

Potential of Ayer Hitam Forest Reserve, Selangor as a Wildlife Reserve

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ABSTRAK

Dalam kepesatan pembangunan, Hutan Simpan Ayer Hitam kini menjadi sebagai satu tempat pertahanan terakhir bagi pemuliharaan fauna dan flora di Lembah Klang. Lokasi strategiknya menarik pelbagai ancaman, terutamanya daripada pemaju tanah dan industri. Keselamatan sebidang tanah ini mulai terganggu dan memerlukan suatu peruntukan perlindungan yang khusus. Kertas ini membincangkan keperluan pemuliharaan Hutan Simpan Ayer Hitam terutamanya perlindungan terhadap hidupan liar yang semakin berkurangan di dalamnya melalui beberapa cadangan pendekatan perundangan yang bermakna. Perlindungan alternatif untuk hutan ini termasuklah menjadikannya sebagai rizab hidupan liar di bawah Jabatan Perhutanan Negeri Selangor atau sebagai rizab/santuari hidupan liar di bawah Jabatan Perlindungan Hidupan Liar dan Taman Negara.

ABSTRACT

In the rapidly developed Klang Valley, Ayer Hitam Forest Reserve has served as a last bastion for the conservation of the indigenous fauna and flora. Its strategic location has attracted many threats particularly from land developers and industries. Security of this piece of pristine land is at stake, which needs to be protected by specific legislation. This paper addresses the conservation needs of Ayer Hitam Forest Reserve, in particular the preservation of the decreasing wildlife populations within this reserve by meaningful legislative provisions. The protection alternatives for this forest include its designation as a forest reserve for wildlife under the State Selangor Forest Department or as wildlife reserve/sanctuary under the Wildlife and National Parks Department.

INTRODUCTION

The earliest reference to wildlife protection in Malaysia was Ordinance no. 111 of 1894, introduced in the Straits Settlement (Penang and Malacca). This ordinance gave protection only to certain species of birds. The protection was extended to include other wild animals and birds with the introduction of more comprehensive ordinance in 1904. By virtue of this latter ordinance, elephants, tapir, rhinoceros and green pigeon were protected (Khan 1988). Since legislation alone will not guarantee the survival of the biological heritage without protecting their habitat, steps were taken to provide permanent habitats for plants and wildlife through gazettelement of wildlife reserves, nature reserves and national parks. The first public domain area set up by the federal agency for these purposes was dated 1903 with the designation of the Chior Wildlife Reserve in Perak (Stevens 1968). This wildlife reserve made up a total area of 689

ha (Perak State Notification No. 1107). The interest in protecting big game animals such as elephants and gaurs from over-hunting especially by hunters and planters have set the stage for more areas to be gazetted as wildlife reserve.

This trend for the conservation of wildlife and their habitats, however has lost steam due to the demand for more land for agricultural development particularly for oil palm plantations. The significant date for wildlife conservation turning point was after the year 1964 with the establishment of Sungai Dusun Wildlife Reserve in Selangor. After this period, there were no more significant areas that were set up for the protection of wildlife and their habitats.

Lately, people began to manipulate natural areas for their own interests and benefits. Nature and wildlife take lower priority in their pursuit of existence in Malaysia. The consequence is that if the forest is not effectively protected, fewer areas that are supposed to be

preserved would result in devastation. As these problems proceeded, the wildlife components of the ecosystem could be destroyed forever. This condition will later undermine the survival of such forest. As a result, the creditability of the nation's conservation strategy will be eroded.

The purpose of the paper is to highlight the importance of preserving Ayer Hitam Forest Reserve (AHFR), an island forest amidst a sea of urban development in the newly developed Malaysian Super-Corridor (MSC) as a habitat for wildlife. The forest is surrounded and neighbored by several nationally significant land development activities such as the Cyberjaya township, the new Federal Capital of Putrajaya, National Sports Complex and several major residential areas. Several alternative legislative approaches are presented for the sustainable management of wildlife and their habitats in AHFR.

THE RATIONALE OF AHFR AS WILDLIFE RESERVE

Selangor state has a total of 10,428 ha (1.3% of state land; 0.1% of Peninsular Malaysia) of wildlife reserves under the administration of the Department of Wildlife and National Parks, and the state Forest Department. Thus, based on the total number of wildlife availability in the state especially in the forest reserves (30% of state land), it can be said that the area for the protection of wildlife is still small by comparison to the wildlife species to maintain its sustenance. Moreover, the characteristics of tropical diversity of species, however, is associated with relative scarcity of individuals of each kind of plants and animals of each component species. In other words, although there are many plants and animals in a given area, relatively fewer individuals of each kind will be found (Thang 1988). Thus, proportionately larger areas of suitable habitat will be necessary to ensure the survival of a given plant or animal population.

In the Klang Valley, Ayer Hitam Forest Reserve (AHFR) was designated as a forest reserve in 1930s. At present Ayer Hitam Forest Reserve is used by the Faculty of Forestry for education, research purposes and extension services. Thus, this forest serves as a honey pot to the students and staff of the Faculty for their "living classroom", forest camps and other forest related activities (Abdullah *et al.* 1999). In the very near future, AHFR will be the only forest for the entire population of newly developed residential

and commercial areas nearby. AHFR can be considered relatively rich in biodiversity. There are 430 species of seed plants, 33 species of ferns and fern-allies, 127 timber species, 29 fruit trees species and 98 plant species with medicinal values (Faridah Hanum 1999). In order to attain the sustainable and productive ecosystem of such forest, conservation or better still a preservation approach must be applied to this area. This in turn will support effectively the wildlife and its habitat. Conservation in this case involves maintaining and improving semi-natural habitats and their associated species in as natural state as possible because there are no remaining areas that are unmodified by human activities. It also allows other use in the area for as long as the activities are compatible with the land and only involved minimal modification of the resources.

Although AHFR is a logged-over and isolated forest reserve, studies conducted here showed that this forest is still very rich with wildlife. AHFR contains 160 species of birds from 38 families, which is comparable to other primary areas in Peninsular Malaysia. The three largest families were Timaliidae (13 Babbler species), Cuculidae (12 Cuckoo species) and Pycnonotidae (12 Bulbul species) (Zakaria and Abdul Rahim 1999). Five species of primates, *Presbytis malalophos*, *Hylobates lar*, *Presbytis obscura*, *Macaca fascicularis* and *Macaca nemestrina* were found in this forest as compared to the total ten species present in Peninsular Malaysia. In addition *Nycticebus coucang* (slow loris) is known to occur in the area (Zakaria and Rahmat 1999). Jambari *et al.* (1999) reported that there were three species of bats, two species of reptiles, 11 species of frogs and toads and nine species of fishes have been recorded present in the forest. Studies by Ahmad Said *et al.* (1999) revealed that 11 orders of insects with hundreds of species are found in the forest. Hymenoptera was dominant, followed by Isoptera, Collembola, Coleoptera, Diptera, Othoptera, Thysanura, Homoptera, Hemiptera, Lepidoptera and Neuroptera. Big mammals such as tigers, wild boars, civets and mouse deers were also present (Isyarak per. comm.).

Being a forest amidst a sea of development, AHFR's role is dual: protecting the biodiversity and serving as a green lung especially to the MSC. As such it is also the only natural refuge for wildlife from other disturbed or destroyed habitats in the vicinity.

LEGISLATIVE PROVISIONS IN THE PROTECTION OF AHFR

AHFR as Forest Reserve for Wildlife

As a forest reserve AHFR is managed under the jurisdiction of National Forestry Act, 1984 (Amendment 1993). Under the law, for the purpose of conservation of flora and fauna in a forest reserve, the Act under Section 10 specified that the State Director of Forestry with the approval of the State Authority has to classify permanent forest reserve into eleven functional classes of the forest. Functions with the exception of Subsection 10(1a) which is for timber production, all remaining 10 functional classes are for the purposes of protection and conservation that include forest sanctuary for wildlife (Zul Mukshar 2000).

In addition, there are other sections in National Forestry Act (Amendment 1993) which give due consideration to wildlife protection. One of the relevant sections of such legislation include Section 81 which specified prohibition to use poisonous substance, or dynamite or other explosives in rivers or lakes for the purpose of fishing, or hunting, or set traps or snares; and trespass the permanent forest reserve in any manner. Furthermore, Section 111 enables the State Authority to make rules to implement and operationalize the provisions provided by the Act. Under the legislation of subsection 111(2) (s) of the Act, the State Authority may prescribe rules and regulations for multiple use of the forest. Among others, they may include wildlife, plant life, and objects of geological, archeological, historical, ethnological, scientific and scenic interest. As an example, this provision has been considered as one of the basis and viable options for the establishment and management of the Perlis State Park (Zul Mukshar 2000).

The National Forest Policy of 1978 revised in 1992 could provide an additional protection mechanism for AHFR in wildlife conservation. This policy can strengthen the protection of wildlife if enforced effectively by the Forestry Department particularly at the state level. Hence the policy specifically emphasized the need for the preservation of biological diversity and the conservation of areas with unique species of flora and fauna.

AHFR as Wildlife Reserve

Wildlife Reserve and Sanctuary could provide another alternative in the pursuant for the pro-

tection of wildlife in AHFR. The protection of Wild Life Act 1972 (Act 76, Laws of Malaysia) could be important. Under this law, Section 47 (a), it specified that the Ruler or the Yang di Pertua Negeri of a State may, after consultation with the Minister from time to time by notification in the *Gazette* to declare any State land to be a wildlife reserve or a wildlife sanctuary and designate the officer for the time being having the control of such reserve or sanctuary. Other important subsection of Section 47 that would lead to better protection of wildlife and its habitats is through (b) definition and alteration of the boundaries of the wildlife reserve or wildlife sanctuary, and (c) in the case of wildlife reserve, specify certain animals and birds (which are not protected wild animals or not protected wild birds within the meaning of this act) as protected or totally protected wild birds (as the case may require) which specification shall be in addition to the lists of wild animals and wild birds specified in the Schedules to this Act.

In strengthening for the protection of this reserve, the Act provided that under Section 48 (1), no person shall enter a wildlife reserve or a wildlife sanctuary unless he first obtains a written permit from the Director for Wild Life and National Parks authorizing him to do so. In addition under subsection (5) no person shall disturb or cut or remove any timber in a wildlife reserve. Section 49 (a), (b), (c) also specified that no person shall shoot, kill or take any animal or bird (wild or otherwise); take, disturb, damage or destroy the nest or egg of any animal or bird (wild or otherwise); disturb or remove any timber or vegetation in a wildlife sanctuary.

CONCLUSION

The Ayer Hitam FR is presently facing pressures resulting from increasing human population in the surrounding areas and their need for more space. The protection status of the forest is still unclear as long as it is under the jurisdiction of the state government. The state government can convert the status of the forest into other land use especially for housing and industrial projects. This situation must be recognized and total commitment must be given to ensure the permanent protection status of this forest. Ultimately, AHFR should be administered and legislated as a forest reserve for wildlife or decisively as a wildlife reserve.

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