

Wyatt reviewed in *Mammal News* Summer 2005 **142:16**

Reviewed by Dr Joanne Gurney

This interesting book explores the fascinating and rapidly advancing field of chemical communication between animals. In the 40 years or so since the first pheromones were identified, huge advances have been made in our understanding of the impact of these signals on the behaviour of animals and the book provides an up-to-date and comprehensive review of the current position.

The thirteen chapters of the book guide the reader through what is a complex field of study, beginning with some very useful definitions of chemical signals, their evolution, potential modes of action and their specificity. Throughout the book, questions are asked of the reader that encourages consideration of the broader aspects and up-to-date references for further reading are provided. Chemical signals mediate a wide range of animal behaviour and the author considers their impact on social organisation, recruitment, orientation, finding and choosing mates, and territorial behaviour amongst others. The widespread use and importance of chemical communication is illustrated using a diverse range of animals, such as insects, snakes, marine copepods and mammals, including humans. In some parts of the book, for example the chapters featuring pheromone effects on social organisation and territorial behaviour, mammals dominate the taxa from which examples are drawn, but much of the primary research on chemical signalling has been carried out with invertebrates, particularly insects. Applications of pheromones in agriculture and pest management are also investigated along with the possibility and problems of commercial exploitation.

Pheromone research necessarily requires a multidisciplinary approach by a broad range of biologists, ecologists and chemists. This well structured, nicely illustrated and accessible book will provide a good starting point for researchers and students of any discipline.