Seismic body vibrations in a sand-dwelling species, the piebald shrew (*Diplomesodon pulchellum*)

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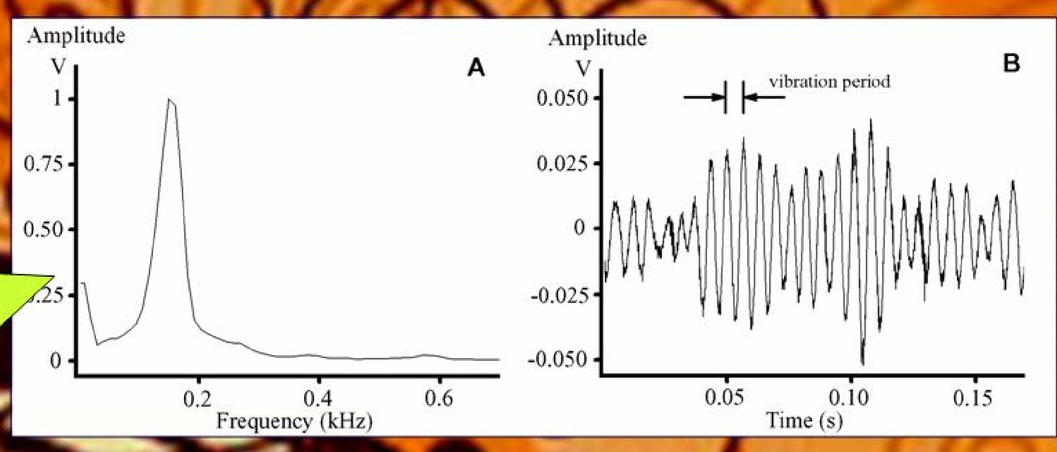
Insects
Spiders
Amphibians
Rodents
Elephants

Self-produced seismic vibrations

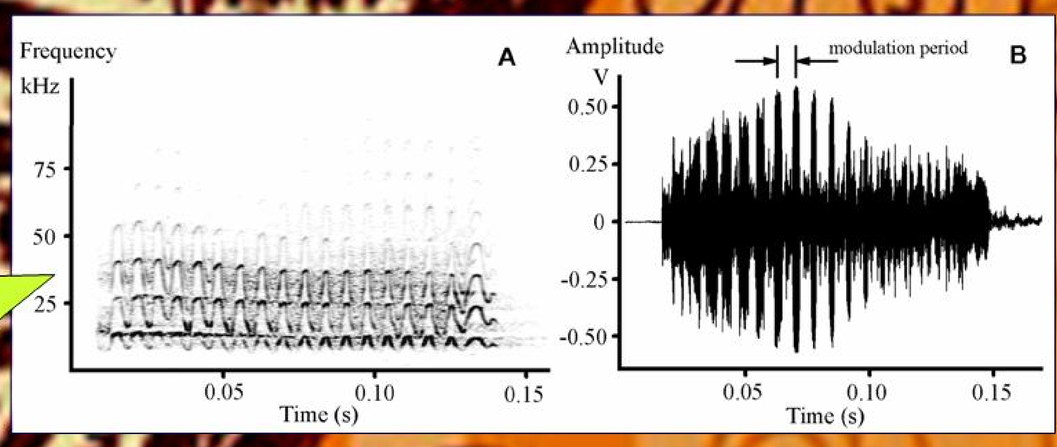
YES !!!

Insectivora ???

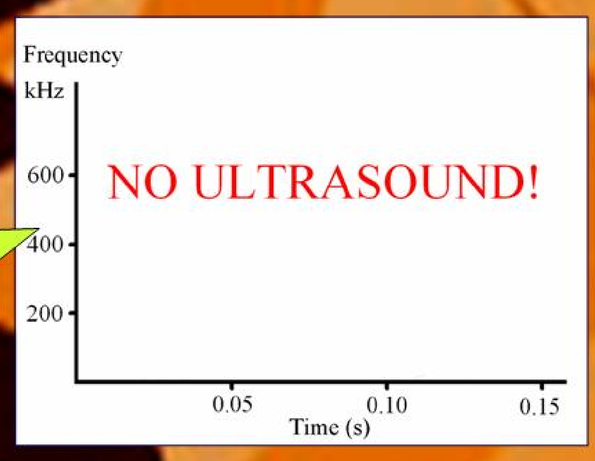
19 shrews (10 males, 9 females)



160.5 ± 15.0 Hz
min-max 132-174 Hz, N = 11 animals



159.4 ± 6.1 Hz,
min-max 148-170 Hz, N = 11 animals



Probable functions:
Communication? – NO, they SMELL and VOCALISE
SEISMIC SUBSTRATE DENSITY EXPLORING !!!

Piebald shrews are capable of digging and detect insects under sand layer (up to 30 prey diggings per night)

Body vibration related:
Thermoregulation? - NO
Hunger? - NO
Fear? - NO

For somatosensory detection, piebald shrews may use ridges of fine hairs of their forefeet

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Measuring airborne components of seismic body vibrations in a Middle-Asian sand-dwelling Insectivora species, the piebald shrew (*Diplomesodon pulchellum*)

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