



**Fig. 6.** Features of crocodilian and avian sound detection. (A) Columella footplate mean velocity (for a constant stimulation of 100 dB SPL) plotted for the spectacled caiman *Caiman crocodilus* (data from Wilson *et al.*, 1985) and the pigeon *Columba livia* (data from Gummer *et al.*, 1989). Figure taken from Saunders *et al.* (2000). The dashed lines indicate the frequency of highest sensitivity for each species. (B) Distance *versus* frequency maps for the basilar papilla of several bird species and the spectacled caiman (redrawn from Gleich *et al.*, 2004). The diagram shows best response frequency as a function of normalized distance from the apex of the basilar papilla. To calculate these curves, Gleich *et al.* (2004) used maps derived from single-fibre staining of physiologically characterized auditory nerve fibres available for the starling *Sturnus vulgaris* (Gleich, 1989), chicken *Gallus domesticus* (Manley *et al.*,