Proc. R. Soc. B | vol. 277  no. 1686  pp. 1299–1456  | 7 May 2010

7 May 2010
volume 277 · number 1686 · pages 1299–1456

Review articles
Resolving phylogenetic incongruence to articulate homology and phenotypic evolution: a case study from Nematoda
E. J. Ragsdale & J. G. Baldwin

Research articles
Explosive evisceration and functional morphology of the duck penis supports sexual conflict in waterfowl genitalia
P. L. R. Brennan, C. J. Clark & B. O. Prum

Eyes are on us, but nobody cares: are eye cues relevant for strong reciprocity?
E. Hof & K. Schneider

The energetic basis of acoustic communication
J. F. Gibb & A. G. Opie

Irradiance governs exploitation of fungi: fine-tuning of carbon gain by two partially myco-heterotrophic orchids
R. Prins, I. K. U. Adam & G. Gebauer

Aggression, segregation and stability in a dominance hierarchy
T. A. Ang & A. Manica

Sexual conflict and the gender load: correlated evolution between population fitness and sexual dimorphism in
seed beetles
G. A. Perpil & M. Toda

Decline in top predator body size and changing climate alter trophic structure in an oceanic ecosystem

How rugged individualists enable one another to find food and shelter: field experiments with tropical hermit crabs
M. E. Laidre

Microscale laser surgery reveals adaptive function of male intromittent genitalia
M. Frøk & A. Rashed

Tool use by wild New Caledonian crows Corvus moneduloides at natural foraging sites

Pattern mimicry of host eggs by the common cuckoo, as seen through a bird’s eye
M. C. Stoddard & M. Stevens

Behavioural consequences of sensory plasticity in guppies

Systemic factors dominate mammal protein evolution
A. E. Vinogradov

The direct effects of increasing CO2 and temperature on non-calciﬁying organisms: increasing the potential for
phase shifts in kelp forests
S. D. Cornell & B. D. Russell

A mathematical model of exposure of non-target Lepidoptera to Bt maize pollen expressing Cry1Ab within Europe

Learning your own strength: winner and loser effects should change with age and experience
T. W. Fawcett & R. A. Johnstone

Positive feedback in the transition from sexual reproduction to parthenogenesis
T. Schwaner, S. Vollrath, J. Dufﬁn & B. J. Crespi

Even small SNP clusters are non-randomly distributed: is this evidence of mutational non-independence?
W. Amos

The role of extinction in large-scale diversity-stability relationships
C. Simpson & W. Kiessling

To see further with the Royal Society in 2010 – celebrate 350 years