

Preface

This book is about the ecology of freshwater and terrestrial habitats in Hong Kong. Those wishing to know something of the streams, woodlands, shrublands and grasslands have had few sources to turn to, apart from G.A.C. Herklots' account, *The Hong Kong Countryside* (1951), and S.L. Thrower's handbook, *Hong Kong Country Parks* (1984), both now out of print. Our main aim was to write a book that would go some way towards filling this information gap. We have deliberately omitted the largely urban or agricultural coastal flatlands, because the ecology of these highly-managed areas is fundamentally different from the semi-natural uplands that we cover. Even here, however, we make no claims about completeness of coverage. Inclusion of topics has depended upon our own interests, and the research undertaken by our colleagues and graduate students at The University of Hong Kong. Much has yet to be learned about Hong Kong's terrestrial and freshwater habitats. If this book stimulates further investigations, then our efforts will have been amply rewarded.

A second reason for writing this book was to serve the needs of local conservation. In common with many other people, we are alarmed by the accelerating despoliation and destruction of the Hong Kong countryside. Mere documentation of Hong Kong's ecology will not, on its own, prevent habitat destruction, but ecological knowledge is the basis of sound conservation planning and management. Only if we can inspire others towards conservation action and enhance their knowledge and appreciation of the countryside, will it be possible to preserve some of our heritage.

As we are university teachers, we have written primarily with undergraduates in mind, but the text is not aimed only at those specializing in ecology. School teachers and naturalists should also find this book useful and, we hope, enjoyable. Inevitably, the text is a compromise between providing sufficient depth and detail to interest the trained biologist, and enough basic material to aid the non-specialist. Our success in this regard must be judged by the reader. Despite the fact that some readers may see them as intimidating, we have been unable to avoid the use of scientific names (latin binomials) for organisms. Where there are widely-used names in English, we have adopted them, but have also given the scientific name the first time that a particular plant or animal is mentioned. For the great majority of Hong Kong organisms, however, there is either no English name at all or the scientific name is more widely known.

We emphasize that this is not an ecology textbook and we have not attempted to cover all facets of modern ecology. For that, the reader must look elsewhere. Ecological concepts and theories are introduced only where they are necessary to understand the features of Hong Kong's ecology that we discuss. A glossary has been added at the end of the text to define those technical terms that we have been unable to omit.

While we have tried to avoid arid lists of facts and species names, or the presentation of ecological concepts for their own sake, the theory of evolution by natural selection — the single most important generalization in biology — is employed liberally to provide context and explanation for the phenomena which are described in these pages. The geneticist T.H. Dobzhansky wrote that 'Nothing in evolution makes sense except in the light of ecology'; equally, nothing in ecology makes sense except in the light of evolution. For this reason, we have devoted a few pages of this book to an account of the theory of evolution by natural selection. While there are no surprises for biologists in these pages, we hope that readers unfamiliar with the theory will find the material a useful aid for interpreting ecological patterns and processes in Hong Kong. 'The trouble with biology', evolutionist John Maynard Smith is reputed to have said, 'is that there are too many goddamn facts!' Evolution provides a structure within which these facts become understandable and, to some extent, predictable; that is its importance for ecologists and natural historians.

In sum, this book considers *what* patterns appear when the terrestrial and freshwater habitats of Hong Kong are studied, and discusses *why* these patterns arise. The answers to the second question

depend upon a combination of influences: the evolved features of organisms, present-day interactions between organisms and their environments, and the historical changes that have occurred in Hong Kong over the centuries. Ultimately, we hope to make the ecology of Hong Kong's hills and streams more understandable, and so further the reader's appreciation of these environments.

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