

SENSORY TRAIL PLANNING AT AYER HITAM FOREST RESERVE, PUCHONG

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DEDICATION

This thesis, I dedicate to

My parents Ibu, ayah

Abang Long, Kak Lina, Abang Amin

members in Batch Merapoh,

all my seniors that had guide me

and all lecturers in Faculty of Forestry

that gather me to gain experience and acknowledgement of being successful in this project.

Thank you a lot of commitment for me to gain knowledge.

ABSTRACT

There are many elements of natural resources with high potential that can be used as sensory stimulator elements along the sensory trail in Ayer Hitam Forest Reserve area. This study was conducted to plan for a sensory trail that can be used as therapeutic recreational activities for low vision and blind people at AHFR. The planning was to establish a sensory element on the existing forest trail that can benefit low vision and blind people to experience outdoor activities in a forest area. A recreation resource inventory was conducted in the sampling point's interval of 10 m (metres) distance, to evaluate and identify the recreation resources that can be translated into sensory trail; soil, water, flora and fauna, meteorology and the trail surrounding. Two proposed routes were accessed and as a result trail A was selected. The study showed that the selected route is suitable for a sensory trail that can enhance the quality of outdoor recreation activities for low vision and blind people.

ABSTRAK

Terdapat banyak elemen sumber asli berpotensi tinggi yang boleh digunakan sebagai elemen perangsang deria di sepanjang "sensory trail" di kawasan Hutan Simpanan Ayer Hitam. Kajian ini dijalankan untuk merancang jejak deria yang boleh digunakan sebagai aktiviti rekreasi terapeutik untuk orang rabun dan orang buta di AHFR. Perancangannya adalah untuk mewujudkan elemen sensori di laluan hutan sedia ada yang boleh memberi menafaat kepada orang rabun dan orang buta untuk merasai aktiviti luar di kawasan hutan. Inventori sumber rekreasi telah dilakukan pada titik pensampelan selang jarak 10 m (meter), untuk menilai dan mengenal pasti sumber rekreasi yang boleh di terjemahkan kepada jejak deria; tanah, air, flora dan fauna, meteorologi dan laluan sekitar jalan. Keputusannya, terdapat dua jalan akses yang telah dicadangkan. Dua laluan yang di cadangkan telah dinilai dan hasilnya, laluan A telah terpilih. Kajian ini menunjukkan bahawa jejak yang terpilih itu adalah sesuai untuk jejak deria yang boleh meningkatkan kualiti aktiviti rekreasi luar bagi orang rabun dan orang buta .

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APPROVAL SHEET

I certify that this research project reported entitled "Sensory Trail Planning at Ayer Hitam Forest Reserve, Puchong" by Fathin Nabilah binti Sharfudin has been examined and approved as partial fulfilment of the requirements for the degree of Bachelor for Park and Recreation Science in the Faculty of Forestry, University Putra Malaysia

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LIST OF ABBREAVATIONS

AHFR	Ayer Hitam Forest Reserve
NZRDA	New Zealand Riding for Disabilities
ADA	America with Disabilities Act
ADAAG	America with Disabilities Act Accessibility Guideline
ABA	Architecture Barrier Acts
FSTAG	Forest Services Trail Accessibility Guidelines
PwDs	Person with Disabilities
SISFEC	Sultan Idris Shah Forest Education Centre
RRI	Recreation Resource Inventory
NGO	Non-Government
SP	Sampling
Μ	Mean Score

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Zainal et al. (1996) stated that in Malaysia the frequency of blindness for all ages was 0.2% and low vision was 2.44%. They are registered as disabilities vision. According to Goh, Abqariyah, Pokharel and Ellwein (2003) stated that the occurrence of blindness among children aged around 7 to 15 years was 0.3%. The Department of Social Welfare Malaysia (2014) stated that there were 531,962 persons with disabilities registered in 2014, and the percentage of vision impair were 9%. This indicates that there is an increase in disability vision in our country.

Terry and Terry (2008) define Therapeutic Recreation as structured leisure activities that utilize and enhances of leisure focus on rebuilding lost leisure skill, identifying new interest or learning new skills as a way to maximizes a person health and well-being. Therapeutic Recreation programme can be organized in the form of outdoor activities, bird-watching, sports and travelling and the outcome is the participant enjoyed the activities stimulated all their senses and feel refresh. The blind trail also known as a sensory trail, comprises a trail that provides adventure and unique stimulation of the other senses such as touch, hear and smell without using an ability vision. In other words, a sensory trail is a purpose-built recreation area where users can explore different sensation while doing their recreational activities (Wairarapa New Zealand Riding for the Disabled Abilities, 2014). From the United Kingdom Sensory Trust stated that sensory trail provides multi-sensory experiences in their journey exploring the designed route. Sensory Trail focuses on journey and movement and therefore, is a direct application to experience orientation skills.

The Ayer Hitam Forest Reserve is a well-known forest reserve for UPM citizen. The forested area was originally 4,207.7 hectares and close gazetted as a forest reserve in 1906. However, the forested area had decreased to 1,176.1 hectares due to rapid development in the surrounding areas (Faculty of Forestry, 2016). The forest reserve is well natured with an abundance of different species of flora and fauna. Therefore, it has natured-based resources such as a river, soil topography and vegetation. The forest is suitable for recreational activities such as hiking, swimming, camping and other activities to experience the natural resources. It is also suitable a place to do a study or research on forestry, forest recreation and wildlife.

1.2 The Disability Needs

The most important things disable people want is to be able to move on their own and being independent. Mobility can improve and stimulate their entire body with feelings of general wellbeing. The disable person would also like to be with the normal person in exercise activities that can improve muscle tone up, metabolism of the body system and gain the enjoyment of the recreation activities. From an individual perspective, being able to walk around the park and at home makes them happy and satisfied.

From the Malaysia Disable People Acts 685, 2008, it is stated that disable people has equal right to access recreational activities. The recreational activities are needs that should be provided to all citizens whether they are normal or disable, for them to live in harmony and enjoy their entire life journey in a leisure time.

1.3 **Problem Statement**

The Ayer Hitam Forest Reserve has not established any *blind trail or sensory trail* for disable user groups because AHFR is under secure control in maintaining the natural resource in the forest and prevent any trespassers from entering the reserved forest.

However, there is an indication that government must provide suitable elements for disable people including blind people to carry out leisure activities together with the normal people at a recreational park, sport area, tourism area and others. A research in planning a blind trail or sensory trail at the nature park using the Concept of Universal Design which complies with the Malaysia Disable People Act 685, 2008 requirement.

1.4 Objectives

The objective of this study was to identify a suitable route for sensory trail within Ayer Hitam Forest Reserve. Specifically, this study was objectifying at:

- a. To identify sensory elements of sensory trail in the Ayer Hitam Forest Reserve that is suitable for people with disability vision.
- b. To know which trail that is safe, unique and suitable for blind people group to appreciate and stimulate their others senses on nature resources.

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