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### Sperm competition in grey whales

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## Sperm competition in grey whales

SIR—Your legend for the drawing of grey whales taken from Cyall Watson's book *Whales of the World*, perpetuates the myth that a 'helper' male is necessary for successful mating in this species. The legend states that: "Only one male is involved in the actual mating; the other takes an upright position on the far side of the female, acting as a prop or wedge". This description of grey whale mating behaviour, paraphrased from Watson's book, can be traced to Samaras<sup>2</sup>.

All accounts of mating behaviour in grey whales note that more than one male is involved. Although Samaras believed that the most common group consisted of two males and a female, mating groups of up to 18 animals have been observed<sup>3</sup>. Mating groups may last for up to two hours but change composition as individual males leave or join<sup>4</sup>. These groups probably consist of a single oestrous female and numerous males. Swartz's detailed observations have shown that

mating within these groups is not confined to a single male: the female "repeatedly copulates with more than one male during the same mating bout"<sup>3</sup>. Samaras interpreted the trios of two males and a female sometimes seen in grey whales as a mating couple and an additional 'helper whale' but it is now believed that this is a misinterpretation and that multiple males are copulating with the female and competing through sperm competition in mating groups of all sizes<sup>3,5</sup>. We have pointed out that the relatively large testes, long penises, copulations of one female with several or many males, and the relatively unaggressive male-male interactions in right, bowhead and grey whales are characteristic of polygynous species where males compete by sperm competition rather than by aggressive interactions<sup>5</sup>.

1. *Nature* 335, 125 (1988).

2. Samaras, W.F. *Bull. Southern Calif. Acad. Sci.* 73, 57-64 (1974).

3. Swartz, S.L. *Rep. Int. Whal. Commn spec. Issue* 8, 207-229 (1986).

These features are found in species throughout the animal kingdom, ranging from insects to primates, where males compete primarily by sperm competition<sup>5,6</sup>.

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