad. 1030hrs arrived at 4th position and looking downwind for FAD, conditions improving, 15-20knts WNW. After an unsuccessful 30min search. Headed further south to 5th FAD, 3nm SW of position at 1234hrs. Very small untaggable SKJ and RRU so did not want to waste bait. Arrived 6th FAD 8161, 1301 hrs. Small YFT and SKJ at start and later P size YFT. 121 fish tagged with 71% YFT. Last FAD for the day at 1452hrs had zero, nothing on sounder so steamed to Pondo. Arrived baitground 1830hrs. Area exposed to wind 15-20knts and swells almost like drifting out at sea. After a lengthy discussion with capt and fm, anchor and lights down in anticipation of improving conditions during the night. Set at 2300hrs, no wind but swells still present which caused rough handling of 225 bkts of mainly heterolobus, lewisi and hh. 0030hrs heading for FAD at moderate sea condition.
8/05/2011	Fishing FADs NW of Open Bay to FADs N of Kimbe Bay	Revisited FAD 8161 and continued to FADs N Kimbe Bay. Weather better than yesterday, slow winds and moderate sea. However, fished in heavy rains in the morning. 7 FADs visited with 5 and a "free school" producing a total of 386 tag releases, 30% SKJ and 70% YFT. Good YFT school was found on FAD 8451, the last one for the day @ 1646hrs. Will be revisited early tomorrow morning. Rough scooping during baiting last night due to swells caused a high mortality in bait tanks. 2 tanks left so decided to bait at Bialla tonight. Arrived baitground 2050hrs. Net at 1130hrs for 115 bkts of rainbow sardine and lewisi. Depart baitground at 0130hrs for FAD 8451.
9/05/2011	Fishing FADs N of Kimbe Bay to N Willaumez Peninsula	An early start with 131 fish on a revisit to FAD 8451 N of Kimbe bay, 0530hrs, weather looking promising with winds 270/10 and moderate . It got better on the second FAD 8149 with 428, 60% YFT. Nice school but requires too much bait in order to keep them biting under heavy sky showers. Busy morning with biological sampling and data entry. Continued to FADs N of Willaumez Peninsula. couple of them missing and 2 others had fish but no bite. Chased a free school of YFT after lunch 1303hrs but zero result. Bait survivability better than yesterday. Tough luck on FAD 8198 further north with only 2 skj and wind

		<p>starting to pick up again. Position for next FAD 8299 interestingly has two payaos 100m apart. Fish on sounder but difficult to bring up and weather worsening, waves to 1.5m. Arrived last FAD 1637hrs fish on sounder would need time and plenty of bait to bring up at seas now 2m and wind at 20kts. The idea to drift or tieup now no longer possible. Capt not comfortable to enter the narrow pass of Peter Haven at dark the closest baitground now ETA 2130hrs. But all good, 2 full bait tanks left for tomorrow fishing before early entry to Eleonora/Emeline bay to fill up. headed to shelter of Garove Is from the W NW winds, ETA 2230hrs. Total for the day 562, overall total 12809 with 27% YFT&BET.</p>
10/05/2011	Fishing N Wilaumez Peninsula to N Eleonora	<p>Depart shelter of Garove 0400hrs to FAD 8200 N W'mez Pen. Arrived position 0631hrs but no FAD. Head SW for FADs N of Eleonora Bay. Found a YFT log school 0723hrs and 28 fish tagged with 1/4 of the two tanks of bait used. Continued south to another double payao FAD but no fish then to FAD 8436 with jumper school of small yft and skj. Tagged 82 fish with another 2/4 of bait. Benthly received tagging lessons and should start practical soon, SHS did sampling training with MJH. Last 1/4 bait used to investigate other fishable FADs further south for tomorrow fishing before heading to Eleonora, which is more sheltered for W NW just in case. Arrived baitground 1520hrs, capt and chief made a toksave to crew regarding water usage and rationing, boat cleaning by bosuns, got the chief to update on fuel to prepare for Madang, a team went to logging base for phone cards and simuk search for crew and, the fish for veggies trading with locals. Visited by village councillor who came late for fish. so asked if some of his boys can go out with us so they get their fish first when we come back...crazy and not sure if we are coming back.</p> <p>First haul 0930hrs, full net, tried to avoid overcrowding by blocking half behind the plank while scooping 240 bkts of devisi, some hq and small malambur, half let go into villagers canoes. Will try fish free schools south of Garove now with plenty of bait and FADs N of Emeline.</p>
11/05/2011	S of Garove and FADs N of Emeline Bay	<p>Departed baitground 0030hrs for FAD8037 SE of Garove which had YFT school. Drifted around position to wait for sunrise. Fishing started 0545hrs with 314 fish 84%YF, this time bigger 39-54cm and one small BET. headed to area south of Garove for free schools. fished a log but only 60 fish. searched south to FADs N of emeline bay. Good fishing on FAD 8491, 366 releases. Saw Hannah 88 heading towards our position, probably sound checking on FADs. Requested via VHF to go alongside when png observer Clement Kuag confirmed presence of tag recaptures. Tied up to Hannah SB side 1130hrs and CL and MJH boarded with posters, recovery forms and rewards. Received a total of 78 tags of which 69 from 1 school caught 2 days ago. Data</p>

		<p>collection and tag reporting explained explicitly by MJH and rewards paid. Not much fishing information acquired but fishing master remembers S6 during PG-1 cruise 13. Busy afternoon on 3 more FADs of mostly small yft although sounder indicates larger ones hesitating to surface. Maybe would be different in the morning. Headed to Emeline Bay 1604hrs after essa finish. Fine weather whole day, W winds is over I hope...now feeling the SE. Arrived baitground and anchor down at 1926hrs. Mr moon still covered by evening clouds. First haul, 2230hrs for 270 bkts of achoolies (heterolobus, devisi), hh, hq and some malambur. Tomorrow fishing range of FADs from Emeline Bay to Iboki. Departed baitground 0030hrs.</p> <p>Total for the day = 1264 (15 BET), Cruise Total = 3921, Overall Total = 14209. % BET&YFT = 31</p>
12/05/2011	Range of FADs N of Emeline Bay to Iboki	<p>Arrived FAD 8514 position N of Emeline 0315hrs and drifted till sunrise. Fishing started 0545hrs with 146 fish tagged. Next good FAD 8492, third for the day 0812hrs, still N of Emeline bay which produce 604 fish, 18% YFT and 1 BET. Searched FADs west to Iboki, couple missing, others chummed but no response...probably fished out. Found a school on the position of FAD 8041 but no FAD, chummed and saakanaa!!! but no kaikai. Continued to FAD 8444 north of Rottok El bay and still no fish. Found a free school nearby and chummed but fish not interested with our nice bait. Headed back towards Iboki for last FAD of the day 8445. Arrived 1818hrs in drizzles, maxi let go of essa and sakana, spray is on, deck light are on, big fish jumping on the side of the boat, poles bent and up came kawakawa, kawakawa and kawakawa... nothing significant on the sounder so stopped fishing 1900hrs and off to baitground. Anchor down at Iboki, 2038hrs. Total for the day=771, YFT 25% and 6 BET.</p>
13/05/2011	Fishing around Unea (Bali) island and FADs N of Borgen Bay	<p>First haul 0100hrs for 240 bkts, spp. comp similar to Emeline bay. Departed baitground 0230hrs for fishing ground, Unea (Bali) Island. Searching commenced at sunrise, S of Is, to the E and N but was disrupted by morning showers. Several schools were lost due low visibility. Managed to pick-up digicel phone and internet coverage, so called NFA office to sort out fuel and bonus money for Madang and called BRK to update on Madang port visit. Fished W to SW of Unea to FADs N of Brogen Bay. Visited 4 FADs and free school, all good school including big yft, but not all were interested to play. Second last FAD 8431, 97% yft and one 52cm BET, will visit this again in the morning, maybe jigging if possible. Fished a nice jumper 0518hrs until bait finish and steamed to baitground. Anchored Borgen Bay 2155hrs in light showers and clouds still hiding the already 1/4 moon. A satisfactory day with 644 releases, 71% YFT and 3 BET.</p>
14/05/2011	Fishing N NW of Borgen and then	<p>Borgen did not deliver as expected. Good spot, cloud cover, but no good aggregation. Waited till 0200hrs. Two hauls for 120 bkts of</p>

	back towards Iboki	hetrolobus, devisi small bara, trevallies and pellona. Departed baitground 0350hrs for the FAD with 52cm BET, arrive 0700hrs when school already feeding on punctifer. Second FAD 0905hrs, chummed but only small SJ around but no biting. Fished w towards new FADs N of Dampier strait without success. Could feel the touch SE bottling up the Vitiaz though, wind 15-20, rolling seas. Then back to shelter of New Britain, FADs N of Borgen to Iboki. Found a nice rippler of mix skj and yft on floating log, 515 releases, 77% yft. Steamed to Iboki 1440hrs for early baiting before fishing towards seamount 04 04.050S 148 12.868E. Arrived baitground 1953hrs, not much cloud cover for the moon this time, however sounder looking good but not enough for early set. First haul at 0030hrs for 100 bkts of more anchovies and few sardines and another 50 bkts on light boat.
15/05/2011	Fishing FADs W of Unea (Bali) Island and NW to Seamount	Depart baitground 0230hrs for FADs 8427 & 8440 W of Bali Island. Arrived first FAD 0720hrs, 79 releases of mix skj and yft. Second FAD was not as successful, chummed but no response. Fishing to seamount - 20 releases on small skj free school 4nm NW of FAD 8440. Chased second free school of small skj and probably big yft underneath W of Otilien reef but to no avail, need to budget essa. Tagged 167 skj and few yft mixed with rru, 1311hrs, mostly z's on a log 17nm SE of seamount. Still heading on seamount bearing, met second log with subsurface school, would require plenty bait to get them biting, only 31 releases 2 tanks of bait already cleaned to the last anchovy. Third log school, 10nm to seamount, 1431hrs, 21 releases, 95% small skj. TPS vessel, Queen Victoria fishing and searching to the area. Although observer confirmed no presence of tags onboard, requested to go alongside for awareness. After MJH went through the awareness, 4 long time tags popped up including a PGW 07 release. A worthwhile stop, MJH now full of notes for Tag Recovery Coordinators to improve tag reporting. Arrived seamount 1700hrs just to see a PS completing its set. The pain in FM eyes, "that's supposed to be our fish". Another 2 ps, a carrier and ranger boat in sight. Changed course to Sherburne as Capt thinks he's got the waypoints but later realised they were waypoints for anchorage and not entrance. But all good. Returned back to seamount 2000hrs to drift with 2 4/5's tank of essa and low mortality. Not alone though as lights of other vessels visible around the area. Will try to check for survivors in the morning before fishing down to Madang. Total for the day = 327, Cruise 2 Total = 6,247, Overall total = 16,535, % YFT&BET = 34
16/05/2011	Fishing on Seamount 04 04.050S 148 12.868E	Searching started 0620hrs cause we seemed to have drifted out of the seamount. Searched back onto the seamount not sure we will find anything after witnessing the ps yesterday. However, to our surprise, found a splasher 1.5 miles S of original drifting position. A quick response by mix skj and yft to our chum and realised it was just

		<p>the tip of the iceberg. Fished from 0700hrs until essa ran out and fish still biting. Stopped fishing 0820hrs and sounder still fully coloured with school under. Biological sampling, data entry and crew commenced cleaning up 105 for the howling tomorrow. 963 releases with 74% SKJ and 45% z tags, fish size from 30-55 cm. Departed seamount 1120hrs with mixed feelings; satisfied with the day's result, the last tagging day of the cruise but wish we could spend more time here. Head for Madang entrance as plan to fish FADs N of Long Is now no longer possible. Called NFA office to check on fuel and crew bonus payment and BRK on Madang port clearance via Sat phone since no reply to email. Sounds alright although iridium reception low and not clear. ETA 0500hrs, SE from the Vitiaz 20-25kts and seas 1-1.5.</p>
17/05/2011	In Madang port	<p>Pilot boarding was at 1110hrs and berthing at coastal wharf. First thing was water as the last tank ran dry while drifting at entrance and so no shower, cooking. Headed straight to BSP bank while BRK, SHS, chief and capt organised fuel and shopping orders. Fuel to arrive tomorrow morning as well as shopping payments and delivery. Stood a weary 3 1/2 hrs in the bank and walked out with 70k cash. All crew bonuses paid late afternoon at an exchange rate of 1USD=K2.75 after all deductions of advances and overseas orders, total paid = PGK59,255 total deduction = PGK16,480. Meeting with officers and crew 0600hrs at midship with some cool white ones... some thankyou speeches on behalf of SPC, NFA and former CLs, discussions about information on madang, shopping and directions to night clubs. And so it began... ha whoooooooooooooo Busy day tomorrow... Looking at the white board on the back wall... 3 tasks fully completed and 13 to go including BML pick-up at the airport.</p>
18/05/2011	In Madang port	<p>Early visit to Madang market by SHS, BES and Wakio. Refueling 1000hrs by Interoil for 39kl, all shopping, provisions, hardware and stationary completed by noon. Sent BES to Nagada village to negotiate access to Rasch Pass for baiting. Only a few tasks to complete tomorrow, 30hp repair, radar inspection by a technician from maritime. Visited by customs officer 0330hrs saying that inter-port clearance is needed for international registered vessel. No time to do clearance now so can't leave Madang. However, will bait tonight and come back in the morning for clearance. BML arrived on time at 16:30 by PX126 from Moresby. Cast the rope at 17:30 ;Pilot onboard for 15 min then headed to Rasch passage for early baiting; Benthly has been arranged the baiting with the local people during the afternoon and he joined the vessel with some baitground owner who were ok with the baiting. Anchor in 34 m of water with bit of swell and wind. First net at 9:00 produced 34 bkts of a mix bag with small sprat and pony fish; second set in difficult condition with big moon and swell only gave 5 bkts of mostly pony fish. Moved more inside-south to be more protected; anchored at 11:30 in 30 m</p>

19/05/2011	baiting Rasch Passage , Madang shopping and port clearance	third set at 03:00 for a mere 13 bkts of robbish baits, mostly ponys. Departed baitground 0640hrs for Madang entrance to wait for pilot AGAIN. Pilot arrived 0850hrs and engine stopped due loss of compression. engineers forgot to tighten the valves in the morning. No big problem as valves tightened and back alongside coastal wharf. Arranged for more water to fill up the reserve tanks (fish wells). A bit more shopping for staff, special ingredients needed by Waks that was not in the shopping yesterday. BRK organised an agent to handle customs clearance and returned the fixed 30hp propeller from Rookes Marine before heading to airport for Wewak. All service payments completed, almost 10k PGK. Clearance 1600hrs and cast off 1630hrs with the 500m pilot. Headed for Rasch Pass to bait again tonight...anchor down at 1750hrs with good cloud cover and slow winds. First set at 19:30 gave 81 bkts of some big baits , rainbow sardines, little priest, indicus and also devisi, heterolobus and a few punctifers; second set at the dinguy, at 20:30, for 21 bkts of same bait; Depart bait ground 2240hrs for FADs NE of Karkar;
20/05/2011	Fishing Fads NE Karkar toward Hansa Bay	First Fad found at 06:20, 3 miles SW from the given position; only small sj less than 30 cm; then found a good log with mostly small yf and sj for 294 tags; following fad produced only 41 tags and the next one none. Another log found around mid-day produced 366 tags with 45% YF. As we were still at about 60 miles from the bait ground we decided to stop fishing and start steaming to arrive before night. Total tagged was 701 with 44% yf and 84% z tags. Anchored behind Laing island at 18h. First net at 0815 for 66 buckets of punctifer and few rainbow sardines. One nice king fish also that will do nicely for tomorrow lunch. Second net on light boat gave only 8 buckets of similar species so decided to put lights down again for one more.
21/05/2011	fish fads north Manam isl	But alas no cloud and moon still very bright : only 3 bkts of very small anchovies at 01 in the morning; left bait ground at 02:00. First Fad at 07:40, RD 8378, under rain, no fish. Second and third Fads missing. Fad RD ? fished at 10:30 for 1 yf tagged, may be not the good time of the day...then chased a couple of free school at 11H and 11:45 with no success. Another nice looking free school of good size sj has been chased for 30 min before FM let go at 14:20. On the way back to bait ground found at about 15:20 an RD Fad that wasn't on the list, about 22 miles NE Manam; mainly small yf came to the chum for 50 tags. Total for the day 49 yf and 2 sj...Arrived a bit late (20:00) at bait ground that might explain the poor result of first net at 9:30 = 5 bkts...second set no better with 3 bkts.
22/05/2011	Fish Fads on the way to Hermits	Third and fourth sets were no better with 2 and 1 bkts...hard work not paid. Go out Hansa Bay at 5'oclock. One free school chummed at 8:20 but no success. Met the first Fad RD 8274 at 10 o'clock but Dolores 837 was tied-up to this one. Talked to the PNG observer Trip ID GCJ 1103 and learned that D837 was waiting for a light boat to fish

		<p>the Fad tomorrow morning. He mentioned that the vessel was not intending to fish on FADs on our cruise plan cause they've put a R buoy on a log and will fish that next. Pass RDFad 8297 location, missing, arrive at RD 8315 at noon; one supply vessel "FB James, PNG436" tie-up; tried to chum but no answer. Fad 7852 missing . Arrived near Seamount 48m at about 15h and tagged 2 schools with good size yf and sj ; need quite a lot of bait to keep them at the boat so decided to stop to keep last bait tank to fish same area in the morning; start drifting at 16h.</p>
23/05/2011	fishing 48m seamount and go Hermit for baiting	<p>Drifted about 10 miles west during the night. Difficulties to start the engine for about 40 minutes...start SF at 6. Arrived on fish at 7:10, right on 48m seamount. Big shoals of mixed yf and sj good size 45 -55 cm; alas run out quickly of good bait and bottom bait tank pony fishes not really appealing; stopped at 7:30 after 61 fish (42 sj, 19 yf); start steaming in the middle of jumping fish toward Hermit, 83 miles away. Arrived at the western entrance at 16:45. OpenCPN Map about 1.3 miles WSW from GPS. Engine stopped for some reason when arriving at anchorage (17:30)`captain put it astern.... BML and THU went onshore to speak and give fish to local people just near the boat. Main engine finally fixed at 21:30 (fuel timing) and first set thereafter for 209 buckets of a mixed bag, sprats (lewisi), hardy heads, cardinals, Hq, big sardines. Second set at 11 for 53 bkts of same bait.</p>
24/05/2011	Fish south Hermit to 48 m seamount	<p>Anchor up at 0100hrs and about to depart baitground but the engine went dead again when attempting ahead slow. Waited for the engineers to do their magic while drifting with SE at 10kts, but noat. Needs more time to fix the problem. Anchor down again at 0250hrs, 0.5 miles W of initial anchored position. Engine finally "fixed" at 5:45. After few trials we left the baitground at 6am ;arrived at Fad RD 8061 at 9:30; big school of mainly small fish but not interested when chumming with big sardines...Met a free school at about 12 under heavy showers but running fast (YF) and only almost came to the boat ...Same thing again at 1430. Arrived at 4pm at seamount and found a nice school of good size sj with few yf around 50 cm; unfortunately engine stopped after 30 minutes; stop tagging when fish swam away from boat... Engine started at 17 and we tagged 2 more quick schools before the end of the day on a current line with plenty good logs. Total 275 with 36 % YF. The engineer team started dismantling and cleaning all engine fuel line systems as soon as we drifted...</p>
25/05/2011	fishing 48m seamount and go baiting Hermit	<p>Start engine at 04:30 , back on the top of seamount at 6 and start fishing with good biting; stop just before 8 when YF started to stay under the boat and not biting. 514 fish tagged with 32 % YF. Decided to check the current line and logs we were at the end of yesterday. After 2 unsuccessful tries on log, we steamed back toward Hermits and found a good school of skipjack on RD Fad 7914 before 11am and</p>

		tagged 85 fish before running out of bait. Arrived at Hermit entrance at 6:30pm. First set at 09pm for 247 bkts but alas with too much big sardines; second net on light boat at 1015 for an additional 5 bkts per tank, trying first to remove the big sardines. Anchor up at 11:15
26/05/2011	fishing fads North Ninigo	Passed Fad T-013 out of given pos by 3.5 miles with a ranger boat (Champion 17, PNG reg 909) tight-up to at 0620... After checking position we had , come back to Fad and try to fish but only small sj (19 tagged). Chummed a free school at 8:30 with no success; arrived at T-011 associated with another fad about 400 meters apart at 1045; good detection on the sounder but big sardines not working...Fad T-010 missing; found an unknown Fad with a raft attached that could mean it will be fished soon; good school associated and managed to tag 107 fish, mostly good size (55+) sj that came to the big sardines; would have easily be possible to tag 1000 fish with good bait....Following Fad T-009 was missing too ; return to Fad T-011 and tried again with some big sardine cuts but no success. Hit the road at 17:30 toward Manus/Nares harbour. Total for the day 127 (23%yf)
27/05/2011	SF toward Manus-Nares harbour and bait	Steam all night from north Ninigo toward Manus/Nares harbour. Most of the remaining sardines died during the night, not much left in tanks...First fad (RD8401) crossed at 5:30 had a boat making a set, second Fad (RD 8313) had no fish; checked Fad T-026 which was associated with a good school but run out of bait very quickly and just tag 10 fish. Start steaming toward Nares at 7 :00; arrive at bait ground at 12:00, at anchor at 13h closed to Sori Island in 30 meter water. Delegation of CLs and SHS went to visit and explain the project to Sori Island but also Sori 1 village on the main island and Harengan Island. Back to the boat at 17:30, in time to deploy light boat.Firt set at 22h for 144 bkts of mostly anchovies (heterolobus, few indicus), few blue and silver sprats, hh; second set at 11h on light boat only provided 19 bkts
28/05/2011	fishing Fads and logs NW Manus	Left Nares harbour at 1 am. Arrived at Fad TPJ-026 at 6:20. Tagged 75 fish there but mostly z tags and can't find school of bigger fish seen yesterday. Next Fad 20 miles west , no fish. Following Fad missing (RD 8461) and next one also...(RD 8423) and also next one (RD 8459); met a free school of fast running sj on the way to seamount 547m but fish disappeared quickly after 49 fish tagged. About 6 to 4 miles south of the seamount we found a large current area with good logs and also one whale. In 5 schools between 3 and 5:30 pm we tagged about 700 fish with more than 60% YF of z tag size. Run out of bait before heading to Nares harbour. Total for the day: 834 with 62 % yf. Arrived at the bait ground at 21h.
29/05/2011	Bait Nares Harbour and fish seamounts north Manus	first set at 12:30 for 180 bkts of mostly anchovies. Enough for one day fishing so decided not to do another set. Left Nares at 3am for fishing the same area than yesterday afternoon. Tagged 1043 fish before

		10am on 2 schools, first one associated with seamount 547 m , second one on a Fad not on our lists, about 4 miles NW of seamount. Few fish around seamount 255m and chummed a couple of schools that disappeared without coming to the boat. On the way to TPJ-61 Fad (which is about 10 miles north of seamount 155m) we chummed a log school that provide 127 tags but very small fish around 32 cm (44% yf). On Fad TPJ-61 a school was present but seemed to be composed only of YF that didn't come to the boat; we run out of bait on this last one at 15h and start to steam to Seadler Hbr via seamount 105m. Total for today : 1170 with 41% YF, including 18 B and one Yf AT. At anchor at baitground at 19:30. One set at 1030 provide 270 bkts of small gold anchovies that will hopefully survive for 3 days...
30/05/2011	Provision, watering and passenger change in Manus	THU and SHS went onshore with dinghy for shopping and bring back custom officer for clearance . Up anchor at 12 h for getting water in Lumbrum. But in Lumbrum the water was cut down because of some angry land owners...Chief said we should be alright till Kavieng with the 17 tons left with a bit of safety management. Last chopping for crew with BRK rented car and public transport; small pb with half of the crew arriving 2 hours late at the boat; left Lumbrum wharf at 18h waiving good by to Thomas.
31/05/2011	fishing TAO 00 and Fads on the way to TAO 2N	After steaming all night, arrived at weather buoy TAO 00-147 at 6:45. Large school of big size (50-60cm) sj was there. Tagged 317 fish; possibly some yf underneath but the skipjack were eating all the baits; stopped fishing to save those. Met another big skippy school 1,5 hour later on a log for a quick 107 tags. Then passed by 4 TPJ fad locations but all of them missing...at 15:45 only the TAO 2N in front of us, 75 miles away...Arrived at 23:30 and drift for the night.
1/06/2011	Fish TAO 2N-147E	Engine started at 4:30. Started fishing at 05:40 and large skipjack started to come 10 min later but difficult to keep them at the boat with the too small anchovies. For the same reason we couldn't make coming the bigeye and yellowfin that were underneath (large detection on the sounder at 40-60 meters). For this one the big sardines might have be useful... Just got one 5 min run of 50-60 cm Bet at 06:15. Managed to deploy 3 archival before they disappeared. Run out of bait at 07:40 after 211 tagged, 92% SJ and 11 bigeye including the 3 Ats. Start steaming south for the 240 NM to Manus....
2/06/2011	In Nares harbour for the day, bait	Arrived in Nares at 08am; first set at 22:10 for 114 bkts of mainly anchovies (devisi) with some hh, sardines (Ss), blue sprat, second set at 23:10, 162 buckets of mainly good sized heterolobus anchovy and some blue sprats. Anchored at Nares until 03:00 before depart for seamount.
3/06/2011	fishing seamounts north Manus, bait	Left Nares at 3 am, arrived on Seamount at 6am; fished on some logs and current lines 3-4 miles east of seamount pos; a lost fad was in the

	Seeadler	current line, probably the one we fished North of the seamount some days ago as it wasn't there this time. 252 fish tagged before 8 then carry on searching on the east side of seamount; a nice log produced 176 mostly good size sj (40-50); Then at 10:45 meet a whale school (2 sei whales, probably mother and young) with a mixed school of 40-50 sj and yf but those last won't come at the bow. Then met quite a few log school with various success in south of seamount 255m. On the way to seamount 105m, about 4 miles before, found a log school with big size SJ (60-65) and have good fun for 40 min and 213 tagged. Total for the day 1280. Arrived in Seeadler Harbor at 20:30, at anchor at 21h. One set at 10:30 provided 200 buckets of gold anchovies. Left harbor at midnight.
4/06/2011	Fish fads SE Manus and bait Sherburne Reef	First fad, RD 8155 was missing; found a big log few miles after but fish not coming well at the chum, only 58 tagged. Next Fad rd 8405 produced 112 fish, mostly z tags. Following fad RD 8384 missing. But found a nice log instead that produced 604 tags. Then RD 8418 no fish and a log nearby produced another 310 tags. RD 8434, no fish and same thing for RD 8389. A log 5 miles later produced a useful 674 tags at 13h. RD 8340, no fish, heading to Sherburne reef at 14h; a current line with plenty big fish associated was chummed with no success at 14:30, too many baits in the water ...Then we passed closed to a seamount at 179m on the chart and got onto another useful school with good size 40-50 cm S and Y for 499 tags. Total for the day : 2257, including 900 YF and 23 B. Arrived at Sherburne at 18h; drop the anchor at 18:50, no time to find a place for light boat. One net at 21:00hrs in choppy conditions with gentle winds from SW, 170 buckets of primarily fusilier and a sprinkling of blue sprats.
5/06/2011	Fish Seamounts and fads north Sherburne, bait St Andrew	Up anchor at 02:15 and left Sherburne toward 304m seamount; no fish around, head back to seamount 179 m and manage to found same kind of school as yesterday. One school closed to the summit produced almost 700 tags then another one about 5 miles in the SE, at the edge, produced 227 tags with a bigger % of sj. Decided to go to St Andrew to bait rather than Sherburne because wind was increasing and reef not very comfortable in these conditions. In the afternoon, about 18 miles from St Andrew anchorage, found a nice log that produced 313 tags. Total of the day 1237 with 22% YF . Entered in St Andrew anchorage at 18h. At anchor at 18:30. First set at 23h for 48 bkts of sprat (blue and silver) and bit of fusiliers. Second set in difficult condition with failure of underwater light (have to use the light boat in the net) and swell. Only 4 bkts .
6/06/2011	fish fads east St Andrew	Left St Andrew anchorage at 02:00. Arrived at first Fad at 7:00, only few fish there, 25 tagged mainly small Yf. Next fad was missing, and no fish at Rd 7954. Nice log encountered at 10:30 but the big YF associated not coming to the chum; following fad, rd8349 produced 190 tags, mostly z with about 60% YF ; next fad no fish and following

		one 2 ranger boats were tie-up to...Started steaming toward Dyaul seamount at 17h.
7/06/2011	Fish Dyaul seamount and steam to Kavieng	Red dawn off New Hanover with Dyaul looming 06:00hrs, just about on the Dyaul seamount, slight ESE breeze in fair seas, bait survived well during the night. Fish seamount summit and south edge, big schools of skipjack of various size but chasing large baits and not interested in ours...start steaming toward Kavieng at 09h