



Simpson Desert 1963

Surveyors' Exhibition November 2013 to February 2014



The first systematic government survey of the Simpson Desert





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The exhibition depicts an aspect of surveying in Australia's Simpson Desert 50 years ago and is curated by retired survey assistant Alan Wright of Stonyfell. The Exhibition has a variety of surveying instruments and items from surveywork undertaken in 1963 by the then South Australian Department of Lands under contract to the Commonwealth Government.

*left -Birdsville the Madigan 1939/RGSSA plaque
1962*

The Simpson Desert surveys followed on from earlier ones of the North East of South Australia and beyond to Birdsville and Bedourie, and East to Betoota, which were done in 1960.



Mining and exploration companies were becoming active in the region and needed to know exactly where they were in order to map the various geophysical anomalies and to determine the exact boundaries of their leases. This pre-dated, of course, satellite assisted positioning systems. The calculations were based upon trigonometrically based triangulation mathematics, and geographic land forms as taught in schools today.

In 1963 this area of Australia, then and now know loosely as *the Outback*, was very remote and advance survey skills were needed to navigate the terrain of areas such as the Simpson Desert.

The Royal Geographical Society of South Australia has had close links with this region, the Simpson Desert having been named after a Society President, AA Simpson, who sponsored Dr Cecil Madigan's scientific crossing in September 1939. The plaque in Birdsville says *Dr C.T. Madigan with 8 men and 17 camels arrived here on the 6th July 1939 having left Andado No.1 Bore 31 days earlier. Erected by the Royal Geographical Society of Australasia South Australian Branch 1962.*

In July 1963 eleven men in six Landrover 4x4 vehicles left Adelaide for the Simpson Desert. They carried very basic equipment plus all necessary survey gear, long handled shovels, some matting (for retrieving vehicles from sand and mud), lots of tinned food, water and petrol in 4 gallon jerry cans, and personal gear.

En route to Hawker and Marree it rained . and from Quorn the road was unsealed. At that time Marree was the depot for the Birdsville Mail Run and an important railway town on the narrow gauge Ghan railway to Alice Springs. The party continued to William Creek on muddy roads and at Oodnadatta fuel and last minute supplies were taken on at the legendary Oodnadatta Store, run by the colourful Jaroslav Pecanek and his wife Jindra.

From Oodnadatta the survey party headed north on wet tracks to Mt Sarah and the railway siding of Pedirka. Here teams went out to plot the traverse at Pedirka to the existing triangulation survey.



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From this point the surveyors traversed east and north through Dalhousie Springs (now part of Witjira National Park, but at that stage part of Mt Dare pastoral station) to the Alka Seltza bore by angle and distance methods. Tellurometers measured the distances by radio signal between the two triangulation stations. Theodolites measured the horizontal and vertical angles to calculate the positions and heights; barometer and wet and dry bulb thermometer readings were taken for adjustments, with all readings logged into the prescribed field book, the official record.

Camping was very pleasant, with constant billy boiling along the way, there was no illness, and there was some novel camp cooking at times! *Geosurveys* bush pilots delivered the mail and took aerial photographs of the areas to be surveyed.

All of the required survey work was undertaken, although follow-up work continued for some years. In many ways it was the last of the great classical regional surveys using technology and methodologies which had not changed for many years. At that time no one could foresee that within a relatively few years satellite technology and increasingly precise global positioning systems would change surveying for ever.

It was also a time when motor vehicles were being used in the Simpson Desert for the first time. The high, parallel sand ridges made travel difficult, especially for the modestly powered 4WD vehicles of the time. For the surveyors of the day it was all part of the job, any difficulties had to be faced with the resources at hand and 50 years on we can only admire the resourcefulness displayed on an almost daily basis. Yet, as with the surveying work itself, there could be no forecasting that within a decade or two tourism would follow in the surveyors' footsteps. Today, thousands of 4WD adventurers cross the Simpson Desert annually.

The edge of the Simpson Desert near Birdsville





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On display is the Wild RC-7 aerial camera that took many of the ground surface photographs in S.A. and N.T. during the 1960s and 70s. These were the basis of position identification until the introduction of the GPS in the 1980s.

Without aerial photographs surveyors, geologists, map makers and many other did not have a very difficult time in finding their way and position in the Australian outback.

This camera was fitted in the S.A. Department of Lands' DC-3 VH DAS by Allan Vial DFC, OAM, OPR(POL), Charles Vincent and others of his team in the late 1950s and 60s.



Suggested reading:-

[*The Simpson Desert : natural history and human endeavour*, by Shephard, Mark.](#)

North Adelaide, S. Aust., Corkwood Press ,1999. rga 994.291 S548 1999 b

[*Walking the Simpson Desert*, Bonython, C. Warren \(Charles Warren\), 1916-2012](#)
[Adelaide], Rigby, 1980, rga 919.4291 B723

[*The Simpson Desert and surrounds : notes for a visit by the Royal Geographical Society of Australasia \(South Australian Branch\) Inc. , Harris, C. R. \(Colin R.\)*](#)

Royal Geographical Society of Australasia (South Australian Branch); South Australia. Dept. of Environment and Planning, [Adelaide], South Australian Dept. of Environment & Planning, c1986,rgpam 919.4237 H313 b

[*Crossing the dead heart*, Madigan, C. T. \(Cecil Thomas\), 1889-1947.](#), Melbourne, Georgian House, 1946
rga 919.4291 M182

[*Dune is a four-letter word*, Sprigg, Griselda, 1921-2003., Maclean, Rod, 1955-2011](#), Wakefield Press, Kent Town, S. Aust., 2001
ga 919.4237 S769

[*Physical features of Central Australia*, Winnecke, C. \(Charles\), 1857-1902.](#), Royal Geographical Society of Australasia. South Australian Branch, Adelaide, Spiller, 1887 (Proceedings (Royal Geographical Society of Australasia. South Australian Branch)
rgsp 994.2 W776

[*Report on exploration of a portion of Central Australia*](#)
[*Report on exploration of a portion of Central Australia by the Barclay-Macpherson Expedition, 1904-1905 . Barclay, H. Vere \(Henry Vere\), \[1916?\]*](#),
rgsp 919.42043 W776

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