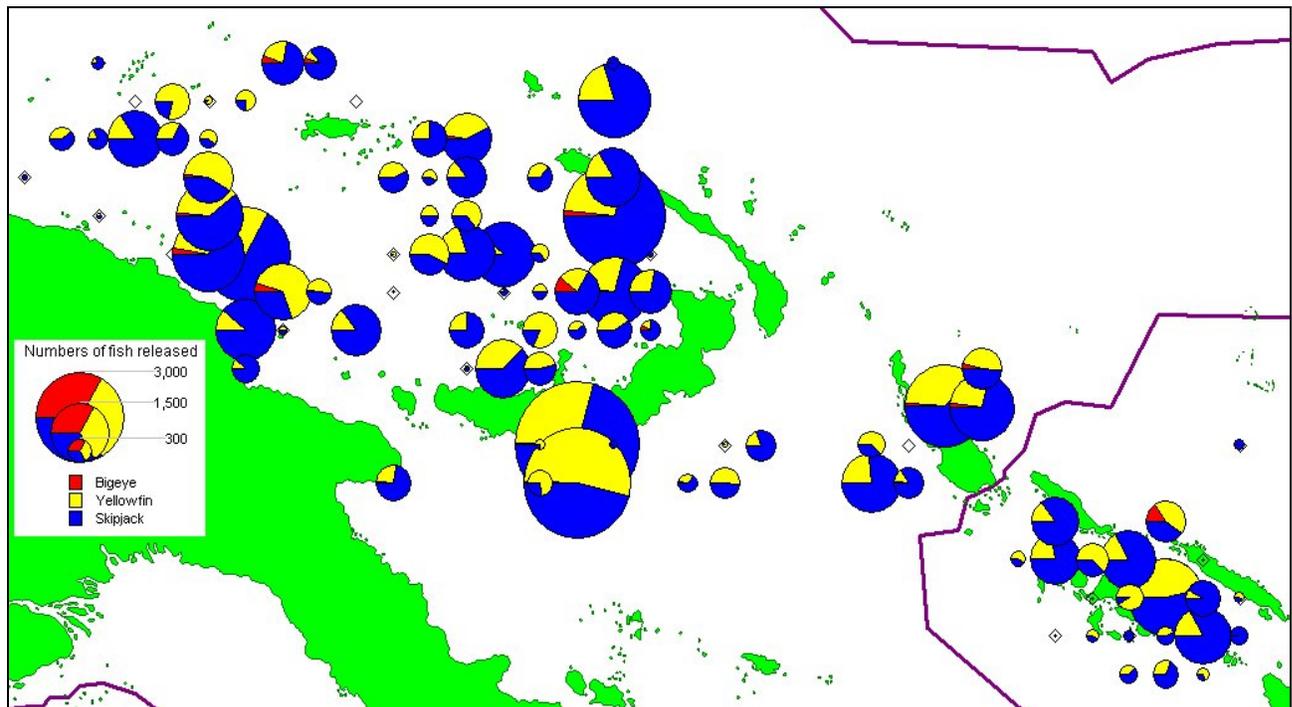


**PACIFIC TUNA TAGGING PROGRAMME**  
**MONTHLY TAGGING SUMMARY – FEBRUARY 2008**



## **PROGRAMME UPDATE**

The PNG Tagging Project, the fieldwork for which was completed in May 2007, was intended to represent Phase 1 of a new Pacific Tuna Tagging Programme (PTTP). A proposal for the PTTP was presented at the August meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, and was enthusiastically supported by the scientific representatives of Commission members and cooperating non-members. Since then, a major funding commitment (NZD 5 million) to the PTTP was announced by the Hon. Helen Clark, Prime Minister of New Zealand at the recent Forum Leaders Meeting in Tonga. This commitment, along with other funding committed by the European Commission and Papua New Guinea National Fisheries Authority (PNG-NFA), means that approximately USD6.4 million of the USD10 million project budget has now been pledged.

With these developments, we will continue to provide monthly summaries of tagging activity under the banner of the PTTP.

### SOLOMON ISLANDS CRUISE 2

The second tagging cruise in the exclusive economic zone of the Solomon Islands started on 21<sup>st</sup> February 2008 and is experiencing great fishing success with more than 11,000 fish tagged in the first 10 days with a large percentage (73%) of yellowfin and bigeye tuna..

## TAG RELEASES

Field work for Phase 1 (PNG) was completed in May 2007. A one month cruise was recently completed in the Solomon Islands (27 October-23 November), and the results are now revised as below in Table 1.

**Table 1. Tag releases, August 2006 -November 2007.**

### A. PNG August 2006 – May 2007

|                                     | Skipjack     | Yellowfin    | Bigeye     | <b>Total</b> |
|-------------------------------------|--------------|--------------|------------|--------------|
| Conventional tag only               | 40338        | 20300        | 633        | 61271        |
| Archival + conventional tag         | 2            | 214          | 40         | 256          |
| Sonic + conventional tag            | 69           | 116          | 10         | 195          |
| Archival + sonic + conventional tag | 0            | 19           | 8          | 27           |
| <b>Total</b>                        | <b>40409</b> | <b>20649</b> | <b>691</b> | <b>61749</b> |

### B. Solomon Islands October 2007 – November 2007

|                                     | Skipjack    | Yellowfin   | Bigeye     | <b>Total</b> |
|-------------------------------------|-------------|-------------|------------|--------------|
| Conventional tag only               | 7476        | 3560        | 132        | 11168        |
| Archival + conventional tag         | 0           | 5           | 7          | 12           |
| Sonic + conventional tag            | 0           | 0           | 0          | 0            |
| Archival + sonic + conventional tag | 0           | 0           | 0          | 0            |
| <b>Total</b>                        | <b>7476</b> | <b>3565</b> | <b>139</b> | <b>11180</b> |

### C. Total PTPP

|                                     | Skipjack     | Yellowfin    | Bigeye     | <b>Total</b> |
|-------------------------------------|--------------|--------------|------------|--------------|
| Conventional tag only               | 47814        | 23860        | 765        | 72439        |
| Archival + conventional tag         | 2            | 219          | 47         | 268          |
| Sonic + conventional tag            | 69           | 116          | 10         | 195          |
| Archival + sonic + conventional tag | 0            | 19           | 8          | 27           |
| <b>Total</b>                        | <b>47885</b> | <b>24214</b> | <b>830</b> | <b>72929</b> |

## TAG RECOVERIES

February 2008 was a quiet month for tag returns (Figure 1), with 297 conventional tags, 2 archival tags and 1 sonic. This brings the total number of tag returns to **9,467**, with an overall recovery rate of **13%** (Table 2) for conventional tags, 13.2% for archival tags (Table 3) and 9.9% for sonic tags (Table 4).

**Table 2. Conventional tag recoveries, as at 29 February 2008.**

|                           | Skipjack     | Yellowfin    | Bigeye      | Total      |
|---------------------------|--------------|--------------|-------------|------------|
| February 2008 recoveries  | 204          | 93           | 0           | 297        |
| Total to 29 February 2008 | 5907 (12.3%) | 3331 (13.8%) | 229 (27.7%) | 9467 (13%) |

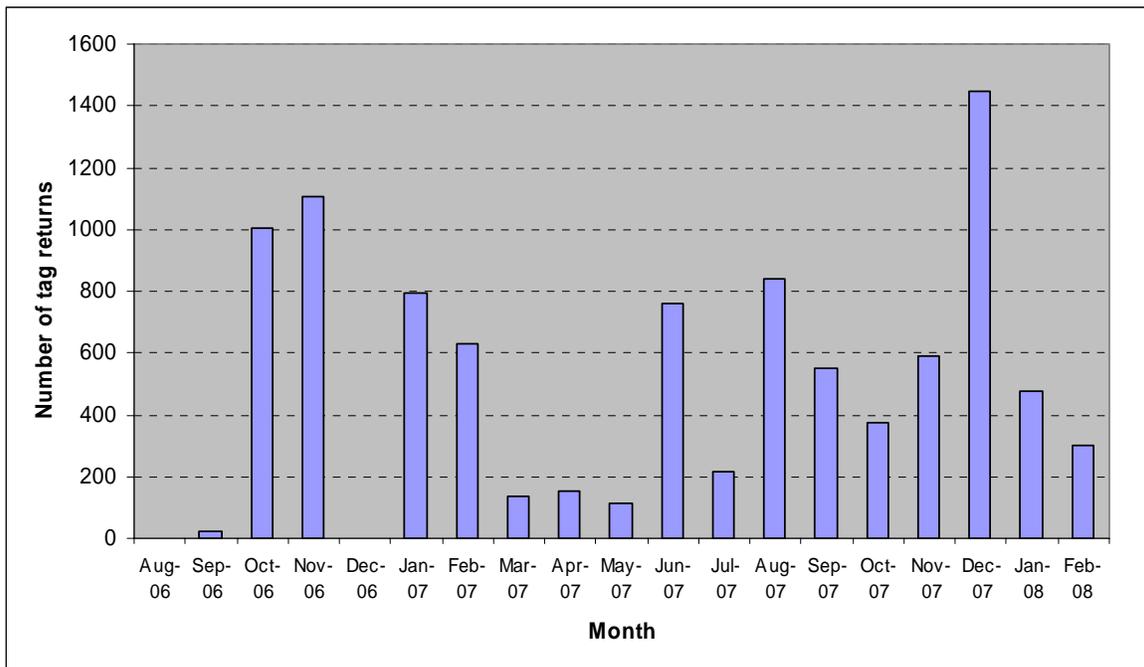
Note : numbers include returns that were double tagged with conventional and electronic tags.

**Table 3. Archival tag recoveries, as at 29 February 2008.**

|                           | Skipjack | Yellowfin  | Bigeye   | Total      |
|---------------------------|----------|------------|----------|------------|
| February 2008 recoveries  | -        | 2          | -        | 0          |
| Total to 29 February 2008 | 1 (50%)  | 27 (11.3%) | 11 (20%) | 39 (13.2%) |

**Table 4. Sonic tag recoveries, as at 29 February 2008.**

|                           | Skipjack | Yellowfin | Bigeye    | Total     |
|---------------------------|----------|-----------|-----------|-----------|
| February 2008 recoveries  | 0        | 1         | 0         | 1         |
| Total to 29 February 2008 | 3 (4.3%) | 12 (8.9%) | 7 (38.9%) | 22 (9.9%) |



**Figure 1. Number of tag returns by month.**

The February 2008 recoveries were dominated by the Solomon Islands purse-seiners (NFD) and by the Thailand and Philippines based canneries.

**Table 5. Number of tag recoveries by source (location found).**

| <b>Tag return source</b>            | <b>February 2008 returns</b> | <b>Total returns</b> |
|-------------------------------------|------------------------------|----------------------|
| American Samoa                      | 0                            | 13                   |
| China                               | 0                            | 1                    |
| FSM                                 | 0                            | 1                    |
| IATTC                               | 0                            | 103                  |
| Indonesia                           | 0                            | 69                   |
| IOTC                                | 0                            | 2                    |
| Japan                               | 44                           | 271                  |
| Korea                               | 0                            | 115                  |
| Other                               | 0                            | 6                    |
| Philippines (direct)                | 57                           | 322                  |
| Philippines (Frabelle)              | 0                            | 162                  |
| PNG (Frabelle)                      | 0                            | 590                  |
| PNG (NFA)                           | 0                            | 87                   |
| PNG (other)                         | 1                            | 32                   |
| PNG (RD)                            | 0                            | 5022                 |
| PNG (SSTC)                          | 0                            | 145                  |
| Solomon Islands (Soltai)            | 0                            | 128                  |
| Solomon Islands (Other)             | 7                            | 27                   |
| Solomon Islands (Global Investment) | 16                           | 674                  |
| Solomon Islands (NFD)               | 86                           | 1011                 |
| Tagging vessel                      | 0                            | 23                   |
| Thailand                            | 86                           | 663                  |
| <b>TOTAL</b>                        | <b>297</b>                   | <b>9467</b>          |

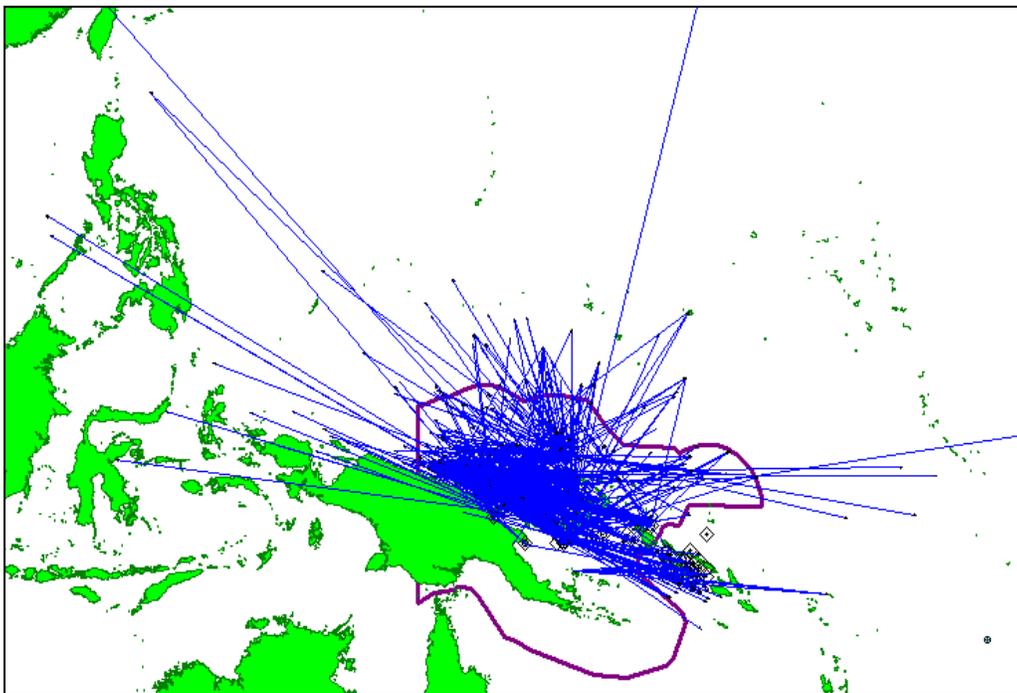
Overall, tag recoveries continue to be dominated by PNG flagged or affiliated vessels fishing primarily in the Bismarck Sea, where many of the tagged tuna were released (Table 6). However, significant recaptures of tagged tuna continue to be made by all of the major purse seine fleets (Japan, Korea, Taiwan, Vanuatu, China) and the Solomon Islands returns are increasing.

**Table 6. Number of tag recoveries by vessel flag.**

| <b>Flag</b>      | <b>February 2008 returns</b> | <b>Total returns</b> |
|------------------|------------------------------|----------------------|
| Non identified   | 1                            | 407                  |
| China            | 4                            | 31                   |
| FSM              | 1                            | 9                    |
| Indonesia        | 0                            | 71                   |
| Japan            | 45                           | 287                  |
| Kiribati         | 0                            | 10                   |
| Korea            | 11                           | 152                  |
| Marshall Islands | 0                            | 10                   |
| New Zealand      | 0                            | 2                    |
| Panama           | 0                            | 8                    |
| PNG              | 31                           | 5510                 |
| Philippines      | 54                           | 896                  |
| Solomon Islands  | 92                           | 1165                 |
| Seychelles       | 0                            | 1                    |
| Taiwan           | 39                           | 268                  |
| United States    | 0                            | 5                    |
| Vanuatu          | 19                           | 635                  |
| <b>TOTAL</b>     | <b>297</b>                   | <b>9467</b>          |

### **TAGGED FISH MOVEMENTS**

Updated graphics showing the movements of tagged tuna are shown below in figures 2-4. Skipjack continue to show the greatest mobility, followed by yellowfin and bigeye tuna.



**Figure 2. Displacements of tagged SKIPJACK >300 nmi.**

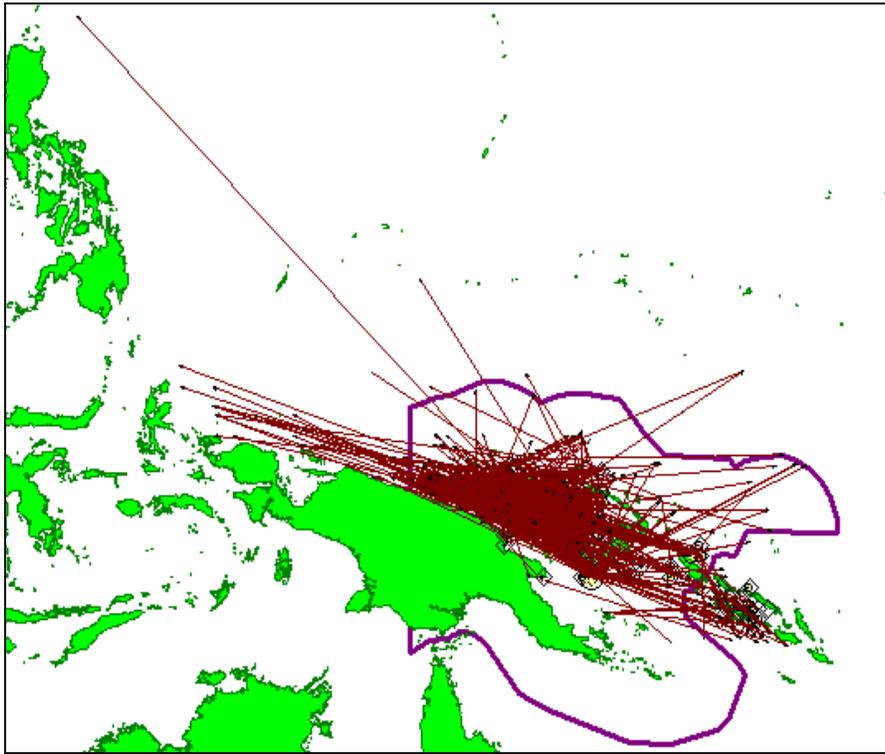


Figure 3. Displacements of tagged YELLOWFIN > 200 nmi.

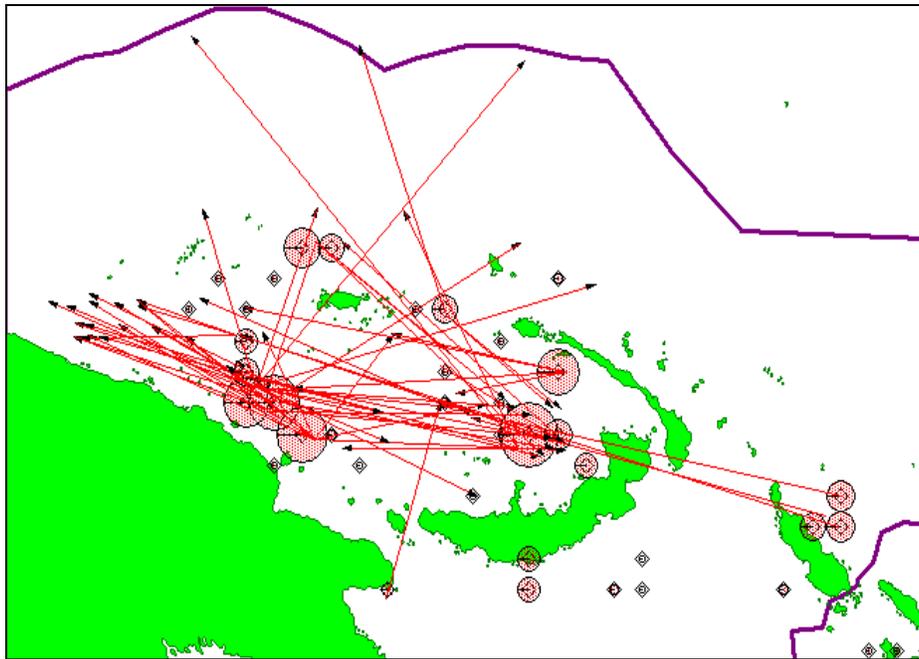


Figure 4. Displacements of tagged BIGEYE > 100 nmi.