



MNS Mission:

To promote the study, appreciation, conservation and protection of Malaysia's natural heritage, focusing on biological diversity and sustainable development.

POSITION STATEMENT

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CONSERVATION OF THE BELUM-TEMENGGOR FOREST COMPLEX, PERAK

EXECUTIVE SUMMARY

The contiguous Belum and Temenggor forest reserves form the second largest remaining block of virgin forest in Peninsular Malaysia and the largest example of the northern monsoonal Burmese-Thai forest vegetation zone (Bamboo-Schima) in Malaysia. These forests are approximately 130 million years old, older than the Amazon and the Congo, and subsequently much more complex in their biodiversity. They support populations of large mammals and extensive stands of mixed dipterocarp forests over about 300,000 hectares, almost four times the size of Singapore, in one of the least accessible or developed areas of the Peninsula. All ten hornbill species of Malaysia can be found within this forest complex, including the globally threatened Plain-pouched Hornbill, present in large flocks of more than one thousand birds, a phenomenon not known to occur anywhere else in the world.

The Belum-Temenggor forest reserves (herein referred to as the BT Complex) forms the last remaining contiguous tract of forest in Peninsular Malaysia that is a) currently outside the National protected area system and b) that is sufficiently large to support the huge diverse range of flora and fauna for which Malaysia is recognised as one of only twelve megabiodiversity countries in the world. The findings from three major expeditions (two from MNS) and other surveys vouch for this outstanding value.

The conservation of the BT Complex is Malaysia's last opportunity to include the highest priority conservation areas within its protected areas network. Establishing such landscape-level sanctuaries in Peninsular Malaysia fulfils our obligations as a party to the Convention on Biological Diversity (CBD). Furthermore, its contribution to conservation would be reinforced by its transboundary connection to the protected areas of the Hala-Bala Wildlife Sanctuary and the Bang Lang National Park in Thailand.

The BT Complex is already internationally recognized as an Important Bird Area (IBA). Its legal protection would prove Malaysia's commitment to sustaining the biological diversity of its tropical forests, through managing not just our economic and social, but also environmental assets.

MNS recommends the conservation of BT Complex through:

- **Gazettement of the Royal Belum State Park**
- **Extension of the Royal Belum State Park to include the Temenggor Forest Reserve**
- **Developing a site conservation management plan for the State Park**
- **Protection of natural forest stretch flanking the East-West highway from conversion to plantation**

This position statement outlines the importance of conserving the BT Complex and MNS' recommendations for its management. It must be emphasized that this will only be possible with the cooperation and commitment of all concerned parties, namely the Federal government, the Perak State government, the Forestry Department, the Department of Wildlife and National Parks (PERHILITAN), the Department of Irrigation and Drainage (DID), NGOs, local communities and others.

INTRODUCTION

The conservation of the BT Complex has long been of concern to MNS, other NGOs and the larger public. During the two MNS Belum Expeditions (the first in 1993/4, the second in 1998), unique habitats, rich in diverse wildlife and plants were discovered and described. A third expedition in 2000 (by Forestry Department & UKM) added even more information on this area. Another key value is the fact that these forests along the Main Range are catchments for major rivers in Perak, Kelantan and Pahang. Logging has reached the foot of this mountain range. The slopes are too steep for agriculture, and represent high erosion risks. These are priority conservation areas as well as biodiversity corridors.

The outstanding value of the BT Complex is a large landscape ecosystem, supporting large mammal populations such as Asian Elephant, Sumatran Rhinoceros, Malayan Tiger, Malayan Gaur (Seladang), Leopard and Tapir. These populations desperately need large forest areas to survive, and the BT Complex is the last such refuge left in Malaysia. It is also recognized internationally as an Important Bird Area (IBA).

With Taman Negara representing the biodiversity of central Peninsular Malaysia, Endau-Rompin with its West Borneo influence representing the southern end, the BT Complex is the last major tract for the northern flora and fauna. Its protection will mark the fulfilment of our national obligation to the Convention on Biological Diversity (CBD), and presents an excellent chance to establish a trans-boundary Protected Area (PA) together with the Hala-Bala wildlife Sanctuary and the Bang Lang National Park in Thailand.

JUSTIFICATION FOR CONSERVATION

1. **The protection of Belum-Temengor will contribute a critical zone to a contiguous and representative Totally Protected Area (TPA) system in Peninsular Malaysia.** There is an urgent need to increase Malaysia's TPA system coverage in relation to IUCN/international standards. Currently, Malaysia does not

have a comprehensive and representative TPA network, and the gazettement of the BT Complex will address this gap.

2. Additionally the BT Complex **has been identified as an Environmentally Sensitive Area (ESA) Rank 1 under Malaysia's National Physical Plan (NPP)**, and as such, urgent measures must be taken to protect it before it is opened for more logging. This category states that no development, agriculture or logging shall be permitted except for low-impact nature tourism, research and education. It is also identified as part of the Central Forest Spine (CFS) that forms the backbone of all ESAs, in which studies will be undertaken to determine possibilities to re-establish the integrity and connectivity of forests and wetlands through the implementation of linkages between these CFSs. This connectivity ensures that wildlife corridors are maintained, enabling movements of important fauna, providing greater protection for them. Thus, protecting the BT Complex will be a key element in achieving Malaysia's national goals.
3. It has some of the largest blocks of untouched, virgin forest in Peninsular Malaysia, with **high rates of endemism** within its unique flora and fauna. The conservation of these areas would promote Perak as a leading State in biological conservation in Malaysia.
4. The largeness of the area increases the survival viability of flora and fauna, particularly for endemics. With the increasing likelihood of **climate change** generating more stress on all organisms within forests, the sheer size of the BT Complex, combined with the adjacent reserves, means that all species will have a correspondingly greater chance of surviving climatic aberrations such as extended periods of drought.
5. **Promote trans-boundary protected area system** with Thailand (Belum / Temenggor - Hala-Bala Wildlife Sanctuary / Bang Lang National Park). The forests here are a mixture of the Thai-Burma and Malaysian type; this flora is found in Burma and Thailand but not elsewhere in the

Peninsula. Linking with the National Parks in Thailand will create perhaps the largest single protected area on the Malay Peninsula. Such an area has great potential for tourism. Furthermore, the current security concerns in southern Thailand are an added justification for buffer security zones, and although this is not an environmental justification for the protection of the BT Complex, it is certainly a political one.

6. The BT Complex is **vital for the survival of the Plain-pouched Hornbill** (*Aceros subruficollis*), confined to the Malay Peninsula and globally threatened. It is equally important for the other nine Malaysian hornbill species. This is the only part of Malaysia where all 10 of Malaysia's hornbill species are found. As the largest remaining expanse of lowland and hill dipterocarp forest in the northern Peninsula, this is probably the only viable population of Plain-pouched Hornbill in Malaysia. From MNS studies, the population appears dependent on the entire complex, ranging northwards into Thailand and southwards into the southern end of the Temenggor Forest Reserve.
7. The BT Complex is famed for its **salt licks**; providing essential nutrients to a wide variety of wildlife, from butterflies to elephants. The lake itself supports a **high diversity of fish**. The lake and the streams that flow through the forest reserves are rich in fish life and the conservation of the forest reserves will ensure that diversity is sustained. Both these features also have high tourism potential.
8. The BT Complex has **world-class wilderness and aesthetic value**, with some of the most beautiful mountain peaks, waterfalls and rapids that have yet to be explored. Most of the rivers in the BT Complex start off as steep torrent streams flanked by boulders and large forest trees, providing stunning visual environments.
9. The forests are **home to many tribes of indigenous people**, the Orang Asli especially those from the Jahai tribes. These forest communities are an integral

part of the wilderness, and also form part of the area's key values. Their interests must be maintained.

10. Intact, these forest reserves protect important **environmental, social, cultural and economic assets of the country**.

BIOLOGICAL DIVERSITY OF THE BT COMPLEX

Supports important keystone flora and fauna species:

- Over 3,000 species of flowering plants, many endemic to just the northern Peninsula, including 46 species of palms (15 endemic) and over 30 species of gingers (20% of the total number of Peninsula species), and a variety of rare orchids
- At least 274 species of birds and it must be noted that the entire BT Complex area has all 10 hornbills of Malaysia, with perhaps the largest remaining populations of breeding hornbills. It was recorded that at least 2,000 Plain-pouched Hornbills were seen flying in just one evening
- Over 100 species of mammals. Animals include Asian elephant, Malayan Tiger, Leopard, Seladang (Gaur), Sun-bear, Sumatran Rhinoceros and Malayan Tapir. The extremely high concentration of large mammals that could be larger than that in Taman Negara National Park. BT Complex supports at least 13 and 14 globally threatened and near-threatened mammals
- 168 species of butterflies, including the rare *Herona sumatrana* and *Tanaecia clathrata* and 252 smaller moths
- 95 identified species of leaf-beetles, with the highest likelihood that there are many more
- 64 species of ferns and fern allies
- 62 species of mosses
- 51 species landsnails (one sixth of all known Peninsular Malaysian snail species)
- 49 terrestrial and seven freshwater molluscs species
- 36 species of aquatic and semi-aquatic bugs, and a new aquatic fly
- 25 species cicadas
- 24 species of amphibians
- 21 species of lizards
- 23 snakes
- 23 species of freshwater fishes
- 19 species of odonates
- Seven freshwater and land turtles. At least five and one globally threatened and near-threatened turtles and tortoises.
- Three species of freshwater decapod crustaceans

MNS RECOMMENDATIONS

Recognising the importance of the Royal Belum State Park, the Temenggor Forest Reserve and its neighbouring forests in Kedah, Kelantan and Thailand, MNS proposes the following:

- 1. Establishment of a Protected Area for the Belum-Temenggor forest complex,** expanding the Royal Belum State Park to include the Temenggor Forest Reserve as well. The protection of this last tract of forest has universal as well as national significance. The two reserves function as a single ecosystem, and together, are a global treasure that is irreplaceable and immensely more valuable than the timber contained within. It will be the largest conservation area in Peninsular Malaysia with its connectivity to the Main range, with the potential of establishing a trans-boundary Protected Area with Thailand.

All areas that have been given out as logging concessions should revert to the protected area as soon as possible, and wherever possible, logging concessions should be revoked.

Additionally, this BT Complex should be linked to adjoining forest reserves in Kelantan (Gunung Stong) and Kedah (Ulu Muda) by appropriate protected corridors. The BT Complex is Malaysia's last chance to establish a contiguous network of protected areas, linking high priority conservation areas in the country. This fulfils Malaysia's obligation as a party to the Convention on Biological Diversity (CBD).

It should be noted that although Royal Belum has been declared a State Park, it has never been gazetted as a Protected Area by the Perak government. All protected areas should be legally and permanently protected.

- 2. Develop a comprehensive management plan.** Once protected, the BT Complex must be managed and the laws enforced appropriately. Management Guidelines have been drafted by the MNS from the results of its Expeditions. These should be

used as a starting point for developing a comprehensive site management plan. This will allow issues of hunting, poaching and illegal trans-boundary trade to be addressed and resources allocated for effective enforcement.

- 3. Promote a Trans-Boundary Protected Area System** linking the Royal Belum State Park, the Temenggor Forest Reserve, and the Hala section of the Hala-Bala Wildlife Sanctuary in Thailand.

The Belum-Temenggor area, the Hala-Bala Wildlife Sanctuary and the Bang Lang National Park are all areas internationally recognised as Important Bird Areas (IBAs). The establishment of a trans-boundary protected area will give Malaysia a higher profile of global conservation credibility. The links between the BT Complex to those of its neighbours in Kedah and Kelantan are a strong justification for this large landscape protected area.

- 4. Address current logging threats**

Logging has been a large contributing industry to the State and Nation, but there must come a time when an economy can no longer depend on exploiting virgin forests. With current laws on forest management focussed only on the exploitation of timber resources, legislation needs to be passed to ensure that conservation values of our forests are given the high priority they deserve.

The removal of mature trees has considerable impact on a functional ecosystem. An example is the globally threatened Plain-pouched Hornbill which uses the BT Complex in its entirety, possibly nesting in one area and feeding in another. The presence of old trees for nesting is critical, as is the presence of keystone species such as Figs, over a large enough area for feeding.

The MNS survey on the *Hornbills of the BT Complex* (2004-2005) recorded the relationship between hornbills and logging - hornbills are encountered more frequently in unlogged forest than in logged-over forest in the Temenggor Forest Reserve. More recent observations since logging

has been active in these areas indicate a marked reduction in numbers of hornbills, clearly signifying that these hornbills do not frequent these areas as much after logging commences.

- 5. Protection of stretch of forest flanking the East-West highway** along the Belum and Temenggor Forest Reserves. Conversion of this natural forest to industrial tree plantations will certainly disrupt the natural forest habitat. As such, it is crucial that this threat is immediately removed by preservation of this patch of natural forest by the Perak State government. Furthermore, this strip of forest is also vital for survival of wildlife, particularly as forest corridors, serving as wildlife crossings and enabling them to move about from one place to another within this huge forest complex. As the East-West highway cuts through these invaluable forest reserves, the integrity of the remaining invaluable forest complex must be preserved.

CONCLUSION

The Malaysian Nature Society takes the position that the BT Complex possesses one of the highest biodiversity in South East Asia. It is also of the highest importance as a wildlife corridor between key conservation areas in Peninsular Malaysia and the protected areas (Hala-Bala Wildlife Sanctuary and Bang Lang National Park) in Thailand. The total area of these combined forests amounts to a massive

850,000 hectares. Once logged, the intricate ecological web will be fragmented and damaged beyond repair.

This position statement is aimed at identifying measures that can be taken to conserve and manage this area as a landscape. It should be noted that the recommendations listed above are inter-linked, and should be implemented in their entirety to succeed.

Malaysia's life support systems are under severe stress. Free ecological services that has so far have been taken for granted are rapidly approaching the point where they will be overwhelmed, generating huge losses and costs for the nation to compensate. Realistic economic values must be attributed to natural ecological services to reflect their real worth.

We also urge the Perak State government to take into account the importance of future opportunities these forests possess in biotechnology, pharmacology and nature tourism, as well as preserving a landscape that is exceptional and has provided the basis for the peninsula's survival and prosperity thus far.

The Malaysian Nature Society is prepared to participate wherever possible to ensure the conservation of one of the oldest forests in the world. We hope to work in collaboration with the Perak state government and all other stakeholders in making this vision a shared reality.