



Cover: Dovekies rely on flying and diving to find and capture prey. At a breeding colony in East Greenland, Ste-Marie et al. (jeb243252) used accelerometers and the doubly labelled water method to model the energetic costs of both locomotory behaviours in this small Arctic seabird. Compared with the cost of flight, dive costs were found to be particularly high in this species, probably as a result of high non-mechanical costs such as those associated with thermoregulation. Photo credit: Eric Ste-Marie.

INSIDE JEB

Mitochondria directly boost copepods' rosy hue

Knight, K.

jeb244644

Desert grassland scorpions might navigate by touch and taste

Knight, K.

jeb244588

Different tubular lysosome strategies of male and hermaphrodite

C. elegans

Knight, K.

jeb244612

Muscle testosterone supply keeps male birds topped up out of season

Knight, K.

jeb244563

High-altitude deer mice depend on blood fuel supply for warmth

Knight, K.

jeb244545

REVIEW

Hearing without a tympanic ear

Capshaw, G., Christensen-Dalsgaard, J. and Carr, C. E.

jeb244130

SHORT COMMUNICATIONS

Siberian hamsters nonresponding to short photoperiod use fasting-induced torpor

Przybylska-Piech, A. S. and Jefimow, M.

jeb244222

Reproductive tradeoffs govern sexually dimorphic tubular lysosome induction in *Caenorhabditis elegans*

Ramos, C. D., Bohnert, K. A. and Johnson, A. E.

jeb244282

METHODS & TECHNIQUES

A brainstem preparation allowing simultaneous access to respiratory motor output and cellular properties of motoneurons in American bullfrogs

do Amaral-Silva, L. and Santin, J. M.

jeb244079

RESEARCH ARTICLES

Chemical manipulation of mitochondrial function affects metabolism of red carotenoids in a marine copepod (*Tigriopus californicus*)

Powers, M. J., Baty, J. A., Dinga, A. M., Mao, J. H. and Hill, G. E.

jeb244230

How does mitochondrial function relate to thermogenic capacity and basal metabolic rate in small birds?

Milbergue, M. S., Vézina, F., Desrosiers, V. and Blier, P. U.

jeb242612

Acute thermal stress elicits interactions between gene expression and alternative splicing in a fish of conservation concern

Thorstensen, M. J., Turko, A. J., Heath, D. D., Jeffries, K. M. and Pitcher, T. E.

jeb244162

Evidence of learning walks related to scorpion home burrow navigation

Gaffin, D. D., Muñoz, M. G. and Hoefnagels, M. H.

jeb243947

Is vertebral shape variability in caecilians (Amphibia: Gymnophiona) constrained by forces experienced during burrowing?

Lowie, A., De Kegel, B., Wilkinson, M., Measey, J., O'Reilly, J. C., Kley, N. J., Gaucher, P., Brecko, J., Kleinteich, T., Adriaens, D. and Herrel, A.

jeb244288

Exercise and emersion in air, and recovery in seawater in the green crab (*Carcinus maenas*): metabolic, acid–base, cardio-ventilatory and ionoregulatory responses

Wood, C. M. and Po, B. H. K.

jeb244268

Interindividual variation in maximum aerobic metabolism varies with gill morphology and myocardial bioenergetics in Gulf killifish

Rees, B. B., Reemeyer, J. E. and Irving, B. A.

jeb243680

Specialized androgen synthesis in skeletal muscles that actuate elaborate social displays

Schuppe, E. R., Tobiansky, D., Goller, F. and Fuxjager, M. J.

jeb243730

Electrocommunication signals and aggressive behavior vary among male morphs in an apteronotid fish, *Compsaraia samueli*

Freiler, M. K., Proffitt, M. R. and Smith, G. T.

jeb243452

Accelerating animal energetics: high dive costs in a small seabird disrupt the dynamic body acceleration–energy expenditure relationship

Ste-Marie, E., Grémillet, D., Fort, J., Patterson, A., Brisson-Curadeau, É., Clairbaux, M., Perret, S., Speakman, J. R. and Elliott, K. H.

jeb243252

Activation of p53 in anoxic freshwater crayfish,
Faxonius virilis

Gupta, A., Breedon, S. A. and Storey, K. B.
jeb244145

A therian mammal with sprawling kinematics? Gait and
3D forelimb X-ray motion analysis in tamanduas

Scheidt, A., Ditzel, P. C., Geiger, S. M., Wagner, F. C.,
Mülling, C. K. W. and Nyakatura, J. A.
jeb243625

Cardiac mitochondrial energetics of the Australasian red spiny
lobster, *Jasus edwardsii*, when exposed to isoeugenol within
the commercial anaesthetic AQUI-S

Robertson, J., Jeffs, A., Hedges, C. and Hickey, A. J. R.
jeb242771

Thermogenesis is supported by high rates of circulatory fatty
acid and triglyceride delivery in highland deer mice

Lyons, S. A. and McClelland, G. B.
jeb244080