

Gazettement and Development of the Tun Mustapha Park Integrated Management Plan

Introduction

On 5 March 2003, the Sabah Government approved, through a cabinet decision, the intention to gazette Tun Mustapha Park (TMP), an area covering approximately 1.02 million hectares of both coastal and marine areas in northern Sabah. The initiative to establish and gazette the proposed Park under the Parks Enactment 1984 is spearheaded by Sabah Parks, the managing agency for all Parks in the State. Tun Mustapha Park will adopt a multiple-use concept, falling under Category VI of the International Union for Conservation of Nature (IUCN). As described by the IUCN, Category VI protected areas conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. This category depicts the highest level of human intervention, through shared governance, utilizing collaborative management mechanisms.

The multiple use concept is a new paradigm shift in park management for Sabah. Traditional governance methods do not allow the extraction of resources or participation of the community in the Park's management. A multiple-use concept whereby various zones are identified for different types of uses, on the other hand, allows the continuity of use of natural resources sustainably, when conservation and sustainable use can be mutually beneficial.



Protected Areas Category VI, IUCN:
To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial.

Process of Developing the Management Plan

In support of a collaborative and participative approach, the preparation of the TMP Integrated Management Plan is based on multiple stakeholder input. This process is facilitated through the TMP Interim Steering Committee (ISC) and Technical Working Groups (TWGs) that have consulted with both public and private stakeholders within the Park to recognise conservation and management issues within the Park, leading to the identification of pertinent management thrusts addressed within the Plan.

Initiatives to establish and gazette Tun Mustapha Park are grounded in three management objectives - the alleviation of poverty, sustainable development, and the conservation of habitats and threatened species. Sabah Parks leads these collaborative initiatives, which includes the development of the Integrated Management Plan for Tun Mustapha Park.



Group photo taken during the meeting held on 1 February 2011 when the TMP-Interim Steering Committee was established.

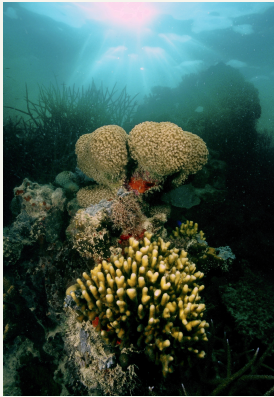
The TMP ISC was established in 2011 to oversee the process of gazettement of TMP, and is responsible to review, refine, and harmonise all existing management plans for the Management Plan, determine and harmonise management approaches and methods to fulfil TMP management objectives, and guide and facilitate the preparation of the TMP

Integrated Management Plan. The Technical Working Committee was formed to oversee the workings of six TWGs - Integrated Resources Management; Marine Industry Development Management; Socio-Economic Programmes Development Programmes; Environmental Education and Public Awareness Programme Development; Zoning (Biodiversity); and Legislation, Enforcement and Governance.

Development of the Tun Mustapha Park Integrated Management Plan

The TMP Integrated Management Plan guides management authorities to perform their mandated functions, setting the framework and operational mechanisms by which the multiple authorities within the Park can base their interventions, decisions and actions. Key areas requiring management intervention defined in the Plan are on fisheries management, marine habitat protection through collaborative management, shoreline management and control of land-based pollution, livelihoods and enterprise management, legal arrangements and institutional development, and education and awareness.

Biodiversity Protection



One of the important features of TMP is the presence of important marine habitat representatives in the area— coral reefs, mangrove and seagrass are important habitats in TMP. These interrelated habitats play important roles from biological functions that include providing shelter to species from predation, acting as nursery grounds and feeding grounds for various marine species at various stages of their life-cycles, to physical functions that include protection from land-based pollution and coastal erosion caused by strong waves. These habitats are also linked to other unique land features such as the limestone hills on Balambangan Island.

TMP has the second largest coral reef area in Sabah. As part of the Coral Triangle, TMP has a very high coral, fish and invertebrate richness. An expedition in 2012 confirmed the high diversity in TMP with high numbers of species recorded for corals and fish. But these are under threat.



Mangroves within the proposed boundary of TMP covers an area of approximately 158,000 hectares and of this approximately 47,000 hectares (30%) are protected as forest reserves (Class V – Mangrove Forest Reserve) (Data as of 2008). Mangroves line the coastal areas of mainland Kudat, Kota Marudu and Pitas and most of the islands especially the larger islands including Balambangan, Banggi and Malawali. The mangrove trees form a complex ecosystem that provide shelter and protection for species from predation, feeding, breeding and nursery grounds for many commercially important species in the area. Marudu Bay, lined with a thick healthy mangrove forest is one of the important fishing grounds for shrimp in the state of Sabah.

included within a fully protected zone is anticipated to provide protection for biodiversity within TMP while protecting the well-being of coastal fishermen dependent on these resources. A spatial planning process is undertaken to assist in the integration of both biodiversity conservation and fisheries management objectives.



The seagrasses of TMP provide important feeding grounds for sea turtles and dugongs, two of the endangered species found within TMP. Overall, 5 genus of seagrass (*Cymodocea spp.*, *Halodule spp.*, *Halophila spp.*, *Thalasia sp.* and *Enhalus sp.*) have been recorded so far.

Habitat and species protection within TMP will be protected through a multiple-use zoning system for TMP. A target of 30% of key habitat



ALL PHOTOS IN THIS COLUMN © WWF-MALAYSIA/ERIC MADEJA

© WWF-MALAYSIA/ERIC MADEJA

PRELIMINARY RESULTS: TUN MUSTAPHA PARK EXPEDITION

Coral families:

- Fungiidae: 38 species
- Agariciidae: 28 species
- Euphyliidae: 14 species

- Reef fish census: 430 species**
- Ovulidae snails: 25 species**
- Macroalgae: 130 species**

Reef Status of Reefcheck Sites: (Total of 55 transects)

Excellent:	7% (4 transects)
Good:	49% (27 transects)
Fair:	40% (22 transects)
Poor:	4% (2 transects)

Zoning

Marine spatial planning has been used as a tool to help integrate the multiple uses and jurisdictions of the Park. Four management zones have been defined for TMP - preservation zones (i.e. no-take zones), community-managed zones, multi-use zones, and commercial fishing zones. Marxan for Zone (MarZone) was used as a decision support tool to help with establishing various options for zones in TMP. Three Marxan training sessions involving stakeholders in TMP were conducted (in 2008, 2010 and 2011) to build capacity and raise awareness on spatial planning using MarZone. The last two MarZone training sessions were conducted by the University of Queensland in Sabah. These provided opportunities to a larger group of stakeholders to learn and understand the zoning process and the use of MarZone.

Fisheries Management

Responsible fishing, which addresses a range of issues such as the status of the resource, the health of the marine environment, and post-harvest technology and trade, enables the development of sustainable fisheries. Through a co-ordinated approach, initiatives have been carried out to promote and implement sustainable fisheries in Tun Mustapha Park through improved fisheries management and implementation of Ecosystem-Approach to Fisheries Management (EAFM).

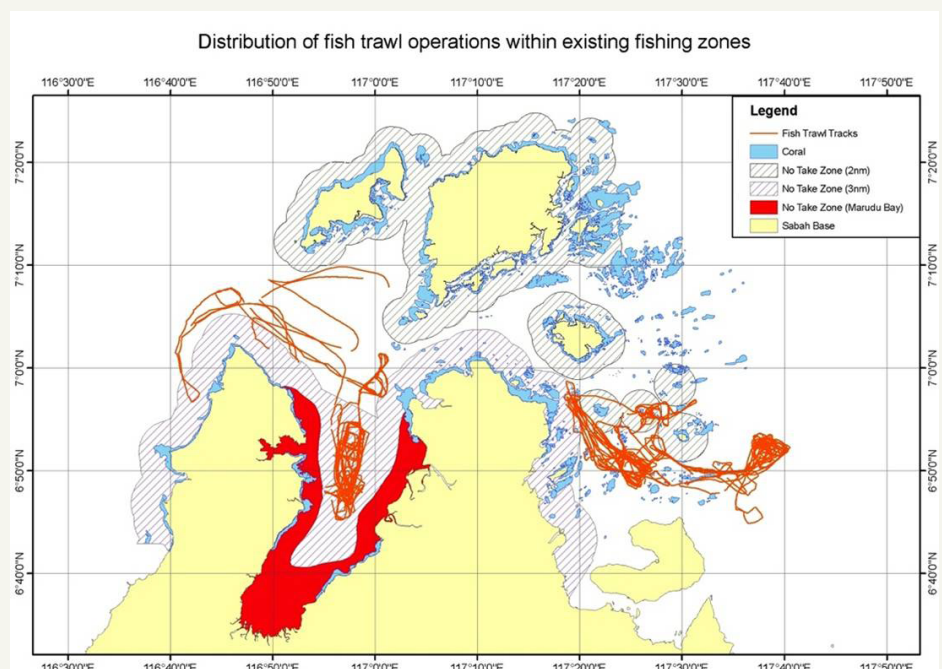
Engagement with commercial fishers began in 2006. A series of **workshops** led towards clarification of existing fishing zones and current fisheries regulation, identification of important areas for fishing and possible zoning areas for fishing and closed seasons, and potential regulation of fishing effort (number of fish trawlers, shrimp trawlers and purse seiners allowed), both within and outside of the identified TMP. These continuous consultations have been pivotal in achieving agreement among stakeholders from the commercial fisheries industry pertaining to the zoning and management plans for TMP.

The **Tun Mustapha Park Pilot Fisheries Observer Programme** was carried out from October 2011 to March 2012 to gather catch and fishing effort to assist in spatial planning/zoning, to provide information for the design of an effective management strategy for commercial fisheries in TMP, and to assess the potential of a long-term fishery observer programme in TMP. Information contributes towards enhancing knowledge and establishing fisheries management for two commercial fishing gears - trawl and purse seine.

The **Fisheries Assessment for Feasibility of Spatial Management of Two Gears in TMP** generated further data contributing towards the spatial zoning process for TMP and enhancing the understanding of fishing patterns within the East Coast Fishing Zone in Sabah. The study, which focused on assessing the status of trawl and purse seine fisheries in the districts of Kudat and Sandakan, recommends the inclusion of no-fishing zones and restrictions on the type of fishing gears allowed to be used in specified zones, permission for only Kudat-registered commercial fleets to fish within TMP, landings to be made compulsory in Kudat fish landing ports, and a limit on the number of fishing licences within TMP.

Factors considered during the zoning process:

- Specific treatment for commercial fishing areas
- 3 nautical miles from main land and 2 nautical miles from islands
- Existence of fisheries reserve in Marudu Bay
- High concentration of coral reef habitats



GPS data collected by trained Fisheries Observers during the Pilot Programme allows for the sampled catch to be associated with a spatial location, providing information on current practices by commercial fishers within Tun Mustapha Park. (Resource: Consultancy for the Undertaking of Fisheries Observer Training and Fisheries Observers Pilot Programme Final Report, April 2013)

Community Participation

With approximately 80,000 coastal residences living within its boundary, community participation in resource management is crucial for Tun Mustapha Park.

The **Maliangin Island Community Association (MICA)**, formed in 2009, is a collaborative management structure responsible in managing the natural resources on Maliangin by regulating monitoring and patrolling activities and making sure community members benefit from the alternative livelihood programme. Maliangin handicraft was re-introduced as an alternative livelihood to help reduce fishing pressure in Maliangin Sanctuary by promoting an alternative to fishing, behavioural and social change, as well as support-

ing MICA collaborative patrolling and enforcement activities. On nearby Berungus village, a collaboration was formed between fishermen from the island and international hotel chain, Shangri-La, promoting sustainable fisheries.

The **Banggi Youth Club (BYC)**, formed in September 2009, comprises more than 150 young people from villages on Banggi Island and the islands surrounding it. Awareness raising efforts by BYC includes the year-long Green Lifestyle Campaign in 2012, a campaign involving five villages and two schools on Banggi Island, to increase environmental awareness and encourage communities to practice green lifestyles, and to educate and train local communities to protect their natural and marine resources in TMP.

Communities on three islands in Tun Mustapha Park – Maliangin, Berungus, and Tigabu – have been trained and appointed as **Honorary Wildlife Wardens** by the Sabah Wildlife Department to assist in carrying into effect provisions of the Wildlife Conservation Enactment 1997. Sanctioned with the power of arrest, community members have begun actively patrolling their areas to monitor and take action against illegal activities destructive to their marine environments. The appointment of Honorary Wildlife Wardens bestows legal grounds for community involvement in collaborative resource management in Tun Mustapha Park.



ALL PHOTOS IN THIS COLUMN © WWF-MALAYSIA

GazetteMENT of TMP: A Participatory and Consultative Process

Governance of Tun Mustapha Park is guided by six principles highlighting the need for integrated management, multi-stakeholder cooperation, local community participation, sustainable and planned development, spatial planning, and safety at sea. The strong emphasis placed on a highly participatory multi-stakeholder process, harmonising the numerous jurisdictions within the Park, ensures that the management framework developed for this Marine Protected Area results in mutual benefits for all its stakeholders, fostering ownership by the various groups including local communities, fishing communities, and the State and Federal government.

Continuous capacity building aims towards the development of a highly functional, effective, co-management institution.

For more information, feel free to contact:

Rebecca Jumin

Manager

Sulu-Sulawesi Marine Ecoregion (SSME) Programme

Email: rjumin@wwf.org.my

Alexa Antal

Communications Manager

Sulu-Sulawesi Marine Ecoregion (SSME) Programme

Email: aantal@wwf.org.my

In Partnership With :



USAID | ASIA
FROM THE AMERICAN PEOPLE

Funded by :



CORAL TRIANGLE INITIATIVE
ON CORAL REEFS, FISHERIES AND FOOD SECURITY



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.panda.org