

**Project Update: June 2018**

**Principle Outcomes from Third Phase of Project:**

Dugong feeding trail survey was conducted around Sibu-Tinggi Archipelago to collect seagrass samples from the feeding trail areas and non-feeding trail areas. The seagrass samples were sorted according to species and we examined their biomass, density and nutrient compositions. Sediment samples were collected as well to investigate the influence of sediment particle size towards the feeding preferences of dugongs. We have managed to obtain 30 feeding trail samples and 22 non-feeding trail samples during the survey and analysed accordingly. More non-feeding trail samples (control) will be collected in the following field survey as well as to kickstart the field testing of underwater video monitoring system for dugong.



After dugongs feed, whole seagrass plants were uprooted and a distinctive, tell-tale feeding trail is left visible on the seagrass bed. By tracking on the feeding trail, we know dugongs are utilising this area for food resources.

The preliminary result revealed that dugongs were adopted certain foraging strategies in our seagrass meadow, by selecting certain areas of seagrass constantly. Abundance analysis of seagrass showed that there were significantly higher shoot density and biomass of *Halophila ovalis* complex in the feeding trail areas compared to non-feeding trail areas. We are speculating that abundance of this preferred species, played a role in determining feeding preference of dugongs.

The field survey in our study area was hampered due to the annual northeast monsoon, which lasted from November 2017 until April 2018. All in-situ data collection work was resumed after May 2018, including field testing and optimisation of underwater video monitoring system, to minimise the environmental risk imposed towards this project and its research members.

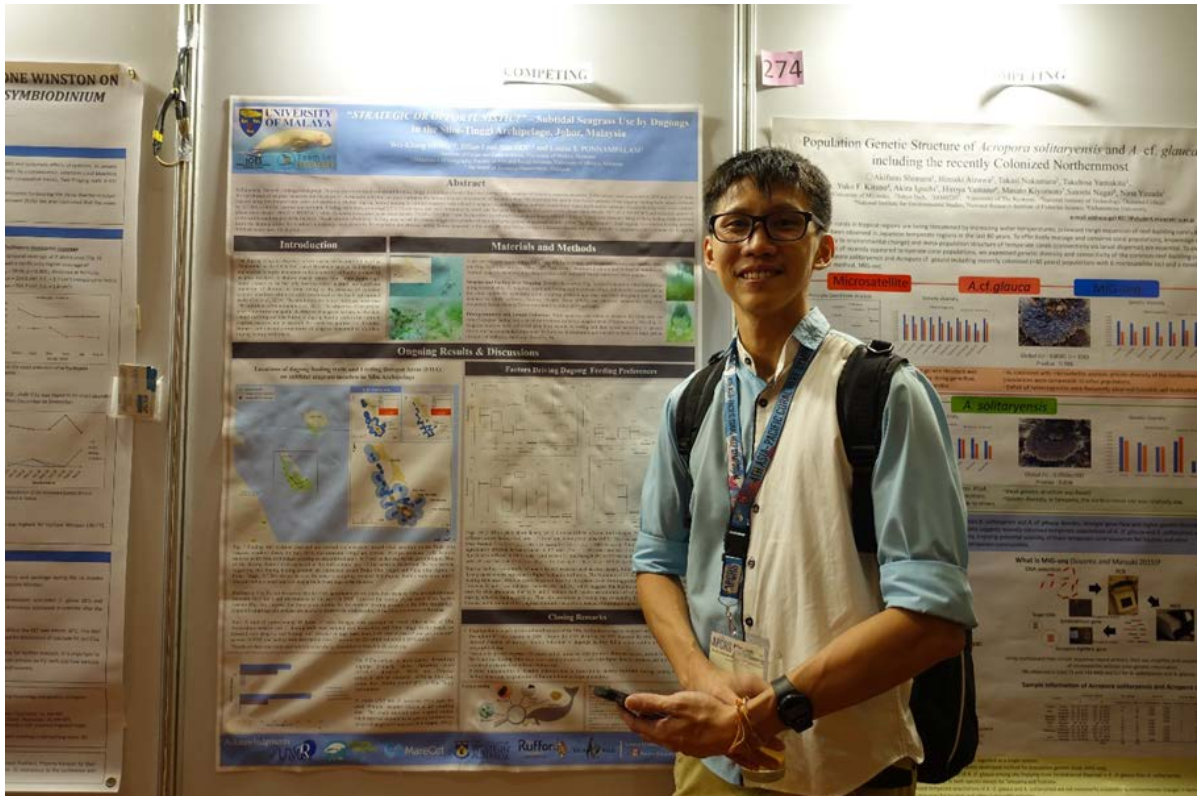
**Presentation & Sharing of Works:**

1. Poster Presentation **“MAPPING SEAGRASS HABITAT AND UNDERSTANDING FEEDING PREFERENCES OF ENDANGERED DUGONGS (DUGONG DUGON) IN THE SIBU-TINGGI ARCHIPELAGO, JOHOR, MALAYSIA”**: 2nd Toba Symposium of Dugongs “30th Anniversary of SERENA”, 22 February 2018, Toba City, Mie Prefecture, Japan
2. Poster Presentation **“STRATEGIC OR OPPORTUNISTIC? SUBTIDAL SEAGRASS USE BY DUGONGS IN THE SIBU-TINGGI ARCHIPELAGO, JOHOR, MALAYSIA”**: 4th Asia-Pacific Coral Reef Symposium (APCRS), 8 June 2018, Cebu, Philippines  
\* This poster won the Best Student Poster Award
3. Oral Presentation **“STRATEGIC OR OPPORTUNISTIC? SUBTIDAL SEAGRASS USE BY DUGONGS IN THE SIBU-TINGGI ARCHIPELAGO, JOHOR, MALAYSIA”**: World Seagrass Conference 2018, 12 June 2018, Singapore.



Poster presented at The Second International Dugong Symposium in Toba, Mie Prefecture, Japan, 22<sup>nd</sup> – 23<sup>rd</sup> Feb 2018.





Poster presented at the 4th Asia-Pacific Coral Reef Symposium in Cebu, Philippines, 4th – 8th June 2018.



Presented at the World Seagrass Conference 2018 in National University of Singapore, Singapore, 11th – 13th June 2018.