

VANUATU TRENDS REPORT FOR 2011-2012

Report prepared by Catherine Siota, Turtle Database Officer

1. INTRODUCTION

The purpose of this report is to provide Wan Smolbag Theatre's (WSB) Vanua-Tai Turtle Monitors Network and partners with a summary of tagging and nesting information that has been submitted to SPREP for incorporation into the regional Turtle Research and Monitoring Database System (TRENDS).

This report also aims to provide information that can be used to assist turtle conservation work carried out in Vanuatu.

The data held in TRENDS is from fieldwork carried out in Vanuatu by the Wan Smolbag's Vanua Tai Turtle Monitors Network as well as the Environment Unit, Fisheries and documents listed in the bibliography at the end of TRENDS report for 2009 (Trevor, 2009).

This report provides an update of all data in TRENDS and accommodating the recent data received for 2011-2012 period, during this reporting period (2011 June-2012 September).

2. TAG INVENTORY

The tag inventory for Vanuatu records all tags received from SPREP and details of damage and distribution of tags. The tag inventory records all flipper tags used for turtle monitoring in Vanuatu.

2.1. Tags distributed by SPREP to Vanuatu

Tags distributed to WSB, Environment Unit, Fisheries and Tranquility Resort by SPREP now total up to 12,410. Out of this total, only 3,652 (29.4%) are recorded in TRENDS (Annex 1). Trevor (2009) reported a total of 9,663 tags distributed by SPREP to Vanuatu and only 2,392 (24.8%) are recorded in TRENDS as being used. While Siota (2010) reported 10,295 tags distributed and 2,994 (29.1%) as applied to turtles.

2.2 Tags distributed by other agencies to Vanuatu

There are no records of tags distributed by other agencies for Vanuatu in TRENDS.

3. SPECIES NUMBERS BY SITE FOR VANUATU

Hawksbill turtle (n=1035) is the species with the highest record in TRENDS for Vanuatu. This is followed by green (n=645), unidentified marine turtle species (n=143), leatherback (n = 15), loggerhead (n=7) and olive ridley turtles (n=5) (Annex 2). The new update for this reporting period is the inclusive of data from Tranquility Resort for 2011-2012 (up to May) period. The details of turtles encountered are as follows:

- **1973:** One green turtle which was tagged and released from Scilly Atoll in French Polynesia was reported as a tag recovery in 1973 in Maskelyne Island;
- **1992:** Five juvenile turtles of the species hawksbill (n=2) and green turtles (n=3) were captured, tagged and released in Lutes and Pelongk villages in Maskelyne Island;
- **1993:** Two loggerhead turtles were tagged in Wiawi village in Malekula Island, but tag numbers were not recorded in TRENDS. Also in 1993 one nesting green turtle was reported from Motalava Island.
- **1996:** A total of 61 hawksbill and eight green turtles were observed in 1996;
 - Out of the total, 61 hawksbill and five green turtles were reported from Efate Island, in the following sites:
 - ❖ Fifty-six hawksbill turtles were tagged and released from Tukutuku Ranch, 55 of them were head starting turtles that were kept in captivity, while one was a nester, that was observed to be nesting;

- ❖ For foraging turtles, five green turtles were captured by netting and were tagged and released from Sun Island (n=1), Takara village (n=2) and Tanoliu village (n=2). While four hawksbill turtles were tagged and released from Tanoliu village (n=1), Tasipuariki (n=1), Efate island (n=1) and Toa Lima (n=1);
- ❖ In addition, one hawksbill turtle was reported to be nesting in Angoroa/Tukutuku.
- Three green turtles were also reported from Utanlang village, Nguna Island. One was observed to be foraging, while the other two beached and nested;
- **1997:** A total of four green, two hawksbill and one olive ridley turtles were reported to be captured, tagged and released in 1997, following bullet points are the detailed breakdown:
 - Out of the total, a green and an olive ridley turtles were from Emua village, while one hawksbill turtle was from Mangaliliu village and a green turtle from Siviri village;
 - In addition, two green turtles were captured by rodeo on Nguna Island in the villages of Tikilaso (n=1) and Unakap (n=1);
 - Furthermore, one hawksbill turtle was initially tagged from Tukutuku Ranch in 1996 and was recaptured in Bounkil, Erromango Island in 1997;
- **1998:** A total of 24 hawksbill and 12 green turtles were reported to be captured, tagged and released in 1998 for foraging turtles. Also an addition of two nesting green turtles from Takara village in Efate and one green turtle reported from Utanlang village in Nguna Island. Following are the detailed breakdown:
 - Seven hawksbill and four green turtles were from Nguna Island. Out of the total, five hawksbill turtles were reported from Nagustare point (n=1), Tarena (n=1) and Woralapa (n=3), while two hawksbill and two green turtles were from Malapau passage (n=2) and Utalang. In addition one green turtle was from Tikilaso (n=1);
 - While 12 hawksbill and four green turtles were from Emua (n=3), Hat (Eretoka) Island (n=1), Mangaliliu (n=2), Panuagisu (n=1), Tanoliu (n=1), Toa Lima (n=1), Tasipuariki (n=5) and Vatupau (n=1) in Efate Island;
 - With two hawksbill turtles from Lelepa landing (n=1) and Leosa passage (=1) in Lelepa Island;
 - In addition, two green turtles were from Epi Island in the villages of Bongovio (n=1) and Mafilau (n=1);
 - Moreover, three green turtles were from Avunatari village (n=1) in Malo Island and Kakula Island (n=2);
 - One hawksbill turtle was reported from Marou village in Akamb Island;
 - Furthermore, one hawksbill turtle was reported from Champagne beach in Espirito Santo and two green turtles from Isavai village in Aniwa Island (n=2).
- **1999 Foraging:** A total of 15 green and 14 hawksbill turtles were reported to be captured, tagged and released in 1999. Following bullet points are the detailed breakdown:
 - From Efate Island, out of the total, six green turtles were from Emua (n=1), Mangaliliu (n=2), Samoa Point (n=1), Takara (n=1) and Toa Lima passage (n=1). For hawksbill turtles, four were reported from Emua (n=1), Samoa Point (n=1), Toa Lima Passage (n=1) and Takara (n=1);
 - In addition, two green turtles were from the villages of Mafilau (n=1) and Nelson Bay (n=1) and two hawksbill turtles from the villages of Bongovio (n=1) and Brisbane (n= 1) in Epi Island;
 - Moreover, one green turtle from Emotu passage and two hawksbill turtles were from Tasiriki village (n=1) and White Stone (n=1) in Moso Island;
 - From Malo Island, one green turtle was tagged and released from Avunatari village and a hawksbill turtle from Malo passage;
 - In addition, five green turtles were captured, tagged and released from Isavai village, Aniwa Island (n=1), Rovo Bay, Emae Island (n=1), Lasoa, Emau Island (n=1), Port Olry, Espirito Santo (n=1), Pelongk village, Maskelyne Island (n=1). And four hawksbill turtles reported from Marou, Akamb Island (n=1), Isavai village, Aniwa Island (n=1) Lelepa Landing, Lelepa Island (n=1) and an unknown site, Vanuatu (n=1).

- **2000 Foraging:** A total of 54 hawksbill and 23 green turtles were captured, tagged and released in year 2000 for foraging turtles.
 - Fifteen hawksbill and four green turtles were from the Island of Efate in the villages of Emua (n=8), Epau (n=2), Mangaliliu (n=1), Siviri (n=3), Tanoliu (n=2), Lanukarae (n=1), Laukenasua (n=1) and Panuagisu (n=1);
 - Five green and two hawksbill turtles from Epi Island were tagged and released from the following sites: Brisbane village (n=1), Mafilau village (n=1), Sara village (n=2), Alack reef (n=1) and Volan village;
 - Five green and one hawksbill turtles were from Aniwa Island in the villages of Isavai (n=5) and Aniwa lagoon (n=1);
 - One green and 11 hawksbill turtles were head starting turtles from Tranquility Island Resort in Moso, that were in captivity and were tagged and released;
 - From Malekula Island, two green turtles were tagged and released from Manmol (n=1) and Sohbef (n=1), in addition, three hawksbill turtles were from Tomma;
 - Furthermore, in Maskelyne Island, three green turtles were tagged and released from Lutes village, as well as two hawksbill turtles from Pelongk (n=1) and Peskarus (n=1);
 - Five hawksbill turtles were reported from Malo Island in the villages of Avunatari (n=4) and Nanuku (n=1), they were also tagged and released;
 - While two green turtles were from Nelson Bay and one hawksbill from Valesdir village in Emae Island;
 - Also reported from Emau Island in Lausake passage was one hawksbill turtle, as well as one green turtle and a hawksbill turtle were tagged and released in Wiana village;
 - In addition, one hawksbill and one green turtle were from Hog harbour and one hawksbill turtle from Port Olry (n=1) in Espirito Santo.
 - Three hawksbill turtles from Freemantle (n=1) and Piliuru village (n=2) in Pele island;
 - Two hawksbill turtles were reported from Tegua island in the villages of Lateu (n=1) and Tavloel (n=1). Turtle from Tavloel was a nester.
 - Moreover, four green turtles were from Marou village, Akamb Island (n=2), Graig Cove, Ambrym Island (n=1) and Tikilaso village, Nguna Island (n=1). While two hawksbill turtles were from Motalava village, Motalava Island (n=1) and Lolbiribirisulu village in Pentecost Island.
- **2000 Nesting:** For nesting turtles, two hawksbill and three green turtles were reported. Following bullet point is the detailed breakdown:
 - Three green turtles were reported from Asaola village, Aniwa Island (n=1), Epau village reef, Efate Island (n=1) and Rovoliu village, Epi Island (n=1). And the two hawksbill turtles were from Rovoliu village, Epi Island and Tavloel village, Tegua Island (n=1).
- **2001 Foraging:** A total of 25 hawksbill and 13 green turtles and eight unidentified marine turtle species were captured, tagged and released in 2001. And as well as two nesting green turtles which were reported from Mafilau, Epi Island and Litatra village, Tegua Island. The following are the details of the foraging turtles encountered:
 - Out of the total, seven green turtles were from Efate Island in the villages of Emua (n=1), Epau (n=1), Siviri (n=1), Takara (n=3) and Tanoliu (n=1). And as well as eight hawksbill turtles were from the same villages in Efate Island, in Emua (n=3), Epau (n=1), Siviri (n=2), Takara (n=1) and Tanoliu (n=1);
 - From Emau Island, five green turtles were encountered from the village of Isavai (n=2), Ngurua (n=2) and Wiana village (n=1) and four hawksbill turtles from Wiana village;
 - From Epi Island, Two green turtles were from Bongovio village and one hawksbill turtle from Volan village (n=1);
 - Moreover, four hawksbill turtles were from Pentecost Island in Loltong (n=3) and Namwarangiut village (n=1), in addition one green turtle from Tegua Island in Lateu

- (n=1) and one green turtles and one hawksbill from Avok island, in Lembu bay (n=1) and Willes (n=1);
- Furthermore, one green turtle was from Marou village, Akamb Island and six hawksbill turtles were tagged and released from Natapau village, Lelepa Island (n=1), Herelol village, Loh Island (n=1), Mantale-Lamb, Malekula Island (n=1) and Marou village, Akamb Island (n=3). Moreover, eight unidentified marine turtle species were from Tranquility Island Resort, Moso Island (n=8).
 - **2001 Nesting:** For nesting turtles, two green turtles were reported for 2001 period. Following bullet points are the detailed breakdown:
 - One green turtle beached for nesting in Epi Island at Mafilau village;
 - While, another green turtle beached for nesting at Litatra village in Tegua Island.
 - **2002 Foraging:** A total of 20 green and 25 hawksbill turtles and 24 unidentified marine turtle species were reported to be captured, tagged and released in 2002, following bullet points are the detailed breakdown:
 - From Efate Island, 11 hawksbill turtles were encountered from the village of Epau (n=1), Mangaliliu (n=2), Mele (n=1), Namoso (n=2), Siviri (n=3) and Tanoliu (2); while two green turtles were from the villages of Takara (n=1) and Siviri (n=1)
 - Three hawksbill turtles were from Epi Island in the villages of Nikaura (n=1) and Nuvi (n=2) and from Malekula Island, two green turtles were from Labo village and two hawksbill turtles from Lembenwen village;
 - From the Island of Maskelyne, four green turtles were from Lutes (n=2), Peskarus (1) and Sakao Island (n=1) and one hawksbill was also from Sakao Island. Furthermore, two hawksbill turtles were from Lateu village (n=1) and Litatra village (n=1) in Tegua Island;
 - Twenty-four hawksbill turtles were head starting turtles that were released from captivity from Tranquility Island Resort, Moso Island;
 - Furthermore, 11 green turtles were from Akamb village, Akamb Island (n=4), Wiana village, Emau Island (n=1), Nakere village, Espiritu Santo (n=1), Natapau village, Lelepa (n=1), Piliuru village, Pele Island (n=1), Latano village, Pentecost Island (n=2) and unknown site, Vanuatu (n=1). Also six hawksbill turtles were from Akamb village, Akamb Island (n=1), Woru, Ambrym (n=1), Wiana village, Emau Island (n=1), Natapau village, Lelepa (n=1), Piliuru village, Pele Island (n=1) and Latano village, Pentecost Island (n=1).
 - **2002 Nesting:** For nesting turtles, 10 green and four leatherback turtles were reported for 2002 period. Following bullet points are the detailed breakdown:
 - For the nesting turtles, 10 were nesting green turtles reported from Emua village, Efate Island (n=1), Epau village reef, Efate Island (n=1), Votlo village, Epi Island (n=5), and Lawa village, Malekula Island (n=3). Moreover four leatherback turtles were also from Votlo village in Epi Island.
 - **2003 Foraging:** A total of 41 hawksbill and 28 green turtles, and 26 unidentified marine turtle species were reported in 2003. Following are the detailed breakdown:
 - Out of the total, 10 hawksbill turtles were encountered in Emua (n=6), Epau (n=1), Saama (n=2) and Tanoliu (n=1) and seven green turtles from Mangaliliu (n=1), Siviri (n=2) and Takara (n=4) in Efate Island;
 - In addition, six green turtles were from Lawia (n=1), Semsahao (n=1), Suhuruh (n=1), Willes (n=1), and Binniho (n=1) in Avok Island and two hawksbill turtles reported from also from Avok Island;
 - From Malekula Island, seven hawksbill turtles were reported from the villages of Lawa (n=3) and Lembenwen (n=4) and an additional of one green turtle from Melip village (n=1). Moreover in Nguna Island, seven hawksbill turtles were reported from Lanusaroi (n=2), Matakove (n=1), Tikilaso (n=3), and Woralapa (n=1), while two green turtles were from the villages of Nekapa (n=1) and Lanusaroi beach (n=1) also in Nguna Island;

- Furthermore, from Emau Island, three green turtles were reported from Lausake (n=2), and Ngurua (n=1) and five hawksbill turtles from the villages of Wiana (n=3) and Lausake (n=2);
- In addition, two green turtles were tagged and released in Ringdove bay (n=1) and Votlo Research Site (n=1) in Epi Island;
- From Lelepa Island, six hawksbill turtles were tagged and released from Lelepa landing (n=3), Lelepa reef (n=1) and Lelepa village (n=2) and one unidentified marine turtle species was also reported from Lelepa landing;
- Also in addition from Akamb Island, five green turtles were reported from the villages of Marou (n= 4) and Akamb (n=1) and one hawksbill turtle from Akamb village;
- Twenty-five unidentified marine turtle species were reported from Tranquility Island Resort in Moso Island;
- While four hawksbill turtles were reported from Lolowai village, Ambrym Island (n=1), Kakula Island (n=1) and Piliuru village, Pele Island (n=2). Moreover a leatherback turtle was reported from Port Vato, Ambym Island and one green turtle from Hog harbour, Espiritu Santo.
- **2003 Nesting:** For nesting turtles, four hawksbill turtles were reported from Ringdove bay, Epi Island (n=1), Lembenwen (n=1) and Neranehme (n=1) in Malekula Island and as well as one in Namuka Island (n=1). While two green turtles were reported from Ringdove Bay (n=1) and Votlo Research Site (n=1) in Epi Island. Along with two leatherback turtles reported from Port Qumie (n=1) and Votlo Research Site (n=1) in Epi Island.
- **2004 Foraging:** A total of 55 hawksbill and 50 green turtles, 71 unidentified marine turtle species and one olive ridley turtle were reported to be tagged and released in 2004:
 - Out of the total, 71 of them were head starting unidentified marine turtle species that were kept in captivity and were tagged and released from Tranquility Island Resort in Moso Island;
 - From Efate Island, 16 hawksbill turtles were reported from the villages of Emua (n=1), Mangaliliu (n=5), Saama (n=1), Siviri (n=7), Tanoliu (n=1) and Tasipuariki (n=1), while eight green turtles were from Emua (n=1), Fatupau (n=1), Siviri (n=3) and Takara (n=3)
 - Moreover from Nguna Island, 16 hawksbill turtles were reported from Nguna-Pele Conservation Area (n=2), Taloa (n=11) and Unakap village (n=3) ;
 - From Malekula Island, five green turtles were from the villages of Leviamp (n=2) and Okai (n=3), while five hawksbill turtles were from Faroun (n=1) and Okai village (n= 4);
 - From Maskelyne Island, ten green turtles were from the villages of Lutes (n=5), Pelongk (n=2) and Peskarus (n=3), as well as one hawksbill turtle also from Lutes (n=1) and one olive ridley turtle reported from Peskarus (n=1);
 - From Pentecost Island, three hawksbill turtles were from Loltong Harbour (n=1) and Namwarangiut village (n=2), three green and three hawksbill turtles were from the village of Marou (n=6) as well as one green turtle from Akamb village.
 - In addition from Emae Island, three hawksbill turtles were from Finonge (n=1) and Tongamea (n=2) and one green turtle reported from Tenmaru village also in Emae Island.
 - Furthermore, for Emau Island, three green turtles were reported from Lausake village (n=1) and Lausake passage (n=2), as well as three hawksbill turtles reported also from Lausake village (n=1) and Lausake passage (n=2);
 - Five green turtles were reported from Behaveh, Sakau (n=1), Port Olry, Espiritu Santo (n=1), Laman Bay, Epi Island (n=1) and Avok Island (n=2). And five hawksbill turtles were also reported from Lelepa village, Lelepa Island (n=1), Avok Island and Laman bay, Epi Island (n=1)
- **2004 Nesting:** For nesting turtles, 10 green and four leatherback turtles were reported for 2004 period. Following bullet points are the detailed breakdown:

- Ten nesting green turtles were reported from Emua village, Efate (n=1), Epau village reef (n=1), Efate, Votlo village (n=5), Epi Island and Lawa village, Malekula Island (n=3). And four leatherback turtles were from Votlo village in Epi Island.
- **2005 Foraging:** A total of 80 green, 52 hawksbill and one olive ridley turtles and six unidentified marine turtle species were observed in 2005, these are foraging turtles that were captured, tagged and released in various Islands in Vanuatu. Following bullet points are the detailed breakdown:
 - Fifty-four of them were head starting unidentified marine turtle species that were tagged and released from captivity from Tranquility Island Resort in Moso,
 - From Malekula Island, nine hawksbill turtles were reported from Bamboo bay (n=3), Faroun village (n=1), Vakas Basis (n=2) and Okai village (n=3). And in addition, two green turtles were reported from Okai village and two unidentified marine turtle species from Malekula (n=1) and also Okai village (n=1);
 - From Nguna Island, 12 hawksbill turtles were reported from Laken Napere (n=1), Nagisutare (n=2), Nguna-Pele Conservation Area (n=8), and Tarena (n=1) and also eight green turtles from Matakove (n=1), ; Nguna-Pele Conservation Area (n=2), Taikesa (n=2), Tarena (n=2) and Woralapa village (n=1);
 - In addition, six green turtles were from Emua (n=1), Epau (n=1), Mangaliliu (n=1) and Takara (n=3) and as well as eight hawksbill turtles were also reported from Emua (n=1), Mangaliliu (n=4), Pango (n= 1) and Siviri (n=2) in Efate Island;
 - In addition from Emau Island, one green turtle was reported from Mangarongo village, and one unidentified marine turtle species from Kopesimaeto village. As well as four hawksbill turtles reported from Mginiae beach (n=2), Vatukura (n=1) and Wiana (n=1) in Emau Island, moreover one olive ridley turtle was also reported from Mginiae village;
 - In Sakau Island, three hawksbill turtles were tagged and released from the villages of Tahumben (n=1), Tasmania (n=1) and Tonomeal (n=1);
 - Four green turtles were from Ranon (n=3) and Varo village (n=1), while four hawksbill turtles were reported from Ranvetlam (n=1), Maltou village (n=2) and Varo village (n=1) in Ambrym Island.
 - In Akamb Island, four hawksbill turtles were reported from Marou (n=1), Robunas (n=1) and Rorbaeigk (n=2). As well as one green turtle and one unidentified marine turtle species reported from Marou village;
 - Furthermore, four green turtles were reported from Anelgohat, Aneityum Island (n=1), Worarana, Emae Island (n=1) and Mystery Island (n= 1), while six hawksbill turtles were reported from Vulai Island, Maskelyne (n=1), Telvet, Motalava (n=1), Litatra village, Tegua Island (n=1), Toka village, Tores Island (n=2), Sola, Vanualava (1) and Vatura, Emau (1). And two unidentified marine turtle species in unknown sites, Vanuatu (n=2).
- **2005 Nesting:** A total of 27 green and five hawksbill turtles, four unidentified marine turtle species and two leatherback turtles were reported to be nesting in Vanuatu in 2005:
 - Thirteen of them were reported to be nesting in Bamboo Bay, Malekula Island; there were nine green turtles, two hawksbill turtles and two unidentified marine turtles;
 - In addition, four were nesting leatherback and green turtles reported from Nelson Bay (n=1) and Votlo Research site (n=3) in Epi Island;
 - Eighteen were nesting hawksbill and green turtles and unidentified marine turtle species from the island of Malekula, these were reported from Bamboo Bay (n=4), Vakas basis (n=2), Malekula (n=11) and Pinapow beach, Burao Tenmaru (n=1). And one from Lungharigi in Loh Island.
- **2006 Foraging:** A total of 89 green, 73 hawksbill and four loggerhead turtles, and one unidentified marine turtle species are foraging turtles that were reported to be captured, tagged and released in 2006. The following bullet points are the detailed breakdown:
 - Nineteen green turtles were from the villages of Piliura (n=15), Weareru (n=1) and Worasiviu (n=3), while 10 hawksbill turtles were reported from Lanuamoa (n=2), Piliura (n=3) and Worasiviu (n=5) in Pele Island;

- From Nguna Island, six green turtles were from Malapau passage (n=3), Matakove (n=1), Taloa (n= 4) and Vatvako (n=1) and six hawksbill turtles from Matakove (n=2), Taloa village (n=3) and Unakap village (n=1) in Nguna Island;
- Thirteen of them were from head starting turtles from Tranquility resort in Moso Island, 10 of them were hawksbill and three green turtles;
- In addition, five hawksbill turtles were from Pelongk (n=1), Sakao (n=1) and Vulai (n=3) in Maskelyne Island;
- From Malekula Island, nine hawksbill turtles were from Bamboo bay (n=9), Lawa Southwest Bay (n= 3) and Okai (n=1) and a green turtle, also from Okai village in Malekula Island;
- From Loh Island, three loggerhead turtles were reported from Lungharigi, while two hawksbill turtles were reported from Nguleley Lenga Point (n=2);
- Three green turtles were reported from the villages of Marou (n=2), Robunas (n=1), Rorbaeigk (n=1) and six hawksbill turtles reported from Marou village (n=1), Rorbaeigk (n=3) and Varo village (n=2) in Akamb Island;
- From Ambrym Island, three hawksbill turtles were reported from a site in Ambrym and one loggerhead turtle at Lonbili in Ambrym Island;
- From Emau Island, three green turtles were reported from Lausake passage (n=2) and Wiana passage (n=1), six hawksbill turtles were reported from in Emau Island and two from Nikaura (1) and Nuvi (1) in Epi Island.
- Forty-three of them were from Mystery Island and three from Tonomeal (2) and Vatmbeaf villages in Sakau Island.
- Twenty-three were from Anelgohat village, Aneityum (11), Aniwa Island (2), Mangaliliu, Efate Island (2), Finonge village, Emae (1), Dillons bay, Erromango (1), Port Olry, Espiritu Santo (1), Telvet village, Motalava (4) and unknown site, Vanuatu (1).
- **2006 Nesting:** A total of 36 green , 47 hawksbill and one leatherback turtles were reported to be nesting in 2006. The following bullet points are the detailed encounters:
 - Sixty of them were nesting hawksbill and green turtles from Bamboo bay (55), Bennewur (1), Levor (1), Malekula (1), Nebure (1) and Weisir (1) in Malekula Island.
 - Six were nesting hawksbill, Leatherback and green turtles from Port Olry (1) and Vaipei Village (5) in Espiritu Santo.
 - In addition, ten hawksbill turtles were reported to be nesting in Lungharigi, Loh Island (1) and Tasiriki in Moso Island (9). And also eight green turtles were reported from Bamboo bay in Malekula Island.
- **2007 Foraging:** A total of 78 green and 51 hawksbill turtles and seven unidentified marine turtle species were reported to be captured, tagged and released in 2007 for foraging turtles. The following bullet points are the detailed encounters:
 - From Moso Island, a total of twenty hawksbill and unidentified marine turtle species (1) were from Tranquility Island Resort and one green turtle and two hawksbill turtles were from reported from Tasiriki.
 - From Efate Island, three green turtles were encountered in Emua (1) and Takara (2). While six hawksbill turtles were reported from Black Sands (1), Emua (3), Tanoliu (1) and Tasipuariki (1). Moreover two unidentified marine turtle species (2) were from Efate (1) and Laukenasua (1).
 - Thirty-six green turtles and six hawksbill turtles were captured, tagged and released from Mystery Island.
 - Three hawksbill turtles were reported from Maskelyne Island in the villages of Lombuland (1), Sohdidueo (1) and Volumbau (1), in addition a green turtle was also reported from Vulai Island also in Maskelyne.
 - While one hawksbill and a green turtle were reported from Bamboo bay (1) and only one green turtle from Lawa Southwest Bay (1) in Malekula Island.
 - From Pele Island, two hawksbill and two green turtles were reported from Piliura and one hawksbill and one green turtle reported from Worasiviu.

- Also from Sakau Island, one unidentified marine turtle species from Donomial and one hawksbill turtle from Tonomeal (1) were reported.
- Moreover one green turtle from Loltong Harbour and an unidentified marine turtle species from Melisisi village in Pentecost Island were reported.
- In Gaua Island, one hawksbill turtle was reported from Matanda and for Gaua, two green turtles and one hawksbill were reported.
- While from Emau Island, two hawksbill and one green turtle were reported from Lausake and one green turtle from Mangarongo.
- Furthermore 16 green turtles and thirteen hawksbill turtles were captured, tagged and released in Varo village, Akamb Island (2), Magam, Ambrym Island (1), Lembu Bay, Avok Island (1), Aniwa Island (7), Nuvi village, Epi Island (1), Port Olry, Espirito, Santo (1), Telvet village, Motalava Island (1), Unakap village, Nguna village (4), Lateu, Tegua Island (1), Avunatari village, Malo Island (3), Batavusai, Sakau Island (1), Behaveh, Sakau Island (1), Hog Harbour, Espirito Santo (1), Litatra village, Tegua Island (1), Marou, Akamb Island (4), Port Vato, Ambrym (1) and unknown site, Vanuatu (1).
- **2007 Nesting:** A total of 21 green and 53 hawksbill turtles were reported to be nesting during 2007 period. The following bullet points are the detailed encounters:
 - A total of 11 green and 20 hawksbill turtles beached for nesting on Bamboo bay and also a green turtle from Vakas Basis on Malekula Island;
 - In addition, 30 hawksbill and one green turtle nested on Tasiriki, Moso Island.
 - Furthermore, 7 green turtles nested in Votlo village, Epi (n=1), Molboe, Espirito Santo (1), Vasvasada, Pentecost (n=1), unknown site, Vanuatu (1) and Wiawi village (3).
 - Moreover, two hawksbill turtles nested in Worasivi, Pele (n=1) and Wiawi village, Malekula (n=1).
- **2008 Foraging:** A total of 17 green and 17 hawksbill turtles were captured, tagged and released in 2007 period. The following bullet points are the detailed breakdown:
 - A total of 11 green and one hawksbill turtles were captured, tagged and released on Mystery Island;
 - Another five hawksbill and one green turtles tagged in Bamboo bay (5) and Wiawi (1) on Malekula Island;
 - Furthermore three hawksbill and two green turtles were captured, tagged and released from Port Vato, Ambrym;
 - Moreover, three hawksbill turtles were captured, tagged and released from Hog Harbour and Radio Station in Espirito Santo;
 - Also, five hawksbill turtles were captured, tagged and released from Marou village, Akamb (n=2), Saninakani, Aniwa (n=1) and Avunatari village, Malo (n=2);
 - In addition, three green turtles were captured, tagged and released from Waluriki, Ambae (n=1), Cooks Bay, Erromango (n=1) and Lateu village, Tegua (n=1).
- **2008 Nesting:** A total of 22 green, 83 hawksbill and one olive ridley turtles and two unidentified marine turtle species were reported to be nesting turtles observed during 2007 period. The following bullet points are the detailed encounters:
 - Out of the total, 20 green, one olive ridley and 26 hawksbill turtles beached for nesting on Bamboo Bay (33), Dixon Reef village (1), Vakas Basis (2) and Wiawi village (11);
 - In addition one green and 57 hawksbill turtles nested in Tasiriki village, Moso Island;
 - Furthermore, one green turtle and two unidentified marine turtle species nested in Namuka Island (1) and Ambeck, Vanualava (2).
- **2009 Foraging:** A total of one green and three hawksbill turtles were reported to be captured, tagged and released in 2009 period. The following bullet points are the detailed encounters:
 - One hawksbill turtle was tagged and released from Aniwa lagoon;
 - While two hawksbill turtles were tagged and released from Tranquility Island Resort;
 - In addition, one green turtle was tagged and released at Tasiriki village.
- **2009 Nesting:** A total of nine green, 68 hawksbill and one olive ridley turtles were reported to be nesting turtles observed during 2009 period. The following bullet points are the detailed encounters:

- Out of the total, 44 hawksbill and one green turtles beached on Tasiriki beach for nesting;
- In addition, 24 hawksbill and five green turtles nested on Bamboo Bay beach;
- Furthermore, three green and one olive ridley turtles nested on Wiawi village.
- **2010 Foraging:** A total of 16 green and 73 hawksbill turtles were reported to be tagged and released in 2010 period. The following bullet points are the detailed encounters:
 - Out of the total, 72 head starting hawksbill turtles were tagged and released from Tranquility Island Resort;
 - Moreover 14 green and one hawksbill turtles were tagged and released from Mystery Island;
 - While two green turtles were tagged and released from Anuwunamlau.
- **2010 Nesting:** A total of six green and 18 hawksbill turtles, and one unidentified marine turtle species were reported to be nesting turtles observed during 2010 period. The following bullet points are the detailed encounters:
 - Out of the total, three green and 14 hawksbill turtles beached for nesting on Tasiriki village;
 - In addition, three green and four hawksbill turtles; and one unidentified marine turtle nested on Bamboo Bay.
- **2011 Foraging:** A total of four green and 120 hawksbill turtles were reported to be tagged and released in 2011 period. The following bullet points are the detailed encounters:
 - Out of the total, one green turtle was captured by netting and was tagged and released from Mengyeng in Rah Island;
 - In addition, 112 head started turtles were tagged and released from Tranquility Island Resort;
 - Moreover, seven hawksbill and three green turtles were captured, tagged and released from Namwarangiut village (n=1), Nerenigman village (n=1), Port Narvin (n=2), Taloa village (n=1), Tanoliu village (n= 2) and Unakap village (n=3);
 - Furthermore one green turtle was recaptured in Vao, this was a tag recovery turtle, which was tagged and released in Mystery Island in 2010.
- **2011 Nesting:** A total of three leatherback and one green turtles were reported to be nesting on Votlo Research site during 2011 period.
- **2012 Foraging:** A total of 46 head starting hawksbill turtles were tagged and released at Tranquility Island Resort.

4. NESTING TURTLES BY SITE

4.1 Leatherback Turtle

TREDS records show leatherback turtle nesting on Epi, Efate, Espiritu Santo and Malekula with Votlo, Epi showing the most numbers (Table 3) (Trevor, 2009).

Table 3: Nesting leatherback turtles recorded in TREDS for Vanuatu during 2002-2007 period

Location	Island	2002/03	2003/04	2004/05	2006/07	2011
Port Olry	Espiritu Santo				1	
Port Quimie	Epi		1			
Votlo	Epi	6				
Votlo Research site	Epi			2		3
	Total by year	6	1	2	1	3

4.2 Loggerhead Turtle

There is only one record in TREDIS of nesting loggerhead turtle which was on the island of Loh (Table 4) (Trevor, 2009).

Table 4: Nesting loggerhead turtles recorded in TREDIS for Vanuatu during 2006-2007

Location	Island	2006/2007
Linua	Loh	1
	Total by year	1

4.3 Hawksbill Turtle

The hawksbill turtle nesting recorded in TREDIS are on the islands of Ambrym, Efate, Epi, Espiritu Santo, Malekula, Moso and Tekoa. The highest numbers, possibly due to effort put into surveys, are at Tasiriki (Moso) and Bamboo Bay (Malekula) during the 2006-2010 and 2007-2010 nesting seasons (Table 5). The update includes the data for Tasiriki and Bamboo Bay in 2007-2010 and 2008-2010

Table 5: Nesting hawksbill turtles for 1995-2010 period in TREDIS for Vanuatu.

Location	Island	1995/ 96	1996/ 97	2000/ 01	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2009/ 10
Bamboo Bay	Malekula					1	1	32	20	19	28
Lalinda beach	Ambrym								1		
Malekula	Malekula					1					
Tukutuku/Angoroa	Efate	1									
Pinapow Beach	Malekula						1				
Rembe	Malekula				2						
Ringdove	Epi				1						
Rovoliu	Epi			1							
Tasiriki	Moso							19	30	57	58
Tavloel	Tekoa			1							
Vaipei	Espiritu Santo		1					2			
Wiawia	Malekula								7		
	Total by year	1	1	2	3	2	2	53	58	76	86

4.4 Green Turtle

Green turtles nesting have been recorded in TREDIS on the islands of Epi, Espiritu Santo, Malekula, Moso, Motalava, Nguna, Pentecost, Pele and Tekoa, with the highest numbers recorded on Malekula Island due to surveys carried out at the Bamboo Bay area in 2004-2010 and 2006-2010 nesting seasons. The update includes the data for Tasiriki, Bamboo Bay and Wiawia during the period of 2006-2010 (Table 6).

Table 6: Nesting green turtles recorded in TREDIS for Vanuatu during 1992-2010 period.

Location	Island	1992/93	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2011
Asaola	Pentecost			1										
Aniwa Lagoon	Malekula									4				
Bamboo bay	Malekula							12		27	25	14	8	
Dickson reef village	Malekula										1			
Epau village	Efate										1			
Epi	Epi						1							
Lawa	Malekula					3								
Litatra	Tegua				1						1			
Mifilau	Epi			1										
Malekula	Malekula							8		1				
Molboe	Espiritu Santo										1			
Motalava	Motalava	1												
Okai	Malekula							3						
Rembe	Malekula							4						
Ringdove	Epi						1							
Rovoliu	Epi		1											
Tasiriki	Moso									30	3	10	3	
Unakap	Nguna									1				
Vaipei	Espiritu Santo									2				
Vakas	Malekula							1						
Vasvasada	Pentecost									1				
Votlo	Epi					6								
Votlo Research Site	Epi						2		3					1
Wanbe	Epi									1				
Wiawia	Malekula									1	4	3		
Worasivi	Pele									2				
	Total by year	1	1	2	1	9	4	28	3	66	40	27	11	1

5. SIZE FREQUENCY BY SPECIES

5.1 Size Frequency for Green Turtles

A total of 547 green turtles have curved carapace length (CCL) measurement records in TREDIS for Vanuatu. The size frequency graph shows 379 juveniles within the class size range of 5.0-64.9cm, 34 sub-adults within the class size range of 65.0-84.9cm and 134 adults in the class size range of 85.0-124.9cm (Figure 1). Siota (2010) reported 542 green turtles with CCL measurements in an earlier report.

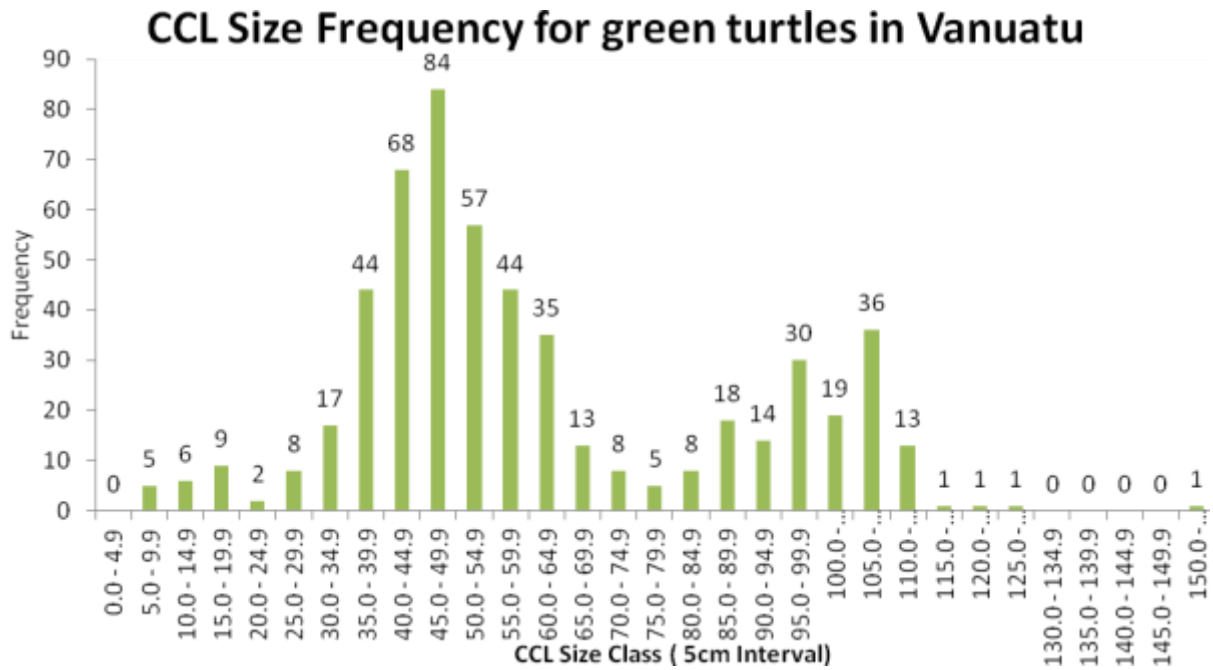


Figure 1: Size frequency for green turtles as recorded in TREDIS for Vanuatu

5.2 Size Frequency for Hawksbill Turtles

A total of 1070 hawksbill turtles have CCL measurement records in TREDIS for Vanuatu. The size frequency graph shows 758 juveniles within the CCL size class range of 0.0-64.9cm, 19 sub-adults within the CCL size class range of 65.0-79.9cm and 293 adults within CCL size class range of 80.0-104.9cm (Figure 2). Siota (2010) reported 870 hawksbill turtles with CCL measurements in an earlier report.

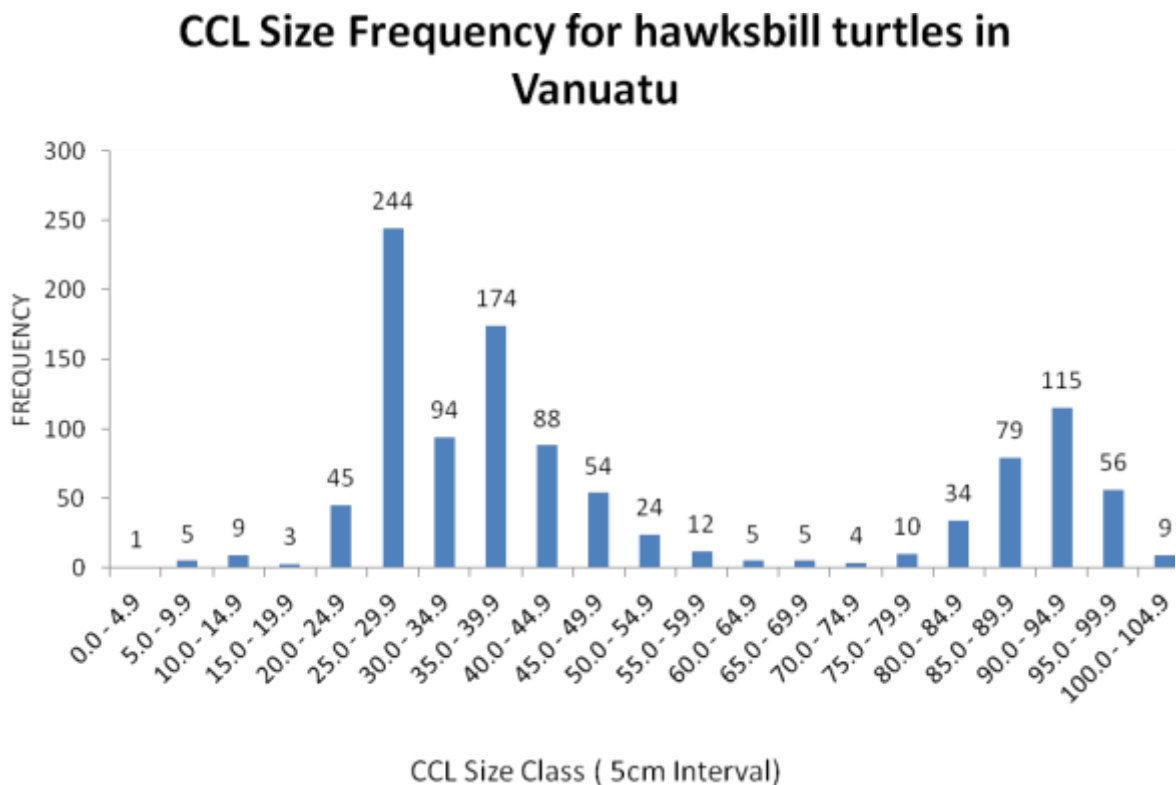


Figure 2: Size frequency for hawksbill turtles as recorded in TREDIS for Vanuatu.

5.3 Size Frequency for Leatherback Turtles.

There are only nine leatherback CCL measurements recorded in TREDIS for Vanuatu. The CCL size class range for the nine leatherback turtles are from 105.0-199.9cm.

5.4 Size Frequency for Loggerhead Turtles.

Only five loggerhead turtles have CCL measurements in TREDIS for Vanuatu. The CCL size class range for these loggerhead turtles are from 40.0-59.9cm for juveniles (n=4) and 100.0-104.9cm for one adult.

5.5 Size Frequency for Olive Ridley Turtles.

Only three (3) olive ridley turtles have CCL measurements recorded in TREDIS for Vanuatu. The CCL size class range for these olive ridley turtles is from 45.0-59.9cm.

6. TAG RECOVERY

6.1. Turtles tagged and recovered within Vanuatu

Out of 63 turtles that were tagged and recovered within Vanuatu. Thirteen were from Bamboo Bay village on Malekula Island, three nesting green turtles were remigrant nesters with 3-7 years of remigration intervals and the rest were recaptured within nesting seasons. In Tasiriki village, Moso Island, only one hawksbill turtle was recaptured as a remigrant interval nester and the other 33 were recovered within the nesting seasons. Wiawia village had two nesting turtles recaptured within a season, one green and the other an olive ridley turtle (ANNEX 2). In addition, 14 tagged turtles were reported as tag recoveries by Trevor (2009). Out of these, five records have no initial tagging details and could only be traced as being used in Vanuatu through TREDIS tag inventory. The updates include 49 turtles that were tagged and recovered within Vanuatu. Trevor (2009) reported only 14 tag recoveries.

6.2 Turtles tagged outside and recovered within Vanuatu

Three green turtles tag recoveries were from turtles that were reported as nesting and tagged in South Great Barrier Reef - Australia, French Polynesia and American Samoa. Two additional green turtles were tagged in Australia and French Polynesia, of which the initial tagging record for Australia was unknown, while the green turtle in French Polynesia was released from captivity from Scilly Atoll. The two hawksbill turtle tag recoveries were of turtles that were tagged and released as sub-adults in Australia and Samoa and recovered in Vanuatu (Trevor, 2009) (Table 8). There are no new updates for turtles tagged outside and recovered in Vanuatu for this reporting period.

6.3 Turtle tagged in Vanuatu and recaptured outside

A hawksbill turtle tagged in Vanuatu on Malekula Island in Bamboo Bay village was recovered stranded in Australia at Lake Arrangan beach (Table 9). This tag recovery is a new update of tag recovery for Vanuatu.

Table 8: Tag recovery of turtles tagged outside and recaptured in Vanuatu

Tag No.	Species	Sex	Initial Encounter			Other Encounter		
			Date	Location	Activity	Date	Location	Fate
K21864	Green	Female	09/Dec/2000	Lady Elliot Island,SGBR, QLD, Australia	Nesting	02/Feb/2002	Lutes Village, Malekula Island	Killed
K625	Green	Female	05/Nov/1993	Rose Atoll, American Samoa	Nesting	01/Apr/1994	Ambrym Island, Vanuatu	Dead
K8415	Hawksbill	Female	21/Oct/1997	Unname reef, NGBR near Lizard Island, QLD, Australia	Foraging	?/10/2006	Vaipei village, NW Santo, Vanuatu	Killed
R16708/R16707	Hawksbill	Indeterminate	29/Apr/2006	Malua Theological College, Upolu Island,Samoa	In captivity	18/Aug/2007	Wasaga Village, Vanua Lava,	RA?
S111/S112/S113	Green	Female	22/Oct/1991	Scilly Atoll, French Polynesia	Nesting	10/Feb/1995	Aneityum Island, Vanuatu	?
K34661	Green	Female	?/?/1992	Australia	unknown	17/Dec/2008	Wiawia village, Malekula Island	Nesting
39	Green	Female	30/Apr/1972	Scilly Atoll, French Polynesia	In Captivity	14/Sep/1973	Maskelyne Island, Vanuatu	unknown

Table 9: Turtle tagged in Vanuatu and recovered outside

Tag No.	Species	Sex	Initial Encounter			Other Encounter		
			Date	Location	Activity	Date	Location	Activity
R41825/R41825	Hawksbill	Female	09/Dec/2009	Bamboo bay village	Nesting	20/Oct/2010	Lake Arrangan Beach, Brooms head NSW,Australia	Stranded, Dead

7. RECOMMENDATION

- More training is needed for the turtle monitors in proper protocols for filling in of turtle datasheets.
- Update tag inventory records to make sure that tag distribution to turtle monitors, loss or damaged tags are reported back to SPREP on their usage for easier verification of data.
- Regular flow of information between Wan Smolbag Theatre's (WSB) Vanua-Tai Turtle Monitors Network and partners with SPREP should be encouraged. This will facilitate informative and useful reporting of tag recoveries back to the government and its partners.
- Vanua- Tai Turtle Monitors Network has grown rapidly, so turtle data needs to be entered in the turtle database regularly to avoid back log of data and datasheets loss.

8. BIBLIOGRAPHY

Trevor, A. 2009. TREDs report for Vanuatu. Report prepared by the Secretariat of the Pacific Regional Environment Program Apia, Samoa.

Siota, C. 2010. TREDs report for Vanuatu. Report prepared by the Secretariat of the Pacific Regional Environment Program Apia, Samoa.

ANNEX 1: Tags series distributed by SPREP

Date	Tag Series		No. of Tags	No. of Tags in TREDS	Receiving Agency
	From	To			
23/10/1991	R1401	R1700	300	14	Environment Unit
06/02/1996	R10026	R10098	73	53	Fisheries Dept
06/02/1996	R10401	R10424	24	0	Fisheries Dept
06/02/1996	R10651	R10700	50	40	WSB
06/02/1996	R10801	R10826	26	19	Fisheries Dept
06/02/1996	R10828	R10850	23	9	Fisheries Dept
06/02/1996	R11001	R11050	50	26	Fisheries Dept
06/02/1996	R11101	R11125	25	17	Fisheries Dept
06/02/1996	R11201	R11223	23	13	Fisheries Dept
06/02/1996	R11226	R11249	24	6	Fisheries Dept
06/02/1996	R9283	R9283	1	1	Fisheries Dept
06/02/1996	R9876	R9898	23	0	Fisheries Dept
31/05/1996	R10153	R10170	18	0	WSB
31/05/1996	R10227	R10249	23	9	WSB
31/05/1996	R10251	R10275	25	0	WSB
31/05/1996	R10378	R10400	23	0	WSB
31/05/1996	R10578	R10589	12	12	WSB
31/05/1996	R10714	R10747	28	16	WSB
31/05/1996	R10927	R10927	37	26	WSB
30/08/1997	R13126	R13350	225	110	WSB
30/08/1997	R13451	R13650	200	52	WSB
16/07/1998	R13951	R14450	550	117	WSB
18/11/1998	R15751	R16350	500	172	WSB
20/04/1999	R21651	R21750	100	40	WSB
20/01/2000	R20973	R21150	178	77	WSB
21/01/2000	R23251	R23650	400	140	WSB
01/01/2002	R19051	R19100	50	10	WSB
01/01/2002	R19201	R19300	100	4	WSB
01/01/2002	R19401	R19926	425	151	WSB
15/08/2002	R18559	R18950	409	109	WSB
20/10/2003	R25101	R25250	150	68	WSB
20/10/2003	R25451	R25650	200	113	WSB
30/06/2004	R28051	R28150	100	34	WSB
29/10/2004	R31501	R31900	400	229	WSB
01/02/2005	R29901	R30500	600	253	WSB
24/03/2005	R35001	R35800	800	110	WSB
18/08/2006	R37651	R38200	550	296	WSB
18/08/2006	R41601	R41650	50	20	WSB
07/12/2006	R40001	R40400	400	83	WSB
19/03/2007	R40601	R41100	500	82	Tranquility resort
30/04/2007	R41651	R42000	350	146	WSB
30/04/2007	R43601	R43650	50	0	WSB
18/11/2007	R42801	R43200	400	102	WSB
18/11/2007	RI00001	RI00100	100	45	Tranquility resort
04/05/2008	R44201	R44300	100	0	WSB
07/06/2008	R44401	R44500	100	0	WSB
07/06/2008	RI00301	RI00400	100	0	WSB
07/06/2008	RI00601	RI00700	100	0	WSB
06/10/2008	RI00901	RI01200	300	0	WSB
19/05/2009	R45951	R46350	400	100	WSB
19/05/2009	RI02001	RI01200	200	0	WSB
26/11/2009	R47451	R47650	200	0	WSB
26/04/2009	RI04401	RI04600	200	70	Tranquility resort

ANNEX 1 continue: Tags series distributed by SPREP

Date	Tag Series		No. of Tags	No. of Tags in TREDS	Receiving Agency
	From	To			
26/04/2010	RI04501	RI04600	100	90	Tranquility resort
01/11/2010	RI04601	RI04700	100	-	WSB
01/11/2010	RI04701	RI04800	100	92	WSB
01/11/2010	RI04801	RI04900	100	4	WSB
19/11/2010	RI04601	RI04900	300	96	WSB
07/12/2010	R46176	R46200	25	-	WSB
07/12/2010	R46201	R46225	25	-	WSB
07/12/2010	R46226	R46250	25	-	WSB
04/03/2011	RI04701	RI04800	100	92	WSB
02/05/2011	R40108	R40109	2	-	WSB
03/08/2011	RI03301	RI03399	99	98	Tranquility resort
23/01/2012	R49251	R49350	100	-	WSB
23/01/2012	RI05001	RI05100	100	-	WSB
23/01/2012	RI05101	RI05200	100	-	WSB
03/03/2012	RI06801	RI06900	100	88	Tranquility resort
14/06/2012	RI06301	RI06400	100	-	Tranquility resort
24/07/2012	RI08001	RI08200	200	-	Tranquility resort
Total			12,410	3,652	

ANNEX 2: Number of turtle species by site as recorded in TREDS for 1973-2012 period for Vanuatu.

Location	Island	SPECIES					
		Green	Hawksbill	Leatherback	Olive ridley	Loggerhead	Unidentified
AKAMB VILLAGE	AKAMB	9	2				
ALACK REEF	EPI	2					
AMBECK	VANUALAVA						2
AMBRYM ISLAND	AMBRYM	1	3				
ANEITYUM ISLAND	ANEITYUM	1					1
ANELCOUHAT	ANEITYUM	3					
ANELGOHAT VILLAGE	ANEITYUM	12					
ANIWA LAGOON	ANIWA	6	2				
ANUWUNAMLAU	ANEITYUM	2					
ASAOLA VILLAGE	PENTECOST	1					
AVOK ISLAND	AVOK	2	5				
AVUNATARI VILLAGE	MALO	1	10				
BAMBOO BAY	MALEKULA	78	115				3
BATAVUSAI	SAKAU	1					
BEHAVEH	SAKAU	1	2				
BENNEWUR	MALEKULA		1				
BINNIHO	AVOK	1					
BLACK SANDS	EFATE		1				
BONGOVIU VILLAGE	EPI	3	1				
BRISBANE VILLAGE	EPI	1	1				
CHAMPAGNE BEACH	ESPIRITU SANTO		1				
COOKS BAY	ERROMANGO	1					
CRAIG COVE	AMBRYM	1					
DILLONS BAY	ERROMANGO		1				
DIXON REEF VILLAGE	MALEKULA	1					
DONOMIAL	SAKAU						1
EFATE ISLAND	EFATE		1				1
EMOTU PASSAGE	MOSO	1					
EMUA VILLAGE	EFATE	8	25		1		
EPAU VILLAGE REEF	EFATE	9	4				
EPI ISLAND	EPI	1					

ANNEX 2 continues: Number of turtle species by site as recorded in TREDs for 1973-2012 period for Vanuatu.

Location	Island	SPECIES					
		Green	Hawksbill	Leatherback	Olive ridley	Loggerhead	Unidentified
FAROUN VILLAGE	MALEKULA		2				
FATUPAU	EFATE	1					
FINONGE VILLAGE	EMAE	1	2				
FREEMANTLE	PELE		2				
GAUA ISLAND	GAUA	2	1				
HALAVA	AMBAE		1				
HAT(ERETOKA) ISLAND	EFATE		1				
HERELOL VILLAGE	LOH		1				
HOG HARBOUR	ESPIRITU SANTO	2	4				
ISAVAI VILLAGE	ANIWA	9	2				
KAKULA ISLAND	KAKULA	2	1				
KOPESIMAETO VILLAGE	EMAU						1
LABO VILLAGE	MALEKULA	2					
LAKEN NAPERRE	NGUNA		1				
LALINDA BEACH	AMBRYM		1				
LAMAN BAY	EPI	1	1				
LANUAMOA VILLAGE	PELE		2				
LANUKARAE	EFATE	1					
LANUSAROI BEACH	NGUNA	1	2				
LASOA	EMAU	1					
LATANO VILLAGE	PENTECOST	2	1				
LATEU VILLAGE	TEGUA	3	2				
LAUKENASUA	EFATE		1				1
LAUNSAAKE VILLAGE	PELE		1				
LAUSAKE PASSAGE	EMAU	3	2				
LAUSAKE VILLAGE	EMAU	5	6				
LAWA SOUTHWEST BAY	MALEKULA		4				
LAWA VILLAGE	MALEKULA	3	3				
LAWIA	AVOK	1					
LELEPA LANDING	LELEPA		5				1
LELEPA REEF	LELEPA		1				
LELEPA VILLAGE	LELEPA		4				
LEMBENWEN VILLAGE	MALEKULA		7				

ANNEX 2 continues: Number of turtle species by site as recorded in TREDS for 1973-2012 period for Vanuatu.

Location	Island	SPECIES					
		Green	Hawksbill	Leatherback	Olive ridley	Loggerhead	Unidentified
LEMBU BAY	AVOK	1	1				
LEOSA PASSAGE	LELEPA		1				
LETOKAS	MALEKULA	1					
LEVIAMP VILLAGE	MALEKULA	2					
LEVOR	MALEKULA	1					
LINUA	LOH					1	
LIRO VILLAGE	PAAMA						1
LITATRA VILLAGE	TEGUA	2	2				
LOLBIRIBIRISULU VILLAGE	PENTECOST		1				
LOLOWAI VILLAGE	AMBAE		1				
LOLTONG HARBOUR	PENTECOST	1	1				
LOLTONG VILLAGE	PENTECOST		3				
LOMBULOMB	MASKELYNE		1				
LONBILI	AMBRYM					1	
LUNGHARIGI	LOH		2			3	
LUTES VILLAGE	MASKELYNE	10	2				
MAFILAU VILLAGE	EPI	3	1				
MAGAM	AMBRYM	1					
MALAPAU PASSAGE	NGUNA	4	1				
MALEKULA ISLAND	MALEKULA	9	1				3
MALO PASS	MALO		1				
MALTOU VILLAGE	AMBRYM		2				
MANGALILIU VILLAGE	EFATE	4	18				
MANGARONGO VILLAGE	EMAU	2	2		1		
MANMOL	MALEKULA	1					
MANTLE-LAMB	MALEKULA		1				
MAROU VILLAGE	AKAMB	11	16				1
MATAKOVE	NGUNA	3	3				
MATANDA	GAUA		1				
MELE	EFATE		1				
MELIP VILLAGE	MALEKULA	1					
MELSISI VILLAGE	PENTECOST						1
MENGYENG	RAH	1					

ANNEX 2 continues: Number of turtle species by site as recorded in TRENDS for 1973-2012 period for Vanuatu.

Location	Island	SPECIES					
		Green	Hawksbill	Leatherback	Olive ridley	Loggerhead	Unidentified
MOLBOE	ESPIRITU SANTO	1					
MOTALAVA	MOTALAVA	1	1				
MYSTERY ISLAND	Mystery	115	16				1
NAGUSTARE POINT	NGUNA		1				
NAKERE VILLAGE	ESPIRITU SANTO	1					
NAMOSO	EFATE		2				
NAMSAFURA	ANIWA		1				
NAMUKA ISLAND	NAMUKA	1	1				
NAMWARANGIUT VILLAGE	PENTECOST		4				
NANUKU VILLAGE	MALO		1				
NAPANGORO	EFATE		1				
NATAPAU VILLAGE	LELEPA	1	2				
NEBURE	MALEKULA	1					
NEKAPA VILLAGE	NGUNA	1					
NELSON BAY	EPI	6					
NERANEHME VILLAGE	MALEKULA	1					
NERENIGMAN VILLAGE	MOTALAVA	1					
NGONOU	ANIWA		1				
NGULELY LENGA POINT	LOH		2				
NGUNA-PELE CONSERVATION AREA	NGUNA	4	10				
NGURUA VILLAGE	EMAU	3					
NIKAURA VILLAGE	EPI		2				
NUVI VILLAGE	EPI	1	3				
OKAI VILLAGE	MALEKULA	6	9				
OLAL VILLAGE	AMBRYM						1
PANGO VILLAGE	EFATE		1				1
PANUAGISU VILLAGE	EFATE	1	1				
PELONGK VILLAGE	MASKELYNE	3	3				
PESKARUS VILLAGE	MASKELYNE	4	2		1		
PILIURA VILLAGE	PELE	18	10				
PINAPOW BEACH, BURAO TENMARU	MALEKULA	1					
PORT NARVIN	ERROMANGO		2				

ANNEX 2 continues: Number of turtle species by site as recorded in TREDIS for 1973-2012 period for Vanuatu.

Location	Island	SPECIES					
		Green	Hawksbill	Leatherback	Olive ridley	Loggerhead	Unidentified
PORT OLRV	ESPIRITU SANTO	4	1	1			
PORT QUMIE	EPI			1			
PORT VATO	AMBRYM	2	4	1			
RADIO STATION	ESPIRITU SANTO		1				
RANON	AMBRYM	3					
RANVETLAM	AMBRYM		1				
REMBE	MALEKULA	4	4				
RIF ISLAND	REEF	1					
RINGDOVE BAY	EPI	3	1				
ROBUNAS	AKAMB	1	1				
RORBAEIGK	AKAMB	1	5				
ROVO BAY	EMAE	1					
ROVOLIU VILLAGE	EPI	1	1				
SAAMA VILLAGE	EFATE		3				
SAKAO ISLAND	MASKELYNE	1	2				
SAMOA POINT	EFATE	1	1				
SANINAKANI	ANIWA		1				
SARA VILLAGE	EPI		2				
SEMSAHAO	AVOK	1					
SIVIRI VILLAGE	EFATE	9	16				
SOHBEF	MALEKULA	1					
SOHDIDEUO	MASKELYNE		1				
SOLA VILLAGE	VANUALAVA		1				
SUHURUH	AVOK	1					
SUN ISLAND	EFATE	1					
TAHUMBEN VILLAGE	SAKAU		1				
TAIKESA	NGUNA	2					
TAKARA VILLAGE	EFATE	21	1				
TALOA VILLAGE	NGUNA	12	14				
TANNA ISLAND	TANNA		1				
TANOLIU VILLAGE	EFATE	3	13				
TARENA	NGUNA	2	2				
TASIPUARIKI	EFATE	1	7				

ANNEX 2 continues: Number of turtle species by site as recorded in TREDIS for 1973-2012 period for Vanuatu.

Location	Island	SPECIES					
		Green	Hawksbill	Leatherback	Olive ridley	Loggerhead	Unidentified
TASIRIKI VILLAGE	MOSO	20	148				
TASMANIA VILLAGE	SAKAU		1				
TAVLOEL VILLAGE	TEGUA		1				
TELNET VILLAGE	MOTALAVA	1	5				
TENMARU VILLAGE	EMAE	1					
TIKILASOA VILLAGE	NGUNA	3	4				
TOA LIMA	EFATE	1	3				
TOKA VILLAGE	TORES	1	1				
TOMMAN VILLAGE	MALEKULA		3				
TONGAMEA	EMAE		2				
TONOMEAL VILLAGE	SAKAU	1	3				
TRANQUILITY RESORT	MOSO	58	274				122
TUKUTUKU RANCH	EFATE		56				
UNAKAP VILLAGE	NGUNA	3	8				
UNKNOWN	UNKNOWN, VANUATU	4					1
UTANLANG VILLAGE	NGUNA	5	1				
VAIPEI VILLAGE	ESPIRITU SANTO	3	3				
VAKAS BASIS	MALEKULA	3	5				
VALESDIR VILLAGE	EMAE		1				
VANUATU	VANUATU		1				
VAO	MALEKULA		1				
VARO VILLAGE	AKAMB	3	3				
VASVASADA	PENTECOST	1					
VATMBEAF VILLAGE	SAKAU	1					
VATUKURA	EMAU		1				
VATUPAU	EFATE		1				
VATURANA	EMAU		1				
VATVAKO	NGUNA	1					
VOLAN VILLAGE	EPI		3				
VOLOMBAU	MASKELYNE		1				
VOTLO RESEARCH SITE	EPI	7		6			
VOTLO VILLAGE	EPI	6		6			
VULAI ISLAND	MASKELYNE	1	7				
WALURIKI	AMBAE	1					

ANNEX 2 continues: Number of turtle species by site as recorded in TRENDS for 1973-2012 period for Vanuatu.

Location	Island	SPECIES					
		Green	Hawksbill	Leatherback	Olive ridley	Loggerhead	Unidentified
WASAGA VILLAGE	VANUALAVA	1					
WANBE VILLAGE	EPI	1					
WEISIR	Malekula	1					
WEREARU VILLAGE	PELE	1					
WIANA VILLAGE	EMAU	4	14				
WIAWI VILLAGE	MALEKULA	9	9		2	2	
WILLES	AVOK	3					
WORALAPA VILLAGE	NGUNA	1	4				
WORASIVIU	PELE	6	8				
WURO	AMBRYM		1				
-	Total	645	1035	15	5	7	143

ANNEX 3: Turtles tagged within Vanuatu and also recovered in Vanuatu.

Tag No.	Species	Sex	Initial Encounter			Other Encounter		
			Date	Location	Activity	Date	Location	Activity
R31893/R31892	Green	Female	29/Jan/2005	Bamboo bay, Malekula	Nesting	12/Dec/2008	Bamboo bay, Malekula	Nesting
R31897/R31896	Green	Female	02/Feb/2005	Bamboo bay, Malekula	Nesting	16/Dec/2008	Bamboo bay, Malekula	Nesting
R38185/R38184	Hawksbill	Female	17/Dec/2006	Bamboo bay, Malekula	Nesting	01/Jan/2007	Bamboo bay, Malekula	Nesting
R37752/R38013	Green	Female	02/Jan/2007	Bamboo bay, Malekula	Nesting	03/Jan/2007	Bamboo bay, Malekula	Nesting
R38120/R38119	Hawksbill	Female	09/Dec/2006	Bamboo bay, Malekula	Nesting	04/Jan/2007	Bamboo bay, Malekula	Nesting
R38012/R38011	Green	Female	04/Jan/2000	Bamboo bay, Malekula	Nesting	16/Jan/2007	Bamboo bay, Malekula	Nesting
R38115/R38114	Green	Female	24/Dec/2006	Bamboo bay, Malekula	Nesting	06/Jan/2007	Bamboo bay, Malekula	Nesting
R38026/R38024	Green	Female	17/Dec/2006	Bamboo bay, Malekula	Nesting	10/Jan/2007	Bamboo bay, Malekula	Nesting
R40358/R40357	Hawksbill	Female	13/Nov/2007	Tasiriki Village, Moso Island	Nesting	28/Nov/2007	Tasiriki Village, Moso Island	Nesting
R40366/R40367	Hawksbill	Female	18/Nov/2007	Tasiriki Village, Moso Island	Nesting	03/Dec/2007	Tasiriki Village, Moso Island	Nesting
R41618/R41617	Hawksbill	Female	08/Nov/2007	Tasiriki Village, Moso Island	Nesting	05/Dec/2007	Tasiriki Village, Moso Island	Nesting
R15981/R15982	Hawksbill	Indeterminate	02/Apr/2007	Aniwa lagoon, Aniwa Island	Trapped in a net	19/Aug/2008	Saninakani, Aniwa Island	Hooked by a fishingline
R37850/R37851	Green	Female	13/Dec/2008	Tasiriki Village, Moso Island	Nesting	25/Dec/2008	Bamboo bay, Malekula	Nesting
R38037/R38038	Hawksbill	Female	12/Nov/2008	Bamboo bay, Malekula	Nesting	10/Dec/2008	Bamboo bay, Malekula	Nesting
R41928/R41929	Hawksbill	Female	29/Nov/2008	Tasiriki Village, Moso Island	Nesting	12/Dec/2008	Tasiriki Village, Moso Island	Nesting
R41934/R41935	Hawksbill	Female	03/Dec/2008	Tasiriki Village, Moso Island	Nesting	16/Dec/2008	Tasiriki Village, Moso Island	Nesting
R41940/R41941	Green	Female	04/Dec/2008	Tasiriki Village, Moso Island	Nesting	05/Dec/2008	Tasiriki Village, Moso Island	Nesting
R41955/R41956	Hawksbill	Female	13/Nov/2008	Tasiriki Village, Moso Island	Nesting	29/Nov/2008	Tasiriki Village, Moso Island	Nesting
R41966/R41965	Hawksbill	Female	21/Nov/2008	Tasiriki Village, Moso Island	Nesting	22/Nov/2008	Tasiriki Village, Moso Island	Nesting
R41992/R41993	Hawksbill	Female	21/Jan/2008	Tasiriki Village, Moso Island	Nesting	18/Feb/2008	Tasiriki Village, Moso Island	Nesting
R41995/R41994	Hawksbill	Female	24/Feb/2008	Tasiriki Village, Moso Island	Nesting	21/Feb/2008	Tasiriki Village, Moso Island	Nesting
R42903/R42904	Hawksbill	Female	11/Feb/2008	Tasiriki Village, Moso Island	Nesting	25/Feb/2008	Tasiriki Village, Moso Island	Nesting
R42914/R42920	Hawksbill	Female	18/Oct/2008	Tasiriki Village, Moso Island	Nesting	18/Nov/2008	Tasiriki Village, Moso Island	Nesting
R42940/R42941	Hawksbill	Female	04/Nov/2008	Tasiriki Village, Moso Island	Nesting	13/Dec/2008	Tasiriki Village, Moso Island	Nesting
R41888/R41889	Green	Female	07/Jan/2009	Bamboo Bay, Malekula, Vanuatu	Nesting	17/Jan/2009	Bamboo Bay, Malekula, Vanuatu	Nesting
R41898/R41900	Hawksbill	Female	11/Nov/2009	Bamboo Bay, Malekula, Vanuatu	Nesting	26/Dec/2009	Bamboo Bay, Malekula, Vanuatu	Nesting
R41936/R41937	Hawksbill	Female	04/Dec/2008	Tasiriki Village, Moso Island	Nesting	12/Jan/09	Tasiriki Village, Moso Island	Nesting
R41948/R41949	Hawksbill	Female	10/Jan/2008	Tasiriki Village, Moso Island	Nesting	19/Jan/2009	Tasiriki Village, Moso Island	Nesting
R45955/R45956	Hawksbill	Female	14/Nov/2009	Tasiriki Village, Moso Island	Nesting	01/Dec/2009	Tasiriki Village, Moso Island	Nesting
R45967/R45968	Hawksbill	Female	23/Nov/2009	Tasiriki Village, Moso Island	Nesting	07/Dec/2009	Tasiriki Village, Moso Island	Nesting
R45976/R45977	Hawksbill	Female	30/Nov/2009	Tasiriki Village, Moso Island	Nesting	17/Dec/2009	Tasiriki Village, Moso Island	Nesting
R45979/R45978	Hawksbill	Female	01/Dec/2009	Tasiriki Village, Moso Island	Nesting	19/Dec/2009	Tasiriki Village, Moso Island	Nesting

ANNEX 3 continues: Turtles tagged within Vanuatu and also recovered in Vanuatu.

Tag No.	Species	Sex	Initial Encounter			Other Encounter		
			Date	Location	Activity	Date	Location	Activity
R45996/R45997	Green	Female	06/Dec/2009	Tasiriki Village, Moso Island	Nesting	07/Dec/2009	Tasiriki Village, Moso Island	Nesting
R46001/R46002	Hawksbill	Female	21/Oct/2009	Tasiriki Village, Moso Island	Nesting	09/Nov/2009	Tasiriki Village, Moso Island	Nesting
R46008/R46009	Hawksbill	Female	25/Oct/2009	Tasiriki Village, Moso Island	Nesting	30/Nov/2009	Tasiriki Village, Moso Island	Nesting
R46021/R46022	Hawksbill	Female	06/Oct/2009	Tasiriki Village, Moso Island	Nesting	11/Nov/2009	Tasiriki Village, Moso Island	Nesting
R46036/R46037	Hawksbill	Female	04/Nov/2009	Tasiriki Village, Moso Island	Nesting	21/Nov/2009	Tasiriki Village, Moso Island	Nesting
R46038/R46039	Hawksbill	Female	05/Nov/2009	Tasiriki Village, Moso Island	Nesting	07/Nov/2009	Tasiriki Village, Moso Island	Nesting
R46040/R46041	Hawksbill	Female	11/Nov/2009	Tasiriki Village, Moso Island	Nesting	17/Dec/2009	Tasiriki Village, Moso Island	Nesting
R46047/R46048	Hawksbill	Female	26/Oct/2009	Tasiriki Village, Moso Island	Nesting	14/Nov/2009	Tasiriki Village, Moso Island	Nesting
R43154/R43153	Green	Female	16/Dec/2008	Wiawia village, Malekula Island	Nesting	05/Feb/2009	Wiawia village, Malekula Island	Nesting
R43164/R43163	Olive ridley	Female	08/Dec/2008	Wiawia village, Malekula Island	Nesting	05/Feb/2009	Wiawia village, Malekula Island	Nesting
R46026/R46027	Hawksbill	Female	12/Nov/2008	Tasiriki Village, Moso Island	Nesting	24/Jan/2010	Tasiriki Village, Moso Island	Nesting
R46034/R46035	Hawksbill	Female	03/Nov/2009	Tasiriki Village, Moso Island	Nesting	24/Jan/2010	Tasiriki Village, Moso Island	Nesting
R45993/R45992	Hawksbill	Female	15/Dec/2009	Tasiriki Village, Moso Island	Nesting	16/Jan/2010	Tasiriki Village, Moso Island	Nesting
R45998/R45999	Green	Female	02/Dec/2009	Tasiriki Village, Moso Island	Nesting	18/Jan/2010	Tasiriki Village, Moso Island	Nesting
R41822/R41823	Hawksbill	Female	21/Dec/2009	Bamboo Bay, Malekula Island	Nesting	05/Jan/2010	Bamboo Bay, Malekula Island	Nesting
R41849/R41850	Hawksbill	Female	23/Dec/2009	Bamboo Bay, Malekula Island	Nesting	07/Jan/2010	Bamboo Bay, Malekula Island	Nesting
R45960/R45961	Hawksbill	Female	20/Nov/2009	Tasiriki Village, Moso Island	Nesting	24/Jan/2010	Tasiriki Village, Moso Island	Nesting
R45962/R45963	Hawksbill	Female	23/Nov/2009	Tasiriki Village, Moso Island	Nesting	07/Jan/2010	Tasiriki Village, Moso Island	Nesting
R45970/R45971	Hawksbill	Female	27/Nov/2009	Tasiriki Village, Moso Island	Nesting	05/Jan/2010	Tasiriki Village, Moso Island	Nesting
R10807/R10806	Hawksbill	Indeterminate	02/Oct/1998	Efate Island, Vanuatu	Foraging	??/1999	Vanuatu	Unspecified
R10822/R10823	?	?	??/1996	Vanuatu	unknown	05/Feb/2010	Pango Point reef, Efate Island	Unspecified
R10957/R10956	Hawksbill	Indeterminate	29/Jun/1996	Tukutuku Ranch, Efate Island	In-captivity	20/Feb/1997	Port Narvin, East Erromango	Foraging
R10971	?	?	??/1996	Vanuatu	unknown	22/Nov/1997	Liro, Paama Island, Vanuatu	Foraging
R11006/R11007	Hawksbill	Indeterminate	29/Jun/1996	Tukutuku Ranch, Efate Island	In- Captivity	19/Jul/1996	Tanna Island, Vanuatu	Unspecified
R14182	Hawksbill	Indeterminate	06/Apr/1999	Tonoliu village, Efate Island	unknown	09/Dec/2004	Lelepa Island, Vanuatu	Unspecified
R14365	?	?	??/1998	Vanuatu	unknown	??/Oct/2000	Espiritu, Santo Island	Unspecified
R16320/R16321	?	?	??/1997	Vanuatu (tag sent to Vanuatu)	unknown	06/Oct/2000	Aneityum Island, Vanuatu	Unspecified
R19429/R19428	Hawksbill	Indeterminate	23/Jan/2003	Avok, Avok Island, Vanuatu	Foraging	09/Jan/2005	Rembe, SE Malekula Island	Unspecified
R19627/R19628	Hawksbill	Indeterminate	11/Mar/2002	Tranquility resort, Moso Island	In- Captivity	06/Nov/2003	Lelepa Island, Vanuatu	Foraging
R19905/R19901	Hawksbill	Indeterminate	04/Sep/02	Lembinwen village, Malekula	Foraging	??/Dec/2003	South West Bay, Malekula	Unspecified
R21678/R21679	Green	Indeterminate	19/May/00	Alack Reef, Epi Island, Vanuatu	Foraging	??/Apr/2002	Ringdove Bay, NW Epi Island	Unspecified
R23429	?	?	??/2000	Vanuatu	Unknown	02/Apr/2001	Akham Island, Malekula, Vanuatu	unknown
R35572/R35571	Hawksbill	Indeterminate	18/May/07	Sakau Island, Vanuatu	Foraging	14/Jan/2008	Olal village, Ambrym Island	Unspecified

