

**[Supplementary material]**

**Hidden in plain sight: the archaeological landscape of Mithaka Country, south-west Queensland**

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**Table S1. Summary of the vertebrates of the Channel Country, which were considerably more diverse and numerous than species present today (Duncan-Kemp 1961; Van Dyck & Strahan 2008).**

Species	Common name	Weight	Geographic range	Habitat regions	Terrestrial biomes
<i>Tachyglossus aculeatus</i>	Echidna	2–7kg	Most widely distributed extant monotreme. Subspecies of <i>T. aculeatus</i> are distributed throughout southern and eastern New Guinea, mainland Australia, Kangaroo Island, and Tasmania	Temperate; tropical; terrestrial	Desert; dune; savanna; grassland; forest; rainforest; scrub forest; agricultural land; mountains to 1675m
<i>Dasycercus blythi</i>	Bush-tailed Mulgara	60–110g	Central and Western Australia	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Dasycercus cristicauda</i>	Mulgara	65–185g	Arid region from the Pilbara in north-western Australia to south-western Queensland	Temperate; terrestrial	Desert; dune
<i>Dasyuroides byrnei</i>	Kowari	70–175g	Constrained to Channel Country in south-western Queensland and northern South Australia	Tropical; terrestrial	Desert; dune; savanna; grassland. Inhabit the gibber plains of Channel Country
<i>Dasyurus geoffroii</i>	Western quoll	615–2185g	Now only in south-west Western Australia but once inhabited the central arid regions including western Queensland	Temperate; terrestrial	Desert; dune; savanna; grassland; forest
<i>Planigale gilesi</i>	Giles' planigale	5–16g	Central and eastern semi-arid inland regions	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Planigale ingrami</i>	Long-tailed planigale	2.6–6.6g	North and north-eastern Australia	Temperate; terrestrial	Savanna; grassland; forest
<i>Planigale tenuirostris</i>	Narrow nosed planigale	4–9g	Inland south-east Australia	Temperate; terrestrial	Scrubland; tussock grassland.

Species	Common name	Weight	Geographic range	Habitat regions	Terrestrial biomes
					Prefers to be away from water and in less densely vegetated areas
<i>Ningai ridei</i>	Wongai ningai	6.5–10.5	Throughout most of the arid region	Temperate; terrestrial	Savanna; grassland; shrubland
<i>Antechinomys laniger</i>	Kultarr	30g	Throughout the north, east and west regions of Australia	Temperate; terrestrial	Savanna; grassland; shrubland; forest; scrub forest
<i>Sminthopsis crassicaudata</i>	Fat-tailed dunnart	15g	Southern portion of Queensland (mainly inland)	Temperate; terrestrial	Desert; dune; savanna; grassland; shrubland
<i>Sminthopsis macroura</i>	Stripe-faced dunnart	20g	From central Western Australia to western Queensland and northern New South Wales	Temperate; terrestrial	Desert; dune; savanna; grassland
<i>Isoodon auratus</i>	Golden bandicoot	250–670g	Now restricted to Western Australia and the Northern Territory but historically found across the arid interior	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Macrotis lagotis</i>	Greater bilby	800–2500g	South-west corner of Queensland and central arid interior. Historically across 70 per cent of Australia	Temperate; terrestrial	Desert; dune; savanna; grassland
<i>Macrotis leucura</i>	Lesser bilby	311–435g	Central Australia	Temperate; terrestrial	Savanna; grassland
<i>Trichosurus vulpecula</i>	Common brushtail	1200–4500g	Across Australia	Temperate; tropical; terrestrial–semi-terrestrial	Rainforest; forest, scrub forest; mangrove; dry woodland
<i>Bettongia lesueur</i>	Burrowing bettong	1028g	Historically Australia wide but now restricted to the Pilbara Coast in Western Australia	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest; forest
<i>Caloprymnus campestris</i>	Desert rat-kangaroo	647–1060g	South Australia extending into southern Queensland and southern Northern Territory	Temperate; terrestrial	Desert; dune

<b>Species</b>	<b>Common name</b>	<b>Weight</b>	<b>Geographic range</b>	<b>Habitat regions</b>	<b>Terrestrial biomes</b>
<i>Macropus robustus</i>	Euro	6–60kg	Western Australia, New South Wales and Queensland	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Macropus rufus</i>	Red kangaroo	17–92kg	Most of the arid central desert areas	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Hydromys chrysogaster</i>	Water rat	340–1275	Mainland Australia, Tasmania and New Guinea	Tropical; saltwater; marine; freshwater	Lakes; rivers; streams; coastal; wetlands; riparian; urban; suburban
<i>Rattus villosissimus</i>	Long-haired rat; plague rat	54–280g	Across Australia	Temperate; terrestrial	Desert; dune; savanna; grassland; shrubland
<i>Leggadina forresti</i>	Central short-tailed mouse	20g	Sparse across the arid and semi-arid interior	Temperate; terrestrial	Desert; dune; savanna; grassland; shrubland; riparian; forest
<i>Notomys alexis</i>	Spinifex hopping mouse	35g	Central and Western Australia	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Notomys cervinus</i>	Fawn hopping mouse	35g	Central Australia, New South Wales, Victoria	Temperate; terrestrial	Desert; dune
<i>Notomys fuscus</i>	Dusky hopping-mouse	32g	Channel Country	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Notomys longicaudatus</i>	Long-tailed hopping-mouse	100g	Channel Country and gibber plains.	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Pseudomys australis</i>	Plain's mouse	40g	Central arid and semi-arid interior	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Pseudomys desertor</i>	Desert mouse	25g	Widespread throughout the arid zone	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Pseudomys hermannsburgensis</i>	Sandy inland mouse	12g	Widespread throughout the arid zone	Temperate; terrestrial	Desert; dune; savanna; grassland; scrub forest

Species	Common name	Weight	Geographic range	Habitat regions	Terrestrial biomes
<i>Rattus tunneyi</i>	Pale field rat	170g	Northern Australia, sporadic in central arid interior	Temperate; tropical; terrestrial	Desert; dune; savanna; grassland; scrub forest
<i>Macroderma gigas</i>	Ghost bat	150g	Northern Australia and Queensland	Tropical; terrestrial	Forest; rainforest; scrub forest
<i>Saccolaimus flaviventris</i>	Yellow-bellied sheath-tailed bat	30-60g	Widely distributed except for Tasmania and south-west Western Australia	Temperate; tropical; terrestrial	Desert; dune; savanna; grassland; scrub forest; forest
<i>Austronomus australis</i>	White-striped free-tailed bat	26-48g	Mainly southern Australia but extends regularly to the Tropic of Capricorn	Tropical; terrestrial	Desert; dune; savanna; grassland; scrub forest; forest; shrubland
<i>Mormopterus spp.</i>	Inland free-tailed bat	10g	Australia wide	Temperate; tropical; terrestrial	High adaptable to almost any habitat
<i>Nyctophilus geoffroyi</i>	Lesser long-eared bat	8g	Australia wide except Tasmania	Temperate; tropical; terrestrial	Desert; dune; savanna; grassland; forest; rainforest; scrub forest; agricultural land; mountains
<i>Chalinolobus gouldii</i>	Gould's wattled bat	13g	Australia wide	Temperate; tropical; terrestrial	Desert; savanna; grassland; forest; rainforest; scrub forest; agricultural land; mountains
<i>Chalinolobus picatus</i>	Little pied bat	6g	Queensland and New South Wales	Tropical; terrestrial	Desert; dune; savanna; grassland; scrub forest; forest; shrubland
<i>Scotorepens balstoni</i>	Inland broad-nosed bat	7-14g	Australia wide, except Tasmania	Temperate; tropical; terrestrial	Desert; dune; savanna; grassland; forest; rainforest; scrub forest; agricultural land; mountains. Usually not coastal
<i>Scotorepens greyii</i>	Little broad-nosed bat	6.6g	Most of Australia excluding Tasmania and coastal extremities in the south	Temperate; tropical; terrestrial	Desert; dune; savanna; grassland; forest; rainforest;

Species	Common name	Weight	Geographic range	Habitat regions	Terrestrial biomes
					scrub forest; agricultural land; mountains
<i>Vespadelus baverstocki</i>	Inland forest bat	5g	Mainland Australia up to the Tropic of Capricorn	Tropical; terrestrial	Desert; dune; savanna; grassland; scrub forest; forest; shrubland. Not coastal
<i>Vespadelus finlaysoni</i>	Finlayson's cave bat	3–7g	Most of central and northern Australia	Tropical; terrestrial	Desert; dune; savanna; grassland; scrub forest; forest; shrubland; caves
<i>Canis dingo</i>	Dingo	11–22kg	Most of Australia	Temperate; tropical; terrestrial	Desert; dune; savanna; grassland; forest; rainforest; scrub forest; agricultural land

**Table S2. Summary of key archaeologically relevant observations concerning Indigenous societies of the Channel Country in the nineteenth and twentieth centuries.**

Observer	Date	Location	Villages	Habitation structures	Footpaths	Fish traps	Pituri	Grinding, seeds, flour	Summary of key observations	Reference
Charles Sturt	1845	Lower Cooper, Coongie Lakes; Mulligan River	X	X	X			X	Large populations (>150 people in places), villages; large-scale seed grinding and storage; spearing and netting of fish; mussels a major dietary component; well-beaten footpaths.	Davis (2002)
Edmund Kennedy	1847	Cooper Creek south of Windorah	X	X	X		X		Villages; large numbers of people; pituri use.	Beale (1983)
Augustus Gregory	1858	Cooper Creek		X	X				“old native huts”, well-beaten footpaths with loose stones removed and piled	Gregory (1884)
William Wills	1860–1861	Cooper Creek, Innamincka; Diamantina River; King Creek		X	X	X	X	X	Large camps; collection / processing of grass seed; gunyahs; fish traps (Pigeongah Creek); mussel shell heaps; well-worn paths.	Wills (1963)
John King	1860–1861	Cooper Creek, Innamincka; Diamantina River; King Creek		X					People “very numerous” (groups up to 50); mia mias.	King (1860–1861)
John McKinlay	1861–1862	Coongie Lakes; Diamantina River	X	X	X	X			Large populations (groups >200); habitations very numerous; footpaths; fishing mid-Diamantina (nets and a “native fishing weir”); hunting reptiles and small game in sandhills; mussels a major dietary component.	McKinlay (1863)
Alfred Howitt	1860s	Lower Cooper		X				X	Large-scale pounding and grinding of seed.	Howitt (1904)

J.M. Gilmour	1871	Thunderpurty Lagoon		X					103 mud houses.	Gilmour (1871)
J. H. Lewis	1875	North and west of Lake Eyre		X		X			Native wells; 'wurleys' on Warburton River; groups up to 350 people; "native fishery" on Gardiner's Waterhole; fishing with nets.	Lewis (1876)
William Hodgkinson	1876	Diamantina River; Coongie Lakes; Eyre Creek, Mulligan River	X	X	X		X	X	Large graves; well-beaten footpaths; circular timber shelters plastered with clay; pigeon trapping, nardoo grinding, and consumption of fish, tubers and pituri.	Hodgkinson (1877)
J. Skulthorpe	1880	Mithaka country						X	"Prodigious" grain quantity and "proportionate mill power in the shape of hard pounding stones"; grass cut and stacked; at one camp a wagon load of grain.	Skulthorpe (1880)
W. H. Davidson	1885	Boulia area		X					Stone "ring-mounds", having the appearance of camps (Pituri Creek); emu traps; consumption of lizards; nets (purpose not specified); ceremonial use of bilby tails.	Davidson (1920)
F. H. Wells	1880s–1890s	Diamantina and Georgina Rivers		X			X		Burial of dead in dunes; 'wurleys' of logs, canegrass and mud; varied diet.	Wells (1893)
Alice Heber-Percy	1892	Diamantina Lakes	X						Wongaree Waterhole a "major camp"; varied diet; burial rituals.	Heber-Percy (1893)
Walter Roth	1890s	South-west Queensland, centred on Boulia	X	X		X	X	X	Detailed observations of diet and other uses of plants and animals; trade; customs; ceremony.	Roth (1897)
S. Hill	1890s	Brighton Downs area		X				X	Gunyahs, usually 8–9 in circles on sandhills; seed grinding; snakes, emus, goannas as food.	Hill (1901)
C. W. Mackie	1890s	Brighton Downs and mid-reaches of Diamantina		X			X		Pituri trade; dietary observations.	Mackie (1901)
Alice Duncan-Kemp	Early 1900s	Mooraberrie and surrounds	X	X		X	X	X	Large populations; multiple gunyahs around waterholes; detailed accounts of food harvesting, storage, trade and ceremony, spiritual landscape elements.	Duncan-Kemp (1933, 1952, 1968)

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