



Cover: Whales are at risk from entanglement with fishing gear, as shown by this North Atlantic right whale (top), whose baleen can be seen protruding outside of its mouth. Biomechanical investigations by Werth et al. (jeb189233) demonstrate the remarkable flexibility of this keratinous oral tissue, owing to its arrangement of internal horn tubules (seen in cross-section; bottom left) and revealed by flow tank experiments (bottom right). The extent to which baleen can resume its shape after entanglement may help determine the fate of this critically endangered species. Photo credits: Center for Coastal Studies (NOAA permit 932-1489; whale); Diego Rita Espada (cross-section); Alexander Werth (baleen plates).

INSIDE JEB

Side-swimming plankton snail flaps shell like a fin

Knight, K.

jeb194746

Porpoises have higher metabolic rates than thought to keep warm in cold water

Knight, K.

jeb194712

Mucky guillemot eggs are definitely not self-cleaning

Knight, K.

jeb194720

OUTSIDE JEB

Birds and bats: masters of hovering

Stawski, C.

jeb170282

Some like it warm – usually women

Regan, M. D.

jeb170290

Serotonin: octopus love potion?

Nadler, L. E.

jeb193698

Size slows animals' response to surprise

Stenum, J.

jeb170233

A breath of fresh air for lungless salamanders

Joyce, W.

jeb170308

COMMENTARY

Genetic accommodation and the role of ancestral plasticity in the evolution of insect eusociality

Jones, B. M. and Robinson, G. E.

jeb153163

SHORT COMMUNICATIONS

Using a shell as a wing: pairing of dissimilar appendages in atlantiid heteropod swimming

Karakas, F., D'Oliveira, D., Maas, A. E. and Murphy, D. W.

jeb192062

Water pH limits extracellular but not intracellular pH compensation in the CO₂-tolerant freshwater fish *Pangasianodon hypophthalmus*

Sackville, M. A., Shartau, R. B., Damsgaard, C., Hvas, M., Phuong, L. M., Wang, T., Bayley, M., Thanh Huong, D. T., Phuong, N. T. and Brauner, C. J.

jeb190413

Glucocorticoid–temperature association is shaped by foraging costs in individual zebra finches

Jimeno, B., Hau, M. and Verhulst, S.

jeb187880

RESEARCH ARTICLES

High field metabolic rates of wild harbour porpoises

Rojano-Doñate, L., McDonald, B. I., Wisniewska, D. M., Johnson, M., Teilmann, J., Wahlberg, M., Højer-Kristensen, J. and Madsen, P. T.

jeb185827

Innate visual preferences and behavioral flexibility in *Drosophila*
Grabowska, M. J., Steeves, J., Alpay, J., Van De Poll, M., Ertekin, D. and van Swinderen, B.

jeb185918

An attempt to select non-genetic variation in resistance to starvation and reduced chill coma recovery time in *Drosophila melanogaster*

Menezes, B. F., Salces-Ortiz, J., Muller, H., Burlet, N., Martinez, S., Fablet, M. and Vieira, C.

jeb186254

Distinct metabolic adjustments arise from acclimation to constant hypoxia and intermittent hypoxia in estuarine killifish (*Fundulus heteroclitus*)

Borowiec, B. G., McClelland, G. B., Rees, B. B. and Scott, G. R.

jeb190900

Deciphering function of the pulmonary arterial sphincters in loggerhead sea turtles (*Caretta caretta*)

García-Párraga, D., Lorenzo, T., Wang, T., Ortiz, J.-L., Ortega, J., Crespo-Picazo, J.-L., Cortijo, J. and Fahlman, A.

jeb179820

Bite force and cranial bone strain in four species of lizards

Ross, C. F., Porro, L. B., Herrel, A., Evans, S. E. and Fagan, M. J.

jeb180240

How do baleen whales stow their filter? A comparative biomechanical analysis of baleen bending

Werth, A. J., Rita, D., Rosario, M. V., Moore, M. J. and Sforino, T. L.

jeb189233

Vultures respond to challenges of near-ground thermal soaring by varying bank angle

Williams, H. J., Duriez, O., Holton, M. D., Dell'Osso, G., Wilson, R. P. and Shepard, E. L. C.

jeb174995

Hydrodynamics of linear acceleration in bluegill sunfish, *Lepomis macrochirus*

Wise, T. N., Schwalbe, M. A. B. and Tytell, E. D.

jeb190892

High accuracy at low frequency: detailed behavioural classification from accelerometer data

Tatler, J., Cassey, P. and Prowse, T. A. A.

jeb184085

MicroRNAs regulate survival in oxygen-deprived environments

English, S. G., Hadj-Moussa, H. and Storey, K. B.

jeb190579

Spectral sensitivity in ray-finned fishes: diversity, ecology and shared descent

Schweikert, L. E., Fitak, R. R., Caves, E. M., Sutton, T. T. and Johnsen, S.

jeb189761

Common guillemot (*Uria aalge*) eggs are not self-cleaning

Jackson, D., Thompson, J. E., Hemmings, N. and Birkhead, T. R.

jeb188466

Adaptive frequency shifts of echolocation sounds in *Miniopterus fuliginosus* according to the frequency-modulated pattern of jamming sounds

Maitani, Y., Hase, K., Kobayasi, K. I. and Hiryu, S.

jeb188565

Latency for facultative expression of male-typical courtship behaviour by female bluehead wrasses depends on social rank: the 'priming/gating' hypothesis

Price, S. M., Luong, K., Bell, R. S. and Rose, G. J.

jeb180901

Evidence that Rh proteins in the anal papillae of the freshwater mosquito *Aedes aegypti* are involved in the regulation of acid-base balance in elevated salt and ammonia environments

Durant, A. C. and Donini, A.

jeb186866

High experience levels delay recruitment but promote simultaneous time-memories in honey bee foragers

Van Nest, B. N., Otto, M. W. and Moore, D.

jeb187336

Potential role of the anterior lateral line in sound localization in toadfish (*Opsanus tau*)

Cardinal, E. A., Radford, C. A. and Mensinger, A. F.

jeb180679

Endotoxin rapidly desensitizes the gonads to kisspeptin-induced luteinizing hormone release in male Siberian hamsters (*Phodopus sungorus*)

Long, K. L. P., Bailey, A. M., Greives, T. J., Legan, S. J. and Demas, G. E.

jeb185504

CORRECTION

Correction: Size-dependent physiological responses of the branching coral *Pocillopora verrucosa* to elevated temperature and P_{CO_2} (doi:10.1242/jeb.146381)

Edmunds, P. J. and Burgess, S. C.

jeb194753