Contents

Volume 215 (17) September 2012



Cover: A water droplet sits on the superhydrophobic toe of a Tokay gecko (*Gekko gecko*). While many studies have focused on the adhesive properties of the gecko's toe, adhesion in the presence of water has not received as much attention. Stark, Sullivan and Niewiarowski (pp. 3080–3086) report that the anti-wetting properties of the gecko toe allow the toe pads to retain their adhesive capabilities but only under certain circumstances. In other cases, the adhesive properties of the gecko significantly decrease to the point that the gecko can no longer support its body weight. Photo credit: A. Y. Stark, S. Sethi.

▼Inside JEB

How geckos cope with wet feet i; Loggerhead turtles have low frequency hearing i; Canaries can't cheat on sexy A syllables ii; Approaching bats reduce volume exponentially iii

Outside JEB

Drugged bees go missing iv; Practice makes perfect, even if it doesn't look like it v; For crayfish claws, size isn't everything v; Camera-laden leatherbacks document feeding vi

News

Knight, K. Woodstock 2012: a homage to Chris Wood. 2933-2934

Review

Fenton, M. B., Faure, P. A. and Ratcliffe, J. M. Evolution of high duty cycle echolocation in bats. 2935-2944

Methods & Techniques

Seabrooke, S. and O'Donnell, M. J. Determining rates of epithelial solute transport by optical measurement of fluorochrome concentration gradients in the unstirred layer. 2945-2949

Research Articles

➤Suthers, R. A., Vallet, E. and Kreutzer, M. Bilateral coordination and the motor basis of female preference for sexual signals in canary song. 2950-2959

Mukherjee, N., Kannan, N. N., Yadav, P. and Sharma, V. K. A model based on oscillatory threshold and build-up of a developmental substance explains gating of adult emergence in *Drosophila melanogaster*. 2960-2968

Pérez-Maceira, J. J., Mancebo, M. J. and Aldegunde, M. Serotonin-induced brain glycogenolysis in rainbow trout (*Oncorhynchus mykiss*). 2969-2979

Harrison, S. M., Whitton, R. C., King, M., Haussler, K. K., Kawcak, C. E., Stover, S. M. and Pandy, M. G. Forelimb muscle activity during equine locomotion. 2980-2991

Oellermann, M., Pörtner, H. O. and Mark, F. C. Mitochondrial dynamics underlying thermal plasticity of cuttlefish (*Sepia officinalis*) hearts. 2992-3000

► Martin, K. J., Alessi, S. C., Gaspard, J. C., Tucker, A. D., Bauer, G. B. and Mann, D. A. Underwater hearing in the loggerhead turtle (*Caretta caretta*): a comparison of behavioral and auditory evoked potential audiograms. 3001-3009

Jamieson, A. J., Fujii, T. and Priede, I. G. Locomotory activity and feeding strategy of the hadal munnopsid isopod *Rectisura* cf. *herculea* (Crustacea: Asellota) in the Japan Trench. 3010-3017

Koehler, C., Liang, Z., Gaston, Z., Wan, H. and Dong, H. 3D reconstruction and analysis of wing deformation in free-flying dragonflies. 3018-3027

Crisp, K. M., Gallagher, B. R. and Mesce, K. A. Mechanisms contributing to the dopamine induction of crawl-like bursting in leech motoneurons. 3028-3036

Uzsák, A. and Schal, C. Differential physiological responses of the German cockroach to social interactions during the ovarian cycle. 3037-3044

►Nørum, U., Brinkløv, S. and Surlykke, A. New model for gain control of signal intensity to object distance in echolocating bats. 3045-3054

Li, S., Wang, D., Wang, K., Taylor, E. A., Cros, E., Shi, W., Wang, Z., Fang, L., Chen, Y. and Kong, F. Evoked-potential audiogram of an Indo-Pacific humpback dolphin (*Sousa chinensis*). 3055-3063

Murphy, C., Kelliher, D. and Davenport, J. Shape and material characteristics of the trachea in the leatherback sea turtle promote progressive collapse and reinflation during dives. 3064-3071

Müller, R., Ernst, M. and Blickhan, R. Leg adjustments during running across visible and camouflaged incidental changes in ground level. 3072-3079

► Stark, A. Y., Sullivan, T. W. and Niewiarowski, P. H. The effect of surface water and wetting on gecko adhesion. 3080-3086

Maekawa, S., Iemura, H., Kuramochi, Y., Nogawa-Kosaka, N., Nishikawa, H., Okui, T., Aizawa, Y. and Kato, T. Hepatic confinement of newly produced erythrocytes caused by low-temperature exposure in *Xenopus laevis*. 3087-3095

Krishnan, A., Prabhakar, S., Sudarsan, S. and Sane, S. P. The neural mechanisms of antennal positioning in flying moths. 3096-3105

Herrel, A. and Bonneaud, C. Trade-offs between burst performance and maximal exertion capacity in a wild amphibian, *Xenopus tropicalis*. 3106-3111

Conde-Sieira, M., López Patiño, M. A., Míguez, J. M. and Soengas, J. L. Glucosensing capacity in rainbow trout liver displays day—night variations possibly related to melatonin action. 3112-3119

Ma, H., Cui, H., Ma, C. and Ma, L. High genetic diversity and low differentiation in mud crab (*Scylla paramamosain*) along the southeastern coast of China revealed by microsatellite markers. 3120-3125

Zani, P. A., Irwin, J. T., Rollyson, M. E., Counihan, J. L., Healas, S. D., Lloyd, E. K., Kojanis, L. C., Fried, B. and Sherma, J. Glycogen, not dehydration or lipids, limits winter survival of side-blotched lizards (*Uta stansburiana*). 3126-3134

►Article featured 'Inside JEB'

The Company of Biologists Limited, Bidder Building, 140 Cowley Road, Cambridge CB4 0DL, UK ISSN 0022-0949 (Print), ISSN 1477-9145 (On-line) © 2012. Published by The Company of Biologists Ltd

http://jeb.biologists.org