UNIVERSITI TEKNOLOGI MARA

LANDSCAPE DESIGN AND NEIGHBOURHOOD GREEN SPACES AS URBAN WILDLIFE HABITATS IN THE KLANG VALLEY, PENINSULAR MALAYSIA

NIK HANITA BINTI NIK MOHAMAD

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Author's Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

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Name of candidate	:	NIK HANITA BINTI NIK MOHAMAD
Candidate's ID No.	:	2005221697
Programme	:	AP 990 - Doctor of Philosophy in Specialism of the Built Environment
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Signture of Candidate : 

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ABSTRACT

Rapid urbanisation in Malaysia has resulted in the loss and fragmentation of lowland tropical forests. Due to the modification of habitat needs provided by these natural green spaces, the diversity and population of urban wildlife have significantly reduced. The urban parks provided are recognised as an effective urban conservation strategy to mitigate the effects of urbanisation by conserving, enhancing and creating new habitats for urban wildlife. Despite this, the potential of neighbourhood green spaces to function as urban wildlife habitats has never been optimised. Similarly, landscape ecology principles that have been recognised to guide in the successful implementation of wildlife habitat designs are seldom adopted in design efforts in Malaysia.

This thesis addresses the issue of sustainable communities by integrating sociological, ecological and design dimensions. It examines the ecological approaches adopted by a group of landscape architects in their design of neighbourhood green spaces that have successfully culminated in the conservation, enhancement, and/or creation of wildlife habitats. In addition, the attitudes of housing residents in the Klang Valley toward urban wildlife and habitats were also examined. The research, therefore, has sought to investigate through a combination of surveys, case studies, interviews and observations on landscape architects and residents in the Klang Valley.

The findings revealed that the design approaches employed by landscape architects in the design phases have successfully culminated in the conservation, enhancement and/or creation of new wildlife habitats. However, there are different levels of adoption observed in the design phases of site planning, conceptual master planning, planting design and plant selection, and in the construction phase and use of green materials. The findings indicate that landscape architects who collaborated with relevant agencies, and who have the support of their clients were more effective in their design efforts. An overall positive attitude toward urban wildlife was definitely visible. The findings from the residents' attitudes survey strongly demonstrated a selective preference towards common urban wildlife. This research also identified the main constraints impeding landscape architects from adopting landscape ecology principles in their design efforts.

It is envisaged that the findings of this research will contribute to reaffirm the broad definition of ecological landscape design, and contribute to the knowledge of sustainable ecological landscape within the regime of landscape architecture. It is also hoped that it will trigger the emergence of a holistic design approach integrating both sociological and ecological considerations that can mutually benefit both the community and the environment.

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