



7 January 2008

volume 275 · number 1630 · pages 1–115

<b>Editorial</b>	1
W. G. Hill & M. T. Siva-Jothy	
<b>The evolution of contact-dependent inhibition in non-growing populations of <i>Escherichia coli</i></b>	3
M. Lemonnier, B. R. Levin, T. Romeo, K. Garner, M.-R. Baquero, J. Mercante, E. Lemichez, F. Baquero & J. Blázquez	
<b>Geometry and self-righting of turtles</b>	11
G. Domokos & P. L. Várkonyi	
<b>Epidemiological consequences of an incursion of highly pathogenic H5N1 avian influenza into the British poultry flock</b>	19
K. J. Sharkey, R. G. Bowers, K. L. Morgan, S. E. Robinson & R. M. Christley	
<b>Maternal investment tactics in superb fairy-wrens</b>	29
A. F. Russell, N. E. Langmore, J. L. Gardner & R. M. Kilner	
<b>Gene expression underlying adaptive variation in <i>Heliconius</i> wing patterns: non-modular regulation of overlapping <i>cinnabar</i> and <i>vermillion</i> prepatterns</b>	37
R. D. Reed, W. O. McMillan & L. M. Nagy	
<b>A long-term association between global temperature and biodiversity, origination and extinction in the fossil record</b>	47
P. J. Mayhew, G. B. Jenkins & T. G. Benton	
<b>Mountain chickadees discriminate between potential cache pilferers and non-pilferers</b>	55
V. V. Pravosudov	
<b>Evidence for adaptive design in human gaze preference</b>	63
C. A. Conway, B. C. Jones, L. M. DeBruine & A. C. Little	
<b>The pace of morphological change: historical transformation of skull shape in St Bernard dogs</b>	71
A. G. Drake & Chr. P. Klingenberg	
<b>Unexpected male choosiness for mates in a spider</b>	77
M. C. Bel-Venner, S. Dray, D. Allainé, F. Menu & S. Venner	
<b>The importance of habitat and life history to extinction risk in sharks, skates, rays and chimaeras</b>	83
V. B. García, L. O. Lucifora & R. A. Myers	
<b>Robustness and evolvability: a paradox resolved</b>	91
A. Wagner	
<b>Scents and scents-ability: pollution disrupts chemical social recognition and shoaling in fish</b>	101
A. J. W. Ward, A. J. Duff, J. S. Horsfall & S. Currie	
<b>Modelling studies to estimate the prevalence of foot-and-mouth disease carriers after reactive vaccination</b>	107
M. E. Arnold, D. J. Paton, E. Ryan, S. J. Cox & J. W. Wilesmith	



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

Registered Charity No 207043



[www.journals.royalsociety.org](http://www.journals.royalsociety.org)

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