

## **Project Update: July 2014**

*January 2014- May 2014*

### **Nesting Activities**

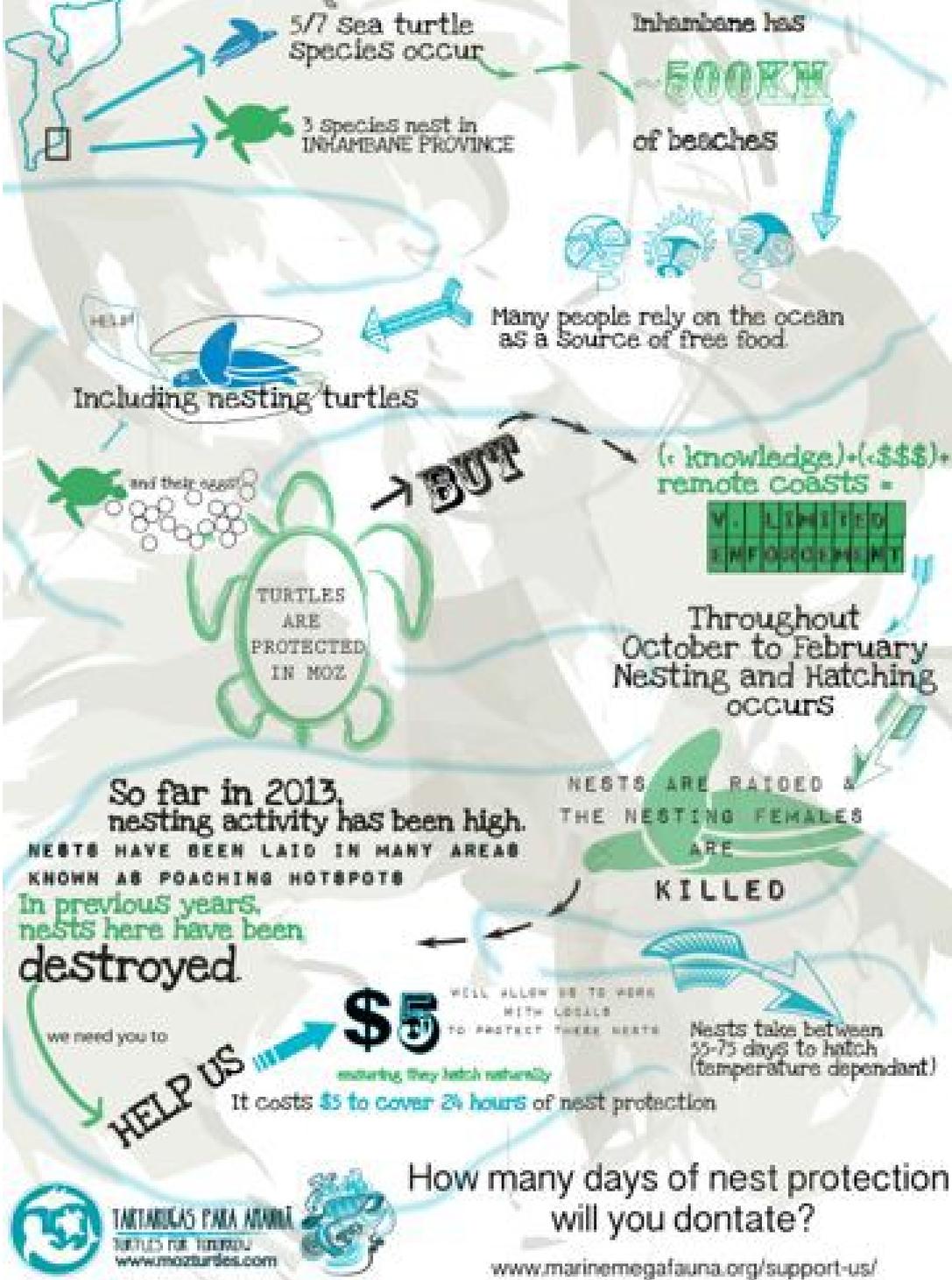
- We experienced the busiest nesting season in past 5 years across Inhambane Province. Whether this is a result of increase turtles nesting this season or evidence of effective outreach programmes is unknown.
- Many new partnerships have been made to facilitate reporting of nesting activity. A nest protection programme was created for beaches between Guinjata Bay and Island Rock and funds were raised to hire turtle guards to protect nest locations until hatching. This initiative was known as “Guardas de tartarugas” and an infographic was used to help raise awareness and funds. Additionally group of interested local business and property owners has been founded under the name Turtles Jangamo, for the purposes of on-ground collaboration of reporting and supervising nesting and hatching events. We will provide scientific and conservation expertise to Turtles Jangamo.
- Through the ‘Guardas de Tartarugas’ program awareness was also created within the local communities and fishers and beachgoers we encouraged to report any signs of turtle nesting or poaching.
- A new and valuable partnership was fostered between the principal investigator, Jess Williams and the team from Dunes de Dovela, a small eco-lodge situated within private reserve protecting some of the last remaining coastal dune forest in Southern Mozambique. The beach included within this private reserve, is known as Manhame Beach and has proven to be an exclusively leatherback nesting area. The usage of this beach by leatherback turtles was not previously documented and the extent of nesting along Manhame Beach was unknown.
- We hypothesise that this might be the most abundant nesting density beach for leatherback turtles along the Mozambican coast. Eight confirmed nests were detected and anecdotal evidence exists of seven other nests that were poached in early October/November 2013. Several nests were washed away by tidal inundation and nest relocation should be strongly considered for future seasons to maximise hatching success.
- Several site trips have been made throughout the course of the nesting and hatching season to train staff on ground (at Dunes de Dovela) how to distinguish between nesting species tracks, nesting activities and how to excavate and determine nesting and hatching success.

- A community meeting was held early in the nesting season to raise awareness amongst fishers and villagers in Dovela that nesting turtles are no longer in abundance and that they must respect national laws put in place to protect sea turtle species. The fishers were encouraged to report nesting events and the village chief, Alberto was pressured by the rest of his community to make a statement recognising that in the past he was one of the biggest influences to poaching in the area. The first nesting turtle of the season was always caught and killed and brought back to the chief as an offering and he would divide it up amongst the community as a symbol to officially mark the opening of the nesting turtle hunting season. Since this meeting community involvement has been higher than before and several fishers have come to watch and learn about nest excavations and hatchling releases.



*Two of Dovela's local fishers watch over the excavation process of this Leatherback turtle nest.*

# in mozambique



## Poaching

- In our ongoing efforts to document the motives and attitudes surrounding poaching of sea turtles a new interviewer was recruited and is being trained. He will be conducting semi-structured interviews and recording the interview for transcribing and translation. Nine additional interviews have been conducted.
- Poaching of nests was reported in Bazaruto Island, Painsane, Tofinho and Manhame Beaches.
- We have been continuing to conduct mortality walks of sand dunes along beaches within Inhambane Province to gather data for poaching study. Most recently the Northern beach of Praia de Rocha was surveyed. The remains of 17 animals were found along a 2km stretch of beach. These comprised of various sizes (both *C. mydas*, *C. caretta*) and remains were found in varying states of degradation. Five spearfishing camps were detected within this area.
- Two full fresh carcasses have been reported. One in Tofinho, a mature loggerhead turtle with large monofilament line and lure hooked into the side of its mouth. The other a juvenile green turtle, washed ashore onto the lagoon at Manhame Beach. This carcass had no exterior signs to suggest cause of death and fishers had cut open the turtles remains allowing us to check the digestive tract for evidence of plastic ingestion, however nothing was detected.



*Google earth imagery displaying position of poached turtles (red markers) and spearfishing camps (green markers) at Praia de Rocha's northern beach as surveyed in January 2014.*

## In-water monitoring

- Automated photo Identification tool for sea turtles released by I3S- now working with developers to use our annotated ID images to help validate accuracy of fingerprints and potentially prepare a standardized guide for how to use I3S Pattern to photo ID turtles.
- Our in-water turtle sightings database has reported 253 encounters for 2013.
- Preliminary historical data has been written in to manuscript reporting first in-water sightings data for the region. Paper is currently in review.

- **Alternative Livelihoods**

- Focusing on PhD data collection and research (LEK poaching surveys and Expert opinion surveys (five more responses compiled).
- Machilla Magic artists are producing new beaded and tin can key rings. Including a shipment to Sea Turtle Inc, South Padre Island, Texas.



*Local artist making sea turtle beaded keyrings, final product (right).*

## Outreach- World Turtle Day themed activities

- It was World Turtle Day on May 23<sup>rd</sup> 2014. Prepared activities for Kingfisher International school at Machavenga including viewing of turtle documentary, geography activity tracking and mapping a live satellite tag of a green sea turtle tagged in Tanzania, turtle diagrams and anatomy, poems and the construction of a life sized turtle which was covered in papier mache on the day.
- Narsciso, Narsciso and Pedro from the Nemos Pequenos programme were also put through basic turtle biology, anatomy, species ID and conservation crash course and then tested on their comprehension of the material. I have had three question and answer sessions with the boys to help explain the content and they have attended

two of my turtle conservation and biology public presentations.

- A brief conservation themed talk to 45 children at the Babalaza Primary School. This same turtle talk was also given to students of Nhassanana, Coinjana and Bomba primary schools. It's estimated over 200 students from local schools attended these presentations.
- A small World Turtle Day celebration for was held on Bazaruto Island in the Bazaruto Archipelago National Park. The kids were involved in turtle crawl beach races, turtle hopscotch, pin the tail on the turtle, making play-doh turtles and everyone eating a giant turtle shaped cake!



*Jess with students of Kingfisher International School and their paper mache leatherback turtle model.*



## Online Media

->Marine Megafauna Foundation Blog

- Not Quite Poached! One more Leatherback nest survives.
- <http://www.marinemegafauna.org/quite-poached-one-leatherback-nest-survives/>
- 93 Loggerhead turtles hatch at Tofinho (14/01/2014)
- <http://www.marinemegafauna.org/93-loggerhead-turtles-hatch/>
- An impromptu field necropsy at Manhame Beach (19/02/2014)
- <http://www.marinemegafauna.org/impromptu-field-necropsy-manhame-beach/>

• ->Mozturtles.com

- Leatherback hatchlings- Manhame Beach, Mozambique (19/03/14).  
<http://mozturtles.com/2014/03/19/leatherback-hatchlings-manhame-beach-mozambique/>
- Turtle poaching at Isla de Inhaca (26/03/14).  
<http://mozturtles.com/2014/03/26/turtle-poaching-at-isla-de-inhaca/>
- One late nest (22/01/2014)  
<http://mozturtles.com/2014/01/22/one-late-nest/>

• ->Eyes on the Horizon

- Leatherback sea turtles, the panda bears of the ocean (6/3/14).  
<http://www.eoth.org/leatherback-sea-turtles-the-panda-bears-of-the-ocean/>
- <http://www.eoth.org/an-impromptu-field-necropsy-at-manhame-beach/>
- <http://www.eoth.org/the-lucky-93/>

## **Publications**

### *In review:*

Williams JL, Pierce SJ, Fuentes MMPB, Hamann M (2014) Effectiveness of recreational divers for monitoring sea turtle populations. *Endangered Species Research*.

### *In-prep:*

Fernandes, R., Williams, J., Louro, C. & Pereira, M.A. (2014) Monitoria, marcação e conservação de tartarugas Marinhas em Moçambique: relatório Anual 2013/14. Maputo. CTV

## **Conferences and Workshops**

Attended the first “Conservation in Mozambique Workshop” held in Maputo 21st-22nd April 2014. Conference drew together both terrestrial and marine conservationists, scientists and some of the Nations policy makers and government representatives to discuss and plan priority areas and species for advancing conservation efforts within the country.

