

- |                         |                               |
|-------------------------|-------------------------------|
| 1. Record Nr.           | UNISALENTO991000224309707536  |
| Autore                  | Cordero, Franco               |
| Titolo                  | Passi d'arme / Franco Cordero |
| Pubbl/distr/stampa      | Torino : Einaudi, 1979        |
| Descrizione fisica      | 433 p. ; 20 cm                |
| Collana                 | Nuovi coralli ; 245           |
| Disciplina              | 853.914                       |
| Lingua di pubblicazione | Italiano                      |
| Formato                 | Materiale a stampa            |
| Livello bibliografico   | Monografia                    |
- 
- |                         |   |
|-------------------------|---|
| 2. Record Nr.           | UNINA9911020076803321   |
| Autore                  | Lake P. S   |
| Titolo                  | Drought and aquatic ecosystems : effects and responses / / P. Sam Lake  |
| Pubbl/distr/stampa      | Chichester, West Sussex ; ; Hoboken, N.J., : Wiley-Blackwell, 2011  |
| ISBN                    | 1-283-17811-7<br>9786613178114<br>1-4443-4181-2<br>1-4443-4178-2  |
| Descrizione fisica      | 1 online resource (402 p.)  |
| Classificazione         | SCI020000   |
| Disciplina              | 595.76/49   |
| Soggetti                | Dung beetles - Ecology<br>Dung beetles - Evolution  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Machine generated contents note: List of Contributors -- Preface -- 1. Reproductive competition and its impact on the evolution and ecology |

of dung beetles (Leigh W. Simmons and T. James Ridsdill-Smith) -- 1.1 Introduction -- 1.2 Competition for mates and the evolution of morphological diversity -- 1.3 Competition for resources and the evolution of breeding strategies -- 1.4 Ecological consequences of intraspecific and interspecific competition -- 1.5 Conservation -- 1.6 Concluding remarks -- 2. The evolutionary history and diversification of dung beetles (T. Keith Philips) -- 2.1 Introduction -- 2.2 Scarabaeinae diversity and tribal classification issues -- 2.3 Scarabaeine dung beetle phylogenies -- 2.4 The sister clade to the Scarabaeinae -- 2.5 The origin of the dung beetles -- 2.6 The oldest lineages and their geographic origin -- 2.7 Evolution of activity period -- 2.8 The evolution of feeding habits -- 2.9 Evolution of derived alternative lifestyles -- 2.10 Evolution of nidification: dung manipulation strategies -- 2.11 Evolution of nidification: nesting behaviour and subsocial care -- 2.12 Conclusions -- 2.13 Future work / gaps in knowledge -- 3. Male contest competition and the evolution of weapons (Robert Knell) -- 3.1 Introduction -- 3.2 Dung beetle horns as weapons -- 3.3 Functional morphology of horns -- 3.4 Horns as predictors of victory -- 3.5 Are beetle horns simply tools? -- 3.6 The evolution of horns: rollers vs. tunnellers -- 3.7 The evolution of horns: population density -- 3.8 The evolution of horns: sex ratio -- 3.9 Future work -- 4. Sexual selection after mating: the evolutionary consequences of sperm competition and cryptic female choice in onthophagines (Leigh W. Simmons) -- 4.1 Introduction -- 4.2 Sperm competition theory -- 4.3 Evolution of ejaculate expenditure in the genus *Onthophagus* -- 4.4 Evolutionary consequences of variation in ejaculate expenditure -- 4.5 Theoretical models of female choice -- 4.6 Quantitative genetics of ejaculate traits -- 4.7 Empirical evidence for adaptive cryptic female choice in *Onthophagus Taurus* -- 4.8 Conclusions and future directions -- 5. Olfactory ecology (G. D. Tribe and B. V. Burger) -- 5.1 Introduction -- 5.2 Orientation to dung and other resources -- 5.3 Olfactory cues used in mate attraction and mate recognition -- 5.4 Chemical composition of Kheper pheromones -- 5.5 Kairomones -- 5.6 Defensive secretions -- 5.7 Conclusions and future directions -- 6. Explaining phenotypic diversity: The conditional strategy and threshold trait expression (Joseph L. Tomkins and Wade Hazel) -- 6.1 Introduction -- 6.2 The environmental threshold model -- 6.3 Applying the threshold model -- 6.4 Future directions -- 7. Evolution and development: *Onthophagus* beetles and the evolutionary development genetics of innovation, allometry, and plasticity (Armin Moczek) -- 7.1 Introduction -- 7.2 Evo-devo and eco-devo - A brief introduction -- 7.3 *Onthophagus* beetles as an emerging model system in evo-devo and eco-devo -- 7.4 The origin and diversification of novel traits -- 7.5 The regulation and evolution of scaling -- 7.6 The development, evolution, and consequences of phenotypic plasticity -- 7.7 Conclusion -- 8. The evolution of parental care in the onthophagine dung beetles (John Hunt and Clarissa House) -- 8.1 Introduction -- 8.2 Parental care theory -- 8.3 Testing parental care theory using onthophagine dung beetles -- 8.4 Conclusions and future directions -- 9. The visual ecology of dung beetles (Marcus Byrne and Marie Dacke) -- 9.1 Introduction -- 9.2 Insect eye structure -- 9.3 Eye limitations -- 9.4 Dung beetle vision -- 9.5 Visual ecology of flight activity -- 9.6 Sexual selection and eyes -- 9.7 Ball rolling -- 9.8 Conclusions -- 10. The ecological implications of physiological diversity in dung beetles (Steven L. Chown and C. Jaco Klok) -- 10.1 Introduction -- 10.2 Thermoregulation -- 10.3 Thermal tolerance -- 10.4 Water balance -- 10.5 Gas exchange and metabolic rate -- 10.6 Conclusion and prospectus -- 11. Dung beetle populations: structure and

consequences (Tomas Roslin and Heidi Viljanen) -- 11.1 Introduction -- 11.2 Study systems -- 11.3 Range size -- 11.4 Habitat and resource selection -- 11.5 Dung beetle movement -- 11.6 The genetic structure of dung beetle populations -- 11.7 Consequences: spatial population structures and responses to habitat loss -- 11.8 Perspectives -- Biological control: ecosystem functions provided by dung beetles (T. James Ridsdill-Smith and Penny B. Edwards) -- 12.1 Introduction -- 12.2 Function of dung beetles in ecosystems -- 12.3 Dung beetles in pasture habitats -- 12.4 Seasonal occurrence and abundance of native dung beetles in Australia -- 12.5 Distribution and seasonal occurrence of introduced dung beetles in Australia -- 12.6 Long term studies of establishment and abundance -- 12.7 Competitive exclusion -- 12.8 Optimising the benefits of biological control -- 13. Dung beetles as a candidate study taxon in applied biodiversity conservation research (Elizabeth S. Nichols and Toby A. Gardner) -- 13.1 Introduction -- 13.2 Satisfying data needs to inform conservation practice -- 13.3 The role of dung beetles in applied biodiversity research in human-modified landscapes -- 13.4 Dung beetle conservation -- 13.5 Some ways forward -- References -- Index.

---

## Sommario/riassunto

"This book describes the evolutionary and ecological consequences of reproductive competition for scarabaeine dung beetles. As well as giving us insight into the private lives of these fascinating creatures, this book shows how dung beetles can be used as model systems for improving our general understanding of broad evolutionary and ecological processes, and how they generate biological diversity. Over the last few decades we have begun to see further than ever before, with our research efforts yielding new information at all levels of analysis, from whole organism biology to genomics. This book brings together leading researchers who contribute chapters that integrate our current knowledge of phylogenetics and evolution, developmental biology, comparative morphology, physiology, behaviour, and population and community ecology. Dung beetle research is shedding light on the ultimate question of how best to document and conserve the world's biodiversity. The book will be of interest to established researchers, university teachers, research students, conservation biologists, and those wanting to know more about the dung beetle taxon"--

---