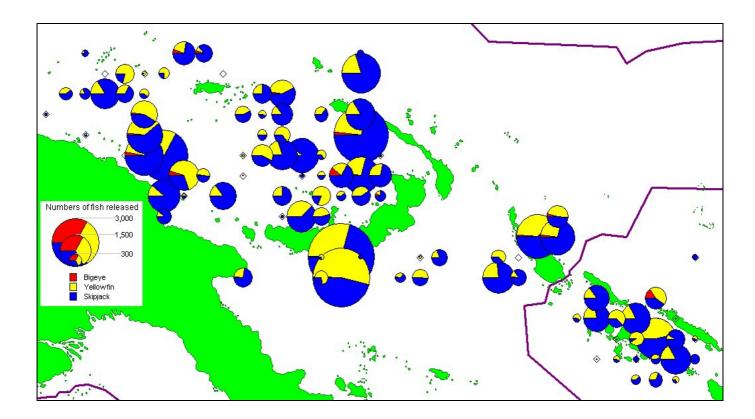
# PACIFIC TUNA TAGGING PROGRAMME

# **MONTHLY TAGGING SUMMARY – JANUARY 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 commences on 21<sup>st</sup> February 2008 for 10 weeks. The tagging will include both conventional and archival tagging of yellowfin, bigeye and skipjack tuna.

### TAG RECOVERY OFFICER

To help manage the recovery of tags and further facilitate the payment of rewards for tag returns, SPC recently advertised for a tagging technician to work with our recovery agents across the western Pacific. We are pleased to announce that Mr Brian Kumasi has accepted the position and will commence in mid-February. Brian was a fisheries officer with the PNG-NFA prior to this appointment with key responsibilities for implementing the PTTP in the exclusive economic zone of Papua New Guinea. Consequently he comes to this position with extensive knowledge about the program and will already be familiar to many of fisheries managers and fishers.



Brian at the tagging craddle onboard Soltai6

## 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 | Total |
|-------------------------------------|----------|-----------|--------|-------|
| 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    |
| Total                               | 40409    | 20649     | 691    | 61749 |

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

|                                     | Skipjack | Yellowfin | Bigeye | Total |
|-------------------------------------|----------|-----------|--------|-------|
| 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     |
| Total                               | 7476     | 3565      | 139    | 11180 |

### C. Total PTTP

|                                     | Skipjack | Yellowfin | Bigeye | Total |
|-------------------------------------|----------|-----------|--------|-------|
| 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    |
| Total                               | 47885    | 24214     | 830    | 72929 |

## **TAG RECOVERIES**

January 2008 was a relative quite month for tag returns (Figure 1), with 478 conventional tags, and 1 sonic tag. This brings the total number of tag returns to **9,170**, with an overall recovery rate of **12.6%** (Table 2) for conventional tags, 12.5% for archival tags (Table 3) and 9.5% for sonic tags (Table 4).

#### Table 2. Conventional tag recoveries, as at 31 January 2008.

|                          | Skipjack     | Yellowfin    | Bigeye      | Total        |
|--------------------------|--------------|--------------|-------------|--------------|
| January 2008 recoveries  | 336          | 141          | 1           | 478          |
| Total to 31 January 2008 | 5703 (11.9%) | 3238 (13.4%) | 229 (27.7%) | 9170 (12.6%) |

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

#### Table 3. Archival tag recoveries, as at 31 January 2008.

|                          | Skipjack | Yellowfin  | Bigeye   | Total      |
|--------------------------|----------|------------|----------|------------|
| January 2008 recoveries  | -        | -          | -        | 0          |
| Total to 31 January 2008 | 1 (50%)  | 25 (10.5%) | 11 (20%) | 37 (12.5%) |

#### Table 4. Sonic tag recoveries, as at 31 January 2008.

|                          | Skipjack | Yellowfin | Bigeye    | Total     |
|--------------------------|----------|-----------|-----------|-----------|
| January 2008 recoveries  | 1        | -         | -         | 1         |
| Total to 31 January 2008 | 3 (4.3%) | 11 (8.1%) | 7 (38.9%) | 21 (9.5%) |

The January 2008 recoveries were dominated by the Solomon Islands purse-seiners (NFD and Global Investment) and by Frabelle company in PNG.

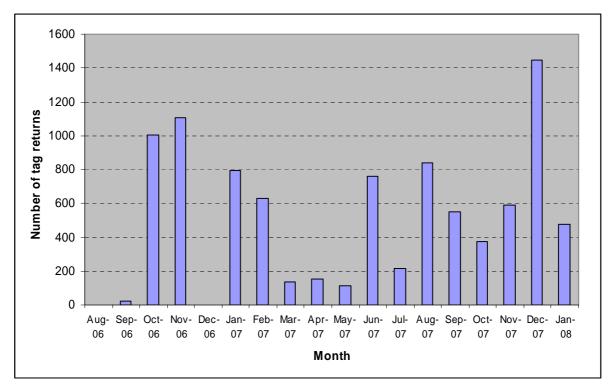


Figure 1. Number of tag returns by month.

| Tag return source                   | January 2008 returns | Total returns |
|-------------------------------------|----------------------|---------------|
| American Samoa                      | 0                    | 13            |
| China                               | 0                    | 1             |
| FSM                                 | 0                    | 1             |
| IATTC                               | 0                    | 103           |
| Indonesia                           | 0                    | 69            |
| IOTC                                | 0                    | 2             |
| Japan                               | 1                    | 227           |
| Korea                               | 0                    | 115           |
| Other                               | 0                    | 6             |
| Philippines (direct)                | 0                    | 265           |
| Philippines (Frabelle)              | 0                    | 162           |
| PNG (Frabelle)                      | 127                  | 590           |
| PNG (NFA)                           | 0                    | 87            |
| PNG (other)                         | 1                    | 31            |
| PNG (RD)                            | 0                    | 5022          |
| PNG (SSTC)                          | 0                    | 145           |
| Solomon Islands (Soltai)            | 0                    | 128           |
| Solomon Islands (Other)             | 0                    | 20            |
| Solomon Islands (Global Investment) | 253                  | 658           |
| Solomon Islands (NFD)               | 81                   | 925           |
| Tagging vessel                      | 0                    | 23            |
| Thailand                            | 15                   | 877           |
| TOTAL                               | 478                  | 9170          |

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

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).

| Flag             | January 2008 returns | Total returns |
|------------------|----------------------|---------------|
| Non identified   | 0                    | 407           |
| China            | 0                    | 26            |
| FSM              | 1                    | 6             |
| Indonesia        | 0                    | 71            |
| Japan            | 2                    | 242           |
| Kiribati         | 0                    | 10            |
| Korea            | 1                    | 141           |
| Marshall Islands | 0                    | 10            |
| New Zealand      | 0                    | 2             |
| Panama           | 0                    | 8             |
| PNG              | 55                   | 5479          |
| Philippines      | 76                   | 842           |
| Solomon Islands  | 81                   | 1073          |
| Seychelles       | 0                    | 1             |
| Taiwan           | 8                    | 231           |
| United States    | 0                    | 5             |
| Vanuatu          | 254                  | 616           |
| TOTAL            | 478                  | 9170          |

Table 6. Number of tag recoveries by vessel flag.

## 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.

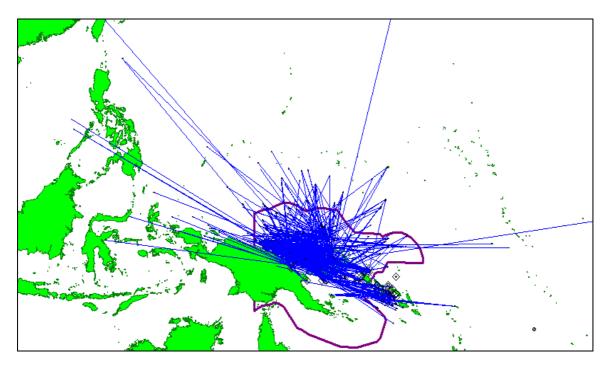


Figure 2. Displacements of tagged SKIPJACK>300 nmi.

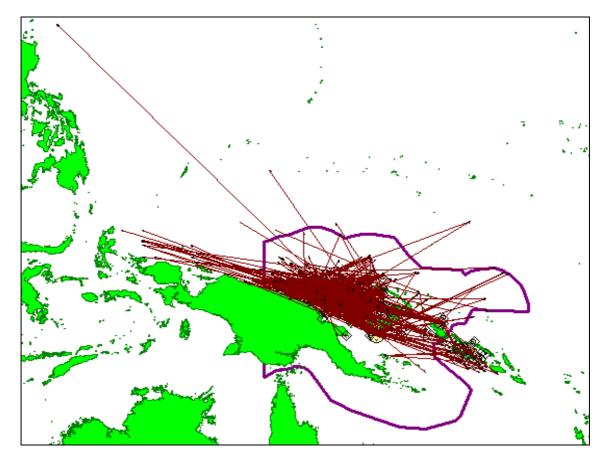


Figure 3. Displacements of tagged YELLOWFIN>200 nmi.

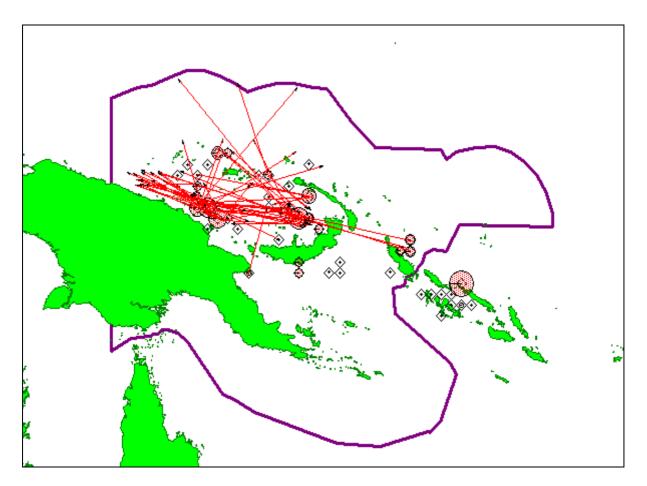


Figure 4. Displacements of tagged BIGEYE>100 nmi.