THE NEUROETHOLOGY OF PREDATION AND ESCAPE

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To eat and not get eaten is key to animal survival, and the arms race between predators and prey has driven the evolution of many rapid and spectacular behaviours.

This book explores the neural mechanisms controlling predation and escape, where specialisations in *afferent pathways, central circuits, motor control* and *biomechanics* can be traced through to natural animal behaviour.

Each chapter provides an integrated and comparative review of case studies in neuroethology. Ranging from the classic studies on bat biosonar and insect counter-measures, through to fish-eating snails armed with powerful neurotoxins, the book covers a diverse and fascinating range of adaptations. Common principles of biological design and organization are highlighted throughout the text.

The book is aimed at several audiences:

- *for lecturers and students.* This synthesis will help to underpin the curriculum in neuroscience and behavioural biology, especially for courses focusing on neuroethology
- *for postgraduate students.* The sections devoted to your area of specialism will give a flying start to your research reading, while the other chapters offer breadth and insights from comparative studies
- *for academic researchers.* The book will provide a valuable resource and an enjoyable read

Above all, we hope this book will inspire the next generation of neuroethologists.

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