

ENRICHMENT ON BEHAVIOUR OF CAPTIVE
ASIAN SMALL-CLAWED OTTER (*Aonyx Cinerea*) IN
UNDERWATER WORLD LANGKAWI

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**ENRICHMENT ON BEHAVIOUR OF CAPTIVE ASIAN SMALL-CLAWED
OTTER (*Aonyx cinerea*) IN UNDERWATER WORLD LANGKAWI**

By

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**PENGAKUAN DAN PENGESAHAN
LAPORAN PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk '**Enrichment on behaviour of captive Asian small-clawed otter (*Aonyx cinerea*) in Underwater World Langkawi**' oleh **Azwarina Binti Mohd Azmi Ramasamy**, No. Matrik UK **10249** telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Marin sebagai memenuhi sebahagian daripada keperluan memperoleh **Ijazah Sarjana Muda Sains (Biologi Marin)**, Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

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LIST OF ABBREVIATIONS

%	-	percentage
±	-	standard error (S.E)
2 nd	-	second
3 rd	-	third
am	-	<i>ante meridiem</i> (Latin), morning
ANOVA	-	Analysis of Variance
E	-	East
IUCN	-	International Union for Conservation of Nature and Natural Resources
N	-	North
N	-	number of population
n	-	number of sample
No.	-	number
P	-	significant value
pm	-	<i>post meridiem</i> (Latin), evening
UWL	-	Underwater World Langkawi
μ	-	population mean
Σ	-	summation

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ABSTRACT

It is no longer acceptable to put animal in a cage and simply keep it alive. Zoos have a responsibility to learn about the specific needs of each animal they display and provide it with a suitable environment. This study monitors the daily (short-term) behavioural repertoires of species-specific behaviour and the effects of enrichment activities of one adult male Asian small-clawed otter (*Aonyx cinerea*). It was done from early November 2006 to early December 2006 at Underwater World Langkawi. Before, during and after enrichment activities were recorded: (1) the daily behaviour pattern, (2) the changing behaviour on enrichment activities and (3) the abnormal behaviour of the otter. During daily behaviour, the otter spent the highest percentage on stereotype behaviour approximately 24% and the lowest are eat and forage behaviour only 3%. The number of time spent in active category has increased from 87.83 ± 9.09 in baseline to 133 ± 23.3 in post-enrichment. Passive category also increased significantly ($P < 0.05$) where the number of behaviour for each baseline, enrichment and post-enrichment were 89.17 ± 17.36 , 95.33 ± 13.69 and 120.67 ± 16.9 . Feeding behaviour increased significantly ($P < 0.05$) during enrichment activities 51.33 ± 14.11 compare to the both baseline 19.5 ± 13.05 and post-enrichment 22.67 ± 12.86 while stereotype category were significantly decreased from 103.5 ± 15.92 in baseline to 45.17 ± 13.18 in enrichment and 23.67 ± 12.68 in post-enrichment. The enrichment activities appear to have a good effect on the otter. Finally, it can be assume that the reduction or elimination of stereotypies indicates a decrease of abnormal behaviour and an improvement in welfare.