



Government of South Australia  
South Australian Arid Lands Natural  
Resources Management Board

# Bronzeback Legless Lizard Survey Report

October/November 2017

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This report may be cited as:

South Australian Arid Lands Natural Resources Management Board (2018). Bronzeback Legless Lizard Survey Report. South Australian Arid Lands Natural Resources Management Board, Port Augusta.

Cover image: Bronzeback Legless Lizard captured on Evelyn Downs station. Photo taken by Jamie Dunlop.

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# INTRODUCTION

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The Bronzeback Legless Lizard (*Ophidiocephalus taeniatus*) is a poorly understood reptile species, known from a handful of sites between Coober Pedy and the Northern Territory border. Bronzebacks are listed as *Vulnerable* under both South Australian and national legislation (*Environment Protection and Biodiversity Conservation Act 1999*).

The lack of knowledge of this species contributes to this listing as a threatened species – Bronzebacks are notoriously hard to find, with days of searching in appropriate habitat usually yielding few results. Bronzebacks are thought to prefer to live in the dense leaf litter mats which accumulate beneath long lived *Acacia* shrubs such as Western Myall (*Acacia papyrocarpa*), Northern Myall (*A. calcicola*), Gidgee (*A. cambagei*), Mulga (*A. aneura*) and sometimes other species which accumulate thick litter, including Leafless Cherry (*Exocarpus aphyllus*).

A number of Bronzebacks have turned up in dug-outs at Coober Pedy over the last 10 years or so and a project which samples the animals falling into abandoned opal prospecting shafts has also captured a number from along the Stuart Range Escarpment in areas to the immediate north of Coober Pedy (Pedler, 2010). Two Bronzebacks were captured further north along this escarpment on the Mt Willoughby/Mt Clarence boundary during the Mt Willoughby IPA Biological Survey in 2003 (Brandle, Sparrow, Foulkes, & Robinson, 2005). Other Bronzeback Legless Lizard records include sites to the north-east on Arckaringa and Todmorden Stations. Bronzebacks were also recorded on Mt Willoughby Station IPA during March 2012 and on Evelyn Downs station in July 2012 and July 2014. In September 2017, a Bronzeback Legless Lizard was captured at Wintinna Homestead, some 16 km north-west of the most north-western record on Evelyn Downs.

The aim of this survey was to search areas of appropriate habitat on Evelyn Downs, Arckaringa, Wintinna, Welbourn Hill and Todmorden stations to determine the distribution of Bronzeback Legless Lizards in the adjoining potential habitat between known records. This is important for understanding the distribution of this species as well as information on their habitat preferences, behaviour, population size and other areas relevant to their conservation (Pedler, Brandle, Fenner, & Lennon, 2014). It is assumed that Bronzebacks likely have a continuous distribution throughout an arc of suitable habitat within Breakaway land system (Pedler, 2012; Pedler, 2014 and Pedler, et al., 2014). This survey aimed to investigate areas of this land system that have not previously been surveyed for Bronzeback Legless Lizards.



## METHODS

A team of up to nine observers at a time searched for Bronzeback Legless Lizards in leaf litter mats using 3-pronged rakes over six days at Evelyn Downs, Arckaringa, Wintinna, Welbourn Hill and Todmorden stations (25 October and 28 October to 1 November 2017). Weather during the trip was generally warm to hot, with clear and sunny days and mild overnight minima of between 11-17 °C (Table 1). Rainfall in the months preceding the survey was minimal, with the exception of high rainfall totals experienced in the region in late September/early October, with > 85 mm recorded at Todmorden station.

**Table 1. Summary of weather conditions during the survey. Taken from the nearest recording station at Coober Pedy (150 km to the south). Dir = direction, Spd = speed (km/h), RH = relative humidity (%).**

Date	Day	Temp (°C)		Rain (mm)	Max wind gust		9am				3pm			
		Min	Max		Dir	Spd	Temp	RH	Dir	Spd	Temp	RH	Dir	Spd
25/10/17	Wed	17.4	33.1	0	SW	50	20.6	42	SW	31	32	13	SW	24
28/10/17	Sat	11.9	28.9	0	S	48	15.2	51	S	26	26.6	13	SSW	9
29/10/17	Sun	15.1	37.1	0	SSW	70	26.2	13	N	30	35.6	10	W	33
30/10/17	Mon	12.3	23.9	0	SSW	63	14.8	47	SW	41	22.9	24	SSW	30
31/10/17	Tue	10.9	25.6	0	ESE	37	14.8	44	ESE	30	23.5	17	S	9
1/11/17	Wed	12.9	30	0	SE	37	20.1	23	E	22	27.4	12	ENE	11

Clearance to survey within the project area was provided by Antakarintja senior custodian Bill Lennon, and William Lennon.

Areas of potential Bronzeback habitat were targeted for searches, particularly breakaway slopes and minor creeklines supporting Western Myall (*Acacia papyrocarpa*), Northern Myall (*A. calcicola*), Mulga (*A. aneura*) and Gidgee (*A. cambagei*) or other shrubs providing suitable leaf litter, such as Witchetty Bush (*A. kempeana*). Leaf litter mats were lifted with rakes and then replaced to minimise long-lasting disturbance to Bronzeback Legless Lizard habitat. Captured reptiles were measured and photographed and then returned to the leaf litter at their point of capture. A total of 43 sites were surveyed, with a total search effort of approximately 58 person hours (Figure 1). A full list of survey sites and the survey effort at each site is provided in Appendix 1.



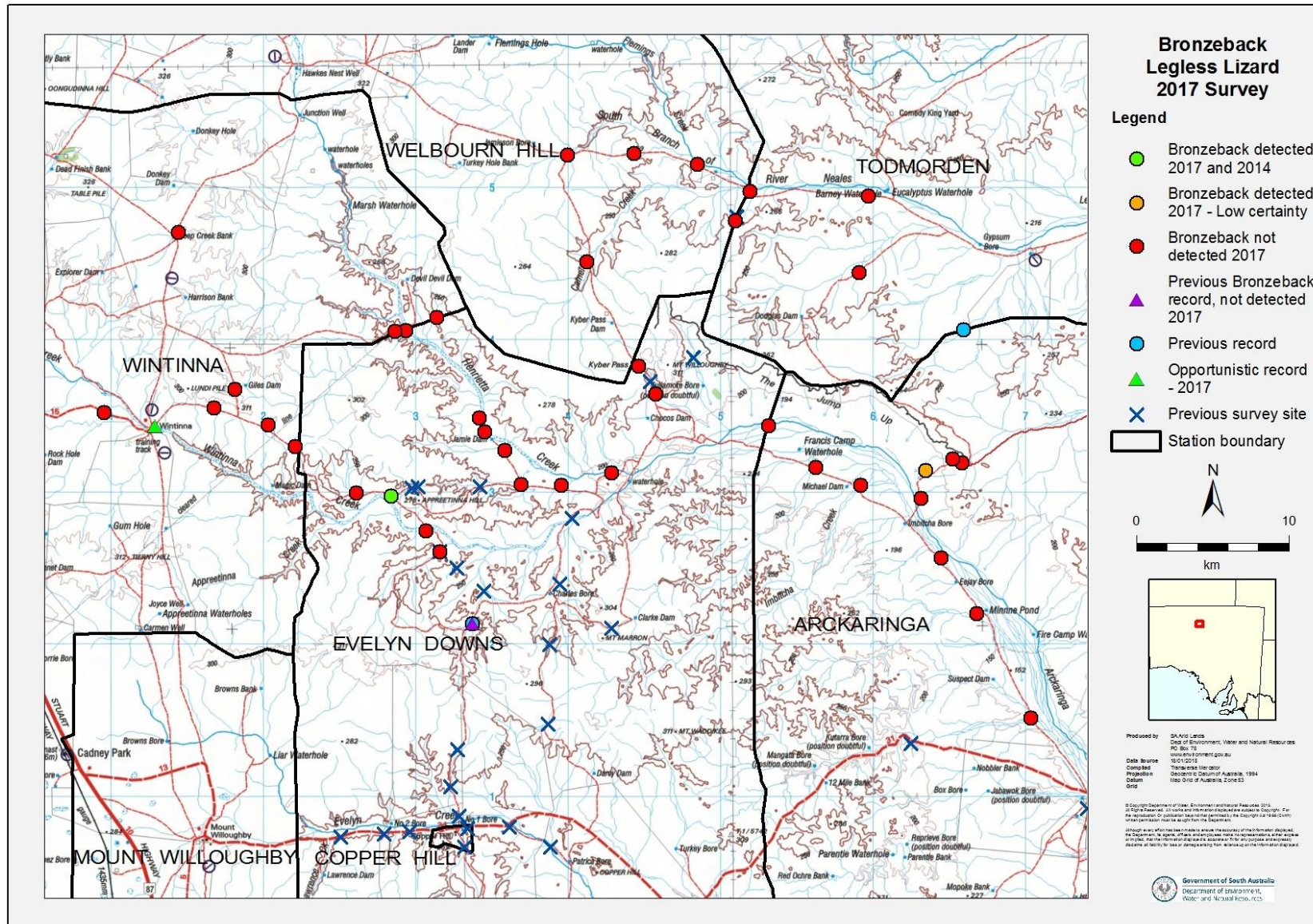


Figure 1. The location of survey sites and sites where Bronzeback Legless Lizards were detected during the 2017 survey. Previous survey sites are also shown, as well as the opportunistic record from September 2017 by Frankie and Jake Fennell at Wintinna.





**Figure 2. John Knight and Caroline Thomas from Evelyn Downs looking for Bronzebacks with Rob Brandle, and Dan Duval in the background.**



**Figure 3. Rob Brandle and volunteer Sue Kenny raking for Bronzebacks under Western Myalls.**



## RESULTS AND DISCUSSION

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Only one Bronzeback Legless Lizard was captured during the survey, despite significant search effort in suitable habitat (see Figure 1). It was captured at a site (EVD50) where a Bronzeback was captured during a previous survey on Evelyn Downs in 2014 (Pedler, 2014); near the Wintinna Creek, at the foot slope of Appreetinna Hill. The Bronzeback was captured under a Western Myall (*Acacia papyrocarpa*) under a thick litter mat (see Figures 5 and 6). The individual was an adult, with a snout-vent length of 109 mm. No other Bronzeback Legless Lizards were captured during the survey.

However, one Bronzeback was possibly sighted at a site on Arckaringa Station (ARC03), in a minor drainage channel just west of the main Arckaringa escarpment, although the sighting could not be confirmed. The drainage channel was lined with Mulga (*A. aneura*) and scattered and Western Myall, with the potential Bronzeback individual sighted in leaf litter under a Western Myall. The observer recalls seeing a legless lizard with the colourings of a Bronzeback, but due to the inability to capture and verify its identity this record has a low certainty. If this observation was indeed a Bronzeback, this would provide a link between those records from the eastern part of the Breakaway land system on Arckaringa to those further west on Evelyn Downs, and adds weight to the theory that the species' distribution is continuous throughout an arc of suitable habitat within that land system (Figure 4).

Forty-one individuals of five other species were also detected from within or near leaf litter mats, with the Marble-faced Delma (*Delma australis*) and Great Desert Slider (*Lerista desertorum*) (Figure 7) accounting for 31 out of the 42 individuals detected (Table 2). Five of the Marble-faced Delma records were from sloughs (the dead outer skin shed by a reptile), with 18 scale rows at mid-body. Out of the other legless lizard or skink species found in this habitat, Marble-faced Delma has 17-20 scale rows, usually 18, while the Great Desert Slider (*Lerista desertorum*) has at least 20 scale rows at midbody and Bronzeback Legless Lizards have 16 scale rows at mid-body (Cogger, 2014; Wilson & Swan, 2014; Mark Hutchinson pers. comm.). One male Ochre Dragon (*Ctenophorus tjantjalka*) was captured opportunistically on Wintinna station, away from designated survey sites (Figure 8), while two female Ochre Dragons were captured at sites on Evelyn Downs station (Figure 9).

Much of the habitat surveyed was generally suitable for Bronzebacks, characterised by breakaway slopes and associated creeks, gullies and foot slopes supporting Northern Myall, Western Myall and Mulga, with a range of mature and juvenile trees creating suitable leaf litter mats. However, litter mats suitable for Bronzebacks had been impacted substantially at some sites by cattle sheltering under trees, particularly at sites near waterpoints. Disturbance to leaf litter from kangaroos was also evident at some sites. In a number of cases, litter mats also appeared to have been washed away, probably from the heavy rainfall experienced in the region in late September. Major flash flooding events which strip away the surface soil and overlying litter have been highlighted as a threatening process for the species, with such events making Bronzebacks subject to localised declines and extinctions (Ehmann, 1992; Pedler, et al., 2014).



While no Bronzebacks were recorded on Wintinna station during this survey, the opportunistic observation of a Bronzeback at Wintinna Homestead in the month prior to the survey extends the known range of the species by over 16 km to the north-west of the closest record on Evelyn Downs (Figure 4). It also further supports the theory that the species distribution is continuous throughout suitable habitat within the Breakaway land system.

No Bronzebacks were detected at sites surveyed within the Breakaway Landsystem on Todmorden or Welbourn Hill, despite the presence of relatively good litter mats at most sites, particularly on Todmorden. Evidence of disturbance by cattle and waterflow impact to litter was also evident at some sites.

The low reptile detection rates, including Bronzebacks in suitable habitat, most likely reflects the warm temperatures during much of the survey. Previous surveys have been most successful in detecting Bronzebacks in cooler weather, when animals are slower and more likely to be seeking heat nearer the surface.

### **Implications and further work**

The Bronzeback record from Wintinna is significant given that it is the first from Wintinna pastoral lease and extends the known range of the species to the north-west from the closest previous record on Evelyn Downs. Further surveys in the north-western extent of the Breakaway land system on Wintinna, and further north on Welbourn Hill and Todmorden, may uncover additional records, however suitable leaf litter mats were limited at sites surveyed on Wintinna during this survey.

The Coongra and Bagot land systems have also been identified as a high priority for targeted searches within suitable habitat (Pedler, Brandle, Fenner, & Lennon, 2014), as any Bronzebacks detected in those areas would provide connectivity in the species' distribution between records in the Breakaway land system in South Australia and records further north on Crown Point and into the Northern Territory.

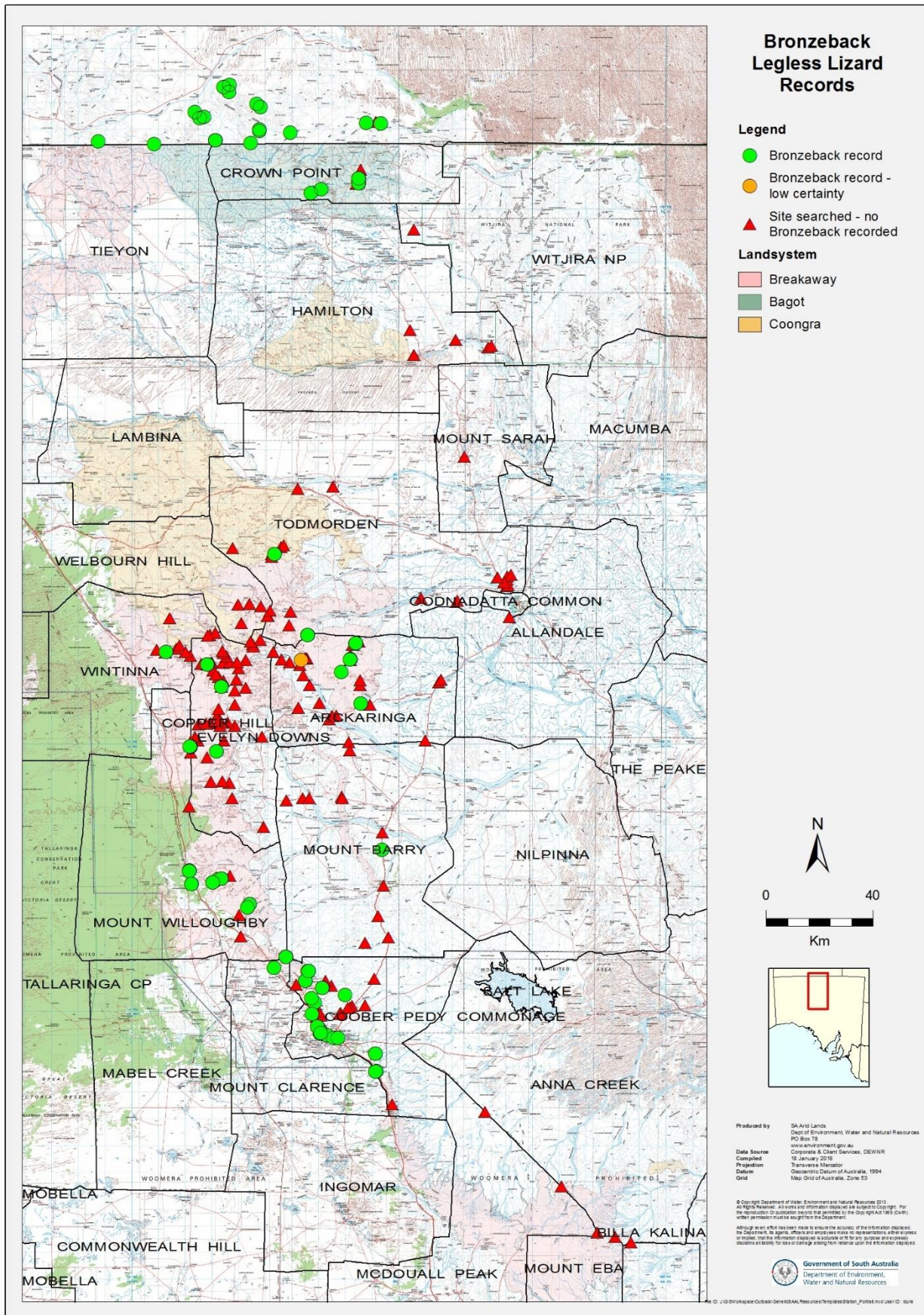
The Bronzeback surveys in October 2017 coincided with a similar survey to map out the distribution of the nationally endangered Arckaringa Daisy, for which timing was ideal as most plants were flowering thereby making them easier to find. Unfortunately the warm weather was less conducive to detecting reptiles by raking. Whilst raking has proven to be the best method for detecting Bronzebacks, future searching should focus on cooler times of the year.



**Table 2. Summary of reptiles captured at each site. \*denotes uncertain identification**

Site	Common Name	Species	Number
ARC01	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
	Great Desert Slider	<i>Lerista desertorum</i>	2
ARC02	Great Desert Slider	<i>Lerista desertorum</i>	1
	Desert Whipsnake	<i>Demansia reticulata</i>	1
ARC03	Great Desert Slider	<i>Lerista desertorum</i>	2
	Bronzeback Legless Lizard	<i>Ophidiocephalus taeniatus</i>	1*
ARC04	Central Bearded Dragon	<i>Pogona vitticeps</i>	1
ARC05	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
ARC07	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
ARC10	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
EVD48	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
EVD50	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	3
	Great Desert Slider	<i>Lerista desertorum</i>	2
	Bronzeback Legless Lizard	<i>Ophidiocephalus taeniatus</i>	1
EVD62	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	2
EVD63	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
EVD65	Great Desert Slider	<i>Lerista desertorum</i>	1
EVD67	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
	Great Desert Slider	<i>Lerista desertorum</i>	1
EVD68	Slider	<i>Lerista sp.</i>	1
EVD71	Ochre Dragon	<i>Ctenophorus tjantjalka</i>	1
EVD72	Ochre Dragon	<i>Ctenophorus tjantjalka</i>	1
	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	2
TOD01	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
	Great Desert Slider	<i>Lerista desertorum</i>	1
WBH01	Great Desert Slider	<i>Lerista desertorum</i>	1
WBH02	Slider	<i>Lerista sp.</i>	2
WBH03	Slider	<i>Lerista sp.</i>	2
WBH04	Great Desert Slider	<i>Lerista desertorum</i>	1
	Slider	<i>Lerista sp.</i>	1
WIN03	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	2
WIN04	Delma Lizard / Marble-faced Delma	<i>Delma australis</i>	1
WIN09	Great Desert Slider	<i>Lerista desertorum</i>	1





**Figure 4. The location of all previous Bronzeback Legless Lizard records and sites searched throughout the wider region.**





**Figure 5. Bronzeback Legless Lizard captured on Evelyn Downs. Photo: Jamie Dunlop.**



**Figure 6. Volunteers Sue Kenny and Jamie Dunlop with Rob Brandle at the Western Myall under which the Bronzeback Legless Lizard was captured.**





**Figure 7. Lil Kamphorst holding a Great Desert Slider (*Lerista desertorum*) at the Western Myall (*Acacia papyrocarpa*) under which it was caught in thick leaf litter on Arckaringa station.**





Figure 8. A male Ochre Dragon (*Ctenophorus tjantjalka*) captured on Wintinna.



Figure 9. A female Ochre Dragon (*Ctenophorus tjantjalka*) captured on Evelyn Downs.





**Figure 10. Absence of litter mats under a Western Myall (*Acacia papyrocarpa*) due to cattle sheltering under the tree.**



## ACKNOWLEDGEMENTS

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Thanks to volunteers Sue Kenny, Jamie Dunlop and Randall Johnson for their invaluable assistance with the survey, and Peter Lang (State Herbarium of South Australia) and Dan Duval (Seed Conservation Centre) for their assistance also. Thanks also to Shontelle Lennon, Connie Taylor, Chevahn Hoad and Joel Kowold from the Kan̄ku-Breakaways Conservation Park for their support and assistance with the survey. Thanks also to Rob Brandle and Lil Kamphorst for their assistance in planning and undertaking the survey.

We would like to acknowledge the Antakarintja traditional owners whose land these surveys were carried out on. Antakarintja custodians Bill Lennon and William Lennon are gratefully acknowledged for guidance around sites of cultural significance.

Thank you to Caroline Thomas and John Knight from Evelyn Downs for allowing us to camp on their property and for coming out to assist with the survey, and to Tony and Jackie Williams, Paul and Katy Quinn, Jake and Frankie Fennell, Douglas Lillecrapp and Donald and Colleen Sampson for their interest and support of the surveys.

This work was funded through the Australian Government's National Landcare Program.

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# APPENDICES

Appendix 1. Summary of sites and search effort for Bronzeback Legless Lizards. \*denotes site previously surveyed by Pedler (2014).

Site ID	Property	Easting	Northing	Location description	Date	No. of observers	Total search time (person hours)	Approx. search area (ha)	Landform
ARC01	Arckaringa	465830	6931934	Drainage channel dissecting main Arckaringa escarpment, approx 5.5km NE of Imbitcha Bore	25/10/2017	9	7.5	6.8	Drainage channel dissecting escarpment, overstorey of Western Myall and Beaked Red Mallee
ARC02	Arckaringa	465192	6932165	Drainage channel flowing just W of main Arckaringa escarpment, approx 5km NE of Imbitcha Bore	25/10/2017	5	3.3	6.0	Drainage channel, , overstorey of Western Myall and Beaked Red Mallee
ARC03	Arckaringa	463424	6931416	Drainage channel E of main Arckaringa Creek, approx 3.5km NE of Imbitcha Bore	25/10/2017	4	1.7	3.8	Minor drainage channel lined with Mulga and scattered Western Myall
ARC04	Arckaringa	463133	6929594	Drainage channel E of main Arckaringa Creek, approx 1.8km NE of Imbitcha Bore	25/10/2017	3	0.8	1.0	Minor drainage channel from main Arckaringa Creek
ARC05	Arckaringa	470338	6915187	Approx 3.5km SE of Suspect Dam on Imbitcha Bore track, approx 9.5km N of Painted Desert Road	30/10/2017	2	1.0	6.0	Gidgee lined drainage channel with Bladder Saltbush and Ruby Saltbush
ARC06	Arckaringa	466765	6921995	Approx 700m W of Minnie Pond, approx 2.5km S of Eejay Bore	30/10/2017	2	1.2	9.0	Gidgee lined drainage channel over Cotton-bush
ARC07	Arckaringa	464426	6925649	Approx 3km SE of Imbitcha Bore on the W side of main Arckaringa Creek channel, approx 1.8km N of Eejay Bore, E side of track	30/10/2017	2	1.2	6.3	Main Arckaringa Creek, Gidgee dominated plain
ARC08	Arckaringa	459182	6930436	Approx 600m E of Michael Dam	30/10/2017	2	0.2	0.0	Minor drainage channel



Site ID	Property	Easting	Northing	Location description	Date	No. of observers	Total search time (person hours)	Approx. search area (ha)	Landform
ARC09	Arckaringa	456217	6931626	Approx 2km NW of Michael Dam, approx 1.5km SE of Francis Camp Waterhole. S side of main Arckaringa Creek channel	30/10/2017	2	1.2	4.0	Minor drainage channel with a mix of Gidgee and Northern Myall, and Coolibah and Willow Wattle
ARC10	Arckaringa	453136	6934352	Arckaringa/Evelyn Downs boundary fence, approx 1.5km N of gate, approx 2.5km NW of Francis Camp waterhole, along main Arckaringa Creek	30/10/2017	2	1.0	4.0	Floodplain – Red Gum and Coolibah lined watercourse with Northern Myall on floodplain plus scattered Gidgee and Dead Finish
*EVD23	Evelyn Downs	431549	6926073	Wintinna Creek crossing, N of Copper Hills Homestead	1/11/2017	4	1.3	3.8	Broad well-vegetated gum-lined creekline
*EVD48	Evelyn Downs	433695	6921369	Approx 2km N of Muldoon's Dam, S side of drainage channel, both sides of track	1/11/2017	4	0.7	2.3	Wide multi-channel watercourse with Mulga and Western Myall
EVD50	Evelyn Downs	428355	6929749	Flat adjacent to Wintinna Creek - at T-Junction to Appreetinna Hill	31/10/2017	2	1.5	7.5	Flat fringing major creekline, below breakaway hillslopes
EVD62	Evelyn Downs	436872	6930508	Drainage channel at start of track to Jamie Dam	28/10/2017	4	1.3	9.0	Drainage channel lined with Mulga and scattered Northern and Western Myall
EVD63	Evelyn Downs	435779	6932753	Track to Jamie Dam, approx 1kmSE of Jamie Dam, S of Henrietta Creek	28/10/2017	4	3.3	16.0	Drainage channel dominated by Northern Myall and scattered Western Myall, Mulga and Dead Finish
EVD64	Evelyn Downs	434463	6933960	W side of main Henrietta Creek channel, approx 700m NW of Jamie Dam	28/10/2017	4	2.3	9.0	Red Gum lined creek with Northern and Western Myall on floodplain fringes



Site ID	Property	Easting	Northing	Location description	Date	No. of observers	Total search time (person hours)	Approx. search area (ha)	Landform
EVD65	Evelyn Downs	434108	6934840	W side of Henrietta Creek channel, approx 1.5km NW of Jamie Dam	28/10/2017	7	2.9	12.5	Red Gum lined creek with Northern Myall on floodplain fringes as well as Western Myall, Mulga and Desert Senna and Dead Finish
EVD66	Evelyn Downs	442788	6931278	Approx 100m W of Big Hole yards, south side of Henrietta Creek channel, N side of track	28/10/2017	2	0.8	4.0	Red Gum lined creek with Coolibah, Mulga and Northern Myall
EVD67	Evelyn Downs	445710	6936443	S of Kyber Pass, approx 1.6km NE of Chocos Dam	30/10/2017	2	1.0	9.0	Minor drainage channel with Northern and Western Myall plus scattered Mulga, Senna and Dead Finish
EVD68	Evelyn Downs	444594	6938279	Approx 150m S of Kyber Pass, both sides of track	30/10/2017	3	1.3	2.3	Drainage channel in valley between escarpment
EVD69	Evelyn Downs	439512	6930425	Approx 2.5km E of Jamie Dam track, S side of Henrietta Creek, N side of track	31/10/2017	2	0.7	2.3	Minor drainage channel from main Henrietta Creek, with Western Myall, Dead Finish and Mulga
EVD70	Evelyn Downs	426066	6929948	Approx 3.5km E of Evelyn Downs W boundary with Wintinna, along Wintinna Creek channel	31/10/2017	2	0.7	4.0	Minor drainage channel
EVD71	Evelyn Downs	429313	6940615	Edge of Henrietta Creek on S side of channel, adjacent Evelyn Downs/Wintinna boundary, approx 3.4km S of Devil Devil Dam	31/10/2017	2	0.5	1.0	Major creek through dissected tableland
EVD72	Evelyn Downs	430642	6927474	S of Appreetinna Hill, S side of Wintinna Creek, approx 9km NW of Charles Bore	1/11/2017	4	1.3	10.0	Flats beside main Wintinna Ck channel. Western and Northern Myall on fringes



Site ID	Property	Easting	Northing	Location description	Date	No. of observers	Total search time (person hours)	Approx. search area (ha)	Landform
TOD01	Todmorden	450941	6947788	W boundary of Todmorden adjacent Welbourn Hill, approx 2km S of Neales River, both sides of track i.e. into Welbourn Hill also	29/10/2017	3	2.0	6.3	Minor drainage channel with Northern Myall, Mulga, Desert Senna and Dead Finish
TOD02	Todmorden	451898	6949725	W boundary of Todmorden, both sides of the track adjacent the River Neales on the S side	29/10/2017	3	1.3	4.0	Floodplain – Red Gum lined watercourse with Northern Myall on floodplain plus scattered Mulga
TOD03	Todmorden	459667	6949450	Approx 1km W of Barney Waterhole track, S of Neales River, both sides of track	29/10/2017	3	1.5	4.0	Drainage channel running main Neales River channel. Dominated by Northern Myall with scattered Mulga and Desert Senna
TOD04	Todmorden	459053	6944391	Douglas Dam track, approx halfway between Douglas Dam and northern track, approx 4.5km NE of Douglas Dam	29/10/2017	3	1.3	6.0	Drainage channel dominated by Northern Myall and scattered Western Myall and Mulga
WBH01	Welbourn Hill	448462	6951526	On SE track from Todmorden boundary, approx 4km W of boundary	30/10/2017	2	2.0	3.5	Minor drainage channel through dissected stony tableland, leading into Coolibah creek
WBH02	Welbourn Hill	444283	6952220	On SE track approx 8km W from Todmorden boundary	30/10/2017	2	2.3	1.5	Minor drainage channel through stony tableland, with Northern Myall
WBH03	Welbourn Hill	441204	6945127	Kyber Pass road, approx 4.5 N of Kyber Pass Dam	30/10/2017	2	1.2	4.0	Stony tableland
WBH04	Welbourn Hill	439902	6952120	Welbourn Hill Creek at junction of Kyber Pass track and Welbourn Hill/Todmorden track	30/10/2017	2	1.2	4.0	Flats beside major creek draining stony tableland



Site ID	Property	Easting	Northing	Location description	Date	No. of observers	Total search time (person hours)	Approx. search area (ha)	Landform
WIN01	Wintinna	422063	6932973	Approx 250m W of Evelyn Downs/Wintinna boundary, approx 3km NW of Magic Dam	31/10/2017	2	0.5	0.5	Minor drainage channel with Western Myall and Mulga over Senna spp.
WIN02	Wintinna	416717	6935528	S boundary of Giles paddock, approx 2km W of Giles Dam track	31/10/2017	2	0.2	0.0	Minor drainage channel with Mulga
WIN03	Wintinna	412832	6934289	Wintinna Creek at Wintinna Homestead	31/10/2017	2	1.0	2.3	Red Gum and Coolibah lined watercourse, Willow Wattle, Senna, Elegant Wattle, Dead Finish on flats
WIN04	Wintinna	409516	6935240	Main road to Wintinna Homestead, approx 3.5 W of homestead, N side of road	31/10/2017	2	1.3	12.3	Minor drainage channel running S from main Wintinna Creek channel, with Northern Myall
WIN05	Wintinna	414375	6947062	Deep Creek Bank Dam, approx 13km N of Wintinna Homestead	31/10/2017	2	0.2	0.0	Minor drainage channel with Mulga
WIN06	Wintinna	418091	6936740	Approx 750m W of Giles Dam	31/10/2017	2	0.2	0.0	Minor drainage channel with Mulga
WIN07	Wintinna	420265	6934415	Approx 2.5km NW of Wintinna/Evelyn Downs boundary gate, approx 4km N of Magic Dam	31/10/2017	2	0.3	0.8	Minor drainage channel running from breakaway hillslopes, with Northern Myall
WIN08	Wintinna	431350	6941453	Boundary fence between Wintinna/Evelyn Downs across Henrietta Creek	31/10/2017	2	1.8	5.0	Creek valley between two isolated valleys - wide and flat
WIN09	Wintinna	428598	6940543	Devil Devil Dam track, approx 600m west of Henrietta Creek	31/10/2017	2	0.3	0.1	Dissected stony tableland

