

terra australis 24

COASTAL THEMES

AN ARCHAEOLOGY OF THE
SOUTHERN CURTIS COAST,
QUEENSLAND

SEAN ULM

The background of the cover is a photograph of a coastal landscape. In the foreground, two tall, dark, spiky plants (possibly Pandanus) stand prominently. Beyond them, a wide sandy beach curves along a bay with clear blue water. The sky is a pale, clear blue. In the distance, low hills or mountains are visible on the horizon. The overall scene is bright and sunny.

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APPENDICES

Appendix 1: Radiocarbon dates: technical data

SITE	SQUARE	XU	DEPTH (cm)	LAB. NO.	SAMPLE	WEIGHT (g)	$\delta^{14}\text{C}$ (‰)	$\delta^{13}\text{C}$ (‰)	D14C (‰)	% MODERN	14C AGE
Agnes Beach Midden	-	-	-	Wk-10969	charcoal	1.6	-36.7±8.5	-27.1±0.2	-32.6±10.4	96.7±1.0	266±87
Agnes Beach Midden	-	-	-	Wk-11280	<i>D. deltoides</i>	35.0	-30.4±4.6	0.8±0.2	-80.4±5.4	92.0±0.5	674±47
Elliott Heads	-	-	-	Wk-6994	<i>D. deltoides</i>	19.6	-0.2±6.1	-0.6±0.2	-49.1±7.1	95.1±0.7	400±60
Eurimbula Creek 1	C	6	14.9-18.3	Wk-7680	charcoal	3.4	-29.9±5.6	-26.1±0.2	-27.7±6.9	97.2±0.7	230±60
Eurimbula Creek 2	A	6	13.1-16.3	Wk-7689	charcoal	2.8	-22.1±6.5	-25.7±0.2	-20.8±8.0	97.9±0.8	modern ^a
Eurimbula Site 1	1	5	9.5	Wk-5601	charcoal	2.5	-30.8±7.6	-27.0±0.2	-26.9±9.3	97.3±0.9	220±80
Eurimbula Site 1	1 (Sl)	10	35	Wk-3944	<i>A. trapezia</i>	71.1	-219.8±4.5	-0.8±0.2	-257.6±5.2	74.2±0.5	2390±60
Eurimbula Site 1	1 (Sl)	10	35	Wk-5215	charcoal	2.1	-181.3±12.7	-25.3±0.2	-180.8±15.5	81.9±1.5	1600±160
Eurimbula Site 1	2	9	50	Wk-3945	charcoal	10.3	-315.3±4.4	-26.5±0.2	-313.3±5.3	68.7±0.5	3020±70
Eurimbula Site 1	3	7	28.4-34.1	Wk-8553	<i>A. trapezia</i>	20.2	-158.5±5.1	-0.6±0.2	-199.5±6.0	80.1±0.6	1790±60
Eurimbula Site 1	4	4	15-20	Wk-8554	<i>A. trapezia</i>	19.9	-19.6±5.4	-0.9±0.2	-66.9±6.2	93.3±0.6	560±55
Eurimbula Site 1	near 7	surface	0	Wk-3946	<i>A. trapezia</i>	90.7	-17.7±4.8	0.0±0.2	-66.8±5.6	93.3±0.6	560±50
Eurimbula Site 1	7	5	18.8-24	Wk-8555	<i>A. trapezia</i>	21.0	-3.9±5.9	-0.4±0.2	-52.8±6.9	94.7±0.7	440±60
Eurimbula Site 1	A	5	9.7-12.4	Wk-10967	charcoal	1.2	-46.1±11.8	-25.0±0.2	-46.1±14.3	95.4±1.4	379±121
Eurimbula Site 1	A	17	43.7-46.6	Wk-7688	charcoal	4.6	-258.2±5.0	-25.5±0.2	-257.5±6.1	74.2±0.6	2390±70
Eurimbula Site 1	B	12	34.4-38	Wk-10968	charcoal	1.3	-242.8±9.6	-26.0±0.2	-241.3±11.8	75.9±1.2	2218±126
Eurimbula Site 1	D	15	45.4-47.9	Wk-7687	charcoal	2.8	-291.5±7.6	-24.7±0.2	-291.9±9.3	70.8±0.9	2770±110
Gladstone 1	-	-	-	Wk-8456	<i>A. trapezia</i>	11.5	-8.0±4.9	0.3±0.2	-58.2±5.7	94.2±0.6	480±50
Gladstone 2	-	-	-	NZA-12119 ^b	<i>A. trapezia</i>	4.6	4.6±6.8	-0.8±0.2	-44.0±6.5	95.6±0.6	360±60
Ironbark Site Complex	M	4	5.4-10.5	Wk-6359	charcoal	4.4	-81.0±5.2	-26.9±0.2	-77.5±6.4	92.3±0.6	650±60
Ironbark Site Complex	M	9	22.9-28.1	Wk-6360	charcoal	4.1	-161.0±5.0	-25.7±0.2	-159.9±6.1	84.0±0.6	1400±60
Ironbark Site Complex	M	17	60-69.3	Wk-6361	charcoal	1.8	-186.2±12.3	-26.2±0.2	-184.3±15.0	81.6±1.5	1640±150
Ironbark Site Complex	O	9a	27.4	Wk-8556	<i>A. trapezia</i>	16.7	-60.7±5.4	-0.5±0.2	-106.7±6.3	89.3±0.6	910±55
Ironbark Site Complex	P	7	16.3	Wk-8557	charcoal	1.0	-26.9±13.8	-26.0±0.2	-25.1±16.8	97.5±1.7	200±140
Ironbark Site Complex	P	7	17.6	Wk-8558	<i>A. trapezia</i>	20.1	-22.8±6.1	-0.3±0.2	-71.1±7.1	92.9±0.7	590±60
Ironbark Site Complex	R	9	17.5-20.4	Wk-10964	charcoal	1.3	-38.9±8.6	-26.8±0.2	-35.5±10.5	96.4±1.1	290±89
Ironbark Site Complex	core	-	25-30	OZD-756 ^b	organics	-	-	-25 ^d	-	97.4±0.6	215±55
Middle Island Sandblow Site	A	1	0	Wk-7679	<i>D. deltoides</i>	35.0	-66.5±4.8	1.1±0.2	-115.2±5.5	88.5±0.6	980±50
Middle Island Sandblow Site	B	1	0	Wk-10091	<i>D. deltoides</i>	32.3	-37±3.9	0.9±0.2	-86.8±4.5	91.3±0.5	730±39
Middle Island Sandblow Site	C	1	0	Wk-10092	<i>D. deltoides</i>	34.1	-63.4±3.8	1.2±0.2	-112.4±4.5	88.8±0.4	958±40
Middle Island Sandblow Site	D	1	0	Wk-10093	<i>D. deltoides</i>	34.2	-16.2±4.2	0.9±0.2	-67.2±4.9	93.3±0.5	559±42

continued over

Appendix 1: continued

SITE	SQUARE	XU	DEPTH (cm)	LAB. NO.	SAMPLE	WEIGHT (g)	$\delta^{14}\text{C}$ (‰)	$\delta^{13}\text{C}$ (‰)	D ¹⁴ C (‰)	% MODERN	¹⁴ C AGE
Mort Creek Site Complex	A7	4	18-20	Wk-5602	<i>A. trapezia</i>	47.3	-0.3±0.2	-264.7±3.7	-301.0±4.3	69.9±0.4	2880±50
Mort Creek Site Complex	A7	6	22.6-26.7	Wk-3937	<i>A. trapezia</i>	75.2	0.1±0.2	-269.3±4.0	-305.9±4.7	69.4±0.5	2930±60
Mort Creek Site Complex	A7	9	32.4-37	Wk-3938	<i>A. trapezia</i>	81.2	0.1±0.2	-249.3±4.3	-286.9±5.0	71.3±0.5	2720±60
Mort Creek Site Complex	Granites	11C	45.5-52.1	Wk-3940	mixed shell ^c	66.7	0.7±0.2	-296.9±4.4	-333.1±5.1	66.7±0.5	3260±70
Mort Creek Site Complex	Granites	11M	45.5-52.1	Wk-3941	<i>A. trapezia</i>	71.3	-0.2±0.2	-246.4±4.5	-283.8±5.3	71.6±0.5	2680±60
Mort Creek Site Complex	WP	4	12.8-18.4	Wk-3942	<i>A. trapezia</i>	79.6	0.6±0.2	-222.2±5.7	-262.2±6.6	73.8±0.7	2440±80
Mort Creek Site Complex	WP	10	37.6-44.8	Wk-3943	<i>A. trapezia</i>	74.8	-0.5±0.2	-235.5±4.4	-273.4±5.1	72.7±0.5	2570±60
Mort Creek Site Complex	C	6	22	Wk-7458	charcoal	2.4	-219.7±6.4	-26.5±0.2	-217.5±7.8	78.3±0.8	1970±80
Mort Creek Site Complex	C	6	22	Wk-7836	<i>A. trapezia</i>	39.2	-1.4±0.2	-213.3±4.1	-250.4±4.8	75.0±0.5	2320±50
Mort Creek Site Complex	C	7	25	Wk-6987	<i>A. trapezia</i>	45.9	-1.5±0.2	-208.2±3.9	-245.3±4.6	75.5±0.5	2260±50
Mort Creek Site Complex	C	18	60	Wk-6988	<i>A. trapezia</i>	8.3	-1.1±0.2	-310.1±6.2	-343.1±7.1	65.7±0.7	3380±90
Mort Creek Site Complex	B	19-20	65	Wk-6986	<i>A. trapezia</i>	6.0	-1.6±0.2	-315.3±9.8	-347.3±11.3	65.3±1.1	3430±140
Pancake Creek Site Complex	A	9	14.3-18.6	Wk-7837	<i>A. trapezia</i>	35.6	-1.1±0.2	-34.3±5.2	-80.5±6.1	92.0±0.6	670±50
Pancake Creek Site Complex	E	7	25	Wk-6989	<i>A. trapezia</i>	5.4	-0.1±0.2	-55.0±12.1	-102.1±14.0	89.8±1.4	870±130
Pancake Creek Site Complex	F	6	25	Wk-6990	<i>A. trapezia</i>	13.9	-0.4±0.2	-27.8±6.3	-75.6±7.3	92.4±0.7	630±70
Pancake Creek Site Complex	G	8	31	Wk-6991	<i>A. trapezia</i>	34.9	0.5±0.2	-38.9±5.1	-87.8±5.9	91.2±0.6	740±60
Pancake Creek Site Complex	H	8	26	Wk-6992	<i>A. trapezia</i>	7.2	-0.3±0.2	-47.2±7.4	-94.3±8.6	90.6±0.9	800±80
Pancake Creek Site Complex	H	8	26	Wk-6993	charcoal	1.2	-26.8±0.2	-86.8±12.2	-83.5±15.0	91.7±1.5	700±140
Port Curtis 1	-	-	-	Wk-8457	<i>V. singaporina</i>	8.8	0.3±0.2	-5.6±6.1	-56.0±7.1	94.4±0.7	460±60
Port Curtis 2	-	-	-	NZA-12120 ^b	<i>V. singaporina</i>	1.7	0.9±0.2	-16.9±6.7	-67.9±6.4	93.2±0.6	570±60
Round Hill Creek Mound	-	-	-	Wk-10090	<i>A. trapezia</i>	37.7	-0.3±0.2	-170.6±3.5	-211.6±4.1	78.8±0.4	1910±42
Seven Mile Creek Mound	A	4	6.8-10.4	NZA-12272 ^b	charcoal	<0.1	-26.0±0.2	-146.4±8.5	-144.7±8.5	85.5±0.9	1260±80
Seven Mile Creek Mound	A	4	7.14	Wk-8324	<i>A. trapezia</i>	17.5	-0.9±0.2	-323.6±5.5	-356.2±6.4	64.4±0.6	3540±80
Seven Mile Creek Mound	A	13	39-43.6	NZA-12117 ^b	charcoal	<0.1	-25.7±0.2	-354.2±4.5	-353.3±4.5	64.7±0.5	3500±60
Seven Mile Creek Mound	A	13	40.4	Wk-8326	<i>A. trapezia</i>	19.5	-0.8±0.2	-329.8±4.9	-363.3±5.7	63.8±0.6	3610±70
Seven Mile Creek Mound	A	20	67.8	Wk-8327	<i>A. trapezia</i>	40.7	-1.2±0.2	-344.2±3.8	-375.4±4.4	62.5±0.4	3780±60
Seven Mile Creek Mound	A	20	67.8-71.5	NZA-12273 ^b	charcoal	0.1	-23.4±0.2	-356.6±4.6	-358.7±4.6	64.1±0.5	3570±60
Seven Mile Creek Mound	A	26	88.2	Wk-8328	<i>A. trapezia</i>	33.0	-0.5±0.2	-340.3±3.8	-372.7±4.4	62.7±0.4	3750±60
Seven Mile Creek Mound	A	26	88.7-92.2	NZA-12118 ^b	charcoal	0.2	-27.8±0.2	-369.0±4.4	-365.5±4.4	63.4±0.4	3660±60
Tom's Creek Site Complex	D	3	3.3	Wk-7682	<i>A. trapezia</i>	19.7	-1.2±0.2	-28.1±4.9	-74.4±5.7	92.6±0.6	620±50
Tom's Creek Site Complex	D	3	3.9	Wk-7681	charcoal	11.4	-27.2±0.2	-9.6±4.8	-5.1±5.9	99.5±0.6	modern ^a
Tom's Creek Site Complex	D	8	22.2-25.5	Wk-10966	charcoal	1.1	-25.7±0.2	-34.3±12.3	-32.9±14.9	96.7±1.5	269±125

continued over

Appendix 1: continued

SITE	SQUARE	XU	DEPTH (cm)	LAB. NO.	SAMPLE	WEIGHT (g)	$\delta^{14}\text{C}$ (‰)	$\delta^{13}\text{C}$ (‰)	D ¹⁴ C (‰)	% MODERN	¹⁴ C AGE
Tom's Creek Site Complex	D	15	50	Wk-7683	<i>A. trapezia</i>	26.7	-66.2±4.5	-1.2±0.2	-110.6±5.2	88.9±0.5	940±50
Tom's Creek Site Complex	D	17	55.7-60	Wk-7684	charcoal	3.2	-106.8±6.6	-26.8±0.2	-103.7±8.1	89.6±0.8	880±70
Tom's Creek Site Complex	D	18	59.5-64	Wk-7685	charcoal	3.3	-133.5±6.4	-27.5±0.2	-129.2±7.8	87.1±0.8	1110±70
Tom's Creek Site Complex	S	8	20.5-24	Wk-7686	charcoal	12.6	-65.1±3.9	-25.3±0.2	-64.5±4.8	93.5±0.5	540±50
Tom's Creek Site Complex	S	8	20.5-24	Wk-7838	<i>A. trapezia</i>	42.9	-29.1±5.3	-0.9±0.2	-75.9±6.1	92.4±0.6	630±50
Tom's Creek Site Complex	S	11	31.7-35	Wk-10965	charcoal	1.2	-127.1±10.2	-26.4±0.2	-124.7±12.4	87.5±1.2	1070±115
Tom's Creek Site Complex	S	-	62.5-67	NZA-13385 ^b	organics	30.69	-218±5.5	-26.2±0.2	-216.2±5.5	78.4±0.6	1956±57
Worthington Creek Midden	-	-	5	Wk-10089	<i>S. glomerata</i>	32.4	0.7±4.5	-3.4±0.2	-42.5±5.2	95.7±0.5	349±60

a The term 'modern' is applied for conventional radiocarbon ages of less than 200 years. Finite ages are problematic in this area of the radiocarbon time-scale owing to high levels of variability in radiocarbon activity in the atmosphere caused by the onset of the industrial revolution and atmospheric testing of thermonuclear devices. ¹⁴C ages between 0 and 200 could give ages anywhere from AD 1750 to AD 1950. After 1950, bomb ¹⁴C in the atmosphere causes a very rapid increase in sample ¹⁴C, peaking around 1965 (Alan Hogg, University of Waikato Radiocarbon Dating Laboratory, pers. comm., 1999).

b Accelerator Mass Spectrometry (AMS) determination. All other determinations were calculated using Liquid Scintillation Counting (LSC).

c Mixed shell consisting of *Saccostrea*, *Polynices*, *Nerita chamaeleon*, *Placamen calophyllum*, *Fragum hemisphaerium*, *Cymatium* sp., *Corbula* sp., *Antigona chemnitzii*, *Trisidos tortuosa*, *Tapes dorsatus*, *Meropesta* sp., *Pinctada* sp., *Trichomya hirsutus*, *Bembicium auratum*, *Calthalotia arruensis* and *Anadara trapezia*.

d Estimated value.

Appendix 2: Recorded archaeological sites on the southern Curtis Coast

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
JE:A04	Stone Arrangement	G. Alfredson	24°00'43"S 151°28'30"E	Stone arrangement at the summit of Hummock Hill. Alfredson (1993) identified this site 'as a probable surveyor's trig point' although subsequent archival research failed to find any records. References: Alfredson (1993).
JE:A41	Shell Midden/ Artefact Scatter	H. Johnson	23°59'54"S 151°28'20"E	
JE:A42	Shell Midden	H. Johnson	24°02'18"S 151°29'29"E	
JE:A43	Shell Midden/ Artefact Scatter	H. Johnson	24°02'18"S 151°29'22"E	
JE:A60	Shell Midden	C. Burke	24°00'42"S 151°26'37"E	
JE:A61	Artefact Scatter	C. Burke	24°00'51"S 151°29'41"E	
JE:A62	Artefact Scatter	C. Burke	24°00'43"S 151°28'44"E	
JE:A63	Shell Midden	C. Burke	24°01'13"S 151°29'33"E	
JE:A64	Shell Midden	C. Burke	24°01'13"S 151°29'26"E	
JE:A65	Shell Midden	C. Burke	24°02'18"S 151°29'36"E	Shell mound with a depth of up to 40cm. Burke (1993) noted that only a small portion of the site had not been damaged by development activities and water erosion. References: Burke (1993).
JE:A66	Shell Midden	C. Burke	24°00'21"S 151°29'16"E	
JE:A70	Scarred Tree	M. Bird 24.2.1998	24°07'50"S 151°27'44"E	
KE:A05	Stone Quarry	P. Smith 1.11.1980 C. Burke 26.3.1993	24°14'09"S 151°56'10"E	Stone quarry on a silcrete outcrop (c.50m ²) within a granitic headland, adjacent to the coastline at Rocky Point. High density artefact exposure, including a backed blade, scraper, two hammerstones and many small flakes. Burke observed large numbers of artefacts during a 1993 visit, although Reid (1998) failed to identify any unambiguous artefacts during a 1998 visit and called into question the cultural status of the stone exposure. References: Burke (1993); Lilley et al. (1997); Reid (1998).
KE:A06	Axe Grinding Locality	P. Smith 1.11.1980	24°14'09"S 151°56'10"E	Grinding grooves in granite, on a headland adjacent to the coastline at Agnes Water, c.35m from KE:A05 (see above). This site could not be relocated during a field inspection in 1998. References: Reid (1998).
KE:A08	Shell Midden/ Artefact Scatter	R. Neal 25.6.1986	24°04'00"S 151°30'00"E	Sparse shell and stone artefact scatter exposed in sand vehicle tracks on a sloping dune adjacent to a rocky foreshore and mangrove swamp near Seven Mile Creek. Comprises mud ark (60%), whelk (20%) and oyster (20%), and artefacts manufactured on quartz (50%), rhyolite (40%) and black volcanic rock (10%). References: Neal (1986).
KE:A09	Shell Midden	R. Neal 25.6.1986	24°04'00"S 151°31'00"E	Shell midden spotted from the air on a beach ridge adjacent to Seven Mile Creek and bordered by a freshwater swamp. Rowland could not locate this site during a field inspection in 1986 and local informants suggested that it was quartz tailings from quarrying activities rather than a midden deposit. References: Neal (1986); Rowland (1987).
KE:A10	Shell Midden/ Artefact Scatter	M. Rowland A. Border 30.10.1986	24°11'00"S 151°52'00"E	Small, low density surface shell scatter in eroding foredunes and deflated dunes on the ocean beach just north of Agnes Water. Includes pipi, oyster, nerite and occasional stone artefacts. This site is probably the same as KE:A87 (see below). This site is dated on charcoal to 266±87 BP (Wk-10969). References: Lilley et al. (1997); Rowland (1987).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KE:A11	Shell Midden	M. Rowland 30.10.1986 C. Burke 22.4.1993	24°10'58"S 151°52'47"E	Extensive shell midden complex bordering Round Hill Creek and bounded in the south by Tom's Creek, an eastern tributary of Round Hill Creek. Size not accurately determined owing to heavy vegetation. Material scattered on all 4WD tracks examined in the area. Maximum depth in all locations is 10–20cm. Predominantly mud ark and oyster, with some stone artefacts. Site complex covers a large area and probably subsumes the sites registered separately as KE:A33, KE:A62 and KE:A63 (see below). References: Burke (1993); Rowland (1987).
KE:A12	Stone Quarry/ Shell Midden/ Artefact Scatter	M. Rowland 1.11.1986 C. Burke 29.4.1993	24°09'00"S 151°53'04"E	Site consists of the entire Round Hill Head headland. Isolated stone artefacts and artefact scatters located along exposed walking tracks and ridges. Two large rhyolitic tuff boulders near the navigation beacon at the tip of the headland exhibit a number of negative flake scars. Some oyster shell and flaking debris is scattered in surrounding crevices. Elsewhere, scattered shell fragments and stone artefacts occur, including cobble cores. References: Burke (1993); Lilley et al. (1997); Rowland (1987).
KE:A16	Shell Midden	M. Rowland 24.7.1990 L. Godwin 4.10.1990 C. Burke 30.4.1993	24°12'10"S 151°51'56"E	Multi-component stratified shell mound at least 16m x 10m (c.160m ²) with a depth of more than 50cm, located in open woodland on a low rock terrace c.25m from Round Hill Creek. Extremely high density and spatially discrete shell deposit, dominated by mud ark, but also some oyster, stone artefacts, bone and charcoal. References: Burke (1993); Rowland (1987).
KE:A32	Contact Site/ Story Place	S. Davies 2.2.1994	24°20'20"S 151°34'00"E	Miriam Vale Homestead and Cattle Station built c.1856. Historic and contact site, located just southeast of the modern town of Miriam Vale. The station is the centre of religious and social affiliation to country for many Aboriginal families whose association to the Miriam Vale area spanned the pastoral occupation and into the distant past. This area was the location of several massacres and conflicts between white pastoralists, Native Mounted Police and Aborigines, including a major Aboriginal attack on 12 February 1857. After the establishment of the homestead and until the time of the attacks, local Aborigines had been employed on the station. An Aboriginal camp was situated on the southern bank of House Creek adjacent to the homestead. References: Clarkson et al. (n.d.); Davies (1994).
KE:A33	Shell Midden	C. Burke 22.4.1993	24°11'40"S 151°52'30"E	Large, stratified midden complex (c.100,000m ²) intermittently exposed over low dunes abutting the base of a rhyolitic scree slope on the northern junction of Round Hill and Tom's Creeks. Several low, sandy, residual ridges which exhibit dense midden exposures were also located on the adjacent mudflats. Dominated by mud ark and oyster with occasional other species, stone and flaked glass artefacts. Burke originally recorded part of this site as very sparse oyster and mud ark scatters (c.800m ²) exposed on and around 4WD tracks in open woodland in a gently inclined area 5–20m from mudflats bordering Tom's Creek. This site is dated on charcoal to 1,110±70 BP (Wk-7685). This site is probably part of the more extensive KE:A11 (see above). References: Burke (1993); Ulm (1999).
KE:A34	Shell Midden/ Artefact Scatter	C. Burke 27.1.1993	24°04'25"S 151°45'36"E	Very sparse, surface scatter of shell and stone artefacts (c.2,500m ²) located on a graded survey line on a sand ridge c.1km inland from the central east coast of Middle Island. Oyster (n=20), mud ark (n=10) and stone artefacts (n=3). References: Burke (1993).
KE:A35	Shell Midden	C. Burke 27.1.1993	24°06'49"S 151°46'19"E	Very sparse, surface shell scatter (c.20m ²) on top of a ridge on the southeast of Middle Island. Contains only 5 oyster fragments, no artefacts. This site is probably part of the larger site complex recorded by Lilley, registered as KE:A66 (see below). References: Burke (1993); Lilley (1994).
KE:A36	Shell Midden	C. Burke 27.1.1993	24°06'47"S 151°46'19"E	Very sparse, surface shell scatter (c.1m ²) consisting of only three oyster shells on the southeast of Middle Island. This site is probably part of the larger site complex recorded by Lilley, registered as KE:A66 (see below). References: Burke (1993); Lilley (1994).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KE:A37	Shell Midden	C. Burke 30.1.1993	24°07'16"S 151°46'41"E	Sparse, surface shell scatter (c.1,500m ²) disturbed by construction activities, located on a dune ridge on the southeastern end of Middle Island. Dominated by oyster, but includes mud ark and mussel. This site is probably part of the larger site complex recorded by Lilley (1994), registered as KE:A66 (see below) and also exposed in the northern erosion bank of Middle Creek. References: Burke (1993); Lilley (1994); Lilley et al. (1997).
KE:A38	Shell Midden	C. Burke 30.1.1993	24°06'08"S 151°45'04"E	Sparse, surface shell scatter (c.2,000m ²) containing one stone artefact on a ridge on the southwest of Middle Island. This site is probably part of the larger site complex recorded by Lilley, registered as KE:A65 (see below). References: Burke (1993); Lilley (1994).
KE:A39	Shell Midden	C. Burke 6.3.1993	24°00'38"S 151°37'26"E	Sparse, surface shell scatter (c.50m ²) in an open area on a bank above the beach fronting Rodds Harbour on the northwestern end of Rodds Peninsula. Dominated by mud ark with some oyster and mussel. References: Burke (1993).
KE:A40	Shell Midden	C. Burke 6.3.1993	24°00'47"S 151°37'37"E	Very sparse, surface shell scatter (c.50m ²), 10m from beach fronting Rodds Harbour and 100m from the sea at low tide c.5m asl, on the northwestern end of Rodds Peninsula. Dominated by oyster with some mud ark. References: Burke (1993).
KE:A41	Shell Midden/ Artefact Scatter	C. Burke 6.3.1993	24°00'51"S 151°37'43"E	Extensive areas of natural shell deposits (cheniers), cultural shell midden deposits and a stone-walled tidal fishtrap located on the western bank of Mort Creek on the western coast of Rodds Peninsula. Shell exposures cover an area in excess of c.6,000m ² . Species include mud ark, oyster and whelk. Stone artefacts and fish bone noted in some excavations. This site is dated on shell to 3,430±140 BP (Wk-6986). References: Burke (1993); Carter (1997); Carter et al. (1999); Lilley et al. (1996); Lilley et al. (1997).
KE:A42	Shell Midden	C. Burke 7.3.1993	24°00'38"S 151°41'18"E	Sparse, stratified shell scatter (c.100m ²) on a ridge near Falls Creek on the central east coast of Rodds Peninsula. Includes oyster and turbo. Site located 500m from sea and rocks. References: Burke (1993).
KE:A43	Shell Midden	C. Burke 7.3.1993	24°03'24"S 151°41'48"E	Group of midden exposures (c.900m ²) located on low residual beach ridges stranded on mudflats at the western extremities of Pancake Creek consisting of a shallow, linear midden exposed in a low erosion bank and three sparse shell scatters. Includes oyster, mud ark, thaid, whelk and mussel. References: Burke (1993).
KE:A44	Shell Midden	C. Burke 9.3.1993	24°02'22"S 151°42'49"E	Large stratified shell midden (c.8,320m ²) on top of a ridge above the beach and mudflats on the northern bank of Pancake Creek, 100m to mudflats and 35m to a small tidal inlet. Dominated by mud ark and includes whelk and oyster to a depth of 5cm determined by auger. This site is dated on charcoal to 700±140 BP (Wk-6993). References: Burke (1993); Lilley et al. (1997); Ulm (1999).
KE:A45	Shell Midden/ Artefact Scatter	C. Burke 9.3.1993	24°02'21"S 151°42'50"E	Stratified linear shell midden (c.5,500m ²) located 50m from the sea and 5–10cm deep, and a shell scatter located 20–30m away from a small tidal inlet and beach flats on the northern bank of Pancake Creek. Dominated by mud ark and includes oyster and whelk, with a single stone artefact noted. This site is dated on charcoal to 700±140 BP (Wk-6993). References: Burke (1993); Lilley et al. (1997); Ulm (1999).
KE:A46	Shell Midden	C. Burke 9.3.1993	24°02'16"S 151°43'03"E	Linear stratified midden (c.7,140m ²) eroding from a creek bank 20m west of a tidal inlet on the northern bank of Pancake Creek. Shell lens is visible in the eroding profile for 238m and continues as a scatter on top of the dune for another 97m. Dominated by oyster and includes mud ark, whelk and charcoal. This site is dated on charcoal to 700±140 BP (Wk-6993). References: Burke (1993); Lilley et al. (1997); Ulm (1999).
KE:A47	Shell Midden	C. Burke 9.3.1993	24°02'05"S 151°43'15"E	Surface shell scatter (c.350m ²) on top of a beach ridge, 30m from mangroves and 15–20m from high water mark on the northern bank of Pancake Creek. Includes oyster, mud ark and thaid. Poor visibility. This site is dated on charcoal to 700±140 BP (Wk-6993). References: Burke (1993); Lilley et al. (1997); Ulm (1999).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KE:A48	Shell Midden	C. Burke 9.3.1993	24°02'25"S 151°42'50"E	Surface shell scatter (c.1,200m ²) in front of a tidal inlet before mudflats at a shack, 100m from the northern shore of Pancake Creek. Includes oyster, mud ark and whelk. This site is dated on charcoal to 700±140 BP (Wk-6993). References: Burke (1993); Lilley et al. (1997); Ulm (1999).
KE:A49	Shell Midden	C. Burke 25.3.1993	24°11'54"S 151°51'33"E	Burke (1993) recorded three surface shell scatters (c.1,000m ²) located on the eroding western bank of Round Hill Creek. Includes oyster, mud ark and whelk. Ulm et al. (1999) considered this to be part of the extensive Eurimbula Site 1. This site is dated on charcoal to 3,020±70 BP (Wk-3945). References: Burke (1993); Godwin (1990); Lilley et al. (1996); Lilley et al. (1997); Ulm et al. (1999).
KE:A50	Shell Midden	C. Burke 25.3.1993	24°11'44"S 151°51'40"E	Burke (1993) recorded one linear stratified midden (c.100m ²) exposed 5–10cm deep and two surface shell scatters (c.100m ²) located on the eroding western bank of Round Hill Creek. Some shell is eroding out of the bank. Includes oyster and mud ark. Ulm et al. (1999) considered this to be part of the extensive Eurimbula Site 1. This site is dated on charcoal to 3,020±70 BP (Wk-3945). References: Burke (1993); Godwin (1990); Lilley et al. (1996); Lilley et al. (1997); Ulm et al. (1999).
KE:A51	Shell Midden	C. Burke 25.3.1993	24°11'35"S 151°51'42"E	Burke (1993) recorded two shell scatters (c.200m ²) on the western bank of Round Hill Creek exposed on the surface and up to 30cm deep in the erosion section. Dense <i>in situ</i> deposit of mud ark and oyster. Ulm et al. (1999) considered this to be part of the extensive Eurimbula Site 1. This site is dated on charcoal to 3,020±70 BP (Wk-3945). References: Burke (1993); Godwin (1990); Lilley et al. (1996); Lilley et al. (1997); Ulm et al. (1999).
KE:A52	Shell Midden	C. Burke 25.3.1993	24°11'28"S 151°51'45"E	Burke (1993) recorded six shell scatters (c.2,000m ²), including linear stratified deposits up to 10cm deep, on the western bank of Round Hill Creek. Dominated by mud ark with some shell eroding out of section, up to 5cm deep. Ulm et al. (1999) considered this to be part of the extensive Eurimbula Site 1. This site is dated on charcoal to 3,020±70 BP (Wk-3945). References: Burke (1993); Godwin (1990); Lilley et al. (1996); Lilley et al. (1997); Ulm et al. (1999).
KE:A53	Shell Midden	C. Burke 26.3.1993	24°11'04"S 151°51'56"E	Burke (1993) recorded three surface shell scatters (c.450m ²) on top of a sand ridge adjacent to Round Hill Creek. Dominated by mud ark with a single large core of granite-like material noted. Ulm et al. (1999) considered this to be part of the extensive Eurimbula Site 1. This site is dated on charcoal to 3,020±70 BP (Wk-3945). References: Burke (1993); Godwin (1990); Lilley et al. (1996); Lilley et al. (1997); Ulm et al. (1999).
KE:A54	Shell Midden	C. Burke 26.3.1993	24°10'56"S 151°51'50"E	Burke (1993) recorded two surface shell scatters on top of a sand ridge and on a tidal flat (c.700m ²), and a linear stratified deposit (c.750m ²) on a sand ridge adjacent to Round Hill Creek. Dominated by mud ark and includes oyster. Ulm et al. (1999) considered this to be part of the extensive Eurimbula Site 1. This site is dated on charcoal to 3,020±70 BP (Wk-3945). References: Burke (1993); Godwin (1990); Lilley et al. (1996); Lilley et al. (1997); Ulm et al. (1999).
KE:A55	Shell Midden/ Artefact Scatter	C. Burke 1.6.1993	24°01'00"S 151°45'46"E	Sparse scatter of oyster shell including 7 stone artefacts (c.400m ²), located on the northern side of Bustard Head. Raw materials may not be local. References: Burke (1993).
KE:A56	Shell Midden	C. Burke 21.4.1993	24°02'31"S 151°33'54"E	Low density surface shell scatter (c.70m ²) located in an open, gently sloping area 10m from the beach on the western side of Innes Head, on the eastern bank of Seven Mile Creek. Dominated by oyster and includes mussel. References: Burke (1993).
KE:A57	Shell Midden/ Artefact Scatter	C. Burke 22.4.1993	24°05'10"S 151°38'52"E	Three small surface shell scatters (c.70m ²) located on and around a graded dirt road c.50m from mangroves, on the eastern edge of an unnamed embayment on the western side of the Turkey Beach peninsula. Dominated by mud ark and includes oyster and a single white quartz flaked piece. References: Burke (1993).
KE:A58	Artefact Scatter	C. Burke 22.4.1993	24°05'44"S 151°38'10"E	Isolated stone artefact manufactured on banded chert located on mudflats on the eastern edge of an unnamed embayment on the western side of the Turkey Beach peninsula, c.50m from mangroves. References: Burke (1993).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KE:A59	Shell Midden/ Artefact Scatter	C. Burke 1.6.1993	24°01'56"S 151°44'40"E	Very sparse surface shell scatter (c.24,000m ²), including one quartz flaked piece, located on the edge of mudflats on the Jenny Lind Creek side of Bustard Head. Dominated by mud ark and oyster and includes whelk. References: Burke (1993).
KE:A60	Scarred Tree	C. Burke 30.4.1993	24°12'51"S 151°54'16"E	Scarred tree located in the centre of Agnes Water. Scar is located on a large eucalyptus tree (Queensland blue gum or Moreton Bay ash). Scar measures 250cm x 46cm. References: Burke (1993); Lilley et al. (1997).
KE:A61	Shell Midden	C. Burke 17.5.1993	24°01'56"S 151°44'40"E	Fairly dense discrete stratified shell midden with depth of 10cm, located on the eastern bank of Round Hill Creek, c.100m southeast of KE:A16 (see above). Dominated by mud ark. Site damaged by bulldozer activity. References: Burke (1993); Lilley et al. (1997).
KE:A62	Shell Midden/ Artefact Scatter	C. Burke 22.5.1993	24°10'57"S 151°52'53"E	Linear stratified midden (c.4,200m ²) with <i>in situ</i> lens of shell c.50cm below ground surface and up to 10cm thick. Subsurface material exposed in a large excavation behind the sewage treatment depot. Dominated by mud ark and includes oyster and stone artefacts manufactured on a variety of raw materials. This site is probably part of the more extensive KE:A11 (see above). References: Burke (1993).
KE:A63	Shell Midden	C. Burke 22.5.1993	24°11'10"S 151°52'33"E	Very sparse surface scatter (c.400m ²) of mud ark and oyster shell located on either side of a 4WD track. This site is probably part of the more extensive KE:A11 (see above). References: Burke (1993).
KE:A64	Shell Midden/ Artefact Scatter	I. Lilley 10.4.1994	24°04'10"S 151°43'35"E	Shell midden complex (c.200,000m ²) up to 15cm deep on the central west coast of Middle Island. Dominated by mud ark and includes oyster and a quartz flake. Located in low swampy melaleuca shrubland adjacent to mudflats on a tidal creek. References: Lilley (1994).
KE:A65	Shell Midden	I. Lilley 10.4.1994	24°05'30"S 151°45'00"E	Shell midden complex (c.800,000m ²) located on high north-south trending dunes extending for c.7km along the central western side of Middle Island. Comprises mud ark, oyster, pipi and whelk. References: Lilley (1994).
KE:A66	Shell Midden/ Artefact Scatter	I. Lilley 10.4.1994	24°06'00"S 151°44'30"E	Shell midden complex (c.800,000m ²) located on high north-south trending dunes extending for c.5km along the central eastern side of Middle Island. Comprises mud ark, oyster and pipi as well as a quartz core. References: Lilley (1994).
KE:A67	Shell Midden	I. Lilley 10.4.1994	24°03'44"S 151°45'56"E	Shell midden complex (c.140,000m ²) dominated by pipi up to 15cm deep on parabolic dunes and sandblows on the northeastern end of Middle Island, bordered in the north and west by Jenny Lind Creek. This site is dated on shell to 980±50 BP (Wk-7679). References: Lilley (1994); Lilley et al. (1997); Ulm (1999).
KE:A87	Shell Midden/ Artefact Scatter	S. Ulm	24°12'15"S 151°54'11"E	Low density scatter of shell and stone artefacts located in a small blowout in the frontal dunes and bordered to the west by a 2m high wire fence. The exposure covers an area of 31m x 12m (372m ²). Maximum densities of 30 shell fragments/m ² , including oyster and mud ark, and 5 stone artefacts/m ² , including quartz, chert and rhyolitic tuff. This site is probably the same as KE:A10 (see above). This site is dated on charcoal to 266±87 BP (Wk-10969). References: Lilley et al. (1997); Rowland (1987).
KE:A88	Shell Midden/ Artefact Scatter	S. Ulm	24°12'21"S 151°54'15"E	Sparse scatter of oyster and pipi fragments eroding out of frontal dunes c.50cm below ground surface. One stone artefact noted, probably manufactured on rhyolitic tuff. References: Lilley et al. (1997).
KE:A89	Shell Midden/ Artefact Scatter	S. Ulm	24°12'22"S 151°54'15"E	Minor scatter of oyster and pipi with one stone artefact located c.20m south of KE:A88 (see above). References: Lilley et al. (1997).
KE:A90	Shell Midden	S. Ulm	24°12'23"S 151°54'15"E	Minor scatter of 12 oyster fragments adjacent to access path to beach, located c.50m south of KE:A89 (see above). References: Lilley et al. (1997).
KE:A91	Shell Midden	S. Ulm	24°10'39"S 151°50'34"E	Sparse shell scatter on southern edge of mangrove fringe of Eurimbula Creek, including whelk, mud ark and pipi. A water-rounded rock was located 20m south of the shell. References: Lilley et al. (1997).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KE:A92	Shell Midden/ Artefact Scatter	S. Ulm	24°11'00"S 151°49'30"E	Extensive surface scatter of shell and stone artefacts visible on Eurimbula Creek 4WD access track. Bracken fern fringes the track on both sides making it difficult to determine the extent of the scatter owing to lack of visibility. Includes flakes, flaked pieces, cores and manuports manufactured on rhyolitic tuff, quartz and indurated mudstone. Includes mud ark and oyster. References: Lilley et al. (1997).
KE:A93	Shell Midden/ Artefact Scatter	S. Ulm	24°14'24"S 151°56'27"E	Low density shell and stone artefact deposit eroding from subsurface lens. Includes oyster, nerite, mud ark and whelk. Twelve stone artefacts noted including rhyolitic tuff and silcrete. References: Lilley et al. (1997).
KE:A94	Artefact Scatter	S. Ulm	24°14'30"S 151°56'30"E	Stone artefact scatter on 4WD road shoulder on headland. Artefacts manufactured on rhyolitic tuff found eroding out of a nearby road cutting up to 60cm below ground surface. Cores, flakes, flaked pieces, grinding stone made on indurated mudstone, rhyolitic tuff, silcrete, quartz and quartzite. Some retouched artefacts. References: Lilley et al. (1997).
KE:A95	Shell Midden	S. Ulm	24°14'37"S 151°56'36"E	Discrete scatter of oyster lids and bases eroding down orange-yellow dune face covering an area of c.10m ² . Shell densities of up to 28 oyster fragments/m ² . Six unmodified blocks of stone are associated with the shell material. Purple colouration on some oyster valves suggests a recent, perhaps non-Aboriginal, origin. References: Lilley et al. (1997).
KE:A96	Hearth	S. Ulm	24°14'40"S 151°56'34"E	Hearth feature located c.30m south of KE:A94 (see above). Five unmodified blocks of silcrete arranged in a rough circle 46cm x 33cm. No artefactual material is associated with the feature. Possible non-Aboriginal origin. Reference: Lilley et al. (1997).
KE:A97	Artefact Scatter	S. Ulm	24°14'42"S 151°56'37"E	Small artefact scatter comprising 12 stone artefacts manufactured on silcrete exposed over c.10m ² on a bluff adjacent to low dunes. Large blocks of silcrete embedded in the ground surface may have been modified. Reference: Lilley et al. (1997).
KE:A98	Shell Midden/ Artefact Scatter	S. Ulm	24°15'14"S 151°56'44"E	Sparse scatter of stone artefacts and shell, including oyster, whelk and mussel. Colouration on some shell suggests a recent, perhaps non-Aboriginal, origin. Large silcrete flake collected from adjacent high water mark. Reference: Lilley et al. (1997).
KE:A99	Artefact Scatter	S. Ulm	24°16'00"S 151°56'50"E	Two stone artefacts located on the open coast on the southern side of the Red Rock headland, south of Rocky Point. One broken waterworn pebble manuport with cortex, and one flake on a red igneous rock (possibly silcrete). References: Lilley et al. (1997).
KE:B00	Artefact Scatter	S. Ulm	24°16'00"S 151°56'50"E	Two rhyolitic tuff cores and one andesite flake located on a walking track on the open coast on the southern side of the Red Rock headland, south of Rocky Point. References: Lilley et al. (1997).
KE:B01	Artefact Scatter	S. Ulm	24°14'00"S 151°56'00"E	Low density scatter of rhyolitic tuff flakes and flaked pieces exposed on eroding walking and vehicle tracks across the northern Rocky Point headland. References: Lilley et al. (1997).
KE:B02	Artefact Scatter	S. Ulm	24°14'00"S 151°56'00"E	Scatter of 20 flakes and flaked pieces manufactured on chert, rhyolitic tuff and quartzite exposed in a road cutting on the northern Rocky Point headland. References: Lilley et al. (1997).
KE:B03	Artefact Scatter	S. Ulm	24°14'01"S 151°55'57"E	Six large silcrete flakes and three cores eroding out of secondary orange dune. Located adjacent to two round wooden pillions driven into top of dune. Reference: Lilley et al. (1997).
KE:B04	Shell Midden/ Artefact Scatter	S. Ulm	24°13'47"S 151°55'45"E	Low density scatter of shell and stone material over c.5m ² area at intersection of 4WD track and beach c.20m west of high water mark. All material may have a non-Aboriginal origin as the site is located in a popular European camping area. Reference: Lilley et al. (1997).
KE:B05	Shell Midden/ Artefact Scatter	S. Ulm	24°13'41"S 151°55'39"E	Stone material eroding down slope of c.3m high frontal dune with material in section c.20cm below ground surface. Located c.50m south of minor headland mid-way between Rocky Point and Agnes Water headlands. Scattered surface shell thought to have modern origin. Test excavation yielded no unambiguously cultural material, although the origin of the stone material in the deposit remains to be explained. Reference: Lilley et al. (1997).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KE:B06	Shell Midden/ Artefact Scatter	S. Ulm	24°13'28"S 151°55'31"E	Small scatter of shell and stone artefacts in low secondary dune c.50m of minor headland mid-way between Rocky Point and Agnes Water headlands. Includes oyster, mud ark and pipi. References: Lilley et al. (1997).
KE:B07	Shell Midden/ Artefact Scatter/ Stone Quarry	S. Ulm	24°07'00"S 151°46'30"E	Extensive shell midden and quarry site complex (c.140,000m ²) located on the southern bank of Middle Creek close to its mouth. Includes oyster, mud ark, nerite and pipi. Shell material visible in erosion sections up to 25cm deep. Extensive outcrop of modified rhyolitic tuff. Surface artefact densities up to 110/m ² . This site is dated on charcoal to 1,640±150 BP (Wk-6361). References: Lilley et al. (1997); Reid (1998).
KE:B10 KE:B22				
KE:B11	Artefact Scatter	S. Ulm	24°09'00"S 151°46'30"E	Stone artefact scatter on salt pan at the southern extremities of Ocean Creek estuary where low mangroves begin at base of creek. Numerous stone artefacts manufactured on rhyolitic tuff spread over c.200m ² area c.20m west of low casuarina fringe. Several isolated fragments of shell noted along mangrove fringe. References: Lilley et al. (1997).
KE:B12	Artefact Scatter	S. Ulm	24°08'30"S 151°47'00"E	Numerous artefacts manufactured on rhyolitic tuff embedded in a muddy surface on mudflats in the centre of open area on Middle Creek estuary. References: Lilley et al. (1997).
KE:B16	Artefact Scatter	S. Ulm	24°09'30"S 151°48'00"E	Nine rhyolitic tuff artefacts scattered over a 50m ² area c.30m southeast of bridge on saltpan at the northern extremity of Eurimbula Creek. References: Lilley et al. (1997).
KE:B17	Shell Midden/ Artefact Scatter	S. Ulm	24°09'40"S 151°48'10"E	Low density scatter of oyster shell fragments and two water-worn manuports visible on bank about 10m through mangroves to channel of Eurimbula Creek. References: Lilley et al. (1997).
KE:B18	Shell Midden	S. Ulm	24°09'54"S 151°49'02"E	Scatter of midden shell visible in low (c.30cm high) erosion bank on mangrove fringe of Eurimbula Creek. Some sparse scattered oyster fragments visible on surface. Main scatter c.5m ² eroding out of bank onto flat mangrove fringe. Shell layer visible in erosion bank c.18cm below surface and c.3cm thick for c.3m along bank. Density is c.108/m ² . Includes oyster and mud ark. This site is dated on charcoal to 230±60 BP (Wk-7680). References: Lilley et al. (1997); Ulm (1999).
KE:B19	Shell Midden	S. Ulm	24°10'04"S 151°49'22"E	Scatter of shell visible on top of a low dune c.20m northeast of mangrove fringe of Eurimbula Creek mainly visible in the burrow of an unknown animal. Scatter spread over an area of c.10m ² . Maximum density is 25/m ² . Predominantly oyster, with some nerite, mud ark, whelk and telescope mud whelk. Located in dry rainforest thicket. Recent excavations in this general site complex have yielded modern radiocarbon dates. References: Lilley et al. (1997); Ulm (1999).
KE:B20	Shell Midden/ Artefact Scatter	S. Ulm	24°10'10"S 151°49'36"E	Very sparse scatter of shell visible on low (c.1m high) erosion bank c.10m north of Eurimbula Creek. Includes mud ark, oyster and whelk as well as several flaked pieces of quartz and rhyolitic tuff and some larger, possibly ground, implements manufactured on the rhyolitic tuff. References: Lilley et al. (1997).
KE:B21	Shell Midden	S. Ulm	24°10'21"S 151°50'17"E	Extensive low density pipi scatter located c.50m from open beach and c.100m west of the mouth of Eurimbula Creek. May be non-cultural. References: Lilley et al. (1997).
KE:B24	Shell Midden	C. Burke	24°01'01"S 151°30'14"E	
KE:B26	Shell Midden	S. Ulm	24°11'50"S 151°52'10"E	Mounded mud ark midden disturbed by brush-turkey nesting located near the eastern bank of Round Hill Creek and the southern bank of Tom's Creek, Agnes Water. References: Lilley et al. (1997).
KE:B28	Scarred Tree	S. Ulm	24°15'30"S 151°53'00"E	Possible scarred tree which has been felled for construction of a power easement on the southern margin of Round Hill National Park. References: Lilley et al. (1997).
KE:B29	Artefact Scatter	S. Ulm	24°15'00"S 151°55'30"E	Low density scatter of stone artefacts located along the northeastern margin of Deepwater Creek, southwest of Rocky Point. References: Lilley et al. (1997).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KF:A01	Shell Midden	C. Burke 6.3.1993	23°58'52"S 151°36'48"E	Very sparse surface shell scatter dominated by oyster on the eastern side of Richards Point, Rodds Peninsula. Total of 20 shell fragments. References: Burke (1993).
KF:A02	Shell Midden	C. Burke 7.3.1993	23°59'20"S 151°40'06"E	Four low density shell scatters (c.1,200m ²) up to 5cm deep dominated by oyster but also includes chiton, austro, turbo and mud ark, located on the northeastern coast of Rodds Peninsula. Scatters in close proximity to beach, tidal inlet and rock platforms. References: Burke (1993).
KF:A03	Shell Midden	C. Burke 8.3.1993	23°59'23"S 151°39'44"E	Two surface shell scatters (c.1,400m ²) located behind dunes and a tidal inlet 50–60m from ocean and rock platforms, located on the northeastern coast of Rodds Peninsula. Dominated by oyster and includes mud ark, chiton and turbo. References: Burke (1993).
KF:A04	Shell Midden	C. Burke 8.3.1993	23°59'13"S 151°39'29"E	Very sparse surface shell scatter (c.40m ²) of oyster 20m from beach and rock platforms, located on the northeastern coast of Rodds Peninsula, c.10m asl. Site is behind thick scrub. References: Burke (1993).
KF:A05	Shell Midden	C. Burke 8.3.1993	23°59'05"S 151°39'22"E	Two shell scatters (c.1,700m ²) at least 15cm deep situated on a bank near the beach c.20m from the sea and rock platforms, located on the northeastern coast of Rodds Peninsula. Dominated by oyster and includes mud ark, chiton and turbo. References: Burke (1993).
KF:A06	Shell Midden	C. Burke 8.3.1993	23°59'27"S 151°40'14"E	Two sparse oyster scatters (c.150m ²) located 50m from beach and rocks, located in the vicinity of foredunes on the northeastern coast of Rodds Peninsula. Freshwater creeks in close vicinity to deposits. References: Burke (1993).
KF:A07	Shell Midden	C. Burke 9.3.1993	23°58'52"S 151°38'52"E	Sparse oyster deposits (c.200m ²) up to 5cm deep situated c.100m from sea and 5m asl on a bank on top of a ridge, located on the northeastern coast of Rodds Peninsula. Dominated by oyster and includes austro. References: Burke (1993).
KF:A08	Artefact Scatter	C. Burke 9.3.1993	23°58'33"S 151°37'31"E	Isolated stone artefact on a steep rocky slope on top of a headland on the eastern side of Richards Point, Rodds Peninsula, c.20m asl and 20m from rock platforms and ocean. References: Burke (1993).
KF:A09	Shell Midden	C. Burke 9.3.1993	23°58'45"S 151°37'44"E	Surface shell scatter (c.200m ²) on beach c.0.5m asl and c.10m from rock platforms and ocean, c.500m northwest of Richards Point, Rodds Peninsula. Dominated by oyster and includes mud ark and austro. References: Burke (1993).
KF:A10	Shell Midden	C. Burke 9.3.1993	23°58'45"S 151°37'44"E	Surface oyster scatter (c.800m ²) at least 5cm deep situated c.50m from beach in open woodland, located on the northeastern coast of Rodds Peninsula. Ocean and rock platforms c.200m from site. Augering revealed shell to 5cm in depth. References: Burke (1993).
KF:A11	Shell Midden	C. Burke 9.3.1993	23°58'51"S 151°37'18"E	Sparse surface scatters (c.500m ²) of oyster and mud ark, 50–100m from rock platforms and ocean, located on the northeastern coast of Rodds Peninsula. Tidal creek in close vicinity. References: Burke (1993).
KF:A12	Fishtrap	C. Burke 9.3.1993	23°58'40"S 151°37'25"E	Stone-walled fishtrap of unknown dimensions located in a small bay to the immediate west of Richards Point. The trap appears to contain water at both high and low tide. The trap is in the shape of an arc with a formed opening in the centre of it. References: Burke (1993); Lilley et al. (1997).
KF:A13	Shell Midden	C. Burke 8.3.1993	23°59'24"S 151°40'13"E	Very sparse surface shell scatters (c.50m ²) containing mostly oyster 20–50m from rock platforms and ocean. Freshwater creek located 10–50m away. References: Burke (1993).
KF:A14	Shell Midden	C. Burke 8.3.1993	23°59'08"S 151°39'11"E	Sparse surface shell scatters (c.3,650m ²) situated on top of a dune ridge in a clearing behind the beach, located on the northeastern coast of Rodds Peninsula. Dominated by oyster and includes mud ark, chiton and mussel. Tidal creek is located nearby. References: Burke (1993).
KF:A15	Shell Midden	C. Burke 8.3.1993	23°59'08"S 151°39'09"E	Sparse surface shell scatter, containing mostly oyster, situated on top of a dune ridge, located on the northeastern coast of Rodds Peninsula. Tidal creek is located nearby. References: Burke (1993).

continued over

Appendix 2: continued

SITE ID	SITE TYPE	RECORDER	LOCATION	DESCRIPTION
KF:A16	Shell Midden	C. Burke 8.3.1993	23°58'55"S 151°38'50"E	Surface oyster scatter (c.25m ²) situated c.100m from ocean and c.50m from rock platforms, c.5m asl, located on the northeastern coast of Rodds Peninsula. References: Burke (1993).
KF:A23	Shell Midden	S. Ulm	24°59'22"S 151°40'15"E	Low density surface scatter of oyster up to c.150m inland on northeastern Rodds Peninsula associated with large burdekin plum trees. Possible subsurface component. Reference: Lilley et al. (1997).
SCC55	Shell Midden	S. Ulm	24°04'30"S 151°39'00"E	Thin layer of oyster eroding out of low bank c.5cm below ground surface along c.4m of bank at Turkey Beach. Area to the west and south has been levelled for the construction of a small toilet block and BBQ area.
SCC58	Shell Midden	S. Ulm	24°01'40"S 151°44'40"E	Surface scatter of shell on a high dune ridge up to 50m inland on the eastern bank of Pancake Creek immediately behind a navigation beacon opposite Pancake Point. Visible shell appears to be associated with crab burrowing and is probably derived from subsurface deposits. Dominated by oyster but also includes mud ark and whelk. A small silcrete core was also noted. References: Ulm (1999).
SCC64	Shell Midden	S. Ulm	24°07'25"S 151°40'59"E	Extensive linear shell midden exposed in section on the western bank of Worthington Creek. The midden material is located along the top margin of a high (c.4m) creek erosion bank. Sandstone is exposed at the base of the section, overlain by a thick layer of light brown clays and a thin veneer of eroding top soils containing the shell material. Shell is visible along a segment of bank c.350m in length and up to 5cm deep. Includes oyster and scallop. This site is dated on shell to 349±60 BP (Wk-10089). References: Ulm (this volume).

Appendix 3: Site name synonyms for recorded sites on the southern Curtis Coast

EPA REGISTERED SITE NO.	BURKE (1993) FIELD NO.	BURKE (1993) PRE-ALLOCATED SITE NO.	GGCHP SITE ID	OTHER DESIGNATIONS
JE:A41				Hummock Hill Island Site 1
JE:A42				Hummock Hill Island Site 2
JE:A43				Hummock Hill Island Site 3
JE:A60	CC190			
JE:A61	CC192			
JE:A62	CC193			
JE:A63	CC195			
JE:A64	CC196			
JE:A65	CC197			
JE:A66	CC187			
KE:A05	CC132		SCC20	Rocky Point Quarry; Choughs Crossing
KE:A06				Agnes Water Grooves
KE:A08				Boyne Creek I (Neal 1986)
KE:A09			SCC63	Boyne Creek II (Neal 1986); Seven Mile Creek Mound (this volume)
KE:A10			SCC3	MV1 (Rowland 1987)
KE:A11	CC144		SCC65	MV2 (Rowland 1987); Tom's Creek Site Complex (this volume)
KE:A12	CC139		SCC1	MV3 (Rowland 1987)
	CC043	KE:A37		
	CC044	KE:A38		
	CC045	KE:A39		
	CC046	KE:A40		
	CC047	KE:A41		
	CC048	KE:A42		
	CC049	KE:A43		
	CC050	KE:A44		
	CC051	KE:A45		
	CC052	KE:A46		
KE:A16	CC147		SCC53	MV4 (Rowland 1987); Round Hill Creek Mound (this volume)
KE:A32				Miriam Vale Homestead (Davies 1994); BG10 (Davies 1994)
KE:A33	CC141	KE:A31	SCC59	Tom's Creek Site Complex (this volume)
	CC142	KE:A30		
KE:A34	CC005	KE:A32		
KE:A35	CC006	KE:A33		Site Group 4 (Lilley 1994)
KE:A36	CC007	KE:A34		Site Group 4 (Lilley 1994)
KE:A37	CC008	KE:A35	SCC46	Site Group 4 (Lilley 1994)
KE:A38	CC009	KE:A36		
KE:A39	CC065	KE:A47		
KE:A40	CC066	KE:A48		
KE:A41	CC067	KE:A49	SCC42	Rodds Peninsula Site Complex (Carter 1997)
	CC068	KE:A50		Mort Creek Site Complex (this volume)
KE:A42	CC069	KE:A51		
KE:A43	CC090	KE:A52		
	CC091	KE:A53		
	CC092	KE:A54		
	CC093	KE:A55		
KE:A44	CC094	KE:A56	SCC45	Pancake Creek Site Complex (this volume)
KE:A45	CC095	KE:A57	SCC45	Pancake Creek Site Complex (this volume)
	CC096	KE:A58		
KE:A46	CC097	KE:A59	SCC45	Pancake Creek Site Complex (this volume)

continued

Appendix 3: continued

EPA REGISTERED SITE NO.	BURKE (1993) FIELD NO.	BURKE (1993) PRE-ALLOCATED SITE NO.	GGCHP SITE ID	OTHER DESIGNATIONS
KE:A47	CC098	KE:A60	SCC45	Pancake Creek Site Complex (this volume)
KE:A48	CC099	KE:A61	SCC45	Pancake Creek Site Complex (this volume)
KE:A49	CC112A CC113A CC131	KE:A62 KE:A63 KE:A64	SCC43	Eurimbula Site 1 (this volume)
KE:A50	CC114 CC115 CC116	KE:A65 KE:A66 KE:A67	SCC43	Eurimbula Site 1 (this volume)
KE:A51	CC117 CC118	KE:A68 KE:A69	SCC43	Eurimbula Site 1 (this volume)
KE:A52	CC119 CC120 CC121 CC122 CC123 CC124	KE:A70 KE:A71 KE:A72 KE:A73 KE:A74 KE:A75	SCC43	Eurimbula Site 1 (this volume)
KE:A53	CC125 CC126 CC127	KE:A76 KE:A77 KE:A78	SCC43	Eurimbula Site 1 (this volume)
KE:A54	CC128 CC129 CC130	KE:A79 KE:A80 KE:A81	SCC43	Eurimbula Site 1 (this volume)
KE:A55	CC174	KE:A82		
KE:A56	CC133	KE:A83		
KE:A57	CC135 CC136 CC137	KE:A84 KE:A85 KE:A86		
KE:A58	CC138	KE:A87		
KE:A59	CC173	KE:A88		
KE:A60	CC148	KE:A89	SCC52	
KE:A61	CC169	KE:A90	SCC49	Caravan Midden Scatter (Lilley et al. 1997)
KE:A62	CC140	KE:A91		Tom's Creek Site Complex (this volume)
KE:A63	CC143	KE:A92		Tom's Creek Site Complex (this volume)
KE:A64				Site Group 1 (Lilley 1994)
KE:A65				Site Group 2 (Lilley 1994)
KE:A66				Site Group 4 (Lilley 1994)
KE:A67			SCC47	Site Group 5 (Lilley 1994); Middle Island Sandblow Site (this volume)
KE:A87			SCC3	Agnes Beach Midden (this volume); Agnes Water Shell and Stone Artefact Scatter #2 (Lilley et al. 1997)
KE:A88			SCC4	Agnes Water Shell and Stone Artefact Scatter #3 (Lilley et al. 1997)
KE:A89			SCC5	Agnes Water Shell and Stone Artefact Scatter #4 (Lilley et al. 1997)
KE:A90			SCC6	Agnes Water Shell and Stone Artefact Scatter #5 (Lilley et al. 1997)
KE:A91			SCC7	Eurimbula Creek Shell Scatter (Lilley et al. 1997)
KE:A92			SCC10	Eurimbula Shell and Stone Artefact Scatter (Lilley et al. 1997)
KE:A93			SCC11	Deepwater Shell and Stone Artefact Scatter (+ Lens) (Lilley et al. 1997)
KE:A94			SCC12	Deepwater Stone Artefact Scatter #1 (Lilley et al. 1997)
KE:A95			SCC13	Deepwater Stone Artefact Scatter #2 (Lilley et al. 1997)
KE:A96			SCC14	Deepwater Hearth Features (Lilley et al. 1997)
KE:A97			SCC15	Deepwater Artefact Scatter (Lilley et al. 1997)
KE:A98			SCC16	Deepwater Shell and Stone Artefact Scatter (Lilley et al. 1997)
KE:A99			SCC17	Deepwater Shell and Stone Artefact Scatter (Lilley et al. 1997)
KE:B00			SCC18	Red Rock Stone Artefact Scatter #1 (Lilley et al. 1997)
KE:B01			SCC19	Rocky Point Stone Artefact Scatter (Lilley et al. 1997)

Appendix 3: continued

EPA REGISTERED SITE NO.	BURKE (1993) FIELD NO.	BURKE (1993) PRE-ALLOCATED SITE NO.	GGCHP SITE ID	OTHER DESIGNATIONS
KE:B02			SCC21	Rocky Point Stone Artefact Scatter #1 (Lilley et al. 1997)
KE:B03			SCC22	Rocky Point Stone Artefact Scatter #2 (Lilley et al. 1997)
KE:B04			SCC23	Agnes Water-Rocky Point Stone Artefact Scatter (Lilley et al. 1997)
KE:B05			SCC24	Agnes Water Shell and Stone Artefact Scatter #1 (Lilley et al. 1997)
KE:B06			SCC25	Agnes Water Shell and Stone Artefact Scatter #2 (Lilley et al. 1997)
KE:B07			SCC26-SCC29; SCC41	Ironbark Site Complex (this volume)
KE:B08			SCC26-SCC29; SCC41	Ironbark Site Complex (this volume)
KE:B09			SCC26-SCC29; SCC41	Ironbark Site Complex (this volume)
KE:B10			SCC26-SCC29; SCC41	Ironbark Site Complex (this volume)
KE:B11			SCC30	Middle Creek Stone Artefact Scatter #1
KE:B12			SCC31	Middle Creek Stone Artefact Scatter #2
KE:B16			SCC35	Eurimbula Creek Stone Scatter
KE:B17			SCC36	Middle Creek Shell and Stone Scatter
KE:B18			SCC37	Eurimbula Creek 1 (this volume); Middle Creek Shell Scatter #1
KE:B19			SCC38	Eurimbula Creek 2 (this volume); Middle Creek Shell Scatter #2
KE:B20			SCC39	
KE:B21			SCC40	Eurimbula Creek Shell Scatter (Lilley et al. 1997)
KE:B22			SCC26-SCC29; SCC41	Ironbark Site Complex (this volume)
KE:B24	CC194			
KE:B26			SCC48	Turkey Mound Midden (Lilley et al. 1997)
KE:B28			SCC50	Round Hill National Park Scarred Tree (Lilley et al. 1997)
KE:B29			SCC51	Swamp Artefact Scatter (Lilley et al. 1997)
KF:A01	CC064	KF:A01		
KF:A02	CC071	KF:A02		
	CC072	KF:A03		
	CC073	KF:A04		
	CC074	KF:A05		
KF:A03	CC075	KF:A06		
	CC076	KF:A07		
KF:A04	CC077	KF:A08		
KF:A05	CC078	KF:A09		
	CC080	KF:A10		
KF:A06	CC081	KF:A11		
	CC082	KF:A12		
KF:A07	CC087	KF:A13		
	CC088	KF:A14		
KF:A08	CC101	KF:A15		
KF:A09	CC102	KF:A16		
KF:A10	CC103	KF:A17		
KF:A11	CC104	KF:A18		
	CC105	KF:A19		
KF:A12	CC100	KF:A20	SCC54	
KF:A13	CC070	KF:A21		
	CC083	KF:A22		
KF:A14	CC084	KF:A23		
	CC085	KF:A24		
KF:A15	CC086	KF:A25		
KF:A16	CC089	KF:A26		
KF:A23			SCC44	Plum Tree Site (Lilley et al. 1997)
-			SCC64	Worthington Creek Midden

Appendix 4: Excavation data

Table A4/1 Seven Mile Creek Mound, Square A. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	3.6	3.6	0.2	1.9	0	0	*	0	0
2	33.4	29.8	9.8	4595.9	7.8	0.7	0.1	0.8	749.8
3	66.2	32.8	11.1	6589.1	29.1	1.3	0.4	1.7	793.8
4	104.0	37.8	12.3	6448.5	55.0	1.6	0.2	0.7	799.2
5	133.8	29.8	11.1	5736.5	59.8	1.2	0.2	2.5	997.2
6	170.4	36.6	12.3	6606.4	20.2	1.3	0.6	0.1	826.4
7	206.2	35.8	10.8	5774.5	42.4	1.7	0.7	8.5	674.2
8	240.2	34.0	10.8	5986.6	22.1	0.2	0.5	16.8	471.8
9	278.6	38.4	11.5	5618.0	19.3	0.8	0.4	2.5	1516.7
10	312.4	33.8	10.2	5437.5	17.7	0.3	0.1	0.5	675.1
11	353.0	40.6	11.6	6114.7	20.5	4.9	0.8	1.4	861.3
12	389.6	36.6	10.1	5441.6	40.6	3.3	0.3	0.7	878.9
13	436.4	46.8	11.1	6000.2	61.8	3.6	0.1	0	979.5
14	466.8	30.4	10.4	5499.1	35.7	5.1	0.2	2.6	1499.1
15	508.0	41.2	11.3	6079.8	17.0	3.9	1.5	31.9	989.6
16	554.4	46.4	12.1	6290.5	5.6	2.0	1.0	16.1	1297.7
17	582.0	27.6	11.7	5572.8	10.8	0.8	1.0	35.8	1176.2
18	643.6	61.6	18.9	4197.7	5.4	0.2	0.2	32.4	1118.8
19	676.2	32.6	13.4	5247.8	8.7	1.5	0.2	2.7	1677.9
20	714.6	38.4	15.3	6478.2	18.6	0.4	0.9	0.9	442.3
21	750.6	36.0	14.0	9679.4	16.1	0.9	1.3	0.7	1358.2
22	785.4	34.8	12.8	4640.6	5.4	0.4	1.4	0	1254.3
23	818.6	33.2	12.7	3921.1	3.8	0.4	1.4	1.0	619.3
24	848.2	29.6	12.2	3368.9	2.6	0.1	1.5	3.7	467.7
25	886.8	38.6	15.1	2496.7	3.7	0.2	1.2	0	394.4
26	921.8	35.0	13.5	1336.9	4.8	1.6	1.0	0	444.5
27	952.6	30.8	12.7	552.9	0.7	*	0.7	4.8	620.7
28	994.6	42.0	12.9	60.6	0	*	0.2	0.3	251.4
29	1030.6	36.0	13.3	16.3	0	*	0.4	0.1	235.1
30	1097.0	66.4	26.1	3.2	0	0	0.1	0	1312.8
31	1163.2	66.2	24.1	0.8	0	0	0.2	0	724.6
Total	-	-	395.4	135794.8	535.2	38.3	18.8	169.1	26108.6

Table A4/2 Mort Creek Site Complex, Square C. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	0	0	0	0.7	0	0	0	0	0.1
2	47.2	47.2	17.6	723.4	0	1.0	0.2	0	14.1
3	55.8	8.6	9.8	775.0	0	0.9	0.5	0	34.1
4	83.2	27.4	10.0	1661.2	0	2.2	0.5	0	11.8
5	113.4	30.2	9.0	1581.3	0	2.3	0.7	0	7.9
6	158.2	44.8	12.9	2831.6	0	7.9	2.5	0	57.2
7	180.8	22.6	7.4	754.7	0	25.9	0.3	*	34.3
8	222.8	42.0	17.8	291.8	0	9.6	1.1	131.7	252.9
9	255.4	32.6	8.5	70.3	0.1	2.0	0.2	0	9.7
10	291.8	36.4	10.5	13.3	0	1.2	0.3	0	20.1
11	327.2	35.4	11.5	15.0	0	6.8	0.2	0.8	50.2
12	353.4	26.2	8.5	12.7	0	2.2	0.2	0.3	844.1
13	388.4	35.0	10.3	0.4	0	0.6	0.9	0	17.3
14	428.0	39.6	13.6	0.1	0	0.1	5.8	0	32.5
15	457.2	29.2	9.5	0.1	0	0.1	0.1	0	50.2
16	495.6	38.4	9.5	0.5	0	0.1	0.1	0.1	321.0
17	536.4	40.8	14.8	8.3	0	0.3	0.7	2.1	1505.6
18	564.2	27.8	11.5	8.3	0	1.1	1.7	0.8	761.5
19	590.6	26.4	7.8	0.1	0	0.3	0.1	*	1528.7
Total	-	-	200.5	8748.8	0.1	64.5	15.8	135.7	5553.3

Table A4/3 Pancake Creek Site Complex, Square A. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	7.6	7.6	0.4	0	0	0	0.2	0	*
2	61.4	58.3	16.0	0.5	0	0	3.1	0	4.0
3	87.4	26.0	7.5	0.3	0	0	1.2	0	1.6
4	103.4	16.0	6.2	0	0	0	1.0	0	1.7
5	125.2	21.8	7.5	0	0	0	2.2	0	2.1
6	156.8	31.6	9.5	0.9	0	0	5.7	0	4.5
7	179.8	23.0	8.1	0.5	0	*	13.1	0	4.3
8	204.2	24.4	9.0	4.3	0	0	3.6	0	5.3
9	235.2	31.0	10.5	86.4	0	0	3.8	0	61.3
10	260.4	25.2	9.5	21.1	0	0	12.9	0	9.4
11	294.8	34.4	12.0	2.0	0	0	35.5	*	86.3
12	325.2	30.4	11.3	0.7	0	0	18.8	0	33.7
13	351.0	25.8	10.0	0.1	0	0	6.0	0	30.2
14	378.0	27.0	10.0	0	0	0	4.3	0	31.6
15	434.2	56.2	20.7	0.1	0	0	11.0	0	63.6
16	503.0	68.8	27.0	0	0	0	79.3	0	29.8
17	559.2	56.2	22.4	3.8	0	0	40.7	0	74.3
18	603.2	44.0	16.7	0	0	0	6.0	0	14.3
19	683.2	80.0	33.5	0	0	0	4.6	0	10.8
Total	-	-	247.8	120.6	0	*	252.8	*	468.7

Table A4/4 Pancake Creek Site Complex, Square B. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	10.8	10.8	0.3	0.1	0	0	0.1	0	0
2	69.0	58.2	16.2	0.4	0	0	2.7	0	3.8
3	87.4	18.4	8.2	0.7	0	0	1.0	0	2.0
4	121.8	34.4	7.7	*	0	0	1.3	0	2.1
5	154.6	32.8	10.4	0.1	0	0	3.6	0	3.3
6	172.6	18.0	9.0	18.0	0	0	2.0	0	3.8
7	206.6	34.0	10.7	18.7	0	0	3.3	0	7.7
8	233.4	26.8	9.0	92.5	0	0	5.1	0	5.5
9	262.4	29.0	9.7	133.9	0	0.5	12.6	0	8.0
10	293.0	30.6	10.3	9.2	0	0	17.0	0	15.4
11	331.2	38.2	11.5	19.2	0	0	11.7	0	16.6
12	358.0	26.8	9.2	1.0	0	0	10.5	0	14.8
13	387.0	29.0	9.1	*	0	0	32.2	0	12.6
14	419.2	32.2	9.7	0	0	0	25.3	0	12.7
15	476.8	57.6	20.5	0	0	0	36.2	0	9.1
16	528.2	51.4	17.9	0	0	0	32.7	0	8.1
17	586.2	58.0	22.9	0	0	0	17.2	*	7.1
18	674.0	87.8	31.1	0	0	0	5.9	0	17.1
Total	-	-	223.3	293.8	0	0.5	220.3	*	149.9

Table A4/5 Pancake Creek Site Complex, Square C. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	3.6	3.6	0.1	*	0	0	*	0	0
2	80.8	77.2	27.1	44.4	0	0.1	18.0	0	57.5
3	118.0	37.2	11.3	76.7	0	0	1.8	0	1.1
4	151.0	33.0	12.6	83.2	0	0	2.2	0	1.8
5	187.8	36.8	10.8	625.7	0	0	5.6	0	2.2
6	231.8	44.0	12.7	827.1	0	0	7.0	0	12.8
7	270.2	38.4	12.6	157.2	0	0	7.4	0	14.3
8	315.0	44.8	12.3	81.8	0	0	51.2	0	14.6
9	354.6	39.6	11.1	15.7	0	0	38.4	0	0.4
10	393.4	38.8	12.4	6.0	0	0	3.5	0	0.2
11	436.0	42.6	9.2	*	0	0	9.2	0	0.7
12	530.2	94.2	26.4	0.6	0	0	12.4	0	0.1
13	617.0	86.8	31.7	0	0	0	1.5	0	3.9
Total	-	-	190.3	1918.5	0	0.1	158.2	0	109.6

Table A4/6 Pancake Creek Site Complex, Square D. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.2	1.2	0	*	0	0	*	0	*
2	72.0	70.8	24.4	12.9	0	0	11.8	0	1.0
3	140.6	68.6	22.3	47.3	0	0	4.5	0	1.1
4	175.2	34.6	12.6	77.2	0	0	2.5	0	1.9
5	213.4	38.2	12.5	367.6	0	0	3.6	*	4.3
6	246.4	33.0	12.4	100.4	0	0	3.6	0	2.0
7	283.6	32.2	12.4	25.5	0	0	11.5	0	2.4
8	321.6	38.0	13.9	30.5	0	0	27.5	12.8	2.3
9	356.2	34.6	11.8	1.4	0	0	6.1	0	*
10	388.0	31.8	11.6	0.1	0	0	4.6	0	0.2
11	442.2	54.2	17.6	0.1	0	0	8.3	0	0.2
12	525.6	83.4	25.6	0.1	0	0	7.2	0	0.8
13	606.4	80.8	27.6	0.1	0	0	2.5	0	0.5
Total	-	-	204.7	663.1	0	0	93.7	12.8	16.7

Table A4/7 Pancake Creek Site Complex, Square E. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.6	1.6	0	*	0	0	0.5	0	*
2	65.2	63.6	24.3	16.2	0	0	60.9	0	0.7
3	131.0	65.8	12.6	12.5	0	0	35.6	0	1.8
4	165.4	34.4	11.8	45.3	0	0	7.1	0	2.9
5	199.2	33.8	13.4	391.5	0	0	4.5	0	16.9
6	233.0	33.8	12.0	87.9	0	0	5.5	0	29.5
7	269.2	36.2	12.0	33.0	0	0	10.6	0	0.8
8	302.8	33.6	11.8	18.9	0	0	22.0	0	1.1
9	369.8	67.0	23.5	0.1	0	0	8.3	0	0.6
10	448.4	78.6	27.3	3.9	0	0	7.4	0	0.9
11	521.2	72.8	22.4	0.1	0	0	6.5	0	0.5
12	586.4	65.2	25.6	0.4	0	0	2.3	0	7.2
Total	-	-	196.7	609.9	0	0	171.2	0	62.9

Table A4/8 Pancake Creek Site Complex, Square F. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.4	1.4	0	*	0	0	0.1	0	*
2	61.2	59.8	26.2	22.1	0	2.3	57.1	0	0.8
3	119.6	58.4	23.1	48.2	0	0	46.6	0	14.5
4	154.0	34.4	12.9	84.0	0	0	5.3	0	1.9
5	182.6	28.6	11.3	281.2	0	0	6.2	0	8.9
6	218.4	35.8	12.7	503.1	0	0	10.6	0	2.1
7	249.2	30.8	12.4	182.2	0	0	8.4	0.1	2.5
8	282.0	32.8	12.5	56.8	0	0	17.3	*	10.3
9	316.2	34.2	12.6	9.2	0	0	72.5	0	0.7
10	373.6	57.4	24.7	11.4	0	0	18.0	0	0.4
11	458.6	85.0	30.5	0.5	0	0	23.4	0	0.3
12	529.6	71.0	24.0	1.6	0	0	13.9	0	0.1
13	599.2	69.6	23.1	0.5	0	0	2.4	0	2.9
Total	-	-	226.0	1201.0	0	2.3	281.8	0.2	45.5

Table A4/9 Pancake Creek Site Complex, Square G. *= <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	2.0	2.0	0.2	0.4	0	0	0.1	0	0
2	54.2	52.2	18.7	11.3	0	0	6.9	0	25.6
3	101.0	46.8	15.0	14.0	0	0	3.1	0	2.5
4	158.2	57.2	17.3	50.5	0.2	0	4.6	0	2.2
5	176.0	17.8	7.3	71.5	0	0	3.2	0	2.7
6	208.8	32.8	4.5	337.1	0	0	2.8	0	34.7
7	237.2	28.4	9.3	508.8	0	0	18.4	0	107.6
8	267.4	30.2	10.9	16.9	0	0	44.8	0	3.9
9	311.8	44.4	13.4	29.4	0	0	18.4	0	1.8
10	348.6	36.8	11.4	5.3	0	0	25.1	0	11.3
11	380.0	31.4	10.6	2.0	0	0	21.1	0	0.6
12	403.4	23.4	7.2	163.4	0	0	9.8	0	0.2
13	435.4	32.0	10.8	60.7	0	0	12.1	0	1.6
14	466.6	31.2	11.1	0.2	0	0	9.5	0	0.4
15	496.2	29.6	11.8	1.0	0	0	11.7	0	1.4
16	543.0	46.8	14.6	1.3	0	0	5.4	0	2.9
17	582.2	39.2	13.0	*	0	0	2.8	0	0.6
18	656.4	74.2	25.2	0.2	0	0	2.0	0	17.3
Total	-	-	212.3	1274.1	0.2	0	201.7	0	217.3

Table A4/10 Pancake Creek Site Complex, Square H. *= <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	2.2	2.2	0.1	0.2	0	0	0.3	0	0.1
2	53.8	51.6	17.8	5.8	0	0	6.7	0.1	1.9
3	97.8	44.0	14.3	7.1	0	0	2.8	0	1.1
4	147.8	50.0	16.8	16.5	0	0	5.3	0	2.1
5	180.6	32.8	11.1	4.4	0	0	4.3	0	1.3
6	210.0	29.4	9.9	41.7	0	0	5.1	*	26.5
7	242.4	32.4	11.1	128.8	0	0	4.4	0	4.5
8	261.4	19.0	7.4	50.0	0	0	13.3	0	2.3
9	297.0	35.6	11.0	131.2	0	0	10.7	0.2	1.8
10	336.0	39.0	11.9	139.5	0	0	13.4	0.1	2.7
11	365.2	29.2	11.2	*	0	*	16.0	0	3.1
12	401.0	35.8	11.8	*	0	0	146.8	0	2.9
13	438.0	37.0	12.2	9.0	0	0	14.0	0	0.7
14	467.2	29.2	10.2	0.7	0	0	8.9	0	0.2
15	530.4	63.2	21.5	0.9	0	0	56.8	0	1.7
16	591.2	60.8	20.6	*	0	0	23.2	0	2.6
17	647.8	56.6	19.8	0.2	0	0	5.2	0	4.0
18	675.6	27.8	9.0	*	0	0	1.5	0	5.5
Total	-	-	227.7	535.9	0	*	338.6	0.4	65.0

Table A4/11 Ironbark Site Complex, Square L. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.0	1.0	0.1	0	0	0	0	0	*
2	51.4	50.4	16.3	3.9	0	0	2.4	68.5	68.4
3	109.4	58.0	17.7	0	0	0	7.4	124.9	275.0
4	136.2	26.8	8.8	0	0	0	6.3	1226.0	230.4
5	200.4	64.2	17.8	0	0	0	6.0	1014.3	756.1
6	263.0	62.6	17.0	0	0	0	2.7	562.0	796.7
7	317.4	54.4	18.0	0	0	0	2.5	3.5	278.1
8	359.2	41.8	8.8	0	0	0	0.7	2.4	32.9
9	393.4	34.2	7.3	0	0	0	0.4	7.7	19.3
10	447.6	54.2	8.4	0	0	0	0.7	45.9	18.2
11	515.4	67.8	9.0	0	0	0	0.4	0.1	11.0
12	608.2	92.8	10.4	0	0	0	1.1	0.9	21.3
13	682.4	74.2	3.5	0	0	0	2.4	2.2	31.3
Total	-	-	143.0	3.9	0	0	33.1	3058.4	2538.9

Table A4/12 Ironbark Site Complex, Square M. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	0.8	0.8	0	0	0	0	0	0	0
2	26.6	25.8	14.3	0	0	0	1.7	1206.3	53.5
3	53.8	27.2	8.4	0	0	0	2.6	108.2	77.7
4	104.8	51.0	14.3	0	0	0	0.2	1786.5	597.0
5	138.6	33.8	10.7	0	0	0	2.8	1124.2	165.9
6	167.2	28.6	8.7	0	0	0	2.8	220.2	112.6
7	207.2	40.0	19.9	0	0	0	3.6	1878.9	157.4
8	227.8	20.6	8.3	0	0	0	1.4	559.3	107.1
9	281.4	53.6	14.4	0	0	0	0.1	2037.5	193.2
10	326.2	44.8	8.9	0	0	0	2.1	3.7	72.5
11	370.0	43.8	9.0	0	0	0	0.9	1.1	40.8
12	414.0	44.0	8.0	0	0	0	1.3	1.1	15.5
13	452.8	38.8	7.5	0	0	0	0.6	1.1	6.8
14	494.6	41.8	8.0	0	0	0	0.5	0.6	8.0
15	533.8	39.2	8.0	0	0	0	0.3	0.5	11.0
16	600.2	66.4	7.5	0	0	0	1.1	3.9	11.0
17	681.0	80.8	6.5	0	0	0	0	8.0	42.9
Total	-	-	162.3	0	0	0	21.9	8941.1	1672.9

Table A4/13 Ironbark Site Complex, Square N. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	15.0	15.0	0	5.2	0	0	0.2	0	101.3
2	41.0	26.0	8.2	560.1	0.4	0	2.4	2.8	3835.8
3	69.2	28.2	9.0	338.0	*	0	2.2	2.3	7187.6
4	101.4	32.2	6.1	30.4	0.2	0	1.1	0.1	4074.7
5	130.4	29.0	9.4	6.2	0	*	0.9	0.9	7429.5
6	187.4	57.0	14.0	0.8	0	0	0.8	0	15111.9
7	230.2	42.8	11.3	0.1	0	0	0.5	0	5890.5
8	277.0	46.8	12.6	0.1	0	0	0.7	0	8546.3
Total	-	-	70.6	940.8	0.7	*	8.8	6.0	52177.6

Table A4/14 Ironbark Site Complex, Square O. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	8.2	8.2	0.8	0.1	0	0	0.2	0.1	2.1
2	39.0	30.8	11.2	10.3	0	0	1.1	*	4.4
3	83.6	44.6	15.4	14.2	2.4	0	2.2	0.1	2.5
4	114.0	30.4	10.8	73.4	19.6	0	2.1	0.1	5.0
5	144.4	30.4	11.0	24.5	0	0	4.0	0.1	2.2
6	180.8	36.4	12.2	29.0	0	0.3	12.3	*	5.9
7	219.4	38.6	12.2	14.5	0	0	8.3	0.2	7.3
8	264.8	45.4	17.1	57.2	0	0.3	15.6	0.2	9.3
9	322.8	58.0	18.3	122.0	0	0	3.4	0.8	24.5
10	356.6	33.8	10.9	0.1	0	0	0.8	0.1	35.7
11	385.6	29.0	10.8	0.2	0	0	1.4	0.5	59.6
12	458.8	73.2	24.0	*	0	0	2.1	0.8	27.6
13	527.2	68.4	24.8	0.3	0	0	1.1	0.3	9.8
Total	-	-	179.5	345.6	22.0	0.6	54.4	3.3	195.9

Table A4/15 Ironbark Site Complex, Square P. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	6.0	6.0	0.4	3.3	0	0	0.1	0	0.5
2	38.6	32.6	9.1	3.2	0.1	0	1.6	0	0.7
3	74.0	35.4	12.0	9.6	0.5	0	2.6	0	1.9
4	105.0	31.0	10.9	47.6	0	0	1.6	0.1	3.1
5	134.0	29.0	10.1	33.5	*	0	1.9	0.1	1.3
6	159.8	25.8	9.5	15.9	0	0.2	9.1	*	2.9
7	184.0	24.2	8.5	51.0	0	0	9.4	*	4.0
8	215.0	31.0	10.0	15.0	0	0	7.1	*	4.7
9	241.2	26.2	9.0	62.8	0.5	0	17.5	0.6	7.3
10	270.0	28.8	9.7	73.4	0	0	18.2	0.3	6.1
11	302.0	32.0	11.0	18.8	0	0	3.6	0.3	20.9
12	333.2	31.2	9.8	0.2	0	0	1.2	0.4	13.6
13	358.2	25.0	9.0	0.1	0	0	1.0	31.2	19.6
14	382.8	24.6	8.5	0	0	0	0.9	18.0	99.9
15	412.0	29.2	9.7	0	0	0	0.6	0	65.2
16	442.6	30.6	12.0	0	0	0	0.5	0.1	12.1
17	493.8	51.2	17.7	0	0	0	0.3	*	5.5
18	581.8	88.0	32.1	0	0	0	1.0	*	4.7
19	656.6	74.8	35.5	0	0	0	0.6	0	1.8
Total	-	-	234.5	334.4	1.1	0.2	78.9	51.3	275.9

Table A4/16 Ironbark Site Complex, Square Q. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	6.8	6.8	0	0	0	0	0	0	0
2	36.8	30.0	8.0	0.1	0	0	0.4	0	0.9
3	71.4	34.6	11.0	12.2	0	0	0.6	*	1.0
4	103.2	31.8	9.0	31.6	0	0	0.3	30.4	2.2
5	132.4	29.2	9.4	67.3	0	0	1.0	*	2.5
6	168.0	35.6	10.6	33.1	0	0	1.9	184.3	3.0
7	197.8	29.8	10.6	21.4	0	0	3.0	0.1	5.5
8	252.6	54.8	15.9	6.1	0	0	1.7	0.4	4.4
9	274.8	22.2	7.7	0.6	0	0	1.1	0.6	2.6
10	306.8	32.0	12.3	0.1	0	0	2.1	*	28.2
11	344.2	37.4	11.5	0.1	0	0	1.2	*	1.9
12	376.4	32.2	11.0	0	0	0	3.7	*	4.1
13	421.8	45.4	14.7	0.1	0	0	1.4	0.2	6.1
14	458.6	36.8	11.7	0	0	0	0.4	0	9.0
15	516.0	57.4	19.4	0.2	0	0	0.6	0.1	2.0
16	578.8	62.8	20.4	0	0	0	1.1	0	6.7
17	670.6	91.8	30.3	0.1	0	0	0.7	0	0.3
Total	-	-	213.6	173.0	0	0	21.1	216.2	80.4

Table A4/17 Ironbark Site Complex, Square R. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.2	1.2	0	0.3	0	0	0	0	0
2	17.2	16.0	3.7	0.1	0	0	0.1	0	0.2
3	40.6	23.8	6.4	0.2	0	0	0.4	0	0.5
4	74.4	33.8	11.9	8.2	0	0	0.7	0	1.2
5	102.8	28.4	7.1	17.2	0	0	0.5	0.1	0.7
6	131.0	28.2	9.3	5.1	0	0	1.0	0.1	1.5
7	154.8	23.8	8.8	4.1	0	0	2.7	0.5	2.3
8	177.4	22.6	7.6	0.9	0	0	2.1	0.1	0.8
9	203.6	26.2	8.6	6.3	0	0	7.1	*	1.1
10	237.6	34.0	11.8	0	0	0	3.9	0	1.8
11	268.2	30.6	9.8	0.1	0	0	0.8	0	1.2
12	297.2	29.0	8.8	4.0	0	0	0.7	0.1	1.6
13	337.6	40.4	14.8	0	0	0	1.2	0	2.1
14	367.4	29.8	10.1	0	0	0	0.9	0	4.8
15	394.6	27.2	8.8	0	0	0	0.6	0.2	3.3
16	450.0	55.4	20.2	0	0	0	0.8	0	7.8
17	499.8	49.8	19.0	0	0	0	0	0	4.0
18	548.0	48.2	16.0	0	0	0	0.5	0	2.8
19	621.8	73.8	25.2	0	0	0	0.3	0	1.4
20	662.4	40.6	14.5	0	0	0	0.1	0	0.2
Total	-	-	221.9	46.5	0	0	24.3	1.2	39.3

Table A4/18 Eurimbula Creek 1, Square A. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	34.0	34.0	10.7	179.1	0.4	*	1.1	0	14.0
2	60.2	26.2	10.0	51.2	0	0	1.5	0	9.1
3	84.6	24.4	11.4	14.8	0	0	1.1	0	14.4
4	110.8	26.2	9.6	0.2	0	0	0.3	0	2.7
5	136.6	25.8	10.4	0.1	0	*	0.2	0	0.7
Total	-	-	52.1	245.3	0.4	*	4.1	0	40.9

Table A4/19 Eurimbula Creek 1, Square B. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	5.2	5.2	1.0	*	0	0	0	0	0
2	115.0	109.8	8.3	27.9	0	0	2.7	0	26.8
3	144.2	29.2	2.9	65.1	0	0	1.4	0	19.3
4	162.2	18.0	2.2	194.8	0	*	0.7	0	5.4
5	191.4	29.2	3.4	85.9	0	0	1.0	0	4.4
6	251.0	59.6	13.5	120.4	0	0.1	4.4	0	37.5
7	287.2	36.2	10.7	5.3	0	0	1.2	0	43.4
8	328.2	41.0	11.5	0.4	0	0	0.6	0	4.5
9	370.0	41.8	12.3	*	0	0	0.4	0	8.3
10	396.2	26.2	8.3	*	0	0	0.2	0	3.1
11	419.4	23.2	7.4	0	0	0	0.1	0	2.9
Total	-	-	81.5	499.8	0	0.1	12.7	0	155.7

Table A4/20 Eurimbula Creek 1, Square C. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.8	1.8	0.3	0	0	0	0.1	0	0.4
2	30.6	28.8	5.3	1.2	0	0	0.5	0	2.8
3	74.8	44.2	12.9	13.2	0	0	1.6	0	30.4
4	115.6	40.8	12.3	12.7	0	0	2.0	0	35.2
5	149.2	33.6	10.7	41.2	0	0	2.9	0	54.5
6	183.0	33.8	10.1	76.6	0	*	3.4	0	49.9
7	218.4	35.4	10.9	80.2	0	0	5.4	0	28.3
8	248.6	30.2	9.7	45.0	0	0	2.3	0	97.9
9	279.6	31.0	10.4	15.4	0	0	0.8	0	20.0
10	314.2	34.6	10.7	2.2	0	0	1.4	0	21.2
11	337.0	22.8	9.7	0.2	0	0	1.2	0	15.7
12	369.0	32.0	11.2	0.2	0	0	1.2	0	8.4
13	393.2	24.2	10.0	0	0	0	0.4	0	8.2
14	424.0	30.8	11.4	0	0	0	0.5	0	9.1
15	468.2	44.2	16.5	*	0	0	0.2	0	7.1
Total	-	-	152.1	288.2	0	*	23.9	0	389.2

Table A4/21 Eurimbula Creek 1, Square D. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	4.0	4.0	0.4	0	0	0	0.1	0	0
2	40.8	36.8	4.5	1.8	0	0	0.2	0	1.5
3	88.6	47.8	13.4	9.6	0	0	1.6	0	30.0
4	127.2	38.6	11.6	29.9	0	0	1.8	0	43.0
5	168.6	41.4	12.7	96.6	0	0	3.5	0	63.0
6	201.0	32.4	11.5	67.6	0	0	4.9	0	61.1
7	233.6	32.6	10.2	33.6	0	0	8.1	0	41.3
8	264.0	30.4	10.9	22.3	0	0	3.7	0	47.4
9	286.6	22.6	7.9	6.5	0	*	3.7	0	23.1
10	320.4	33.8	10.7	28.3	0	0	2.7	0	31.2
11	349.8	29.4	10.4	0.6	0	0	1.9	0	30.6
12	375.8	26.0	8.7	0	0	0	0.9	0	14.4
13	404.2	28.4	9.2	0	0	0	0.6	0	8.3
14	437.2	33.0	12.1	0	0	0	0.5	0	18.1
15	463.6	26.4	9.5	0.1	0	0	0.5	0	7.7
16	516.6	53.0	18.8	0	0	0	1.0	0	8.2
Total	-	-	162.5	296.9	0	*	35.8	0	429.0

Table A4/22 Eurimbula Creek 2, Square A. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	5.2	5.2	0.6	4.7	0	0	0.3	0	0
2	34.4	29.2	9.7	44.7	0	0	1.1	0	0.2
3	64.2	29.8	8.2	12.2	0	0	1.0	0	0
4	88.8	24.6	9.4	28.2	0	0	2.5	0	0.1
5	131.0	42.2	14.5	33.4	0	0	6.5	0	1.1
6	163.2	32.2	10.8	31.5	0	0	2.8	0	0.2
7	194.8	31.6	11.2	3.9	0	0	1.0	0	0.2
8	227.4	32.6	11.9	17.4	0	0	0.5	0	0.1
9	257.0	29.6	11.6	18.0	0	0	0.4	0	2.1
10	276.8	19.8	9.7	1.9	0	0	0.2	0	1.2
11	308.0	31.2	8.9	1.2	0	0	0.1	0	0.1
12	339.8	31.8	13.1	0	0	0	0.1	0	1.1
13	375.2	35.4	14.2	0	0	0	0.1	0	1.3
14	405.2	30.0	10.6	0	0	0	0.1	0	0.3
15	456.8	51.6	22.8	4.3	0	0	0.4	0	2.6
Total	-	-	167.2	201.3	0	0	20.9	0	10.5

Table A4/23 Eurimbula Site 1, Square A. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	2.0	2.0	0.2	0.4	0	0	0.2	0	0
2	32.2	30.2	7.4	43.9	0	0	2.8	0	0.5
3	59.8	27.6	8.5	63.7	0	0.1	5.8	0	0.5
4	96.8	37.0	12.9	347.9	0	0.3	6.4	0.1	0.7
5	124.4	27.6	10.1	475.1	0	1.6	8.2	0.1	0.8
6	157.0	32.6	10.2	200.7	0	2.2	7.1	0	0.4
7	183.8	26.8	10.4	74.7	0	0.8	6.4	0.2	0.9
8	218.6	34.8	10.2	37.5	0	0.4	6.6	0	0.6
9	247.8	29.2	10.6	29.3	0	0.2	4.8	0	0.7
10	277.6	29.8	9.9	31.1	0	0.3	6.0	*	5.2
11	305.8	28.2	9.9	51.2	0	0.1	5.0	0	0.5
12	335.0	29.2	9.6	22.4	0	0.1	4.7	0	0.5
13	362.6	27.6	11.9	56.8	0	0.1	7.7	0.1	0.5
14	396.0	33.4	11.0	9.3	0	0.1	7.5	0	0.5
15	415.8	19.8	8.6	1.6	0	*	4.2	0.1	0.5
16	436.6	20.8	6.5	6.8	0	0.1	2.6	0.1	0.1
17	466.4	29.8	9.8	3.8	0	0	0.7	1.8	0.4
18	497.0	30.6	10.1	2.0	0	0	2.9	0.2	0.3
19	525.8	28.8	10.6	0.1	0	0	2.3	0.2	0.2
20	555.6	29.8	9.9	0.1	0	0	2.5	0	0.2
21	585.4	29.8	9.8	0.3	0	*	1.7	0	0.8
22	616.2	30.8	9.9	0.4	0	*	1.3	0	1.1
23	648.2	32.0	9.3	0	0	0	1.7	0	0.7
24	711.0	62.8	25.4	0.4	0	*	7.8	0.1	0.6
25	776.0	65.0	21.9	0	0	0	11.6	0	0.8
Total	-	-	264.3	1459.6	0	6.6	118.6	2.9	18.0

Table A4/24 Eurimbula Site 1, Square B. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	3.4	3.4	0.2	0.1	0	0	*	0	*
2	44.6	41.2	9.9	94.2	0	*	10.6	0.2	0.3
3	75.0	30.4	9.0	587.0	0	0.7	5.8	0	0.5
4	104.0	29.0	9.1	474.4	0	4.0	10.8	0.3	1.4
5	138.6	34.6	9.2	130.6	0	0.8	11.8	0	0.5
6	171.6	33.0	10.7	54.9	0	0.6	11.3	7.4	0.4
7	194.8	23.2	9.9	30.3	0	0.4	7.0	0	0.6
8	237.0	42.2	11.0	54.1	0	*	6.9	0	0.5
9	273.8	36.8	12.8	34.7	0	0.1	10.0	0.8	0.7
10	304.6	30.8	9.8	48.6	0	0.4	5.7	0	0.5
11	344.0	39.4	11.7	252.9	0	0.1	7.9	0.1	5.5
12	380.4	36.4	11.0	289.4	0	*	7.5	0.1	1.0
13	414.8	34.4	11.2	26.6	0	*	8.8	0.4	1.2
14	453.6	38.8	12.0	1.8	0	0.4	11.6	0	0.9
15	461.6	8.0	2.0	3.2	0	0	0.9	0	0.1
16	488.0	26.4	8.3	1.8	0	*	4.2	0	11.3
17	513.0	25.0	9.3	0.4	0	0.1	3.1	0.2	35.8
18	542.4	29.4	11.3	1.0	0	0	1.4	1.9	0.3
19	575.6	33.2	13.3	*	0	*	1.6	14.3	0.7
20	613.0	37.4	13.1	0.3	0	*	1.1	0	0.5
21	642.8	29.8	10.9	*	0	*	0.6	0	0.5
22	673.0	30.2	10.4	0.1	0	0	0.4	0	0.2
23	734.8	61.8	22.3	1.5	0	0	0.6	0.1	1.3
24	804.8	70.0	27.7	8.4	0	0	4.0	0	0.7
Total	-	-	266.1	2096.4	0	7.6	133.8	25.9	65.4

Table A4/25 Eurimbula Site 1, Square C. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	2.2	2.2	0.3	2.5	0	0	0.3	0	*
2	29.6	27.4	8.9	73.0	0	0.1	3.4	0	0.3
3	53.2	23.6	7.5	92.8	0	0.1	0	1.2	0.6
4	75.8	22.6	7.8	517.8	0	0.3	4.1	0.1	0.7
5	106.8	31.0	9.6	501.5	0	2.0	12.0	0.4	2.6
6	134.0	27.2	9.9	122.0	0	4.0	9.9	0.5	1.6
7	167.2	33.2	10.0	112.5	0	1.2	7.8	0.3	51.0
8	193.8	26.6	10.4	72.9	0	0.5	3.6	0	1.2
9	226.4	32.6	10.2	111.7	0	0.3	3.9	0	0.4
10	255.4	29.0	12.1	87.4	0	0.1	5.3	0	0.7
11	287.0	31.6	10.8	45.9	0	0.1	3.5	0.1	0.7
12	316.6	29.6	9.9	14.1	0	*	3.6	0.1	0.4
13	348.6	32.0	11.7	54.8	0	*	3.6	0	0.8
14	377.0	28.4	11.4	86.3	0	*	3.5	0	0.4
15	417.8	40.8	11.1	20.9	0	0	5.4	0.1	0.3
16	437.4	19.6	11.8	2.1	0	*	5.8	0.1	0.5
17	469.0	31.6	13.0	0.7	0	0	6.5	0.3	0.4
18	489.0	20.0	6.8	0	0	0	2.7	0	0.1
19	518.4	29.4	9.9	0	0	0	3.6	1.2	0.2
20	541.4	23.0	8.7	0	0	*	2.2	0	0.3
21	565.6	24.2	9.3	0	0	*	1.4	0	0.2
22	595.2	29.6	10.7	0	0	0	1.0	0.4	0.6
23	628.2	33.0	11.2	0	0	*	0.7	0	0.5
24	658.2	30.0	11.3	0	0	0	0.5	0	0.6
25	731.8	73.6	25.8	0	0	0	0.7	0	0.6
26	802.6	70.8	22.4	0	0	0	1.0	0	0.5
Total	-	-	282.5	1919.3	0	8.7	96.1	4.6	66.3

Table A4/26 Eurimbula Site 1, Square D. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	5.6	5.6	0.3	1.0	0	0	0.1	0	0
2	9.8	4.2	8.6	39.3	0	*	2.6	0.1	0.4
3	70.8	61.0	9.3	91.2	0	*	9.3	0	0.6
4	99.0	28.2	8.4	322.3	0	0.3	5.1	0.1	0.9
5	136.2	37.2	10.4	309.5	0	2.0	9.8	0	4.3
6	171.8	35.6	10.2	99.4	0	0.9	12.0	0	0.8
7	203.4	31.6	9.0	160.5	0	1.4	10.6	0	32.1
8	239.8	36.4	11.3	38.0	0	*	7.9	1.1	0.6
9	274.0	34.2	10.8	74.8	0	0.2	4.9	0.8	0.6
10	310.2	36.2	10.9	16.8	0	*	7.6	0	1.0
11	345.2	35.0	11.9	14.3	0	0.2	5.0	0.1	0.2
12	387.0	41.8	13.2	19.4	0	0.1	7.2	51.0	1.4
13	420.0	33.0	11.4	0.5	0	*	5.3	78.4	8.9
14	455.0	35.0	10.6	0.1	0	0	6.9	0	0.6
15	479.2	24.2	7.9	2.2	0	*	6.7	0	0.2
16	509.6	30.4	10.7	2.1	0	0	3.6	0.1	0.4
17	538.6	29.0	11.5	0.2	0	0	3.3	0	1.3
18	567.2	28.6	9.8	0.3	0	0	2.4	0	0.5
19	599.2	32.0	10.9	*	0	0	3.2	1.1	0.9
20	629.0	29.8	10.6	0	0	0	4.2	0	0.3
21	661.8	32.8	12.8	0	0	0	8.8	0	0.3
22	731.2	69.4	24.7	0.1	0	0	51.8	0	1.1
23	797.0	65.8	21.5	0	0	0	104.4	0	0.5
Total	-	-	256.6	1192.0	0	5.1	282.9	132.8	58.0

Table A4/27 Tom's Creek Site Complex, Square A. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.8	1.8	0.1	0.3	0	0	0.2	0	*
2	49.4	47.6	15.3	201.2	0	0	7.7	0.2	127.4
3	91.4	42.0	12.0	264.1	0	0.3	11.6	7.7	5.4
4	120.2	28.8	9.5	139.6	0	0.1	7.4	0.8	42.3
5	156.0	35.8	11.0	120.6	0	0	5.2	0.1	12.8
6	188.8	32.8	9.9	187.8	0	0.1	5.3	1.9	0.9
7	238.4	49.6	12.5	337.1	4.2	1.1	6.9	0.8	12.3
8	275.4	37.0	11.5	551.6	0	4.0	7.2	5.4	99.4
9	317.8	42.4	12.5	483.4	0	1.9	6.0	17.7	2.1
10	355.6	37.8	12.0	256.4	0	0.6	4.5	1.2	0.9
11	399.0	43.4	12.1	253.4	0	0.6	6.4	0.5	14.0
12	433.2	34.2	11.4	285.9	0	1.6	12.3	1.9	14.9
13	468.6	35.4	10.4	77.7	0	1.8	7.9	0.8	0.5
14	501.8	33.2	11.8	41.4	0	0.6	5.6	0.6	100.5
15	536.6	34.8	11.3	52.2	0	0.1	6.1	0.2	0.7
16	564.0	27.4	10.8	19.9	0	*	5.3	0.6	1.2
17	599.6	35.6	12.1	0.8	0	0.1	3.9	0.8	3.4
18	635.6	36.0	11.6	2.5	0	0.1	7.3	0.1	3.0
19	678.4	42.8	12.8	0.1	0	0.1	0.9	2.8	2.1
20	709.4	31.0	11.8	0.1	0	0	1.4	0.2	0.6
21	746.8	37.4	11.0	0.1	0	0.1	1.7	0.1	1.1
22	826.2	79.4	25.7	0.1	0	0	1.2	0	9.8
23	895.0	68.8	21.0	0.1	0	*	0.5	*	1.1
Total	-	-	280.1	3276.5	4.2	13.1	122.7	44.4	456.4

Table A4/28 Tom's Creek Site Complex, Square B. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	1.2	1.2	0.2	45.5	0	0	0.3	0	0
2	29.4	28.2	9.8	161.3	0	0.6	5.6	10.3	4.7
3	65.0	35.6	10.7	236.6	0.3	0.5	8.9	3.8	2.3
4	99.6	34.6	10.4	286.2	0	0.7	8.1	0.9	2.5
5	137.2	37.6	11.7	258.7	0	0.4	8.1	0.7	35.7
6	179.2	42.0	10.6	198.0	0	0.4	7.0	1.8	4.1
7	209.4	30.2	11.9	248.7	0	0.4	7.2	0.5	0.6
8	241.2	31.8	11.2	333.6	0	0.6	6.6	5.3	9.0
9	281.6	40.4	11.2	445.3	1.1	0.6	5.6	9.2	24.0
10	323.8	42.2	13.5	177.4	0.7	0.5	5.6	0.8	3.1
11	360.0	36.2	12.5	163.9	0.3	1.1	7.3	1.2	3.2
12	397.4	37.4	11.9	214.8	0.5	1.5	17.4	16.5	0.9
13	434.6	37.2	11.8	126.8	0	1.8	10.3	4.1	3.0
14	472.4	37.8	12.0	34.9	0	0.4	7.7	0	22.4
15	515.4	43.0	13.5	1.2	0	0.1	5.1	0.5	0.9
16	546.0	30.6	12.1	2.8	0	0.2	2.2	4.1	0.9
17	592.2	46.2	13.8	3.5	0	*	1.8	0.4	7.5
18	616.8	24.6	9.9	0.3	0	*	1.3	0.1	5.3
19	658.4	41.6	14.5	4.0	0	*	1.5	0.4	2.5
20	691.6	33.2	12.4	0.1	0	*	0.9	*	0.8
21	728.0	36.4	11.4	0.1	0	0	0.6	*	123.6
22	756.4	28.4	11.5	*	0	0	0.4	0.1	142.1
23	847.0	90.6	26.9	0.1	0	*	0.7	0	259.7
24	905.4	58.4	20.8	0.1	0	0	0.4	0	0.6
Total	-	-	296.2	2944.1	2.9	9.9	120.6	60.6	659.4

Table A4/29 Tom's Creek Site Complex, Square C. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	0.6	0.6	0.1	6.8	0	0.1	0.6	0	0
2	58.6	58.0	19.3	366.9	0	1.0	0	5.2	13.7
3	86.2	27.6	9.1	170.6	0	0.3	9.1	0.7	52.5
4	125.4	39.2	11.9	181.3	0	1.3	10.6	3.2	31.4
5	167.0	41.6	14.8	371.7	0	1.0	8.6	4.8	5.0
6	199.8	32.8	11.4	215.9	0	0.4	5.8	0.4	1.6
7	229.6	29.8	11.8	223.6	0	0.6	6.0	1.0	1.3
8	274.2	44.6	11.7	130.3	0	0.7	5.4	2.4	1.3
9	302.8	28.6	11.0	124.1	0	0.2	4.2	0.2	0.5
10	332.2	29.4	12.0	161.0	0.2	0.6	7.7	0.6	1.3
11	361.0	28.8	9.7	262.5	0.4	0.8	7.6	0.2	4.0
12	392.6	31.6	11.6	143.3	0	1.1	14.1	1.8	0.8
13	426.8	34.2	11.7	217.6	0	1.4	20.9	3.4	2.3
14	454.0	27.2	11.6	36.4	0	0.6	18.2	4.7	2.3
15	494.4	40.4	12.4	29.3	0	0.7	13.7	0.4	153.3
16	523.6	29.2	11.7	12.7	0	0.1	5.1	0.1	0.7
17	557.6	34.0	12.9	4.1	0	0.1	3.8	0.1	0.4
18	612.6	55.0	23.5	0.4	0	*	3.4	1.2	2.1
19	654.2	41.6	15.0	0.2	0	*	2.0	0	2.3
20	687.0	32.8	11.8	*	0	0	1.7	0	1.8
21	718.2	31.2	11.7	*	0	*	1.4	0	36.5
22	757.4	39.2	13.0	0	0	0	0.7	0	89.0
23	834.0	76.6	27.5	*	0	0	0.7	0	1.6
24	897.0	63.0	22.1	0	0	0	0.4	0	0.2
Total	-	-	319.3	2658.8	0.5	10.9	151.6	30.5	405.8

Table A4/30 Tom's Creek Site Complex, Square D. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	2.8	2.8	0.1	0.1	0	0	*	0	0
2	44.6	41.8	12.3	224.4	0	0.3	14.3	1.9	0.6
3	74.4	29.8	9.8	245.6	0	0.1	20.3	0.1	1.9
4	105.2	30.8	10.2	124.8	0	0.1	3.5	0.9	8.2
5	135.8	30.6	10.2	196.4	0	0	5.5	0.2	3.6
6	184.8	49.0	14.5	325.6	0	0.5	7.7	0.9	2.9
7	222.4	37.6	12.0	230.8	0	0.7	6.0	0.4	0.7
8	255.2	32.8	11.7	210.7	0	1.1	4.9	4.5	1.1
9	293.8	38.6	12.2	156.1	0.1	0.5	4.7	0.3	2.3
10	334.4	40.6	13.2	14.6	0.2	0.3	5.1	0.3	12.5
11	364.0	29.6	11.5	103.5	0.4	0.8	5.8	0.1	27.1
12	397.0	33.0	11.0	123.6	0.1	0.4	9.1	0.4	0.8
13	441.2	44.2	14.3	222.7	0	2.2	15.8	3.2	1.9
14	478.8	37.6	12.0	79.3	0	1.6	15.7	42.8	51.3
15	522.8	44.0	14.5	58.6	0	0.8	11.2	2.0	0.8
16	557.0	34.2	11.9	8.0	0	0.1	4.9	0.7	1.0
17	595.0	38.0	11.1	0	0	0	3.2	9.5	0.7
18	640.2	45.2	16.9	1.6	0	0	3.3	1.2	6.9
19	677.4	37.2	11.3	*	0	*	1.2	*	29.2
20	709.6	32.2	11.7	0.1	0	0.1	3.2	0.2	24.4
21	747.0	37.4	13.6	0.1	0	0	1.6	0	3.2
22	824.0	77.0	24.9	0	0	0	1.4	0	12.0
23	883.8	59.8	19.2	*	0	0	0.6	0	7.4
Total	-	-	290.1	2426.5	0.8	9.6	149.1	69.6	200.7

Table A4/31 Tom's Creek Site Complex, Square R. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	2.4	2.4	0.1	0.1	0	0	0.1	0	0
2	32.4	30.0	9.9	9.9	0	0	0.3	0.1	0.1
3	67.6	35.2	11.3	74.4	0	0	1.0	1.0	1.5
4	101.0	33.4	10.0	170.1	0	0.1	4.1	0.5	2.7
5	133.6	32.6	11.1	175.3	0	0	9.3	1.0	7.2
6	166.2	32.6	10.1	221.3	0	0	13.6	0.4	2.2
7	209.4	43.2	14.1	421.4	0	0	17.9	1.1	7.6
8	238.6	29.2	7.8	456.2	0	0.3	8.6	11.1	9.0
9	269.0	30.4	12.1	472.2	0	0.1	12.2	1.3	8.9
10	315.0	46.0	13.7	98.0	0	0	9.8	0.1	17.6
11	351.2	36.2	13.2	200.5	0	0	5.2	3.6	60.4
12	406.2	55.0	15.8	11.6	0	0	1.8	0.1	47.8
13	447.6	41.4	13.4	0.3	0	0	2.0	0	5.1
14	488.0	40.4	13.6	*	0	0	0.4	0	9.1
15	532.0	44.0	13.5	*	0	0	0.1	0	1.3
16	568.6	36.6	12.1	0.2	0	0	0.1	0	0.2
17	603.4	34.8	10.8	0	0	0	0.1	0.3	0.1
18	667.8	64.4	20.8	*	0	0	0.1	0.9	0.9
Total	-	-	213.4	2311.5	0	0.5	86.7	21.6	181.7

Table A4/32 Tom's Creek Site Complex, Square S. * = <0.1g.

XU	MAX. DEPTH (mm)	MEAN SIZE (mm)	WEIGHT (kg)	SHELL (g)	CRUSTACEAN (g)	BONE (g)	CHARCOAL (g)	STONE ARTEFACTS (g)	OTHER STONE (g)
1	2.6	2.6	0.1	0	0	0	0	0	0.8
2	39.0	36.4	10.6	50.6	0	0	0.6	0.1	0.5
3	88.8	49.8	13.1	93.5	0	0	10.5	0	0.7
4	124.6	35.8	10.0	179.8	0	0.4	3.3	0	2.5
5	164.0	39.4	10.5	262.9	0	0	11.4	0	3.2
6	202.2	38.2	10.2	331.1	0	*	14.2	0.2	6.7
7	205.2	3.0	1.9	13.2	0	0	0	*	43.6
8	239.6	34.4	9.7	736.1	0	0	13.3	4.1	132.0
9	280.8	41.2	12.1	451.3	0	0	18.1	10.7	10.8
10	317.0	36.2	11.6	44.8	0	*	12.9	0.3	9.8
11	350.2	33.2	11.1	292.9	0	*	6.2	0.1	135.1
12	386.2	36.0	11.8	15.5	0	0	2.0	0	43.9
13	419.2	33.0	11.0	1.6	0	0	0.3	*	1.1
14	459.2	40.0	13.7	1.9	0	0	0.2	0	5.7
15	497.6	38.4	13.1	0	0	0	0.1	0	0.4
16	532.2	34.6	11.3	0	0	0	*	0	0.1
17	572.2	40.0	12.3	0	0	0	0.1	0.1	3.8
18	608.4	36.2	12.4	0	0	0	*	*	0.6
19	671.6	63.2	21.8	0	0	0	0.1	0.7	0.4
Total	-	-	208.3	2475.2	0	0.4	93.2	16.2	401.8

Appendix 5: Shellfish reference collection*

FAMILY	SPECIES	COMMON NAME/S	PREFERRED ENVIRONMENT/SIZE
MARINE BIVALVIA			
Anomiidae	<i>Anomia trigonopsis</i>	(Hutton, 1877) jingle shell	To 10m among shell debris; to 75mm
Arcidae	<i>Anadara trapezia</i>	(Deshayes, 1840) Sydney cockle; blood cockle; mud ark	Intertidal mangroves; estuarine tidal flats; seagrass beds; to 70mm
Cardiidae	<i>Acrosterigma vertebratum</i>		In muddy sand of intertidal flats
Carditiidae	<i>Venericardia</i> sp.		In sand in shallow water
Chamidae	<i>Chama fibula</i>	(Reeve, 1846) spiny oyster	Attached to shell or coral debris to 10m; to 30mm
Corbulidae	<i>Corbula (Serracorbula) crassa</i>	(Reeve, 1843)	Sandy/muddy substrates; to 18mm
Donacidae	<i>Donax (Plebidonax) deltoides</i>	(Lamarck, 1818) pipi; eugarie; wong	Littoral sand; to 60mm
Mastridae	<i>Mastrid</i> sp.		Littoral sand
Mytilidae	<i>Trichomya hirsutus</i>	(Lamarck, 1819) hairy mussel	Tidal estuary; attached to rocks from low tide level to 16m; to 65mm
Noetiidae	<i>Arcopsis deliciosa</i>	(Iredale, 1939)	Rocky substrates to 81m; to 10mm
Noetiidae	<i>Arcopsis symmetrica</i>	(Reeve, 1844)	Rocky substrates; shallow water; to 16mm
Ostreidae	<i>Saccostrea glomerata</i> syn. <i>S. cucullata</i> syn. <i>S. commercialis</i>	(Gould, 1850) Sydney rock oyster; rock oyster; commercial oyster	Sheltered rocky shores and mangroves; mid-intertidal; to 100mm
Pteriidae	<i>Pinctada albina sugillata</i>	(Reeve, 1857) pearl oyster	Attached to rocks and corals to 22m; to 110mm
Tellinidae	<i>Tellina</i> sp.		Littoral sand
Tellinidae	<i>Tellina (Cyclotellina) remies</i>	(Linnaeus, 1758)	Littoral sand; to 70mm
Trapeziidae	<i>Trapezium (Neotrapezium) sublaevigatum</i>	(Lamarck, 1819)	Littoral shell debris, coral crevices or in oyster clumps; 3-10m; to 65mm
Ungulinidae	<i>Felaniella (Zemysia) subglobosa</i> syn. <i>F. subglobosa</i>	(E.A. Smith, 1885)	Coral/mud to 13m; to 4.5mm
Veneridae	<i>Antigona chemnitzii</i>	(Hanley, 1844)	Littoral sand; to 100mm
Veneridae	<i>Dosinia tumida</i>	(Gray, 1838)	Littoral sand; to 58mm
Veneridae	<i>Gafrarium australe</i>	(Sowerby, 1850)	Intertidal, muddy sand; to 25mm
Veneridae	<i>Irus</i> sp.		Intertidal and subtidal sandy/rocky areas
Veneridae	<i>Placamen</i> sp.		Littoral sand
Veneridae	<i>Venerid</i> sp.		Littoral sand
MARINE GASTROPODA			
Batillariidae	<i>Pyrazus ebininus</i>	(Bruguère, 1792) hercules club whelk	Mudflats/mangrove swamps; to 110mm
Batillariidae	<i>Velacumantus australis</i> syn. <i>Batillaria australis</i>	(Quoy & Gaimard, 1834) Australian mud whelk; mud creeper	Sandy estuarine substrates among algae/seagrass/mangroves; to 35mm
Cerithiidae	<i>Cerithid</i> sp.		Sandy intertidal/shallow subtidal
Cerithiidae	<i>Cerithium</i> sp.	creeper	Intertidal/shallow subtidal in sandy areas
Cerithiidae	<i>Clypeomoros bifasciata</i>	(Sowerby, 1855)	Intertidal/shallow subtidal in sandy areas
Colubrariidae	<i>Colubraria maculosa</i>	(Gmelin, 1791) giant false triton	to 90mm
Columbellidae	<i>Zafra avicennia</i>	(Hedley, 1914)	On rocks or sand in shallow water; to 5mm
Conidae	<i>Conus</i> sp.		In sand in shallow water
Costellariidae	<i>Vexillum</i> sp.		Intertidal/subtidal sand/rock/coral

continued over

Appendix 5: continued

FAMILY	SPECIES	COMMON NAME/S	PREFERRED ENVIRONMENT/SIZE
Cypraeidae	<i>Cypraea</i> sp.	cowrie	Muddy rocks inshore
Ellobiidae	<i>Ophicardelus sulcatus</i>	(H. & A. Adams, 1855)	Intertidal and above high tide mark on rocks in mudflat areas/mangrove swamps
Epitoniidae	<i>Epitonium</i> sp.		Among rocks on coral; subtidal in sand
Fascioliariidae	<i>Fascioliariid</i> sp.		In sand or coral
Fascioliariidae	<i>Latirus</i> sp.		Intertidal/subtidal sand to coral
Fissurellidae	<i>Diodora ticaonica</i>	(L.A. Reeve, 1850)	Intertidal/shallow subtidal on rocks; to 22mm
Lottiidae	<i>Acmaeid</i> sp.		On rocks in intertidal zone
Littorinidae	<i>Bembicium nanum</i>	(Lamarck, 1822) periwinkle	Intertidal, rocky reefs; to 12mm
Littorinidae	<i>Littoraria</i> sp.	periwinkle	On rocks or mangroves in intertidal zone
Mitridae	<i>Mitra</i> sp.		Subtidal in sand or mud
Muricidae	<i>Bedevea paivae</i> syn. <i>B. hanleyi</i>	(Crosse, 1864) oyster drill	Muddy habitats in lower intertidal/shallow subtidal zone; to 20mm
Muricidae	<i>Morula marginalba</i>	(Blainville, 1832) mulberry whelk	Intertidal and subtidal on rocky shores/rocky reefs often on oyster beds; to 30mm
Nassariidae	<i>Nassarius burchardi</i>	(Dunker in Philippi, 1849) dog whelk	Intertidal sand and mudflats; to 12mm
Nassariidae	<i>Nassarius pauperus</i>	(Gould, 1850)	Intertidal/shallow subtidal, sand flats; to 14mm
Naticidae	<i>Natica</i> sp.		In sand or mud
Neritidae	<i>Nerita balteata</i> syn. <i>N. lineata</i>	(Reeve, 1855) common nerite	On and in logs; on prop roots and on lower trunks of mangroves; to 40mm
Neritidae	<i>Nerita squamulata</i>	(Guillou, Le, 1841) variable nerite	Rock platforms; intertidal zone; to 35mm
Planaxidae	<i>Planaxis sulcatus</i>	(Born, I. von, 1778)	Intertidal on rocks; 18-35mm
Potamididae	<i>Telescopium telescopium</i>	(Linnaeus, 1758) telescope mud whelk	Mudflats/mangrove swamps; to 110mm
Skeneidae	<i>Pseudoliotia</i> sp.		Under rocks intertidal/shallow subtidal zones
Triphoridae	<i>Metaxia</i> sp.		Shallow to deep water, in sponges
Triphoridae	<i>Subulphora</i> sp.		
Trochidae	<i>Herpetopoma atrata</i> syn. <i>Echelus atratus</i> syn. <i>Euchelus atratus</i>	(Gmelin, 1791) beaded top shell	Intertidal rocky reefs; 15-20mm
Trochidae	<i>Thalotia</i> sp.		Intertidal, rocky reefs/shores
TERRESTRIAL GASTROPODA			
Camaenidae	<i>Figuladra</i> sp.		Coastal vine thicket
Camaenidae	<i>Trachiopsis mucosa</i>		
Pupillidae	<i>Pupoides pacificus</i>		Coastal vine thicket
Subulinidae	<i>Eremopeas tuckeri</i>	(Pfeiffer, 1846)	Coastal vine thicket in leaf litter
FRESHWATER BIVALVIA			
Corbiculidae	<i>Corbicula (Corbiculina) australis</i>	(Deshayes, 1830)	Coastal rivers and streams; to 20mm
Mutelidae	<i>Velesunio ambiguus</i>	(Philippi, 1847)	
Mutelidae	<i>Alathyria pertexta</i>	(Iredale, 1934)	

* Details after Coleman 1981; Lamprell and Healy 1998; Lamprell and Whitehead 1992; Wilson and Gillet 1979.