

- Foreword by Theodore H. Bullock, one of the most renowned neuroethologists of all time
- A wide range of examples and detailed case studies illustrate key ideas and concepts
- Describes not only the major findings in each area, but also the experimental approaches used to obtain these results
- Biographical sketches of eminent past and present researchers throughout the text bring the subject to life
- Assumes no background knowledge of animal behavior or neurobiology

Animals often exhibit intriguing and captivating patterns of behavior, from migration and homing, to communication. But how is this behavior controlled? *Behavioral Neurobiology* introduces the fascinating field of neuroethology—the study of the neurobiological processes underlying animal behavior. Written in a lively, easy-to-read style, it examines the key concepts and ideas which underpin this intricate and elegant subject, and describes many of the groundbreaking discoveries that have helped us to unravel the mechanisms behind the behaviors we observe.

Beginning with a look at the history of the study of behavior, from Aristotle to recent breakthroughs and predictions for the future, the book then reviews the ethological and neurobiological concepts that constitute the essential tools of behavioral neurobiology, before moving on to the field of neuroethology itself.

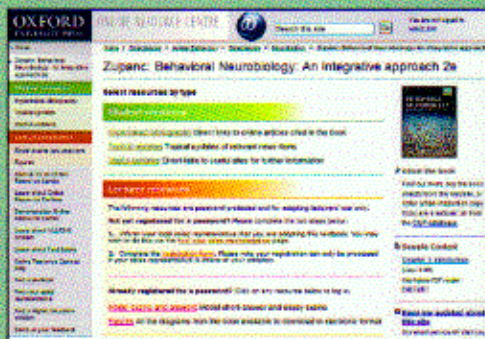
New to this edition

- Expanded coverage of myelin, electrical properties of neurons, chemical and electrical synapses, and ion channels
- A new major section on decision making explores how neural circuits control the generation of alternative types of behavior
- A new chapter on circadian rhythms looks at classical and recent advances in the understanding of the molecular structure and the behavioral function of biological clocks
- New Advanced Topic feature gives you the opportunity to develop critical thinking and reading skills



online resource centre

www.oxfordtextbooks.co.uk/orc/zupanc2e/



For students:

- Topical updates of relevant news items
- Hyperlinked references
- Links to useful websites

For lecturers:

- Model exams and answers
- Figures from the book in electronic format, ready to download

'A useful addition to your bookshelf. Zupanc's book can be used alone or as a supplement just to provide the fun examples of how the nervous system regulates behavior.'

Janine M. Wootton, *The Journal of Undergraduate Neuroscience Education*

'This book successfully fills the demand for a current neuroethology text ... in combination with the material on the supplemental web site, will prove invaluable to instructors teaching this emerging field.'

Shaun D. Cain, *The Journal of Experimental Biology*

Cover images: iStockphoto.com/Hélène Vailée; iStockphoto.com/Olena Druzhynina

OXFORD
UNIVERSITY PRESS

www.oup.com

ISBN 978-0-19-920830-2



9 780199 208302