

## Reef Care Tioman: Annual Report 2020

### 1. Introduction

In October 2019, Reef Check Malaysia (RCM) and Tioman Marine Conservation Group (TMCG) were invited by the Department of Fisheries Malaysia (DoF) to join a “strategic cooperation in Marine Park management”. The terms of reference for the cooperation, called Reef Care, described a new programme that would give local communities a greater role in managing marine resources in the Marine Parks of Peninsular Malaysia (see appendix 1 for further details).

Initially, the area designated for Reef Care in Tioman covered coral reefs adjacent to Kg Tekek. RCM proposed to increase the area to include coral reefs off Kg Air Batang, as these waters are contiguous with those of Kg Tekek and any impacts would be felt in both areas and could be mitigated by similar conservation initiatives.

To implement Reef Care, RCM and TMCG launched a programme that would include:

- Education and awareness for both local stakeholders and tourists
- Boat management in shallow water to protect corals, turtles and other animals from boat strikes
- Improving sewage treatment systems.

This report describes the background to the project and details activities carried out in 2020, the first year of the initial 2-year operating period. The goal of this report is to provide feedback on the activities of Reef Care in Tioman and recommend improvements to the project and roll out in other areas.

### 2. Background

Reef Check Malaysia (RCM) has been working with the community on Tioman island since 2014 to build resilience of both the community and the island’s marine ecosystems. “Cintai Tioman” was introduced as an overall brand for the programme, and consultations and capacity building for conservation were conducted under this banner.

A study in 2014 by RCM, based on 100 interviews within the local community on Tioman, revealed that the vast majority of respondents showed an interest in working for the Department of Marine Parks Malaysia (DMPM). Respondents felt they should be given the first priority to fill available jobs within the DMPM Pahang/Tioman compared to ‘outsiders’ whom they claim have little understanding of, or interest in, the island, its culture and relevant conservation issues.

During discussions between RCM and DMPM, DMPM acknowledged that it is aware of this situation but is constrained by government hiring regulations. Recruitment of staff for government positions is managed by the JPA (Jabatan Perkhidmatan Awam – Public Services Department) and a minimum of SPM results is required plus evidence of further training (supported by “Certificates of Competence”). Few islanders have SPM certificates and therefore do not qualify for jobs within the DMPM.

In an attempt to resolve this problem in the past, and provide local employment opportunities where possible, the DMPM improvised by hiring some islanders as contract workers, even recruiting some full time after they had gained sufficient training and experience. DMPM also actively sought capable individuals within the local community to undertake tasks that could be sub-contracted.

RCM adopted a similar approach as the quickest and most viable option for recruiting members of the local community to participate in conservation and management, alongside the DMPM. RCM would provide training and funding for a community group to carry out conservation programmes, providing them with the opportunity to work alongside DMPM staff and build their experience. These would be tasks that are simple, yet play an important role in reducing local threats and managing the Marine Park Island. The long term objective was that DMPM would work directly with the group and provide sustainable funding, thereby meeting the goal of creating stable jobs for local islanders in the management of the Marine Park.

In 2015, the Tioman Marine Conservation Group (TMCG) was established. Comprising local villagers, they were given specific trainings to empower them to participate in conservation activities. The TMCG has since established a number of conservation programmes including:

- Ghost net removal
- Mooring buoy management
- Coral predator control
- Coral rehabilitation
- Monitoring surveys
- Community consultations.

Initial funding was provided by the former Department of Marine Parks Malaysia. Since 2017, TMCG has been funded by RCM as part of on-going donor programmes. This is an evolving initiative and its future will depend on the willingness of the government to consider the Group as a full partner in management (e.g. by establishing a co-management system) and provide funding for the conservation programmes the group conducts.

### 3. Reef Care

In 2019, the Department of Fisheries (DoF) introduced a new programme designed to give local stakeholders a more formal role in managing marine resources – Reef Care. The objectives of Reef Care are as follows:

1. Encourage local community participation in the conservation of coral reefs.
2. Enhance cooperation between the DoF and the local communities on the islands of the Marine Parks.
3. Contribute to the socio-economic empowerment of local communities through capacity building programmes.

Reef Care is an arrangement whereby local stakeholders (communities, resort/chalet operators, boat operators and dive shop operators) are given limited responsibility for maintaining defined areas of coral reef adjacent to the coastal areas where the stakeholder is located. This programme is a strategic approach to the management of Marine Parks that aims to increase the involvement of local stakeholders in coral reef management and conservation.

The programme does not give any ownership or rights to partners. However, it has several incentives to ensure that stakeholders are recognized, valued and rewarded and it is expected to contribute to revenue generation and business opportunities for local stakeholders. Involvement of local communities and other stakeholders in coral reef management and conservation is a way of mainstreaming environmental protection at community level.

This strategic approach creates a win-win situation that will greatly benefit Reef Care partners, Marine Parks Malaysia and the country at large. Through this programme, coral reef conservation and management will be improved as there is an element of community involvement as well as raising the level of public education and awareness.

DoF appointed a number of partners to help implement the programme; RCM and TMCG were selected as partners to manage an area of coral reef on the west coast of Tioman adjacent to Tekek villages. Reef Care partners are encouraged to take action to reduce local impacts to coral reefs, but the programme is not supported by any funding.

#### 4. Reef Care on Tioman

RCM has developed a strategy to guide implementation of the Reef Care programme on Tioman. The strategy is consistent with the approach described in the original briefing documents received from DoF. It describes the goal and objectives of the programme, and the activities that will be undertaken to roll out the programme on the island.

**Goal:** Sustainable community-based marine resource management within Marine Parks.

**Objectives:**

- Empower local stakeholders to manage Reef Care
- Engage all stakeholders to achieve the established goal.

**Activities:**

Communication, Education, Public Awareness (CEPA) programmes.

- a. Initiate CEPA programmes on the importance of healthy coral reefs, targeted at ALL stakeholder groups (local islanders, snorkel guides, dive centres, boat operators, resort operators, restaurants, and tourists). Since September 2019 a total of 13 awareness programmes have been conducted with the local community. This does not include the quarterly newsletters, daily social media and leaflets produced and distributed among the local community.
- b. Provide additional training for individuals selected to assist with Reef Care activities (e.g. EcoDiver certification, bleaching monitoring protocols, coral rehabilitation and maintenance, mooring buoy management, crown-of thorns removal and net removal). Since September there has been 12 training sessions for TMCG members on various subjects from on financial management, administration, communication, planning and monitoring skills, and basic marine science and management of marine resources. They were also given hand on training on bleaching monitoring, ghostnet removals and crown of thorns control.

Promote responsible boating practices within Reef Care area to minimise damage to marine life.

- a. Introduce regulations on speed limits in certain areas, establish no-wake zones adjacent to beaches and at known turtle foraging grounds.

- b. Install mooring buoys to avoid the use of anchors on coral reefs and seagrass beds. Since September we have installed 16 mooring lines around the island.
- c. Install boundary lines to mark boating lanes and snorkelling sites. we expanded the boundary line at Air Batang to include the shallow reef and seagrass area. This is to protect foraging turtles as well as divers that use that area for confined water training.

Promote responsible sewage and waste treatment to reduce pollution on the reefs.

RCM has an ongoing waste management/recycling programme on Tioman. We have partners working at six of Tioman's seven villages to collect and recycle plastics, glass and aluminium. We have collected water quality data and have prepared reports on sewage management to business operators and local government. Sewage is a major issue that needs to be addressed and taken seriously by the government before it is too late.

## 5. Outcomes

Since Reef Care Tioman became active, a number of incidents that involve activities that contravene Marine Park regulations have been reported to the Marine Park authorities:

- Illegal harvesting of giant clams in Kg Air Batang
- Spearfishing
- Anchor damage caused by a boat
- Fishing with gill nets and from jetties
- Coral harvesting for propagation programmes.

Stronger enforcement, combined with appropriate penalties, is required to fully protect the marine resources of the island.

The TMCG has also been actively involved in conservation work both within and outside the reef care areas around Tioman Marine Park. The table below summarises work done in 2020.

2020	JAN	FEB	MA R	APR	MA Y	JUN	JUL	AUG	SEP	OCT	NO V	DEC	TOTAL
Mooring Buoy Monitoring/Maintenance	1	1	2				1						5
Reef Rehabilitation Monitoring/Maintenance	1	1	1			4	3	2	2	2	2		18
Reef Check Monitoring Surveys							4	1	3	1			9
Coral Bleaching Surveys						1	3	2	1				7
Crown Of Thorns Monitoring/ Removal ( <b>NUMBERS</b> )		1 (80)				1(230 )	5 (488 )	5(203 )	3 (14)	1 (18)			0
Reef Clean Ups										4			4
Rapid Response	2	1	3			2	1	1	2				12
Liaison With Tourism Operators							4	3	8	1	2		18
Snorkel Guide Training													0
Assist in Marine Park organised Programmes	2					1	3	1					7
Progress Reporting			1			1			1				3

## 6. Conclusions & Recommendations

Reef Care in Tioman has been a success, and has integrated on-going conservation programmes run by Reef Check Malaysia: Cintai Tioman and Tioman Marine Conservation Group.

Reef Care has encouraged the participation of a wide range of stakeholders in a variety of conservation programmes.

Reef Care has empowered the local community. They have expressed their desire to be further involved in management of the island's marine resources and have established a co-management committee to provide a vehicle for greater participation.

To date, Reef Care has been funded by RCM's sponsors. If there is to be a future for it, there must be more sustainable funding to pay allowances for participants. This could be taken from the conservation charge paid by tourists to the island.

We recommend that:

- DoF continues with the Reef Care programme and converts it into a permanent programme, with greater responsibility conferred to local partners
- Reef Care in Tioman should be extended to cover the coral reefs adjacent to other villages on Tioman – Salang, Paya, Genting, Mukut and Juara
- A budget for Reef Care activities should be made available to Reef Care on Tioman via the company established by TMCG in 2019
- DoF arrange a forum to allow all Reef Care operators to share experiences and replicate successes
- DoF consider applying for Green List accreditation for Tioman, as a means to introduce a more integrated, rigorous, participatory management system for the island.

## Appendix 1 – translation of Reef Care terms and conditions

This appendix contains the original content of the Reef Care documentation received from Department of Fisheries, together with a translation into English.

### Terma Rujukan

#### Terms of Reference

##### Objektif program

1. *Bagi menggalakkan penyertaan komuniti setempat dalam penjagaan dan pemuliharaan terumbu karang*
2. *Mengeratkan kerjasama antara Jabatan Perikanan Malaysia dengan komuniti setempat di pulau-pulau taman laut*
3. *Memperkasakan sosio-ekonomi komuniti tempatan melalui program pembangunan kapasiti*

##### Programme objective

1. To encourage local community participation in the conservation and conservation of coral reefs
2. Enhance cooperation between the Fisheries Department of Malaysia and the local communities on the islands of the marine park
3. Socio-economic empowerment of local communities through capacity building programs

##### Definisi

- *Reef Care: satu program penjagaan dan pemuliharaan sejumlah kawasan terumbu karang yang tertentu di perairan Taman Laut oleh pihak yang diiktiraf sebagai Rakan Strategik oleh Jabatan Perikanan Malaysia*
- *Penjaga “caretaker”: individu perseorangan atau kumpulan samada penduduk tempatan, pengusaha resort/chalet/boat/organisasi bukan kerajaan yang mengikuti program Reef Care dan diiktiraf sebagai Rakan Strategik oleh Jabatan Perikanan Malaysia untuk menjaga dan memulihara sejumlah kawasan terumbu karang di perairan Taman Laut berdasarkan syarat-syarat yang dipersetuju. Dalam hal ini Rakan Strategik yang dimaksudkan adalah Reef Check Malaysia dan Tioman Marine Conservation Group*
- *Tapak Reef Care: lokasi kawasan terumbu karang tertentu yang telah diberikan kebenaran oleh Jabatan Perikanan Malaysia kepada penjaga berdasarkan syarat yang dipersetuju namun ia bukanlah hak untuk memiliki secara mutlak.*

##### Definition

- *Reef Care: a program for the conservation and preservation of certain coral reefs in the waters of the Marine Park by those recognized as Strategic Partners by the Department of Fisheries Malaysia*
- *Caretaker: Individual or group of individuals, locals, resort / chalet / boat operators / non-governmental organizations participating in the Reef Care program and recognized as Strategic Partners by the Department of Fisheries Malaysia to maintain and conserve a number of coral reefs in the waters of the Marine Park based on the terms agreed upon. In this regard the Strategic Partners in question are Reef Check Malaysia and Tioman Marine Conservation Group*
- *Reef Care Site: the location of certain coral reefs that has been approved by the Department of Fisheries Malaysia to the guardian under the terms agreed upon but which is not an absolute right.*

## SYARAT PROGRAM PENJAGAAN TERUMBU OLEH REEF CHECK MALAYSIA DAN TIOMAN MARINE CONSERVATION GROUP

### TERMS OF THE CARE PROGRAM BY REEF CHECK MALAYSIA AND THE MARINE CONSERVATION GROUP

*1. Tiada Hak Milik atau hak mutlak untuk menggunakan kawasan tersebut.*

*Kebenaran penjagaan terumbu karang di tapak Reef Care tidak melibatkan penurun kuasa dan tidak melibatkan pemberian hak milik atau hak eksklusif kepada penjaga untuk menggunakannya.*

#### **1. No Property or the absolute right to use the area.**

The reef care authorization on the Reef Care site does not involve abatement and does not involve the granting of proprietary or exclusive rights to the guardian to use it.

#### *2. Kawasan Penjagaan*

*Keluasan tapak Reef Care yang dibenarkan adalah di Kg Tekek, Tioman. Anggaran keluasan kawasan yang diluluskan adalah 0.98km<sup>2</sup>.*

#### **2. Care Area**

The approved Reef Care site is located in Kg Tekek, Tioman. Estimated area of displaced area is 0.98km<sup>2</sup>.

#### *3. Tempoh Masa Kebenaran*

*Kebenaran untuk menjaga Reef Care adalah untuk tempoh 2 tahun sahaja. Namun, kebenaran ini boleh disambung dengan pihak Penjaga membuat permohonan kepada DoF. Berdasarkan kepada penilaian pelaksanakan dan keberkesanan penjagaan tapak Reef Care oleh Penjaga, Jabatan akan membuat pertimbangan bagi menentukan sama ada keberaran boleh diberikan atau tidak.*

*Jabatan berhak menghentikan/membatalkan/meminda kelulusan yang telah diberikan pada bila-bila masa tanpa sebarang pampasan sekiranya terdapat percanggahan dengan polisi dan perundangan berkuatkuasa serta kepentingan Jabatan dan umum.*

#### **3. Period of Truth**

Permission to maintain Reef Care is for a period of 2 years only. However, this permission may be extended to the Guardian making an application to the DoF. Based on the assessment and the effectiveness of the Reef Care site's care by the Guardian, the Department will consider whether or not the grant may be granted.

The Department reserves the right to suspend / revoke / amend the approval at any time without any compensation in the event of a conflict of interest with the relevant policy and legislation. Department and general.

#### *4. Penandaan Kawasan Yang Diluluskan*

*DoF dan penjaga akan bekerjasama untuk mengukur dan menandakan tapak Reef Care yang terlibat. Pada peringkat awal, DoF akan membekalkan boyai penanda (tertakluk kepada keaddan peruntukan kewangan Jabatan) untuk penandaan tapak Reef Care manakala adalah menjadi tanggungjawab Penjaga pula untuk menjaga penandaan sempadan kawasan tersebut. Walau bagaimanapun, penandaan tersebut haruslah tidak menghalang laluan lintasan bot/ferry.*

#### **4. Marking of Approved Areas**

The DoF and caregivers will work together to measure and capture the affected Reef Care site. In the initial phase, the DoF will provide a marker buoy (subject to the Department's financial allocation status) for marking the Reef Care site while it will be the Guardian's responsibility to maintain the boundary marking of the area. However, these markings should not hinder the boat / ferry route.

## 5. Syarat-Syarat Umum

Penjaga yang telah dibenarkan untuk menjaga tapak Reef Care perlu memastikan semua aktiviti rekreasi yang dijalankan dalam kawasan perairan yang diluluskan perlu mematuhi Bahagian IX Akta Perikanan 1985 serta lain-lain peraturan berkaitan yang berkuatkuasa.

## 5. General Terms

Guardians who have been authorized to maintain the Reef Care site must ensure that all recreational activities carried out within the approved watershed area must comply with Part IX of the Fisheries Act 1985 as well as other relevant regulations.

## 6. Pelepasan Tanggungjawab Ke Atas Kerajaan

Jabatan Perikanan Malaysia tidak akan bertanggungjawab ke atas keselamatan mana-mana individu termasuk pelancong, pekerja dan operator yang terlibat dalam program ini. Jabatan yang mewakili Kerajaan Malaysia juga tidak akan bertanggungjawab ke atas sebarang kerosakan, kemusnahan dan kehilangan harta benda serta kerugian yang dialami oleh pihak Penjaga di sepanjang program ini berjalan.

## 6. Release of Government Responsibility

The Department of Fisheries Malaysia will not be responsible for the safety of any individual including tourists, workers and operators involved in the program. The Department representing the Government of Malaysia shall not be liable for any damage, damage or loss of property or loss suffered by the Guardian during this program.

## 7. Kegagalan Penjaga Menguruskan Tapak Reef Care Dengan Berkesan

Jabatan Perikanan Malaysia sebagai pihak yang berkuasa meluluskan kebenaran menguruskan tapak Reef Care juga boleh menghentikan atau menarik balik kawasan tapak Reef Care yang telah diperuntukan kepada Penjaga tanpa sebarang pampasan. Situasi ini akan berlaku sekiranya Jabatan mendapati bahawa Penjaga gagal untuk menguruskan tapak Reef Care dengan berkesan atau mendapati bahawa ekosistem terumbu karang telah rosak atau musnah akibat aktiviti yang dijalankan oleh Penjaga. Dengan itu juga, Jabatan berhak menghentikan/membatalkan kelulusan yang telah diberi dengan serta merta tanpa sebarang pampasan.

## 7. Guardian Failure to Manage Reef Care Site Effectively

The Malaysian Fisheries Department as the authority to approve the management of the Reef Care site may also terminate or withdraw the area of the Reef Care site provided to the Guardian without any compensation. This situation would occur if the Department found that the Guardian failed to effectively manage the Reef Care site or found that the coral reef ecosystem was damaged or destroyed as a result of the activities carried out by the Guard. In addition, the Department reserves the right to terminate / revoke the approval granted immediately without any compensation.

## 8. Penalti

Sekiranya pihak Penjaga didapati melanggar sebarang perundangan berkaitan Taman Laut yang berkuatkuasa, maka tindakan perundangan akan diambil terhadap pihak Penjaga.

## 8. Penalties

If the Guardian is found to be in violation of any law relating to the prevailing Marine Park, legal action will be taken against the Guardian.

## 9. Pengurusan Sisa Buangan

Penjaga perlu menguruskan sendiri sisa-sisa pepejal dengan baik di kawasan tapak Reef Care masing-masing. Aktiviti pembuangan sampah sarap ke laut dari bot atau oleh mereka yang menjalankan aktiviti rekreasi adalah dilarang sama sekali.

## 9. Waste Management

Caregivers need to manage their solid waste on their own in the Reef Care site. Disposal of rubbish to the sea from a boat or by persons engaged in recreational activities is strictly prohibited.

**10. Pengurusan Pembuangan Minyak dan Gris Dari Bot**

Pembuangan minyak dan gris dari bot ke dalam laut adalah dilarang sama sekali. Kemudahan penyimpanan sementara sisa minyak kotor serta pelupusan hanya boleh dilakukan di tapak pelupusan dan berdasarkan Garis Panduan yang diluluskan oleh Jabatan Alam Sekitar.

**10. Oil and Gas Removal Management From Boat**

The disposal of oil and grease from boats into the sea is strictly prohibited. Temporary storage of waste oil waste and disposal is only possible at the disposal site and in accordance with the Department of Environment approved guidelines.

**11. Kuasa Kakitangan Jabatan Perikanan Malaysia**

Kakitangan Jabatan Perikanan Malaysia dan mana-mana agensi penguatkuasa yang berkaitan dibenarkan membuat pemeriksaan pematuhan syarat-syarat kelulusan pada bila-bila masa. Jabatan akan melaksanakan pengauditan operasi pada setiap tahun untuk memastikan pematuhan syarat-syarat kebenaran operasi.

Kakitangan Jabatan berhak untuk membuat pemeriksaan terhadap dokumen-dokumen berkaitan operasi semasa pemeriksaan atau pengauditan dilaksanakan. Surat kebenaran operasi perlu dipamerkan pada kawasan yang boleh dilihat dan dibaca.

**11. Authority of the Fisheries Department of Malaysia**

Employees of the Fisheries Department of Malaysia and any relevant enforcement agency may at any time inspect compliance with the conditions of approval. The department will conduct annual performance audits to ensure compliance with operating permit requirements.

The Department's personnel shall have the right to inspect the documents relating to the operations at the time of inspection or auditing. The operating permit must be displayed in a visible and readable area.

**12. Penyimpanan Rekod Kebenaran Menjaga Terumbu**

Jabatan Perikanan Malaysia bertanggungjawab untuk menyimpan rekod kebenaran dan kelulusan setiap Program Reef Care yang dijalankan.

**12. Keeping the Record of Permission to Keep the Reef**

The Department of Fisheries Malaysia is responsible for keeping a record of the truth and approval of each Reef Care Program conducted.

**13. Kebenaran Untuk Menggunakan Tapak Reef Care Kepada Pihak Lain**

Penjaga sesuatu tapak Reef Care perlu memberi kebenaran kepada mana-mana pihak lain untuk menggunakan kawasan tersebut. Sekiranya pihak yang menggunakan kawasan tersebut didapati melanggar etika, syarat dan perundangan, maka pihak Penjaga perlu melaporkan kepada Pejabat Jabatan Perikanan yang terdekat untuk tindakan penguatkuasaan terhadap mereka yang tidak bertanggungjawab itu. Penjaga tidak mempunyai kuasa penguatkuasaan.

**13. Permission To Use Reef Care Site To Another Party**

The custodian of a Reef Care site must give permission to any other person to use the area. If a person using the area is found to be in violation of ethics, terms and laws, the Guardian must report to the nearest Fisheries Department Office for enforcement action against the irresponsible. The guard has no enforcement powers.

**14. Akitiviti Yang Boleh Dilakukan Dalam Tapak Reef Care**

Aktiviti rekreasi air yang tidak ekstraktif ke atas terumbu karang dan hidupan marin lain seperti berenang, snorkeling, menyelam dan mengambil gambar dalam air adalah dibenarkan. Walau bagaimanapun, Penjaga perlu memastikan ianya dilaksana tanpa memberi kesan negatif ke atas ekosistem terumbu. Kawalan ke atas aktiviti memungut, mengambil dan memijak, mematah, mengusik mana-mana terumbu karang dan haiwan marin perlu dilaksanakan.

Aktiviti membersihkan sampah sarap, sampah laut (marine debris) dan pukat terbiar (ghost net) di tapak Reef Care adalah digalakkan bagi mengekalkan kecantikan dan kesihatan serta meminimakan kesan negatif ke atas ekosistem terumbu karang. Aktiviti memungut pemangsa terumbu karang seperti haiwan tapak sulaiman berduri (COTs) dan siput dari genus Drupella adalah digalakkan. Adalah diseru agar aktiviti-aktiviti ini dilaksanakan melalui penglibatan sukarelawan samada secara percuma atau membayar pakej untuk terlibat sama dalam program ini secara berulang kali dalam setahun. Pelaksanaan aktiviti pembersihan ini perlu dirancang, diurus dan dilaksanakan oleh Penjaga serta memaklumkannya kepada Jabatan.

Penjaga juga dibenarkan untuk melaksanakan aktiviti pendidikan dan kesedaran awam dengan menggunakan tapak Reef Care sebagai contoh penjagaan dan pengurusan terumbu secara amalan terbaik oleh komuniti. Sekiranya amalan baik (best practices) ini diketengah dan dipromosi secara meluas, ianya akan dapat membantu operator chalet, bot dan kedai selam untuk mendapatkan pelanggan yang peka, berminat dan menyokong kepada usaha murni menjaga alam persekitaran. Ini adalah contoh 'good environment care makes good business sense'.

Kebenaran juga diberikan kepada Penjaga untuk memasang tambatan bot dalam tapak Reef Care masing-masing.

#### 14. Activities to Do in a Reef Care Site

Non-extractive water recreational activities on coral reefs and other marine life such as swimming, snorkeling, diving and taking pictures in the water are allowed. However, the Guardian must ensure that it is implemented without negatively affecting the reef ecosystem. Control over the activities of collecting, retrieving and tracing, breaking down, tearing down where coral reefs and marine animals should be carried out.

Activities to clean up debris, marine debris and ghost nets at the Reef Care site are encouraged to maintain beauty and health and minimize the negative impact on coral reef ecosystems. The activities of collecting coral reef predators such as prairie animals (COTs) and snails of the genus Drupella are encouraged. It is recommended that these activities be carried out through volunteer involvement either for free or for a package to participate in the program several times a year. Implementation of these cleaning activities should be planned, managed and implemented by the Guardian and notified to the Department.

Caregivers are also allowed to carry out public education and awareness activities by using the Reef Care site as an example of community-based reef care and management. If these best practices are promoted and widely promoted, it will help chalet, boat and subway operators to find customers who are aware, interested and supportive of their environmental stewardship. This is an example of 'good environment care makes good business sense.'

Permission is also given to Guardians to install boat patches on their respective Reef Care sites.

#### 15. Akitiviti Yang Tidak Boleh Dilakukan Dalam Kawasan Yang Dijaga

Aktiviti mengubah ekosistem terumbu karang dengan memanipulasikannya adalah dilarang sama sekali. Sekiranya Penjaga hendak melaksanakan aktiviti membaik pulih habitat terumbu dan memasang tukun tiruan di tapak Reef Care, ianya perlu mendapatkan kelulusan dari Jabatan terlebih dahulu. Kawasan ini tidak boleh dibangunkan dengan sebarang struktur tanpa kelulusan Jabatan.

#### 15. Non-actionable Activities in a Protected Area

The act of changing the reef ecosystem by manipulating it is strictly prohibited. If the Guardian intends to carry out reef habitat restoration and artificial reefs at the Reef Care site, it must first obtain approval from the Department. This area cannot be developed with any structure without the approval of the Department.