

PACIFIC TUNA TAGGING PROGRAMME



MONTHLY TAGGING SUMMARY – MAY 2008



Figure 1. The Double D provisioning in Honolulu.

PROGRAMME UPDATE

This report summarizes the activities of the 30 day cruise representing the first sub-regional approach to Phase 2 of the Pacific tuna tagging project (PTTP). The proposed objective of the sub-regional components is to target areas that are difficult to access with the main tagging platform, the FV Soltai 105, specifically the central Pacific and French Polynesia in order to improve overall spatial coverage of tag releases.

The first central Pacific cruise was carried out from the 5th of May to the 3rd of June 2008 and marked the commencement of Phase 2 of the PTTP, designated CP-08-01 (CP-1) was carried out using a multi-purpose handline/longline vessel the FV Double D (**Figure 1.**), a privately owned vessel registered in Hawaii. The vessel was used

very successfully as the principal tagging platform for the Pelagic Fisheries Research Programme (PFRP) funded Hawaii Tuna Tagging Project.

The cruise was headed by Mr. David Itano^{*}, a consultant with the PTTP representing the Secretariat of the Pacific Community (SPC). The captain and owner of the Double D, Mr. Joe Dettling, his son Joe Dettling Junior and two crew members, Arvin Leal and Claver Servanes, manned the cruise.

CP-1 CRUISE DESCRIPTION

The cruise started from Honolulu Harbour, Hawaii on the morning of May 5 2008 on a direct course for the TAO array that lies along the 155°W meridian. The general plan being to fish the TAO bouys at 8N and 5N before running to Christmas Island. The vessel spent three days fishing before heading in to Christmas Island.

From Christmas Island the vessel then proceeded to fish around the TAO bouys at 5N and 2N for eleven days before heading north to fish the TAO buoy at 8N for three days, before heading back for Hawaii. The vessel took the opportunity to tag on the NOAA 51002 buoy as they entered Hawaiian waters. The cruise of the Double D during cruise CP-1 is shown in **Figure 2**. For details please refer to the detailed cruise report by David Itano.

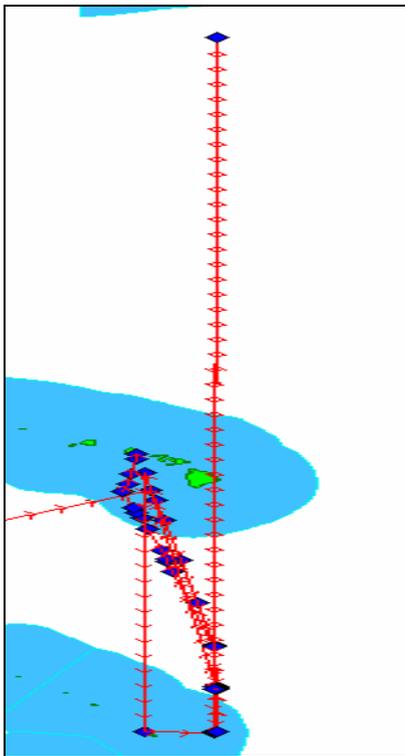


Figure 2. A plot of the central Pacific cruise CP-1.

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TAG RELEASES

The total number of tag releases during the CP-1 cruise, as at 3rd June 2008, involving 30 days of field work was 1909. The total of 1909 tunas tagged and released during the cruise comprised of 1736 bigeye (BET, 90.9%), 57 skipjack (SKJ, 3.0%) and 116 yellowfin (YFT, 6.1%). The majority of the tunas tagged and released were made on the TAO buoy at 2N. The large number of bigeye tagged and released was a surprise and an added bonus to a successful cruise. The release numbers by tag type and species for cruise CP-1 are shown in **table 1**. **Table 2**, shows the total number of tags released during the project as of 31st May 2008. **Figure 3 (a, b, c)** shows the proportion of tag releases by species at the main tagging sites.

[Table 1. Tag numbers by species and tag type.]

	Skipjack	Bigeye	Yellowfin	Total
Conventional tag only	57	1691	111	1859
Archival tag only		45	5	50
Total	57	1736	116	1909

Table 2. Total number of tag releases for PTPP (including CP-1)

	Skipjack	Bigeye	Yellowfin	Total
Conventional Tag	62984	1178	38238	102400
Archival Tag	2	56	260	318
Sonic Tag	69	10	116	195
Archival + Sonic Tag	0	8	19	27
Total	63055	1252	38633	102940



Figure 3(a). Tag releases by species (SKJ) during cruise CP-1.

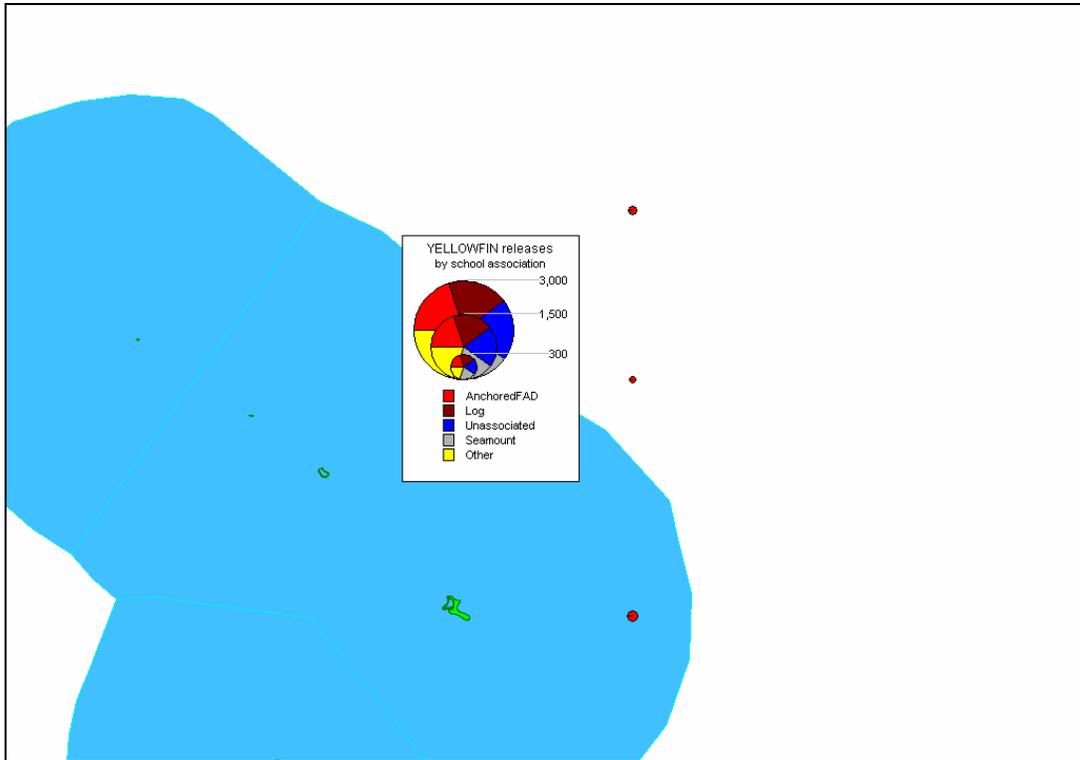


Figure 3(b). Tag releases by species (YFT) during cruise CP-1.

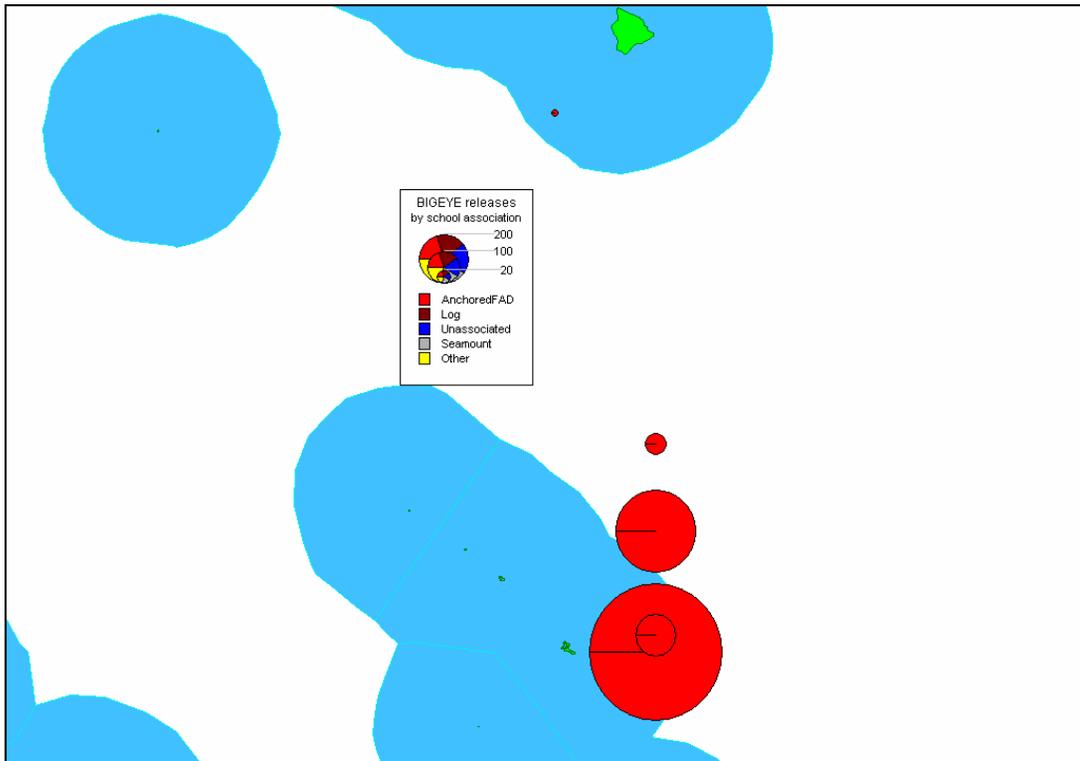


Figure 3(c). Tag releases by species (BET) during cruise CP-1.

TAG RECOVERIES

As at 4th July 2008, three tags released during the cruise CP-1 have been recovered, all by the tagging vessel itself at the TAO buoy at 2N. The recoveries comprised of 1 YFT (9 days at liberty) and 2 BET (1 and 9 days at liberty). In May 2008, 106 tags were returned, **Table 3** shows the total number of conventional tag recoveries, **Table 4** shows the total number of archival tag recoveries and **Table 5** shows the total number of sonic tags returned and **Table 6** shows the tags returned from tag various sources. **Figure 4** shows the total tags returned per month. **Figure 5** shows the displacement of the tagged population by species. **Table 7** shows the returns by vessel flag.

Table 3. Conventional Tag recoveries as at 31st May 2008

	Skipjack	Yellowfin	Bigeye	Total
May 2008 recoveries	63	38	3	104
Total to May 31 2008	6490(10.3%)	3866 (11.3%)	247(21.4%)	10603(11.9%)

Table 4. Archival tag recoveries as at 31st May 2008

	Skipjack	Yellowfin	Bigeye	Total
May 2008 recoveries	0	2	0	2
Total to May 31 2008	1 (50%)	30 (13.0%)	11(22.9%)	42 (15%)

Table5. Sonic tag recoveries as at 31 May 2008.

	Skipjack	Yellowfin	Bigeye	Total
May 2008 recoveries	0	0	0	0
Total to May 31 2008	3 (4.3%)	12 (8.9%)	7 (38.9%)	22 (9.9%)

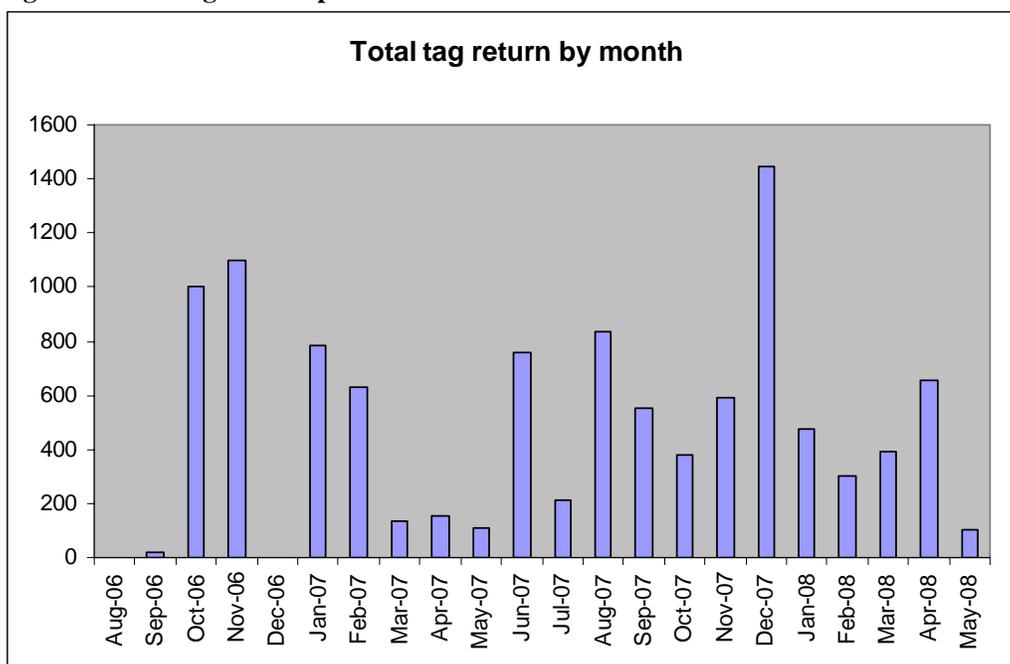
Table 6. Number of tag returns by source (where found).

Tag Return Source	May 2008 returns	Total returns
American Samoa	3	16
China	3	4
FSM	0	1
IATTC	0	135
Indonesia	0	75
IOTC	0	5
Japan	0	271
Korea	0	130
Philippines (Direct)	0	360
Philippines (Frabelle)	0	162
PNG (Frabelle)	0	645
PNG (NFA)	1	90
PNG (RD)	0	5022
PNG (SSTC)	0	145
PNG (Other)	0	33
Solomon Islands (NMFMR)	50	74
Solomon Islands (Soltai)	0	165
Solomon Islands (Global Investment)	0	944
Solomon Islands (NFD)	0	1492
Solomon Islands (Other)	0	51
Tagging Vessel	0	23
Thailand	50	757
Other	0	7
Total	107	10607

Table 7. Tag returns by vessel flag.

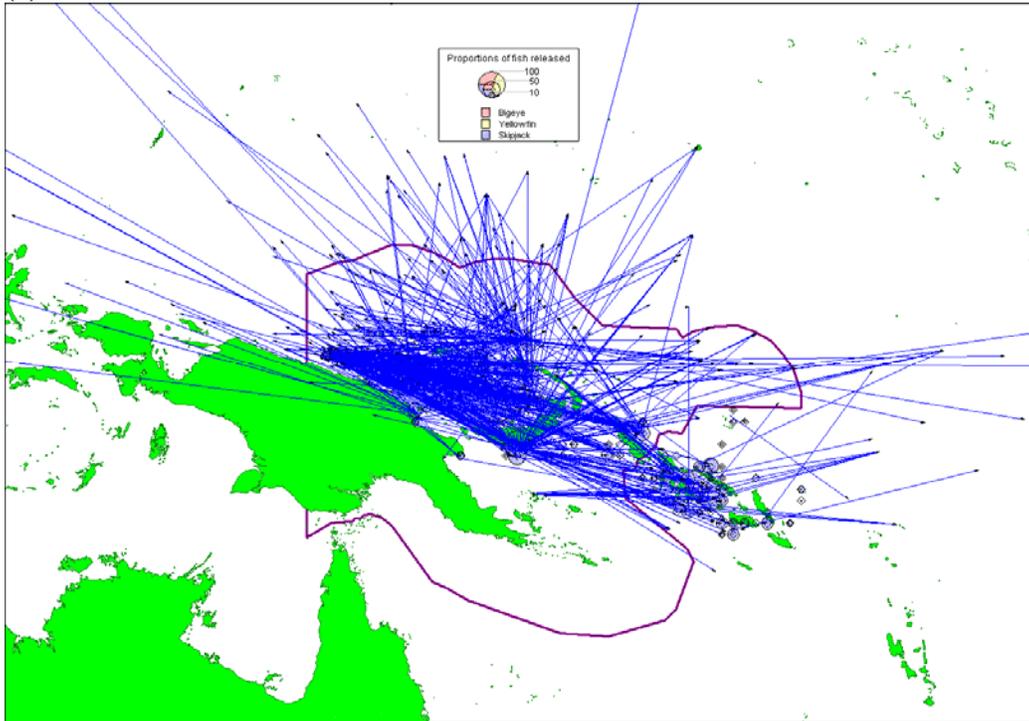
China	May 2008 returns	Total returns
FSM	2	11
Indonesia	0	83
Japan	2	291
Kiribati	2	13
Korea	40	238
Marshall Islands	0	8
New Zealand	1	3
Panama	0	8
PNG	16	5549
Philippines	0	969
Solomon Islands	11	1723
Seychelles	0	1
Taiwan	15	302
United States	0	9
Vanuatu	5	914
Non identified	9	203

Figure 4. Total tag returns per month.

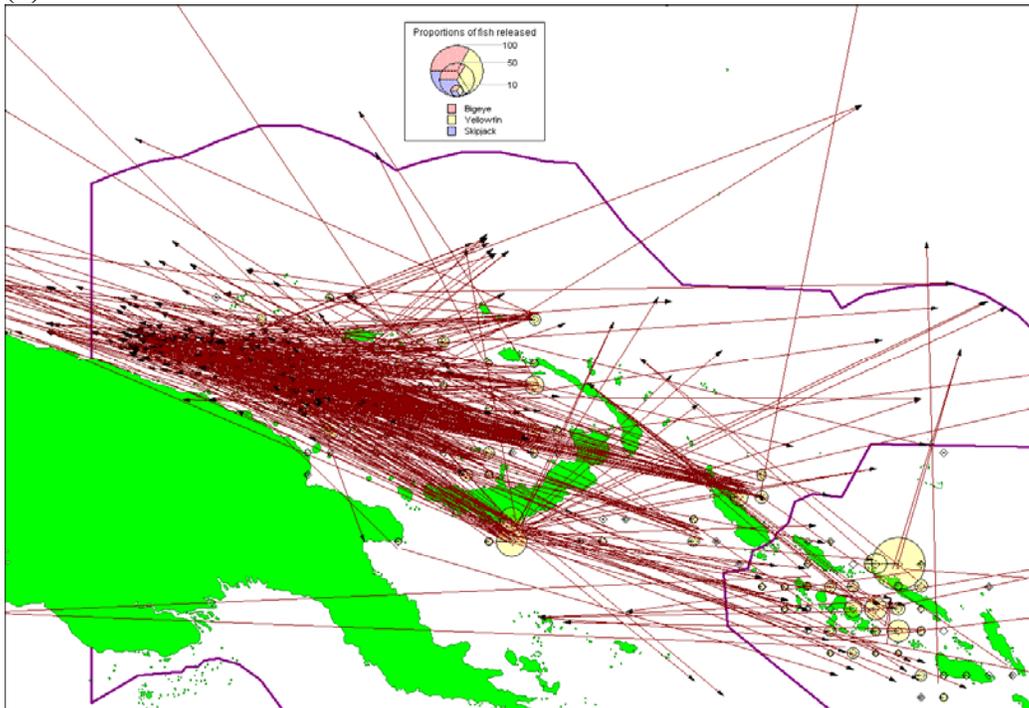


TAGGED FISH MOVEMENTS

(a)



(b)



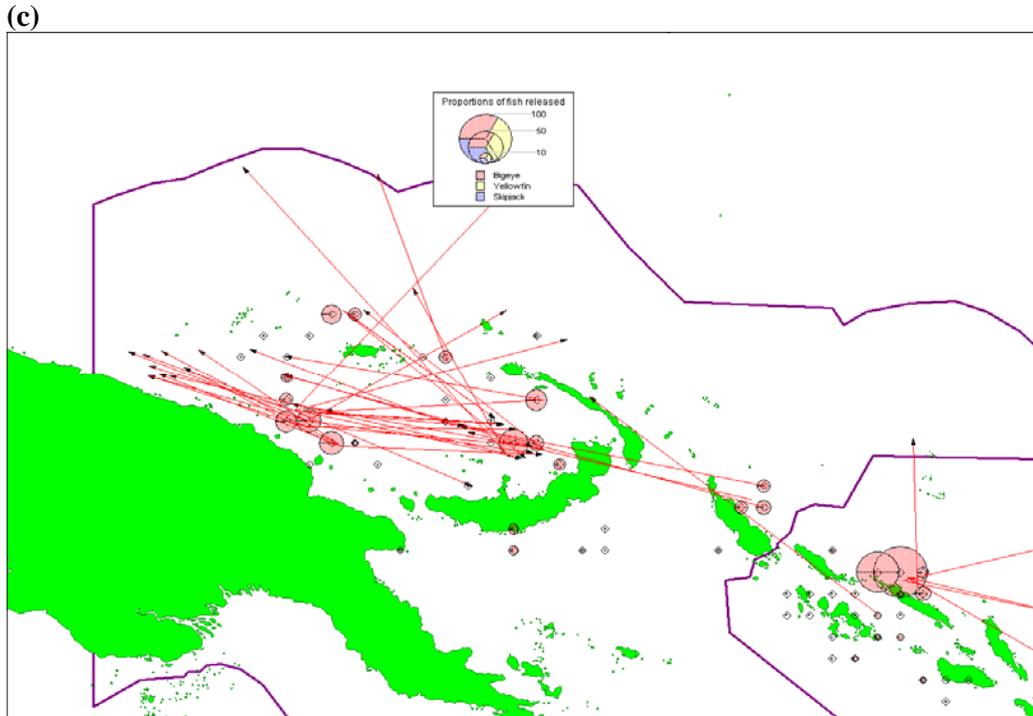


Figure 5 (a), (b), (c) shows the movement of tagged fish by species, SKJ, YFT and BET respectively.

TAG RETURN LOTTERIES

The first of these tag return lotteries was held in Bangkok, Thailand, during the Tuna Conference 2008 hosted by Infofish. The names of tag finders from all the tags returned from canneries in Thailand were pooled together and three winners were drawn. The draw was done by Ms. Praulai Nootmorn, Director for the Andaman Sea Fisheries Research and Development Centre of the Thailand Department of Fisheries and Dr. Antony Lewis, a consultant with the SPC Tuna Tagging Project.



Ms. Praulai Nootmorn and Dr. Lewis drawing the winners.

- 1st Prize – Digital Camera – Mr. Te Aow
- 2nd Prize – Mobile Phone – Mr. Win Khai
- 3rd Prize – MP3 Player – Mr. So

More tag return lotteries are planned to be conducted during the course of the year in major tag return centres (eg. PNG, Solomon Islands, etc...).