

ATTRACTION OF BIRD FEEDERS TO AVIAN FAUNA  
AT THE UNIVERSITI AREA OF UNIVERSITI  
MALAYSIA TERENGGANU (UMT)

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## Attraction of bird feeders to avian fauna at the mangrove area of Universiti Malaysia Terengganu (UMT) / Ella Kazahany Kamaruddin.



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**ATTRACTION OF BIRD FEEDERS TO AVIANFAUNA AT THE MANGROVE  
AREA OF UNIVERSITI MALAYSIA TERENGGANU (UMT)**

By  
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A thesis submitted in partial fulfilment of  
the requirements for the award of the degree of  
Bachelor of Applied Science (Biodiversity Conservation and Management)

**DEPARTMENT OF BIOLOGICAL SCIENCES  
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JABATAN SAINS BIOLOGI  
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## PENGAKUAN DAN PENGESAHAN LAPORAN PITA I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: ATTRACTION OF BIRD FEEDERS TO AVIANFAUNA AT THE MANGROVE AREA OF UNIVERSITI MALAYSIA TERENGGANU (UMT) oleh Ella Kazahany bt Kamaruddin, no. Matrik: UK12264 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains Gunaan (Pemuliharaan dan Pengurusan Biodiversiti), Fakulti Sains dan Teknologi, Universiti Terengganu Malaysia.

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## **DECLARATION**

I hereby declare that this thesis entitled ATTRACTION OF BIRD FEEDERS TO AVIANFAUNA AT THE MANGROVE AREA OF UNIVERSITI MALAYSIA TERENGGANU (UMT) is the result of my own research except as cited in the references.

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## ABSTRAK

Penyediaan makanan kepada burung menggunakan bekas makanan burung biasa dipraktikkan. Banyak kajian menggunakan bekas makanan burung telah dijalankan di kawasan taman berbanding di kawasan paya bakau. Tambahan lagi, perubahan alam sekitar contohnya seperti kemusnahan habitat mungkin memberi kesan kepada habitat semulajadi burung. Kajian ini telah dijalankan di kawasan paya bakau Universiti Malaysia Terengganu (UMT) untuk mengenal pasti spesis burung melalui penggunaan bekas makanan dan juga untuk mengkaji kemunasabahan bekas makanan burung sebagai satu kaedah pemuliharaan. Tiga jenis bekas makanan telah digunakan iaitu rumah makanan burung, bekas yang digantung dan bekas di atas tanah. Kajian ini telah dijalankan selama enam bulan dari bulan Ogos 2007 sehingga bulan Januari 2008. Sebanyak 301 pemerhatian daripada sembilan famili dengan 12 spesis burung telah direkodkan dalam kajian ini. Daripada jumlah itu, 11 spesis berstatus residen manakala satu spesis berstatus residen dan migran. Murai Kampung (*Copsychus saularis*) ialah spesis yang paling kerap diperhatikan dengan pemerhatian sebanyak 147 kali (48.84%). Tidak terdapat perbezaan yang nyata antara tiga jenis bekas makanan dengan bilangan pemerhatian setelah diuji dengan Kruskal-Wallis Test ( $H = 0.164$ ,  $p > 0.05$ ). Ancaman pemangsa, aktiviti dan gangguan manusia, kelimpahan makanan di kawasan paya bakau serta jenis dan kualiti makanan yang disediakan telah dikenalpasti mempengaruhi tarikan burung kepada bekas makanan.

## **ABSTRACT**

The provision of food to birds using bird feeders is a common practice. There are many studies conducted using bird feeders in garden areas, but only a few in mangrove areas. Furthermore, changes of environment such as habitat destruction might affect the natural habitat of birds. This study was conducted in the mangrove area of Universiti Malaysia Terengganu (UMT) to identify the bird species through the use of bird feeders and to study the feasibility of bird feeders as a conservation tool. Three types of bird feeders were used namely the bird table, hanging feeder and ground feeder. This study involves six months of samplings from August 2007 to January 2008. A total of 301 sightings from nine families with 12 species were recorded in this study. There were 11 species that are of resident status and one species recorded as resident and migrant. The Magpie Robin (*Copsychus saularis*) was the most frequent species observed at the study area with 147 sightings (48.84%). There were no significant differences between three types of bird feeders with the number of sightings by Kruskal-Wallis Test ( $H = 0.164$ ,  $p > 0.05$ ). Threat of predators, human activities and disturbances, abundance of food in the mangrove and the types and quality of food provided were found to influence the attraction of birds to the bird feeders.