## **Supplementary Material**

Supplementary Table 1. Gantt chart indicating time periods for which activity and body temperature data were obtained from each study aardvark at Tswalu between July 2012 and September 2015. ID – aardvark identity; light grey - activity data; dark grey - body temperature data; blank fields - no data available; \* – logger implantation;  $\mathbf{I}$  – death of the aardvark;  $\mathbf{\Omega}$  – logger not retrieved; # – logger failure; x – logger removal.

	2012																		201	14						2015											
ID	J A		<b>S O</b>	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A S
A01	*# *#						H H																														
A02	*								I I																												
A03	*								<del>Ι</del> Ω <del>Ι</del> Ω																												
A04			L						I I																												
A05								<del>Ι</del> Ω Ι																													
A06	*								#				#	X X																							
A07											:	*												X X													
A08											:	*												x* x*											#		X X
A09											:	*# *																			x*# x*						<del>[</del>
A10											:	*		I I																							
A11												*																I I									
A12			·	_					_			_												*											#		X

\*

## Weyer et al., 2020 Energy deficit makes aardvarks diurnal

Supplementary Table 2. Dimensions of implanted devices.

Devices	Dimensions	Mass
VHF tracking transmitter	30 mm Ø, 110 mm length	~100 g
Temperature loggers		
iButton	$\sim$ 55 mm $\times$ 45 mm $\times$ 10 mm	~40 g
Star-Oddi	~15 mm Ø, 46 mm length	~20 g
Activity loggers		
Actical	$\sim$ 35 mm $\times$ 35 mm $\times$ 15 mm	~40 g
MLOG-AT1	$\sim$ 20 mm $\times$ 40 mm $\times$ 40 mm	~25 g

**Supplementary Table 3.** Overview of locomotor activity data recorded with biologgers in each study aardvark at Tswalu between July 2012 and May 2015. ID – aardvark identity; N days recorded – number of days during which activity was recorded; N days active – number of days each aardvark was active for ≥65 minutes; N days inactive – number of days the aardvark was inactive.

ID	N days recorded	N days active	N days inactive
A01	181	181	0
A02	227	225	2
A03	_	_	_
A04	68	65	5
A05	_	_	_
A06	227	225	2
A07	384	382	2
A08	672	672	0
A09	_	_	_
A10	34	32	2
A11	478	470	8
A12	303	301	2

## Weyer et al., 2020 Energy deficit makes aardvarks diurnal

**Supplementary Table 4.** Summary of the total numbers of emergences (N emergences recorded) and returns (N returns recorded) recorded on camera trap for each study aardvark at Tswalu over the period July 2012 to September 2015. ID – aardvark identity.

ID	N emergences	N returns
<u> </u>	recorded	recorded
A01	_	_
A02	_	_
A03	_	_
A04	_	_
A05	_	_
A06	_	_
A07	65	6
A08	142	30
A09	86	35
A10	10	4
A11	62	28
A12	22	6
Total	387	109

**Supplementary Table 5.** Summary of 24-h body temperature data of all study aardvarks at Tswalu over the period July 2012 to September 2015. ID – aardvark identity; Period – time during which the aardvark was instrumented with a body temperature data logger; N – number of 24-h periods over which body temperature was recorded (excluding capture periods).

ID	Period	24-h be	ody temperat	ure (°C)	N	Died?	Circumstances of death		
		minimum	maximum	maximum amplitude	_				
A01	Jul 2012 to Jan 2013	_	_	_	_	yes	drought		
A02	Aug 2012 to Mar 2013	24.7	38.5	8.1	223	yes	drought		
A03	Aug 2012 to Mar 2013	_	_	_	_	yes	drought		
A04	Aug 2012 to Mar 2013	31.8	38.4	4.7	237	yes	drought		
A05	Aug 2012 to Feb 2013	34.1	38.4	3.1	197	yes	drought		
A06	Aug 2012 to Jul 2013	32.8	38.7	4.3	365	no	_		
A07	Jul 2013 to Jul 2014	30.7	38.4	7.1	384	no	_		
A08	Jul 2013 to Sep 2015	29.9	38.7	8.4	793	no	_		
A09	Jul 2013 to Jun 2015	30.6	38.8	7.3	752	yes	winter after drought		
A10	Jul 2013 to Aug 2013	27.6	38.3	9.3	34	yes	winter after drought		
A11	Jul 2013 to Oct 2014	26.1	38.7	11.7	476	yes	snake bite?		
A12	Jul 2014 to Sep 2015	34.2	38.6	3.0	420	no	_		