

# Audiogram of the megachiropteran Egyptian fruit bat (*Rousettus aegyptiacus*)

**Data from:** Koay, G., Heffner, R.S., and Heffner, H.E. (1998) Hearing in a megachiropteran fruit bat, *Rousettus aegyptiacus*. *Journal of Comparative Psychology*, 112, 371-382.

## Absolute thresholds (in dB re 20 $\mu\text{N/m}^2$ ) for two Egyptian fruit bats (designated A and B)

Frequency (in kHz)	Individual Thresholds (in dB)		Average
	A	B	
1	79	84	81.5
2	63	66	64.5
2.8	47	56	51.5
4	39	42	40.5
5.6	29	29	29
8	9	10	9.5
10	4	4	4
12.5	6	5	5.5
16	11	8	9.5
20	8	8	8
25	7	8	7.5
32	25	25	25
40	16	17	16.5
45	13	13	13
50	20	17	18.5
56	42	26	34
64	66	53	59.5
71	82	75	78.5

## 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	1.6	68
60	2.25	64
50	2.95	61
40	4.05	58
30	5.5	54

### Additional Parameters:

**Body weight** = 163 g

**Functional interaural distance** = 137  $\mu\text{s}$

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

**Comments:** Threshold values taken from original data.

For another audiogram, see: (Suthers, R.A., and Summers, C.A. (1980) Behavioral audiogram and masked thresholds of the Megachiropteran echolocating bat, *Rousettus*. *Journal of Comparative Physiology*, 136, 227-233).