



Cover: A whale shark, *Rhincodon typus*, forages for plankton in the nutrient-rich waters off the Yucatan Peninsula. Whale sharks are the largest fish in the world and one of only 13 species of filter-feeding elasmobranchs (sharks and rays). Paig-Tran et al. (pp. 1643-1654) used physical models based on neonatal whale sharks to determine the parameters (e.g. swim speed, gill anatomy, etc.) that affect performance and selectivity during filter-feeding events. Photo © Louise Murray.

▼ **Inside JEB**

Oxidative profiles reflect greenfinch personalities i; Histamine controls phototaxis in *Daphnia* i; Pinacoderm drives sponge contraction ii; Bottles show how sharks filter feed iii

JEB Classics

Riddiford, L. M. When is weight critical? 1613-1615

Reviews

Johnston, I. A., Bower, N. I. and Macqueen, D. J. Growth and the regulation of myotomal muscle mass in teleost fish. 1617-1628

Wolf, H. Odometry and insect navigation. 1629-1641

Research Articles

► **Paig-Tran, E. W. M., Bizzarro, J. J., Strother, J. A. and Summers, A. P.** Bottles as models: predicting the effects of varying swimming speed and morphology on size selectivity and filtering efficiency in fishes. 1643-1654

Pfaller, J. B., Gignac, P. M. and Erickson, G. M. Ontogenetic changes in jaw-muscle architecture facilitate durophagy in the turtle *Sternotherus minor*. 1655-1667

Norin, T. and Malte, H. Repeatability of standard metabolic rate, active metabolic rate and aerobic scope in young brown trout during a period of moderate food availability. 1668-1675

Bußhardt, P., Gorb, S. N. and Wolf, H. Activity of the claw retractor muscle in stick insects in wall and ceiling situations. 1676-1684

Higham, T. E., Korchari, P. G. and McBrayer, L. D. How muscles define maximum running performance in lizards: an analysis using swing- and stance-phase muscles. 1685-1691

► **Nickel, M., Scheer, C., Hammel, J. U., Herzen, J. and Beckmann, F.** The contractile sponge epithelium *sensu lato* – body contraction of the demosponge *Tethya wilhelma* is mediated by the pinacoderm. 1692-1698

Bradshaw, A., Salt, M., Bell, A., Zeitler, M., Litra, N. and Smith, A. M. Cross-linking by protein oxidation in the rapidly setting gel-based glues of slugs. 1699-1706

Wada-Katsumata, A., Yamaoka, R. and Aonuma, H. Social interactions influence dopamine and octopamine homeostasis in the brain of the ant *Formica japonica*. 1707-1713

Gębczyński, A. K. and Konarzewski, M. Effects of oxygen availability on maximum aerobic performance in *Mus musculus* selected for basal metabolic rate or aerobic capacity. 1714-1720

LeBlanc, S., Middleton, S., Gilmour, K. M. and Currie, S. Chronic social stress impairs thermal tolerance in the rainbow trout (*Oncorhynchus mykiss*). 1721-1731

► **Herborn, K. A., Coffey, J., Larcombe, S. D., Alexander, L. and Arnold, K. E.** Oxidative profile varies with personality in European greenfinches. 1732-1739

Murray, R. L. and Cutter, A. D. Experimental evolution of sperm count in protandrous self-fertilizing hermaphrodites. 1740-1747

Lukić-Bilela, L., Perović-Ottstadt, S., Walenta, S., Natalio, F., Pleše, B., Link, T. and Müller, W. E. G. ATP distribution and localization of mitochondria in *Suberites domuncula* (Olivi 1792) tissue. 1748-1753

Schmidt, A. K. D., Riede, K. and Römer, H. High background noise shapes selective auditory filters in a tropical cricket. 1754-1762

Walter, R. M. and Carrier, D. R. Effects of fore–aft body mass distribution on acceleration in dogs. 1763-1772

► **McCoole, M. D., Baer, K. N. and Christie, A. E.** Histaminergic signaling in the central nervous system of *Daphnia* and a role for it in the control of phototactic behavior. 1773-1782

Watanabe, T. and Takei, Y. Molecular physiology and functional morphology of SO_4^{2-} excretion by the kidney of seawater-adapted eels. 1783-1790

► Article featured 'Inside JEB'