

Online Supplement – Ekdale and Racicot, Anatomical evidence for low frequency sensitivity in an archaeocete whale

Table S4. Dimensions and orientations of anterior (A), lateral (L), and posterior semicircular canals (P). Canal arc radii and lengths expressed in mm, and 90_{var} refers to average deviation of canal pair angles ($90_{\text{A-L}}$, $90_{\text{A-P}}$, $90_{\text{L-P}}$) and expressed in degrees. Data from the bony labyrinths of Balaenopteridae (NC)† (from Pliocene of North Carolina) and *Tursiops truncatus* were taken from Ekdale (2013). Daggers (†) indicate extinct taxa.

Taxon	<u>Canal Radii</u>				<u>Canal Lengths</u>			<u>Canal Angles</u>			<u>Canal Deviations</u>				
	A	L	P	Ave	A	L	P	A-L	A-P	L-P	$90_{\text{A-L}}$	$90_{\text{A-P}}$	$90_{\text{L-P}}$	90_{var}	
Basilosauridae															
<i>Zygorhiza kochii</i> †	2.2	2.2	1.6	2.0	8.9	7.4	8.4	99.4	92.0	87.7	9.4	2.0	2.3	4.6	
Mysticeti															
<i>Balaena mysticetus</i>	2.7	2.6	2.5	2.6	12.2	10.1	11.9	86.2	92.5	98.0	3.8	2.5	8.0	4.8	
<i>Balaenoptera acutorostrata</i>	2.1	1.9	1.8	1.9	8.0	5.7	7.7	75.6	113	78.9	14.4	23.0	11.1	16.2	
Balaenopteridae†	2.5	2.4	1.9	2.3	10.4	8.6	8.5	78.5	99.9	79.4	11.5	9.9	10.6	10.7	
Balaenopteridae (NC)†	2.6	2.2	2.0	2.3	10.7	9.5	8.5	71.6	105	75.6	18.4	15.0	14.4	15.9	
<i>Eschrichtius robustus</i> (neonate)	2.5	2.0	1.8	2.1	7.9	8.6	8.4	70.6	101	71.5	19.4	11.0	18.5	16.3	
<i>Eschrichtius robustus</i> (adult)	2.5	2.0	2.1	2.2	9.1	7.0	8.5	73.5	99.6	75.5	16.5	9.6	14.5	13.5	

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<i>Eschrichtiidae</i> †	2.7	2.2	1.9	2.3	11.1	8.4	9.1	70.8	109	79.7	19.2	19.0	10.3	16.2
<i>Eubalaena glacialis</i>	3.8	2.8	3.1	3.2	17.4	11.9	14.9	74.8	97.4	94.3	15.2	7.4	4.3	9.0
<i>"Megaptera"</i> <i>miocaena</i> †	2.8	2.2	2.5	2.5	11.8	7.3	11.2	101	103	94.0	11.0	13.0	4.0	9.3
<i>Megaptera</i> <i>novaeangliae</i>	2.7	2.3	2.1	2.4	11.5	8.6	9.4	66.0	98.0	77.0	24.0	8.0	13.0	15.0
Odontoceti														
<i>Tursiops truncatus</i>	1.2	1.4	0.8	1.1	3.8	4.4	4.0	75.0	97.6	88.9	15.0	7.6	1.1	7.9