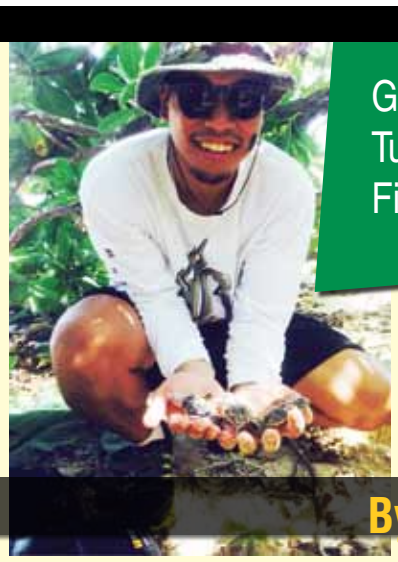

Giving the CNMI Sea Turtle Hatchlings a Fighting Chance

By: Erick Dela Rosa

A sea turtle hatchling may go through many challenges even before they enter the ocean. After sea turtle eggs are laid by their mothers, they are not provided with parental care. The only care the eggs receive are the choice of a nesting site and the attempt of the mother sea turtle in covering and disguising the nest. The turtle program of DFW does beach surveys wherein they monitor and look-out for nesting females and their nests during the nesting season along five known nesting beach sites on Saipan. I, Erick Dela Rosa and my partner Princess Garcia have the great opportunity as an intern for the 2015 CRI Summer Program to take part in this program lead by our mentor Tammy Mae Summers with Jessy Hapdei, Joe Ruak and Felix Sasamoto.

The sea turtle project that we participated in are dayand night (on-call) beach nest surveys where we monitor nesting sea turtles and their nests. Our main purpose of conducting these surveys is to recognize the condition of the sea turtle hatchling success rates on the island of Saipan such as their health, overall number and abundance. This program is targeted for audiences such as students and adults. We communicate the results of our project to businesses such as tour operators, scuba dive shops, fishermen and marine sports operators. These audiences affect the sea turtle eggs and hatch success as a whole. With education, the public are made aware of the presence of the sea turtle nesting sites on our island. This gives the public the opportunity to provide the department with information regarding sea turtle sightings, hatchings, and also illegal hunting of the sea turtle nests and their eggs. "Trends in Saipan's breeding population may differ from those observed in nearby foraging populations, thus direct monitoring of the breeding population is required." (Kolinski et al 67. 2001)

The beach surveys are done with in five chosen beaches on Saipan; Bird Island, Wing Beach, Tank Beach, Lao Lao Bay and Obyan Beach. There are 3 three steps in which we do our nest surveys. First, we look for tracks on beach by a female turtle and her nest attempt. When we do find tracks and a nest, we dig up the nest just above the eggs and add a data logger that takes down the temperature of the nest, this determines the sex of the eggs when they hatch, and we take note of the GPS location and mark the nest. Once we have the nests, we keep an eye out for them every time we do a walk-through of the beach. During this time we check for signs of hatching. When we do see evidence of hatching, we wait three days to give the eggs a chance to hatch before we dig up the nest. Lastly, we do a nest inventory. The nest is dug up, we take out the data logger, measure the nest from first sight of eggs and the bottom of the nest. We then count the number of eggs that hatched as well as the unhatched ones from undeveloped to full term. All three steps are logged into data sheets. There are occasions wherein we keep track of a certain nesting female sea turtle and do night surveys (interns are on-call since it takes place overnight) where they wait for the sea turtle to nest, when she is done they put her in a pen and satellite tag her.

The gestation of an egg is usually two months. Our intern program duration is the same. We have limited time in collecting data from the nests that we have encountered. However, with the information we have successfully compiled, we are able to calculate the hatching success rate of the green sea turtle eggs of Saipan. The work that we do for this project is important to maintain and aid management efforts, conservation, and protection in order to recover the sea turtles from poaching and other threats and thus removing them from threatened species list. With our help and cooperation from the public, the sea turtle hatchlings will be able to rebound and have a bigger fighting chance before they head into the ocean and have a better survival rate into adulthood.

Works Cited

Kolonski, Steven P., Denise M Parker, Larry Itibus Ilo, and Joseph K. Ruak. "An Assessment of the Sea Turtles and Their Marine and Terrestrial Habitats at Saipan, Commonwealth of the Northern Mariana Islands." *Micronesia 34(1)*. 2001. 55-72. Print.

CNMI Sea Turtles 101

By: Princess Fleumeria M. Garcia

MOST children and young adolescents of the Northern Marianas islands have only seen sea turtles in textbooks or movies. However there is a program that gives NMI youth the opportunity to see and possibly hold one in person. The DLNR turtle program does beach and in-water surveys which incorporate educational outreach to increase the public awareness of sea turtle biology. Erick Dela Rosa and I are the lucky candidates of the 2015 CRI Summer Internship to participate in this program with our mentor, Tammy Summers and team members Jessy Hapdei, Joe Ruak and Felix Sasamoto.

As DLNR Sea Turtle Program interns we assist in morning and night beach surveys where we monitor nesting females and their nests. We also assist with in-water sruveys where we buddy-up with Jessy as he captures sea turtles, aid in processing the sea turtles on shore and the release off shore; and provide support when Tammy does educational outreach programs to students and the general public.

Our main purpose of conducting these activities is to monitor the status of the CNMI sea turtle population to include health, overall abundance. Our target audience includes students (children and young adults), but there are also newspaper ads which target adult population. We also give away hotline bumper stickers to local businesses such as tour agencies, scuba dive shops, fishermen and marine sports operators. With education the CNMI community is made aware of the presence of the sea turtles on our islands. This also gives the public an opportunity to provide the department with information and help regarding sea turtle sightings, strandings and illegal hunting activites.

In-water tagging surveys takes place at Balisa, Saipan, Erick and I set out on the DLNR small boat with sea turtle program team members. We fill out data sheets, for each turtle, with information on weather, time, and location. Erick and I take turns buddying-up with Jessy in the water. The purpose of the buddy system is to keep an eye on Jessy's safety and signal the boat when he captures a turtle. The person in the boat with Tammy helps serve as look-out for the divers, loads the sea turtles once they are caught, and assist with data entry. Once we have collected five to six sea turtles within two hours, we head back to shore to process them. The processing of the turtles involves flipper and PIT tagging, taking straight and curved measurements, weight and photos. Tissue samples are taken for DNA and isotope lab analysis. During the processing, Tammy welcomes any by-standers at the dock to have a look see, this is where she does her impromptu educational outreach to whoever is there to listen. Once we are done with the processing, we release the sea turtles back into the water at the edge of the dock. Other outreach programs done by Tammy are usually located at the sites where there is a hatching event and/or where there is a sea turtle that has come up to nest. Outreach is scheduled around nest inventories, night tagging surveys or in-water tagging surveys.

The in-water survey tagging started with Tammy and Jessy back in 2008-2009. Because sea turtles are long-lived species with a slow rate of maturity, it may take many years for us to see results from this research. "Green sea turtles may be common to certain CNMI southern-arc waters, hawksbills should presently be classified as rare" (Kolinski et al. 111. 2004.) Thus mostly green sea turtles, *Chelonia mydas,* are caught by Jessy; on rare occasions a hawksbill sea turtle, *Eretmochelys imbricata,* is added to the list in a day of in-water survey.

The work that we do for this project is important to maintain and aid management efforts, conservation, and protection in order to recover the CNMI sea turtle from population from illegal hunting and other threats; thus removing them from the endangered species list. In time, the general public won't have to rely on outreach programs to be able to see a sea turtle in person. The population of sea turtles will increase and the citizens of the NMI will be able to see the sea turtles on the beaches by chance.

Summary of Reference

The article is a study of the green sea turtle population in the waters of Tinian and Aguijan. Their methods of counting the sea turtles were surveys by sight from the shoreline, tow in the water, and snorkeling. They also collected algae and seagrass samples to know possible green sea turtle forage in the waters of Tinian. The result were that there were mostly juveniles around Tinian. Surprisingly there were more sea turtles present in Tinian than in Saipan and also more than in uninhabited islands. The surveys were conducted in 2001.

Summary of Project

Our project for the sea turtle program comprise of 4 parts. Of those parts, there is the in-water survey tagging and educational outreach programs. The in-water survey tagging is a four-member operation that starts off in the water to attain the sea turtles that are caught by hand by Jessy, then process is done at the shore. The processing of sea turtles are taking measurements, flipper and PIT tagging, weighing and collecting of tissue samples. Pictures are also taken of the top and bottom shell and once all are done, we release the sea turtle back into the water. For the educational outreach program, it is either scheduled or impromptu by our mentor, Tammy, to students or by-standers when we do nest inventories, night tagging surveys or in-water tagging surveys. She gives information about the program and ways the public can help in giving information of strandings or illegal hunting of the sea turtles.

Work Cited

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