

## Recreational Opportunities For Public Use in Ayer Hitam Forest: Setting the Stage and Park Management Approach

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### ABSTRAK

*Kertas kerja ini membincangkan konsep taman hutan untuk kegunaan rekreasi awam dan sumber pendidikan yang boleh disediakan oleh Hutan Simpan Ayer Hitam, Puchong, Selangor. Hutan Simpan ini telah berfungsi sebagai tapak pendidikan dan penyelidikan tetapi perlu bersedia untuk membenarkan orang ramai memasukinya jika dibuka untuk kegunaan rekreasi. Peluang rekreasi yang disediakan mestilah mampu memberi ruang kepada kehendak rekreasi yang mengutamakan pengalaman yang menyenangkan dan berdasarkan kepada rekreasi pendidikan dengan latarbelakang alam semulajadi. Sebarang bentuk penggunaan rekreasi hendaklah melibatkan impak yang rendah dan pembangunannya adalah berdasarkan kemampuan dan kekangan ekologi hutan simpan berkenaan. Untuk memenuhi keperluan rekreasi dan penjagaannya hutan simpan ini memerlukan amalan pengurusan taman hutan dan kerangka institusi bersepadu. Ini meliputi penyediaan peluang rekreasi kepada orang ramai dan pada masa yang sama memberi penekanan kepada pemeliharaan sumber. Sebagai kesimpulan adalah disarankan agar Hutan Simpan Ayer Hitam dikelas dan diwartakan sebagai 'Hutan Terbuka'.*

### ABSTRACT

*This paper discusses the concept of forest park for public recreational use and educational resource to be provided by Ayer Hitam Forest Reserve in Puchong, Selangor. This reserve has served as a teaching and research site but must be ready to allow people to set foot in. The recreation opportunity to be provided must be able to accommodate recreational needs that prioritised rewarding experience and educational-based recreation opportunity within the natural setting. Any recreational access and utilisation must involve low impact use and its development has to be based on the ecological limitation of the forest reserve. For a benefiting use of the area for recreation and its stewardship, the forest requires the practise of park recreation management and an integrated institutional arrangement. These include provision of recreational opportunities to the public albeit protection of the resources. In conclusion it is recommended that Ayer Hitam Forest Reserve be classified and gazetted as an open forest reserve.*

### INTRODUCTION

As we enter into a new millennium, the changing role of forest in relation to its multipurpose use must be recognised. Increase use of its resources without causing adverse impact to the environment is desired. Key concern of the forest management embraces social forestry concept of open forest where public is part of a broader environment. People must have the share of the forest and able to access the resources. A forest

or park is not to be seen as an island where some people are excluded and only a single type of use is prevalent. Forest conservation programme must include recreation for the public in order to minimise people being sidelined in the pursuant of the benefits.

Forest recreation is widely recognised as an amenity and is essential for the well-being of a society. It plays an important part for a person to enjoy quality life after he is able to fulfil his own

basic needs for survival. Recreational needs can be changing with time as society grew and can be characterised as below (Tillman, 1974):

1. Adventure and active recreational pursuit
2. Relaxation in outdoor or in natural environment
3. Escape and fantasy
4. Recognition and identity
5. Dominance and mastery
6. Social interaction
7. Mental activity (to appreciate, appraise and understand)
8. Creativity
9. Provide services to others
10. Physical activity and fitness
11. Need for new experiences and variation in activities

It is proper to accommodate those needs in a modern dynamic society. More people are putting a higher value on forest where they once belong to it. In any outdoor settings, the behaviour of participants may be influenced by several needs simultaneously such as companionship, family, security, self-esteem, prestige and comfort (Tinsley and Kass 1989; Pearse 1988).

With reference to Ayer Hitam Forest Reserve, this forested area is considered as a spot of particular scarcity based on its location and importance as the last remaining lowland dipterocarp forest to be enjoyed by people in the Klang valley. In addition, this forest reserve is still large, able to maintain its integrity, less disturbed and possesses a luxuriant natural resources by comparison to other neighbouring forested areas.

### STUDY AREA

Ayer Hitam Forest Reserve (AHFR) in Puchong is the last remaining forest to be used as a recreational land for the nearby local residents of Puchong, Seri Kembangan, Kinrara and the upcoming townships of Cyberjaya and Putrajaya (Fig.1). The area is more accessible now as previously with the opening of Damansara-Puchong Highway. It is made of many prominent topographical features that are conducive for recreation. The prominent features include the landforms made up of rugged lowland and hills (highest peak is 600 m), rivers, waterfalls, vegetation, wildlife and nearby orang asli

community. Man made elements are also found but insignificant for a wider recreational use and as attraction to conduct activities.

Ayer Hitam Forest Reserve is a lowland dipterocarp forest managed under the forest reserve by the Forest Office of Central Selangor. It is located about 45 km from the centre of Kuala Lumpur and 25 km from Universiti Putra Malaysia (UPM). This forest reserve includes compartments 1, 2, 12, 13, 14 and 15 leased to the Faculty of Forestry, UPM for research for 80 years under an agreement between UPM and state government of Selangor. This forest area is a logged over forest in the 1960s and improvement works have been done ever since.

The primary uses of this forest are for research and educational purposes. The terms and condition of agreement spelled out provisions such as the duration and condition of award, control mechanism on use of the area as well as specific restrictions on activities to be carried out in the forest area. Therefore, the AHFR having the rights to use for a long-term period by UPM is important because planning and development work can be implemented systematically.

### *Current Recreational Activities in Ayer Hitam Forest Reserve*

By its very nature, the AHFR should be available for forest recreation. Since many surrounding forested areas are shrinking, people are looking into whatever remains of natural area as their outlet for outdoor recreation. Activities that are related to educational-based recreation are carried out by the Faculty of Forestry, UPM since 1970s and include:

1. Forestry Camp both for Diploma and Degree students
2. Essaython for school children (Form One to Form Three)
3. National Science Camp
4. Corporate Game
5. Family Day

Most of the recreational activities are mainly of the organised types where leadership and instructions are provided. Activities that are conducted are well prepared and structured. At present few local people are allowed to go into and enjoy the forest. The attractive spots in AHFR frequented by recreationists include the waterfall and the Sungai Rasau that flows through it.

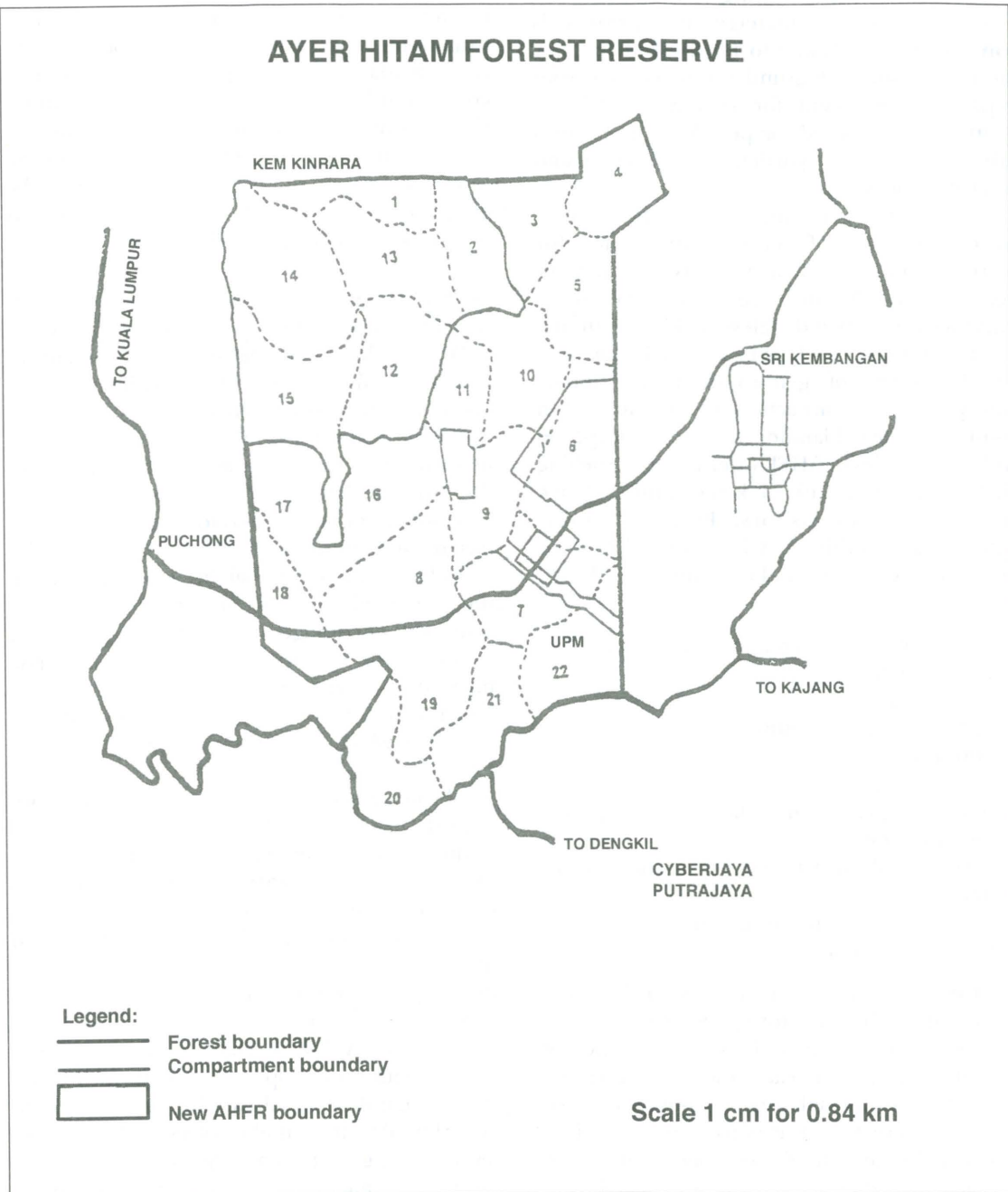


Fig. 1. Location of Air Hitam Forest Reserve from Urban Centres



#### *Potential Recreational Provision and Development*

Recreational development and provisions for recreating public must be based on the elements of choices in forest setting. In many forest reserves where the management priority is conservation but failing to let the public enjoy them will result in disgruntlement. Therefore an explicit arrangement for recreation delivery should be formulated for people to access into this forest and to participate in delineated recreation activities.

The setting of naturalness and the status of its contents are of central importance for recreation delivery. Areas such as lake gardens nearby only offer open man-made landscape with stale products and lifeless ecological culture. Natural resources such as birds, small mammals and the presence of tigers will form the curiosity and part of the attraction of the forest. In addition, a rugged landform, a variety of species and water bodies in AHFR offer hiking, repelling and swimming, picnicking and nature appreciation for visitors. Potential forest recreational activities can be oriented towards rewarding experience and education-based such as:

- Forest camping (recreational learning)
- Forestry talks
- Forestry day
- Forest hiking/adventure
- Forest trip/tour
- Forest living
- Nature appreciation – bird watching, tree identification
- Forest based special event – essaython, family day
- Community forestry programme
- Family recreation

Consideration for the social based participation in this forest, which is to be provided, can be tailored upon two types of recreationist interests categories. This includes organised or formal and non-organised or informal recreationist groups. The organised group implies structured group participation and the activities conducted are itineraried into specific recreational activities such as school groups, and uniformed organisation. Meanwhile, the non-organised group is typically made up of visitation by people without any relationship to such organisation and pursuing activities on their own. These include individuals, peers, large

groups and families pursuing non-specific activities.

The introduction of facilities to enhance the setting and to accompany the activities can enhance the experience in the forest. Commitment to provide land and buildings to accommodate recreating general public is to be considered in order to assist the lack of nature skill among the recreationists. Obligation to ensure a healthy and safety environment of the forest area is imperative. People who visit the area must strictly adhere to whatever regulations posed by the manager of the forest.

#### *Management Approach and Institutional Arrangement*

A committee was set up by the Faculty of Forestry, UPM for the planning and development of AHFR, mainly for students' activities and staff research. The question is that whether the setting up of the forest for only certain use can justify its establishment. The question of single use of the forest, which ignores other interests, might arise sooner or later. Therefore the use of forest based on public park concept should be considered where accessibility by all is both at the developed site and remote part of the forest. This will encourage use and enjoyment but problems of ecological constraint may arise particularly with increasing demand and incompatible recreational activities by users of the forest, which can affect its integrity (Abdullah, 1996).

Protection of the environment is therefore important to be emphasised. The probable solution could be built around the principles of low impact recreational practices and compromising less disturbance of the environment (Cole 1989). The implementation of management control procedure such as carrying capacity or limit of acceptable change might work to balance the impact (Hendee *et al.* 1990). Since AHFR is relatively limited in size, the recreation development should not exceed the biological or social carrying capacity of the area. Limiting the number of users to a certain level by using permits and queuing system, and group size limitation could protect the resources. So it is important to determine the value of the capacity if people are allowed access and stay in the forest.

To overcome this problem, the zonation concept can be applied to manage the resources and other interests such as research (*Fig. 2*).

The dispersal of different types of recreational use, which is compatible with different levels of condition and protection of the specific area, has to be emphasised. An idealised zone could be based on the following background characteristics of the AHFR:

**I High Density Recreation Use Area**

- Compartment 12 and 15 around the present developed site and gravel road. Sungai Rasau is at the centre of activities. Develop area with visitors facilities and services with park value still maintained.

**II Extended and General Recreational Use Area**

- Compartment 13 with rugged lowland, hills and headwaters of Sungai Rasau. Recreational activities are extended for those wanting to pursue more nature-based activities.

**III Historical and Cultural Recreation Area**

- Compartment 15 with historical values of World War II relicts and located near the aborigine village with its own cultural

background. Recreational activity that ties with traditional and historical based activities.

**IV Natural and Wilderness Strict Use Area**

- Compartment 1, 2, 13 and 14 of wilderness and undisturbed area. Sungai Bohol and its headwater can be found here. This is a natural site with minimum interference from internal or external elements and only controlled wilderness recreation takes place.

**V Limited and Undisturbed Area**

- Can be located in several parts of the reserve particularly away from heavy recreational activities. Available for research and nature learning activities.

It can be said that the legislation and regulations that are outlined for AHFR would not be effective for the conservation particularly at the site where it is being highly used by people. Educational programmes that are

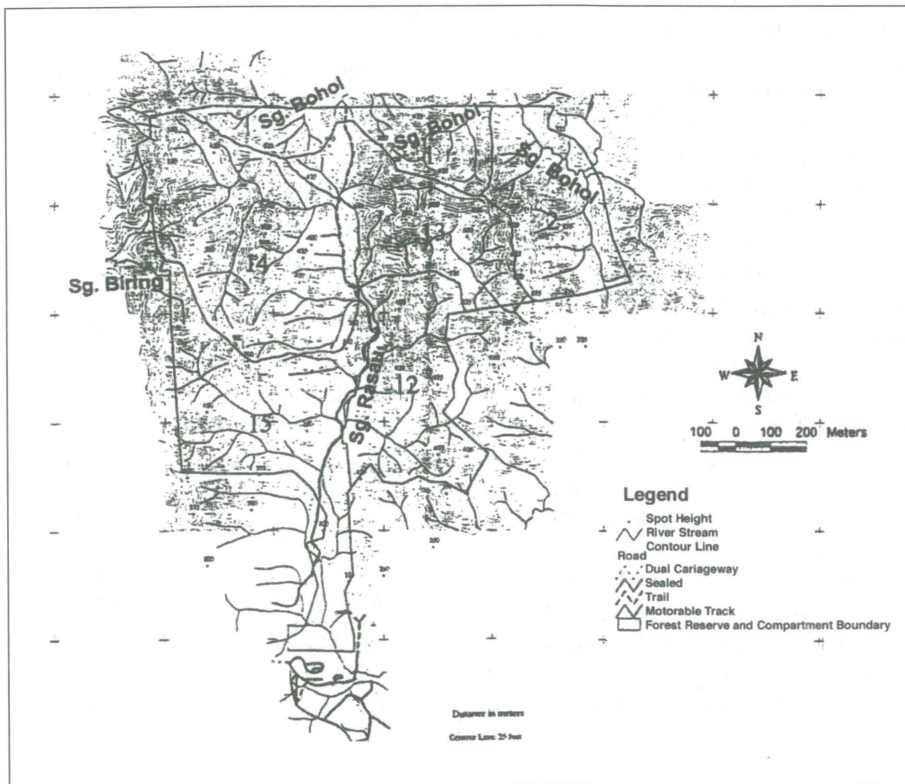


Fig. 2. Natural and man-made features of Ayer Hitam Forest Reserve



spontaneous, formal or informally conducted need to be integrated by the management. Programmes, activities or even modules to be delivered have to be integrated in order to ensure that visitors are able to gain the knowledge and awareness of conservation while recreating.

Conflicting interests will crop up between the naturalists and the public when access is increased. Here, the institutional arrangement should be highlighted among the stakeholders. It can play an important role where participation by all interested parties can contribute to the planning process. A forum or platform for those interested parties should be established for them to voice out ideas. Public at large can form support groups to protect the existence of the forest although there will some impact of recreational use of the forest. Supporting activities can include environmental education group, outdoor recreation - camping group and other groups with environmental interest behind them. Another controversial step that can be considered would involve co-operative endeavour or smart partnership with private operators, who sometimes develop interest in the development for recreation and ecotourism in this area. This attempt can be seen to enhance the productivity of the forest.

Joint management and partnership with other financing institution might lead to cost effectiveness of operation, which could be a workable solution. Presently the financial resources and funding for the management of AHFR is insufficient. Revenue sources and funds to meet running operation is provided by UPM and the forest manager has to make do with limited funds that is available. The fiscal resources therefore reflect the philosophy, objectives and direction of the forest conservation and usage.

The business activities of this cooperation have to be monitored to ensure that they don't go overboard to bring about high profits. The procedure involved must be based on the legal responsibility shared between the parties. Main benefits should therefore go to the guardian, i.e. Faculty of Forestry (UPM) and Forest Department. A development and management plan must therefore be prepared to help reconcile the competing interests. The plan will

guide specific facility development and specific actions to meet the management objectives.

## CONCLUSION

The general public has turned to forest settings to satisfy much of their recreational needs. AHFR has all the resources to supply those needs. This led to the requirement of a comprehensive approach for the management of the forest reserve. The management should incorporate an open forest the needs. The opportunities to be provided must be based on low impact use of the forest and educational based recreation. The management must encourage compatible development that come with it. Use control and limitation at certain areas should be adhered. Zonation might be workable to address the problems of extensive use of the forest and protection of the fragile resources. Thus, it is necessary for the management of AHFR to be more explicit about the role and stewardship of this forest.

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