

Fading out of view: the enigmatic decline of Rose's mountain toad *Capensibufo rosei*

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SUPPLEMENTARY TABLE 1 Historical records of Rose's mountain toad *Capensibufo rosei* on the Cape Peninsula, South Africa, consolidated by date and location into 56 positive records and 26 instances where negative observations were made.

Date ¹	Location	Status ²	Collector	Record type
Silvermine Nature Reserve				
September 1901	River valley	U	W.F. Purcell	Museum specimen
1925	Muizenberg Mountain (Steenberg Plateau)	B	W. Rose	Museum specimen
1925	Muizenberg Mountain (Steenberg Plateau)	B	Unknown	Museum specimen
1960s	Near waterfall	U	R.C. Boycott	Anecdotal
August–October 1971	Silvermine Plateau	B	R.C. Boycott	Field notes
August 1971	East of Old Cape Road	B	R.C. Boycott	Field notes
August 1971	Steenberg Plateau	B	W.R. Branch	Anecdotal
13 August 1972	Steenberg Plateau	B	R.C. Boycott	Museum specimen
6 April 1972	East of Old Cape Road	B	R.C. Boycott	Field notes
13 August 1972	East of Old Cape Road	B	R.C. Boycott	Field notes
26 August 1971	Near parking area	NB	A. de Villiers	Museum specimen

23 September 1979	Steenberg Plateau	B	W.R. Branch	Museum specimen
September 1979	Steenberg Plateau	B	R.C. Boycott	Anecdotal
August 1989	Steenberg Plateau	B	Delvinquier et al. (1991a,b; 1995)	Literature
14 August 2008	Steenberg Plateau	B	J. Measey/ K. Tolley	GPS point locality
September 2009 (M)	Steenberg Plateau	B	J. Measey/ K. Tolley	GPS point locality
July–September 2010 (W)	Steenberg Plateau	B	J. Measey/ K. Tolley	GPS point locality
July–October 2011 (W)	Steenberg Plateau	B	This study	GPS point locality

Cape of Good Hope Nature Reserve (Cape Point)

2 September 1973	Olifantsbos	B	R.C. Boycott/B. Rose	Museum specimen
8 July 1988	Cape of Good Hope Nature Reserve	U	L.A.C. Hoffmann	Museum specimen
1996	Cape Point (near GEPS dam)	NB	M. Picker	Field notes
23 March 2010	Cape Point (near GEPS dam)	NB	J. Measey	GPS point locality
30 March 2010	Cape Point	NB	A. Rebelo	Field notes
2 September 2010	Cape Point	B	A. de Villiers/R. de Villiers/J. Measey/ K. Tolley	GPS point locality
25 March 2011	Cape Point	NB	J. Measey	GPS point locality
September 2011 (W)	Cape Point	B	This study	GPS point locality

Table Mountain

21 August 1927	Maclear's Beacon	B	Rose (1950)	Literature
27 December 1927	Table Mountain (no additional information)	U	K.H. Barnard	Museum specimen
15 December 1950	Western Table	U	Lund University	Field notes
15 December 1950	Echo Valley	NB	Lund University	Field notes
7 January 1958	Table Mountain	U	Unknown	Museum specimen
July 1960	Hiking hut	NB	C.E. Gow	Museum specimen
July 1960	Table Mountain	U	Unknown	Museum specimen
July 1960	Echo Valley	NB	Unknown	Museum specimen
11 January 1961	Maclear's Beacon	B	J. Visser	Museum specimen
2 January 1965	Hiking hut	NB	C.E. Gow	Museum specimen
8 September 1965	Maclear's Beacon	B	M. Tandy	Field notes
September 1965	Top of Platteklip Gorge	B	J. Visser	Museum specimen
8 December 1966	Top of Platteklip Gorge	B	J. Visser	Museum specimen
21 May 1969	Top of Platteklip Gorge	B	P. van den Elzen	Museum specimen
4 January 1971	Top of Platteklip Gorge	B	J. Visser	Museum specimen
27 September 1973	Top of Platteklip Gorge	B	J. Visser	Museum specimen
29 September 1973	Maclear's Beacon	B	J. Visser	Field notes

4 November 1973	Top of Platteklip Gorge	B	J. Visser	Museum specimen
15 December 1973	Maclear's Beacon	B	J. Visser	Field notes
1973	Top of Platteklip Gorge	B	J. Visser	Anecdotal
1973	Table Mountain (no additional information)	U	Lund University	Museum specimen
5 April 1979	Top of Platteklip Gorge	B	W.R. Branch	Museum specimen
1983	Top of Platteklip Gorge	B	J. Visser	Museum specimen
Other localities				
January 1904	Chapman's Peak	NB	R.M. Lighfoot	Museum specimen
26 May 1907	Cape Peninsula	U	C. French	Museum specimen
1915	Kalk Bay	NB	H. Power	Museum specimen
February 1925	Jackal's Drift	NB	Rose (1950)	Literature
February 1925	Kalk Bay	NB	Rose (1950)	Literature
8 January 1978	Ocean's View, Kommetjie	NB	A. de Villiers	Museum specimen
August 2004	Blackhill Road	NB	K. Louw/C. Seymour	Anecdotal
Negative observations (all localities)				
22 September 1974	Top of Platteklip Gorge, Table Mountain	B	J. Visser	Anecdotal
19 December 1983	Maclear's Beacon, Table Mountain	B	M. Tandy	Field notes
August–September 1985	Maclear's Beacon, Table Mountain	B	M. Cherry	Anecdotal

August–September 1985	Olifantsbos, Cape Point	B	M. Cherry	Anecdotal
1998	Maclear's Beacon, Table Mountain	B	M. Cunningham	Anecdotal
1998	Top of Platteklip Gorge, Table Mountain	B	M. Cunningham	Anecdotal
16 August 2009	Hiking hut, Table Mountain	NB	J. Measey/ K. Tolley	Field notes
16 August 2009	Back Table, Table Mountain	NB	J. Measey/ K. Tolley	Field notes
20 September 2009	Chapman's Peak	NB	J. Measey/ K. Tolley	Field notes
August–September 2010 (M)	Maclear's Beacon, Table Mountain	B	J. Measey/ K. Tolley	Field notes
August–September 2010 (M)	Blackhill Road	NB	J. Measey/ A. de Villiers	Field notes
August–September 2010 (M)	Chapman's Peak	NB	J. Measey/ K. Tolley	Field notes
August–September 2010 (M)	Olifantsbos, Cape Point	B	J. Measey/ K. Tolley	Field notes
August–September 2010 (M)	Ocean's View, Kommetjie	NB	J. Measey/ A. de Villiers	Field notes
August–September 2010 (M)	Near parking area, Silvermine	NB	J. Measey/ K. Tolley	Field notes
August–September 2011 (M)	Top of Platteklip Gorge, Table Mountain	B	This study	Field notes
August–September 2011 (M)	Maclear's Beacon, Table Mountain	B	This study	Field notes
August–September 2011 (M)	Echo Valley, Table Mountain	NB	This study	Field notes
August–September 2011 (M)	Hiking hut, Table Mountain	NB	This study	Field notes
August–September 2011 (M)	Blackhill Road	NB	This study	Field notes

August–September 2011 (M)	Chapman's Peak	NB	This study	Field notes
August–September 2011 (M)	Olifantsbos, Cape Point	B	This study	Field notes
August–September 2011 (M)	Ocean's View, Kommetjie	NB	This study	Field notes
August–September 2011 (M)	Near parking area, Silvermine	NB	This study	Field notes
August–September 2011 (M)	Cape Point (GEPS dam)	NB	This study	Field notes
August–September 2011 (M)	Jackal's Drift	NB	This study	Field notes

¹ Focused survey efforts indicated by shading; (M), multiple visits were made during the time period indicated; (W), weekly visits were made to the site during that period

² U, unknown (no information with the original record; B, breeding has been observed at this location; NB, no breeding or solitary individuals have been observed at this site

SUPPLEMENTARY TABLE 2 Haplotype frequencies for Rose's mountain toad at Silvermine and Cape Point, South Africa for the ND2 mitochondrial marker, with EMBL (European Molecular Biology Laboratory) accession numbers.

Haplotype (Sample no.)	Total frequency	Silvermine	Cape Point	EMBL no.
H1 (CBS1–4)	27	27	0	HG321470
H2 (CBS4–1)	4	4	0	HG321471
H3 (CBP1–1)	28	0	28	HG321472
H4 (ADV32)*	2	2	0	FN650136*
H5 (CBP3–13)	1	0	1	HG321473
Total	62	33	29	HG321474

*Haplotype 4 = ADV32 and ADV34 from phylogeny of Tolley et al. (2010)

SUPPLEMENTARY TABLE 3 Net sequence divergence (uncorrected P-distances) for Rose's mountain toad *Capensibufo rosei* and Tradouw's mountain toad *C. tradouwi* for 16S (upper matrix) and ND2 (lower matrix). Values on the diagonal reflect within-site P-distances (16S/ND2). Some values were not estimated (NA) for within-site divergences (one sample per site) or because of non-amplification of the 16S fragment.

			1	2	3	4	5	6	7	8	9	10	11	12	13
<i>C. rosei</i>	1	Silvermine	0.001/ 0.001	0.000	0.026	0.027	0.035	0.037	0.035	0.029	0.043	0.045	0.038	0.042	na
<i>C. rosei</i>	2	Cape Point	0.004	0.000	0.026	0.027	0.035	0.037	0.036	0.029	0.043	0.045	0.038	0.042	na
<i>C. incertae sedis</i>	3	Landdroskop	0.097	0.095	0.000	0.006	0.014	0.028	0.030	0.027	0.042	0.042	0.036	0.040	na
<i>C. incertae sedis</i>	4	Jonaskop	0.103	0.101	0.019	0.002	0.008	0.030	0.032	0.028	0.043	0.043	0.034	0.038	na
<i>C. incertae sedis</i>	5	Hawekwas	0.102	0.105	0.043	0.040	0.002	0.037	0.039	0.037	0.051	0.051	0.044	0.048	na
<i>C. incertae sedis</i>	6	Akkedisberg	0.098	0.101	0.088	0.090	0.082	na	0.006	0.027	0.045	0.045	0.042	0.044	na
<i>C. incertae sedis</i>	7	Klein River Mtns	0.093	0.096	0.085	0.087	0.078	0.000	0.002	0.028	0.047	0.047	0.040	0.042	na
<i>C. incertae sedis</i>	8	du Toitsberg	0.099	0.099	0.095	0.096	0.080	0.095	0.091	0.004	0.031	0.035	0.036	0.041	na
<i>C. tradouwi</i>	9	Grootvadersbos	0.124	0.123	0.116	0.110	0.120	0.127	0.118	0.120	0.000	0.010	0.038	0.040	na
<i>C. cf. tradouwi</i>	10	Keeromsberg	0.112	0.109	0.119	0.114	0.124	0.119	0.107	0.109	0.062	0.002	0.036	0.039	na
<i>C. cf. tradouwi</i>	11	Breekrans	0.104	0.099	0.112	0.112	0.123	0.114	0.108	0.116	0.118	0.089	na	0.002	na
<i>C. cf. tradouwi</i>	12	Pakhuis pass	0.107	0.104	0.116	0.117	0.127	0.119	0.112	0.117	0.120	0.097	0.009	0.000	na
<i>C. cf. tradouwi</i>	13	Turret Peak	0.119	0.120	0.121	0.124	0.123	0.120	0.112	0.118	0.114	0.112	0.099	0.104	na/na