



Meeting report

- 431 **Social insects inspire human design**
C. T. Holbrook, R. M. Clark, D. Moore,
R. P. Overson, C. A. Penick & A. A. Smith
- 434 **Body-size distributions and size-spectra: universal indicators of ecological status?**
O. L. Petchey & A. Belgrano
- 438 **Emerging diseases in Chiroptera: why bats?**
G. Wibbelt, M. S. Moore, T. Schountz & C. C. Voigt

Animal behaviour

- 441 **Social calls used by a leaf-roosting bat to signal location**
G. Chaverri, E. H. Gillam & M. J. Vonhof
- 445 **Experimental evidence that sentinel behaviour is affected by risk**
A. R. Ridley, N. J. Raihani & M. B. V. Bell
- 449 ***Notonecta* exhibit threat-sensitive, predator-induced dispersal**
S. J. McCauley & L. Rowe
- 453 **Can eggs in a cavity be a female secondary sexual signal? Male nest visits and modelling of egg visual discrimination in blue tits**
M.-J. Holveck, C. Doutrelant, R. Guerreiro, P. Perret, D. Gomez & A. Grégoire
- 458 **Anthropogenic noise affects risk assessment and attention: the distracted prey hypothesis**
A. A. Y.-H. Chan, P. Giraldo-Perez, S. Smith & D. T. Blumstein
- 462 **Sickness behaviour acting as an evolutionary trap? Male house finches preferentially feed near diseased conspecifics**
K. M. Bouwman & D. M. Hawley
- 466 **Conformist learning in nine-spined sticklebacks' foraging decisions**
T. W. Pike & K. N. Laland
- 469 **Efficiency of coding in macaque vocal communication**
S. Semple, M. J. Hsu & G. Agoramoorthy
- 472 **Relaxed predation risk reduces but does not eliminate sociality in birds**
G. Beauchamp
- 475 **The presence of an avian co-forager reduces vigilance in a cooperative mammal**
L. L. Sharpe, A. S. Joustra & M. I. Cherry
- 478 **Body fat influences departure from stopover sites in migratory birds: evidence from whole-island telemetry**
W. Goymann, F. Spina, A. Ferri & L. Fusani

Biomechanics

- 482 **Gradients of strain and strain rate in the hollow muscular organs of soft-bodied animals**
J. T. Thompson, K. R. Taylor & C. Gentile
- 486 **Do toads have a jump on how far they hop? Pre-landing activity timing and intensity in forelimb muscles of hopping *Bufo marinus***
G. B. Gillis, T. Akella & R. Gunaratne

Community ecology

- 490 **More individuals but fewer species: testing the 'more individuals hypothesis' in a diverse tropical fauna**
T. P. McGlynn, M. D. Weiser & R. R. Dunn
- 494 **Cheaters in mutualism networks**
J. Genini, L. Patricia C. Morellato, P. R. Guimarães Jr & J. M. Olesen

Conservation biology

- 498 **Marine no-take zone rapidly benefits endangered penguin**
L. Pichegru, D. Grémillet, R. J. M. Crawford & P. G. Ryan

Evolutionary biology

- 502 **Opinion piece. Landscape evolutionary genomics**
D. B. Lowry
- 505 **Evolution of virulence when transmission occurs before disease**
E. E. Osnas & A. P. Dobson
- 509 **Air-breathing adaptation in a marine Devonian lungfish**
A. M. Clement & J. A. Long
- 513 **Sperm midpiece length predicts sperm swimming velocity in house mice**
R. C. Firman & L. W. Simmons

Evolutionary developmental biology

- 517 **Development of the pseudthumb in frogs**
M. Tokita & N. Iwai
- 521 **Fluctuating feather asymmetry in relation to corticosterone levels is sex-dependent in Eurasian treecreeper (*Certhia familiaris*) nestlings**
S. Helle, P. Suorsa, E. Huhta & H. Hakkarainen
- 525 **Alarm substance from adult zebrafish alters early embryonic development in offspring**
S. Mourabit, S. D. Rundle, J. I. Spicer & K. A. Sloman
- 529 **Comment. Palaeobiology of the Cretaceous bird *Confuciusornis*: a comment on Peters & Peters (2009)**
L. M. Chiappe, J. Marugán-Lobón & A. Chinsamy
- 531 **Invited reply. Sexual size dimorphism is the most consistent explanation for the body size spectrum of *Confuciusornis sanctus***
W. S. Peters & D. S. Peters

Marine biology

- 533 **Predatory fishes affect trophic cascades and apparent competition in temperate reefs**
A. Frid & J. Marliave

- 537 **Double cones are used for colour discrimination in the reef fish, *Rhinecanthus aculeatus***
V. Pignatelli, C. Champ, J. Marshall & M. Vorobyev

Neurobiology

- 540 **Selective prefrontal cortex responses to joint attention in early infancy**
T. Grossmann & M. H. Johnson

Palaeontology

- 544 **Links between global taxonomic diversity, ecological diversity and the expansion of vertebrates on land**
S. Sahney, M. J. Benton & P. A. Ferry

Pathogen biology

- 548 **Temporal and spatial patterns of sea lice levels on sea trout in western Scotland in relation to fish farm production cycles**
S. J. Middlemas, J. A. Raffell, D. W. Hay, M. Hatton-Ellis & J. D. Armstrong
- 552 **Selection on innate immunity and body condition in Florida scrub-jays throughout an epidemic**
T. E. Wilcoxon, R. K. Boughton & S. J. Schoech
- 555 **Taqman real-time quantitative PCR for identification of western flower thrip (*Frankliniella occidentalis*) for plant quarantine**
K. S. Huang, S. E. Lee, Y. Yeh, G. S. Shen, E. Mei & C. M. Chang

Phylogeny

- 558 **Blindsnake evolutionary tree reveals long history on Gondwana**
N. Vidal, J. Marin, M. Morini, S. Donnellan, W. R. Branch, R. Thomas, M. Vences, A. Wynn, C. Cruaud & S. B. Hedges

Physiology

- 562 **Diet effects on honeybee immunocompetence**
C. Alaux, F. Ducloz, D. Crauser & Y. Le Conte

Population ecology

- 566 **Spatially mismatched trophic dynamics: cyclically outbreaking geometrids and their larval parasitoids**
S. B. Hagen, J. U. Jepsen, T. Schott & R. A. Ims
- 570 **Sexual dimorphism for water balance mechanisms in montane populations of *Drosophila kikkawai***
R. Parkash, V. Sharma & B. Kalra



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

Registered Charity No 207043



rsbl.royalsocietypublishing.org

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