



23 April 2009

volume 5 · number 2 · pages 145–288

**Meeting report**

- 145 Biodiversity research sets sail: showcasing the diversity of marine life  
T. J. Webb

**Animal behaviour**

- 148 Tactical reproductive parasitism via larval cannibalism in Peruvian poison frogs  
J. L. Brown, V. Morales & K. Summers
- 152 From coprophagy to predation: a dung beetle that kills millipedes  
T. H. Larsen, A. Lopera, A. Forsyth & F. Génier
- 156 Sexual segregation of pelagic sharks and the potential threat from fisheries  
G. R. Mucientes, N. Queiroz, L. L. Sousa, P. Tarroso & D. W. Sims
- 160 Latent inhibition of predator recognition by embryonic amphibians  
M. C. O. Ferrari & D. P. Chivers
- 163 Swamp sparrows modulate vocal performance in an aggressive context  
A. L. DuBois, S. Nowicki & W. A. Searcy
- 166 Lactating red squirrels experiencing high heat load occupy less insulated nests  
C. U. Guillemette, Q. E. Fletcher, S. Boutin, R. M. Hodges, A. G. McAdam & M. M. Humphries
- 169 Evidence for egg discrimination preceding failed rejection attempts in a small cuckoo host  
A. Antonov, B. G. Stokke, A. Moksnes & E. Røskift
- 172 Calculated reciprocity after all: computation behind token transfers in orang-utans  
V. Dufour, M. Pelé, M. Neumann, B. Thierry & J. Call
- 176 Indirect cues of nest predation risk and avian reproductive decisions  
M. Mönkkönen, J. T. Forsman, T. Kananoja & H. Ylönen
- 179 Oestradiol level and opportunistic mating in women  
K. M. Durante & N. P. Li
- 183 Production and perception of communicatory signals in a noisy environment  
D. A. Luther & R. H. Wiley
- 188 Assessment and decision-making in a Caribbean damselfish: nest-site quality influences prioritization of courtship and brood defence  
J. M. Leese, J. L. Snekser, A. Ganim & M. Itzkowitz
- 191 Interactions between background matching and motion during visual detection can explain why cryptic animals keep still  
C. C. Ioannou & J. Krause

- 194 Free amino acids as phagostimulants in cricket nuptial gifts: support for the 'Candymaker' hypothesis  
S. Warwick, K. Vahed, D. Raubenheimer & S. J. Simpson
- 197 The impact of host aggressiveness on sex allocation by the gregarious parasitoid wasp *Cotesia glomerata* (L.)  
S. Tanaka

**Biomechanics**

- 200 Suction is kid's play: extremely fast suction in newborn seahorses  
S. Van Wassenbergh, G. Roos, A. Genbrugge, H. Leyens, P. Aerts, D. Adriaens & A. Herrel
- 204 Opinion piece. Marine mammals' influence on ecosystem processes affecting fisheries in the Barents Sea is trivial  
P. J. Corkeron
- 207 Tropical deforestation alters hummingbird movement patterns  
A. S. Hadley & M. G. Betts
- 211 Comment. Selective harvesting with equations: comment on 'Should hunting mortality mimic the patterns of natural mortality?'  
R. B. O'Hara
- 213 Invited reply. With or without equations: what are the dos and don'ts of hunting?  
R. Bischof, A. Mysterud & J. E. Swenson

**Evolutionary biology**

- 214 Opinion piece. Darwin's 'one special difficulty': celebrating Darwin 200  
J. M. Herbers
- 218 Moderation of pathogen-induced mortality: the role of density in *Bacillus thuringiensis* virulence  
B. Raymond, R. J. Ellis & M. B. Bonsall
- 221 Convergent evolution of 'creepers' in the Hawaiian honeycreeper radiation  
D. M. Reding, J. T. Foster, H. F. James, H. D. Pratt & R. C. Fleischer
- 225 Electrifying love: electric fish use species-specific discharge for mate recognition  
P. G. D. Feulner, M. Plath, J. Engelmann, F. Kirschbaum & R. Tiedemann
- 229 Flight behaviour attenuates the trade-off between flight capability and reproduction in a wing polymorphic cricket  
P. A. Guerra & G. S. Pollack
- 232 Consistent male-male paternity differences across female genotypes  
C. D. H. Sherman, E. Wapstra & M. Olsson
- 235 Deep-sea mystery solved: astonishing larval transformations and extreme sexual dimorphism unite three fish families  
G. D. Johnson, J. R. Paxton, T. T. Sutton, T. P. Satoh, T. Sado, M. Nishida & M. Miya

- 240 Asymmetric reproductive isolation during simultaneous reciprocal mating in pulmonates  
A. Wiwegweaw, K. Seki, H. Mori & T. Asami

- 244 Sites of evolutionary divergence differ between olfactory and gustatory receptors of *Drosophila*  
A. Gardiner, R. K. Butlin, W. C. Jordan & M. G. Ritchie

**Global change biology**

- 248 Potential impacts of climate change on the winter distribution of Afro-Palaearctic migrant passerines  
M. Barbet-Massin, B. A. Walther, W. Thuiller, C. Rahbek & F. Jiguet
- 252 Extreme weather events influence dispersal of naive northern fur seals  
M.-A. Lea, D. Johnson, R. Ream, J. Sterling, S. Melin & T. Gelatt

**Marine biology**

- 258 Marine hybrid hotspot at Indo-Pacific biogeographic border  
J.-P. A. Hobbs, A. J. Frisch, G. R. Allen & L. Van Herwerden
- 262 Parental effects on offspring life histories: when are they important?  
J. M. Donelson, P. L. Munday & M. I. McCormick
- 266 Comment. A rebuttal to the claim natural beaches confer fitness benefits to nesting marine turtles  
M. M. P. B. Fuentes & M. Hamann
- 268 Invited reply. Natural beaches produce more hatchling marine turtles than developed beaches, despite regional differences in hatching success  
D. A. Pike

**Neurobiology**

- 270 The movement of motion-defined contours can bias perceived position  
S. Durant & J. M. Zanker

**Physiology**

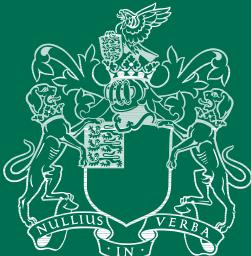
- 274 Feeding muscles scale differently from swimming muscles in sunfish (Centrarchidae)  
A. M. Carroll, A. M. Ambrose, T. A. Anderson & D. J. Coughlin

**Population ecology**

- 278 Costs of reproduction in a long-lived bird: large clutch size is associated with low survival in the presence of a highly virulent disease  
S. Descamps, H. G. Gilchrist, J. Béty, E. I. Buttler & M. R. Forbes
- 282 Relationships between population size and pollen fates in a moth-pollinated orchid  
S. D. Johnson, E. Torninger & J. Ågren

**Population genetics**

- 286 Genetic compatibility and hatching success in the sea lamprey (*Petromyzon marinus*)  
R. Rodríguez-Muñoz & T. Tregenza



Founded in 1660, the Royal Society is the independent scientific academy of the UK, dedicated to promoting excellence in science

Registered Charity No 207043



FirstCite®  
e-publishing

[rsbl.royalsocietypublishing.org](http://rsbl.royalsocietypublishing.org)

Published in Great Britain by the Royal Society,  
6–9 Carlton House Terrace, London SW1Y 5AG