

EXAMINING ECOLOGY

Exercises in Environmental Biology and Conservation

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Examining Ecology: Exercises in Environmental Biology and Conservation provides students and lecturers with real-life examples that demonstrate basic principles. This essential work serves as a means of learning ecological principles by 'doing' ecology, by analysing data, drawing graphs, undertaking practical exercises that simulate field work and more. The book helps students, instructors and those new to the field to learn about the principles of ecology and conservation by completing a series of problems. Prior knowledge of the subject is not assumed; the work requires users to be able to perform simple, largely arithmetic, calculations and draw graphs. Most of the exercises in the book have been used widely by the author's own students over a number of years, and many are based on real data from published research. In a unique benefit not offered by other titles, exercises are succinct (most about 1–2 pages each).

The book is primarily intended as a resource for students, academics and instructors studying, teaching, and working in zoology, ecology, biology, wildlife conservation and management, ecophysiology, behavioural ecology, population biology and ecology, and environmental biology or environmental science. Students will be able to progress through the book attempting each exercise in a logical sequence, beginning with basic principles and working up to more complex exercises. Alternatively, they may wish to focus on specific chapters on specialist areas, e.g., population dynamics. Many of the exercises introduce students to mathematical methods (calculations, use of formulae, drawing of graphs, calculating simple statistics). Other exercises simulate fieldwork projects, allowing users to 'collect' and analyse data which would take considerable time and effort to collect in the field. On completing the main exercises, students may assess their progress by attempting 220 multiple choice questions (MCQs). Answers to the exercises and the MCQs are provided.

Key Features

- Aids with learning about the principles of ecology and conservation biology through succinct, comprehensive real-life examples, problems and exercises
- Features authoritatively and consistently written foundational behavioural ecology and more, as well as abundant and diverse examples
- Functions as a means of learning ecological and conservation-related principles by 'doing', e.g., by analysing data, drawing graphs, undertaking practical exercises that simulate field work, and more
- Features approximately 150 photos and figures almost all of which have been created and produced by the author



Cover image: Bald eagle (*Haliaeetus leucocephalus*)



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