



**Cover:** The large range in size and similar shape of felids makes them well suited for isolating the effects of size on limb posture. Thus, L. M. Day and B. C. Jayne (pp. 642-654) compared the limb posture of nine different sized cat species including those in the composite photo (domestic cat, ocelot, serval and cheetah). Unlike phylogenetically diverse samples of mammals, for which straighter limb posture correlates with increased size, felid limb posture and size have little significant correlation. Image courtesy of the Cat Ambassador Program, Cincinnati Zoo and Botanical Garden, photos by David Jenike, composite by Greg Hanson.

▼ **Inside JEB**

**Hanging On By A Thread i; How Mites Cope With Life In The Freezer i; Hard Diets Build Bone ii; Decisions, Decisions iii**

**Research Articles**

- ▶ **Opell, B. D. and Hendricks, M. L.** Adhesive recruitment by the viscous capture threads of araneoid orb-weaving spiders. 553-560
- Yafremava, L. S., Anthony, C. W., Lane, L., Campbell, J. K. and Gillette, R.** Orienting and avoidance turning are precisely computed by the predatory sea-slug *Pleurobranchaea californica* McFarland. 561-569
- Narendra, A., Cheng, K. and Wehner, R.** Acquiring, retaining and integrating memories of the outbound distance in the Australian desert ant *Melophorus bagoti*. 570-577
- Segers, V., Aerts, P., Lenoir, M. and De Clerq, D.** Dynamics of the body centre of mass during actual acceleration across transition speed. 578-585
- Nicol, S. C. and Andersen, N. A.** Cooling rates and body temperature regulation of hibernating echidnas (*Tachyglossus aculeatus*). 586-592
- ▶ **Hawes, T. C., Bale, J. S., Worland, M. R. and Convey, P.** Plasticity and superplasticity in the acclimation potential of the Antarctic mite *Halozetes belgicae* (Michael). 593-601
- Devlin, M. J. and Lieberman, D. E.** Variation in estradiol level affects cortical bone growth in response to mechanical loading in sheep. 602-613
- ▶ **Warkentin, K. M., Caldwell, M. S., Siok, T. D., D'Amato, A. T. and McDaniel, J. G.** Flexible information sampling in vibrational assessment of predation risk by red-eyed treefrog embryos. 614-619
- Tsai, J.-R. and Lin, H.-C.** V-type H<sup>+</sup>-ATPase and Na<sup>+</sup>, K<sup>+</sup>-ATPase in the gills of 13 euryhaline crabs during salinity acclimation. 620-627
- ▶ **Ravosa, M. J., Kunwar, R., Stock, S. R. and Stack, M. S.** Pushing the limit: masticatory stress and adaptive plasticity in mammalian craniomandibular joints. 628-641

**Day, L. M. and Jayne, B. C.** Interspecific scaling of the morphology and posture of the limbs during the locomotion of cats (Felidae). 642-654

**Deban, S. M., O'Reilly, J. C., Dicke, U. and van Leeuwen, J. L.** Extremely high-power tongue projection in plethodontid salamanders. 655-667

**Nespolo, R. F., Artacho, P. and Castañeda, L. E.** Cyclic gas-exchange in the Chilean red cricket: inter-individual variation and thermal dependence. 668-675

**Yu, C.-J., Gao, Y., Li, P. and Li, L.** Synchronizing multiphasic circadian rhythms of rhodopsin promoter expression in rod photoreceptor cells. 676-684

**Peng, J., Dabiri, J. O., Madden, P. G. and Lauder, G. V.** Non-invasive measurement of instantaneous forces during aquatic locomotion: a case study of the bluegill sunfish pectoral fin. 685-698

**Christie, A. E., Kutz-Naber, K. K., Stemmler, E. A., Klein, A., Messinger, D. I., Goiney, C. C., Conterato, A. J., Bruns, E. A., Hsu, Y.-W. A., Li, L. and Dickinson, P. S.** Midgut epithelial endocrine cells are a rich source of the neuropeptides APSGFLGMRamide (*Cancer borealis* tachykinin-related peptide Ia) and GYRKPPFNGSIFamide (Gly<sup>1</sup>-SIFamide) in the crabs *Cancer borealis*, *Cancer magister* and *Cancer productus*. 699-714

**Navas, C. A. and James, R. S.** Sexual dimorphism of extensor carpi radialis muscle size, isometric force, relaxation rate and stamina during the breeding season of the frog *Rana temporaria* Linnaeus 1758. 715-721

**Moran, A. L. and Woods, H. A.** Oxygen in egg masses: interactive effects of temperature, age and egg-mass morphology on oxygen supply to embryos. 722-731

**Erratum**

**Daley, M. A., Felix, G. and Biewener, A. A.** Running stability is enhanced by a proximo-distal gradient in joint neuromechanical control. 732

▶ Article featured 'Inside JEB'