CEGSA NEWS

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CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

PO Box 144, Rundle Mall, South Australia, 5000.http://www.cegsa.org.au Meetings held on the fourth Wednesday of each month, except December, at 7.30 PM usually in the Armoury Building meeting room, South Australian Museum.

2021 Committee

President	Ian Lewis	(W) 8463 7649 (M) 0427 284 051 (E) Ian.Lewis2@sa.gov.au
Secretary	Mark Sefton	(H) 8277 9086 (E) seftons@adam.com.au
Treasurer	Steve Milner	(M) 0402 884 121 (E) steve.milner@adalaide.on.net
Quartermaster / Key & GPS holder	Neville Skinner	(H) 8296 4142 (M) 0411 295 766 (E) 23nesk01@adam.com.au
Webmaster	Matt Smith	(M) 0419 830 575 (E) matt@speleorovers.org
New member liaison	Pam Payne	(H) 8280 7958 (M) 0427 103 617 (E) pam.payne@bigpond.com
Committee	Heather Siebert	(M) 0402 643 815 (E)Heather.Sieberti@gmail.com

Other Office Bearers

Public Officer / Library & Records/ OzKarst admin / Membership.	Graham Pilkington	(M) 0473 254 956 (E) p-c-h@bigpond.net.au
Publications	Athol Jackson	(H) 8337 8759 (E) atholjax@adam.com.au
Search & Rescue Co-ordinator		
Safety Officer	Matt Smith	As above
Science Officer	Ian Lewis	As above
Training	Matt Smith	As above
Website Trip Log	All Trip Coordinators	See list p16

Area Coordinators

Eyre Peninsula, Murray Mallee, Torrens, NE of SA, Pitjandjara lands, NW of SA	Records Officer	As above
Gawler Ranges	Steve Milner	As above
Upper & Lower S E(dry), Glenelg River	Kevin Mott	(H) 8723 1461 (M) 0447 792 601 (E) jkmott@internode.on.net
Lower South East (wet), Narinna (wet)	Peter Horne	(H) 8295 6031 (E) ppuddles@yahoo.com.au
Adelaide & Kangaroo Is.	Grant Gartrell	(H) 8556 9100 (W) 8556 9100 (E) farm@blueberrypatch.com.au
Nullarbor Plain (SA & WA), Yorke Peninsula	Graham Pilkington	As above
Flinders	Stan Flavel	(M) 0407 600 358 (E) tadarida7@gmail.com

Representatives

ASF	Graham Pilkington	As above
SA Speleological Council	Mark Sefton	As above
Kanawinka Geotrails Liaison	Ian Lewis	As above
CDAA Liaison	Ian Lewis	As above
SA Scout Liaison	Matt Smith	As above

Cover Photograph: At 5A5 cave entrance. Photo: Joel Dillon.

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QUARTERMASTERS NOTE.

High usage equipment will now be stored at the quartermaster's residence. Please make arrangements with the QM well in advance of required date for equipment. The QM can be contacted at the telephone numbers on the previous page.

NEWSLETTER MATERIAL

The deadline for copy or background material for Volume 66 Number 2 (Issue 262) must reach the Editor by Wednesday **12th May 2021**. Material not meeting this deadline may be retained for possible use in a following issue. The preferred method is via E-MAIL to atholjax@adam.com.au as an **attachment** or on a memory stick or CD, in Word *.doc(x) or *.rtf files. Of course other forms of communication will still be gratefully accepted. Photographs are preferred to be in colour as separate files and note in the article where to be inserted. **(*.jpg format** under 500Kb unless for the cover).

PRESIDENTS SPOT

I just sat down this morning to write this after yesterday's Annual General Meeting at Matt and Rachel's place. Many thanks to our hosts for the night – it was a beaut gathering in your lovely back garden setting. The front garden was just big enough to accommodate Athol's sleek candy-red Harley-Davidson-like chariot -- a great machine! And it was Athol's 86th birthday so congratulations to you and we are delighted at your continued presence at our meetings! Of course I am writing this Prez Spot as a result of the voting – thanks to all those current committee members who collectively decided to continue into 2021 and whose nominations were accepted unanimously. Now I have to refine my chairing skills for meetings but have been offered some support and tutelage to improve this – thanks everyone for your tolerance.

There was much lively discussion for an hour or two between groups of us following the meeting. One such discussion centred around putting some form and structure into the proposal for setting a Strategic Plan for CEGSA over the next 5 years and an intention to commence this process after a lull during 2020 while we grappled with COVID distancing and other matters. Mike Woodward had made a complimentary observation at the end of the AGM about the pleasure at which we all feel with a spread of ages across the CEGSA membership and at the meeting and subsequent discussions. Faces with affiliations to the Scout Caving Group and FUSSI were in the gathering, adding a welcome 'dilution' effect to the white hairs of CEGSA (myself included!). A number of us already meet as the SA Speleological Council and that work may have direct relevance and input into a CEGSA Strategic Plan, depending on the kind of objectives both organisations are aiming for. Of course, an immediate one is the successful conducting of the ASF Conference at Ceduna in Easter 2022. However, looking ahead over 5 years, what sort of objectives might CEGSA want to attempt or achieve?

At a personal level, I have a contribution that I'd like to offer to this process. Athol's Annual report yesterday indicates on the front cover that CEGSA is 65 years old. When we turned 50, I offered to put together a document on the history of CEGSA. That task became far larger than I (or anyone) expected and resulted after a couple of years in a 40-page 'interim' document which consisted entirely of just the main dot points! At one general meeting discussion about this, Stan Flavel suggested that it be arranged in decades since the 50's. Athol mentioned that even though it was dot points only at this stage, the exercise is really worth it despite the size of the task. Others have said to me they are eagerly awaiting the '75th anniversary' CEGSA history book, generously (or realistically!) giving me another 10 years to finish the job (and of course, add several more decades…). However, in relation to a 5-year Strategic Plan, I had developed a concept that the CEGSA History be more than an entertaining list of tales and discoveries. From a scientist's viewpoint, I see that CESGA has explored and defined the nature of the extensive and varied karstfields and forms across South Australia. This is an important contribution to the knowledge of the natural heritage resources of our State, extending beyond geology to biology, hydrology, palaeontology, archaeology, anthropology, early settlement history and the adaptations of humans to the different karst landscape resources of South Australia. This state has a lot of karst and (for example) many National Parks containing karst but hardly promoting it (apart from Naracoorte and Kelly Hill) or even aware of its unique character and implications. So my personal proposal towards a 5-year Strategic Plan (if this is felt suitable by the planning committee which is beginning to form) is that the CEGSA History book be also oriented so that the message of our significant contribution to SA's geology and other sciences is emphasised and is ultimately released as a hard-cover book available to the whole State, far beyond CEGSA and ASF members. Our 1976 *SA Cave Reference Book* (Occasional Paper 5) was quoted as the main karst reference in the SA Mines Department's '*Geology of South Australia Vol 2*' in 1995. I would like our history, solid discoveries and records to become a significant South Australian reference acknowledged widely across the State's scientific and public audiences.

No doubt other ideas for our Strategic Plan will be developed – more on these throughout 2021 as they are discussed and put forward for consideration and action. All the best to everyone for 2021 and I wish you all MORE CAVING than in 2020!

Cheers to all from ***Ian D Lewis***.

TRIP REPORTS

CAVE RELOCATION – KELLY HILL 2020

INTRODUCTION

Following the disastrous bushfire at the start of 2020 most of the western portion of Kangaroo Island was burnt. Infrastructure at Kelly Hill and Flinders Chase was destroyed. This meant a loss of all their records.

Most caves could not be identified on the ground as tags were destroyed. A few of the earlier known caves had their number engraved in the rock at the entrance during the 1950's. These engravings still remain. During the 1980's a major project to locate caves was undertaken. As features were found a rectangular blue polypropylene tag was placed at the entrance and stamped with a temporary KH number. At the end of the project these features were collated and plotted. The temporary KH numbers were then converted to formal K numbers. A listing of the KH conversion was provided in CEGSA Newsletter 33 (1) p16. In May 2014 a trip to locate caves with GPS recorded many of the features at Kelly Hill and other areas, Any feature that could not be clearly defined or located were allocated temporary numbers of KXKRM. There are also reported caves from trip reports and newsletters that have not been followed up. These were also given a number in the KXKRM range. KX representing a temporary allocation in Kangaroo Island and KRM being the source of the allocation. Summaries of K numbers can be found in the following CEGSA Newsletters 33(1) pps 16-18, 60(2) pps 41-43.

All known features with K or KXKRM numbers were entered into OzKarst.

CAVE RELOCATION TRIP

Following the fires aerial imagery at a high resolution of Kangaroo Island was flown. This was able to identify many features on the ground. Airborne Research Australia has flown several runs of Lidar over the burnt area as a project to monitor regrowth of vegetation. The Lidar is able to identify surface features. Dave Gillieson has identified potential caves from the Lidar. Joel Dillon has utilised GIS to map existing features and potential features identified from the aerial photography. He also provided an app which allowed data collected on a mobile device to be uploaded directly to the GIS. FUSSI and CEGSA negotiated with National Parks to conduct a program to relocate the karst at Kelly Hill. A trip to visit Kelly Hill in October 2020 to resolve the locations of caves was agreed upon. The trip covered the period 9th – 12th October 2020, concentrating on Kelly Hill reserve and did not look at Flinders Chase or Mount Taylor. How wonderful not to have to worry about Acacia paradoxa. Each day the search for caves was based on the data of potential features provided by Joel Dillon. At that stage the unknown features were

Joel Dillon jd01 - jd 30
Dave Gillieson DG01 – DG38

The aim was for each party visit the locations and record

- Location of feature with GPS (note the location of the GPS)
- Description of the feature including a sketch
- Photograph the feature including photo details
- Tag the feature where possible
- Allocate a temporary number to all new unidentified features
- Verify any known feature found along the way

Where parties had access to a handheld device they used the Collector App to record locations and photos. A field sheet was also completed for each feature. If the party had no handheld device locations were done with GPS and photos taken with a camera. Although the area had been burnt care still needed to be taken to avoid snakes, loose and broken rock and fallen trees. Vegetation was starting to sprout and there were some areas where features that could not previously be seen were now quite obvious. Due to the size of some features grid references may not match until plotted on an aerial image. It is therefore vital to record the location of the GPS point for each feature.

The data has been stored centrally on a Google drive courtesy of Matt Smith. A few photos are still to come in. Follow up work from the trip looked to

- match grid references with previous
- compare locations with previous survey plots
- compare previous photos of known sites
- match descriptions and sketches with known data

As a result of the trip 60 features have had a permanent number allocated or the temporary number replaced with a permanent number (K135 – K194). 40 known caves had their location verified. Many sites have multiple surface features so in line with OzKarst guidelines "s" numbers have been used as a subscript to the K number to indicate sites with multiple surfaces features.
Temporary numbers issued were

Name	Code	Numbers
Stempel Andrew	KXAS	1
Gillieson Dave	KXDG	1-38
Gartrell Grant	KXGG	
Siebert Heather	KXHS	1
Dillon Joel	KXJD	1-30
Mott Kevin	KXKRM	1-73 (pre-existing)
Smith Ken	KXKGS	1
Cockshell Minky	KXMC	6
Smith Matt	KXMS	9
Heath Nick	KXNH	26
Skinner Neville	KXNS	
Payne Pam	KXPP	5
Henley Rachel	KXRH	1

In addition temporary numbers KXJD 31 – 42 have been allocated to potential karst features in Flinders Chase.

Overall the trip was successful and achieved its aim of identifying new and unknown features. There are still some that need to be found and others where further work is required to resolve identification. This is generally providing a description of the feature. This should be undertaken before the scrub grows back too densely.

Mount Taylor and particularly Flinders Chase need to be followed up to continue the process before the thickening of the scrub becomes an excuse for preventing the exercise. The controlled lack of visitation presents an ideal opportunity to inspect the coastal caves away from prying eyes of tourists. The karst of Kelly Hill provides an excellent opportunity to promote the geomorphology of western Kangaroo Island and this project can better help us understand the karst.

SUMMARY

new features identified from photography, Lidar or reports investigated and either discounted, allocated a permanent number or related to another feature	106
existing caves verified for location	40
temporary numbers verified and upgraded to permanent numbers	11
new features allocated a number	49

TECHNICAL CONSIDERATIONS

Compilation of known data before the trip would have facilitated data available.

- OzKarst contained a few errors which were picked up from the field work and will be rectified.
- OzKarst data, when downloaded did not take into account the different datums and plotted everything on the GIS as GDA94.
- OzKarst data contained multiple prime coordinates for some features resulting in multiple plots. This will be rectified.
- Dave Gillieson's data was not uploaded to the GIS prior to the trip.
- Photos of known features were not readily available and may have resolved some identification issues.
- summary data, entrance description and tag location, photo for each feature should be available for each party

Battery power of hand held devices sometimes would not last the trip. Back up power source would be useful.

A method for recording and relating photo details for hand held devices needs to be developed.

With hand held devices there is uncertainty if the GPS is the feature or the photo points? Eg NH14 and NH15 are described as 15m apart but GPS has them 40m apart.

Difficulty relating geographic and cartesian coordinates particularly when data has not yet been uploaded.

Skills in recording data for new features needs improvement. All data must be recorded.

Aerial imagery is useful when comparing GPS locations, particularly when the location of the GPS point is unknown. On a large doline the location could be up to 20m apart if they are recorded on opposite rims of the feature.

Where several features are in close proximity a survey (bearing & dist) from a reference point to related features is sometimes more useful than many nearby GPS points due to limits of GPS accuracy.

A policy for tagging caves and features is urgently required. All tags must have a good location description and photo. In Victoria policy the Area Co-ordinator is the only person to fix permanent tags

- Dropping marked flagging tape down a hole is not always practical
- Where there is a rocky entrance a drilled hole with rivet or pin that can be stamped may be viable
- Temporary tags, as used with KH features, need to be replaced as soon as possible
- Many entrances may never be completely fireproof but a pin or rivet with a good location description may survive and be able to be used for confirmation
- In dolines with rock that rock may be able to utilised to tag the feature with a pin
- Dolines with no rock need a defined location for the tag. This may be the centre, the low point or on the edge at a cardinal bearing from the centre. An agreed marker needs to be used. This may be steel pipe, dropper or rock cairn. A buried container with ID next to a marker post may also be an option
- If a tag is placed within a cave it should be in a location that that will not be disturbed by ingress or egress

Data collected each day needs to be catalogued and matched with photos that evening or next morning to ensure all the data is captured and to enable discrepancies to be rectified.

A summary record relating photo numbers to karst identification needs to be maintained and updated each night. It is suggested the OzKarst convention for naming photos be used.

Kevin Mott
23 Jan 2021

OzKarst Convention for Naming Photos

The filename for a photo consists of five parts, usually in the following order

- **Feature code(s)** mandatory and MUST be first and followed by a space character.
- **Photo specifications** optional
- **Content description** optional
- **Photographer** optional
- **Date – time** optional

Feature Code

This is the karst number for the feature. It can be the allocated number or if a new feature the temporary number you have given it. It consists of the area code followed by a hyphen then the number. Eg K-10 or K-10s1 or KXKRM-15.

If photo shows multiple features they are separated by a space character. Order is not mandated but can be listed as they appear in the photo from left to right. Eg K-33 K-34 or K-65s1 K-65s3 K-65s4.

The temporary code does not need to be altered if the temporary code is entered in to OzKarst as OzKarst will relate the temporary code with the later permanent code.

Photo Specifications

Is comprised of the following optional parts in any order but usually in the order listed below. Each part has a leading identifying character (case sensitive) followed by the relevant data. No separators required between elements.

@	Bearing of the photo (direction to the centre of the photo). Always expressed in three digits and usually the magnetic direction (000 to 359). No degree sign required. Eg @010
d	Dip of the photo. Usually an estimate to the nearest 10 degrees. If nearly horizontal then no value required. Given as two digits. If downward then a "-" added after the "d". If the photo is vertical then a "v" can be used. Eg d-30 or dip-30
v	The dip of the photo is vertically down. See "d" above.
f	The distance of the camera from prime object of the photo, in metres. Usually the distance to the feature, not a person. Eg f7
t	Distance of the camera from the tag in metres. If "t" is used then "f" is not.
en	Not commonly used but cam be useful if no feature is obvious in the photo of a background photo of the feature. It specifies the easting and northing of the camera location, no zone specification needed. Full details will be in the location section of OzKarst. Easting and northing have the same number of digits. For photos close to the feature use 2 digits (four in total) and if greater than 100m use 3 digits (6 in total. Eg en4536 or en 456835

Example of specification code @035d-20f5 or @035f4

Content description

A description of the photo that is not covered by feature code or specifications. Can be used to name people, describe where photo taken from eg from top of vehicle or ent behind bush. Use standard OzKarst abbreviations such as "BH" for blowhole. Use space as the word separator but Underscore can also be used. Never use any specification characters such as @ or © as these have specific meanings in OzKarst. If naming people list in order from left to right with a space, no comma, between names and the first letter of Christian and surnames capitalised. No space between Christian and surname. Eg NevilleSkinner or MattSmith NevilleSkinner

Photographer

The name of the photographer is added by using a leading © character followed by the photographer's name. The name MUST be entered as initials and surname without separators. The initials and first letter of the surname are in uppercase Eg ©GPilkington or ©KRMott. All initials should be entered to avoid confusion more than one person share the same initial and surname.

Date-time

The date is written as year, month, day viz YYYYMMDD without separators. The date can be entered as just the year YYYY or as year and month YYYYMM. Month and day must be two digits using a leading zero if needed.

The time is written enclosed in round brackets as hour and minutes with a dot separator viz (HH.MM). The hours and minutes must be written with 2 digits each using a 24hour clock and local time. Eg 20200709(10.04) meaning 9th July 2020 at four minutes past ten in the morning.

Example

K-1 @162f3 NHeath pointing to tag©KGSmith 20201010(13.45)

KXNH-21 ©MSmith20201011

BUSHFIRES, BURNT KARST AND BUGGER BUSH

Kelly Hill Caves and Future Plans

Clare Buswell

We all stood around looking at paperwork: cave maps, red dots on satellite imagery photos, Lidar images, survey sheets, karst data sheets. What was this, some sort of COVID safe cave test! You know, log where you went, what you did, who you spoke to, the size of your undies…
The weekend did turn out a bit like that, in that we did log where we went, photographed it, made surface maps, and even managed to investigate a couple of holes in the ground. It was a team effort and we needed:
The Brains Trusts: Kevin Mott, Grant Gartrell, Dave Gillieson, Nick Heath.
The Pen Pushers: Clare Buswell, Matt Smith, Minky Cockshell, Andrew Stempel, Heather Sieberti, Rachel Henley, Heiko Maurer, Pam Payne, Ken Smith, Neville Skinner.
The Secret Squirrel, Joel Dillon, in charge of all the computer work, generating maps, satellite images and places to download data to.

The open Xanthorrhoea 'forest' at Kelly Hill, Sept 2020, Photo: Clare Buswell

The remains of the tourist Shelter and entrance to the tourist cave. Photo Ken Smith.

Matt and Grant hatched the plot for this trip sometime early September. It coincided that I happened to have a trip to Kangaroo Island planned, for September, so I contacted Nick Heath, National Parks' person on the ground at Kelly Hill, to do a bit of preplanning.

Nick and I were joined on the day by Dave Gillieson, resident karst expert. We walked through forests of Xanthurias, burnt trees, sand under our feet and little to no ground covering plants. No Bugger Bush at all! Finding caves was easy. You just went for a walk. Getting lost was easy as well, 'coz all the landmarks had gone! We did however spend a very pleasant four or so hours wandering around the Kelly Hill area looking for holes in the ground, trying to work out what cave was what in the hope of matching cave entrances with known cave descriptions. We came away with a rather large list of very exciting work that could be undertaken.

There are a few things about Kelly Hill on Kangaroo Island that you need to know.

Firstly, it is the home of impenetrable scrub and secondly it is the home of impenetrable scrub! Similar to the walls of *Richea scoparia* in

Tasmania, Kangaroo Island is famous for a prickly acacia, *Acacia Paradoxa,* AKA bugger bush. I, like lots of other cavers, who have had cause to beat their way to cave entrances through the stuff, carry the scars. It makes finding holes in the ground hard work.

The final thing you need to know is that half of Kangaroo Island burnt during the January Bushfires of 2020, this included the Kelly Hill Karst landscapes. To say that the fire caused National Parks a number of problems, is a large understatement, but at Kelly Hill Caves, all the records they had on the caves were lost in the fire. The office burnt to the ground and with it the computer, paper records etc. Around the park, cave tags were burned off cave walls. As a consequence, confusion as to what cave is what number now reigns. Further, a lot of cave locations recorded within the CEGSA records themselves predate the existence of GPS. The surface surveys that were undertaken pre-GPS days, often tied into now destroyed surface features. For example, survey comments like: survey tied back into the third post of the tourist shelter, became meaningless, as these had all burnt to the ground!

Our secret squirrel, Joel, working with both lidar and Google images, as well as wrestling data from the CEGSA records gave us some indication of what was where. This greatly facilitated the ground truthing work of the weekend.

Ground truthing from a lidar image. This 1m x 1m doline was located by Grant looking at Lidar Images. Photo Ken Smith

Dave Gillieson facilitated our understanding of the geology of Kangaroo Island, with a talk that ranged from the volcanics found at Wisanger, to the Pleistocene aeolian calcarenite -at Baudin's Cave, Ravine de Casoars, to karst landscapes at Kelly Hill in particular, with its Tertiary laterites, Quaternary coastal sand dunes of the Bridgewater formation.

It was with all this in mind, combined with the efforts of National Parks on KI to redevelop their management plans, that found the fourteen of us standing around a table full of paper, clipboards, distoX2, graph paper, flagging tape and GPS's ready to go and locate heaps of cave and karst features.

Nick took us on a cook's tour of the tourist cave entrance building, followed by K1, where the aluminium access ladder, along with the grid that surrounded it had melted due to the heat of the fire. Nick had done a sterling job in preventing erosion wash from entering the doline and the entrance shafts by placing 60cm high matting around on the surrounding metal fence. He had placed similar erosion control around what was a previous adventure cave, K9. (See photo at left.)

Erosion control around K1. Photo: Clare Buswell

After a bit of talking we split into three groups and went to measure, record, and photograph every doline, shaft, and known cave we could find. We did this for three days. By the end we managed to locate something like fifty caves, karst features, possible digs and a few tiger snakes. There are 105 recorded caves or karst features in the Kelly Hill area, but there is a lot more karst along the coast and heaps of exploration to be carried out.

The brains trusts were frequently called upon, with Grant and Kevin being able to certify that KX205 was cave number K42 or that Frightnite had moved or changed numbers or that this rather large doline had

never been found before! There was a fair bit of lidar ground truthing by Grant which will no doubt lead to more exploration. This of course, was the whole point of the three days of work.

Cave Eats Tree: Photo: Ken Smith

Dig anyone? Photo: Clare Buswell

There is much to do and with bugger bush beginning to grow back in its impenetrable fashion, time is of the essence. There are digs to be done, many holes to be tagged, entered and mapped. Main cave systems to be found, linked up, surveyed and many other things to examine, such as fire impacts on speleothems, cave cricket population studies, bat detection surveys, the establishment of surface geological tours, the list goes on.

Thanks to everyone on the trip, let's do it all again soon, March 2021 sounds like a good idea. We can link our work into the International Year of Caves and Karst and really make the caves of Kelly Hill internationally known.

Some of the intrepid cave finders: L-R: Ken, Nick, Minky, Matt, Neville (in orange overalls), Pam, Rachael, Heather, Andrew.
Missing: Kevin, Grant, Dave, Clare, Heiko, Joel.
Photo: Ken Smith.

Corra Lynn Cave, 5th Dec 2020

Party : CEGSA Graham Pilkington(TL), Andrew Stempel, Peter Carty,
FUSSI Sarah Gilbert, William Cooper, David Mansueto, Danielle Clode.

A beginner's grand 6-hour tour of passages close to the entrance for Peter and Danielle. I had planned for the other FUSSI members to go off on their own after starting out with us but I was told that I took them to places that they've never visited hence they tagged along to learn more paths through the multi-maze. Originally we were going to exit for lunch but everyone was so enthusiastic to keep caving that I just kept on going. Well most of the time. There were a few "rest stops" to pass instructions to our beginners on how to tackle obstacles and the do & don'ts of caving. Also there were a few times that Peter needed to recuperate before tackling the next tight bit!

Everyone enjoyed the leisurely trip, even Peter who discovered that lying flat can be hard work. He said that he appreciated having to push himself (pun intended).

Graham Pilkington

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Corra Lynn Cave, 27th Dec 2020

Party : CEGSA Graham Pilkington(TL), Jamie Schmidt, Ellie Pilkington
FUSSI William Cooper, plus beginners Gabriela Faura and Trudy Lin.

A beginner's 5-hour tour via the top of Grand Central to the Drumstone straddle, down to the Cauldron, the Kitchen, Southern Cross, Dicks Extension, Crystal Chamber into the Crystal Maze taking the tight passages in the northeast southwards to the Ramp dropping into Bushwalkers Run then onto a brief exploration of the Bushwalkers Chamber before returning to the surface.

After a quick late lunch and re-hydration, I showed everyone some of the does and don'ts of cave surveying explaining how best to represent the cave in plan and section, especially how to choose the best survey station locations for the use of the DistoX2 verses tape and compass; where to measure cross-sections; and what LRUDs to write down. Corra Lynn Cave was also a good place to illustrate the use of multi-level plans in near-horizontal passage networks. The main aim of this demonstration was to give Jamie an idea of what was in store for him on the Nullarbor trip that he was going to attend in a couple of weeks time to see if he was interested in slowly moving through a cave instead of the usual exploration trips that he had been on so far. He was still keen but unfortunately the WA government wasn't and the January WA Nullarbor trip had to be cancelled.

Everyone enjoyed the exercise, especially me because it gave me a chance to go caving with my grandkids.

Graham Pilkington

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Corra Lynn Cave, 6th Feb 2021

Party : CEGSA Graham Pilkington, Peter and Tara Kraehenbuehl, Neville Skinner, Andrew Stempel
FUSSI Dee Trewartha, Sarah Gilbert, William Cooper, Gavin Prideaux, plus 10 paleo members.

This was the first trip of the *Dreamland fossil-extraction project* by Gavin. Because the project will last for several years and require many trips by persons familiar with fossil dig techniques, Gavin has enlisted (being the Flinders Uni Professor in charge it may be better to say pressured!) the help of some Flinders Uni paleo students. Gavin selected those that had previous caving experience on other fossil digs (in simpler easier caves) and who he expected to handle Corra Lynn Cave. The main aim of this trip was to introduce the students to what to expect and familiarise them with the route to the *Portal*.

I split the students into 3 parties and each was taken on tours through the cave to test them out on handling fissures flatteners and tubes. All had to tackle *Alberta* to eliminate those who couldn't handle those kind of tunnels because everyone would have to do this trip to get into *Dreamland* – all passed with enthusiasm ranging from "where does this other tunnel go?" to "I can mange this".

Dee and Andrew rigged the *Woodside* pitch with a ladder and we ensured that all the students could harness themselves and climb up. A necessity for ascending the Portal.

During the day I enlisted the help of one party to drag in some gear for testing the hauling of fossils. We left ropes and drag-basins and bags in place after deciding how to tackle various sections of the traverse to the *Portal*. The narrow trolley still at the *Portal* dig will need a bit of repair (due to rusting in the salty damp environment) but will be used for the first leg from the *Portal* along the *Alberta*. In a few places, especially from the *Cauldron* to the surface and half of *Dreamland*, it will be possible to simply use backpacks as backpacks.

An examination of the *Portal* was made to work out what's needed to rig it for lowering fossil material and for getting people up and down faster than we have been. Paul Harper has added a few bolts and tape that make it safer to exit and enter *Alberta*. He also placed a bolt partway up the *Portal*. On the next trip we will have to place at least two more bolts – one for lowering the fossils placed directly over the pitch or suitable for supporting a person over the drop and another for anchoring a ladder. A rope has already been installed.

Graham Pilkington

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Past Trips from General Meetings

November 2020

● *Michael Woodward* : Visited Punyelroo with Wilderness Escape in early November - 2 groups were taken into the caves just prior to lockdown.

December 2020

No General Meeting.

January 2021

- **Matt Smith**: Scout Caving Group visited the Lower South East visiting various features in the area, including diving & snorkelling in Ewens Ponds.

- **Graham Pilkington**: On the 5th & 27th of December there were beginners trips to Corra-Lynn

- **Mark Corbett**: December 12th Scout Caving Group members visited A5 - got to the bottom of the cave after much hard work. Mark keen to reinitiate exploration and digging activities in the cave

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TECHNICAL and OTHER ARTICLES

MEMBERSHIP FEES

CEGSA MEMBERSHIP FEES become due on January 1st. To ensure continuity of membership and privileges (particularly insurance) please pay before March 31st.

Joining fee applies to renewal after March 31st.

CEGSA MEMBERSHIP FEES FOR 2021 YEAR

Full Membership	$30.00
Associate Membership	25.00
Long Term Associate (more than 2 years as an Associate)	30.00
3 Month Introductory	5.00
3 Month Introductory family	10.00
3 Month Associate Membership (including joining fee)	19.00
Joining Fee (not applicable to 3 Month Introductory)	12.00
Country Membership discount (residing more than 80 km from Adelaide GPO)	
Single member or one-parent family	6.00
Two- parent family	12.00

ASF LEVY FEE FOR 2021 YEAR

Single	$70.00
2-parent Family	123.00
1-parent Family	88.00
Retired, pensioner, student, or unemployed	46.00
Honorary (not caving)	21.00
12 Month Introductory	20.00
12 Month Introductory family	35.00

Example 2021 YEAR FEES

	CEGSA	ASF	TOTAL
Full Membership	$30.00	$70.00	$100.00
Full Membership retired	30.00	46.00	76.00
Full Country Membership	24.00	70.00	94.00
Associate Membership	25.00	70.00	95.00
Associate Membership student	25.00	46.00	71.00
Inactive Full (needs Committee approval)	30.00	21.00	51.00
3 Month Introductory	5.00	20.00	25.00
3 Month Associate Membership	19.00	18.00	37.00

Examples for Family Membership

1st Full Member + 2nd Full Member	$60.00	$123.00	$183.00
1st Full Member + 2nd Associate Member	55.00	123.00	178.00
1st Assoc Member + 2nd Assoc Member	50.00	123.00	173.00

NOTE Country Membership discount on the above examples would be $12.

Full Member 1-parent Family	30.00	88.00	118.00

Please make sure your payment of fees includes CEGSA and ASF, if applicable.

Membership Fees can be paid directly into CEGSA Account

CEGSA
BSB 105-900
Account No 950661040
Reference with your Name or Membership Number and fee year; eg 7201-21.

Graham Pilkington. **Membership Officer.**

Approved CEGSA Trip Leaders

Name	Caving Leader levels
Stan Flavel	Horizontal and Laddering
Grant Gartrell	Coordinator
Paul Harper	Horizontal and Laddering
Richard Harris	Horizontal
Peter Horne	Horizontal and Laddering
Peter Kraehenbuehl	Horizontal, Laddering and Vertical
Ian Lewis	Horizontal and Laddering
George MacLucas	Horizontal, Laddering and Vertical
Steve Milner	Horizontal, Laddering and Vertical
Tim Payne	Horizontal, Laddering and Vertical
Graham Pilkington	Horizontal and Laddering
Mark Sefton	Horizontal and Laddering
Neville Skinner	Horizontal, Laddering and Vertical
Matt Smith	Horizontal and Laddering
Tom Szabo	Horizontal and Laddering
Michael Woodward	Horizontal, Laddering and Vertical

All the above named are also CEGSA Trip Coordinators.
Members may query the classification of any Trip Leader at any time with the Committee.
It is a requirement that each trip be organised by an approved Trip Coordinator to be classed as an official CEGSA trip. It's also a requirement that dependent party trips be led by an approved Trip Leader at the appropriate skill level for the cave being entered. Trip Leaders ensure that every caving party has a member with First Aid training.

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5A5 – A HISTORY

It was back in 2009 that Matthew McDowell from Flinders University and Graham Medlin from the SA Museum published an article in Volume 83(1) of the South Australian Naturalist describing small animal bones collected in Sellicks Hill Roadside Cave 5A5 in 2003.
Graham contacted Peter Horne for more information about the cave. Peter in turn contacted me, and the story that I told resonated with Ian Lewis, our President, to the extent that he asked me to repeat it, verbatim, for the CEGSA News. Verbatim it is not, but a story that should be told, it certainly is.
Back in 1969, the then Highways Department made a major improvement to the main highway through the Sellicks Hill area, straightening out many bends in the road and creating several scenic carparks overlooking a large gully, into which enterprising citizens dumped old car bodies and expired hydroponic herb farms. For anyone else, such as cavers, who parked there, there was also a great view of the sea.
As part of this process, they also created several new cliff faces, or cuttings. The ones that particularly interested us had exposed new sections of the Wangkonda Limestone formation, and on the first morning that the new road was open, I headed straight down there for a close inspection.
One of the first things that I saw was some exposed cave passage that had never previously seen the light of day in the side of a cutting. At the base of this, close to road level, was a hole large enough to climb down. As an eternal optimist I had with me a good torch, and so was able to walk down a roomy rock-covered slope. A tall fissure-type chamber a bit over 10 metres long ended in a possible short extension blocked by a very pretty little shawl speleothem which was from memory about 40 to 50 cm long.
What I had not brought with me was my camera (we didn't have smart phones in those days). By the time I returned later in the day with camera to photograph the shawl it was already too late. All that was left of it was a couple of jagged edges. Someone had clearly put a brick through it. Later enquiries indicated that it had ended up on the mantle-piece of a nearby farm manager's residence.
I searched further and located a steadily blowing hole about 10cm in diameter on a bench about 8 metres above the road. After a couple of day's digging we had enlarged it into a cave almost big enough to stand up in. With digging trips almost every weekend, and occasionally on week-day nights as well, it did not take too long for the cave to get more interesting. For quite a while we

remained concerned that the breezes we were encountering might have been coming from surface cracks in the nearby cutting. It was a red letter day when we pulled some small rocks out of the floor and dropped into a new cavity in which we could descend about 6 metres vertically, well below road level, and even more importantly found that the air was still coming up from the depths of the earth rather than the nearby cliff face.
Of course, after the 6 metres of progress there was yet another dig. This particular dig was extra-special. I will remember it for the rest of my life all the more vividly because it was the one that almost got me. I am happy to tell the story again, and if necessary again, because I really don't want it to happen to other people.
Graham Medlin had referred Peter to a 1982 write-up on 5A5 in CEGSA Occasional Paper No 6, Field Notes prepared for attendees at the 1983 Speleovision ASF Conference. As far as I can recall, I didn't have too much to do with the description of the cave in the Field Notes, which described one of my special caves in CAPITAL LETTERS as UNSTABLE IN MOST SECTIONS AND DANGEROUS! , and ascribed to it the dubious honour of being "The only cave in South Australia to have hospitalized CEGSA members, and did it twice."
I disagree vehemently with that description, and I don't think that the claim that it has twice hospitalized CEGSA members is accurate, either. The cave certainly does require care, and any trips into it should only be undertaken with good, experienced leaders. While I have no doubt that it is structurally stable, there are certainly areas where carelessness could result in loose rocks being kicked down on someone below.
The cave was not all that deep in 1982. We had only known of its existence for 13 years. In those days it was certainly characterised by our efforts at digging out rocky floors to get deeper, and it is perhaps not surprising that the Speleovision field notes picked up that flavour.

There is no doubt that the cave gets better the deeper you go. As to the verb Hospitalize. What actually happened was…..
The way on was down through the floor. It was blocked by three quite large rocks sort of keyed together. I managed to move them aside one at a time without dropping the others down the hole, and place them on a dirt bank to the side while we looked at the situation and worked out what to do with them. Normal practice is to try and crack them with a lump hammer to turn them into smaller rocks. Norm Poulter, amongst others, was above me in the dig and wanted to have a look down the hole. I moved aside to let him do so, but instead of just having a look, he suddenly took off down through the hole. I knew the rocks I had pulled aside and was not at all keen on getting beneath them, but I was concerned about Norm and followed him a short distance to try to stop him from haring off as though there was nothing to worry about.

It was an exciting dig, and clearly Norm shared the excitement. Things had moved fast. We had removed a blockage from above, and suddenly could see negotiable passage heading pretty much vertically down over 6 metres, with air in our faces. By my standards, Norm's descent beyond that point was premature and injudicious. Had we handled it as it should have been, there would have been no issues.

While I was attempting to caution Norm, the rocks, which were then above me moved progressively as the dirt gave way under the load. Two rocks then descended and knocked me flat. Fortunately one landed alongside me and prevented the other from crushing me. But I knew there was a third one up there. With great difficulty I extricated myself from this rocky constraint and stood up just in time to see the third rock come down and land at the exact spot my head had been perhaps ten minutes earlier. It certainly was fortunate that none of those rocks did me any damage, but it would be unduly tough to blame the cave for this particular sequence of events, which should not have happened at all, but was triggered primarily in my opinion by Norm's impetuosity.
We now climb over the 2 rocks which temporarily constrained me. They have formed a pretty stable barrier a little bit lower down. The third rock, after being denied the satisfaction of squishing me, bounced a little further down, where it ricocheted off of Norm, and cracked one or more of his ribs while doing so. I guess he sought treatment subsequently for that, but I still am not aware of any other event of a similar nature, and still don't think the word "hospitalize" is strictly accurate when applied to our little event.

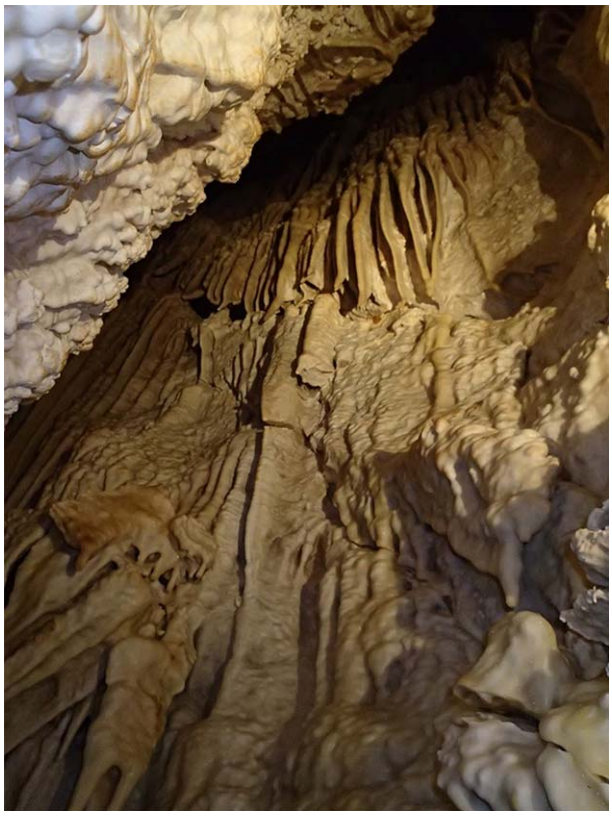
We counted our lucky stars, extricated ourselves from the cave, went outside into the sunlight and kissed the earth in thanks for the relatively benign outcome. Yet that particular break-through was very much the break-through that led us into to some large and deep chasms, and the first signs of

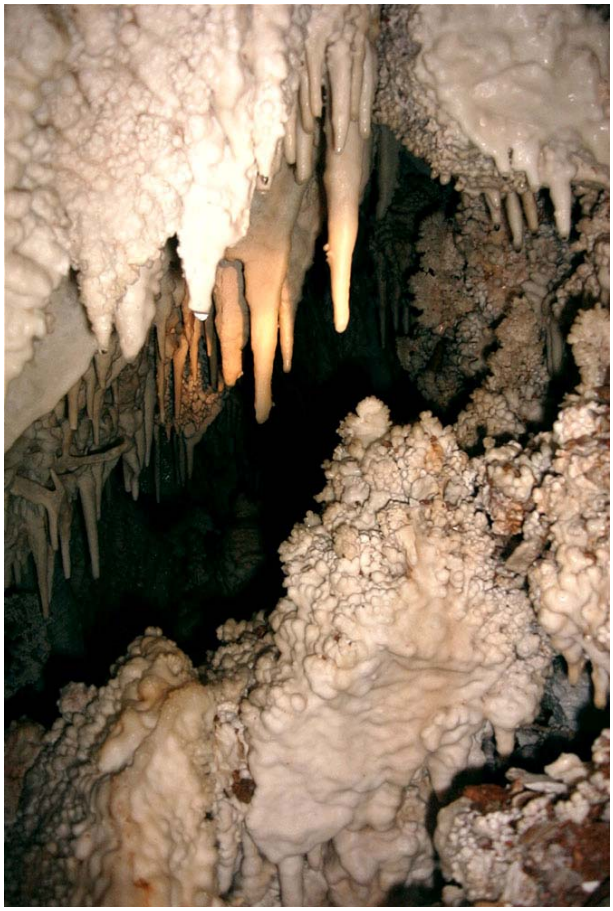
any serious decoration. Of course we went back and redoubled our efforts, and as the photos will attest, ever deeper is ever prettier. Along with Norm we also had another Western Australian, Alex Saar, on that trip. Alex was smart enough to keep out of trouble. I cannot remember who else was on the trip, but there were about half a dozen of us altogether.
There was no further digging strictly necessary for us to access the location in the deep eastern end of the cave where the small animal bones were located. Ladders and climbing ropes were certainly helpful, however. These days the new generation seem to favour SRT.

Any cave with such characteristics is going to need more than a modicum of "gardening" during the initial exploration, but I have absolutely no doubt that A5 will eventually link at greater depth to A25 and both will finally access the major drainage system which must occur below. Whether the connection will be made in my lifetime is another matter. We moved many tonnes of rock over the last 50 years in that place and increased the depth by a good 70 metres plus. The modern generation has shifted about half a bucketful since, and increased the depth not one extra millimetre so far. But to their credit, they are at last talking about it.

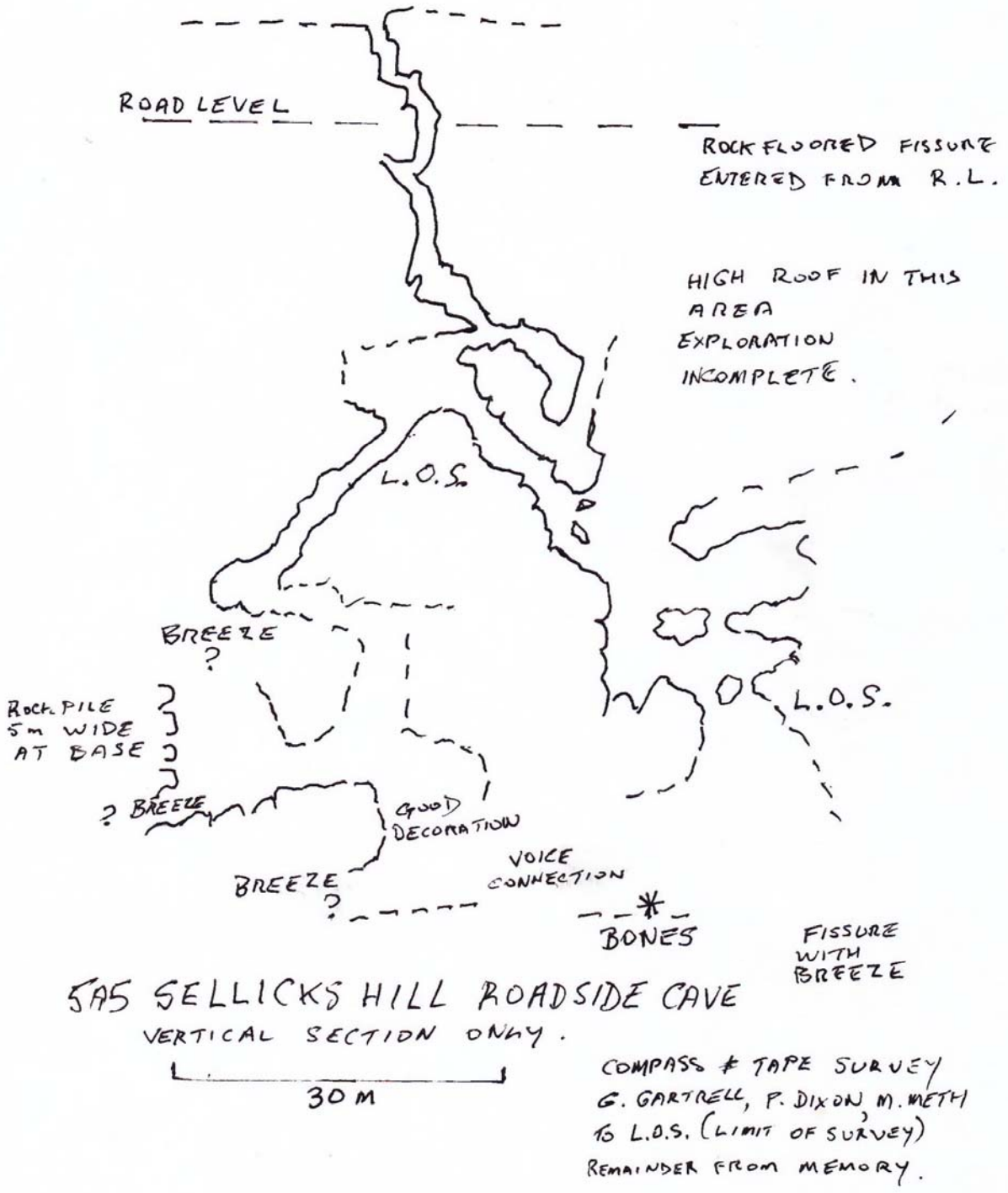
In truth, we were running out of places in which to stack rock which was becoming too hard to get right out of the cave, but the stakes are high, and there are signs that we are getting closer to collapse chambers where there should be all the room in the world to stack up some little heaps of rock until the day we get the tourist paths in place ..... We also gave ourselves a separate distraction by digging A25 from scratch, another major engineering feat. The entrance is just over 100 metres away from A5, and it is now almost as deep as A5. The next breakthrough would be imminent if we could find somewhere to stack the rock, or a few keen people to hoist a few buckets.
I hope we can prove it is all there before the forces of darkness get government approval to mine it all away.
But I cannot finish without a final word about my old friend Norm. It was good that he was so enthusiastic about finding more cave at Sellicks Hill. Not everyone shares our vision on that topic. Back in about 1999 he was both recognized by the ASF with an Edie Smith Award, and by the Australian Government with an Order of Australia Medal, for “services to the environment, principally through his work with the Speleological Research Group of Western Australia”. Although it wasn’t part of his award, even back in those days, Norm was encouraging discussion within the Australian Speleological Federation about adopting a sustainable population policy, and good on him for that, although I cannot see us needing larger halls for CEGSA meetings any time soon. Norm, if you were considering leading by example in the practice of Zero Population Growth at Sellicks Hill, and taking one of your old mates along for the ride, then thanks, but no thanks! The paperwork would kill me!

Grant Gartrell





A selection of photographs in 5A5
Photos by Joel Dillon.


ROAD LEVEL
ROCK FLOORED FISSURE ENTERED FROM R.L.
HIGH ROOF IN THIS AREA EXPLORATION INCOMPLETE.
L.O.S.
BREEZE ?
ROCK PILE 5m WIDE AT BASE
? BREEZE
GOOD DECORATION
VOICE CONNECTION
BREEZE ?
BONES
L.O.S.
FISSURE WITH BREEZE
5A5 SELLICKS HILL ROADSIDE CAVE
VERTICAL SECTION ONLY.
30 M
COMPASS & TAPE SURVEY
G. GARTRELL, P. DIXON, M. METH
TO L.O.S. (LIMIT OF SURVEY)
REMAINDER FROM MEMORY.

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All I want for Christmas is...

Anybody remember George Ranken? Some in the central tablelands of New South Wales might still remember him as the Scottish-born Bathurst farmer, pastoralist, cheesemaker, pioneering vigneron and inventor. However, as the unsung hero of Australian paleontology? Hardly anyone. How quickly the slip of a pen can erase a name. Just one small omission from the pages of a long-defunct South Australian newspaper saw the true discoverer of Australia's largest fossil marsupial disappear from the annals of science and history.

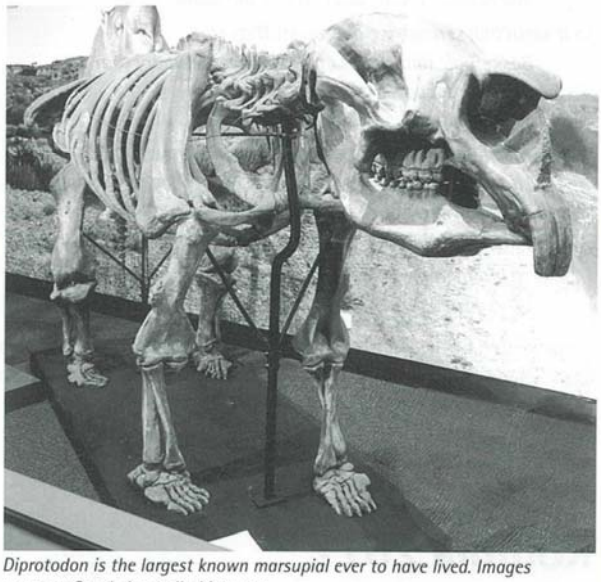
Diprotodon is the largest known marsupial ever to have lived. Its name means two forward or front teeth. Weighing in at an impressive estimated 3000 kg, measuring almost 4 m in length and 2 m at the shoulder, it is probably the most famous and recognisable of our Pleistocene megafauna. Its remains have been found across our continent and it would have occupied a landscape populated by indigenous peoples for some time before becoming extinct about 25 000 years ago.

The story of *Diprotodon's* discovery and scientific study is one of persistence, error, egos and incompetence.

According to the *Sydney Gazette* of 25 May 1830, daring George lowered himself into the Wellington Caves of central New South Wales in late 1829 to discover the enormous limb bones of an unknown beast. Sent to Edinburgh for identification (George was a Scot, after all), they were surmised to have come from a rhinoceros, elephant or even an Irish elk. The enormous bones from the Antipodes continued to baffle science for some time: eminent anatomists of the day, such as William Buckland and Georges Cuvier, speculated that they could also be from a dugong or even a hippopotamus. Further reports of discoveries at Mt Macedon (Lancefield Swamp) in Victoria spoke of giant rodent teeth.

Finally, in 1838, the eminent British comparative anatomist and paleontologist Sir Richard Owen examined a lower jaw and incisor. He made the inspired deduction that they came from an extinct giant wombat, or a kind of kangaroo, or a relative of the koala. *Diprotodon* – our first fossil marsupial – was recognised. Owen is probably best remembered for coining the term 'dinosaur'. But it was from these bones and teeth, brought to him by explorer Major Thomas Mitchell in 1838, that he developed his passion in later life for the extinct mammals of far-off Australia. And from where did Mitchell get his bones? From the Wellington Caves. And how? He was guided there by our hero: George Ranken.

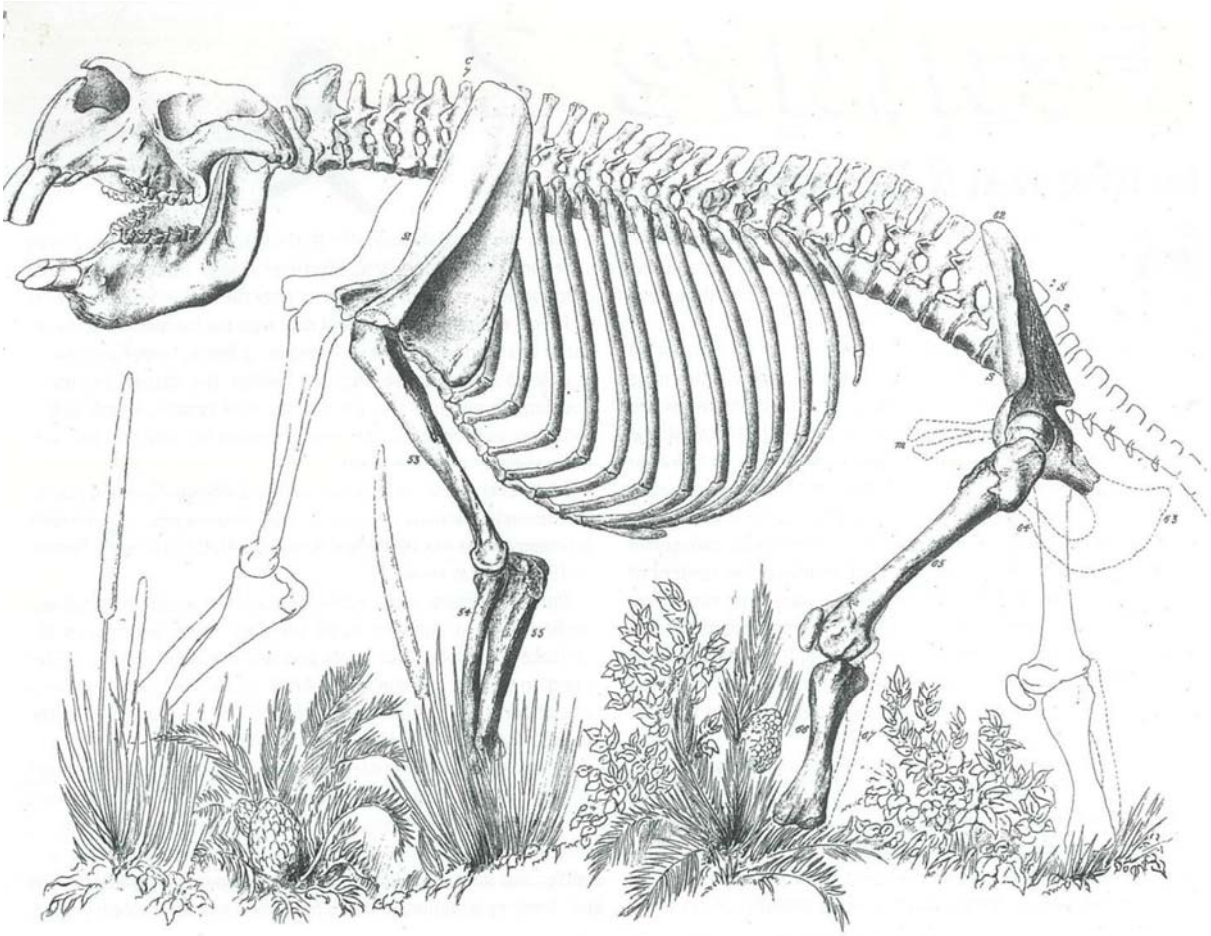
Clues to the true nature of the beast continued to be gathered over the next 40 years as Owen obtained and described more bones from various localities in New South Wales, Victoria and Queensland. But in the way that fossil animals are loath to share all their secrets, vital diagnostic bones were still missing from this giant jigsaw puzzle, specifically the feet. Undeterred, in 1877 Owen proudly illustrated a reconstruction of the skeleton – standing ankle-deep in grass to hide the missing extremities!



Diprotodon is the largest known marsupial ever to have lived. Images courtesy South Australia Museum

The name Diprotodon means two forward or front teeth.

The hunt was on for *Diprotodon's* feet. Such was the creature's grip on the public that apparently £1000 had already been offered by the South Australian Museum and Royal Society of South Australia in 1870 to the discoverer of a complete skeleton. It is no surprise then that in 1892, a well digger from Calaburna Station, east of Lake Frome in the far north of the state, presented himself in Adelaide as the discoverer of skeletons in the bed of Lake Mulligan (Callabonna). It later transpired that he had gazumped the station owner, Frederick Ragless, which led to a dispute over the reward.



Owen's illustration of the reconstructed skeleton shows Diprotodon standing ankle-deep in grass to hide the missing feet bones.

The museum promptly organised a collecting expedition, which saw the excavation of many complete skeletons and isolated bones from some 70 individuals — including the much-desired feet. After visiting the site in May 1893, state government geologist Henry Yorke Lyell Brown was quoted by the colony's oldest newspaper, The South Australian Register, as observing the Callabonna deposits to be: "the most remarkable discovery of fossil remains ever made in Australia, and perhaps the most singular ever made anywhere". Still seized with *Diprotodon* fever, in a later edition the paper also reported the discovery to be the most internationally scientifically important, "since Major Mitchell, the explorer, found fossiliferous remains in the Wellington Caves". Vale George...

Such was the perceived importance of finding bones to fill in the gaps of Owen's reconstruction that a field team was contracted to do the work. Unfortunately, the team was also inept. Lacking supervision from museum staff, they failed to keep material from individual skeletons together, and much scientific information was lost. On learning this, the field team were summarily dismissed by museum director, Edward Stirling, with the work completed at the end of 1893 by museum scientists and staff.

Despite the haphazard collecting, these bones did allow the South Australian Museum to make plaster casts and reconstruct an entire skeleton, from which replicas were sent throughout the country and overseas to meet a significant demand. However, the costs involved in the year-long excavations meant that although the museum eventually found in favour of Ragless' claim to the reward, they were unable to pay.

People thinking of *Diprotodon* today certainly call to mind the bonanza at Lake Callabonna. Me? I spent the first six months of my employment at the South Australian Museum cleaning and packing *Diprotodon* bones in preparation for a move into the new Science Centre in 1984. Most of them were covered in dust, wrapped in newspapers from the 1890s and still held together with glue and string from the day they were unearthed. Richard Owen never saw or described the enigmatic, missing feet of his *Diprotodon*, because he died in December 1892. And poor George Ranken? He died of liver failure in London in 1860, trying to get patents approved for his improvements to ship propellers and paddle wheels. Even he seemed to have put his unacknowledged discovery of Australia's first fossil marsupial behind him.

BEN McHENRY
South Australian Museum

News From ACKMA

Dear ACKMA members,

Your Committee members continue to extend their thoughts and good wishes to everyone in the ACKMA family as we all persevere with the ongoing pandemic. At the 2020 AGM it was unanimously determined that membership fees for all members would be waived for this current 2020-21 membership year. This recognised that many members would be adversely affected by the pandemic, and we recognise that this continues to be the case.

As Treasurer, a motion will be moved by me at our next AGM on the 9th of May in the following terms:

Motion: That members who pay the Association's membership fee for next financial year 2021-22, currently set at $50 per person, will have their membership extended to cover the 2022-23 financial year at no additional charge.

Proposed by David Gillieson, seconded by Tim Moore

It will also be necessary for the 2022 AGM to pass a further resolution to confirm this arrangement. As Treasurer, I will therefore move, at that AGM, as follows:

Motion: That members who paid the Association's membership fee for financial year 2021-22 at $50 have their membership extended for the 2022-23 financial year at no additional charge.

The first proposed motion has the unanimous support of your Committee. The proposed motion for the 2022 AGM is merely a necessary procedural one to confirm the validity of the 2021 AGM resolution (when adopted).

ACKMA Inc. is currently in a strong financial position. Although we do need to have some income, we can afford to offer two years' membership for the price of one. Likely costs over the next twelve months will include support for the Guides School and Bushfires on Karst Symposium, production costs for the ACKMA Journal, costs of incorporation, insurance and website maintenance.

The Committee met by Zoom on 24th January (see attached minutes) and we discussed the prospects of holding the Guides School and Bushfires on Karst Symposium in early May at Wellington Caves. Given the current high level of uncertainty regarding border closures, restrictions on travel and likely quarantine provisions, we decided that it would be better to postpone the Guides School and Symposium until the week of 18th - 22nd October. Planning is now proceeding on this basis.

The ACKMA AGM will be held on Sunday 9th May by Zoom, as happened in 2020. More details will follow. Office bearer's reports will be circulated to members by email several weeks before the AGM.

Encourage your friends to join now: Two years' membership for one year's membership fee means that now is a great time to encourage your cave and karst-minded colleagues and friends to join ACKMA. The membership form can be downloaded at http://www.ackma.org/members/Membform.pdf

Best Wishes, Dave

Dr David Gillieson
Mobile 0427 335 323

10-14 Falie Court

American River SA 5221

tel. 08 8553 7082

Australasian Cave and Karst Management Association Inc.

COMMITTEE MEETING, Sunday 24th January 2021 Conducted on Zoom

MINUTES

Chair: Ian Eddison (President).

Present: Steve Bourne, Peter Chandler, Neil Collinson, David Gillieson, Scott Melton, Tim Moore, Regina Roach, Andy Spate, Rauleigh Webb.

1. **Opening of meeting.** The Chair opened the meeting at 5.00pm AEDT, and welcomed all present.
2. **Apologies.** Cathie Plowman, Kent Henderson
3. **Minutes of the previous meeting**. Pre-circulated, noted.
4. **May ACKMA conference**

A number of people commented on the current issues of border closures being imposed at short notice, stringent quarantine requirements and the rate of Covid-19 vaccination rollout. Feedback had been obtained from WA, SA, Tasmania and New Zealand. The latter is a no-go for a May conference. Ian advised that he had talked to Michelle Tompkins, his supervisor, about postponing an in-person conference to the week of 18-22 October. He will investigate this further and report back. There was brief discussion about holding an online AGM in May, as had been done in 2020. Motion by Scott Melton, seconded Tim Moore, that the 2021 AGM be held by Zoom on Sunday 9th May. Carried unanimously.

5. **International Year of Caves and Karst 2021**

Ian advised that he had liaised with Sarah Gilbert (ASF) and John Patterson (NZSS) over a Creative Celebration of the International Year of Caves and Karst – Australasia. Prizes would be awarded for cave-related works of art, songs and music, short stories and poetry. Judges and guidelines were in place, the process being critically evaluated by Tim Moore. The LedLenser firm had donated four $500 gift vouchers and ACKMA, ASF and NZSS would each contribute funds to support prizes. Motion by Scott Melton, seconded Dave Gillieson, that ACKMA provide $334 to fund prizes for the Celebration of Creativity. Carried unanimously.

6. **Kangaroo Island Management Plan**

Dave advised that a new person, Kym Rumbelow, would be developing the Management Plan for SA Parks. There will be a public meeting at Kingscote on 4th February to gain public feedback. Members of CEGSA and FUSSI will be making a fieldtrip to Kelly Hill in March to further document caves and explore the karst. A Friends of the Karst group is being set up on KI under the auspices of SA Parks.

7. **Yarrangobilly MTB Proposal**

Regina advised that the plan for this development had just been released for public comment, with a short timeline up to the 5th February. The proposal would create 81km of mountain bike trails in Kosciuzsko National Park, with a 1000m descent from Big Talbingo Mountain to Talbingo village. A side branch from Yarrangobilly village would follow the river down from Yan's Crossing to the Thermal Pool. It was noted that the Yarrangobilly and Cooleman karsts, along with the glaciated summit area, were of the highest national significance for geoheritage. There would inevitably be highly undesirable impacts from the bike trail on the stability of hillslopes, on water quality and on the fauna. The environmental assessment was grossly inadequate. A small team from ACKMA, John Brush, Ian, Andy and Dave had prepared submissions which had been sent to the Federal and NSW Environment Ministers, Director of NSW Parks Service, Kosciuzsko NP Advisory Groups and Snowy Valley Council.

Scott Melton proposed, seconded Tim Moore, that John Brush be recommended to the Honorary Life Members as a suitable candidate for Life Membership of ACKMA. Carried unanimously.

8. Hills of Gold Wind Farm

Ian advised that this proposal for a wind farm near Timor Caves was likely to impact local bat populations and had been brought to our attention by Andy Spate on behalf of the Australasian Bat Society. ACKMA had made a submission to several NSW authorities over the issue. Tim Moore wished it to be noted that he did not participate in this discussion, as he had judged several previous proposals that had been before the NSW Land and Environment Court

9. Cave Animal of the Year

Ian noted that the 2021 Australian Cave Animal of the Year was a cave beetle, consistent with other countries in the programme. Cathie Plowman was commended for her very fine efforts in developing and maintaining the programme.

10. Ann Augusteyn Award

Ian noted that the Award was now fully operational and people needed to make submissions.

11. Journal and Editor Position

Tim advised that he would be sending out an email next week setting 10th March as the deadline for contributions for the March edition. He intended to use Survey Monkey to survey members attitudes to the Journal, as to whether it was useful and valued. He noted that the number of contributors was limited, and that many of them were at this meeting. Ian thanked Tim for all his good work and for taking on an extension of the Editorship until May 2021. Dave asked Tim about the workload, which he indicated was about 75% layout, with the remainder being proofreading and soliciting articles. Dave suggested we approach Hansen Print in Naracoorte to see if they could do the layout and production for us, as before. Steve agreed to approach them to find out about their capacity for this work and likely costs.

12. Invoicing and Membership Fees

Rauleigh indicated that invoicing of membership fees would commence again in March. Brief discussion about fees for 2021-22, which would be set at $50 as previously agreed. Dave and Rauleigh would send an email out to the membership making the fee structure for the coming year very clear. Some discussion on whether $50 fee should cover two years, unresolved.

13. Next Meeting.

Ian as President would call the next Committee Meeting before the May AGM, most likely in early April.

14. Close:

The meeting closed at 6.15pm AEDT.

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Annual General Meeting Report

The Annual General Meeting was held at 25B Koongarra Ave, Magill, SA on Saturday 13th Feb. 2021. There were no awards presented for 2020 but special commendations were made by Ian Lewis to CEGSA members **Graham Pilkington, Matt Smith and Grant Gartrell** for outstanding contributions to the Group over the past year.
The Annual Report was presented by Athol Jackson and accepted by the members, followed by the election of officers and committee.
The results of the election were as follows:
President: Ian Lewis.
Secretary: Mark Sefton.
Committee Members: Pam Payne, Neville Skinner, Matt Smith, Heather Siebert and Steve Milner.
A birthday cake was provided by Minky Cockshell for Athol's 86th birthday which was on that day.
The meeting was preceded by a social gathering and BBQ meal.

Athol Jackson.

The Birthday Cake.

Photos: Matt Smith.

Calendar of Events

	Type of Event	Description	Contact
24/02/21	General Meeting	SA Museum Armoury Room 7:30pm	Ian Lewis
??/03/21	Committee Meeting	TBA	Ian Lewis
24/03/21	General Meeting	SA Museum Armoury Room 7:30pm	Ian Lewis
28/04/21	General Meeting	SA Museum Armoury Room 7:30pm	Ian Lewis
??/05/21	Committee Meeting	TBA	Ian Lewis
12/05/21	CEGSA NEWS	Articles due	Athol Jackson
26/05/21	General Meeting	SA Museum Armoury Room 7:30pm	
23/06/21	General Meeting	SA Museum Armoury Room 7:30pm	Ian Lewis
	Committee Meetings	Continuous email meetings between meets	
	Caving	Continuing Fleurieu Peninsula Exploration	Grant Gartrell

****Extra trips will be notified in the Calendar on the Website or at General Meetings****

To be covered by insurance it is mandatory that caving trips involving club members must be registered as CEGSA Trips. To do this, the nature and timing of the trip must be entered in the Calendar of events in CEGSA NEWS, minuted at a General Meeting of Members or entered in the Website Calendar. The member registering such a trip must be an accredited CEGSA Trip Coordinator and must agree to act in this capacity for the trip. There must also be an accredited trip leader with the appropriate skill endorsement to take a dependent party caving.
Also, please ensure that a report of the trip is submitted to the Records Officer and editor in a timely manner.