

PACIFIC TUNA TAGGING PROJECT PHASE 2

CRUISE REPORT No. 5

28th September – 30th October 2008

INTRODUCTION

This report summarizes activities of the fifth cruise of the Pacific Tuna Tagging Project (PTTP) Phase 2 during a 33 day period in Indonesian waters, from arrival in Bitung from General Santos, Philippines, on September 27th to departure from Jayapura and Indonesian waters on October 30th 2008. The cruise was the central component of cooperative research activity involving the PTTP and the Republic of Indonesia Research Centre for Capture Fisheries (RCCF).

Personnel onboard the vessel during the cruise are listed below. Changes were made on two occasions during the cruise, in Ternate on October 8th, and in Sorong towards the end of the cruise (October 25th), in accordance with scheduled port calls as per a cruise plan approved for the visit.

Name	Designation	Affiliation	Dates
Dr. Antony Lewis	Cruise leader	SPC Consultant	28/9 - 25/10
Bruno Leroy	Cruise Leader	SPC	25/10-30/10
Thomas Usu Jr	Scientist/Deputy CL	NFA, PNG	28/9 – 30/10
Peter Williams	Database Manager	SPC	25/10-30/10
Cynthia Wickham	Tagging technician		28/9 – 8/10
Keith Bigelow	Visiting Scientist	NOAA, Honolulu	28/9 – 8/10
Muhammad Natsir	Indonesian Observer	Counterpart Scientist for RCCF-MMFA	28/9 – 30/10
Audy H. Mien	Indonesian Observer	Fisheries Officer From North Sulawesi Province (Manado)	9/10– 25/10
Lt. Pandhi	Security Officer	Indonesian Military Security (Naval Division)	28/9 – 30/10

GENERAL DESCRIPTION OF FISHING ACTIVITY

Following the clearance into Indonesia in Bitung and a welcoming reception, the vessel was able to depart that evening and purchase bait north of Bitung. Steaming east towards Halmahera, the first successful tagging releases were made in the Maluku Sea near Mayu Island, on FADs whose position had been provided by fishermen in Bitung. The high level of activity by domestic vessels of various kinds and Philippines domestic

or locally-based vessels, mostly pump boats with auxiliary skiffs, was evident from the outset. Little fish was then encountered running south to the vicinity of Bacan, former location of large pole-and-line vessels base, and advice had been received in Bitung that fishing in Tomini Bay and adjacent areas was currently poor. The vessel thus headed towards Waigeo, in an initial variation for the approved draft cruise plan for the visit.

A large array of FADs near Gebe Island produced only modest catches, using good bait obtained in Aljui Bay, so the vessel redirected activity to the north of Waigeo, where over 4,000 fish were tagged in three days before heading towards Halmahera, in anticipation of the initial port call in Ternate on October 8th. Whilst excellent bait was obtained at Morotai, relatively small catches were made off the west coast of Halmahera. the vessel then headed for Sula Islands to the south west, where excellent catches were made on FADs known to be in the western Ceram Sea (over 4,000 fish in 3 days), enabled by good bait obtained on the north coast of Taliabu.

Fishing east towards Buru, the vessel was then approved to make the full moon port call in Ambon rather than Sorong, and a two day break was taken. Good fishing was found to the south of Ambon (over 2000 fish tagged) and bait purchases from bagans in Saparua enabled the vessel to fish eastwards across the Banda Sea towards Papua. Excellent catches were made in FADs south of Fakfak, before heading to the north coast of Ceram. Bagan bait was then used to fish north with success towards Gebe, before heading to Sorong for personnel changes and resupply.

The final five days of the cruise were spent in Papuan waters, before clearing out of Indonesia in Jayapura on October 30th. A short trip to the 00/138E TAO buoy was made before Jayapura but with limited success due to the associated school being fished by a purse-seiner prior to our arrival. On the way into Jayapura, one isolated Fad was fished for over 1200 tagged, to reach the 25,000 tagged for the cruise.

The track of the cruise, based on school and noon positions, is found below as **Figure 1**. A very wide area of the Pacific portion of the Indonesian EEZ was covered, with significant gaps really only in Tomini Bay and the Sulawesi Sea.

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 PTTP Phase 2 Cruise 5, 28th September – 30th October 2008, showing the positions of schools fished and the 1800 hrs position each day

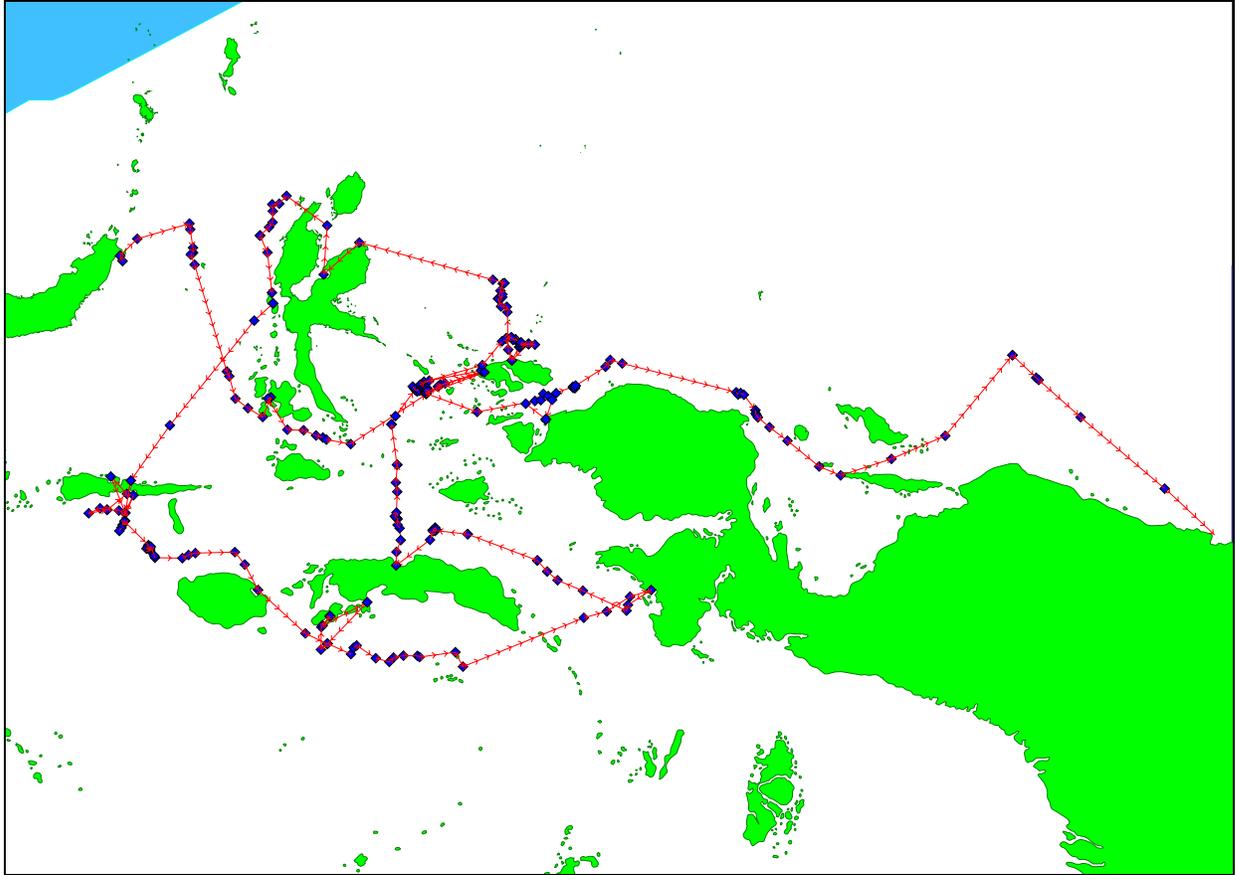


Table 1. Summary of Cruise 5 activity, with number of tagged fish released per day

Dates	Activity	Tag releases			
		BE	SJ	YF	Total
September 27 th	Clear in to Bitung from Philippines; clear out of Bitung				-
Sept 28 th	Baiting Mogogimbul Bay, fishing towards Mayu Is.		491	70	561
Sept 29 th	Fishing south of Bacan, baiting Bacan				0
Sept 30 th	Fishing north of Obi then steaming to Waigeo		118		118
October 1st	Fishing near Obi island, steaming, then baiting Aljui Bay				0
Oct 2 nd	Fishing FADs Gebe Island, catching/buying bait Aljui Bay		563	168	731
Oct 3rd	Fishing FADs Gebe Island, baiting Saripa Bay		122	8	130
Oct 4 th	Fishing north of Waigeo, baiting Fofak Harbour		1281	46	1327
Oct 5 th	Fishing north of Waigeo, baiting Fofak Hbr	1	1646	175	1822
Oct 6 th	Fishing Budd Island, then west towards Halmahera	25	1074	123	1222
Oct 7 th	Steaming to Kao Bay, checking bait, baiting Morotai				-
Oct 8 th	Fishing south towards Ternate		66	111	177
Oct 9 th	In port, Ternate; steaming south towards Sula Is				-

Oct 10 th	Fishing south of Mangole; baiting Vesuvius Bay	162	468	824	1454
Oct 11 th	Fishing south of Mangole; baiting Penu Bay	15	32	178	225
Oct 12 th	Fishing towards Sanana Is, then drifting near seamount	79	995	499	1573
Oct 13 th	Fishing towards Buru; baiting Kayeli Bay	3	1620	318	1941
Oct 14 th	Fishing south of Ambon; in port evening	3	331	217	551
Oct 15 th	In port Ambon for full moon break				-
Oct 16 th	In port Ambon; cleared to depart late afternoon; bought bait Saparua (Kapuas Mahu)				-
Oct 17 th	Fishing south of Ambon; buy bait Kapuas Mahu	8	1056	482	1546
Oct 18 th	Fishing towards Banda Islands; steam overnight	28	394	436	858
Oct 19 th	Fishing south of FakFak; baiting Selassi Bay		1023	15	1038
Oct 20 th	Fishing south of FakFak, then towards north Ceram	1	2546	238	2785
Oct 21 st	Fishing north Ceram; catch/buy bait Seleman Bay	2	558	144	704
Oct 22 nd	Fishing towards Boo Is; steaming/drifting overnight		1820	483	2303
Oct 23 rd	Fishing north to Gebe FADs		384		384
Oct 24 th	Baiting Bimpienlol Bay, fishing east of Sorong, then in port		1171	37	1208
Oct 25 th	In port Sorong, clearance out, baiting Bimpienlol Bay				
Oct 26 th	Fishing east from Sorong, towards Cendrawasih Bay	1	867	146	1014
Oct 27 th	Fishing Papuan waters, baiting Sorenawa		4	5	9
Oct 28 th	Fishing towards Equator				0
Oct 29 th	Fishing TAO buoy on Equator at 138E	26	946	544	1516
Oct 30 th	Steaming to Jayapura; clear outwards from Indonesia				

TAG RELEASES

All of the 33 days of charter were spent on Indonesian waters. Of these 33 days, 5.5 days were spent in port, and the remainder of the time fishing. No down time was incurred as result of lack of bait or bad weather, and only two days total steaming either without or with limited bait. The great majority of fishing days were productive, with just two zero catch days. On 18 days, more than 500 fish were tagged and released, and twelve 1000 plus fishing days were experienced, including 2,785 on one day, the second highest daily total since the project began

In total, **25,197** tuna were tagged with conventional tags, at an average of around 900 fish per fishing day. No archival or sonic tags were released. The releases of conventional tags comprised 19,576 skipjack (77.7%), 5,267 yellowfin (20.9%) and 354 bigeye (1.4%). The “yellowfin plus bigeye” proportion of the catch, at 22.3%, was lower than most areas where the PTTP has operated, even though most fishing was on FAD-associated fish. Yellowfin comprised over 50% of the catch on just four fishing days, mostly in the area south of Kepaluan Islands. Bigeye were taken in small numbers throughout the cruise, but only more than 100 in a day on one occasion

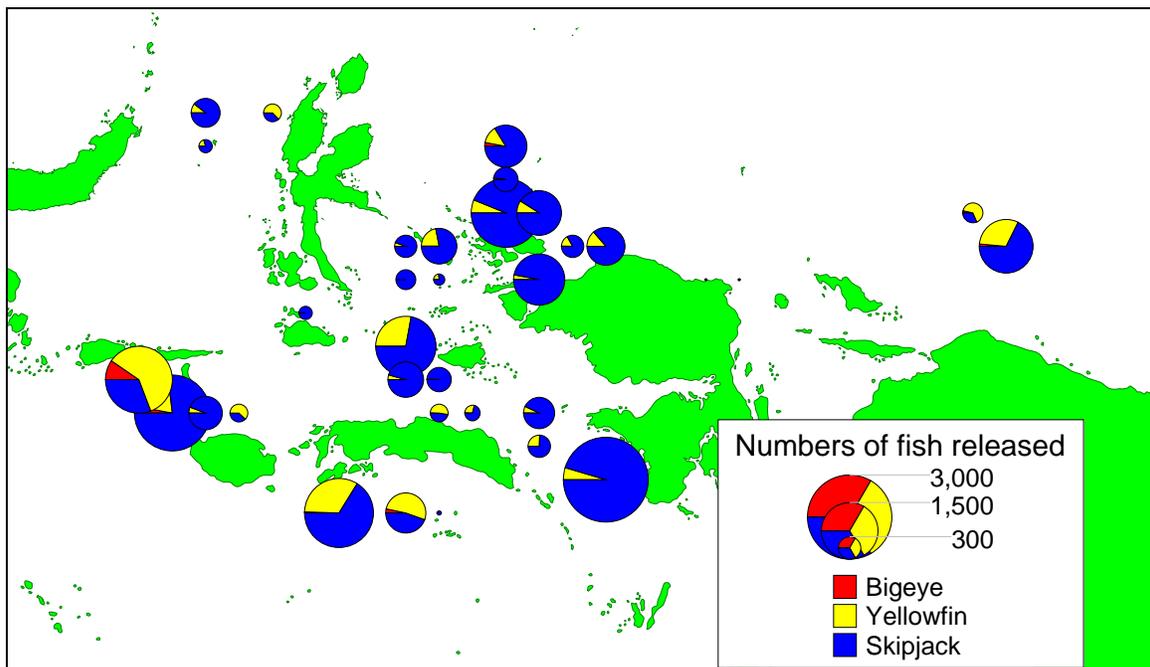
Over 80% of the cruise 5 releases were from anchored FADs which were not uniformly distributed throughout Indonesian waters fished, but rather clumped in productive areas,

invariably deeper than 1000m and usually deeper than 2000m. Only 7.8% of releases were from unassociated (free) schools, and 9% from logs or drifting FADs.

Whilst the great majority of releases were from associated schools, only 25.4 % of releases of conventional tags were the smaller 11cm Z tags (6,409), and 74.6% (18,788) the 13cm P tags.

The Cruise 1 releases are summarized by school in **Table 3**, while **Figure 2** below shows the distribution of the releases in Indonesian waters by 0.5 degree square, by species.

Figure 2. Distribution of releases in Pacific Indonesian waters by half degree square, by species, for PTTP Phase 2 Cruise 5 (28/09 to 30/10/2008)

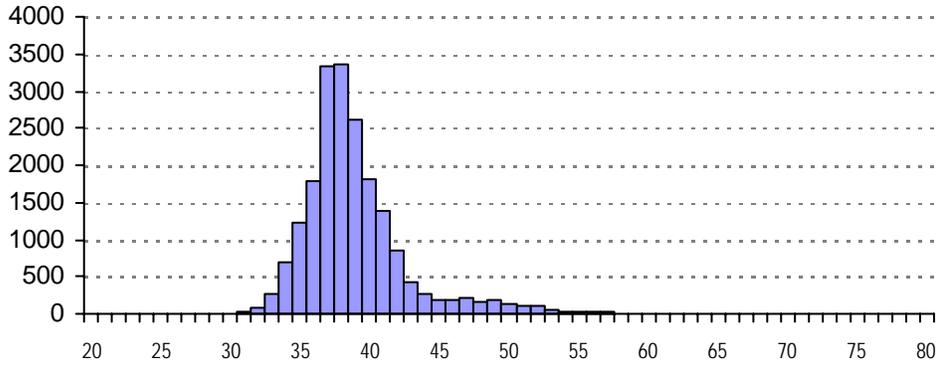


SIZE DISTRIBUTION OF TAGGED FISH

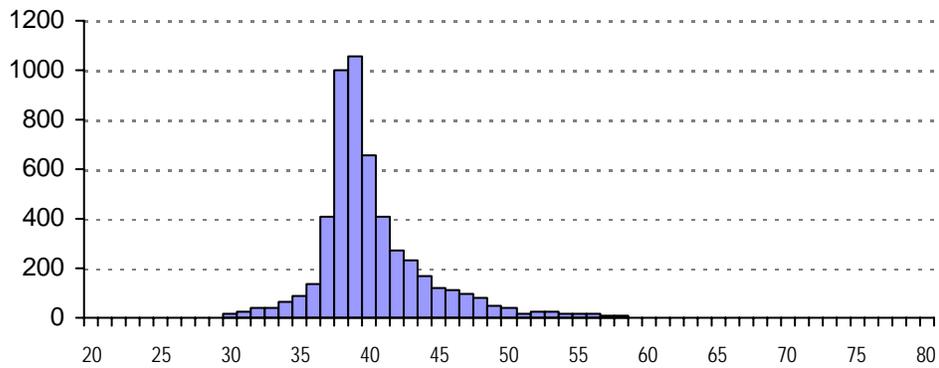
Figure 3 shows the size distribution of fish tagged during the cruise leg. Skipjack were of remarkably uniform size, mostly between 35 and 40cm. the yellowfin size range was slightly wider, but still most fish between 37 and 41cm. The small number of bigeye tagged were mostly larger than 38 cm.

Figure 3. Size distribution of fish tagged during Cruise 5 (28/9 to 30/10/2008)

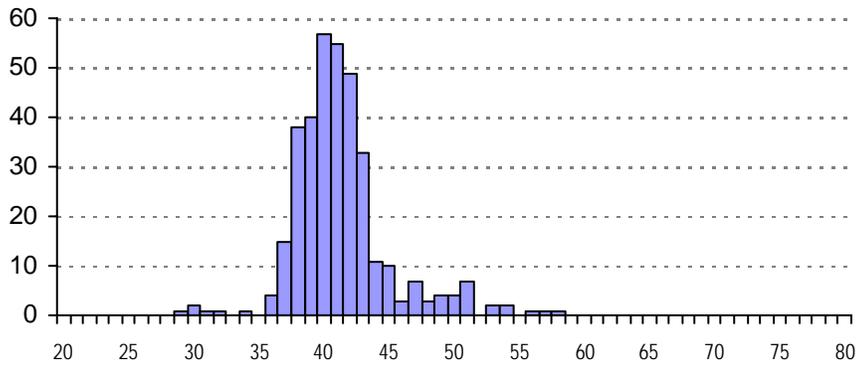
SKIPJACK n = 19,558



YELLOWFIN n = 5,267



BIGEYE n = 354



BAITING

The cruise was blessed with almost continuous good bait in plentiful supply, either from capture by the vessel itself using standard bouke ami gear or purchased from bagans, lift net vessels or platforms supplying bait to local pole-and-line vessels (funai, huhate). As noted, only two days during the cruise involved steaming with no bait, so bait was ultimately not a constraint.

Lights for baiting by the vessel were set on 15 nights in 12 locations. The average bait catch per night was 180 buckets, and was often supplemented with bait purchase from bagans. The tanks were filled on at least 10 occasions, enabling longer trips and translocations to new areas whilst fishing en route

Catches were dominated by anchovies – *Encrasicolina punctifer* (ocean anchovy) was surprisingly common in the deeply shelving bays where baiting often occurred, whereas *devisi* and *heterolobus* were taken in the more extensive shallow bays. Sprats were not taken in large numbers at any location; a species of sardine new to the vessel – presumed to be *longiceps*, with very adherent scales and good survival proved to be a mainstay in many areas. Larger small pelagic predators were often taken in numbers at many sites and often needed to be scoped out with larger mesh nets before loading could commence.

Obtaining bait from bagans proved to be very successful and was carried out in 5 occasions. After negotiations regarding bait availability and price, the vessel would move alongside the keeper net and the bait transferred with the help of bagan personnel, with usually vessel crew scooping the progressively crowded bait into larger bucket for quicker transfer. On most occasions, these larger buckets contained 4-5 kgs or twice the usual bucket wet weight of bait, but still less than the 6-7 kgs if the local vessels were loading. The price was generally Rp 25,000 per large bucket (USD 0.50 per kilo). Over 30% of the bait used in the trip was obtained from bagans and was usually of good quality if correctly and carefully loaded

Table 2. Summary of baitfishing activity during PTTP Phase 2 Cruise 5

Date	Location	Catch (bkts, hauls)	Purchased (2kg bkts)	Species
Sept 28 th	Mogoimbun Bay, N. Sulawesi		250	Anchovy (punctifer)
Sept 30 th	Bacan	115 (4)		Mixed
1st Oct	Aljui Bay, Waigeo	308 (2)		Fusiliers, anchovy
2 nd Oct	Aljui Bay, Waigeo	105(2)	100	Decapterus, anchovy
3 rd Oct	Saripa Bay, Waigeo	77 (2)		Anchovy
4 th Oct	Fofak Bay, Waigeo	308 (3)		
5 th Oct	Fofak Bay, Waigeo	176 (3)		
7 th Oct	Morotai, Halmahera	320 (1)		Anchovy (punctifer)
10 th Oct	Vesuvius Bay, Mangole	78 (2)		Sardine
11 th Oct	Penu Bay, Taliabu	300 (2)		Anchovy (punctifer)
13 th Oct	Kayeli Bay, Buru	56 (1)		Sardine
16 th Oct	Kapuas Mahu, Saparua		180	Sardine
17 th Oct	Kapuas Mahu		200	Sardine
19 th Oct	Selassi Bay, Papua	234 (3)		Sardine
21 st Oct	Seleman Bay, Ceram	70 (3)	270	Anchovy, sardine
23 rd Oct	Bimpienlol Bay, Batanta	229 (1)		Anchovy (devisi, het.)
25 th Oct	Bimpienlol Bay	40(1)		Anchovy (dev)
27 th Oct	Ansoes Bay	231(2)		Anchovy(dev), rastrelliger
TOTAL		2647 (31)	1000 (5)	

CONCLUSIONS

A highly successful cruise by any standards, with a large number of fish (over twice the nominal target of 10,000) tagged over a wide area of the Pacific (eastern) portion of the vast Indonesian EEZ. The proportion of skipjack was higher than on most other cruises but still with a good percentage of yellowfin and bigeye (> 20%). The bigeye proportion of the tagged numbers was low, but slightly higher than on the previous cruise in 1981. Tagged fish were generally of a good size, with Z tagged fish representing only about 30% of the total. The excellent bait catches and/or purchases made this wide coverage of the Indonesian Pacific waters possible.

The success of the cruise was in no small part thanks to the cooperation of many people in Indonesia - all of our RCCF colleague in this endeavour, but especially Pak Victor Nikijuluw, Pak Kusno Susanto and Pak Anung Widodo behind the scenes with preparations and necessary approvals for the cruise. Thanks to Pak Muhammad Natsir (Naseer) for his incredible work and support as chief liaison and counterpart scientist onboard, in the face of continuing demands from successive cruise leaders. Lt. Pandhi as the ever helpful and easy going security officer on board - good to have in some tight spots - and Pak Audy Mien for his cheerful contributions to over half of the cruise.

TABLE 3. Tag releases (all tags) by school during PTPP Phase 2 Cruise 5

sch no.	Date	Lat	Lon	type	Assoc.	Start	Stop	YFT	BET	SKJ	OTH	TOTAL	
1	28-Sep-08	0154.088N	12611.444E	2	3	1040		1115	1	0	315	0	316
2	28-Sep-08	0133.501N	12614.321E	1	3	1356		1429	46	0	85	0	131
3	28-Sep-08	0129.337N	12614.645E	1	3	1509		1528	23	0	87	0	110
4	28-Sep-08	0128.873N	12613.541E	5	5	1600		1612	0	0	4	0	4
5	30-Sep-08	0101.682S	12734.858E	2	3	950		1020	0	0	15	0	15
6	30-Sep-08	0106.540S	12759.264E	2	1	1335		1405	0	0	103	0	103
7	2-Oct-08	0020.737S	12931.404E	2	3	450		535	9	0	162	0	171
8	2-Oct-08	0023.572S	12928.284E	2	3	606		655	16	0	268	0	284
9	2-Oct-08	0025.794S	12929.975E	2	3	719		728	0	0	1	0	1
10	2-Oct-08	0026.004S	12933.125E	1	3	805		823	34	0	35	0	69
11	2-Oct-08	0028.110S	12933.367E	3	3	835		900	88	0	73	0	161
12	2-Oct-08	0030.055S	12932.380E	4	3	930		952	21	0	24	0	45
13	3-Oct-08	0030.936S	12933.053E	1	3	545		615	0	0	1	0	1
14	3-Oct-08	0028.749S	12933.559E	3	3	630		705	1	0	103	0	104
15	3-Oct-08	0026.350S	12933.126E	5	3	725		743	7	0	16	0	23
16	3-Oct-08	0028.317S	12924.590E	5	3	910		930	0	0	2	0	2
17	4-Oct-08	0016.255N	13041.504E	1	3	630		710	3	0	178	0	181
18	4-Oct-08	0017.122N	13045.851E	2	3	740		817	0	0	386	0	386
19	4-Oct-08	0015.011N	13047.182E	1	3	835		919	13	0	329	0	342
20	4-Oct-08	0012.794N	13053.998E	1	3	1024		1036	7	0	6	0	13
21	4-Oct-08	0010.716N	13054.177E	1	3	1050		1058	4	0	1	0	5
22	4-Oct-08	0011.611N	13100.352E	2	3	1143		1225	19	0	381	0	400
23	5-Oct-08	0011.545N	13100.385E	2	3	656		755	60	0	490	0	550
24	5-Oct-08	0010.953N	13105.923E	3	3	835		900	8	1	32	0	41
25	5-Oct-08	0011.564N	13100.405E	3	3	1004		1014	3	0	10	0	13
26	5-Oct-08	0012.796N	13054.005E	1	3	1110		1122	10	0	14	0	24
27	5-Oct-08	0015.323N	13049.479E	3	3	1201		1306	92	0	940	0	1032
28	5-Oct-08	0015.126N	13047.270E	1	3	1320		1333	1	0	20	0	21
29	5-Oct-08	0017.158N	13045.842E	1	3	1348		1411	1	0	69	0	70
30	5-Oct-08	0016.353N	13041.311E	1	3	1446		1515	0	0	71	0	71
31	6-Oct-08	0053.718N	13038.093E	1	3	1300		1322	0	0	5	0	5
32	6-Oct-08	0056.925N	13036.427E	1	3	1348		1440	7	0	339	0	346
33	6-Oct-08	0103.008N	13038.466E	2	3	1532		1604	42	0	431	0	473
34	6-Oct-08	0103.438N	13039.972E	2	3	1616		1700	74	25	299	0	398
35	8-Oct-08	0155.334N	12722.285E	1	3	935		950	5	0	4	0	9
36	8-Oct-08	0144.044N	12711.553E	1	3	1145		1235	105	0	62	0	167
37	8-Oct-08	0129.505N	12717.979E	1	3	1423		1440	1	0	0	0	1
38	10-Oct-08	0212.262S	12516.678E	1	3	1519		1557	210	72	216	0	498
39	10-Oct-08	0219.222S	12516.606E	1	3	1644		1734	614	90	252	0	956
40	11-Oct-08	0210.556S	12511.213E	1	3	830		850	0	0	1	0	1
41	11-Oct-08	0210.118S	12501.267E	1	3	1450		1545	178	15	31	0	224
42	12-Oct-08	0212.784S	12516.746E	1	3	1050		1130	153	9	97	0	259
43	12-Oct-08	0241.113S	12536.015E	1	3	1529		1543	35	36	11	0	82
44	12-Oct-08	0242.729S	12536.488E	1	2	1548		1645	121	20	659	0	800
45	12-Oct-08	0244.588S	12537.932E	1	3	1720		1750	172	11	215	0	398
46	12-Oct-08	0241.347S	12538.455E	1	2	1813		1845	18	3	13	0	34
47	13-Oct-08	0250.811S	12542.049E	1	3	615		714	152	3	1004	0	1159

sch no.	Date	Lat	Lon	type	Assoc.	Start	Stop	YFT	BET	SKJ	OTH	TOTAL	
48	13-Oct-08	0248.527S	12610.664E	1	3	1043		1118	33	0	535	0	568
49	13-Oct-08	0246.013S	12650.038E	3	3	1555		1625	133	0	81	0	214
50	14-Oct-08	0409.131S	12803.525E	1	2	1502		1552	217	3	331	0	551
51	17-Oct-08	0412.955S	12829.020E	1	3	1525		1650	482	8	1056	0	1546
52	18-Oct-08	0419.684S	12901.790E	3	4	730		818	236	12	159	0	407
53	18-Oct-08	0414.326S	12913.841E	1	2	1020		1041	135	14	154	0	303
54	18-Oct-08	0415.570S	12927.555E	1	2	1212		1235	65	2	61	0	128
55	18-Oct-08	0411.311S	12958.074E	1	2	1600		1620	0	0	20	0	20
56	19-Oct-08	0336.642S	13207.088E	3	3	812		920	15	0	1023	0	1038
57	20-Oct-08	0335.874S	13223.966E	3	3	630		742	122	0	1820	0	1942
58	20-Oct-08	0302.592S	13116.298E	2	1	1554		1614	80	0	232	0	312
59	20-Oct-08	0253.125S	13107.856E	2	1	1738		1803	36	1	494	0	531
60	21-Oct-08	0230.570S	13008.548E	2	3	556		620	44	1	109	0	154
61	21-Oct-08	0227.462S	12938.718E	2	1	1003		1020	1	0	317	0	318
62	21-Oct-08	0227.305S	12938.747E	2	1	1025		1036	0	0	19	0	19
63	21-Oct-08	0227.905S	12940.789E	2	1	1130		1145	0	0	23	0	23
64	21-Oct-08	0235.531S	12936.495E	1	3	1247		1330	99	1	90	0	190
65	22-Oct-08	0222.828S	12908.760E	4	1	905		1008	23	0	393	0	416
66	22-Oct-08	0217.729S	12908.852E	4	1	1052		1056	1	0	38	0	39
67	22-Oct-08	0216.807S	12907.940E	3	1	1105		1125	5	0	214	0	219
68	22-Oct-08	0154.595S	12908.591E	1	3	1357		1425	127	0	315	0	442
69	22-Oct-08	0146.704S	12907.247E	1	3	1516		1547	225	0	291	0	516
70	22-Oct-08	0131.462S	12908.627E	1	3	1730		1801	102	0	569	0	671
71	23-Oct-08	0057.076S	12903.653E	1	3	555		607	0	0	46	0	46
72	23-Oct-08	0050.017S	12907.036E	1	3	700		712	0	0	190	0	190
73	23-Oct-08	0025.784S	12930.995E	1	3	1127		1140	0	0	6	0	6
74	23-Oct-08	0025.888S	12932.677E	1	3	1150		1156	0	0	29	0	29
75	23-Oct-08	0026.277S	12933.811E	1	3	1204		1216	0	0	67	0	67
76	23-Oct-08	0028.598S	12934.383E	1	3	1231		1236	0	0	3	0	3
77	23-Oct-08	0030.186S	12933.657E	1	3	1227		1259	0	0	43	0	43
78	24-Oct-08	0030.476S	13124.009E	3	3	920		1050	37	0	1171	0	1208
79	26-Oct-08	0025.057S	13138.192E	1	3	1035		1105	36	0	218	0	254
80	26-Oct-08	0026.176S	13139.945E	1	3	1127		1136	1	0	0	0	1
81	26-Oct-08	0024.236S	13140.439E	1	3	1149		1200	7	1	3	0	11
82	26-Oct-08	0002.082S	13210.114E	1	3	1607		1645	102	0	646	0	748
83	27-Oct-08	0031.520S	13359.062E	1	3	620		630	0	0	3	0	3
84	27-Oct-08	0031.777S	13403.990E	1	3	717		722	5	0	1	0	6
85	29-Oct-08	0001.985N	13752.840E	1	3	545		630	143	8	70	0	221
86	29-Oct-08	0017.300S	13813.040E	1	3	1038		1125	401	18	876	0	1295
CRUISE 5													
TOTALS									5267	354	19576	0	25197

APPENDIX 1

DAILY LOG EXTRACTS

September 27th

Vessel alongside 0830 hrs after taking pilot onboard 0800 hrs; quite a day then unfolded - ADL arrived 1200 hrs from JKT/MCS, and all seemed to be going to plan - with even prospect of bait purchase at night; Victor Nikijuluw arrived 1530 hrs then nice reception at Fishery Port Office - all right things said, banner unfurled etc; then the full horror of Immigration procedures unfolded, with various changes of tack new requirements, new photos etc; agent (Pelni) very patient, working through it - all folks recalled from holiday to clear us, of course; Victor and DNKP head Xandra resolute when new charges were tabled (USD 3,800); eventually paid USD1K of precious cash, with promise to send the balance (now maybe < 1K) later; finally left after midnight, with 2 bait ground guides onboard, after successive delays to baiting plans; great effort by RCCF staff (Victor, Anung, Julianti and observer Naseer) and great to get away; teary farewell to outgoing CL who hung on through it all.

September 28th

Cast off with great relief 0030 hrs with two bait guides onboard; after passage through winding Lembeh Strait (must be amazing in daylight), arrived in vicinity of Capt Glenn's bagan in Mogogimbun Bay (0136 386N 125 08 994E) at 0230 hrs; numerous others nearby; loaded beautiful bait in fairly unsatisfactory manner (est 250 bkts of punctifer), haggled over price (eventually IDR 2.6 milion) then set off 0450 hrs eastwards, towards FAD positions (2) supplied by Glenn (65 nm away); on first subsurface rumpon at 1040 hrs, for 316 very welcome fish, with mix of SJ sizes and 1 YF; from then on, as headed south, all house FADs with vessels tied up, including one quite large (mothership); over 100 fish on two house FADs; some kite fishing seen and whale shark schools near last two FADs with larger fish (SJ and YF) associated in boilers but not biting (just 6 fish tagged); small whale sharks (3-4 m) and seems to be nursery area; posters given out; generally an interesting first day, with 561 fish tagged (70 YF); reasonable bait survival - steamed southwards over night, crossing the Equator for the first, but not the last time .

September 29th

NW of Bacan at dawn, in good weather (light SSW wind); about 80 bkts bait left; after several YF patches (not chummed), first school 0700 hrs - huge mass of fish (50m deep in extent, dense, and rising to surface on several occasions); proved able to resist all the tricks tried and did not bite; searching south - dolphin schools and other life; another similar area of fish with whale - huge amount just under vessel, right at surface, but not biting - some small SJ and YF seen jumping; large YF also jumping nearby; water more greenish in afternoon as heading south; one FAD fished south of Mandioli with four planked dinghys jigging - large area of small fish around FAD but all MT and AT; FADs fished so successfully on Tautai just south of Bacan no longer there (since demise of Usaha Mina at Labuha); headed in at 1500 hrs to Bacan baiting area, passing Labuha on the way in; just one bagan visible, unlike the gold rush days; anchored 1800 hrs in 35 m; good weather and hope for full tanks: sadly, the smell of skunk hangs in the air; after good signs early then fluctuating, first net 2230 hrs for 58 bkts of mixed bait with many predators - much discarded eg hairtails, small barracuda; second haul on lightboat 2300 hrs for 28 bkts of similar stuff. Moved SW across bay to where bagans are anchored.

September 30th

Third net 0330 hrs on the other side of the bay, near the bagans, for 31 bkts plus discards - more anchovy but still plenty of larger fish; final set on light boat 0430 hrs for just 7 bkts, 116 total for the night but quality poor - some devisi and heterolobus but much Dussumieria, pony fish, barracuda etc; checked nearby bagans for bait - only two fishing (most with dry nets since no fleet) - one had sold bait to a p/l boat seen going out at 0200 hrs and the other small bagan had dried up its catch of ~ 10 bkts of nice anchovy; up anchor 0540 hrs and headed south to fish old FAD positions close to Bacan before probably heading east to Waigeo. Encountered the boat which loaded last night in Bacan heading back in, then another (also from Bacan) on a FAD

towards Obi; they were fishing full speed with live bait hooks - mostly AT and some MT, with a few SJ; we managed 15 SJ tagged, then exchanged info, and gave posters, our fish catch and some tinned food; opted to head east, for Waigeo, after some clarification re Raja Ampat MPA; after 2 hrs stand-down, found area of small fish 1330 hrs - 103 tagged, all SJ; several other similar areas of small fish, but no luck with only large bait now left; finished fishing 1700 hrs and heading NE, steaming overnight.

October 1st

Good steam overnight - drifted from 0330 hrs, west of Gag; cooking for breaking of fast (Idul Fitr), served at 0415 hrs; fishing north towards Waigeo from sunrise; nice splasher of YF 0600 hrs but not interested in big bait; another at 0700 hrs, for same thing; headed in 0830 hrs for Aljui Bay; good chance for net repair and other vessel maintenance; last tank drained for crew food; proceeded to inside harbour - bagan area; outer harbour now beset with pearl shell culture lines - Indo-Chinese j/v with army association; five bagans but holiday for most - Naseer and THU checking; 8 FAD positions obtained from the single p/l vessel in the area, tied to a bagan; two not on holidays, one with bait (prepaid) but agreed could supply tonight; could not anchor at sites fished by Tautai previously but on north side, just west of entrance to inner harbour; anchored 1400 hrs in 46m; a little diving for some and general relaxation and plotting for others; first net 2000 hrs with dense bottom showing up to 10m off bottom; bait mass responded well to dimming - 240 bkts of mostly G. gymnopterus loaded in 4 tanks - fighting the bucket, so some bkts light; also some Decapterus, Hq and Rk; second net on light 2100 hrs for 68 bkts of mostly devisi; up anchor 2200 hrs and headed for FADs west of Waigeo, near Gebe.

October 2nd

Steaming towards FADs - arrive 0400 hrs at AB-2 then drift; more FADs in the area than anticipated - 9 fished, still others not; many with Indo/Philis bancas, with mixed crew and uncertain origin; 10 auxiliary dinghies with one banca, most with 1 to 3; fish caught on 6 FADs, most with plenty of fish (rippers/boilers), but obviously much natural food in vicinity and generally slow biting; small dolphins on most FADs perturbing fishing and in one case, pilot whales; 730 tagged (168 YF) before decided to head for Aljui Bay at 1030 hrs, with only large bait left and biting response much diminished; most fish ideal size (38-45cm) for tagging; all remaining bait (large) concentrated in two aft wells (very dense); inside inner Aljui 1600 hrs and purchased bait from one bagan (56 bkts for IDR 250,000); all other bait committed for the p/l vessels in the bay and part of some group; anchored 1730 hrs and set light boat; beautiful weather with light NE wind; first haul 0730 hrs for 72 bkts, mostly small Decapterus; second haul on light boat 0830 hrs for 33 bkts (more anchovy than first net but much sprat escaped); 105 bkts so almost 3 full tanks of smaller bait; opted to head for fishing ground (5 hrs); clocks turned ahead on hour now, so departed 2230 hrs for FADs near Gebe.

October 3rd

October 3rd

Arrived 0400 hrs at southern end of FAD array; calm sea with light E wind; started with two FADs close together; chummed pre-dawn but few signs and no bite - one SJ tagged; 9 more FADs then visited, ranging north, westwards, then back east; most with large amount of fish, rippling then boiling, and mostly SJ; fish caught on just 3 and only on two with more 20 fish 130 total, with just 8 YF; some FADs with bancas and auxiliary vessels (up to 15 on largest), others with no vessels; large amount of fish so very frustrating; called a halt at 1100 hrs for 2 hrs, and headed towards north Waigeo, to bait and fish in new area; resumed searching 1300 hrs, up to edge of shallow water, but no fish; anchored finally in 46m well inside in Saripa Bay at 1800 hrs - difficult to find anywhere shallow enough; light boat not set as no space in the small bay; first set 2130 hrs for a surprising 42 bkts of small anchovy; move to second site just inside the bay, on eastern side; anchored in 50m at 2230 hrs (0 04.769 S 130 22.328E)

October 4th

Second haul in outer bay 0200 hrs for 30 bkts small anchovy and sprat; headed for nearest FAD (30nm), crossing the Equator on the way; arrived just after 0600 hrs and fishing good from the start - over 900 fish tagged on first 3 FADs before 0930 hrs, despite the attentions of pilot whales and dolphins; 3 FADs with little or no fish, then 400 on last FAD at 1145 hrs before finally ran out of bait; astute mixing of smaller bait and larger fusiliers etc in the chumming tanks; headed on for Fofak Hbr at 1230 hrs and anchored 1530 hrs in 30m - large area of suitable depth and looks like an excellent baiting ground; sizeable village in western corner; first haul 2130 hrs, after variable signs, for 192 bkts (plus 20 of predators removed and 15 dying); then to lightboat 2230 hrs in 36m for just 24 bkts, exclusive of much larger bait scooped out; will move back further inside for final shot at 0230 hrs

October 5th

Third net 0215 hrs for 94 bkts - 308 total, and virtually full tanks; headed for FADs 0330 hrs; no signs on nearest FAD (AJ-6) but good catch on second which had produced 400 fish yesterday (550 tagged, 60 YF); huhate also fishing there; few on next four FADs 975 fish total); visited the huhate which was tied to 3rd FAD, obtained FAD positions, left posters etc - no tags; at noon, 7th FAD (AJ-7) produced excellent catch - 1033 fish (92 YF) yet had produced nothing yesterday; next three FADs for 162 (2 YF) before heading in, with one full tank left; one nice wahoo ~ 15 kgs trolled on the way in; 1823 for the day- less than 10% YF (175) and the first BE of the trip; anchored 1745 hrs in 30m - similar position to last night, with light boat further in; a pretty good day generally; time for a good swim and set lights; first haul after bright moon went down 1100 hrs for 58 bkts after much larger fish scooped out, but much still retained;

October 6th

Second haul on light boat 0015 hrs 27m for 54 bkts - better smaller bait; reset lights 0030 hrs - third haul delayed by rain until 0400 hrs - 68 bkts mixed; light boat went out so no final haul; up anchor 0445 hrs and headed for Budd Island FADs; steep chop from NE squall continued during the morning; arrived at FADs near Budd Is ~ 1000 hrs - 3 checked but no signs of fish; wind began to ease after noon; 3 more FADs with just 4 fish from the last of these at 1330 hrs; perseverance rewarded with success soon after - 1218 in 3 schools before bait ran out; good YF and 25 BE, and mostly P tag-size SJ; headed off west, with more FADs and vessels on the way; beautiful evening and fair passage - 4,400 in three days and just short of second bonus (5911)

October 7th

Beautiful morning, steaming into the vast Kao Bay, ringed by dormant volcanos; clocks put back one hour; excellent baiting area, with 11 bagans or more; most however inactive, while one had just sent bait to local factory and another with just 10 bkts of larger bait; reluctantly opted to bait at Morotai since Kao too far from Ternate if stay there overnight; nice steam (6 hrs north) to Morotai - various chores accomplished on the way; anchored 1830 hrs in 35m in quite spacious lagoon area; visits by security (again) for local pearl farms; bait seemed to gather very early close to bottom, with sprats at surface; not much cloud (first quarter now) - first haul 2130 hrs (no light boat because of generator breakdown); full net (400 bkts plus) with 320 bkts loaded and balance released - mostly excellent punctifer; stand down with plan to leave 0200 hrs; bait should last for several days if not used tomorrow

October 8th

Headed out 0200 hrs, clearing Doi Island and searching south along 2000m line; 3 FADs with no birds, boats of fish; one p/s transshipping - unknown nationality but presumably illegal Philippines; moved slightly offshore where all FADs with bancas, some Indonesian canoes and one larger troll vessel; a handful of fish on one FAD, 167 on the next (.. YF) on a long slow bite then one on the third; one Indon stern pole vessel which outfished us but many smaller fish; % YF was a good change; over two tanks now used for not many fish; heading more directly towards Ternate, with the biting sluggish; last school for one fish (another funai doing well) before heavy rain curtailed any more fishing and headed for Ternate; a modest 177 for the day but over 60% YF; good run into spectacular Ternate and surrounds; alongside in Fish Port (Pelabuhan Perikanan Nusantara)

1930 hrs, with the usual gaggle of agents, Immigration, Customs etc waiting; the usual different requirements for paper work etc - will spare the details; then advised that fees will be Rp 16 million (even after Fish Port waiving its usual fees off 5.3 million); the racket we know well, just a bit worse here; with Pak Dwi's help (and vehicle) got the money, had late coffee and offered transport for Keith and Cynthia at 0530 hrs in the morning; not down till well after midnight

October 9th

Up early to see Keith and Cynthia away, then early shopping at adjacent excellent market, more cash obtained (Bank Danamon the best - 1.5 million max but no limit to number of transactions), then good discussion with Pak Dwi as new (and first) TRO; left posters, forms (hard copy and electronic) and Rp 2,500,000 seed money; he in turn will organize radio publicity etc - looking good. Will repeat in Sorong but no sure what is happening in Bitung. Sea-ready, with all shopping done, at 1200 hrs, and expecting agent since 0900 hrs; the usual long story but finally got away at 1545 hrs, nearly 4 hrs late - little time for fishing but looked anyway - just glad to be away; new observer onboard (Aody, a planner from N Sulawesi Province office), plus THU, CL, Naseer and Pandhi; excellent dinner with all fresh vegs in great variety; will steam all night and hope to wake to good fishing north of Mangole in the morning.

October 10th

Good run overnight - many fishing vessels in area 30nm west of Bacan group; ~ 60nm from Mangole/Taliabu mid-passage at 0600 hrs; good weather but nothing seen all morning; entered Chapalulu Passage at noon and through to the other side (Banda Sea) 1310 hrs; steamed south, expecting to eventually find the array of FADs; first FAD found 20nm south of the pass - 498 fish tagged; second a further 6nm south - even more fish tagged (956) in a good bite, again with good % YF and BE; with darkness closing, last two FADs did not produce - one with just RR and mahi, and the other, almost in darkness, with a troller tied up but no fish underneath; daily total 1454, with 68% YF and BE, and 162 BE; headed back 1900 hrs, with at least 3 hrs to baitground; still about 45 bkts of the very good punctifer (and still some sprats)with one tank untouched; no doubt the first fish ever tagged in the Banda Sea - and a gamble which has paid off handsomely so far; anchored in 41m Vesuvius Bay 2300 hrs after setting lightboat in 35m.

October 11th

First haul 0330 hrs; earlier, a heavily armed navy patrol from Sanana arrived in dinghy, showing some belligerence; security officer roused and things quickly sorted, as one of them was his friend - sometimes good to have the security officer onboard; got the one ball of sardines that was around - 71 bkts loaded, mostly large sardines and many Mene, Megalaspis; second haul on light boat 0445 hrs for just 7 bkts; headed out for first FAD 0530 hrs, in oily calm and very hot; will then head west; aim to finish by 1300 hrs or so, to enable move to baitground on northern side of Taliabu (Teluk G Penu); at first FAD 0745 hrs but no joy - RR and mahi only, then dolphins arrived; similar on second, with tuna not coming up; one small SJ tagged; 3rd with an Indon troller with ~ 10 mosquito boats - no interest from fish; no signs on 4th FAD, so a skunk morning in reality; opted to circle west then return - T.G. Penu looks clear so can enter after dark; no rafts seen so returned to the third of the day on the way back; fishing in amongst the mosquitos, scrambled 224 fish (178 YF, 15 BE) before good bait ran out; headed in for the pass (Selat Capalulu), where standing wave encountered (tide vs current); emptied tanks of the large essentially useless bait (3 big baskets - over 100 kgs); anchored in 30m at 2200 hrs in an nice big bay - steep and deep but with a good shelf area.

October 12th

First haul 0400 hrs after moonset, for 235 bkts of smallish punctifer, after scooping out much larger fish (Trichiurus, Lactarius, Selar etc); second haul on lightboat 0515 hrs - another big jag - 70 bkts of an estimated 300 loaded, filled chumming tanks, then released the rest; on first FAD 1045 hrs - had to get past RR and mahi to catch fish, but eventually 259 (153 YF, 9 BE), passing the 8,000 mark; nothing on second FAD for the second day running, after 1000 on the first day; headed for the 90f seamount 40 nm away, with hopefully FADs on the way; no FADs seen until

close to the seamount, then suddenly numerous FADs with pump boats and troll boats, plus logs; fished 2 logs and 2 FADs with success, in the 3 hours of daylight left, for over 1300 fish, and 1573 for the day - 79 BE and 499 YF; poled some pompano mahi in the log school; two bonuses for the day, and 9340 for the cruise ..opted to drift until morning rather than head for Ceram, since still 3.5 tanks left and moon very bright and setting after 0500 hrs in a cloudless sky.

October 13th

Drifted until 0440 hrs in calm conditions; nothing under the boat so steaming back towards seamount (2 nm) to continue fishing; instant action, with 1159 tagged on one tank of bait; opted then to steam east - hard to leave with so much fish in the area - birds, FADs and logs - but stood down until 0900 hrs whilst steaming; fished one FAD 30nm east for 568 fish then stood down again until 1400 hrs; just one FAD after that (1600 hrs) - mostly very small tuna but good % YF in the 214 tagged; nothing after that, when so close to the 2000 for the day (1941) and over 11,000 now for the cruise; approval to go to Ambon (much nearer and other advantages) for the full moon which then meant could try baiting at Teluk Kayeli; anchored in 42m 2100 hrs - very steep-to and not enough space for light boat;

October 14th

Haul maybe a bit late at 0440 hrs, with moon still up but daylight beginning to show; 56 bkts of mixed, with long sardine, Dussumieria etc; headed out for seamount in Ambon surrounds (3.5 hrs); nothing all morning and into the afternoon; headed for second seamount south of Ambon Bay and a ridge where FADs might be located; started to see p/l boats near second seamount; one raft with YF chummed without success; CL locked in the office for some time after lock failure but got out just in time for next raft - this with one p/l vessel just leaving, another still fishing and 4 troll canoes- produced well, with 551 (40%YF and BE) in a long slow bite with some bursts of fish; whales nearby both rafts; finished 1630 hrs and managed to get agent to met boat at PPN Ambon and tied up by 1930 hrs; crew not cleared but all else seems OK; obtained money on cards and set for the morning; also discussed bagan locations, price etc with a local fish buyer so might get off to good start Thursday afternoon - let the howling begin ..

October 15th

Agent not there until after 0930 hrs then crew not actually allowed to go out until lunchtime - police even arrived at one stage; gate security had misread entry date for expiry date; most crew and SPC shopping done by lunch, with aid of rented angkot, then met with Ibu Ika (PPN chief), who graciously accepted to be Ambon TRO; advance of Rp 2,500,000 provided, with forms, posters etc; then an afternoon trip to two freezer operations associated with mini-seiners, near Pattimura airport; annual throughput probably only ~ 6,000t but it all counts; set their own rumpons, with fish sent to Bali., JKT, Muncar etc; posters given and promises of cooperation made; back to vessel to find one crew rampant, some damage in galley and office door still without lock; good conversation with one unloading vessel which had fished next to us on the FAD the day before; confirmed bait hard to get at present (moon) but fish biting well; opted to dine out and did so very well (good seafood); vehicle booked for early morning vege run ..

October 16th

Early AM vegetable run - almost a pleasure in these markets with the vast array of good produce; sightseeing trip organized with angkot - 8 takers amongst crew and observers; CL trying to check mail, change SOG-JKT ticket (without success) and more shopping; very slippery agent paid (after yet another trip to the bank - 6th this break); posters delivered to nearby gillnetters (2, each with a carrier - seems that they set 25nm of net, target mostly pomfret and tenggiri (and presumably shark; fish Banda Sea fringes) and mostly tranship at sea - unusual to be in port); finally able to clear out and headed for Saparua to buy bait at Poperu - arrived 2230 hrs, to find 6 bagans, but just 2 active, and with small amount of bait, all committed; opted to try Kampuas Mahu (bay on north side of Saparua - 3 hrs away).

October 17th

Arrived Kampuas Mahu 0230 hrs - more bagans (5 ?) and with more bait; agreed to take all bait from one bagan after loading 25 bkts to one catcher; another bagan with lovely full net but promised for tomorrow; loaded 98 big bkts but light for big bkts - est 180 normal bkts (4 tanks) - hailed as 75 bkts @ 25,000 Rp (1.75 million, paid 1.6 plus 0.1 bonus); usually 15,000 Rp but bagan gets 10% share of fish catch; have cell phone if return tonight which seems likely; headed off on dawn for ridge south of Ambon - ETA 1130hrs but hopefully will see fish before that; nothing seen until first FAD from previous visit - again no catch; headed south-east after that but little until on a log/FAD at 1529 hrs - good long bite for 1546 fish (482 YF, 8 BE); ; little after, breezer on a log which did not bite; headed back to Kampuas Mahu, arriving 2230 hrs - contacted last night's supplier who agreed to supply again, but maybe 8 or more operating; loaded all they had ~ 75 of their bkts of 200 of ours, to fill tanks (1.75 million Rp); very happy and headed off after loading

October 18th

Departed after loading bait at 0015 hrs, initially heading due south; turned east 0600 hrs; first (and only) FAD of the day with troller tied to it; 407 tagged (60% YF and a few BE); all action after that on floating Nipa butts - 303 tagged at 1020 hrs (nearly half YF), 128 at noon (half YF and BE) then close to seamount north of Banda, just 20 SJ on a slow biting school; daily total 656 (28 BE, 436YF); finished search 1800 hrs and headed for Selassi Bay - should be on FADs just offshore in early AM.

October 19th

Good run overnight, with seas much calmer east of the Gorong Islands, in a southerly extension of Ceram Sea ; first FAD just after 0800 hrs with two canoes and a huhate (KM Cinta Bahari 5) which came as we were fishing; good bite after slow start, with 1039 tagged (but just 15 YF) in an hour before the 100 bkts of bait finished; posters distributed, and headed in to Selassi Bay - 4 hrs to bait location; one bagan/rakit and two vessels with own net in the chosen bay, and possibly others elsewhere (a very big harbour); anchored 105 and light boat 1500 hrs in 50m and 42m respectively; some minor problem with engine telegraph today - at least hope only minor; a good day given the limited bait; conversations with vessels revealed that 3 or more vessels fish for CB - unload to carriers who supply Jakarta and Bitung (one carrier now in nearby village); very few FADs in the area - got positions of 3, only one of which is new; first haul 2000 hrs for 107 bkts of medium sardines - big red spot but did not get it all; second haul on light boat 2100 hrs as moon beginning to show; 80 bkts, so opted to stay there for final shot at 0200 hrs.

October 20th

Third net 0200 hrs for 47 bkts (total 234 bkts, but much larger bait); called by the one bagan selling bait 0300 hrs, with another p/l vessel waiting - no catch in their haul so kept going, heading for the closer FAD position, 25 nm away; on FAD 0615 hrs with two p/l vessels already fishing (same ones as in baiting area) - huge bite, with 1942 on one tank of bait, and despite several long stoppages when ran out of tags; 95% SJ and already 3000 tagged in the area, so time to move on; headed for north Ceram via the area where Tautai got some good free school fish so many years ago; don't expect any FADs in this area nowadays, according to skippers last night; the morning wiped out by heavy rain squalls and following wind; eventually cleared, and two good free schools mid/late afternoon for 312 and 531 fish, mostly SJ; 2785 for the day (second highest ever) and over 18,000 for the cruise - 3 bonuses today; will steam to a point between Ceram and Misool, in deep water, and drift until dawn; fish towards probably Ceram, depending on weather; a great day, all in all.

October 21st

Drifting from 0130 hrs onwards; just happened to be ~ 3nm from a FAD, and on it at dawn, with 3 huhate already fishing; a bit tight, and using a lot of bait, so pulled out after 154 tagged (nearly all SJ), with some large fish amongst them (> 60cm); distributed posters by r/ducky and headed west; little for several hours until came on an area of free schools, but not all biting well; 360 in

three different schools (two others chummed) before heading in towards Seleman Bay; encountered a FAD closer to Ceram, with 5 canoes around it; good fish with high % YF and even a few BE - mixed sizes; 190 tagged before bait finally finished, distributed fish and posters to initially disgruntled fishermen and headed in 1330 hrs; beautiful bay (Seleman), with Tahiti-like jagged cliffs, but hard to find enough shallow water; finally anchored light boat and 105 at 1830 hrs in 46m and 51m respectively, off a sizeable village; 704 for the day, somewhat down from yesterday, but new area and a good day; first haul 2100 hrs with few signs for a pleasing 54 bkts of sardines, after scooping out predators; second on light boat for 8 bkts, mostly squid, then ~ 60 bkts bought from nearby bagan for Rp 750,000 (30@25,000).

October 22nd

Whilst making third set, advance party checked out second bagan in the inner bay - 20 large bkts of anchovy seemed to be held, so decided to take it; 3rd haul at 0130 hrs on 105 yielded just 5 bkts after current problems; steamed to second bagan and had to wait for second haul there, but well worth it, as then at 0345 hrs loaded ~ 200 bkts of beautiful anchovy (large h and some p) - 50 @25,000 = Rp 1,250,000; thence to first bagan who had made another shot for ~ 30 bkts of sprats, sardine and anchovy (16@25,000 = Rp 400,000); tanks filled to groaning, with possibly just more than 350 bkts loaded in total - maybe the most ever; headed out at 0445 hrs along 129E line, bound for Gag vicinity; a few schools did not bite early but then large area of free schools found 30nm north of Seleman; not good biting with much natural bait, but 674 tagged from three areas of fish; 20nm further north, began to see FADs SSE of Pisang Is - 3 fished along the northerly line before dark - good biting, with 1630 tagged; just two tanks left but 2304 for the day (20% YF) and over 21,000 for the cruise; steamed for another 3 hrs, to be north of Boo Islands and banks, then drifted until 0520 hrs next morning.

October 23rd

Drifting before midnight then engine start 0530 hrs; one FAD nearby with vessels associated; 56 tagged, then another 7 nm away for 190 tags - mostly small fish; then very little until the large area of FADs previously fished near Gebe; many small fish (and soon ran out of Z tags), too many FADs too close together, and all too much; no FADs in closer nowadays, as in Tautai days; headed in past Gag for Batanta - just need ~ 100 bkts bait (half tank left) for half day's fishing east of Sorong tomorrow morning before going in to Sorong to clear and get water/fuel ... 384 tagged for the day and no bonus for a change .. brief spell of double tagging this morning before coming to senses and database reasserted itself - but it will happen; steamed towards Waiwarai Bay for baiting, arriving in vicinity 2030 hrs; access initially difficult, then found the bay is now (once again) a patrolled pearl farm; after agonizing about what to do, headed for Bimpienlol Bay which seems to be free, though Marchesa Bay is not anymore, apparently; anchored in the bay at midnight (light boat and 105) in 52m, and a p/l vessel with lights set nearby.

October 24th

First haul 0220 hrs, with a good red spot midwater; some current but 229 bkts of very nice anchovy (d,h mixed) in the haul; recalled light boat and departed for the 1000m line east of Sorong at 0330 hrs; good log at 0630 hrs with some signs at 20m but no bite; similarly with another larger newer log, then birds and large YF with whales; finally, as time running out, found a home-made log with 15 canoes around it at 0930 hrs; bit for over an hour, and 1208 fish tagged, with just 37(3%) YF; some large SJ to 65cm; reluctantly headed in with just another 340 needed for another bonus; nothing sighted on the run in; alongside at Sorong wharf 1530 hrs; doesn't look very secure, so will need good watch; difficulties with fuel payment since bank closed and no arrangements made apparently; might be able to get some by bank transfer tomorrow if quality from secondary suppliers acceptable; still have 16KI FOB so enough to get to Jayapura - though not sure what can be had there .. Paid for shore passes, rental Kijang and watchman for 1.75 million.

October 25th

A hectic day, with market and shopping, regularizing tag returns with the local TRO, visiting the PT Citra Raja Amapt cannery and outgoing CL preparing for departure. BML and PGW arrived at Sorong airport at 15:15, plane was 1 hour late. Meet briefly with outgoing CL before this one took his plane with a well deserve smile on his face. Took a bit of time to find the boat with nobody to told us where it was. But great that fuel already loaded and 4 bait tank left; crew were desperately awaiting for money so we gave them 500 usd each and they took off for a last chopping. Then we have to pay the usual astonishing agent bill. Left Sorong harbor at 21:00 after awaiting some shopping addicted crew for 3 hours...

October 26th

Arrived and anchor at Bimpienlol Bay baitground at 00:30 in 51 meters; decided not not deploy light boat as already 4 tanks full and a long road to do. That was a mistake as the net (hauled at 3:30 after some delay due to current) only brought 40 buckets of mixed species, being pertubated by some schools of scads. Start steaming at 04:30. Nothing sighted before 10am. Found a group of 4 anchored payaos about 15 miles NE from FAD 156 where previous CL deployed 1208 fish on the morning of 24th. Deployed 254 tags around the 4 fads then headed to the NE Sorong Fad position provided by the same sus-mentioned suspect. After chumming without success a big log closed to that position, finally found one Indonesian fishing aggregation with 2 mother boats and about 40 small fishing units 12 miles NE of the position. Tagged 748 fish on this one before deciding to stop for keeping 2 full bait tanks for the next day. End up with a usefull 1014 fish tagged for the day, included 206 double-tagged.

October 27th

after steaming all night, found a group of 3 anchored philippino style Fads 20 miles north of Manokwari; looks like recently deployed with mainly mahi mahi and small rru associated, less than 10 small sj tagged. Fished 3 bamboo raft (from an array of 10) anchored about 7 to 10 miles east of Manokwari Point but only small fish associated... Then ran toward Numfar island west point and chum a large and promising current line with hips of big logs associated and flock of birds fishing on baitfish. Alas no tuna under or too small for the goal. No other sight on the way to Ansoes baitground and we were in too shallow waters after 17h anyway.. Lots of rain. Arrived at Ansoes Bay at 22:45 , drop light boat at 23:15, boat at anchor at 23:25 in 33 m by 0145610S/13548050E.

October 28th

First set at 01:45 for 130 buckets of anchovies (dev) , small rastrelliger and few herrings. Second set on light boat at 2:30 for 101 buckets of the same species. Good quality bait without any big fish between. Off anchor at 3:30. Drive west to turn around Sorenarwa point before heading to TAO buoy. Turned the point at 0645. In between Sorenarwa and Biak all morning without seeing any sign of tuna. Making the second Garmin plotter working at the bridge has been the main task during that time. Travelling all afternoon before clearing out of the shallow waters (<600 m) at sunset...a 0 day but with no waste of bait...ETA at TAO is 05 tomorrow morning.

October 29th

Arrived on the TAO position at 0445, but not in sight. Found it 8nm WNW of expected position with an Indonesian purse seine vessel making a set [F/V Transmitramas 3 (GT-188 ; No. 3188) is the catcher vessel in a group seine operation]. Managed to tagged 221 fish from what was remaining at the TAO but fish were not very responsive to the bait...and for a good reason! Gave indonesian poster to the skiff and hit the road back to Jayapura at 07 am. Found an old Phillipino style anchored Fad at about 1030 in 4000m of water...the one we've been waiting for: 1295 fish tagged in 47 minutes. We didn't even feel the rain that was heavily falling...The 25,000 mark for fish tagged in Indonesia in the pocket (25,197 exactly). Could continue the road to Jayapura in peacefull mind.