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## 1 Introduction

The book is about the non-forested open ecosystems of the world. In a recent analysis the conservation biologist D. M. B. (2017) estimated that 41.5 per cent of the world's land area was covered by forested ecosystems, with the remaining 58.5 per cent being non-forested (Table 1.1). The non-forested ecosystems include deserts, tundra, grasslands, and open woodlands. These open ecosystems covering more than a quarter of the world's land area, are the subject matter of this book. The book is divided into two parts. The first part, chapters 1–5, deals with the origin of these open ecosystems. The second part, chapters 6–9, deals with the current status of these open ecosystems. The book is intended for ecologists, biogeographers, and conservation biologists. It is also a useful reference for students and researchers in related fields. The book is written in a clear and concise style, and is easy to read. It is a valuable addition to the literature on open ecosystems.

Open ecosystems (abbreviated as OEs in this book) are largely ignored in ecological textbooks. Textbooks tend to focus on forests and have received far more attention in developing ecological concepts. In a survey of papers on tropical biodiversity published from 2004 to 2010, Bond and Parr (2010) noted a ratio of 5:1 papers on tropical forests versus the non-forested tropical biomes (204:40). Since then, this bias has shifted to favour research on open ecosystems and the processes that maintain them, especially in the tropics. This book is intended as a guide to the field of open ecosystems. It covers the history of research on open ecosystems, the processes that maintain them, and the current status of these ecosystems. The book is written in a clear and concise style, and is easy to read. It is a valuable addition to the literature on open ecosystems.