

# Marine turtles with foreign tags recaptured in the Philippines from 1993 to 2002

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## ABSTRACT

The Pawikan Conservation Project (PCP) of the Protected Areas and Wildlife Bureau (PAWB)-Department of Environment and Natural Resources (DENR) is the government agency of the Philippines tasked to conserve and manage the marine turtle populations in the country. In 1989, the PCP started its nationwide tagging program in cooperation and collaboration with the DENR Regional and Field Offices, non-government organizations, the academe, and private individuals. This nationwide tagging program is supplemented and complemented by the PCP's information and education campaign regarding marine turtle conservation. Marine turtles with foreign tags recaptured in the Philippines from 1985 to 1993 were those from Yap, Micronesia; Yakushima Island, Japan; and Sabah, Malaysia (De Veyra 1994). An updated list of foreign tag recoveries reported to the PCP from 1993 to 2002 included those tagged from Palau, Guam, Japan, Taiwan, Malaysia and by the South Pacific Regional Environment Program (SPREP). These data further justify the need for an international collaboration to manage the shared marine turtle resource and suggests the Sulu Sea both as a feeding and developmental area for marine turtles.

**KEYWORDS:** Pawikan Conservation Project, tag recoveries, marine turtles, Philippines

## INTRODUCTION

Marine turtle conservation in the Philippines is led by the Pawikan Conservation Project (PCP) of the Protected Areas and Wildlife Bureau (PAWB)-Department of Environment and Natural Resources (DENR). The PCP was created in 1979, which was then known as Task Force Pawikan (TFP). In 1989, the PCP started its nationwide tagging program in cooperation and collaboration with the DENR Regional and Field Offices, non-government organizations (NGO), the academe, and private individuals. Marine turtle tags were issued to the collaborators for this purpose. This nationwide tagging program is supplemented and complemented by the PCP's information and education campaign regarding marine turtle conservation. Through these efforts, the PCP generated the much-needed public support in conserving marine turtles in the Philippines.

Through the Field Action Officers of the DENR, the PCP received reports of marine turtles captured with foreign tags. De Veyra (1994) reported marine turtles recaptured in the Philippines, which were tagged from Yap, Micronesia; Yakushima Island, Japan; and Sabah, Malaysia. In this paper, the list of foreign tag recoveries in the Philippines is updated from 1993 to 2002. Since the Philippine-Sabah Turtle Islands is inferred as a well-

defined green turtle (*Chelonia mydas*) rookery (Trono 1994), marine turtles with Malaysian tags from Sabah encountered in the Philippine Turtle Islands were not included.

## RESULTS AND DISCUSSION

Foreign tag recoveries in the Philippines reported to the PCP from 1993 to 2002 included marine turtles with tags from Palau, Guam, Japan, Taiwan, Malaysia and by the South Pacific Regional Environment Program (SPREP, Table 1). A map of the movements of these marine turtles is shown in Figure 1.

On March 20, 1989 a hawksbill turtle (*Eretmochelys imbricata*) was captured in the Sulu Sea near the province of Negros Occidental. The tags attached to its left hindflipper read Palau Japan, MMDC No. 477. The tag indicated that the turtle came from the turtle headstarting program of the Micronesia Mariculture Demonstration Center (MMDC which is now called Palau Mariculture Demonstration Center), which was supported by the Japanese government (Theo Isamu pers. comm. 2003). They said that the headstarting program targeted hawksbill turtles (Sato and Madriasau 2001) and the tag

number represented the number of turtle released (Theo Isamu pers. comm. 2003). After four years in captivity, on May 14, 1993 the turtle was released in the Sulu Sea near Negros Occidental with tags RP6882 and RP6883 applied to the right and left frontflipper, respectively. Curved carapace length (CCL) was 41.3 cm and curved carapace width (CCW) was 37.5 cm at the time of release.

A hawksbill turtle with tag 738, Dalton Henley, England, Pat #894143, was recaptured in Sitio Puting Balas, Sugod, Tukuran, Zamboanga del Sur on August 28, 1991. The origin of the tag was not identified (De Veyra 1994). However, our review of the original report revealed that the tag was a TWIN tag attached to the left hindflipper. The above inscription was from the bottom tag, and the top tag read PALAU.JAPAN MMDC, TWIN Tag. The hawksbill turtle also came from the MMDC turtle headstarting program. The hawksbill turtle was released at the same area of recapture on January 16, 1992 but the captor removed the tag.

Ten green turtles originally tagged from Sandakan, Sabah, Malaysia were recaptured near the waters of Bacolod City, Palawan, Surigao City, Negros Occidental, and Antique. Communications with Sabah Parks of Malaysia were exchanged regarding these recaptures. A green turtle with tags from Sarawak, Malaysia was recaptured twice near the waters of Palawan within the Sulu Sea.

Green turtles with tags from the SPREP were recaptured in Southern Leyte (Visayas Region) and Oriental Mindoro (Luzon Region).

A green turtle with tags from Japan was recaptured near the waters of Brgy. Buenavista, Rapu-Rapu, Albay on February 28, 1998. The serial numbers of the tags were JPN7376 and JPN16132 in the right and left flipper, respectively. This turtle was originally tagged in Yomitan, Okinawa, Japan on August 25, 1997 (Hideshi Teruya pers. comm. 2002). It was released in Albay Gulf, Rapu-Rapu, Albay on March 05, 1998.

Another green turtle with tags from Japan was recaptured near the waters of Brgy. Banca-Bancao, Puerto Princesa City, Palawan on September 27, 2002. JPN14638 was found in the right frontflipper and JPN25572 in the left hindflipper. Both tags were made from yellow plastic. The green turtle was originally tagged in Sakiyama, Iriomote Island, Okinawa, Japan on August 12, 1997 (Tatsuya Shima pers. comm. 2003). The green turtle was released at the bay of Brgy. Bagong Silang, Puerto Princesa City, Palawan on September 27, 2002.

A green turtle with a tag from Taiwan was recaptured in Tapel, Gonzaga, Cagayan (Northern Philippines) on November 19, 1994. The tag read TW-010-011 PO Box 7-215 Keelung Taiwan 20224 ROC.

RP726A and RP725A tags were applied on its right and left frontflipper, respectively. The turtle was released on November 26, 1994.

On January 02, 2002, a green turtle with a satellite transmitter from Guam was recaptured in Kulisian, Pangutaran, Sulu (Mindanao Area). DENR Region 9 informed the Guam Sea Turtle Project of the said recapture in Philippine waters.

The marine turtle recaptures and release shows the effectiveness of the PCP's marine turtle tagging and conservation program and further justify the need for an international collaboration between countries where the marine turtle resource is shared. Also, the records show the importance of the Sulu Sea both as a feeding and developmental area for the marine turtle populations of Malaysia, Japan, and Palau.

#### ACKNOWLEDGMENT

The author would like to thank the secretariat and organizers of the 4th SEASTAR2000 workshop for the invitation, the Marine Fisheries Resources Development and Management Department (MFRDMD) of the Southeast Asian Fisheries Development Center (SEAFDEC), Malaysia for sponsoring the trip, and Mr. Bibiano Mejino for the map. The PCP acknowledges all the DENR Regional, Provincial, and Community Offices; NGO; LGU; the academe; and the concerned citizens who reported to the PCP all the data contained herein. Also, the PCP acknowledges Dr. Naoki Kamezaki and Assistant Director Tatsuya Shima of the Sea Turtle Association of Japan, Mr. Hideshi Teruya of Okinawa Tyuraumi Aquarium, Japan and Director Theo Isamu of the Palau Mariculture Demonstration Center for providing the original tagging records of the marine turtles with tags from their countries recaptured in the Philippines.

#### LITERATURE CITED

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Table 1. Marine turtles with foreign tags reported to the PCP from 1993 to 2002

Recovered tag(s)	Applied Phil. Tag(s)	Species	CCL and CCW	Recapture Area and Date of Recapture	Approximate Straight-line distance (km)
Palau <b>Japan</b> , MMDC No. 477 (LHF)	(RFF) RP6882 (LFF) RP6883	<i>E. imbricata</i>	CCL=41.3 cm CCW=37.5 cm	Sulu Sea; March 20, 1989 (near Negros Occidental); released on May 14, 1993	1352
(RFF) 37237 Sabah <b>Malaysia</b>	(RFF) RP9854 (LFF) RP9853	<i>C. mydas</i>	CCL=109 cm CCW=95 cm	So. Sibucano, Purok Rosas Pandan, Brgy. Banago, Bacolod City; December 20, 1993; 122°58'00" E 10°40'00" N	780
14213 RETURN TO TURTLE IS. ANOS NAT PARK BX 768 SANDAKAN SABAH <b>EAST MALAYSIA</b>				Brgy. Sabang III, Surigao City. Captured in 1993; 125°29'00" E 09°47'00" N	884
(LFF) 33863 Return to Turtle Island Park, Box 768, Sandakan, Sabah, E. <b>Malaysia</b>	(RFF) RP013B	<i>C. mydas</i>	CCL=110 cm CCW=97.5 cm	Green Island Bay, Roxas, Palawan; February 16, 1994; 119°23'00" E 10°16'00" N	520
33860 Turtle Island Park Box 768 Sandakan Sabah E. <b>Malaysia</b>			CCL=39 in CCW=30 in	Brgy. Babuyan, Puerto Princesa City, Palawan 1994 118°56'30" E 09°59'45" N	442
39098 Sabah <b>Malaysia</b>		<i>E. imbricata</i>	CCL=abt. 90 cm	near mouth of Babuyan River, Brgy. Babuyan, Puerto Princesa City, Palawan; October 28, 1994; 118°56'30" E 09°59'45" N	442
TW-010-011 PO Box 7-215 Keelung <b>Taiwan</b> 20224 ROC	(RFF) RP726A (LFF) RP725A	<i>C. mydas</i>	CCL=100 cm CCW=95 cm	Tapel, Gonzaga, Cagayan November 19, 1994; 122°00'00" E 18°16'00" N	832
(RFF) 47765 TURTLE ISLAND PARKS BOX 768 SANDAKAN SABAH <b>MALAYSIA</b>	(LFF) RP305B	<i>C. mydas</i>	CCL=100 cm CCW=89 cm	Brgy. Balaring, Silay City, Negros Occidental May 17, 1997; 122°58'35" E 10°48'00" N	676
(LFF) 48600 TURTLE ISLAND SANDAKAN SABAH <b>MALAYSIA</b>	(RFF) P13089 (LFF) P13090	<i>C. mydas</i>	CCL=102 cm CCW=98 cm	So. Tubog, Brgy. Lapaz, Hamtic, Antique February 10, 1998; 121°59'20" E 10°42'25" N	728
R-JPN7376 (metal) L-JPN16132 (plastic) Kushimoto Marine Park, Wakayama, <b>Japan</b>	(RFF) RP8587 (LFF) RP8586	<i>C. mydas</i>	CCL=85 cm CCW=66 cm	Brgy. Buenavista, Rapu-Rapu, Albay February 28, 1998; 124°07'45" E 13°11'20" N	1486
(RFF) 56490 (LFF) 56489 Sabah, <b>Malaysia</b>	(RFF) P14409 (LFF) P14408	<i>C. mydas</i>	CCL=99 cm CCW=92 cm	So. Meluang, Brgy. Lucbuan, Puerto Princesa City, Palawan; January 15, 2000; 118°54'30" E 09°59'30" N	442
5000 4999 Sarawak, <b>Malaysia</b>	(RFF) RP8412	<i>C. mydas</i>	CCL=123 cm CCW=75 cm	Brgy. Malinao, Narra, Palawan; May 19, 2000; 118°24'30" E 09°15'00" N	858
(RFF) 3464 Return SPC/SP REP BPDS NOUMEA CEDEX <b>NEW CALEDONIA</b> (and 3465)		<i>Unknown</i>		Brgy. Ambao, Hinundayan, Southern Leyte July 4, 2000; 125°15'00" E 10°23'30" N	
(RFF) 90708 Box 768, 90708 Turtle Island Park, Sandakan, Sabah, <b>Malaysia</b>	(RFF) P16376 (LFF) P16377	<i>C. mydas</i>	CCL=94 cm CCW=92 cm	Brgy. Panacan, Narra, Palawan March 09, 2001; 118°24'25" E 09°15'10" N	364
MY(S)2539 MY(S)2540 Turtle Islands Park Box 768, Sandakan, Sabah, <b>Malaysia</b>		<i>C. mydas</i>		Brgy. Binduyan, Puerto Princesa City, Palawan; December 07, 2001	442

(RFF) right frontflipper

(LFF) left frontflipper

(LHF) left hindflipper

Recovered tag(s)	Applied Phil. Tag(s)	Species	CCL and CCW	Recapture Area and Date of Recapture	Approximate Straight-line distance (km)
Satellite transmitter 439098 with inscription "GUAM SEA TURTLE PROJECT PLEASE DON'T KILL ME" Guam Sea Turtle Project, U.S.A. Return If Found (671)735-3987		<i>C. mydas</i>		Kulisi-an, Pangutaran, Sulu January 02, 2002; 10:00am 120°35'00" E 06°19'00" N	2804
JPN3484 JAPAN		<i>Unknown</i>		approx. 50m away from coastline east of Diogo Island on March 13, 2002	
4999 5000 Forest Development, Sarawak, Malaysia	(RFF) P16371 (LFF) P16372	<i>C. mydas</i>	CCL=50 cm CCW=46 cm	So. Borbon, Brgy. Panacan, Narra, Palawan; August 15, 2002; 11:00 am	858
(RFF) JPN14638 (LHF) JPN25572 (both yellow plastics) JAPAN	(RFF) P18761 (LFF) P18760	<i>C. mydas</i>	CCL=80.1 cm CCW=72 cm	Brgy. Banca-Bancao, Puerto Princesa City, Palawan; September 27, 2002; 7:00 am	1768
(RFF) RMTP 649 SPC REP BPDS NOUMEA CEDEX NEW CALEDONIA	(LFF) P18875	<i>C. mydas</i>	CCL=107 cm CCW=94 cm	Dalahican, Roxas, Oriental Mindoro October 16, 2002; 121°32'00" E 12°36'30" N	

(RFF) right frontflipper

(LFF) left frontflipper

(LHF) left hindflipper

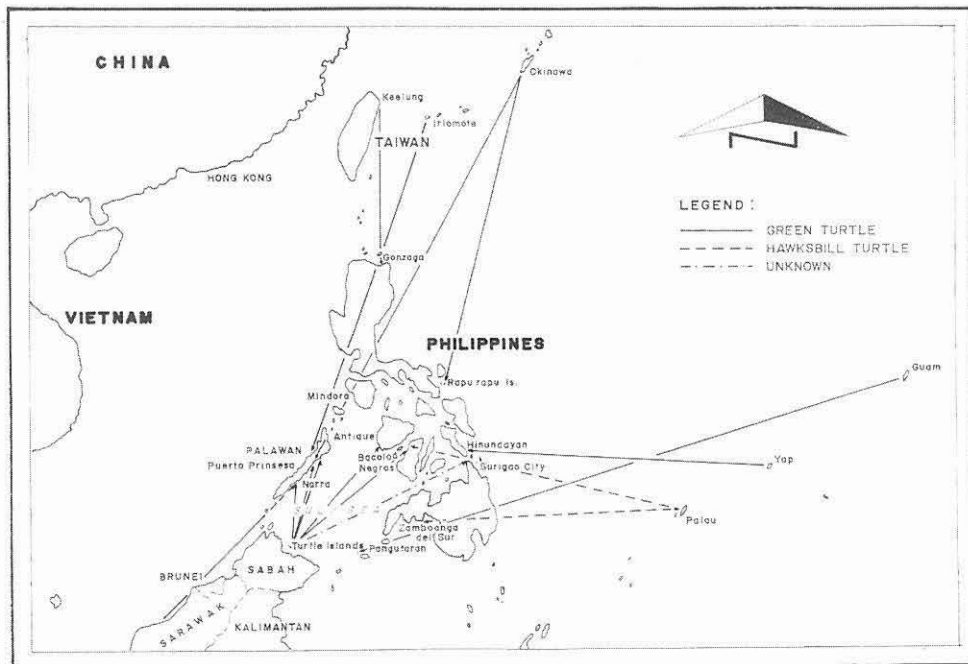


Figure 1. Plotted movements of marine turtles with foreign tags reported to the PCP from 1993 to 2002.