

PREFACE

Singapore, despite having a total area of only 648 sq. kilometre, inherited a rich natural indigenous legacy including over two thousand plant species, eighty mammal species, a hundred bird species, and forty freshwater fish species. The Nature Reserves, comprising Bukit Timah Nature Reserve and Central Catchment Nature Reserve, are situated in the centre of Singapore and constitute the largest remaining naturally vegetated area. Although the biodiversity of Bukit Timah Nature Reserve has been well-studied, prior to the Nature Reserves Survey, documentation relied heavily on *ad hoc*, sporadic, and irregular surveys carried out by individual researchers or groups with interest in specific taxonomic categories. In contrast, the Central Catchment Nature Reserve was poorly surveyed before this project.

By the early 1990s, it was apparent that a concerted effort at scientifically documenting the biodiversity of the largest conservation area in Singapore was long overdue. In 1991, a physical and biological survey of the Nature Reserves was proposed with the following broad targets:

1. Geophysical survey on drainage, topography and soil of the Reserves; and
2. Detailed flora and fauna surveys and identification of specimens.

The Singapore Government financed the physical survey while the cost of the biological survey was supported with funds provided by Lady Yuen Peng McNeice, patron of the Singapore Botanic Gardens and the Cheng Kim Loke Foundation. The project, co-ordinated by the Nature Conservation Branch of the National Parks Board, spanned from 1992 to 1997. It culminated in a seminar held in December 1997 where the participating researchers presented their findings.

New records of at least four mammals, two reptiles and three amphibians and the rediscovery of two reptiles and two amphibians that had not been sighted in the Nature Reserves for the past thirty years, amply confirm that the merits of a co-ordinated systematic survey.

The findings have already been put to good use. A Recreational Masterplan for the Nature Reserves has been formulated taking into account the distribution of sensitive species. Biological databases have been established for the taxonomic groups surveyed during this project and this will form the cornerstone of the proposed National Biodiversity Reference Centre. The information accumulated forms a reliable baseline for monitoring studies. There are many more projects in the pipeline that will utilise the biodiversity data collected, particularly in the field of nature conservation education.

This survey has indeed been a landmark in the history of nature

conservation in Singapore. It has amassed valuable data that should be made more accessible, to academics as well as the general public. To reach a wider audience and to provide a single permanent record for monitoring and future comparisons, much of the data collected during the survey and presented in the Nature Reserves Seminar has been compiled into this special issue of the Gardens' Bulletin.

The work carried out during the Nature Reserves Survey has laid a firm foundation from which Singapore could springboard into nature conservation initiatives in the New Millenium.

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