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Perception on Scenic Beauty of Tropical Recreational Forests

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ABSTRACT

The landscape beauty of a recreational forest refers to its landform and geology; plants and animals; the historic and other cultural heritage as well as the design incorporated to enhance forest beauty. Beauty is the quality that gives pleasure to the mind and it relates to the harmony of forms, colors, textures, artistic excellence, truthfulness, and originality. Beauty is the main category in aesthetics as it is the quality which gives pleasure to the senses. People can experience and appreciate landscape beauties from recreational forest. The recreational forests in Peninsular Malaysia received many visitations from local and international visitors who seek to find landscape beauty in them. Recreational forests provide outdoor activities and scenic views for people to enjoy. However, human interference in a recreational forest can affect the landscape beauty and lead to scenic degradation. Managing the beauty of recreational forest is essential for quality outdoor experiences and their sustainability. The aim of this study is to understand the importance of landscape beauty for outdoor activities in Peninsular Malaysia's tropical recreational forest. The main objective of this study is to examine people's perception towards the landscape beauty of tropical recreational forest. Two recreational forest sites were selected for this study. They are Sungai Chongkak Recreational Forest and Ampang Recreational Forest located in Selangor. The results show that both parks still maintain the existing natural landscapes in a pristine condition that enhances their beauty. However, urgent action needs to be taken on the matter of ...

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PERCEPTION ON SCENIC BEAUTY OF TROPICAL RECREATIONAL FORESTS

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Abstract

The landscape beauty of a recreational forest refers to its landform and geology; plants and animals; the historic and other cultural heritage as well as the design incorporated to enhance forest beauty. Beauty is the quality that gives pleasure to the mind and it relates to the harmony of forms, colors, textures, artistic excellence, truthfulness, and originality. Beauty is the main category in aesthetics as it is the quality which gives pleasure to the senses. People can experience and appreciate landscape beauties from recreational forest. The recreational forests in Peninsular Malaysia received many visitations from local and international visitors who seek to find landscape beauty in them. Recreational forests provide outdoor activities and scenic views for people to enjoy. However, human interference in a recreational forest can affect the landscape beauty and lead to scenic degradation. Managing the beauty of recreational forest is essential for quality outdoor experiences and their sustainability. The aim of this study is to understand the importance of landscape beauty for outdoor activities in Peninsular Malaysia's tropical recreational forest. The main objective of this study is to examine people's perception towards the landscape beauty of tropical recreational forest. Two recreational forest sites were selected for this study. They are Sungai Chongkak Recreational Forest and Ampang Recreational Forest located in Selangor. The results show that both parks still maintain the existing natural landscapes in a pristine condition that enhances their beauty. However, urgent action needs to be taken on the matter of maintenance and cleanliness aspects. A comprehensive management plan in these sites is vital and should be aware of the main factors that cause degradation of natural landscape beauty.

Keywords: Landscape Beauty, Landscape Architecture, Recreational Forest, Outdoor Activity

1. Introduction

A recreational forest is an area designated for visitors' pleasure in the natural environment. It is a place for recreational activities such as jogging, jungle tracking, camping and other activities as well as providing opportunities for visitors to enjoy and experience the beauty of the forest environment [21]. Beauty is the quality that gives pleasure to the mind or senses that relates to harmony of forms, color, artistic excellence, truthfulness, and originality [26]. Beauty also is the main category in aesthetics as it is the quality which gives pleasure to the senses [28].

Recreational forests in Peninsular Malaysia have been designated for public recreational uses since the First Malaysian Plan [23]. In pursuant to the National Forestry Act, these forests are continuously being developed in each of the five-year Malaysia Plan (Table 1) [12]. The goals of their establishment are

to provide places for the public to relax and carry out outdoor family or group activities; to create awareness among the public on the importance of maintaining the environment for better life; to enhance individual performance and to escape from the stress of work and busy city life; to provide opportunities for the public to explore forest areas and enjoy its natural beauty; to function as open laboratories for conducting research and education; and as ecotourism attractions for additional revenue to the Country [8]. Currently, there are 125 recreational forests that had been established in Peninsular Malaysia [16] (See Table 1).

Table1: Number of Recreational Forests in Peninsular Malaysia

Malaysia Plan	Year	Recreational Forests Developed
First	1966 – 1970	3
Second	1971 – 1975	1
Third	1976 – 1980	14
Fourth	1981 – 1985	28
Fifth	1986 – 1990	27
Sixth	1991 – 1995	22
Seventh	1996 – 2000	19
Eight	2001 – 2005	7
Ninth	2006 – 2010	4
Total		125

Source: Forestry Statistics Peninsular Malaysia, 2007

Recreational forests are unique and rich with natural resources that contribute to their own beauty. It has spectacular natural features such as mountains, rivers, waterfalls, water catchments, reservoirs, lakes, islands, coastal areas, mangroves, and hot springs [15]. It is also rich in plant and wildlife diversity. It is estimated that there are 2500 species of trees, 200 species of mammals, 600 species of birds, 110 species of snakes, 80 species of lizards and thousands of insects in these forests [8]. These resources have attracted visitors to come seeking to renew or heighten physical, mental and spiritual experiences as well as for outdoor activities such as for relaxing, education and health [1]. Therefore, there is a need to protect these resources to prevent them from being damaged leading to loss of recreation opportunities for the people.

The scenic beauty of recreational forests has attracted many people to spend their leisure time by carrying out passive activities such as sightseeing and visiting scenic attractions in the forest. At the same time forest also provides fresh air, peace and quiet, and ambience conducive in promoting physical and psychological regeneration. Being outside in a green space such as forests can promote mental well-being, relieve stress, overcome isolation, improve social cohesion, and alleviate physical problems [2]. A classic study carried out by [30] for people experiencing anxiety or stress,

revealed that exposure to an outdoor green environment reduces stress faster than anything else due to exposure to viewing nature. The study found that significant recovery or restoration from stress can be achieved within three to five minutes of viewing nature.

Forests landscape beauty is also important to the tourism industry. Thus, appropriate landscape management practices must be adopted in order to maintain the visual attractiveness of these natural forest areas [13]. Recreational forest management needs to focus on preserving and caring the landscape beauty of the forest where people are likely to use them. At the same time they also must provide for different types of enjoyment; from walking and jogging to bird-watching and environmental education. On the other hand, man-made elements such as shelters, benches, and picnic tables must be in visual harmony with the existing forest environment.

2. Recreational Forest Landscape Beauty and Outdoor Activities

Malaysia defined recreational forest as an area in Permanent Forest Estate used for leisure, sports, research activities, and education as well as for conserving flora and fauna [15]. These forests serve as areas for urban dwellers to escape from the hectic and stressful city life [8]. These forests are also equipped with constructed facilities to attract visitors [33].

The beauty of tropical recreational forest landscape depends on their natural assets. These include vegetation, soil, topography/landform, geology, fauna and water bodies. Furthermore, man-made elements such as bridges, litter bin, walkways, and shelters also contribute to provide convenience as well as in many cases enhance the forests' landscape beauty. Natural asset and man-made elements need to be in harmony with one another to maintain the quality of landscape

beauty and the visual attractiveness of these special forests.

Vegetation found in tropical recreational forests are diverse depending on their location and site characteristics such as altitude. For instance, forest floor of montane ericaceous forest (above 1,500 meters altitude) are mostly dominated by species from the Ericacea family while lowland Dipterocarp forest are dominated by Meranti and Balau (*Shorea* spp.) and Kapur trees (*Dryobalanops aromatic*). In mangrove recreational forest areas, *Rhizophora* spp with their unique root system known as stilt roots and pneumatophores as well as thick leaf structures dominates the area. The diverse vegetation found in the recreational forests provide interesting opportunities for nature-based outdoor activities such as nature study, camping, and conservation work. These forests are kept in their pristine conditions and provide a resource for people to enjoy natural beauty and serenity.

Landforms also contribute to landscape beauty of recreational forests. Landform can influence the observer in how they visually enjoy recreational forests. When viewing a landscape the eye tends to look around a scene and this applies, in particular, where landform is the dominant landscape influence [10]. Wonderful features such as waterfalls and mountainous terrain become attractions that contribute to make recreational forests interesting and enjoyable. Besides visual appreciation, the uneven terrain provides them with challenging experiences such as mountain biking, mountain climbing and hiking.

Geological features such as limestone and rock outcrops (granitic rock and megacrystic granite) displaying varied textures also attract public to the recreational forests. Water flows on the hard geological surface of granite rocks and falls from the hills and rapids make the landscape in recreational forest very

attractive. Waterfalls are very popular in recreational forest for bathing and swimming [20]. Caves found in hilly areas also provide opportunities for people to enjoy. This is seen in the case of Bukit Kubu Recreational Forest in the northern state of Perlis. These nature's gifts are priceless and require special care and attention from everyone because they tell the story of the earth's formation.

Water elements such as rivers, streams, waterfalls, and lakes increased the beauty of recreational forests. According to [14] the attractiveness of forest landscape is influenced not only by the number but primarily by the character of watercourses and water reservoirs. According to Smoleński 2007 as cited in [14], large diversity of ecotypes that determine watercourses as natural corridors and water reservoirs are visually one of the most attractive elements of forest landscape. This diversity also means contrasts in the natural landscape that, according to many authors, is an important criterion in choosing a place for recreation. Therefore, the most preferred places for forest recreation are places located near watercourses and water reservoirs [14]. Consequently, the quality of the water in recreational forests needs to be preserved.

Finally, the variety of wildlife in the recreational forest area has provided enjoyment to forest recreationists. Their activities include observing wildlife, participating in outdoor activities such as bird watching, insect collecting, photography, hunting and fishing [31]. Among the insects that can be found in recreational forest are dragonflies' such as *Orchithemis pulcherrima* and *Neurothemis fluctuans* [32]. It was recorded that 107 Odonata species were documented from Terengganu [4]. They can be found along the habitat permanent gradient ranging from permanent running waters and lakes to small temporary rain pools [5]. Forest mammals such as monkeys, otters, deer,

rodents and rabbits are the most recognized of these wildlife. Meanwhile birds add color, movement and sound to the forest and play crucial roles in the forest ecosystem by dispersing seeds, pollinating plants, and by eating insects and rodents [31].

3. Managing Recreational Forest Landscape Beauty

Forest landscapes are fragile and can be disturbed by human activities. Therefore, any development within these forests needs to consider its impact on the beauty of the forest. This is because those who visit forests for recreation often forms perceptions of a place based on what they see and experience from an aesthetic point of view [11]. He asserted that scenic resource management has become an important part of managing forests for multiple values and protecting the landscape beauty. Scenic resources are those landscape patterns and features that are visually pleasing, including, but not limited to trees, rock outcroppings, and historic buildings that contribute to landscape beauty. Therefore, a proper management of the beauty of recreational forest are vital to ensure their sustainability. These include natural resources, facility design, site-planning and forest maintenance.

The beauty of recreational forest was believed to depend on their natural resources. Forest vegetation must be kept well and maintained as naturally as possible. This is to ensure that the vegetation growing on and around the recreational forest park are desirable and that they provide the features expected as well as they can be sustained well into the future. An organized plan to replace lost trees must be carried out to avoid environmental degradation and reduce the area's functionality and attractiveness. [29] suggested that good management and maintenance can adapt landscapes to keep pace with evolving human needs and demands.

Forest landscape beauty can be managed also in through design. It can be done when the design of facilities and other human made elements, for instance picnic table and buildings, are designed harmoniously into the forest landscape. These will cause minimum impact and will not compete with or dominate natural park features. The facilities also need to be visually pleasing in their simplicity through proper forms, colors, and materials. Properly designed facilities that harmonize well with the forest surroundings is one of the main reasons for visitors to choose spending their recreation and vacation time in or near forest recreation areas. Properly designed forest facilities can provide positive experiences and encourage revisits. Design must also take into account other issues such as landscape degradation, preservation of natural processes, and protection of biological diversity [34].

The beauty of recreational forest can also be managed with good planning. Proper planning should include the formulating of good landscape master plans and resource management plans. Recreational forest planning should involve experts in landscape architecture, forestry, wildlife management, and other relevant experts. Management actions must be consistent with the ecological capability of the forest, optimizing forest health, and maintaining or enhancing the recreational, aesthetic, and other social aspects of the area. At the same time, the health of local communities must be sustained so as to provide economic, social, and ecological benefits to present and future generations.

Meanwhile forest site planning should recognize the intrinsic character and beauty of the site and they must be included in the strategic policies for the conservation and enhancement of the natural environment including landscapes. Landscape character assessments should be prepared to help understand the character and local distinctiveness of the landscape and identify

the features that give it a characteristic sense of place. All planning policies and decisions should be based on most current principles and information about the natural environment and other characteristics of the area.

Forest landscape maintenance plays an important role in keeping the beauty of the recreational forest and their sustainability in the future. Proper landscape maintenance can enhance park's quality as well as increase user experiences. Appropriate and detailed landscape maintenance can enhance the beauty of the landscape; reduce environmental destruction, increase quality of life, and enhance users' experiences. Users are more sensitive towards improper landscape maintenance in recreational forests, especially when it relates to landscape beauty and the quality of life. It is essential to have proper recreational forest landscape maintenance and management system with well-defined goals and objectives in order to achieve quality recreational forest landscape [25].

Thus, the aim of this study is to understand the importance of landscape beauty for outdoor activities in recreational forests. The objective of this study is to understand landscape architecture students' perceptions towards landscape beauty of recreational forest. Two recreational forest sites were selected for this study. Both Sungai Chongkak Recreational Forest and Ampang Recreational Forest are popular forest recreation destinations located in Selangor, Peninsular Malaysia (Figure 1). Both parks are popular for outdoor activities of Klang Valley residents as well as tourist attractions.

4. Research Methods

This study is divided into two stages. The first stage is based on systematic

observation of the study sites. The second stage is a survey using a photo-questionnaire with photographs as surrogates of the actual environment. Final and third year students studying landscape architecture (BLA) in Universiti Putra Malaysia volunteered as respondents for the study. They were selected because they have been exposed to evaluating and understanding landscapes. They were trained to observe and judge specific landscape attributes based on the principles of art, design, resource management, and ecology.

4.1. Site observation

A systematic observation was carried out to observe, record, and analyse landscape features within these two parks. The observation was done by going round the park and looking at the overall existing physical condition of the environment; the landscape (natural and man-made), natural settings, facilities, buildings, and environmental conditions (degradation, pollution, etc.). During this observation, photographs were taken in order to record the beauty and the elements of the park. The elements recorded were natural landscapes including flora, water bodies (river/stream), and man-made landscape elements such as buildings, park furniture, parking facilities, pedestrian facilities, drainage, and signage. Any environmental impact on the site was also recorded to get clear pictures relating to the destruction of the beauty of the sites. Table 2 presents the sample of the photographs, while Table 3 groups the landscape beauty variables into the five beauty parameters.

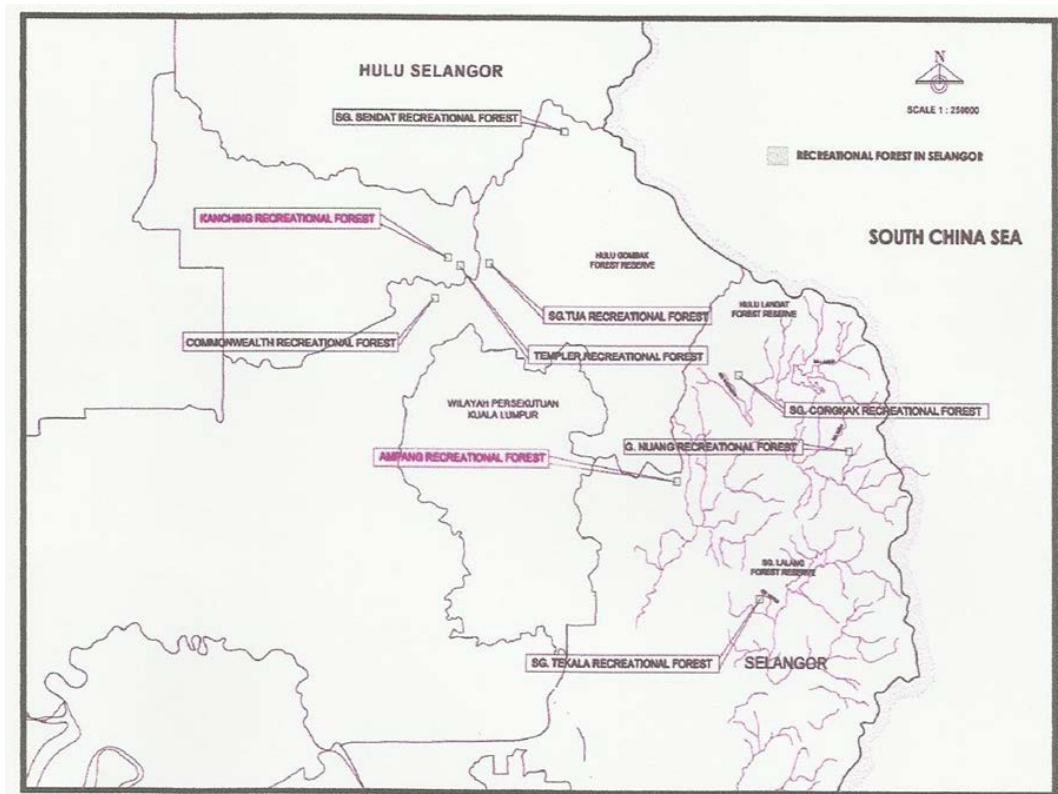


Figure 1 Location of Sg. Chongkak and Ampang Recreational Forests

Table 2 Sample Photographs of Scenes Classified into 5 Beauty Parameters

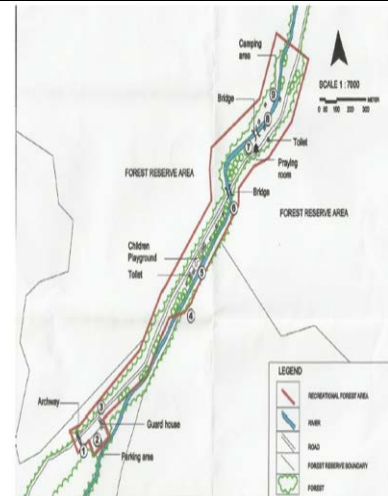
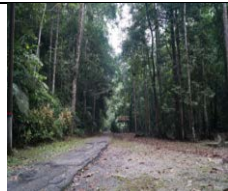
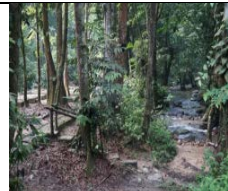
1. Natural Landscape				
				
Vegetation	Soil	Topography	Geology	Water
2. Design				
				
Building	Playground	Shelter	Bridge	Lamp post
3. Planning				
				
Layout of Sungai Chongkak Recreational Forest			Layout of Ampang Recreational Forest	
				
Respect to nature – scale/size	Respect to nature – location	Respect to nature – color	Respect to nature – form/shape	Respect to nature – material
4. Maintenance				
				
Vegetations	Barbeque grill	Camp site	Pergola	Signboard
5. Cleanliness				
				
The dry leaves swept	Road surface	Grass cutting	Pathway cleanliness	Water quality

Table 3 Landscape Beauty Parameters

Landscape Beauty Parameters	Variables
Natural Landscapes	Vegetation, Soil, Topography, Geology and Water
Design	Facility and Accommodation
Planning	Layout and Respect to nature
Maintenance	Natural elements and man-made elements
Cleanliness	Site condition

4.2. Photo-questionnaire survey

The questionnaire is divided into four sections. These are personal particulars, landscape beauty managing score, opinion and, degradation implications of landscape attributes to outdoor activities. Personal particulars are needed for respondent's background data. To know how student perceive the landscape beauty that enhances outdoor activities in the recreational forest, a set of photographs representing the beauty aspects natural landscapes (vegetation, soil, topography, geology, water), facilities (benches, toilets, wakafs, etc.,) and site layout and maintenance were collected and presented to them. A Likert scale (5 = very good; 4 = good; 3 = normal; 2 = bad; 1 = very bad) were used to measure respondents' perception. The photographs were taken from the study site during a fieldwork on existing conditions. All photographs were taken using a digital camera with a lens set on 50 mm, horizontal view, and proper angle (balance, depth, focus and panoramic). All photographs were taken at the eye level. The resulting photo-collection was reviewed to remove poor quality and inappropriate photographs.

The questionnaire also attempted to elicit degradation implications of landscape attributes on outdoor activities in the parks if the management fails to manage the park properly. A Likert scale (5 = very high; 4 = high; 3 = moderate; 2 = low; and 1 = very low) was used to measure respondents' perception towards this implication.

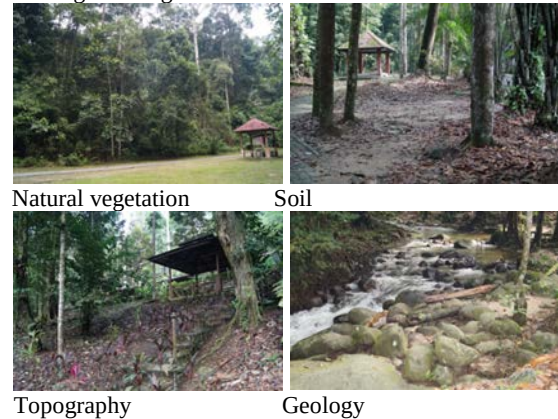
5. Analysis & Results

5.1 Site Observation

Sungai Chongkak Recreational Forest and Ampang Recreational Forest still maintain the existing natural landscapes in a pristine

condition that enhances their beauty (Figure 2: A,B).

A: Sungai Chongkak Recreational Forest



B: Ampang Recreational Forest

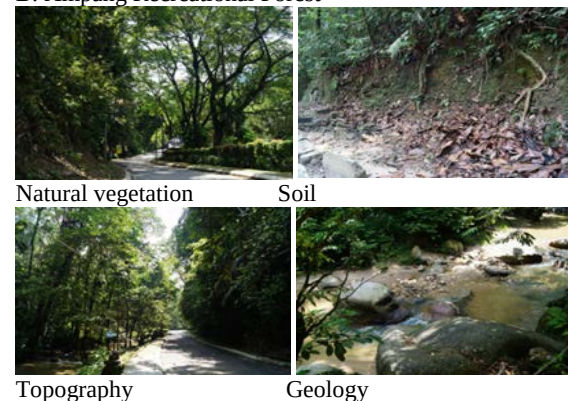


Figure 2(A, B): Both parks Maintained Existing Natural Landscape that Enhances Their Beauty

Both sites still have large and tall trees and thick enough of a lowland and hill dipterocarp forests to shade the users from the sun. There was no serious soil degradation such as compaction and erosion seen on both sites. The managements of both parks also keep existing geological features such as hard sandstone and granite in the original states. The geological element contributed to the park beauty and attracts public to the parks. Furthermore, the water is clean and flows on hard granite

rocks and makes the water features in both recreational forests still very attractive. A study carried out by [19] also agrees that the water of Sungai Chongkak (Chongkak River) is clean and suitable for recreation. Meanwhile, [22] reported that the water of Ampang Recreational Forest is also clean.

During the observation, it was noticed that Ampang Recreational Forest did not provide accommodation such as chalets for visitors to stay overnight unlike the Sungai Chongkak Recreational Forest. The design of accommodations in Sungai Chongkak is categorized as harmonious with the surrounding environment and did not degrade the park beauty. In terms of facilities, both recreational forests parks provide basic facilities such as bridges, pedestrian walkways, toilets, and playgrounds. Those facilities have been designed to integrate with the existing environment and help in conserving the beauty of both parks.

Both recreational forests have linear layouts where their facilities and accommodations are constructed along a river or stream. These facilities have been built close to water sources that give convenience to the user. There are no cut and fill work applied during construction. This shows that the management of both recreational forests consciously protects and preserves existing sites' topography. These enhance the beauty of the parks and increased their visual quality.

A neat and tidy recreational park is very important in augmenting park beauty. Both parks suffer from less than satisfactory maintenance, especially for man-made elements such as gazebos, toilets, playgrounds, bridges, pedestrian walkways and other structures. Many of these structures were in bad conditions that reduced the parks' beauty (Figure 3). Some of the structures require repainting and parts replacement such as screws for playgrounds. However, in terms of

cleanliness both parks were reasonably cleaned.

A: Sungai Chongkak Recreational Forest



Barbeque

Shelter



Signboard

Building

B: Ampang Recreational Forest



Shelter

Bridge



Pergola

Children playground

Figure 3(A, B): Both Parks Need Priority on Maintenance Aspects

5.2 Landscape Beauty of Recreational Forest

A total of 52 respondents took part in this study. All of them were from the landscape architecture program in Universiti Putra Malaysia's Serdang Campus. The demographic breakdown is as shown in Table 4. There were more or less equal number of male (46.2%) and female (53.8%) respondents and most (86.5%) were in the 22-24 age group. The ethnic backgrounds of the respondents were Malay (75%), Chinese (15.4%), Indian (3.8%) and other ethnic groups (5.8%).

Photographs of existing recreational forest scenes were used as stimulus materials to gauge respondents' perceptions towards the sites landscape beauty for outdoor

activities. There were 69 photographs chosen and used in this photo-questionnaire survey (39 photographs of Sungai Chongkak Recreational Forest and 30 photographs of Ampang Recreational Forest). These images depict Natural-looking Settings (27 photographs), Design Elements (14 photographs), and Maintenance Aspects (14 photographs). The layout plans of the study sites representing Site Planning were also attached to the survey instrument.

Table 4 Respondents Background

Respondents	Total	Percentage (%)
Gender:		
Male	24	46.2
Female	28	53.8
Age (year):		
19 - 21	1	1.9
22 - 24	45	86.5

	25 - 27	6	11.5
Ethnic:			
Malay	39		75.0
Chinese	8		15.4
Indian	2		3.8
Others	3		5.8

Table 5 shows respondents perception of the attributes of landscape beauty of the study sites. Half of the respondents (50%) perceived the vegetation in Sungai Chongkak as normal while more than half (57.7%) thought that the vegetation in Ampang as good. They rated the soil in Sungai Chongkak and Ampang as normal (Sungai Chongkak 63.5% and Ampang 55.8%). And for the topography of the sites, respondents rated both as in good conditions (Sungai Chongkak 44.2% and Ampang 50%). The geology found on the sites was found to be normal for both

TABLE 5 Perceptions towards Landscape Beauty of Recreational Forest for Outdoor Activities in Sungai Chongkak and Ampang Recreational Forests

Subject	Very Good		Good		Normal		Bad		Very bad		Mean Score	Std. Deviation	
	Total	%	Total	%	Total	%	Total	%	Total	%			
Sg. Chongkak Recreational Forest													
Natural Landscapes:	Vegetation	1	1.9	20	38.5	26	50.0	5	9.6	-	-	3.33	0.68
	Soil	-	-	13	25.0	33	63.5	6	11.5	-	-	3.13	0.60
	Topography	2	3.8	21	40.4	23	44.2	6	11.5	-	-	3.37	0.74
	Geology	2	3.8	21	40.4	29	55.8	-	-	-	-	3.48	0.58
	Water	3	5.8	26	50.0	19	36.5	4	7.7	-	-	3.54	0.73
Design:	Facility	-	-	10	19.2	24	46.2	18	34.6	-	-	2.85	0.73
	Accommodation	-	-	10	19.2	32	61.5	10	19.2	-	-	3.00	0.63
Planning:	Layout	1	1.9	18	34.6	25	48.1	8	15.4	-	-	3.23	0.73
	Respect to nature	1	1.9	23	44.2	23	44.2	4	7.7	1	1.9	3.37	0.74
Maintenance:	Natural elements	1	1.9	12	23.1	27	51.9	12	23.1	-	-	3.04	0.74
	Manmade elements	-	-	9	17.3	32	61.5	10	19.2	1	1.9	2.94	0.67
Cleanliness		-	-	9	17.3	27	51.9	15	28.8	1	1.9	2.85	0.72
Ampang Recreational Forest													
Natural Landscapes:	Vegetation	2	3.8	30	57.7	18	34.6	2	3.8	-	-	3.62	0.63
	Soil	2	3.8	15	28.8	29	55.8	6	11.5	-	-	3.25	0.71
	Topography	1	1.9	18	34.6	26	50.0	7	13.5	-	-	3.25	0.71
	Geology	2	3.8	19	36.5	25	48.1	6	11.5	-	-	3.33	0.73
	Water	1	1.9	20	38.5	22	42.3	9	17.3	-	-	3.25	0.76
Design:	Facility	1	1.9	20	38.5	27	51.9	4	7.7	-	-	3.38	0.65
	Accommodation	-	-	-	-	-	-	-	-	-	-	-	-
Planning:	Layout	-	-	23	42.3	28	53.8	2	3.8	-	-	3.38	0.57
	Respect to nature	-	-	24	46.2	22	42.3	6	11.5	-	-	3.35	0.68
Maintenance:	Natural elements	2	3.8	20	38.5	26	50.0	4	7.7	-	-	3.38	0.69
	Manmade elements	1	1.9	19	36.5	25	48.1	7	13.5	-	-	3.27	0.72
Cleanliness		-	-	28	53.8	19	36.5	3	5.8	2	3.8	3.40	0.77

Sungai Chongkak (55.8%) and Ampang (48.1%). With regards to water quality, respondents felt that Sungai Chongkak water was of good quality (50%) as

compared to water found in Ampang which they rated as only normal (42.3%).

These can be taken to indicate that the park management had put good efforts in maintaining the natural landscape's

beauty of both sites. Both sites have clear and clean water quality. Many of their natural settings (including plants, animals, insects, etc.) were retained in good condition as captured by many of the images presented to the respondents. The positive perception of the respondents might have been influenced by the richness, diversity and variety of the vegetation as well as the existence of water that they can see in the given photographs.

The design aspects of facilities (including accommodation) were also being perceived as normal (Sungai Chongkak 46.2%; Ampang 51.9%) by the respondents. This result may indicate that the design of these facilities is well integrated with the surrounding natural features. This contributes to give aesthetically pleasurable experiences to users and compliment the sites' beauty. As for the parks' layout plans, respondents perceived them as normal settings (Sungai Chongkak 48.1% and Ampang 53.8%) and have respect for nature (Sungai Chongkak 44.2% and Ampang 42.3%).

However, with regards to site maintenance and cleanliness, only half of the respondents perceived them to be under normal condition for natural elements (Sungai Chongkak 51.9%; Ampang 50.0%) and human-made elements (Sungai Chongkak 61.5% and Ampang 48.1%). Half of the respondents also perceived cleanliness as normal for Sungai Chongkak (51.9%) and good for Ampang (53.8%). Urgent action needs to be taken by the management on this matter because this situation can adversely affect users' experiences and affect their overall experiences of the parks [17; 7].

The overall results portray the efficiency of management planning [17]. On the other hand, the management of the park need to be aware that the number of respondents perceived the park environment as beautiful is less than 60%. This means that the current

park environments need careful planning and management in the future in order to protect the park beauty. These areas are sufficiently sensitive to visual alteration to warrant special consideration in the strategic and operational training. Otherwise, the park beauty will be degraded and people will not revisit the parks.

5.3 Implications of Landscape Beauty Attributes Degradation to Outdoor Activities

Table 6 shows respondents' perception on the implications faced by the parks if the beauty aspect is being ignored. Most of them perceived that it will give a moderate impact on user satisfaction (59.6%). This is the result of the interaction between a respondent experience and the expectation he/she has about Sungai Chongkak and Ampang recreational parks. This also indicate that visitor satisfaction has close relationships to natural and environmental friendliness of forests recreation parks as noted in other studies [27; 24; 3].

Table 6 shows respondent perceptions on the implications of landscape beauty attributes degradation on outdoor activities in the parks. Most of the respondents (57.7%) perceived that the degradation to the attributes will reduce decrease the visual quality and the number of users. The other half of them perceived that it will increase travel difficulty, reduce user experience and increased restoration costs (55.8%). Half of them also perceived that it will degrade the aesthetics value of the park and users will feel unsafe (53.8%). However, only half (50%) of the respondents perceived that it will give a high impact on user mood. These results have similarity with the findings of [18] study on users' perception towards selected recreational forest landscape maintenance in Selangor, Malaysia. This situation arises because maintenance is highly correlated with maintaining the high quality of landscape beauty. Thus, it is clearly seen from the results obtained that landscapes beauty evidently matter to

people and shape their everyday experiences, social interactions, wellbeing, and quality of life.

TABLE 6 Effects of Degradation of landscape Attributes on Outdoor Activities

Subject	Very High		High		Moderate		Low		Very Low		Mean Score	Std. Deviation
	Total	%	Total	%	Total	%	Total	%	Total	%		
Reduce user satisfaction	1	1.9	17	32.7	31	59.6	3	5.8	-	-	3.31	0.61
Change user mood	5	9.6	26	50.0	21	40.4	-	-	-	-	3.69	0.64
Reduce in number of user	-	-	20	38.5	30	57.7	2	3.8	-	-	3.35	0.56
Users feel unsafe	3	5.8	15	28.8	28	53.8	6	11.5	-	-	3.29	0.75
Decrease visual quality	1	1.9	19	36.5	30	57.7	2	3.8	-	-	3.37	0.60
Reduce user experience	1	1.9	19	36.5	29	55.8	3	5.8	-	-	3.35	0.62
Increased travel difficulty	-	-	20	38.5	29	55.8	3	5.8	-	-	3.33	0.59
Degraded aesthetics	2	3.8	18	34.6	28	53.8	4	7.7	-	-	3.35	0.68
Increased restoration costs	1	1.9	19	36.5	29	55.8	3	5.8	-	-	3.35	0.62

6. Conclusion

Managing the beauty of recreational forest is a very important issue. The efforts should be geared towards appreciating beauty and aesthetic values, architecture, and the overall ecology of forest recreation parks. Furthermore, park management should ensure that the high quality beauty of these parks, are maintained to give great pleasure to both users and tourists. At the same time the efforts also contribute to protect landscape resources as the nation's valuable heritage for the present and future generations.

Natural landscapes are important resources for people. Thus, park managements need to reduce impacts on the resources while at the same time providing quality outdoor recreation opportunities to visitors so that they can have quality outdoor recreation experiences in the park. Managing and keeping recreational forest beautiful will bring environmental, social, and economic benefits. Comprehensive management plan for these sites are vital and should be sensitive to the main factors that contribute to the degradation of natural landscape beauty.

Recreational forest landscape beauty plays an important role in providing good experiences to users when they do outdoor activities in the park. Therefore, it is important to conserve and preserve the existing physical characteristics of the

recreational forests so that they can offer benefits such as escape from busy city life, meditation, education, etc. for those who are currently in need of them and also for future generations. It is also important to have recreational forests that provide harmonize facilities and accommodation with the existing forest environment so that it can enhance the park beauty and convenience to the users. Indirectly, this can enrich their quality of life and wellbeing.

It is suggested that the Peninsular Malaysia Forestry Department creates more recreational forests near to residential areas in urban settings that can provide outdoor activities to the urban populations. Forest managers need to manage, plan and conserve the beauty of recreational forests in providing a positive outdoor activity experiences such as nature learning and jungle trekking.

This study, however, is limited to a small number of respondents who were students of landscape architecture. It is suggested that a similar study be extended to landscape architecture professionals to understand their perception of recreational forest landscape beauty.

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