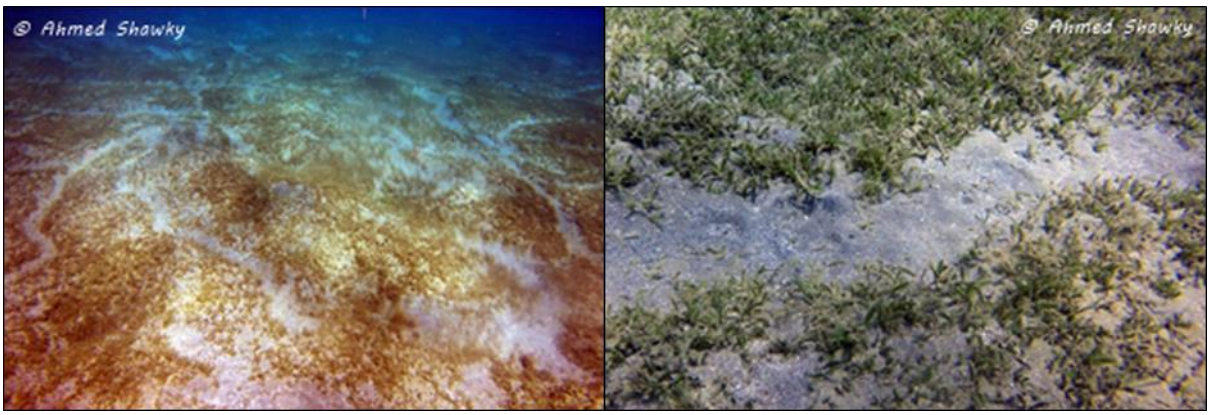
Project Update: April 2019

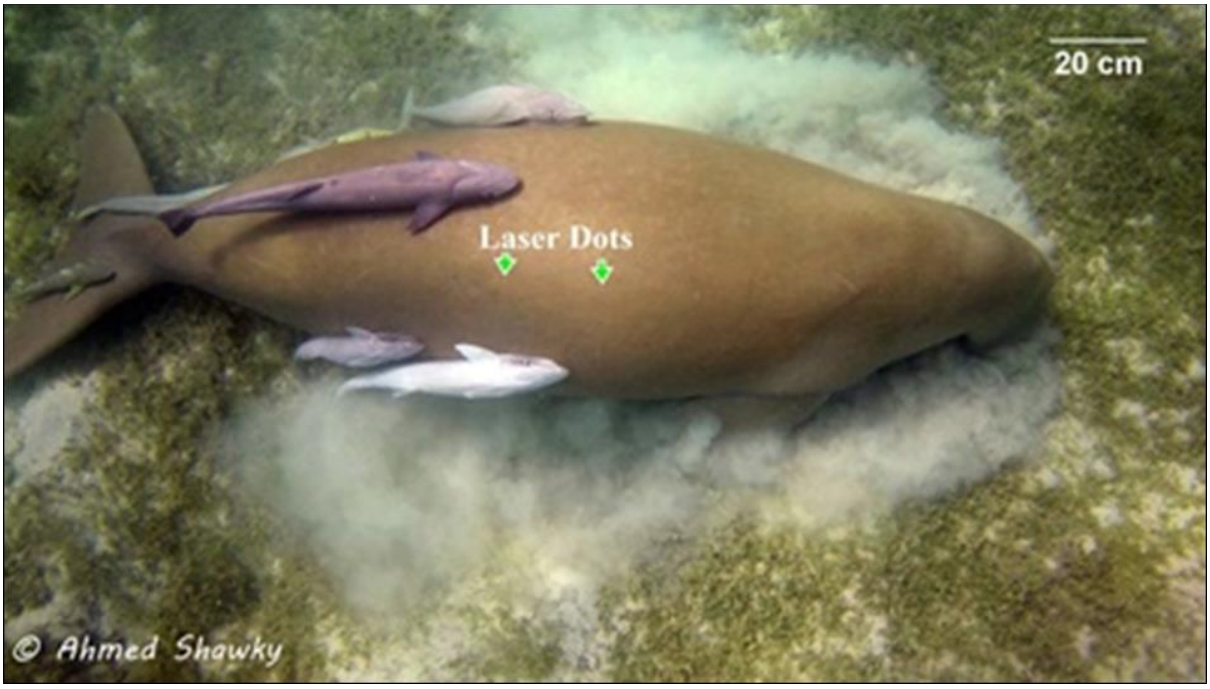
- The manuscript of our new record for a large feeding trail of 30cm wide is accepted by the journal of "Egyptian Journal of Aquatic research". The article will be published soon after revision. The paper reports a significant finding of the largest dugong in the Red Sea that will get sounds to other researchers.
- Field survey is conducted with several dives and more data is collected for feeding trails in different study sites. Small feeding trails of 10 cm wide were recorded this season. In the same time, some divers have recorded a small dugong swimming at 7 km north of Marsa Alam, while other snorkelers encountered a dugong calf swimming in Wadi El Gemal National Park. Therefore, our records for the small feeding trails every season has confirmed the presence of small dugongs in the study area. Thus, the analysis of feeding trails is indirect evidence for the presence of different dugong size.
- The density of seagrass is differed from one site to another due to the effect of strong wave action in the exposed site rather than the sheltered area that has clear feeding trails.
- One dugong individual is measured using laser photogrammetry technique underwater and the calibration is tested using underwater grids.
- Regarding the public awareness activities, I conducted the PADI speciality course of "Dugong Conservation" for 45 persons including diving and snorkelling guides at Maliki a Resort, 30 km north of Marsa Alam. I presented the activities of our project using laser photogrammetry and the analysis of dugong feeding trails.
- Draft for a new manuscript regarding modelling habitat and abundance of dugong in the Egyptian Red Sea is written with contribution with a modelling specialist in biodiversity. The modelling algorithms are useful to predict the appropriate habitat for dugong and calving as well in addition to the prediction of the species density along with the coat of the Egyptian Red Sea by means of the simulated annealing algorithm aka MARXAN. This work is very significant for dugong conservation and management.



Example of dugong feeding trails in the study sites

Small feeding trail width of 10cm wide

High (left) and low (right) densities of seagrass in different study sites



Measuring of dugong underwater using laser photogrammetry technique.

Left: Underwater calibration process. Right: At the field work with laser photogrammetry.

Dugong Conservation Training Course to the dive and snorkelling guides in Marsa Alam

Celebration with the participants at the end of the training course.