

## Project Update: January 2019

- In this month, I succeed to photograph the dugong using the laser photogrammetry rig. I photograph all body parts of the dugong like whole body, head, muzzle, tail, flipper and the genital slit.
- It was a challenge to photograph the dugong muzzle perpendicular to the camera and spot the two laser dots on it.
- I photographed the scars on the dugong body and measure the width between the two parallel lines that indicate the volume of the dugongs in the area.
- Seagrass densities are assessed in the different study sites.
- The feeding trails measurements were taken and the indication of the presence of calf and mother is recorded this month.
- I conducted a briefing to the tourist about the projects aims using and the importance of using laser photogrammetry to assess the presence of the dugong population in the area.
- Many videos were taken for the dugong and its feeding trails as well. Below are the links of the videos:

Documenting the dugong using laser photogrammetry.  
<https://youtu.be/IJxGY3O1Ns0>

Total length <https://youtu.be/k6z4GfsU9iM>

Dugong muzzle <https://youtu.be/ftWcAP8-PKM>

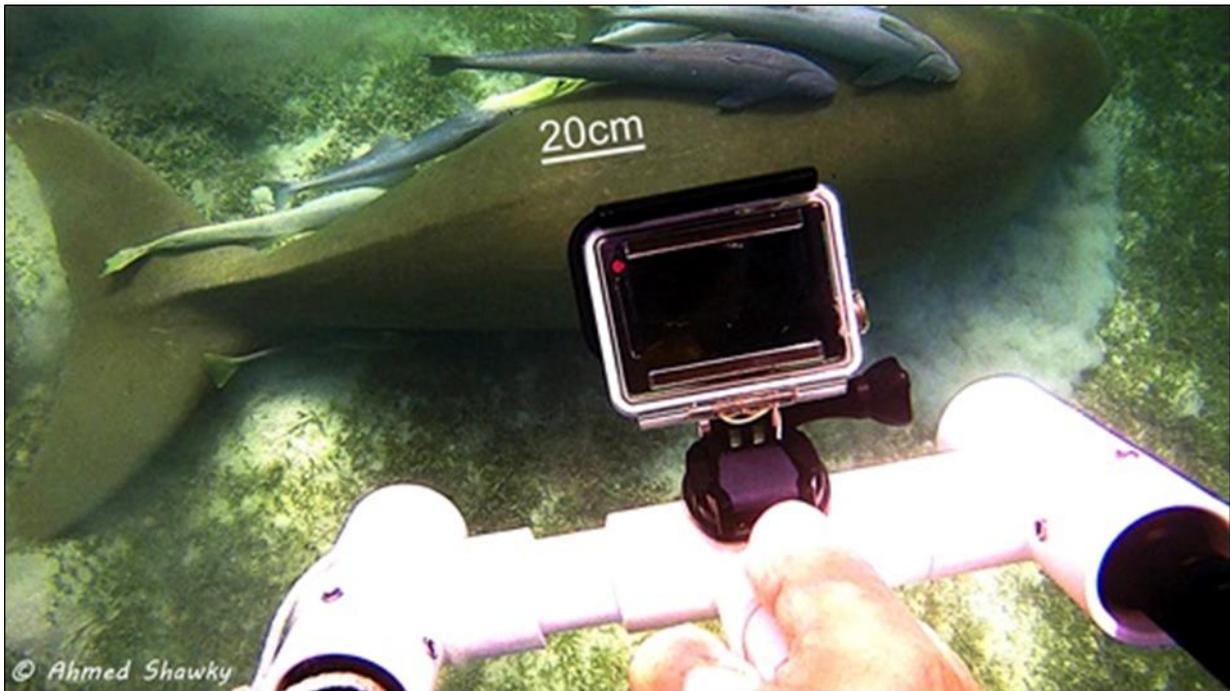
Measuring the feeding trails using laser photogrammetry  
<https://youtu.be/tO07qyhnpao>





© Ahmed Shawky

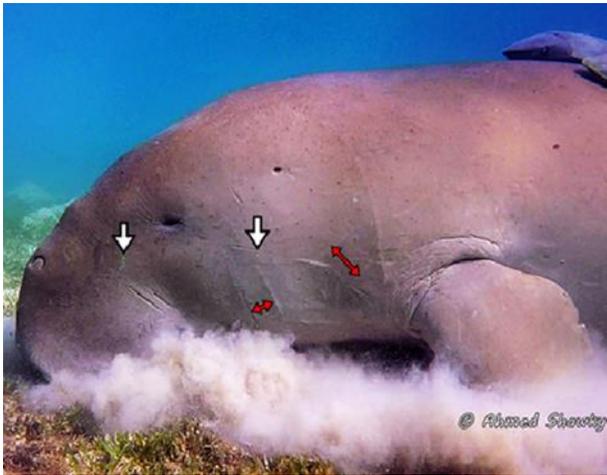
Preparing the laser photogrammetry in the field.



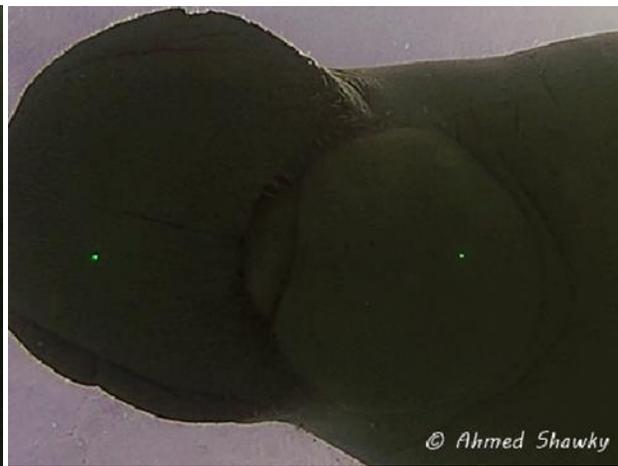
© Ahmed Shawky



Photograph the whole body of the dugong using laser photogrammetry

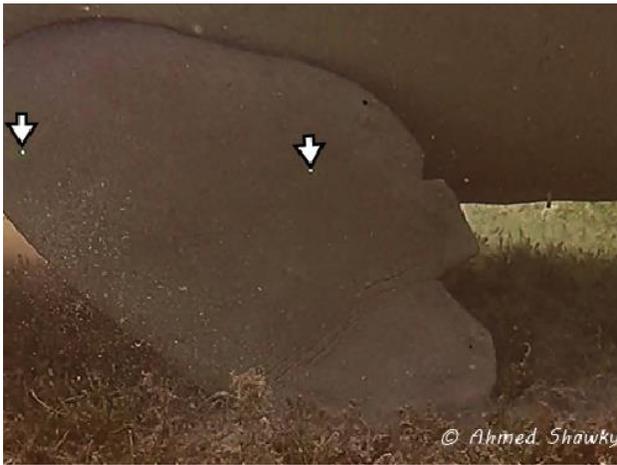


The photos show the two laser dots with a white arrow and the scars with the red arrow.





Dugong muzzle with two laser dots



Left: Flipper with the two laser dots. Right: Two laser dots over the genital slit.



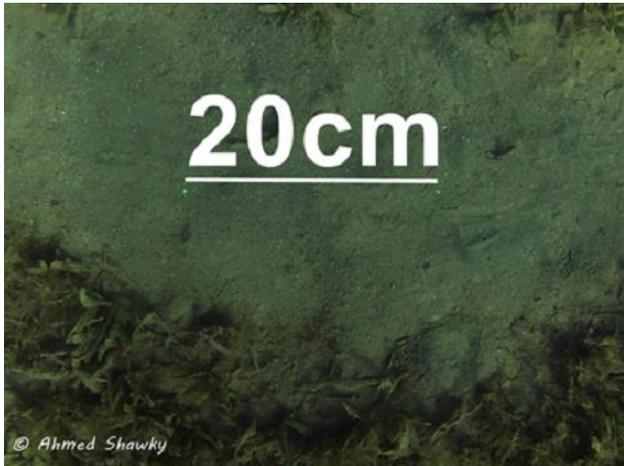
Tourist briefing about the importance of using laser photogrammetry with the dugong.



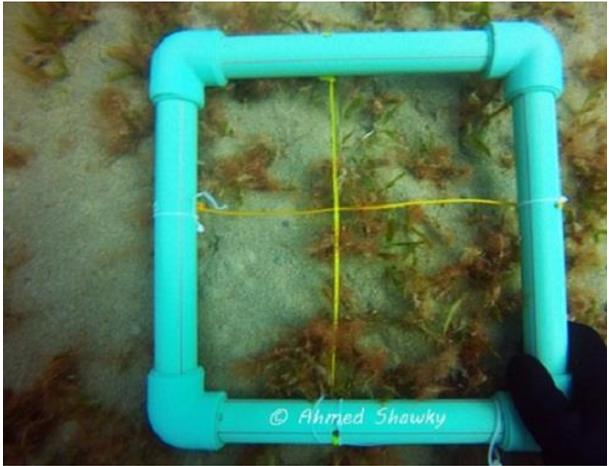
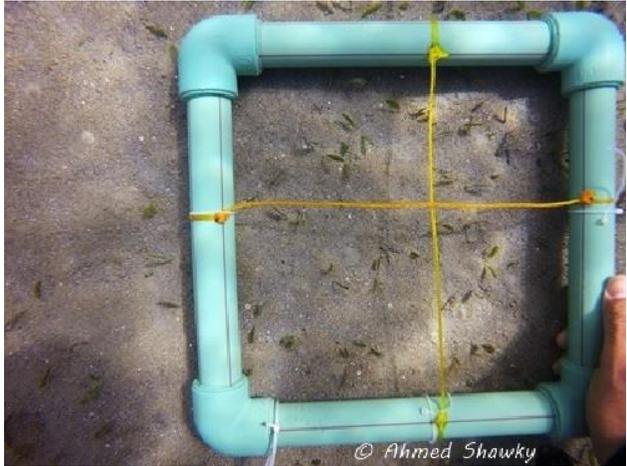
Feeding trails of dugongs at different study sites



Left: Measure a small feeding trail of 10cm. Right: Measure a large feeding trail of 25cm



Left: Measure the feeding trail using laser photogrammetry. Right: Measure a feeding trail of 20cm.



Assess the seagrass abundance and diversity in different study sites.