

THE NULLARBOR, WHERE IS IT?

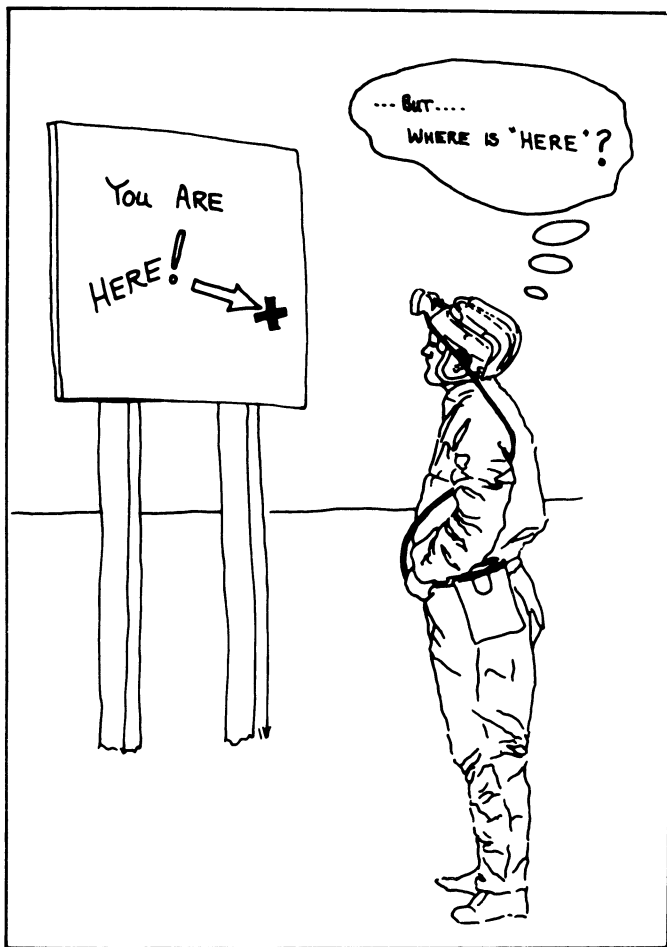
by
Norm Poulter
S.R.G.W.A.

Apart from being the world's largest expanse of limestone, the Nullarbor Plain is one of Australia's remote caving areas.

Remote yes, but no longer difficult to reach. With today's "affluent cavers", modern vehicles and sealed highways, the Nullarbor is within easy reach of most capital cities.

The caves of the Nullarbor however, can be difficult to find. Despite advances in mapping and navigation technologies, ground parties still experience difficulty in knowing where they are in relation to caves, maps - and themselves.

This paper outlines a still un-resolved difficulty in plotting the location of Thampanna Cave (N206) and its historical namesake, Thampanna Rockhole.



The Nullarbor Plain, at 200,000 km² is the world's largest expanse of limestone. Due to the almost featureless terrain and often, out-dated maps, navigation to caves is usually difficult. Navigation in fact, away from the major caves and roads, seems to be a hit and miss affair. Unlike city street directories, the maps of the Nullarbor are not revised annually and when revision is carried out, pre-publication surveys appear to be restricted to 'populated' areas and 'main roads'.

The implied question asked by this paper is:

When a person is at a given point (as indicated on a map) are they really there?

This writer became interested in the problems of Nullarbor navigation during the Goede/Jennings Expedition of April/May 1981 when Mott and Pilkington of CEGSA came across a cave in the Thampanna Rockhole area of Mundrabilla Station. According to a sketch map produced by the Western Australian Speleological Group in 1980, the cave was Thampanna Rockhole although the

Eucla (1963) survey sheet covering the area showed the Rockhole to be elsewhere. Dr. Glen Hunt (pers. comm. 1982) states that the cave was known to rabbit hunters as early as 1964. Due to the lack of roads/tracks in the vicinity (of the cave) at that time, and despite directions given by the hunters, the Hunt party were unable to find the cave. To further complicate matters, WASG ultimately named the cave, Thampanna Cave N206, due to the acknowledged close proximity of Thampanna Rockhole (approximately 1km east), originally named by the surveyor Turner in 1885, the name most likely derived from aboriginal lore.

The most commonly used maps of the Nullarbor region are 1:253 440 survey sheets published during the early 1960's, which in turn were based on military maps of the 1940's. These maps are only just being replaced by a new metric 1:250 000 series. The 'standard' Eucla map of 1963 has just been replaced by a metric map of similar scale, published in early 1981. Approximately 50% of the new map was compiled from air photographs taken during 1978. In the Mundrabilla region, part of the map appears to be already out of date.

The dominating feature of the Thampanna Rockhole area is a road, running in an east-west direction. The 1963 Eucla sheet plots Thampanna Rockhole a short distance north of this road while the 1981 edition places the Rockhole on the southern edge of the same road. Other rockholes and caves in the same vicinity are also in different positions on the two maps. Why?

The access road to Thampanna rockhole and Cave is the reason given for the position shift of Thampanna Rockhole by the Division of National Mapping, Canberra. They claim that during the seventeen years between the survey for the 1963 map and the supplementary survey for the 1981 map, the access road had 'been moved' (north), hence the apparent position change of Thampanna Rockhole. Reference to the relevant air photographs however, dispute this claim. Careful study of the 1978

air photographs clearly show the existing road overlaying the original road between a gate and Thampanna Rockhole save for the inclusion of some deviations around some low hills. (see Fig. 1). The section of road adjacent to the Rockhole is still exactly where it was prior to the 1961 survey. Somewhere around 1975, the road was extended to the west of Thampanna Rockhole, and thus passed within 100m of the future Thampanna Cave.

The location of Thampanna Cave is now known (Poulter 1982), being proven by aerial observation. In theory, the location of Thampanna Rockhole is also known although finding it on the ground is another matter. The surveyor Turner, during 1885 was surveying the Eucla townsite and plotting rockholes (including Chowilla Landslip) in company with native guides. According to Turner's fieldbook, he established a camp on August 11 at a (corrected) latitude of $31^{\circ}42'44''$ and plotted Thampanna Rockhole nearby (most likely) the following day. He estimated the capacity of the Rockhole to be 200 gallons, which implies it to be fairly small and thus hard to find. Turner does not appear to have left any diaries in which other information may have been recorded and the W.A. Lands and Survey have since lost his Original Plans (scale drawings) of the nullarbor region.

When the 1963 Eucla sheet was published, the plotted position of Thampanna Rockhole was approx. $31^{\circ}35'15''$. Come 1981 and the Rockhole had been moved to $31^{\circ}41'38''$, close to where Turner had originally plotted it almost 100 years before.

Why the interest?

Well, as Billy McMahon once said, "We know where we are going!"

Unfortunately, in order to know where we are going, we first have to know where we are, or for that matter where we have been. In other words, if the federal mapping authorities, despite the advantages of modern cartographic technology, cannot position rockholes (relatively unimportant features by today's standards) on maps correctly, can the caving fraternity be confident that access roads and caves are plotted any better?

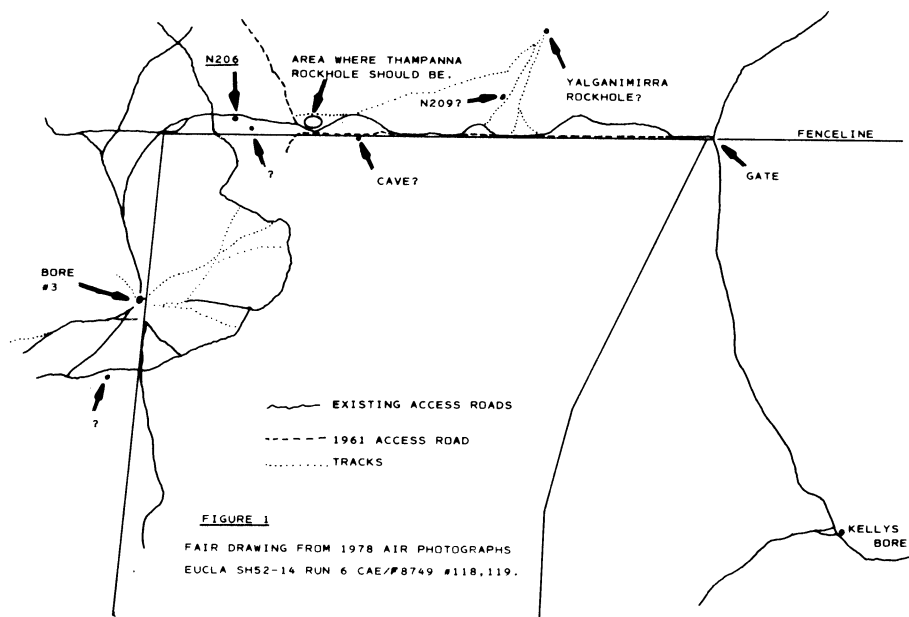
DISCUSSION

The use of a known cave to plot a new cave can place the new cave at the wrong location. Turner was not interested in caves and did not plot them on his surveys.

A group from the Western Australian Institute of Technology plan to follow Turner's survey path across the Nullarbor from Mundrabilla (old) homestead to determine the actual location of the Thampanna Rockhole.

REFERENCES

- Poulter, N. 1982 'Thampanna Cave N206' ASF Newsletter # 95 pp. 2
Air photographs. Eucla SH52-14 CAE/F 8749, run 6, print #'s 118, 119. 9-2-1978.





Well! I must have come in here.