



Sea Turtle Tagging Factsheet

Why does CNMI DLNR-DFW tag turtles?

There are many reasons why we tag turtles. By tagging turtles we can study their migration patterns, distribution and growth rates. We also learn where turtles nest and where they forage (eat).

The information collected from tagging can be used to plan how to best monitor and manage the conservation of sea turtles in the Pacific region.

What are some of the ways that we tag?

Three methods we use to tag turtles here in the CNMI are: 1) flipper tagging, 2) passive integrated transponder (PIT) tagging, and 3) satellite tagging.

What should I do if I find a flipper tagged turtle?

The most important thing to remember if you find a tagged turtle is **do not remove the tags from its flippers!** Aside from causing the turtle pain, losing these tags means that the next time this turtle is sighted, we won't know its history and will therefore lose a lot of valuable information.



If you do find a live tagged turtle, make sure you write down the following information: 1) the tag number, 2) the date, 3) the location sighted, and 4) what the turtle was doing at the time (ex. eating, nesting). Once you have these details please write the Secretariat of the Pacific Regional Environment Programme at P.O. Box 240, Apia, Samoa or email sprep@sprep.org. If you find a dead or injured tagged turtle, call the **DFW hotline at 670-287-8537 (CTR TLES)** or **DFW Enforcement at 670-989-6095**. Through salvage, necropsy, and tissue collection from dead turtles, information can be gathered on genetic origins, sex ratios, diseases, foraging ecology, and other topics. Injured turtles can be rehabilitated at a clinic, tagged, measured, and released to swim another day!



Applying a titanium flipper tag to a juvenile green turtle (*Chelonia mydas*) in Saipan, CNMI.

Flipper tagging

Flipper tagging is the most common type of tagging carried out in the region. Each metal tag contains a letter prefix and a series of numbers on one side and a return address on the other side, so that recovered tags can be reported back to DLNR-DFW. When attached to a turtle, this tag number identifies that individual turtle and provides us with important information about the turtle, like when it was tagged, the island from which it was released, and its' size. Each turtle is hand-captured by a free-diver

so that we can tag it without injury or negative effects to the turtles health.



PIT tagging

Our mark-recapture studies also use PIT tags in order to track turtles' histories. PIT tags are implanted under the turtle's skin and contain a microchip that when scanned, provides a readout or barcode that identifies the turtle. These tags are advantageous because they are very small and last a lifetime, so if flipper tags are lost over the years, the turtle can still be identified by these internal PIT tags.

(Photo: www.biomark.com)



Various PIT tag sizes

Satellite tagging

Satellite tagging is another type of tagging undertaken in the CNMI, but is less common because of the high costs of the technology involved.

Satellite tags are radio transmitters that are attached to the carapace (shell) of the turtle. A turtle with a satellite tag attached will transmit a signal to satellites orbiting earth within a certain time interval. Information generated from satellite tags include location, dive time, and water temperature. Information from the satellite is relayed to scientists carrying out research who then plot these tracks to produce maps showing the migration route of each tagged turtle.

In all cases, turtles receiving satellite tags also have PIT and flipper tags applied as they will remain longer on a turtle than the transmitter.

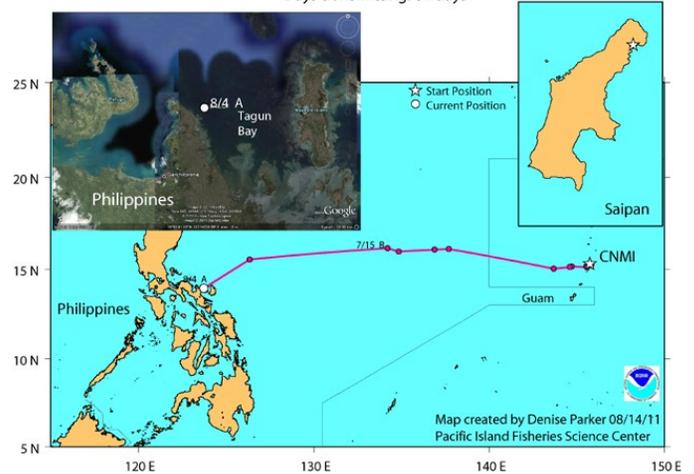
What do we learn from satellite tagging?

Satellite tagging provides immediate and detailed information on turtle movements, showing the actual route taken to foraging areas by adult turtles after nesting. Juvenile turtles can also be tracked in this manner to better understand their behavior and to determine distributions in localized foraging areas that may prove to be critical habitats for these protected species.



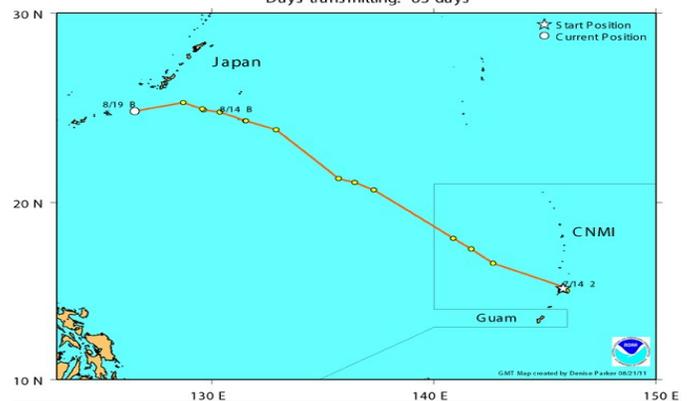
Jessy Hapdei uses fiberglass to attach a satellite transmitter to a green turtle's shell on Bird Island Beach, Saipan, CNMI.

2011 post-nesting movement of green turtle, Kumiko, ID 22979
released 24 May 2011 from Bird Island Beach, Saipan
TAM-4410 6/24 SCL: 88.7 cm
Days transmitting: 81 days



In 2011, the DLNR-DFW Sea Turtle Program staff satellite tagged three nesting turtles on Saipan's beaches. The first turtle was tracked to Tagun Bay, Philippines, a distance of over 2,000 km (or 1,242 miles)! The second female turtle tracked from Saipan headed to Okinawa, Japan. By satellite tagging turtles in Tinian and Rota, the DLNR-DFW will be able to further track turtle migrations on maps such as the one above to see where our sea turtles are traveling. Will the nesting adults follow the same routes as their cousins on Saipan, or will they decide to swim to different islands? Will the juveniles remain around the island where they were tagged or will they travel to neighboring CNMI islands? Only time will tell. **You too can help keep track of our turtles by logging on to www.ihaggan.com!**

2011 post-nesting movement of green turtle, Magas, ID 22981
released from Laolao Beach, Saipan 30 May 2011
TAM-4410 6/24 SCL: 93.6 cm
Days transmitting: 83 days



For more information:

CNMI Division of Fish & Wildlife: www.cnmi-dfw.org/

NOAA Pacific Islands Regional Office: www.fpir.noaa.gov

Pacific Marine Resources Institute: www.ihaggan.com

Secretariat of the Pacific Environment Programme: www.sprep.org

Satellite tracking & maps: <http://www.conserveturtles.org/satelliteturtles.php>

