



Reduction of anthropogenic threats on marine
turtles on nesting beaches in front of
Libreville, Gabon

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Full Report



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Aknowledgements

To ASF team and all the technicians of the National Park of Pongara and the marine park of Mayumba for the leading of the activities on the field. .

To the Marine Turtle Conservation Fund for funding of the project.

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To Angela Formia for its contributions to different reflexions in the preparatory and executive phase of this project.

To all the partners of this immense network of conservation of marine turtles in Gabon.

To all the good wills of Pointe Denis which always assist us during the great operations of saving marine turtles trended in the savannah.

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Context

The marine turtles have a unique place in the biodiversity. As they live in the sea, they conserve an important link with the terrestrial area: the females lay their eggs on land. The hatchlings, just after leaving the sand, move directly to the sea and will be back when they will be adults. This system of double life must be perfect because the marine turtles appeared since 180 millions of years, have survived to the great dinosaurs reptiles.

The Leatherback turtle (*Dermochelys coriacea*), the most common along the Gabonese's beaches is classified In Critical danger on the red list of Threaten Species by UICN. At global level, they are very, they are very threaten of extinction and their populations are truly in strong diminution because of high pressure of exploitation very important caused by their capture, the looting of the nests, the destruction of the laying beaches, etc. The final goal of the plan of conservation of the Leatherback turtle is to encourage the survive in long term, and in particular the putting back of the populations in difficulty and the safeguard of their critical habitats, the integrated conservation of the well- being and to the needs of the rural communities with which they are in contact.

Objectives

The specific objectives of the plan of conservation of the marine turtles financing by the Rufford Small Grant includes:

- (i) The standardization of the observations the marine turtles.
The associations of the artificial lights caused by the lamps of the flashes of the cameras for the persons, who come on the beach by car or foot, often impede the turtles to come on the beach for lay. Some meetings will be organised with the hotel's owners, tourist promoters and the persons who have the houses in order to put in place some common programs for the observation of the marine turtles. Those different meetings will take three (3) months.

- (i) The training and the employment of the local guides.
During the laying, the Leatherback turtles are very fascinating and moving and their observation by night remains an unforgettable experience. Nevertheless, the presence of the visitors without guide in the night can disturb those very sensitive creatures. So, they must be managed and controlled with extreme precaution, by applying the rules of behaviours specific.
The turtle's tourism and their conservation represent the important potential resources for the economical growth, opportunities of employs and for the social development.

- (ii) The site's study and the protection of the nests
The determination of the number of the laying females gives the fundamental data for the conservation and the management of marine turtles. The sites of intensive studies include the habitats of lay must visited regularly by the patrols affected daily.
Once the laying of a certain number of eggs is over, the female marine turtle leaves the beach without any protection for the eggs or the hatchlings. At this moment, the eggs and the hatchlings are facing the diverse natural threats (beach's erosion, storm and inundation by the tide, the natural predators) and the others (poaching, non-indigenous predators and the coastal development).

- (iii) Education and sensitization
Put a particular accent on the marine turtle's conservation and the fitting out of their habitats in order to minimise all negative impact of tourists and maximise their nature's appreciation and their environmental conscience. To encourage a positive interest for the marine turtles and to enhance the sensibility of the protection for the citizen.

Activities

- (i) The harmonisation of the observations of the marines turtles
The ASF team has developed contacts with the hotels, restaurant's owners and the tourist promoters. One of the most important priorities has been their sensitization on the critical situation of the marine turtles threaten of extinction. We consider that all the parties concerned have interest to preserve an undamaged and save ecosystem that will continue to produce environmental, economical and social benefits. We have worked together for reduce the potential impacts of the park's users on the females turtles which lay and their habitat. Some of the themes approached are: the lights on the beach, the marine and terrestrial's pollution, the use of the boats, the jet-sky and the quad on the beach. In common agreement, the solutions have been finding together.
- (ii) The training and the employment of the local guides
Three members from the local community have been employed as Guides for turtles and trained on the biology of marine turtles, the themes of conservation and the code of escorting with turtles. They are in charge of the coordination of the Turtle-tours.
- (iii) The site's study and the protection of the nests
During our scientist and sensitization activities, we have executed monitoring and regular patrols on the laying beach. We think this action will dissuade the poachers and reduce the other threats and the disturbances on the site of laying. We have also worked in association with the authorities of the park in the application of the measures based on the reduction of the different threats on the marine turtles.

During this season, an important number of Leatherback turtles have trended in the savannah because the artificial lights of the houses located behind the laying beach and many hatchlings were lost in the savannah in spite of going back to the sea.

This situation that didn't taken in consideration in the objectives, has led us to put in place some borders in dark plastic along the areas with strong nidifications in order to retain de babies turtles moving in contrary sense of the beach.

- (iv) Education and sensitization
Activities of sensitization have been executed in the Centre of information on the marine turtles of Pongara. This centre is the focal point visitors whose visit the laying beach. We have exposed the panels and didactical materials on the natural history and the conservation of the marine turtles.
During this season, ASF has received from the Irish association Sea Turtle Trust a caste turtle qui will served as model in the schools.
Partnerships have been established with the transporters who make transportation between Libreville and Pointe- Denis.
Education et sensibilisation

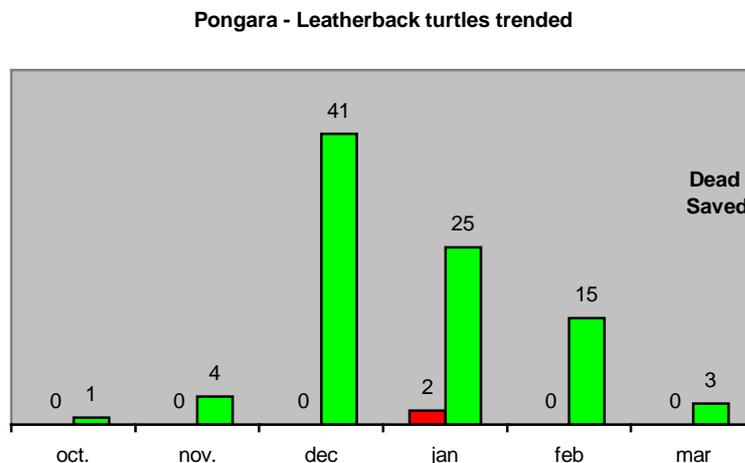
Results

- (i) The harmonisation of the observations of the marine turtles
 Follow to our meetings with the tourists operators; we've arrived to a common agreement: identify the parking for group of persons in vehicles and surround the persons on the beach for the observation of the marine turtles. Nevertheless, we note some complications due to the persons (often politics authorities) who don't take care about the biological importance and the sensibility of the site.
- (ii) The training and the employment of the local guides
 The turtle's guides have led the groups of visitors (10 persons in maximum by group) in the CEI and on the beach for observe the marine turtles during the laying period. Those tours have been organized for the schools of Libreville, hotels and restaurants of Pongara or directly with interested persons.

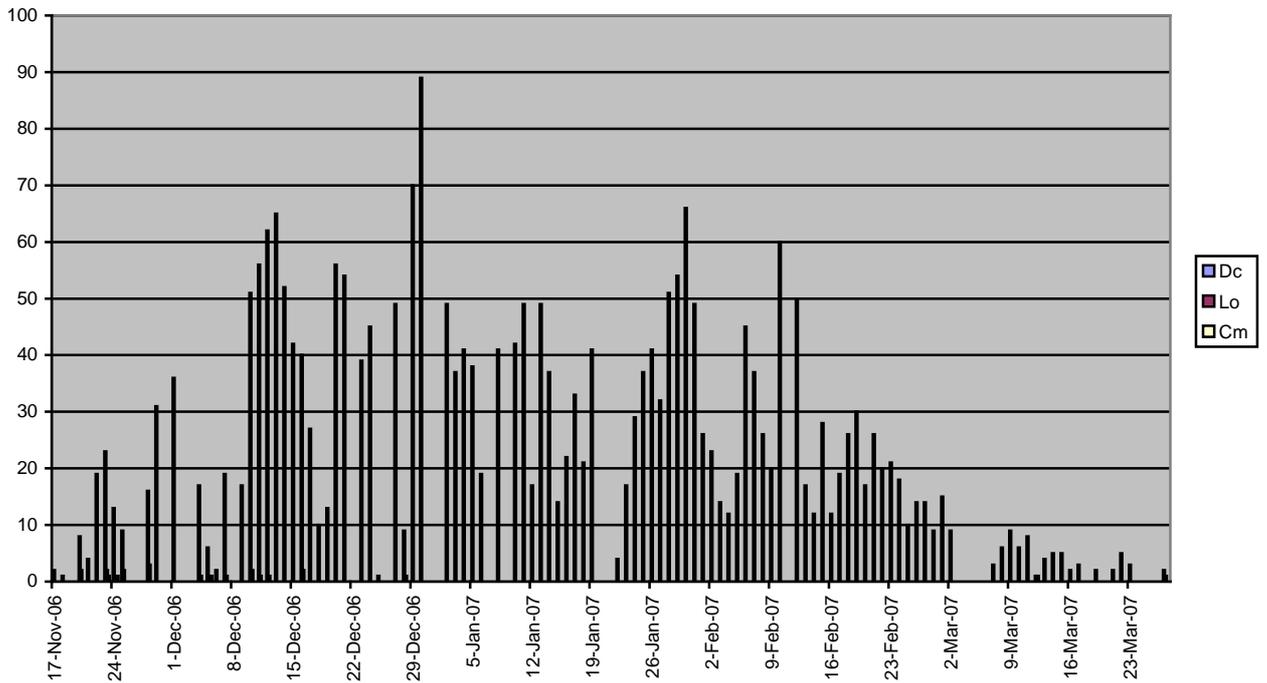
Table. 1: Distribution and arrangement of the material of sensitization.

Recruitment in the local community	4
Groups having request a guide	39
Groups on the beach without guides	68
Persons who know the Code of good behaviour	15
Persons who don't know the Code of good behaviour	1011
Number of leaflets and posters distributed in NP of Pongara	1026
Number of leaflets and posters distributed in the ferries	3000
Number of ferries with the banderols of sensitization	1

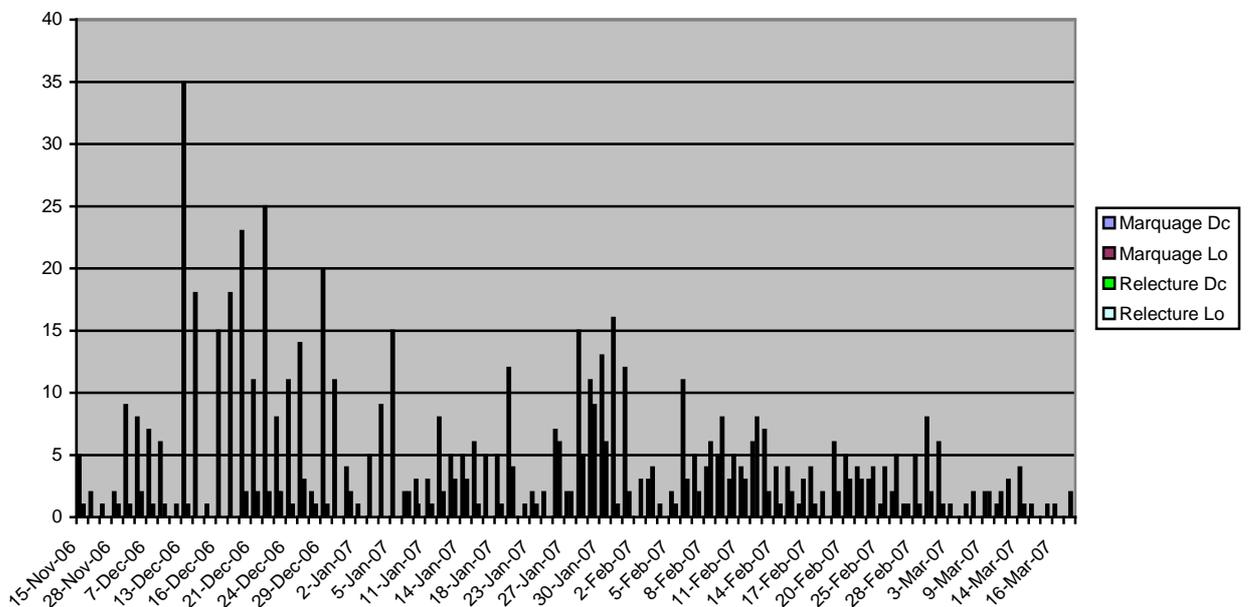
- (iii) The site's study and the protection of the nests
 The project has permitted to identify on of the most important threat on the marine turtles in Pongara: the artificial lights coming from the houses of Pointe- Denis, but mainly the reflected lights from.



The 5 km of beach where the activities are led, with have received 2698 nests of Leatherback turtles, 21 nests of hawksbill turtles and 3 nests of Green turtles distributed in the following histogram:



During that season, the ASF team has tagged 542 Leatherback and re-readed 163. They also tagged 4 hawksbill so that the distribution in the year follows the histogram below:



(iv) Education and sensitization

The green excursions in the national park of Pongara have permitted to sensitize 442 coming from different primary schools of Libreville.

Owing to the presence of the cast Leatherback turtle, ASf has an educational and sensitization' tool that represents local example for the natural Gabonese's heritage and the necessity of protection of a specie threaten of extinction.

Posters and leaflets have been delivered for let people know about:

- a) The critical situation of the marine turtles threaten of extinction in Gabon,
- b) The Centre Education and Sensitization and the Turtle- tours,
- c) How to help the conservation.

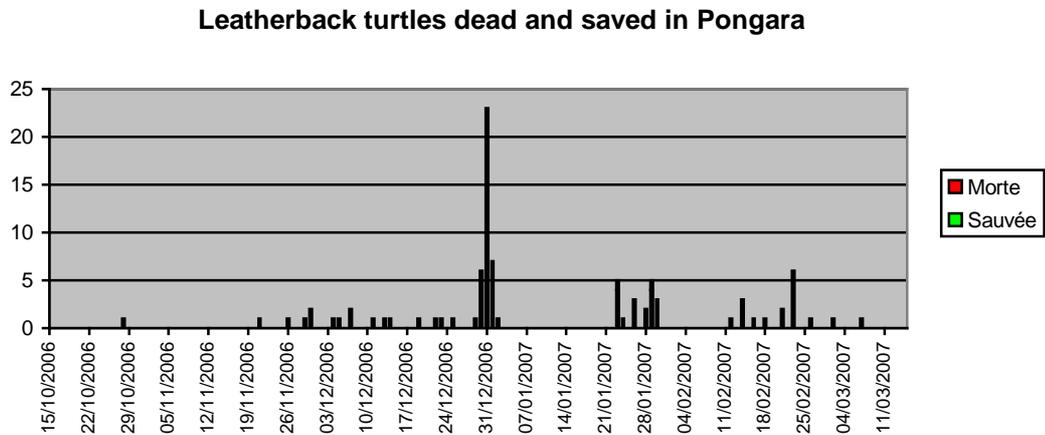
The posters have been posted at Pongara and in the primary and secondary schools of Libreville. We have also established some agreements with the ferries-owners between Libreville and Pongara for stick the banderols on their ferries.

The recruitment of two guides has permitted, in spite of the persistence of the quad's presence and the tourists without guide on the beach, to execute a sensitization the day in order to guide well in the night for the good observation of the turtles on the beaches.

Impacts of the project on the conservation

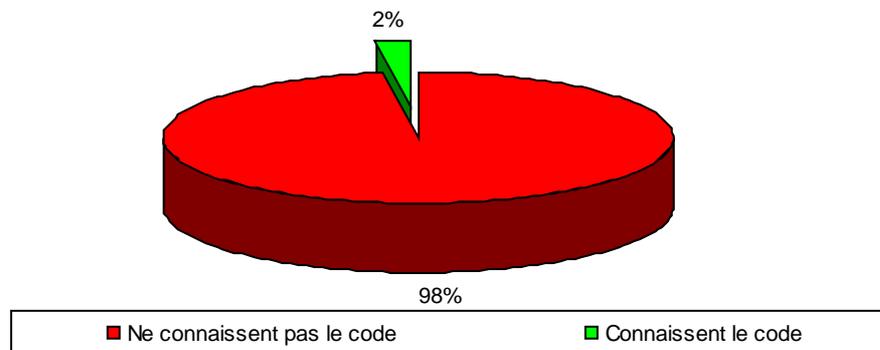
The most measurable effects of the reduction of the negative impacts on the marine turtles are:

- The number of dead and saved turtles,



- The control of the flux of visitors on the laying beaches during the laying of the marine turtles.

The program of sensitization has permitted to identify parking for the transported groups and to surround the persons on the beach for the observation of the marine turtles. Nevertheless, we have noted some complications due to the persons who don't take in consideration the biological importance and the sensitivity of the site.



Percentage of persons sensitised and their knowing of the code of good behaviour.