

Campaign against fish bombing

Protection and regeneration of degraded and threatened coral reefs is the focus of this project in Malaysia. Scientists estimate that 19% of reefs have already been destroyed and another 35% could be lost within 10-40 years as a result of over-exploitation, coastal development, tourism pressure, marine pollution - and destructive fishing practices.



Report by Elizabeth Wood

Tun Sakaran Marine Park was established in 2004 in recognition of its extraordinary natural features and high biodiversity. But for many years before it was gazetted, fishermen had been using fish bombs here. Despite the risk of fines, imprisonment and personal injury some fishermen choose this method of 'fishing' because it is quick, easy and brings in a large 'catch' in a short time. Even now, bombing continues because of the cunning tactics used by the fish bombers to avoid being detected or caught.

When a bomb explodes, corals that build the reefs and provide shelter and feeding grounds for marine life are reduced to rubble. Many of the damaged reefs never fully recover. This affects responsible fishermen who rely on intact, healthy reefs for their livelihoods and everyday

needs. Fish bombing also reduces the value of the reef for biodiversity and tourism and has a negative impact on the local economy.

The aim of the project is to bring an end to fish blasting and to promote recovery of coral reefs that have been degraded or destroyed as a result of this practice. The drive to stop fish blasting will be through a combination of education, enforcement and community engagement. The long term impact of fish bombing is often not fully appreciated and the general perception is that the sea and reefs will continue to provide for daily needs forever.

The outreach and awareness element of the project will focus on explaining and demonstrating the consequences of destructive fishing on biodiversity, food security and economic development. The project will use a combination of

techniques, including a reef guardian scheme, to enhance detection and reporting of fish bombing. We will also work with and assist relevant authorities to improve surveillance and successful prosecution of fish bombers.

Repairing reefs on a big scale is very difficult and expensive, but small steps can be taken to make a difference. The Marine Conservation Society and Sabah Parks are demonstrating 'conservation in action' at key sites in the Marine Park by

making and setting up 'coral frames' in bombed areas. These specially-designed units have been designed and tested by Seamarc Ptv from the Maldives. They are made from reinforcing bars which are readily available locally and are easy to handle and get into the water. The frames are stable when placed on the seabed due to their shape and because water flows through them. As the corals grow and spread out the frames provide excellent hiding places for fish.



Divers regularly check the growth of corals on a frame in the devastated areas.



At a meeting of the „Friends“ the local people watch a film about the effects of dynamite fishing.

Activity / Action	Progress
Outcome 1. Coral reef biodiversity enhanced at restoration sites.	
a) Surveys to select restoration sites	a) Surveys began in June 2011; surveys are ongoing in order to identify suitable sites for further deployment of frames
b) Develop protocols for surveys and monitoring	b) Development began in June 2011; now completed
c) Baseline surveys of current coral cover and fish populations.	c) Surveys began in June 2011; each site has been surveyed prior to deployment of frames.
d) Deploy 'seeded' coral frames.	d) Sept/Dec 2011; Feb & Sept 2012. A total of 120 frames have been made and deployed.
e) Clean & monitor frames; replace dead corals.	e) Cleaning and monitoring carried out in Dec 2011; Feb 2012 and Sept 2012.
f) Monitor biodiversity at regeneration sites (coral survival & growth; fish diversity, size).	

Outcome 2. Coral reef habitat protected	
<ul style="list-style-type: none"> a) Discuss options and tactics for reporting and combating fish bombing. b) Plan and implement programme for combating fish bombing. c) Establish Reef Guardian scheme to assist with local surveillance 	<ul style="list-style-type: none"> a) Meetings and discussions carried out June-Dec 2011 and plans formulated. b) Co-organised and participated in very successful and widely publicised <i>Regional Anti-Fish Bombing Symposium</i> in Kota Kinabalu with WWF and Sabah Parks and produced joint 'Call to Action'. c) Launched Friends of Tun Sakaran Marine Park and Reef Guardian scheme in May 2012. This is on-going.
Outcome 3. Awareness of the importance of biodiversity increased	
<ul style="list-style-type: none"> a) Plan and prepare materials for awareness programme for fishers. b) Carry out awareness / consultation programme with fishers/ local community. 	<ul style="list-style-type: none"> a) Awareness materials designed and produced for first phase of outreach work. b) Outreach programme running and will continue until project end with further materials added.
Outcome 4 Practical skills in reef restoration and monitoring acquired and capacity built to replicate the technique elsewhere	
<ul style="list-style-type: none"> a) Plan training courses and purchase materials and equipment. b) Run training courses on reef frame construction, deployment, maintenance and monitoring. c) Document procedures in the form of a handbook that provides step-by-step guidance for others to follow. 	<ul style="list-style-type: none"> a) Completed. Materials continue to be purchased as needed. b) Main course completed in June 2011; further training has taken place as new participants engage in the work. c) Working draft completed (incorporated into Annex 1 report.). Malay version to be finalised soon. A1 Poster produced for increased information and awareness
Outcome 5 Employment for local people	
<ul style="list-style-type: none"> a) Select local people for training and assistance in making the coral frames – employment on a daily-paid basis. 	<ul style="list-style-type: none"> a) To date, two local community members have been trained and joined the frame-making team. One has also been trained in open-water diving and has participated in all field activities. b) Two other local community members have been trained in outreach and awareness techniques and joined the project team in the 'Friends' outreach Programme.

Period:
since December 2011

Funds 2012:
13.000 GBP

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