

## Online Supplemental Material

**Table 1a.** Upper cheek dentition measurements (mm) for *Wakaleo schouteni* sp. nov. from Riversleigh WHA Local Faunas.  
Abbreviations: a = alveolus measurement ; (L) = left side; (R) = right side; §= measurement to M<sup>3</sup>; [ ] = estimate

Specimen No.	Riversleigh Local Fauna	P <sup>3</sup>		M <sup>1</sup>		M <sup>2</sup>		M <sup>3</sup>		M <sup>4</sup>		P <sup>3</sup> – M <sup>4</sup>
		L	W	L	W	L	W	L	W	L	W	
QM F23443	Rack. Low Lion (L)	11.7	7.1	9.4	9.2	5.9	6.5	4.6	4.9	3.5a	3.2a	35.8a
	(R)	[11.6]	7.1	[9.4]	9.2	6.1	6.8	[5.0a]	4.6a	3.3a	3.2a	35.9a
QM F45200	Hiatus (L)	11.0	7.0	8.8	8.6	6.3	6.9	4.5	5.1	4.0	4.0a	34.0
	(R)	[11.7]	7.4a	8.8	-	6.0	6.9	4.5	5.2	3.7	4.1	34.5
QM F57311	Hiatus	-	-	8.5	8.8	6.4	6.8	4.6a	5.0a	-	-	-
QM F57312	Hiatus	-	-	-	-	-	-	4.1	4.9	-	-	-
QM F57313	Hiatus	-	-	-	-	-	-	-	-	3.9	[4.5]	-
QM F23446	D	12.6	8.5	9.6	9.6	6.0	7.4	5.2	5.5	-	-	32.0 <sup>§</sup>
QM F24680	Dirk's Towers	13.2a	7.8a	8.5a	9.3a	6.3	7.7	4.1 a	4.7a	4.4a	3.7a	35.7a
QM F30250	Dirk's Towers	-	-	9.7	9.9	-	-	-	-	-	-	-
QM F40206	Dirk's Towers	-	-	-	-	-	-	4.9	5.1	-	-	-
QM F57314	Bone Reef	15.1a	8.4a	9.1a	10.4a	7.1a	8.3a	5.1a	5.5a	[4.2a]	3.1a	35.6a
QM F23441	Upper	-	-	9.0	9.0	-	-	-	-	-	-	-
QM F57945	White Hunter	12.1	7.2	9.3	8.9	6.1	7.4	3.5a	4.2a	2.3a	2.0a	33.2a
QM F57944	White Hunter	-	-	9.0	8.7	-	-	-	-	-	-	-
QM F20573	White Hunter	-	-	-	-	5.7	7.3	-	-	-	-	-
QM F30378	White Hunter	-	-	-	-	6.2	7.5	-	-	-	-	-
QM F23444	White Hunter	-	-	-	-	-	-	4.7	4.4	-	-	-
QM F52252	White Hunter	-	-	-	-	5.6	6.3	-	-	-	-	-
QM F23801	Neville's Garden	-	-	-	-	6.5	7.8	-	-	-	-	-
QM F24660	Creaser's Ramparts	-	-	-	-	-	-	4.7	4.7	-	-	-

**Table 1b.** Lower cheek dentition measurements (mm) for specimens of *Wakaleo schouteni* sp. nov. from Riversleigh WHA Local Faunas. Abbreviations: a = alveolus measurement; (L) = left side; (R) = right side; # = measurement to alveolus of M<sub>4</sub>; [ ] = estimate. \* NB: QM F52247 measures of left M<sub>3-4</sub> and M<sub>2-4</sub> include an approx. 0.6 mm epoxy join.

Specimen no.	Riversleigh Local Fauna	P <sub>3</sub>			M <sub>1</sub>			M <sub>2</sub>			M <sub>3</sub>		M <sub>4</sub>		P <sub>3</sub> – M <sub>4</sub> <sup>#</sup>
		L	AW	PW	L	AW	PW	L	AW	PW	L	W	L	W	
QM F52247*	White Hunter (L)	10.0	5.0	6.0	9.0	7.2	6.4	7.3	6.1	5.8	6.0	5.1	3.1a	1.7a	35.7
	(R)	9.9	5.0	5.7	8.8	7.1	6.7	7.5	6.4	6.6	6.0	4.8	2.6a	3.0a	35.8
QM F30465	White Hunter	9.5	5.4	6.0	10.0	6.6	7.1	7.7	6.0	6.1	-	-	-	-	36.7
QM F31376	White Hunter	8.6	4.4	-	8.7	6.1	6.1	7.1	5.7	5.4	-	-	3.0a	2.2a	-
QM F52250	White Hunter	10.1	5.3	5.9	9.9	6.7	7.0	7.7	6.4	6.3	-	-	-	-	-
QM F23443	Rackham's Low Lion	-	-	-	-	-	-	-	-	-	-	-	-	-	34.3a
NTM P91167-3	Burnt Offering	12.2	-	-	9.3	8.5	7.3	7.3	6.2	5.7	-	-	-	-	-
NTM P91171-4	Burnt Offering	11.5	6.5	7.4	-	-	-	-	-	-	-	-	-	-	-
QM F30073	Dirk's Towers	-	-	-	9.4	6.6	6.4	-	-	-	-	-	-	-	-
QM F23449	Upper	-	-	-	9.6	6.2	5.6	-	-	-	-	-	-	-	-
QM F57943	Bone Reef	-	-	-	-	-	-	[7.3]	[6.0]	5.4	-	-	-	-	-
QM F57315	Hiatus	-	-	-	-	-	-	7.3	6.1	5.2	-	-	-	-	-
QM F57316	Hiatus	-	-	-	-	-	-	-	-	-	5.6	4.5	-	-	-