Project Update: September 2017

• Field Survey:

A total of five field surveys were conducted at the sites Marsa Hermez (N=2) and Marsa Abo Dabbab (N=3). A total of eight dives were performed (seven dives from shore, one dive by speedboat).

• Dugong Photo ID:

The dugong was sighted once at the surface in Marsa Hermez (25.320214°N and 34.748129°E) in the morning at 9:00 a.m. The average depth of sighting was 5 m at a distance of 350 m from the shore. The dugong was travelling fast in the open water, so only photos from the surface were taken during snorkelling (Fig 1 and 2).

Another sighting was at Marsa Abo Dabbab (25.338245°N and 34.739238°E), at 4:30 p.m. The average depth of sighting was 7.5 m at a distance of 150 m from the shore. Several photos were taken of the right and left flipper to identify each prominent notch, as well as photos of the tails. When matching the photos with the previous ones, I found that it was the same individual that was recorded in Marsa Hermez (Figs 3 and 4). It means that this individual move from one site to another. On the other hand, I found new scars on one and two lines longitudinal on the body that were not was recorded last month for the same individuals (Fig. 5 and 6). I concluded that this dugong had a social behaviour with other dugongs.

• <u>Dugong behaviour:</u>

Dugong was sighted in feeding state all the time that recorded in Marsa Abo Dabbab (Fig 7 and 8). After I stayed some minutes underwater with dugong using SCUBA diving, I ascend to remain on the surface to record the dugong surface interval using HD camera without the red filter. Surfacing has been resighted between two feeding times to allow the dugong to take a breath at the surface by opening the nostrils (Fig 9). The surfacing time for breathing was 3 seconds. After breathing, dugong rested at the surface for a few seconds before taking the second breath (Fig. 10). When dugong finished its surface interval, it started diving by arching its body to descend to start the submerged interval (Fig. 11 and 12). New behaviour was recorded (i.e. rolling), where the dugong did full rolling on the substrate. In this behaviour, the dugong rotating horizontally with at least 180 degrees touching the substrate and a cloud of sand occurred (Fig. 13 and 14).

Human activities with dugong:

At Marsa Hermez, we recorded only four snorkelers swimming with the dugong at the surface (Fig 15 and 16). At Marsa Abo Dabbab, only five divers were counted around the dugong with a distance and didn't disturb it (Fig. 17 and 18) I recorded no change in the dugong behaviour in the presence of divers. After 5 minutes, a speedboat arrived with snorkelers to see the dugong. More than 15 snorkelers were found at the moment to see the dugong, while the speedboat still moved around (Fig. 19 and 20). I recorded a sudden change in the dugong behaviour once the speedboat arrived, where the dugong is travelling more to the shallow area, then into the open water and disappeared.





Fig. 1 and 2: Dugong sighting at surface in Marsa Hermez





Fig. 3 and 4: Sighting the dugong of Marsa Hermez in Marsa Abo Dabbab





Fig. 5: The dugong without scars



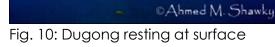


Fig. 9: Nostrils are open for breathing





Fig. 11 and 12: Dugong arching the body to dive after breathing





Fig. 13 and 14: Dugong rolling on the substrate





Fig. 15 and 16: Snorkelers swimming with the dugong at Marsa Hermez





Fig 17 and 18: Divers keep a distance from the dugong at Marsa Abo Dabbab





Fig 19 and 20: Snorkelers and the speedboat follow the dugong at the surface





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