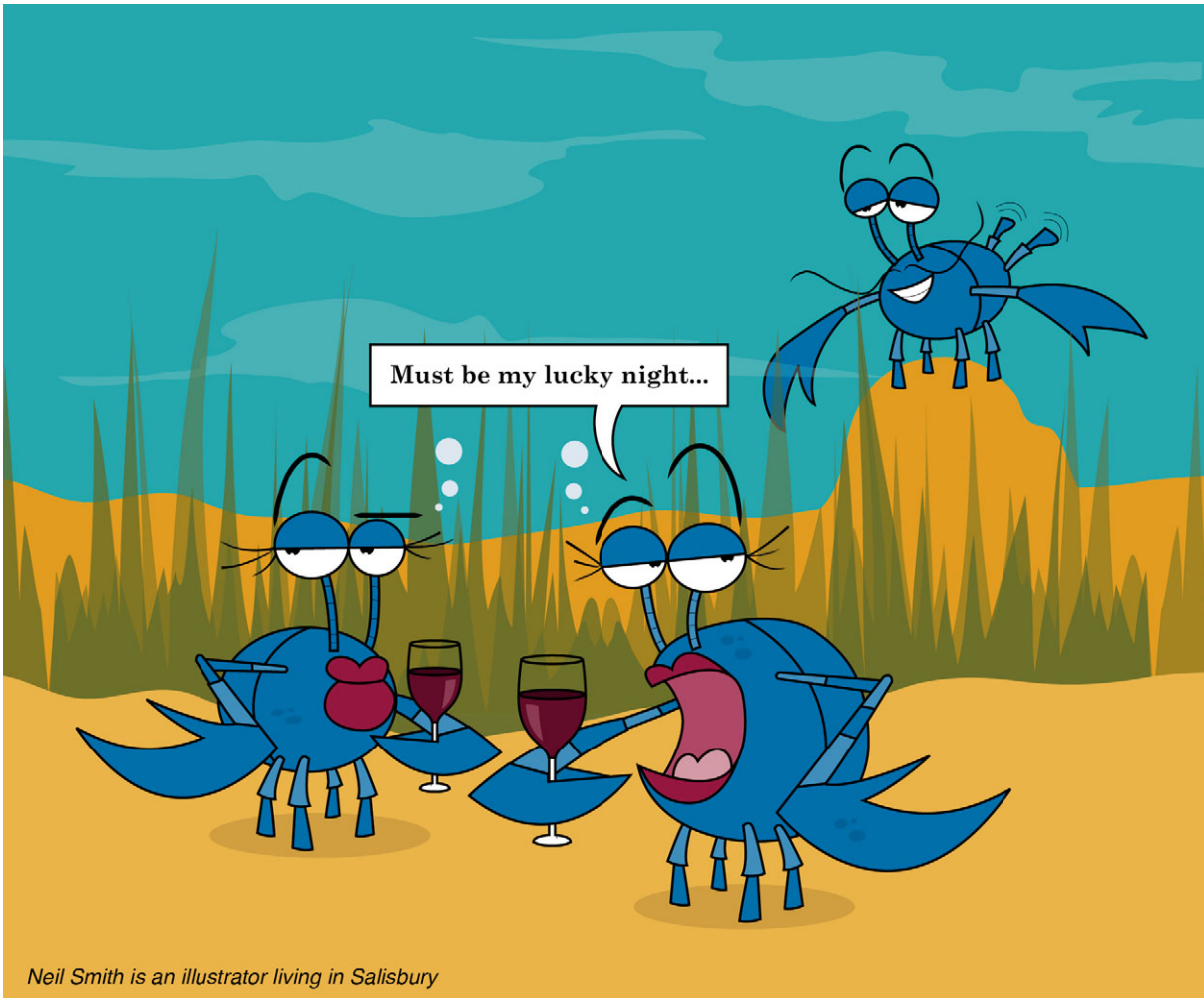


HOW WAVING MALES ATTRACT THE LADIES



Neil Smith is an illustrator living in Salisbury

When a courting male blue crab gets a whiff of a lady, he stands up high and starts waving his paddle-shaped swimming legs. But why male blue crabs indulge in such an ostentatious mating display wasn't clear: no other swimming crabs are known to go to these lengths; putting on a show increases the risk of attracting hungry predators; and the females, which prefer to stay hidden in clumps of smooth cord-grass, are unlikely to see the display anyway. So why bother? Which made Michiya Kamio, Matthew Reidenbach and Charles Derby wonder

whether the waving males were sending more than a visual message (p. 1243).

When the team monitored the crabs' courting behaviour in the lab, they realised that the males rarely resorted to waving, and then only when the female was out of reach behind a plastic mesh. And when they visualised fluid flows around a crab with a thin plane of laser light, the team saw that the waving male generated a strong jet of water with his paddle-shaped legs. Kamio and his colleagues suspect that

having located a female hidden in a clump of grass, the male entices her out of her hidey-hole with a pheromone message carried on the jet of water generated by his waving legs.

10.1242/jeb.018481

Kamio, M., Reidenbach, M. A. and Derby, C. D. (2008). To paddle or not: context dependent courtship display by male blue crabs, *Callinectes sapidus*. *J. Exp. Biol.* **211**, 1243-1248.

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