Experimental Biology

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Cover: A green turtle (Chelonia mydas) at its foraging site around Mayotte Island in the Western Indian Ocean. Like most marine turtle species, green turtles are globally threatened. A detailed knowledge of their energy requirements is fundamental for the conservation of these enigmatic reptiles. Enstipp et al. (pp. 4010–4020) used flow-through respirometry in conjunction with accelerometry to investigate the energetics of freely swimming adult green turtles. Their results underline the cost efficiency of underwater locomotion in marine turtles and show that turtle body acceleration can be used as a reliable proxy of metabolic rate, providing a promising new tool to investigate marine turtle energetics at sea. Photo: M. R. Enstipp.

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