THE NEWSLETTER OF THE SYDNEY UNIVERSITY SPELEOLOGICAL SOCIETY

Box 35,
The Union,
Sydney University.

Price Five Cents

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Ad augusta per angusta

Edited by the Hon. Secretary

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Volume 6 Number 9 January 1967

ACTIVITIES CALENDAR

January		
20-23	Colong	Vince O'Donnell 482776
28-30	(Long Week-End)	
	Wyanbene, and nearby	Graeme Jessup 444016
	Colong	Hugh Jones 951471
	Yessabah (Subject to contact with KSS)	Geoff Butlin
February		
9	GENERAL MEETING	Usual Place, 7.30p.m.
10-11	Gloucester Tops	Glenn Hunt 495784
18	Sea Caves near Sydney	Graeme Jessup 444016
27-31	Orientation Week	
28	Orientation Week SUSS Spectacular - Old Geology I	10a.m.
March		
9	GENERAL MEETING	Usual Place, 7.30p.m.
11-12	Freshers' Trip - Wee Jasper	Graeme Jessup 444016
18-19	Cliefden - S & R organised by O.S.S.	
	See February Newsletter for details	
23-28	Easter:	
	Cooleman	Harley Wright 461196
	Yarrangobilly	John Dunkley 854333
April		
8	ANNUAL GENERAL MEETING	Usual Place, 7.30p.m.
May		
4	GENERAL MEETING	Usual Place, 7.30p.m.
14-21	Buchan	John Dunkley 854333
Vacation, for 2-3 weeks, Central Australia, etc.,		
	4000 plus miles	Graeme Jessup 444016

THE EDITOR apologises for the absence of a December Newsletter and the brevity of this one, due to occupational commitments. BUT.....the February Newsletter will be going to press within a fortnight, so PLEEESE advise the Hon. Secretary of the trips you have planned for February and later,TONIGHT - 462213.

MARRIAGE. The marriage occured on 17th December 1966 of expatriate member Bill Crowle to Mary Mitton. Best wishes from all members !

GENERAL MEETINGS. For a trial period (First Term) General Meetings will be held monthly, on the first Thursday of the month. The February Meeting will be an exception, as adequate notice as required by the Constitution would not have been given.

67th GENERAL MEETING on the 9th February. All members are implored to be present as Orientation Week festivities will be planned and arranged. The Hon. Secretary has arranged Old Geology I lecture theatre on the Tuesday of Orientation Week at a prime time of 10a.m. Any ideas? Present them at this Meeting. Also a stall in Science Road has been arranged. We will need volunteers to man it. Will you volunteer? Do so at this meeting. Bring your latest slides too.

CARNE AND JONES: Limestone Deposits of N.S.W. The Society's copy of this valuable guide disappeared some years ago. However this has now been replaced by a complete Xerox copy (all 400-odd pages of it), and to make sure it does remain available, it will be available ONLY on personal request of the Hon. Secretary, or whosoever the Committee decides to make custodian. Trickett's Jenolan and Wombeyan, will likewise be available (Xerox copies also), and Yarrangobilly in the near future. Perhaps too, if an original can be located, Bungonia.

MR GAVEN's visit last December will be reported in the February Newsletter.

NATIONAL PARKS ACT. Copies are now available from the Sales Dept., Government Printing Office, Market St. (above the Lottery Office) (any connection do you think?) for 50cents.

SUSS ENTERS THE COMPUTER AGE. All membership records are now on punched cards, and depending on the Post Office you will receive with this Newsletter a duplicate copy of yours. Please check the details and return ONLY if incorrect.

SEARCH AND RESCUE. In order to assist in organising an efficient SUSS Search and Rescue machine, please complete the last page of this Newsletter (its coloured) and return to the Hon. Secretary, either by post, or drop it into the letterbox in the Union, or give it to Geoff Butlin at the next meeting. Remember, the life you might have to assist in saving might be your own.

FROM THE LIBRARIAN

Bull. N.S.S., 28(2), April 1966.

Barometric wind in Wind and Jewel Caves, South Dakota, by H.W. Conn.

This paper should be of interest, if not applicable, because of the meteorological work being done in Mullamullang and various blow-holes on the Nullarbor Plain. The expected behaviour of idealized cases such as balloon or tube caves can be calculated and is useful for a comparison with what is actually observed. With Wind and Jewel Caves, however, a definite correlation could not be made. Theoretical computations from flow data proved variable. The author believes that barometric variations on the surface are responsible for the cave winds and whether they blow in or out. Some other possible theories are discussed.

The description of one cave seems similar to those of some of the shallow blow-hole caves on the Nullarbor though it is unlikely that the limestone surrounding this cave could be as riddled with ramifying small tubes as that surrounding the Nullarbor ones.

The Bulletin contains a wealth of information. Also possibly applicable to the Nullarbor situation is "cave-to-surface magnetic induction direction finding and communication", but again the extensive perforation of much of the Nullarbor Limestone may be of trouble. The technique can be applied in checking the accuracy of maps. The article contains the methods of construction and operation of the apparatus which can be constructed by anyone with experience in electronics.

Of interest to the biologist and meteorologist (with money) is "Electrical equipment for the transmission of climatological and hydrological Data from inside caves.

The up-to-date knowledge of Australian Cave Mites is summarized by Elery Hamilton-Smith in a short article. Most are apparently confined to bat guano but none appears truly troglobitic. Comparisons can be made with American and European faunas. Most mites in N.SW. caves have been collected from Wombeyan, Wee Jasper and Cleifden.

Crayfish which live in surface streams most frequently regulate their molting and mating cycles in accordance with the length of the day, which naturally varies throughout the year. Caves, of course, are not day-lit, so what is the mechanism involved? It appears that the most favourable time for mating is just after the spring flooding or rise in water levels in American caves. Naturally young ones would be at a disadvantage in floods. The authors believe that "biological clocks" are set into action which regualate bodily mechanisms in the crayfish. One of the authors (Jegla) has more recently published these findings in The Biological Bull, June 1966, pp.345-358.

Bats differ in their capabilities for coping with the various components of their environment. There is therefore "microclimatic selection within the cave by bats" of different species. Such factors as temperature wind and humidity are important.

Other notes of scientific interest included are of specialized geological and biological interest.

N.S.S. News, 24(8), August 1966.

Contains useful hints for cave surveying with a brunton compass . In the Shadow methods for cave surveys even darkness and dust are an advantage. One uses the shadow of the long Brunton pointer projected on the hairline of the mirror from the light of the next survey station and thus eliminates many of the problems of Brunton surveying. Many hints and advantages of this technique are discussed.

The Sinoia Caves, Lamagamdi District, Rhodesia, By K.R. Robinson, Proc. and Trans., Rhod. Sci. Assoc., v.51, 1966, pp.131-155.

There are several caves in the Sinoia National Park in the Hunyani Range of Rhodesia. They are noted for the wealth of archaeological material which has been excavated.

The Western Caver, 6(3), June 1966. Dave Lowry briefly describes Tommy Grahams Cave near Cocklebiddy, Nullarbor Plain. A map is included.

Speleo-Spiel, no.7, October 1966. The structure and methods of implementation of the Tasmanian cave rescue organization are detailed.

Helictite, 4(4), July 1966. Along with the articles revieved previously is a report on the Australian Biospeleological Expedition to New Caledonia by Barry Moore of Canberra. Collections of animals covered many groups - including bats, rats, insects, arachnids and both terrestrial and aquatic crustacians. Among the insects, giant cave crickets and fast-running cockroaches are most frequently encounted, but beetles, Barry's specialty, were not plentiful.

An Ecological and Taxonomic Account of the Algae of a Semi-Marine Cavern, Paradise Cave, Queensland, By A.B. Cribb, University of Queensland Paper, Department of Botany, v.4,no.16, 40pp, with nine plates.

This is quite an extensive study of the algae of Paradise Cave. It is a semi-marine cavern, penetrated by the sea in rough weather only and in which algal vegetation is largely dependent on freshwater seepage from the roof and walls.

(There have been various papers written on algal growth in American limestone caves).

N.S.S. News, 24(10), October, 1966. Operation "Beyond Time" is an extended research program conducted by the Institut Francais de Speleologie led by Michel Siffre. The main research undertaken is an investigation into the affects of prolonged stay underground on body functioning and mental performance. Michel Siffre writes up the history of these experiments in an interesting and well illustrated article. Jean-Pierre Mairetet has just returned to the surface after six months underground, concluding the fourth of these experiments.

N.S.S. News, September, 1966. In a previous article Rhodamine B dye was considered unsafe for use in water-tracing work. Further study, however, has shown that it is safe in concentrations of about 10 parts per million in water, that is if it cannot be seen to colour the water. Concentrations should be kept as low as possible.

A series of interesting photographs shows some of the Lava Beds National Monuments Caves, complete with ice.

C.E.G.S.A. Newsletter, October, 1966. Includes aninteresting account of work recently done on Kangaroo Island's caves and also working sketches of Alan Hill's new Diprotodon design - Diprotodon hillii - used in photographing large caverns.

Descent, 3(1), 1966. Orange Speleological Society have renewed publication of their rag. It is a most welcome addition to caving literature as the Orange folk can now make their valuable work known, especially their efforts in the Cleifden area. "Descent" summarizes the Society's activity over the past year. Work at Cleifden has been rewarded by new discoveries including CL13 (map included) and has also greatly aided Barbara in her bat banding program. Work also has been going on in the smaller caving areas of the district. They confidently state that Nelungaloo is NOT worth another visit and perhaps are not alone in this belief. A map of Canomodine No. II Cave (Canomodine) and also Compass Cave (Wylinga' property near Wellington owned by M.S. Herring) is included. OSS have also been helping Bud Frank in his studies of cave sediments in Central Western areas and have shown Joe Jennings and Bud around Cleifden Main Cave. Joe believes the much publicized "recent" rock-fall in the cave is probably an old feature.

The Very Latest, 2(4), November, 1966 Canberra S.S.L have published the latest list of Cave Numbers of Cooleman Caves. Some still remain to be numbered. This is the list:

CP1	Cooleman Cave
CP2	Right Cooleman Cave
CP3	Murray Cave
CP4	Cliff Cave
CP5	Devil Hole
CP6	River Cave
CP7	Glop Pot
CP8	Blue Waterhole Cave
CP9	New Year Cave
CP10	Frustration Cave
CP11	Clown Cave
CP12	Black Range Cave
CP13	Fissure Cave
CP14-17	Barber Cave
CP18	Fish Cave (White fish Cave? -Ed)
CP19	Shatter Cave
CP20	unnamed cave
CP21	Easter Cave
CP22-29	Unnamed caves
CP30	Z Cave
CP31	Fifty-Foot Pot
CP32	South Branch Link
CP33	Mine Cave

CP = Cooleman Plain; NOT Coolamine or Coolamon

Troglodyte, No.6 This is the monthly journal of Tas. Caverneering Club Northern Branch centred at Launceston. It includes an interesting account and illustration of the descent of Devils Pot, a broken Climb of about 200 feet. Elery has written an article "Beasts I have met" in which he mentions some of the well known Tasmanian cave fauna excluding our averneering friends

Down Under, August 1966. An interesting insight into the exploits of our Queensland friends who have done a fair amount of caving under the stimilus of one Henry Shannon. Henry has visited Wiburd's Lake Cave at Jenolan with his friends and one or two SUSS and has succeeded in finding a new entrance and new extensions. A very good CRG Grade 1-2 map is included. There is also a surface map of the Viator and Glen Lyon Caves area, and an interesting report on the current state of Mt. Etna caves area, what mining is contemplated and what damage has been done.

Henry also reports (as SUSS had done) that Central Level River in Mammoth had dried up except for a little trickle at Central Level "Lake".

Speleo Spiel, November 1966. Much work seems to be centring around Exit Cave in the south-west (?) of Tasmania. Difficulties are had even getting to the cave and making camp in inhospitable scrub. The cave itself appears to most interesting - a new extension has been found - "the cave is huge and a stream has been followed up for another half mile. Many side passages including one sixty feet high have not yet been explored. A full report will be published in the next Speleo Spiel".

The Observer, Colour Magazine, 17th July, 1966. "13 photographs, 1 colour map inside Black Mountain. An account of an expedition into a new section of Dan-yr-Ogof, discovered after negotiating the 350 ft. "Endless Crawl". This article is illustrated with a fantastic series of colour photographs which are about the best series ever presented in colour, I have seen. The photographs were taken by Alan Coase and show large chambers full of huge masses of straws, rubber dinghies in thundering cascades, 18" high crawlways, Flabbergasm Chasm, and rocky floored Hanger Passage. A well drawn coloured map shows all the various sections of the cave." - Editor "Stop Press"

The Nat. Parks Journal, November, 1966. The cover shows a photo' of the main Limestone Bluff at Colong Caves. Inside the Nullarbor Caves are also mentioned. The author wondered why the Nullarbor "absolutely riddled with caves" is not made a National Park when Jenolan, Yag'bie, Buchan and Chillagoe are protected.

Walkabout, December 1966. Photo' of a section of one of Yag'bie's caves in a N.S.W. Govt. Railways Advertisment

National Geographic, July 1966, 130(1). Gibraltar Rock of Contention, By Howard La Fay. 23 photographs, 2 maps. Gibraltar is a 1,398 ft high limestone block, and is riddled with caves. Seventy-eight caves are known and many have revealed the remains of early human habitation by Neanderthal Man, and elephant and rhinoceros fossils have been found. The old British saying, "Solid as the Rock of Gibraltar", appears to have no "substance", what with caves and all that. In ST. Michaels Cave teenagers shake to rock and roll music. It is also used for classical music, seating about 1,000 people. It seems that Gibraltar once formed part of a mountain wall linking Spain to Africa as similar fossils have been found in the limestones of Gibraltar and Morocco.

Photography in Caverns, By Dr. Herbert W. Francke, Munchen, International Photo Tecknik, no.2, 1966, pp118-123. 4 photos taken in caves, 1 plate in copper mine in Northern Rhodesia, 1 illustration of lamp and camera positions for a typical photo.

"The writer clearly appreciates the problems involved and realizes, probably from good experience, the hardships involved in setting up a shot in almost complete darkness, in not being able to take trial shots and being limited in the degree of positioning available to the flashes.

He suggests that experience can be gained to some extent by photographing the insides of large halls, cathedrals and passages at night. There is some discussion o camera types, with a plug for wide angle lenses and bright image viewfinders.

While the article is interesting and quite useful it would not be regarded as a set of actual working instructions but rather as a guide line for someone new to the complex field of speleophotography." -Arnold Fleischmann, "Stop Press".