

# FACTSHEET



## **INTRODUCTION**

Improper development and lack of understanding in the ecological chain lead to the cumulative stress and damage to the connecting ecosystems, especially in sensitive and unique areas like Tioman Island. For that cause, MNS with support from the Berjaya Cares Foundation believe that the marine and land ecosystem of an island are equally important. The preservation and conservation efforts for both should be treated as one module. As a start, MNS has embarked on a project named ROAR (Restore Our Awesome Reefs), and continued with ROOTS (Revisiting Our Original Trees) in collaboration with Berjaya Cares Foundation.

Coral reefs and trees were chosen as icon for each project because they are the main building block for each ecosystem, underwater and forest. The magical biodiversity that harbours within the two ecosystems are priceless yet threatened. More information and awareness should be articulated to the public in order to ensure the preservation of the nature uniqueness.

## **PROJECT ROAR**

### **WHAT IS PROJECT ROAR?**

“RESTORE OUR AWESOME REEFS” or Project ROAR is an integrated coral rehabilitation project to help restore Tioman Island’s coral reefs. The main aim of this effort is to restore and rehabilitate the coral reefs at Tioman while raising awareness and educating island communities and the public at large, on a threatened ecosystem. One of the components of ROAR involves rehabilitating the degraded coral reefs at Tioman using the latest technology called Biorock™ which is an artificial reef structure made of electrically conductive material which has low voltage electrical current passing through it. This electrical current creates electrolysis of sea water and thus, helps minerals to accrete on the structure. This in turn should help any calcium carbonate mineral based organisms to grow.

The Biorock™ scientific study funded by Berjaya Cares Foundation started in late February 2012 and ran for 9 months. This study is the first of its kind for Malaysia. Four Biorock™ tunnel structures were placed in Teluk Tekek, Pulau Tioman. We measured coral survival rates and coral growth rates on the Biorock™ structures to assess its effectiveness. The results were encouraging, with higher coral growth rates on some structures. However, results were mixed for coral survival rates. We hope that this study would continue so that we can learn how to optimize the use of Biorock™ technology in our local waters. Ultimately, we hope that Biorock™ can help to maintain and restore the coral reef ecosystem of Pulau Tioman.

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ROAR Community and Educational Outreach for the duration of the project involved the following activities :-

- 1) Community engagement.  
Series of awareness talks and campaign were done during the project period. 2 talks on marine ecosystem and related habitat were done both in the halls of Kompleks Pendidikan Tekek in February and August 2013. Afternoon tea hangout was done during the World Oceans Day on June 8, 2013 in Persona Resort coffee house. Free tea and some local delicacies were offered to the crowd while posters and fact sheets were displayed and distributed around the tea area. During the session, four sets of posters were also displayed to the public showcasing the Tioman children's thoughts on local environmental issues and their hopes for the island.
- 2) Beach audit.  
Three Beach audit sessions were done along the Tekek bay with the help from the locals, schools and local stakeholders. Main debris collected from the sessions was items made of plastic and plastic polymer.
- 3) Water quality monitoring.  
Water qualities along the selected river were done by the school KPA students in series. Site 1 was recorded at fair to good level. Site 2 recorded a very high sedimentation and bad quality at several occasions. This was suggested due to the construction of a housing development nearby.
- 4) School adoption.  
SMK Tekek and SK Tekek were successfully brought into the Kelab Pencinta Alam network together with more than 400 other schools all over Malaysia. SMK Tekek was also selected as the top ten finalists for Water Vision 2013 Contest from a total of 65 participation, a remarkable achievement considering this was their first year participation.

## PROJECT ROOTS

### WHAT IS PROJECT ROOTS?

Project ROOTS or "Revisiting our Original Trees" is a land based project studying the high conservation value areas on Tioman island before meaningful management information and recommendations can be produced to safeguard these areas. ROOTS is also about creating more awareness on the natural wonders of Tioman forest and the importance of protecting it.

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The objectives of ROOTS include :-

- To identify the various habitats of Tioman Island.
- To create awareness on Tioman's unique island forest amongst the public.
- To identify wildlife corridors and zonation of areas for sustainable tourism.
- To promote the conservation and preservation of the Tioman's forests from the highland to the beach as one contiguous forest.
- To involve community participation in protecting Tioman's natural heritage through the Rakan Napuh Community Groups.

ROOTS Activities include :

- 1) Biodiversity surveys  
Surveys will be conducted at 4 tracks/sites including Tekek, Salang & Ayer Batang, Juara and Mukut.
- 2) Botanical plots  
Several 10mX10m plots will be established in the forest to understand more on the diversity and density of the forest complex.
- 3) Community participation  
Several committee members from each village will be formed lead by their "Tok Empat" or Ketua Kampung of all village in Tioman. The committee will be the focal point to the public and Tioman's local community for project ROOTS. The committee is also known as "Rakan Napuh" named after one of the protected and iconic wildlife of Tioman, the "Napuh" (Greater Mousedeer).
- 4) CEPA (Communication, Education, Participation and Awareness) materials and activities related to wildlife or Tioman's forests are currently lacking. Hence, this project will develop selected CEPA materials to support conservation activities. Rakan Napuh will be empowered to articulate the awareness and other campaigns.

## **RAKAN NAPUH PROJECT**

### **WHAT IS RAKAN NAPUH?**

Rakan Napuh is a community engagement programme set up to encourage local community involvement in protecting the wildlife and natural heritage of Tioman. Napuh or the "Greater Mousedeer" was especially chosen as the icon because it is native to the island and unfortunately at present, currently being hunted unsustainably.

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## WHO IS INVOLVED IN RAKAN NAPUH?

Rakan Napuh will comprise of interested villagers from 7 main villages in Tioman, led by their “Tok Empat” or “Ketua Kampung”. This committee will work closely with MNS in raising awareness, changing mindsets of the local communities with regards to nature conservation and raising environmental stewards who will be trained and empowered to take ownership of Tioman’s natural heritage.

## WHAT ARE THE PLANNED ACTIVITIES OF RAKAN NAPUH?

Planned activities include forming capacity building workshops including training local nature guides, talks, presentations and forums to obtain the viewpoint of local communities in the aim of seeking cooperation from villages to promote ecotourism and prevent unsustainable poaching and clearing of forests. Rakan Napuh would be a good platform to raise awareness on nature related issues to the villages and local community at large.

## WHAT IS THE LONG TERM OBJECTIVES OF RAKAN NAPUH?

To raise local environmental stewards who will ensure that Tioman Island’s natural resources including its beautiful landscape wilderness and waters remain intact and this in turn, will ensure that Tioman’s eco-tourism potential continues to increase.

