## Project Update: January 2019

Sea Turtles Forever started anti-poaching patrols on October 20<sup>th</sup> 2018 with an experienced crew of four covering 7.7 km of nesting beaches used by endangered sea turtles. So far, we have saved 1898 eggs from being stolen by poachers for sale on the black market, keeping the poaching rate below 10% of nests laid. This is a 90% reduction from initial poaching rates in this area when this project started in 2000. Early hatch rates from our protected (relocated) nests are about averaging approximately 90%, actually above natural hatch rates.

We have tagged 10 green sea turtles this season as of January 10<sup>th</sup> 2019. We have also seen five returning tagged turtles, some that were marked in 2011. These sightings are important for the understanding and conservation of this endangered sub-population. We have also saved eggs laid by the threatened olive ridley turtles. Unfortunately, no critically endangered leatherback or hawksbill turtles have been observed on the nesting beaches yet this season.

Due to a national teachers' strike, we were not able to present our new classroom education programmes in September or October 2018 before the school vacation started. We are hoping to present them in March 2019.

In December 2018, we provided a summary of the last 8 years of our patrol data to the IUCN Marine Turtle Specialist Group for a publication on the status of the Eastern Pacific sea turtle populations.

Currently we have enough funding to continue patrols through April 2019. We are searching for funding for the 2019-20 nesting season in order to continue this project into its 20<sup>th</sup> season. We greatly appreciate The Rufford Foundation's support for endangered sea turtle conservation in this unprotected area of Costa Rica.

We have been experiencing a dramatic decline in nest numbers over the last 3 years, and this trend has been seen at other monitoring operation in the region of northwest Cost Rica. Isla San Jose to the south of our project experienced a 70% drop in nest numbers, Playa Cabuyal to the north also experienced a 60% drop in nest numbers. We have seen a 50% drop in nest numbers for the last three seasons.

Our season started off very slowly with only one nest in October. October is normally when our turtles begin to nest but nesting did not really begin until November 2018. Even November was less active than normal as was December, nesting has picked up considerably in January. January and February are our most active nesting months and we are hoping we see a spike in activity through to April 2019.

For decades, almost every single egg was taking from this regions nesting beaches. My theory that we would experience a generational gap due to decades of almost no hatching nests could cause this kind of reduction in nest numbers. In the last 19 years we have hatched out well over 100,000 eggs but it takes approximately 25 years for Chelonia mydas (green turtle) to reach maturity and return to nest. With any luck we have stopped the extinction of this subpopulation of Chelonia mydas. We should see

our hatchlings begin to return as mature adult turtles in the next 5 years.

We have tagged almost 300 turtles over the last 19 years but see only a small percentage returning. Many may have been lost at sea to commercial fishing nets or gone from attrition due to age. When we started, we were working with an older population and very few hatchlings survived the poaching before our project started which would create a generational gap.

The culturally imbedded practice of poaching sea turtle eggs has not changed. Even after almost 20 years of nightly patrols and yearly educational programmes we are still confronting poachers on a regular basis. The influx of Nicaraguan nationals has been challenging because they are very aggressive poachers with little to no education and a very day to day survival lifestyle. They are poor, they do not even consider the possibility of extinction, and they are hungry, even at times desperate.

Our patrol has managed to succeed because they are very tough guys, and we pay them more than the average wage so they will fight if they need to, because they value their jobs. And already this season they had to fend off a machete wielding Nicaraguan for one nest, and again a pair of angry Nicaraguans for another two nests. This does not happen every night but it does happen, our team is literally fighting for the survival of this sub-population.

We would like to thank everyone at The Rufford Foundation for everything you have done for our project. Your contributions have given us great strength, carried us through the fight. We have been able to pay our patrol team a decent wage due to the incredible support from The Rufford Foundation. You are responsible for saving many thousands of sea turtles that would have otherwise ended up being sold on the black market.





