Review articles
The validity and value of inclusive fitness theory 3313
A. F. G. Bourke

Transitional forms between the three domains of life and evolutionary implications 3321
E. C. Reynolds & D. P. Devis

Research articles
Extremely long-distance seed dispersal by an overfished Amazonian frugivore 3329

Genomic sweep and potential genetic rescue during limiting environmental conditions in an isolated wolf population 3336

Frugivore loss limits recruitment of large-seeded trees 3345
O. M. Wotton & D. Kelly

Hibernation is associated with increased survival and the evolution of slow life histories among mammals 3355
C. Turbill, C. Bieber & T. Ruf

Invasive predatory crayfish do not trigger inducible defences in tadpoles 3364
I. Gomez-Mestre & C. Díaz-Paniagua

Sea urchin tube feet are photosensory organs that express a rhodopsin-like opsin and PAX6 3371
M. P. Czech, R. L. Carolien, S. A. Böttger, M. M. Barry & C. W. Walker

Migration by soaring or flapping: numerical atmospheric simulations reveal that turbulence kinetic energy dictates bee-eater flight mode 3380
N. Sapir, N. Horvitz, M. Wilklick, R. Avisar, Y. Mahner & R. Nathan

Parasitoid diversity reduces the variability in pest control services across time on farms 3387
S. Macfadyen, P. G. Craze, R. Nazerian, K. van Achterberg & J. Memmott

Comparison of cytotoxic T lymphocyte efficacy in acute and persistent lymphocytic choriomeningitis virus infection 3395
F. Graf, K. Richter, A. Overhuis & R. R. Rees

Bell miner provisioning calls are more similar among relatives and are used by helpers at the nest to bias their effort towards kin 3403
P. C. MacDonald & J. Wright

Temporal variation in temperature determines disease spread and maintenance in Paramesocicromucic populations 3412
A. B. Duncan, S. Fellous & O. Katz

Natural ‘poor start’ does not increase mortality over the lifetime 3421
H. Dreummond, C. Rodriguez & D. Oro

Costly punishment prevails in intergroup conflict 3428
L. A. Reti, T. Mages & M. Pautrin

Rainfall-induced changes in food availability modify the spring departure programme of a migratory bird 3437
C. E. Studt & P. P. Martin

Expansion of mass-flowering crops leads to transient pollinator dilution and reduced wild plant pollination 3444
A. Holzschuh, C. D. Dormann, T. Tichanock & B. Stefan-Dewenter

Familiarity affects the assessment of female facial signals of fertility by free-ranging male rhesus macaques 3452

A late-surviving basal theropod dinosaur from the latest Triassic of North America 3459
H.-D. Sues, S. J. Niskitt, D. S. Berman & A. C. Henrick