

# Audiogram of the Virginia opossum (*Didelphis virginiana*)

## Data from:

Ravizza, R.J., Heffner, H.E., and Masterton, B. (1969) Hearing in primitive mammals: I, Opossum (*Didelphis virginiana*). *Journal of Auditory Research*, 9, 1-7. (Animals A & B)  
 Ravizza, R.J., and Masterton, B. (1972) Contribution of neocortex to sound localization in opossum (*Didelphis virginiana*). *Journal of Neurophysiology*, 35, 344-356. (Animals C, D, & E)

## Absolute thresholds (in dB re 20 $\mu\text{N/m}^2$ ) for five opossums (designated A through E)

Frequency (in kHz)	Individual Thresholds (in dB)					Average
	A	B	C	D	E	
.5	75	68	—	83	65	73
1	58	64	—	—	—	61
2	26	34	38	25	33	31
4	22	21	—	—	—	22
8	29	28	27	18	25	25
16	21	17	—	—	—	19
32	14	28	20	13	11	17
60	61	40	—	—	—	50

## Lowest and highest frequencies audible at sound pressure levels (SPL) ranging from 30 to 70 dB SPL

SPL (in dB)	Lowest audible frequency (in kHz)	Highest audible frequency (in kHz)
70	0.6	—
60	1.03	68*
50	1.3	61
40	1.6	52
30	2.15	45

\*Extrapolated value

## Additional Parameters:

**Body weight** = 4 kg

**Functional interaural distance** = 273  $\mu\text{s}$

(Time required for sound to travel around the head from one auditory meatus to the other.)

**Comments:** Threshold values taken from original data (Ravizza et al., 1969) and graphs (Ravizza and Masterton, 1972).