## Project Update: March 2018

- The Egyptian Dugong Team (EDT) participated in the event of World Wildlife Day 2018 at El Gezira Sporting Club on March 3<sup>rd</sup> 2018 (https://www.facebook.com/WWDEGYPT). I shared my project and PADI specialty course of Dugong Conservation Diver with the participants and the visitors. Our team met with Radhia Achouri Director of United Nations information Center in Egypt.
- I conducted a presentation about the dugong project in Egypt to 60 students from the New Cairo British International School and the dive guides at Marsa Nakari Diving centre at Marsa Nakari Village in Marsa Alam.
- A total of 100 questionnaires were conducted before and after the dugong watching tour. Most of these trips were performing to Marsa Mobarak from Port Ghalib Harbour. This harbour has more than 30 boats and three glass boats.
- The surface survey was conducted in Marsa Mobarak to assess the tourism activities in the presence of dugong. All sightings recorded were confirmed that the snorkelers and inflatable boats were located less than 10 m from dugongs and the daily boats situated from 10 to 50 m and from 50 to 100 m.
- Four different behavioural categories were recorded for dugong from underwater. Effects of snorkelers and divers was also documented.
- Finally, I received an invitation to be a co-author to write a chapter for Red Sea dugong through a book of the Red Sea that will be published soon by Springer. I acknowledge the Rufford Foundation for supporting the two dugong project in Egypt.









Participation of Egyptian Dugong Team in the event of World Wildlife Day 2018.





Presentation at Marsa Nakari Diving Center in Marsa Alam





Pre and post tour questionnaires conducted by tourist





Snorkelers and inflatable boats are very close to dugong in a distance less than 10m radius.





Tourism activities at Marsa Mobarak for dugong watching tours. Dugong is pointed by arrow.



Port Ghalib Harbour.



Daily boats at Marsa Mobarak.



Dugong in resting state at surface.





Dugong rolling behaviour.



Travelling behaviour.



A snorkeler interrupts dugong while feeding.



while A diver cross the way of dugong while feeding.

## **A: Pre-Tour Questionnaire**

This survey questionnaire is being conducted by **The Egyptian Dugong Team**, Marsa Alam, Red Sea, Egypt. The questionnaire is part of a Dugong project on "Effect of tourism activities on the behavioural ecology of dugong dugon inhabiting Marsa Alam, Red Sea, Egypt". The purpose of the questionnaire is to ascertain the level of your knowledge about dugong ecology in order to devise education programs designed to benefit dugong conservation efforts.

- I. How well informed were you about dugongs before visiting Marsa Alam?
  - (a) not at all informed
  - (b) slightly informed
  - (c) moderately informed
  - (d) well informed
  - (e) very well informed
- 2. How interested are you in finding out more information on dugong ecology?
  - (a) not interested
  - (b) slightly interested
  - (c) moderately interested
  - (d) very interested
  - (e) highly interested
- 3. What are dugongs most closely related to?
  - (a) whales
  - (b) elephants
  - (c) fish
  - (d) don't know
- 4. In what depth of water do dugong spend most of their time?
  - (a) 0 to 2 meters
  - (b) 2 to 12 metres
  - (c) over 12 metres
  - (d) don't know
- 5. What do dugongs eat?
  - (a) fish
  - (b) seagrass
  - (c) shrimp
  - (d) don't know
- 6. On what senses do dugongs depend most?
  - (a) ears
  - (b) eyes
  - (c) sonar
  - (d) don't know

7.	How do dugongs defend themselves?  (a) head butts (b) sharp teeth (c) swim away (d) don't know
8.	What is the main cause of death of dugongs?  (a) humans (b) killer whales (c) tiger sharks (d) don't know
9.	What is the Marsa Alam dugong population's chance of surviving for the next 100 years?  (a) 0% to 35%  (b) 35% to 70%  (c) 70% to 100%  (d) no opinion
10.	How important is dugong conservation?  (a) not important (b) slightly important (c) moderately important (d) very important (e) no opinion
11.	What would be the main reason to conserve dugongs?  (a) for human use  (b) for their role in the ecosystem  (c) because they have a right to exist  (d) there is no reason to conserve dugongs
12.	How often do dugongs give birth?  (a) every 6 months  (b) every 14 months  (c) every 3 to 5 years  (d) don't know
13.	How many young are usually produced from each pregnancy?  (a) 1  (b) 2  (c) 4  (d) don't know

- 14. How long do dugong young depend on their mother for survival? (a) up to 6 months
  - (b) up to 1 year (c) up to 2 years

  - (d) don't know
- What age group do you belong to? 15.
  - (a) 12 to 15
  - (b) 16 to 19
  - (c) 20 to 30
  - (d) 31 to 60
  - (e) 61 or over

## **B:** Post-Tour Questionnaire

This questionnaire survey is being conducted by **The Egyptian Dugong Team**, Marsa Alam, Red Sea, Egypt. The questionnaire is part of a Dugong project on "**Effect of tourism activities on the behavioural ecology of** *dugong dugon* **inhabiting Marsa Alam, Red Sea, Egypt**". The purpose of the questionnaire is to determine how much dugong-watching tours contribute to your knowledge of dugongs, and ascertain the level of your interest in dugong conservation after you have taken a tour.

- 1. How well informed were you about dugongs before today's tour?
  - (a) not at all informed
  - (b) slightly informed
  - (c) moderately informed
  - (d) well informed
  - (e) very well informed
- 2. Did today's tour increase your knowledge of dugongs?
  - (a) not at all
  - (b) slightly increased
  - (c) moderately increased
  - (d) greatly increased
- 3. Did today's tour increase your interest in dugong conservation?
  - (a) not at all
  - (b) slightly increased
  - (c) moderately increased
  - (d) greatly increased
- 4. Does dugong conservation need more publicity?
  - (a) no more is needed
  - (b) yes, a little more is needed
  - (c) yes, a moderate amount more is needed
  - (d) yes, a great deal more is needed
- 5. Does dugong conservation need more financial support?
  - (a) no more is needed
  - (b) yes, a little more is needed
  - (c) yes, a moderate amount more is needed
  - (d) yes, much more is needed
  - (e) don't know

- 6. If there were a non-profit dugong conservation organization would you make financial contribution to it?
  - (a) no (no possibility)
  - (b) maybe (less than 50% probability)
  - (c) probably (greater than 50% probability)
  - (d) certainly (100% probability)
  - (e) no opinion
- 7. What age group do you belong to?
  - (a) 12 15
  - (b) 16-19
  - (c) 20-30
  - (d) 31-60
  - (e) 61 or over