An Introduction to Animal Behaviour is a book you want to pick up and read immediately. The cover shows two Rainbow Lorikeets, one gently preening its mate’s feathers. A beautiful photograph taken by Marian Stamp Dawkins of young cheetahs reclining sleepily begins the introduction in which two important points are made. The first is that animal behaviour is a very popular subject with biologists and I would add with students and the general public; and secondly, experimental studies with animals are now controlled by law in many countries.

The theme throughout the book is based on Tinbergen’s overlapping concepts: the function of behaviour, the evolution of behaviour, causation (including both internal and external factors), and behavioural development of young animals as they mature. The six chapters after the introduction incorporate these concepts through discussions on the development of behaviour, stimuli and communication, motivation and decision-making, learning and memory, and evolution. This information is integrated into the final chapter on social organization.

In Chapter 2 on the development and adaptiveness of behaviour, instinct, learning, genetics and development are explored by posing questions, which encourage the reader to think about various possibilities. The examples used are interesting, and the idea of cultural transmission of behaviour is examined using bird song and chimpanzee societies.

Chapters 3 and 4 create a logical progression from behavioural development to stimuli and communication, and to motivation and decision-making. These chapters show how animals perceive, evaluate and then respond to their environment, which is the crux of Tinbergen’s concept of causation. The section on communication (Chapter 3) and associated signals, both honest and deceptive, is fascinating and well illustrated with examples from a wide range of animal species. Chapter 4 addresses the idea of measuring motivation as an assessment of animal welfare. Topics include methods of measuring how much an animal is motivated to perform a certain behaviour, and what this measurement means in terms of the animal’s welfare. It is fitting that an up-to-date book on animal behaviour presents the idea that behaviour can give advance warning that something is wrong before pathophysiological symptoms appear.

The most exciting question in Chapter 5 (Learning and Memory) is, “Can animals think and reflect on their actions?” The word “cognition” does not appear in the index, so I was pleased when I found this section. The chapter exposes readers to the
possibility that there is consciousness of some sort in animals, and that one of the most powerful arguments for animal consciousness is an evolutionary one.

Chapter 6 discusses Tinbergen’s concept of the evolution of behaviour and the use of molecular phylogeny as an aid to understanding the sequence in which behaviour evolved. In Chapter 7 (Social Organization), the concepts of evolution, learning, cooperation, communication and kinship are drawn together, and their influence on social behaviour is put into context. A short summary of primate social organization serves as an appropriate illustration.

An Introduction to Animal Behaviour is an excellent introduction to basic behavioural concepts and includes key original research as well as very recent work. The book is easy to read, well illustrated, and contains a comprehensive index. As a new student’s introduction to animal behaviour, it is an ideal book, but it also allows more experienced behaviourists to easily catch up with recent work. As a teacher of animal behaviour to veterinary, agricultural and animal science students, I am sure the book will also be a useful resource for the more applied aspects of these courses.

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