

PACIFIC TUNA TAGGING PROJECT WP 4

CRUISE REPORT No. 1

17th September to 07th October 2017

INTRODUCTION

This report summarizes activities of the first cruise of the Pacific Tuna Tagging Project (PTTP) Phase 2, WP4, during a 21 day period. Following a departure from Noro on the 17th September, fishing began in PNG waters after clearance in Buka on the 19th September. The vessel was back in Noro on the 7th October.

Scientific SPC and in-country personnel onboard the FV Soltai 105 during the cruise are listed in Table 1.

Table 1. SPC and In-Country personal onboard during Cruise 1.

Name	Title	Affiliation	Period
Bruno Leroy	Cruise leader	SPC	17/09/17 – 06/09/17
Francois Roupsard	Tagging technician	SPC	17/09/17 – 29/09/17
Lui Bell	At sea Technician	SPC attachment	17/09/17 – 29/09/17
Peter Sharples	Tagging technician	SPC contractor	19/09/17 – 06/09/17
Jeff Muir	Tagging technician	SPC contractor	29/09/17 – 06/09/17
Marion Boutigny	At sea Technician	SPC contractor	29/09/17 – 06/09/17
Elison Semi	PNG observer	NFA	19/09/17 – 06/09/17
David Kela	Water Police	NFA	19/09/17 – 06/09/17

GENERAL DESCRIPTION OF SEARCHING and FISHING ACTIVITY

The vessel departed Noro late on the evening of September 17th, and went baiting in Ropa, Choiseul Island before heading to PNG waters and fishing on the way to Buka where the clearance formalities took place on the 19th September. After unexpected poor baiting results (see Table 4) in Matchin Bay for two consecutive nights and in Nissan Island on the third night, the initial plan to go fishing in the Solomon Sea was abandoned and the vessel instead went fishing in the Bismark Sea, north of Kimbe Bay.

Five days were spent fishing on the FADs anchored north of New Britain Island with only one FAD seen with an associated good amount of fish. A large percentage (close to 80%) of the smaller tag size was used in this area reflecting the small fish caught. Next the Dyaul seamount provided two excellent fishing days with over 3,500 releases. A stop in Kavieng on the 29th September allowed change of some scientific personal and taking on off some provisions. After an unsuccessful attempt at fishing around Tench Island, the vessel fished south along the east side of New Ireland to arrive in Buka on the 6th October and clear-out of PNG. The cruise ended up back in Noro on the 7th Oct.

The track of the cruise, based on schools and 1,800 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 (2,425 nautical miles) during WP4 Cruise 1.

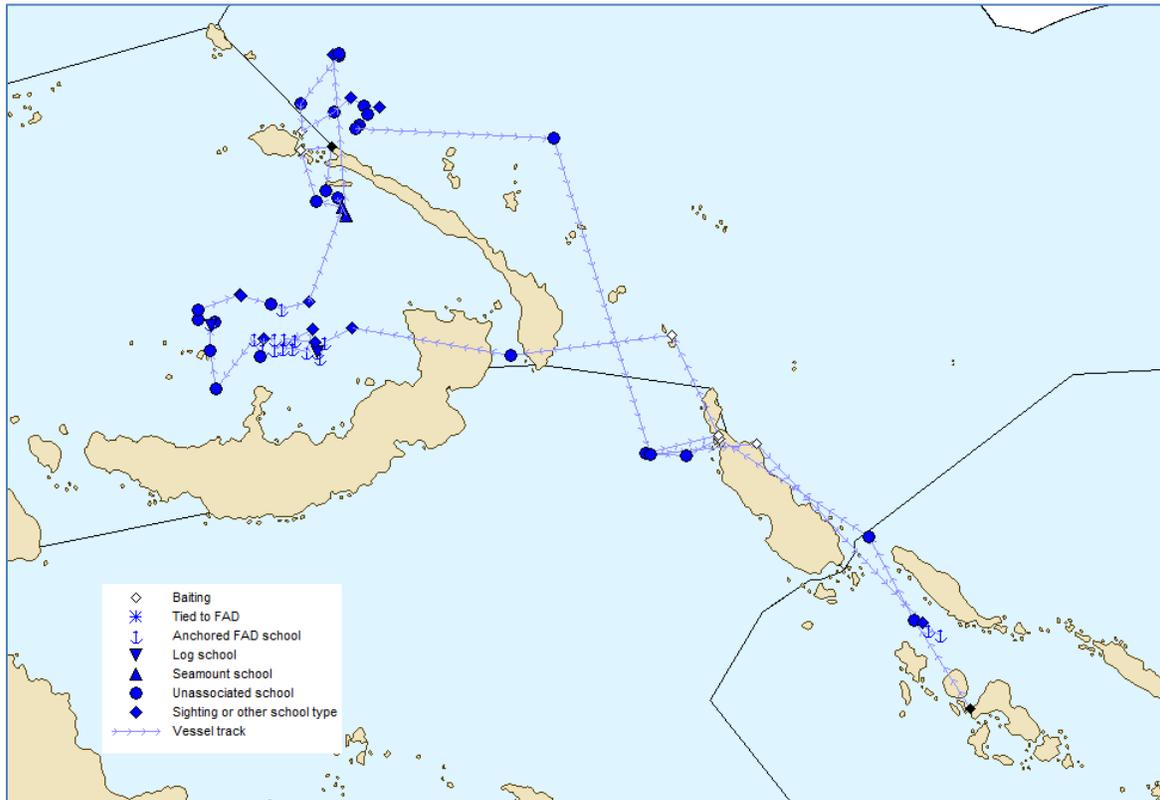


Table 2. Summary of Cruise 1 activity, with the number of conventional tag releases per day per species.

Date	Activity	Conventional releases			Total releases
		SJ	YF	BE	
Sep 17 th	In port Noro; baiting Ropa	-	-	-	-
Sep 18 th	Searching and fishing on the way to Buka	21	104	0	125
Sep 19 th	In port Buka - baiting Matchin Bay				-
Sep 20 th	Searching and fishing - baiting Matchin Bay	71	2	0	73
Sep 21 th	Searching and fishing - baiting Nissan island	0	0	0	0
Sep 22 nd	Searching and fishing – baiting Cape Lambert	0	0	0	0
Sep 23 rd	Searching and fishing – baiting Bangula Bay	131	71	0	202
Sep 24 th	Searching and fishing – baiting Bangula Bay	1577	184	0	1761
Sep 25 st	Searching and fishing – baiting Emeline bay	125	16	0	141
Sep 26 nd	Searching and fishing – no baiting	80	15	0	95
Sep 27 rd	Searching and fishing – baiting Cape Lambert	48	0	0	48
Sep 28 th	Searching and fishing – baiting Nusandalau	2249	139	1	2389
Sep 29 th	In port Kavieng – baiting Nusandalau	-	-	-	-
Sep 30 th	Searching and fishing – baiting Isabel Pass	891	242	0	1133
Oct 01 st	Searching and fishing – baiting Isabel Pass	69	0	0	69
Oct 02 nd	Searching and fishing – no baiting	167	58	1	226
Oct 03 rd	Searching and fishing – no baiting	0	0	0	0
Oct 04 th	Searching and fishing – baiting Machin Bay	0	0	0	0
Oct 05 th	Searching and fishing	0	0	0	0
Oct 06 th	In port Buka- Leave mid-day				
Oct 07 th	Searching and fishing-arrive Noro 14:30	379			379
	CRUISE TOTAL	5808	831	2	6641

TAG RELEASES

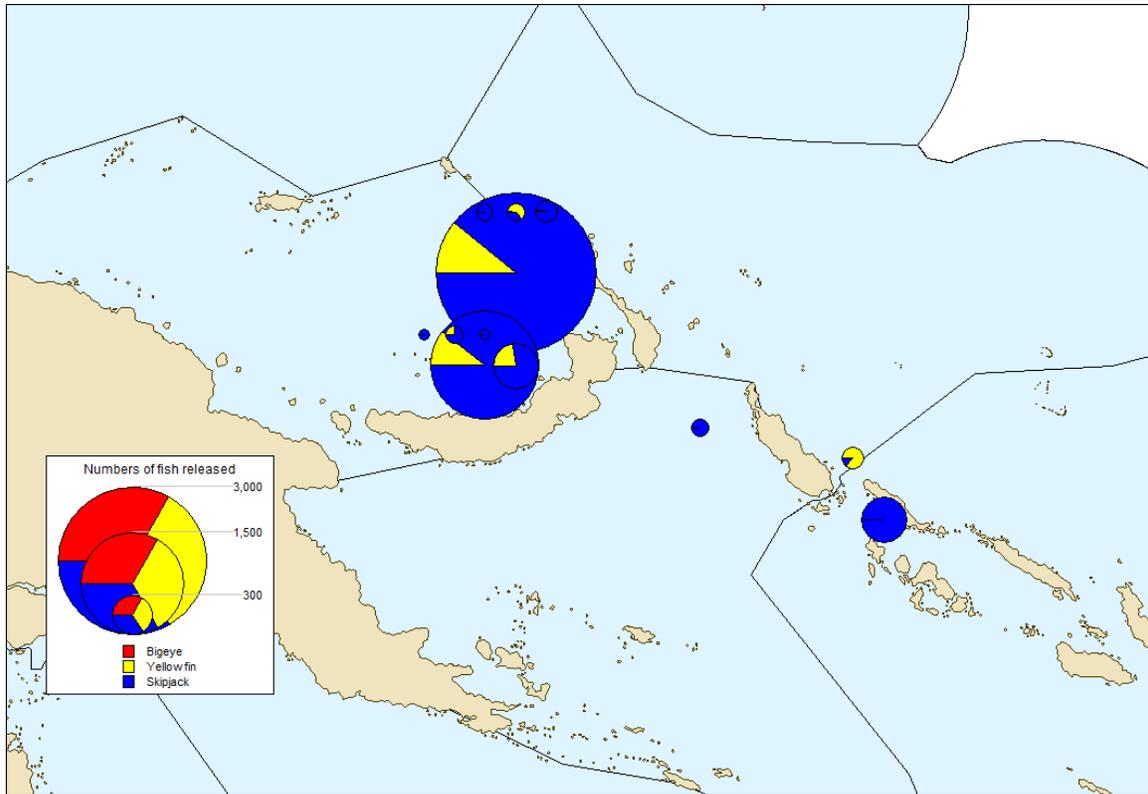
Of the 21 days of the cruise, 17 days were spent searching and fishing and 4 full or partial days in port.

A total of 6,641 fish was tagged and released during the cruise, at a relatively low (compare to previous tagging experiments in PNG waters) average of 390 fish per day. The last 379 fish were tagged in Solomon Islands waters. The species composition in total was 87% skipjack, 13% yellowfin with only two bigeye tuna tagged.

55% of the releases were the smaller 11 cm tags. 36% of releases were in association with anchored FADs, 37% with seamount (Dyaul) and the free school releases representing 23%. The rest of the tags were released on few logs and drifting fads.

The releases are summarized by school, location, school type day and area in **Appendix 1**, whereas **Figure 2** shows the distribution of releases during the cruise.

Figure 2: Distribution of tag releases by species.

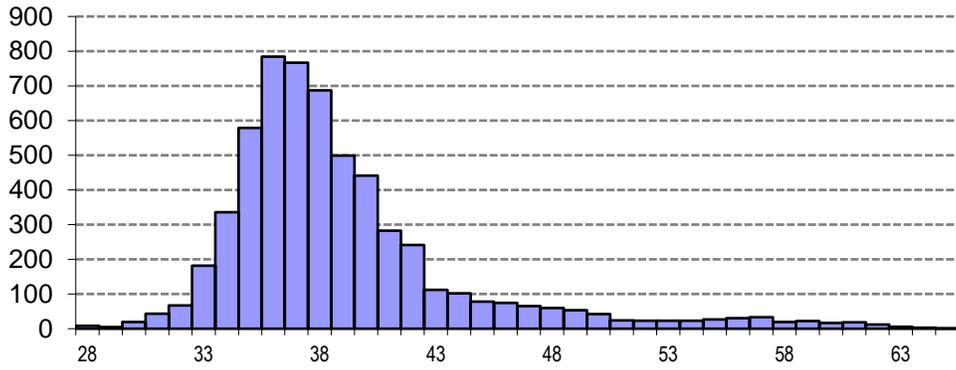


SIZE DISTRIBUTION OF TAGGED FISH

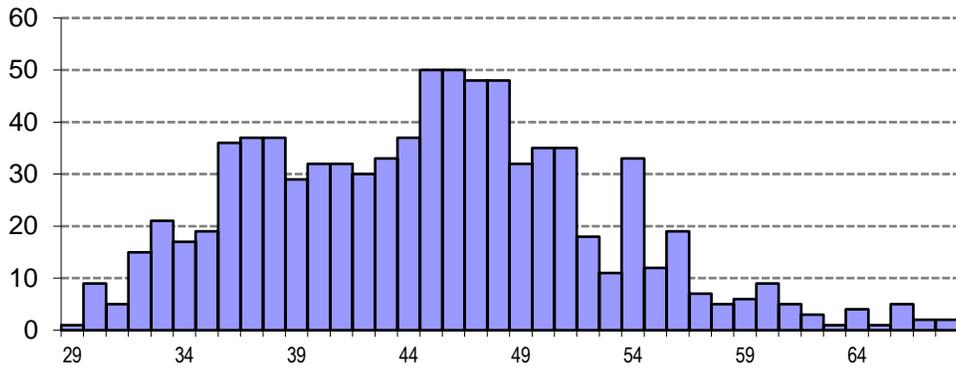
Figure 3 shows the size distribution of fish tagged during WP4-01. The skipjack size distribution was uni-modal (37 cm) with a small tail of larger fish (mostly coming from the free schools fished north of Isabel Pass), whereas the yellowfin sizes were mostly small fish (36-43 cm) with very few fish over 50 cm.

Figure 3: Size distribution of fish tagged during Cruise 1.

Skipjack n = 5808



Yellowfin n = 831



ARCHIVAL TAG SUMMARY

No archival tags were released during WP4-01.

BIOLOGICAL SAMPLING

The collection of biological samples was regularly implemented after most of the tagging events on tuna unsuitable for tagging (injured) and bycatch species. For each specimen, otoliths, dorsal spine (for tuna only), stomach, liver sample, muscle sample and gonads were collected and stored in a dedicated freezer. All samples have been repatriated to Noumea by the different SPC staff teams who participated to the cruise. Table 3 gives the number of samples collected in PNG waters

Table 3. Number of samples per species and sample type

Species	Muscle	Liver	Stomach	Otoliths	Gonads	Dorsal spines	Total
FRI	2	2	2	2	2	2	12
DOL	2	2	2		2	1	9
RRU	1	1	1	1	1	1	6
SKJ	72	72	72	70	72	62	420
YFT	34	34	34	33	34	24	193
Total	111	111	111	106	111	90	640

BAITING

The cruise was hampered from the beginning by a lack of bait. This had never been experienced before over the history of the PTTP in the Matchin Bay bait ground. Another previously very productive bait ground, Nusandalau, was also quite disappointing. Of the seven different bait grounds visited in PNG, only three provided decent catches of good bait species and size (see Table 5). In the other places, the anchovies were in juvenile stages or completely absent. Bangula Bay, a place not visited in previous PTTP cruises, although a bit far from the main fishing grounds, was revealed to be a productive bait ground and very accessible.

To be noted we experienced an incident in Matchin Bay bait ground with the local people from Taiof Island stealing our auxiliary light and its battery at our first visit and cutting-out the dinghy light and our main rope anchor during our last visit. This happened without sign of protestation about our presence. The presence onboard of a police officer did not prevent these incidents from taking place.

Table 5. Summary of bait fishing activity during WP4 Cruise 1.

Date	Location	Catch (bkts loaded, hauls)	Species
17 Sep	Ropa	42 (1)	Sprat (lewisi)
19 Sep	Matchin Bay	68 (2)	Dussumeria, pony fish, few gold anch
20 Sep	Matchin bay	160 (2)	sardines
21 Sep	Nissan Isl	88 (2)	Sardines, few fusiliers
22 Sep	Cape Lambert	38 (2)	Juvenile anchovies and rastrelliger
23 Sep	Bangula Bay	273 (2)	Anchovies (dev), pellona, rastrelliger
24 Sep	Bangula Bay	94 (2)	Gold anchovies, pellona
25 Sep	Emeline Bay	195 (2)	Gold anchovies, rastrelliger juv.
27 Sep	Cape Lambert	153 (2)	Small gold anch. Juvenile rastrelligers
28 Sep	Nusandalau	57 (2)	Small gold anch, silver sprat, sardinella
29 Sep	Nusandalau	62 (2)	Small gold anch, silver sprat, sardinella
30 Sep	Isabel Pass	165 (1)	Silver sprat, gold anchovies
1 Oct	Isabel Pass	300 (2)	Silver sprat, gold anchovies
Total		1695 (24)	

CONCLUSIONS

The cruise results are, in terms of tag releases, under the expected target by over 50% compared to all previous tagging experiments in the same region. Also the encountered fish sizes were smaller on average. The poor bait catches, for sure, prevented some better fishing happening. However, the complete lack of surface fish observed in some of the covered area (east New Ireland and Bougainville) had not been experienced before.

The observed bait-ground access situation was degraded compared to historic access earlier in the PTTTP and seemed to have necessitated the presence of a police officer for the first time ever.

FV Soltai 105, although showing some serious signs of ageing, performed well in general and the past tagging experience of part of the crew was, in no doubt, greatly helpful in getting the vessel fully operational from the first day of the charter.

2017	0211.300S	15106.400E	4	1	1245	1312	0	0	56	0	56	
49	31	02-Oct-										
2017	0211.800S	15115.640E	1	4	1418	1422	3	0	0	0	3	
50	32	02-Oct-										
2017	0216.230S	15108.300E	4	1	1537	1549	0	0	79	0	79	
56	33	07-Oct-										
2017	0726.000S	15646.600E	1	3	0728	0745	0	0	1	0	1	
57	34	07-Oct-										
2017	0728.800S	15654.200E	4	3	0848	0935	0	0	378	0	378	
								CRUISE 1				
TOTALS								831	2	5808		
6641												

APPENDIX 2

DAILY LOG EXTRACTS

logdate	Activity	Notes
17/09/2017	last boat preparation, departure of WP4	Usual hectic last boat new gear installation (new galley aircond, new bird radar). Finished the tagging office set-up with the computer network; experienced some problem, especially with the new laptop dedicated to the Open-port/Oceanbox satcom system. Finally seems to be working at 12h with successful sent/received messages to Thalos and Cynthia. Initial ETD 15h moved to 17h; then waited for immigration for another hour; finally cast the rope at 18:45, WP4 officially started! Reach Ropa bait ground at 00:15 and passed the sad sight of a huge logging boat actively loading. Dropped anchor at 00:25 in 39m. First and last net at 2:50 for 42 bucket of mostly small sprat.
18/09/2017	Fish on the road to Buka	Up anchor at 03:44 and leave Ropa bait ground; very hot in the room with aircond struggling. Started fishing at 6, went through 3 Afad position but all missing. At 08:54 find a nice free school of large skj actively feeding; first attempt under heavy rain and wind failed due to water spray pump not engaged..Then hard work to finally stop after only 3 fish tagged; good shake-down for the boat and at least first tags. Meet a school with 2 pilot whales at noon but no success in chumming. Waited till 15:36 to fish the last school of the day (running out of bait) constituted mostly of 45 cm YF, 122 fish tagged in about half- hour with multiple stops to run after them. Entered in PNG waters short time after that. Not a bad first day (125 tagged, 83 % Y) with limited amount of bait and not very cooperative schools. On the road to Buka to start the PNG adventures...
19/09/2017	Clearing in PNG/Buka, bait in Matchin bay/Taiof island	Arrived in front of Buka passage at 3 am. Wait till 6:30 to steam inside. Alongside at 7:45 (PNG time, Buka is on Solomon time since 2014!!!), very strong current as usual...Custom-quarantine, immigration process from 8:30 to 9:45. Benthly arrived at the same time with Elison Semi the observer. After clearance Captain Ben went with Benthly to the BSP bank to change some of the NFD US cash given by Cynthia prior to departure from Noro to cover cruise expenditures and crew advances. Took them 4 hours to get some official approval despite all NFA official letters... quite amazing really! Then crew have only one hour to do their shopping before we depart at 16:30 (PNG time...) to bait in Matchin Bay closed to Taiof island. At anchor, after dropping the auxiliary light, at 17:15. No strong detection at echosounder, wait till 12h for the first and disappointing net that gave us a mere 36 buckets, mostly composed of medium size dussumeria sp...Second set delayed to try to attract more bait. 33 buckets of same baits at 0345
20/09/2017	Fishing east	After a disappointing baiting night near Taiof island, came out Matchin

	7 of Matchin bay, bait in Matchin	bay at 0545 and start fishing on a 250 course toward some banks about 25 nm away where we had fished with success on some previous cruises. Meet a small school just before 8h but composed mainly by some KAW; 2 Y tagged; At 8:40 , decided to head toward Dfad DSL+162715 about 30 nm away. Not marking, but you never know, and it's probably our unique chance to check it. Before arriving at the Fad, found a school of large sj ; nice fish but hard to catch and managed to tag 71 before running out of our dying baits. Aborted the dFad visit (hard to find in the 15knt wind) and run back to Matchin bay 45 nm away. Plan is to find a more (if possible) productive place than last night...At anchor at 17:37; echo-sounder sign seems to be better than last night but, alas, the first set at 22:30 brought 120 bkts of large rainbow sardines...Then we discover that some local had stolen our auxiliary submarine light and its battery...Could not do the second set right away. We then go back to anchor and set up the bait light for the second set at 4 am. Same sardines...
21/09/2017	Fish to Nissan Island and bait Nissan	Facing the poor bait situation we decided to fish to Nissan Island (70 nm) so we could hopefully get better bait tonight, this could not be if we sail to Gasmata (250nm).Passed through the 785 m seamount where we caught fish in previous trips but no sign of life. Steamed to Nissan without seen a single fish; tried to check on the east coast the position of a stranded TMI dfad but the buoys is more likely already sitting in one of the village there.. Inside the lagoon buy the narrow South passage at 15:30 and at anchor at 16h. For the first time some local came to visit the boat during the evening. Good sign at the echo-sounder screen, then first net at the boat at 22h was perturbed by some predators (trevallies and Kaw) that possibly chase the bait school. Result: 48 bkts of mainly sardine and a few fusiliers. Second set at the auxiliary light at 23:15 for just 40 bkts of the same. Not worth doing another set, better to sail asap to be at Cape Lambert in time for next night. Up anchor at midnight, out of the lagoon at 00:25, route to the Cape St George bout 80nm away.
22/09/2017	Fish between Nissan isl and Cape Lambert	At 06am, we were 28 nm from Cp St George, rolling gently under a side-way 1 m swell. Entered in the channel around 10:30. Tried without success to chum a free school of yf at mid-day. SSW wind up to 20+ knt make us think we will be better in Bismark sea than in the Solomon one...Passed Kokopo and the sleeping monsters between 3 and 4:30 pm, with the wind in our back. No school see in the afternoon; At the entrance of cape Lambert bait ground at 21:15. Carefully and slowly entered inside in 20 min with help of radar and gps mapping. Dropped the auxiliary light at 22:45, at anchor 10 min later in 36 m of water. Bait very slow to gather, wait till 0245 for the first set. Got 29 bkts of a mixed bag of juvenile species, mostly anchovies with some rastrelligers, barracudas and few fusiliers.

		Second set only 9 bkts of the same stuff. No joy...
23/09/2017	Fish seamount and Fads west of C Lambert	Up anchor at 4:30 and out of C Lambert pass at 0510 in calm weather. Birds everywhere. Passed a school of big yellowfin after the seamount then steamed toward FAD RD8812. Nothing at the fad old position. Then, at 8:25, head to RD8557 position where bird radar is detecting something; at 0913 meet a whale school , fish came to the chum but not to the poles...at least 4 small (Minky I think) whales associated. RD 8557 wasn't there. At RD 8528 no school. Then at GS Marine#16 less than 2nm apart we found a small school of mixed sizes yf and sj, mostly z tag sizes. Finished all the bait at 12:18 for 202 tagged. Headed to Bangula Bay, 45 nm in our sse. Entered the very wide and deep pass at 17:15. At anchor at the NW side of the bay in 40 m at 18:30. First set at 22h for 123 bkts of mostly small gold anchovies plus juveniles rastrelligers. Second set at 23h for 150+ bkts...almost full tank!
24/09/2017	Fish aFad north Kimbe Bay and bait Bangula bay	Up anchor at 00:15 and left Bangula Bay at 1h to steam to fads 40 nm north; Arrived at RD 8816 before 5 and start chumming at 0550 but only small school and 2 fish tagged. RD 8529 missing. Fad GSM# 24 only few fish. 2 tagged; 2 miles after found a log where we tagged 136 fish. Then GSM# 15 no fish, RD 8778 missing, on GSM# 13 we found a good school that wanted to play and we tagged 1387 fish in 1h17min. Then 2 more Fads with almost no fish or some yf that do not want to approach the boat. GSM# 21 had a small school of mixed small sj and medium size YF; we tagged 180 fish. Seems GSM #22 was missing. Found a Fad that could be it or #23... tagged a few small fish. Then, on the way to the baitground found another unknown fad (RD probably) with no fish. Total for the day 1761 with 90% S. Arrived at Bangula bay entrance under heavy rain at 18:45, at anchor at 20:00. First net at 22h for only 49 bkts although echosounder signs were very good; maybe too quick to dim the light and close the net...Second set for 55 bkts. Decided to better not do another set to be at the Fads early in the morning. Up anchor at midnight, out of the bay at 1am.
25/09/2017	Fishing Fads north Kimbe bay and south Garove Isl. Bait Emeline Bay	came out of Bangula at about 1 am, 60 nm to go to the first Fad, GSM#19. Arrived at the position at 7am but no school 2 tags only; GSM#11 at 0744 produced 88 tags but we stopped as spending too much baits to keep fish at the boat. Following Fad (GSM#10) has no fish. Then GSM 18 a few small sj with medium to big Yf; can't stay at the boat, only tag 25 Then (9:30) we went check a bird flock seen on the radar but when we arrived (10am) the game was over , birds sitting on the water and we only tagged 25 fish that didn't want to play. Back to Fad GSM#17 but missing. Then GSM #9 at 1118, only sj too small to be tagged (1 tag). On the course to RD 8408 position, 26 nm away. Alas, once again, no fad there. Steamed to a bird flock 5 nm in the SSW. Tried to chum a foamer of large sj but as usual these fish didn't

		answer. Checked two old RD fad positions but nothing there. A bit of a worry for tomorrow if no more fads around....At 15h40 started to steam toward Emeline bay (26 nm away) with the intention to fill-up there the 3 empty bait wells with baits. Entered the pass at 1740. At anchor at 18h30. Local came and all welcome us...First set at 2215 for 120 bkts, second set for 75 bkts at 23:30. Up anchor 12:30 and out of the pass at 1am
26/09/2017	Fish south Garove and Afads north Iboki	Arrived at 3 am in the area we found free schools yesterday about 13 nm south of Garove. Chum a shool at 0630 but it was YF only and of course, although following the bait trail, did not come to the poles...After checking an empty RD fad position (7am), took a 230 course toward the south of Unea island. No school found, at 8:50 we turned left to check the RD Fad cluster we used to fish in PNGTP cruises. First position RD#7803 missing and nothing on the radar showing evidences for the next one. No fad and no sign of life around so decided to change plan at 0945 and to go fish north of Garove where we had some TSP recent (2016) aFad positions. Arrived at TSP#23 at 14:16 ; some large Y and a mixed school of small y and s but not hungry. Only tagged 58 fish. Then we checked a big log with nothing and a promising free school that just vanished on our arrival. Then another quick moving free school produced 37 tags about 4pm; A free school that was looking really promising just vanished when we arrived. Steamed to TSP#27, arrived at 1810, nothing there, tie-up till 3am then let got to TSP#28- total for the day is 95 tagged (80S)
27/09/2017	fish fads west Cape Lambert	Let go the Fad at 3 am and steamed to TSP#28. Arrived at 05 20 but no fish there; 2nm away we met a whale (Bryde) school but couldn't catch it. Arrived at TSP32 at 0735. A TPJ ranger boat (Scout 31) was tie-up to the mooring; the fad float seemed to be missing. Checked around but didn't see any evidence of fish. Steamed to TSP 34 and chase a free school (probably YF) without success on the way. At TSP34 there was a small school, mainly small sj; we tagged 48 fish. This was the last TSP fad on the road to Cape Lambert, back to the missing RD rafts. At 11:20, RD 8784 was miraculously there, half sunked but still, no fish. Rd 8259 missing; RD 8437 missing and also RD 8261. Check the 119 m seamount 15 nm west of cape Lambert at 16:20 but it's an absolute desert similar to all this area. Arrived at Cape Lambert pass at 18h and at anchor at the bait ground at about 19h. First set at 2145 for 98 bkts. Second set finished at 2330 for 55 bkts. Full tanks... Departure at midnight for the Dyaul seamount.
28/09/2017	Fishing Dyaul seamount and SW	Arrived at 0615 at Dyaul seamount under the rain... hard to spot fish...Then found the fish just before 7 am and stayed on it for 3 hours, stopping time to time to retrieve them. Released 1739 fish (98% S). Then found a free school about 11nm south west of Dyaul at 11:38

	Dyaul isl.	and tagged another 652 fish (84 % S) before running out of bait at 12:15. Total for the day 2391 (94% S), putting the cruise total at 4836, short of 164 fish for the first cruise bonus! Arrived at Nusandalau bait-ground at about 16h. Then discussion with bait ground owners at 18h who wanted us to leave the place because of "NFA never gave the compensation they promised in 2013". They finally agreed to let us baiting if they could come with us tomorrow morning in Kavieng to discuss with NFA...not sure how this will work with Jeff Kinch not in town... First net at 01:15 under the rain for only 37 bkts of a mixed bag. Not enough seen at echo-sounder when reaching the auxiliary light so put down the boat light for a couple of hours. Second set at 4 am for a mere 20 bkts
29/09/2017	After baiting Nusandalau, a day in Kavieng for provisioning and 2 scientist personal change	Disappointing baiting results at Nusandalau with only 57 bkts. Left bait ground at 0510 with so called bait ground owners not showing. Arrived in Kavieng at 7:15. Spent all morning changing money at the bank, doing shopping and trying without success to get some fresh water for the boat; at the last minute crew engineers told me there was some problem with the water maker making it supplying less water than it should... But not possible to get water seems due to some town water supply problems...Went to Nusa for lunch and relaxing a bit, back to the boat at 17h; samples put in the esky for Francois and Lui to carry back to Noumea; then go to airport at 6 to pick-up Marion and Jeff. Depart for baitground at 0715. At anchor at Nusandalau 2 h later. Wait for the moon to go down; first net at 01am for 31 bkts; second at 3:30 for 30 bkts. Started steaming at 0430
30/09/2017	Fishing Dyaul island and seamount	With 3 bait tanks we started fishing about 6nm south Byron and only fish after 8am at the SW tip of Dyaul island. Fish then 3 other schools from south Dyaul to finish on the seamount. The last school was composed of bigger fish with a good percentage of yellowfin (36). Total for the day 1133 (79% S). First bonus for the crew and cruise total is now 5967. Steamed to Isabel Pass where we anchored at 08 pm. First and last set at 2 am after moon set for over 160 bkts. Enough for the day fishing around Tench island...Departed from bait ground at 0330
1/10/2017	Fishing Tench isl.and bait Isabel pass	At 6am we were 23nm from Tench. Gentle rolling reminds that we are not in the Bismark. Many anchovies died in the tanks, probably due to overcrowding in the net last night. Arrived at Tench about 8:20 am; at 09:09 tried to chum one school 6 nm east of the island but was composed of Kaw and Rru only. Second school before 10, only large YF. Third, again rru and kaw; after another Kaw school chummed at 1145, decided to stop and try to find greener pasture on the way-back to Isabel pass. Finally found a large school of big sj actively feeding at about 16h and spent the remaining of our bait on them to tag...69 fish.

		Hard to keep the large one at the boat. Back to Isabel pass bait ground at 18h. First set at 03am for 120 bkts. Second set at 4:30 for 180+ bkts and let go the rest...full tanks
2/10/2017	Fishing TMI dfads 30 nm North Kavieng	Fully loaded with baits we left Isabel Pass at 6am and started steaming toward 2 TMI Dfads that were approximately 30 nm NNE of Kavieng. Tried to chum a school on the way but fish running too quick to be caught; arrived at the first fad at 10:40 but only a small school there, tagged 88 fish, mostly small YF. Then found a nice pure 3-4 kg SJ school but hard to keep-up and had to stop after 56 tagged and the first bait tank finished. The following dfad had nothing, few babies (1 tagged). Short time after the fad we run after a sj free school and managed to catch it after 9 nm: 79 S tagged. Total for the day=224. Heading toward Lyra reef about 100nm away at 6 pm.
3/10/2017	Fish south Lyra reef and	After a good passage over night, start to fish from Lyra reef SW corner. Found schools but only large YF. At 07 decided to run in the direction of Lihir isl and a summit at 493 m, hoping to find better schools. The course was also much appropriate to spot fish than punching against the waves. Started to find running schools after 9 and did many attempts to catch one with no success. Even through bait on their nose, they were not interested. Arrived on the 493m seamount at 12h45, nothing around, started steaming toward the 146m summit east of the Tanga island group, 40nm away. One school chased there but again, no joy. A zero fish day, merde alors. Decided to steam during the night to the West Buka area where we tagged fish with less than ideal baits on the 20th Sep. Four tanks of strong silver sprats from Isabel will hopefully do much better....
4/10/2017	Fishing west Buka	Quite passge overnight. The wind completely stopped. Seen many large YF school before trying to chum one at 8:37, but no response from the fish. Carry on looking the edge of the shallow plateau 40 nm WSW from Buka. Search all day for a suitable school but not luck. All school seen were YF too big to be caught. Morale of the boat is down after 2 days in a row without one tag release...We are baiting at Machin bay tonight, will try to top-up our 2.5 bait tanks of strong bait left from Isabel pass (anchovies gone , only silver sprats stay...). Then we will try tomorrow to fish the east side of Buka, not too many options now...
5/10/2017	Fishing east Buka	Another bad experience at Taiof island bait ground with local people cut the anchor rope and the bait-boat sub-marine light, probably around 3 am when, for some reason, nobody was on watch. Only one strand was left on the anchor rope, hopefully the current was nil. We could not bait anymore now as we have no spare light (the one that could be dimmed) for the bait boat...Out of Buka passage at 6 am and heading to some areas where we had good fishing success in past

		<p>cruises. Alas, weather quickly deteriorating to 15-20 knts wind; we slowed down the boat to 6 knt at 09, hoping for weather to improve. No sign of bird on the radar, then weather worsened with heavy rain and the only school found just vanished around 12:30. At 14h decided to find shelter in Teop harbour, 17 nm away. Drama with rain entering in the office full speed imposing 2 hours of intense soaking-up. At anchorage at 16:15. We should leave at 3 am (4 am Buka time) to be at 7 am at Buka main dock.</p>
6/10/2017	<p>After clearance out of PNG in Buka, steam to Solomon Islands</p>	<p>Arrived at the Buka main dock at 7am local time. Clearance started around 9am and took 2 hours...no comment. Finally threw the ropes at 1205 after last crew came back from market. Steamed all day in gentle swell.</p>
7/10/2017	<p>Arrival in Noro after fishing in the slot- Full moon break</p>	<p>Peaceful travel overnight, changed our clock time, and then arrive at the first fad at 0650 but nothing there. Second Fad, a school was there but can't get it at the boat; 1 fish tagged. Then we finished the baits at the third fad on a pure sj school with 378 40-60 cm SJ tagged. Good presage for the Solomon adventures...Arrival in Noro at 14h30; at anchor at 14h50 to wait for immigration/customs. End of WP4 cruise 1 with 6641 fish tagged (5808 S, 831 Y, 2 B). Immigration finished by 16h30.</p>