

## ***A Little Plane, a Big Plain and Very Many Feet: The Finding Of Thylacoleo***

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### **AN IDEA DEVELOPS**

The finding of *Thylacoleo* was, in itself, an unexpected detail in a much longer process. For some ten years, a dedicated group of cavers from CEGSA, CLINC and VSA had spent many trips drawing together the main features of Thampanna Cave to which we had been introduced by earlier surveyors, notably Max Meth and Graham Pilkington. By 1999 new challenges were desired; and a new purpose, so that we could continue to justify enjoying what Rudi Frank has called “that unique state of mind”: the Nullarbor.

An abiding inspiration has been a saying, attributed to the late Joe Jennings, that “Time spent in personal reconnaissance is seldom wasted.” It had long been noted that large trackless areas had virtually no recorded features. It was often accepted that probably no features worth searching for existed.

One such area was chosen, some fifty kilometres square, and a solo three-day walk undertaken. Ten features were found; and of these, two were within eleven metres of each other, yet neither was visible from the other. One was a delightful small stand up cave with several salt domes and a little lake and geckos. Moreover, the best find of the walk was a small cave, barely a hundred metres from where the walk began, found at the end of the three days. Clearly, longer legs were needed. Ladders on vehicles, cameras on kites and even wilder ideas were entertained, but our needs were resolved when an ultralight aircraft was generously made available.

It is a low-cost, quite elderly, single-seat plane, with conventional three-axis controls, making it more suitable for modestly windy conditions. The two-cylinder, two-stroke, single-ignition engine is adequate for short take-offs, and easily handles a 100 km/hr cruise. The aircraft is of metal frame and fabric covering, light and sturdy, and is an old design with an excellent safety record. Most of all, it has a rocket-powered parachute to bring it to ground should some disaster occur.

So with an aircraft available, and with many years of flying experience, a seven-metre-long van was built to bring aircraft, pilot and Nullarbor together. Actually fitting the aircraft into the van took several days, much frustration and disappointment, and continued modifications to the van and fitting; but departure was possible by Easter 2000. The trip from Melbourne proceeded, albeit slowly, towed by our elderly but faithful two-litre Rodeo, never quite moving into fifth gear except down the long hill into Adelaide.

The aircraft was assembled on the airstrip at Mundrabilla, and a successful take-off proceeded. This remains the only occasion on which a “proper airstrip” has been used. We had planned as carefully as we could; however we were writing our own guidelines as we went. If we had covered all contingencies, then we simply never would have started at all. So with some cautious abandon, armchair caving became cockpit caving on Friday 28 April 2000.

### **PURPOSE AND METHOD**

At the beginning our idea was quite simply to look for new caves. Fortunately there were none. Blowholes and other small things there certainly were, but nice big new caves we simply were not going to find. So we would have to record just what was available: anything at all!

The idea grew rapidly as we found what was workable, and what simply wasn't, dictated largely by the shape and confines of a small cockpit. Before long, we had settled on a few parameters:

- The aerial survey would be total, recording everything seen to be disturbing the surface.
- The area chosen would be coverable in a three-week period, allowing for wind and rain preventing flying on some days.
- About ten people on the ground seemed a good ratio for one aircraft.

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- We would aim for minimum track-making.
- Equipment would be simple and undistracting in the cockpit: no radio or camera, but an EPIRB would be carried.
- This combination seems to yield the maximum number of finds, over a maximum area, at minimum cost, and with minimum aircraft time in the air.

It was during this period that Paul (Devine) arrived unannounced and totally unexpected in our camp, and arrived to stay. Paul, whom I had not previously met, had the temerity to take my precious GPS, feed it into his computer, and then HE showed ME where I'd been. It came as a shock to find a friendly gremlin in my GPS had been noting everything I did, and without telling me! Since then our little group has consisted of CEGSA, CLINC, SRGWA and VSA.

There are some factors that need to be kept in mind during the process of searching for features, and recording them:

- All entrances are fortuitous, having little or no relationship to the formation of a cave.
- All caves are phreatic, followed by internal collapse, but totally lacking vadose development.
- Entrances are either collapse events, or tubes formed upwards or downwards by the preferential action of moisture and salt wedging.
- The ratio of caves with entrances to caves without is unknown, and an absence of obvious entrances does not indicate an absence of caves.
- All large entrances are known.

With these factors in mind, we aim to record all rockholes, blowholes, dolines, notable areas of caprock, collapse entrances, notable ridge and donga lines, some tracks, and all villages. A "village" is a waterhole area with a multiplicity of animal tracks radiating like spokes from it.

## OUTCOME

Our first year of this project, 1999, was the year of the solo three-day walk. Just ten features were found, mainly blowholes, some with small caves. By contrast, in 2000 (the project's second year, when the aircraft was first used), 480 features were yielded. Ground parties were unable to visit all features in the three weeks, particularly as many air features would lead to another one or two features being found by the ground party, either obscured from the air or simply not spotted or recognised. Of these 480 features, ongoing visiting and documentation is occurring, some as recently as last October.

It was also found that (due to an absence of any features such as hills, lakes or roads) it is easy on overcast days to fly in the opposite direction from that intended, with embarrassing results if the heading is maintained for very long. And on the last landing of the last day, the undercarriage collapsed on touchdown due to a welding flaw. To add to the challenge, this occurred many kilometres from the nearest track, and the aircraft was no longer able to take off.

Recovery was achieved by the generosity of the whole group, who pitched in to help with food, clothing, cartage, equipment, time and endurance. These combined simply with lots of concern and care after what could have been a serious accident, with potentially serious consequences including fire, in a very remote and difficult area to access. In fact we liked the site so much that we chose it as our base for the following year. I would also like to note the generosity of the staff of the metal analysis laboratory of the late Ansett Airlines, who provided both expertise and their facility, all at no cost.

Our efforts during our third year, 2001, appeared to be somewhat disappointing. Only some two hundred features were noted, and it became apparent that our work was moving into an area virtually devoid of features, certainly nothing like the results of the previous area. However, one new cave of considerable size was found, providing some boost to our hopes.

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Nevertheless, our disappointments were accentuated when one member sustained broken ribs in a vertical shaft: our first serious injury over very many years. During one flight, the GPS failed completely at the outermost limit of search, requiring a return to base largely by estimation and guesswork of prevailing wind direction. The compass was unreachable at the time. And to cap it all, this was the year I ensured everyone had the coordinates to move to a new camp, then took off in strong wind and some rain only to find I did not have them myself.

The fourth year was 2002. Paul found the first Thylacoleo skull in a cave he spotted while *en route* to an aerial feature; and soon afterwards a small nondescript “doline” (for so it seemed from the air) yielded the now well known complete skeleton.

### SUMMARY THOUGHTS

- At our current rate of progress, we shall complete an initial survey of the Nullarbor in just 120 years. However, we are happy to leave some for others, either now or next generation.
- We would like to make a small plea to resist the urge to drive right up to a Nullarbor cave feature; and where a vehicle is necessary for a safe belay only one vehicle. A look at the aerial photographs of Carlisle, Thampanna, Old Homestead and Spidersink entrances shows just how beautiful and unique each is when devoid of human intrusion marks. More importantly, it is hoped to take very seriously our own ASF code of ethics on minimal impact, realising we do not know how much we, and others, may yet learn from these unique places.
- It needs to be said that chance has not been a large factor; and that very much hard, consistent and detailed work has been done. In 2000 alone, when 480 features were found (which is the greatest density recorded), there was still less than one feature for every three square kilometres examined, and not one of the 480 would be of much interest to the average tourist caver. The ground visitation of these features is not complete yet, though there has been continued ongoing documentation from ground-gathered data, some even very recently, by a small and dedicated party of just two.
- What has been achieved to date is the work of around a dozen people, whose willingness to work together (notwithstanding differences in abilities, purposes and methods) has been crucial to both current achievements and to mutual enrichment within the group.
- Complete visiting by ground parties cannot be overstressed, for we have learned that the apparent value of any feature recorded from the air can be at great variance from the reality found on the ground. In a recent example, a feature recorded from the air in 2000, and quite “obviously a long-disused airstrip” in a very odd place, was left in the “don’t bother with it” basket until recently, when a ground party found it was actually a very long, narrow, shallow dam. The aerial assessment of the “doline” which led to the complete Thylacoleo was given our very lowest category of importance, but fortunately the small ground party had time to check the “don’t bother” one that time. Usually aerial assessment is completed in several seconds at around 100 k/h.
- Our searching has been widespread and general, not limited to caves only, or bones, or any particular detail. Tempting though it may be to focus on one area when surprised by discovery, we nevertheless want to continue with a very broad outlook, calling in those with suitable expertise when appropriate. We have been pleased with finding bones from a distant and lost past, but we wonder about, for example, uncontaminated and unique bacteria for the future.
- Finally, for those of us of British ancestry, it is worth reflecting upon our history of finding, collecting, keeping and owning. “Finders keepers.” Effort and cost easily creates a desire to own. Our costs have been met from our own pockets, so certainly we do claim discoveries made as our own, and the information gained as our own. But the objects found remain just that: “the objects found”. They belong to a rich past. They do not belong to our group, not to any body, organisation or government. They are held in trust, and our desire is simply to provide any objects found with the best possible custodians, so that this land’s unique archives may be better appreciated tomorrow.

### Contact details

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