

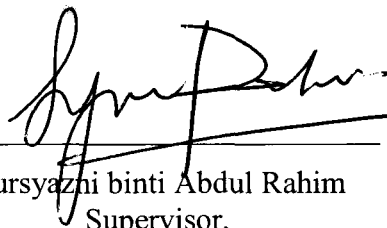
**ENVIRONMENTAL ENRICHMENTS OF CAPTIVE
MALAYAN SUN BEAR (*Helarctos malayanus*)**

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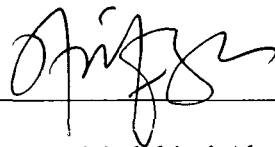
This Final Year Project Report entitled “**Environmental Enrichments of Captive Malayan Sun Bear (*Helarctos malayanus*)**” was submitted by Nur Adibah Nadia binti Salihan, in partial fulfillment of the requirements for the Degree of Bachelor of Science Biology, in the Faculty of Applied Sciences, and was approved by



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ABSTRACT

ENVIRONMENTAL ENRICHMENT OF CAPTIVE MALAYAN SUN BEAR (*Helarctos malayanus*)

Environmental enrichment is needed for every captive animal. Not only it is beneficial for the animal's welfare but it also brings out the species-typical behaviour for that animal. Enrichment works on improving the state and condition of the animal. Environmental enrichment consists of novel objects, feeding enrichment and olfactory enrichment were used in this study. Sun bear is the smallest bear and one of the least studied animals in the world. Bear Complex of Zoo Negara Malaysia kept the Sun bear in captivity and the observation shows little movement of the bear. The value of studying the behaviour of this animal can add the information on how the bears behave in captivity and how it influences the behaviour of this animal. By introducing all three enrichments to the bears, the active behaviour was increased by 12.7% and 15.6%. Stereotypic (stress related behaviour) and inactive behaviour were seen decreasing, 8.8% and 7.3% followed by 8.1% and 4.9% respectively for both bears. Furthermore the interest of the bears was drawn towards novel objects probably as it never encounters such object before. Between the three enrichments, at least one mean value is different which means there is difference in average time for physical contact with enrichment. This can be proven with the existence of ANOVA value $F(2,33) = 70.4$, $p < 0.000$). The investigatory behaviour and exploratory behaviour displayed by the bears after the enrichment and the time spent on playing was increased.