

## PROGRAMME UPDATE

As a continuation of Phase I activities of the PPTP, the second Solomon Islands tagging cruise was undertaken between the $20^{\text {th }}$ February and the $20^{\text {th }}$ March 2008, again utilizing the Soltai 6 under charter from SFPL. 17,037 tuna were tagged with a high proportion (63.6\%) of yellowfin and bigeye tuna. This brings to almost 90,000 the number of fish tagged and released in the first phase of the PTTP.

With a major funding commitment from New Zealand (NZD 5 million) to the PTTP, combined with other funding already in hand from various sources, it is intended that Phase 2 of the project, extending beyond PNG and Solomons to the wider WCFPC region, will commence later in 2008.

The Phase 2 activities, with longer range operations required over a much larger regional area, will require a vessel with
greater range, bait capacity and increased operational flexibility.
Agreement was reached with SFPL management to charter one of their newer vessels, the Soltai 105, for a 2 week period to ascertain its suitability, and prepare detailed plans and specifications for any modifications that might be needed to ready the vessel for fully effective service later in the year. The trial cruise commenced on March 26th, as the final component of Phase 1 activity. Results of the trail cruise will be reported in the April Tagging Summary.

## TAG RELEASES

The total number of tag releases during the PTTP Phase 1, at the end of March 2008 and involving 6 months field work in PNG and 2 months in Solomon Islands was close to 90,000 . Release numbers by tag type and species are listed on the next page.

## TAG RECOVERIES

378 conventional tags were recovered during March 2008 (Figure 1). This brings the total number of tag returns to $\mathbf{9 , 8 4 3}$, with an overall recovery rate of $\mathbf{8 . 5 \%}$ (Table 2) for conventional tags, $12.7 \%$ for archival tags (Table 3) and $9.9 \%$ for sonic tags (Table 4). The March 2008 recoveries were dominated by returns from the Solomon Islands purseseiners - NFD and Global Investment (Table 5). Overall, tag recoveries by vessel flag continue to be dominated by PNG flagged or affiliated vessels, fishing in the Bismarck Sea and surrounding areas, where many of the 62,000 tuna tagged on PNG cruises were released (Table 6). Returns from the more than 30,000 Solomon Islands releases should
continue to increase in the coming months as recoveries from the recent releases are received.

## TAGGED FISH MOVEMENTS

Updated arrow maps showing the movements of tagged tuna are shown below in Figures 24. Note that only movements where precise recapture locations were provided have been shown. Skipjack continue to show the greatest mobility, followed by yellowfin and bigeye tuna. Subsequent analyses will provide a large amount of information on finer scale local movements, particularly in relation to deployed FAD arrays.

Table 1. Total PTTP tag releases

|  | Skipjack | Yellowfin | Bigeye | Total |
| :--- | ---: | ---: | ---: | ---: |
| Conventional tag only | 54021 | 34291 | 1152 | 89464 |
| Archival + conventional tag | 2 | 230 | 48 | 280 |
| Sonic + conventional tag | 69 | 116 | 10 | 195 |
| Archival + sonic + conventional tag | 0 | 19 | 8 | 27 |
| Total | $\mathbf{5 4 0 9 2}$ | $\mathbf{3 4 6 5 6}$ | $\mathbf{1 2 1 8}$ | $\mathbf{8 9 9 6 6}$ |

Table 2. Conventional tag recoveries for PNG and Solomons releases, as at 31 March 2008, .

|  | Skipjack | Yellowfin | Bigeye | Total |
| :--- | :--- | :--- | :--- | :--- |
| March 2008 recoveries | 221 | 156 | 1 | 378 |
| Total to 31 March 2008 | 6127 (11.3\%) | $3486(10.1 \%)$ | $231(19 \%)$ | $9843(8.5 \%)$ |

Note : numbers include returns that were double tagged with conventional and electronic tags.
Table 3. Archival tag recoveries, all cruises, as at 31 March 2008.

|  | Skipjack | Yellowfin | Bigeye | Total |
| :--- | :--- | :--- | :--- | :--- |
| March 2008 recoveries | - | - | - | 0 |
| Total to 31 March 2008 | $1(50 \%)$ | $27(10.8 \%)$ | $11(19.6 \%)$ | $39(12.7 \%)$ |

Table 4. Sonic tag recoveries, all cruises, as at 31 March 2008.

|  | Skipjack | Yellowfin | Bigeye | Total |
| :--- | :--- | :--- | :--- | :--- |
| March 2008 recoveries | 0 | 0 | 0 | 0 |
| Total to 31 March 2008 | $3(4.3 \%)$ | $12(8.9 \%)$ | $7(38.9 \%)$ | $22(9.9 \%)$ |



Figure 1. Number of tag returns by month.
Table 5. Number of tag recoveries by source (location found).

| Tag return source | March 2008 returns | Total returns |
| :--- | :---: | :---: |
| American Samoa | 0 | 13 |
| China | 0 | 1 |
| FSM | 0 | 1 |
| IATTC | 32 | 135 |
| Indonesia | 6 | 75 |
| IOTC | 0 | 2 |
| Japan | 0 | 271 |
| Korea | 10 | 125 |
| Philippines (direct) | 2 | 324 |
| Philippines (Frabelle) | 0 | 162 |
| PNG (Frabelle) | 0 | 590 |
| PNG (NFA) | 0 | 89 |
| PNG (RD) | 0 | 5022 |
| PNG (SSTC) | 0 | 145 |
| PNG (other) | 1 | 31 |
| Solomon Islands (Soltai) | 117 | 129 |
| Solomon Islands (Global <br> Investment) | 166 | 792 |
| Solomon Islands (NFD) | 1 | 1178 |
| Solomon Islands (Other) | 0 | 27 |
| Tagging vessel | 41 | 23 |
| Thailand | 0 | 701 |
| Other | 0843 |  |
| TOTAL | 0 | 7 |

Table 6. Number of tag recoveries by vessel flag.

| Flag | March 2008 returns | Total returns |
| :--- | :---: | :---: |
| China | 4 | 35 |
| FSM | 0 | 9 |
| Indonesia | 12 | 83 |


| Japan | 2 | 289 |
| :--- | :---: | :---: |
| Kiribati | 1 | 11 |
| Korea | 18 | 170 |
| Marshall Islands | 0 | 8 |
| New Zealand | 0 | 2 |
| Panama | 0 | 8 |
| PNG | 13 | 5523 |
| Philippines | 0 | 896 |
| Solomon Islands | 168 | 1333 |
| Seychelles | 0 | 1 |
| Taiwan | 9 | 277 |
| United States | 118 | 6 |
| Vanuatu | 32 | 753 |
| Non identified | $\mathbf{3 7 8}$ | 439 |
| TOTAL |  | 9843 |



Figure 2. Displacements of tagged SKIPJACK>300 nmi.


Figure 3. Displacements of tagged YELLOWFIN>200 nmi.


Figure 4. Displacements of tagged BIGEYE $>100 \mathrm{nmi}$.

