



Alpine kerst field above Muotathel. All drainage from the area in the foreground and middle ground is into Holloch, the entrance to which is in the valley in the right middleground.

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ASE NEWSLETTER

published quarterly by the AUSTRALIAN SPELEOLOGICAL FEDERATION

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EDITING, TYPING - John Dunkley PLATES - Andrew Pavey PRODUCTION - bmsc, hcg & mss, I hope

Thanks again to the Sydney societies, BMSC, HCG, MSS, SSS, SUSS & UNSWSS for undertaking the production side of the Newsletter again this year. lare note: 19 you want accommodation at ASF Committee Meeting, write TO CSS, P.O. Box 530, CANBERRA 2601 (Mmediately

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ASF NEWSLETTER

AUSTRALIAN SPELEOLOGICAL FEDERATION

EDITORIAL

Speleology has really come of age when its representatives address a public meeting in the Sydney Town Hall, So a good crowd of speleos were among 2500 people pressing for major amendments to the antiquated mining legislation which has forestalled rational land use decision making in N.S.W. After introductory speeches by leading conservationists, and a brief appearance by Spike Milligan the Vice President of no less. UNSWSS, Warwick Counsell received strong support with his stirring saga of illegal quarrying at Bungonia/Marulan, Then Ben Nurse, President of SSS outlined briefly the quarrying of marble at Wombeyan. It is evident that limestone is a major pivot of conservation action in N.S.W, and one wonders whether perhaps the battle of Bungonia is only just beginning.

In the same vein, it seems necessary to warn readers not to be too overjoyed at the recent news intimating a conservationist victory at Colong. The price demanded - extension of leases at Marulan - is a high one with dangerous precedent overtones, and the leases at Colong have still not been surrendered.

There has been some disquiet recently about the inadequacy of current conventions on speleological terminology and survey standards in Australia. Before we get carried away it should be mentioned that standards proposed by the Euròpean dominated International Union of Speleology have evidently proved unsatisfactory in English speaking countries: in particular some conflict with established international agreements on qeological symbology. The Federation currently has ad hoc committees working on updating our adopted standards in this context. The convenors are professional workers in the field and they and other convenors of commissions and committees would welcome your assistance and suggestions.

The editor applogises for the lack of punctuality this year, despite the assistance of Sydney societies. It is hoped that the increased standard of production, something <u>not</u> promised, helps to offset this. In any event, it is legitimate to ask whether a magazine of this nature needs to have inflexible publication dates.

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GENERAL NOTICES

ASF COMMITTEE MEETING

The next Committee Meeting of the Australian Speleological Federation will be held in Canberra, ACT, on January 29-30, 1972, probably at Canberra College of Advanced Education. Societies will be circularised in November.

NINTH BIENNIAL CONVENTION OF ASF

The Ninth Biennial Convention of the Australian Speleological Federation will be held at the University of NSW, Sydney, commencing December 27, 1972. Details will be available early next year.

CEGSA NULLARBOR EXPEDITION 1971-2

CEGSA are organizing a major trip to the Nullarbor from 26th December 1971 to approx. 18th January 1972 with the following objectives :

- . Thorough diving in Weebubbie and Cocklebiddy Caves
- Further exploration in Mullamullang Cave, including a renewed attempt to crack the south doline.
- . Other caves depending on time available. Time available for photography.
- A full complement of divers is going and other dry cavers are welcome. Please contact the expedition leader : Ian Lewis,

12 McLachlan Ave, GLENELG NORTH, SA

PUBLIC MEETING TO DISCUSS MINING LEGISLATION, SYDNEY

A Public Meeting will be convened in the Lower Town Hall, Sydney, at 7.30pm on Sunday, November 21, 1971, to discuss proposed changes in the law relating to Mining in NSW. The Meeting is being sponsored jointly by the National Parks Association of NSW, the National Trust, and Ecology Action. Speleological societies have a special interest in this and are urgently asked to try to attend. A member of UNSWSS, Warwick Counsell, will be one of the speakers.

OTHER LARGE SCALE SPELEOLOGICAL TRIPS

TASMANIA - TCC/SCS (?) have an expedition going to investigate limestone near Precipitous Bluff. Walking and caving. SUSS and UQSS and perhaps others also have trips hitting Tassie. ALL THESE AT CHRISTMAS.

CAMODWEAL - "The area with the greatest potential for new discoveries in mainland Australia". No dates arranged yet, next year. (Kerry Williamson, 90 Highland Tce, ST LUCIA, Qld 4067)

CHILLAGOE - Starters wanted, May or August 1972 - J.L.Grimes, UQSS

FIJI - June 1972. B.Nurse, SSS

If interested contact clubs shown - addresses inside cover

n.b. the word is NEWZEALAND mate. Also, NIBICON IS COMING

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CONSERVATION ACTION

SOUTH AUSTRALIAN CONSERVATION REPORT

by Grant Gartrell

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Recently I was pleased to represent CEGSA as part of a delegation from the South Australian Mountain Activities Federation (SAMAF) who were received by the State Minister for Conservation, Mr Broomhill, only recently appointed. The puspose of the visit was to acquaint Mr Broomhill with some of the more urgent conservation desires of bodies belonging to SAMAF and to seek his co-operation.

Mr Broomhill gave the impression of being sincere and sympathetic. Government resources are limited and conflicting interests are encountered. It is not sufficient to merely ask that caves be conserved - to get anywhere we must present him with a strong case which will enable him to argue in the parliamentary market place. On this occasion the submission took the form of literature produced by the Group, including <u>Caves of the Nullarbor</u> and <u>Mullamullang Cave Expeditions 1966</u> as well as some papers outlining the problems of cave conservation. The next steps will be to prepare three distinct cases :

- Overall legislation to prevent caves being used as rubbish dumps. This will be facilitated if caves occur in water catchment areas or in association with underground water resources.
- 2. Perhaps even more urgent, we must arrange our known caves into some order of priority according to scenic, scientific and recreational importance. We need to present the Minister with an ordered list showing location, reason for protection, proposed means of protection including physical (gates etc.)
- 3. We have a responsibility to, promote the preparation and distribution of educational material in the cause of cave conservation and to foster practical means by offering to fence or gate caves that are causing landowners trouble.

(abstracted from CEGSA Newsletter, July-October 1971)

STREAM CAVE Serious concern has been expressed about the future of these two caves in the farming country of south east South Australia. and Hereford Cave has been completely blocked up with dead cows, HEREFORD CAVE sheep, wire and rocks, while Stream Cave is in similar danger. Stream Cave is unique in being the only cave in the state with a running stream and it epitomizes the danger of oroundwater bу pollution in a region with very little surface drainage. As well Stream Cave may have biological significance;although in no great Trevor Maddock numbers, bats have been sighted and in 1966 one was banded.

MT ETNAUQSS and CQSS have conferred with the Queensland National Parks
and Wildlife Association and others with regard to Certificate of
Application for Mining Lease no. 899, lodged at Rockhampton on
30th July 1971 by Central Queensland Cement Co. The purpose of
the application is for mining further for limestone on Mt Etna.
Ron
LorrawayMT ETNAUQSS and CQSS have conferred with the Queensland National Parks
and Wildlife Association and others with regard to Certificate of
Application for Mining Lease no. 899, lodged at Rockhampton on
30th July 1971 by Central Queensland Cement Co. The purpose of
the application is for mining further for limestone on Mt Etna.
Discriptions are being lodged by UQSS and other conservationists.

(courtesy <u>The Explorer</u> <u>2</u> (4) : 1, Sep. 1971)

Number 54

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SPELEOLOGICAL PUBLICATION IN AUSTRALIA

by E.Hamilton-Smith and G.Middleton

THIS PAPER WAS ORIGINALLY READ BY E. HAMILTON - SMITH AT THE SIXTH BIENNIAL CONVENTION OF THE AUSTRALIAN SPELEOLOGICAL FEDERATION IN VICTORIA IN 1966. IT WAS REVISED BY THIS AUTHOR IN 1968 BUT WAS NOT PUBLISHED AT THAT TIME. IT HAS BEEN FURTHER REVISED BY G.MIDDLETON IN 1971. THE AUTHORS WOULD APPRECIATE NOTIFICATION OF ERRORS OR OMISSIONS.

Although the discovery and exploration of many Australian caves were recorded during the mid-nineteenth century, speleology as a systematically organised activity did not commence in this country until 1946, with the establishment of the Tasmanian Since this date, there has been a rapid growth of interest, Caverneering Club. resulting in the establishment of many speleological societies and the development of the Australian Speleological Federation (1956) as a national body. This has resulted in the production of a very considerable amount of literature of various kinds. Parallel with these developments, speleology has adva ced as a science, and this means that the preparation of bibliographies and other guides to the literature are becomong essential. Sources of information regarding published information are an essential tool of the research worker and of the intelligent explorer.

The purpose of the present paper is to provide a general review and annotated catalogue of the publications issued by speleological organizations. Its purposes firstly to offer some guidelines which may help publishers of future material to do this in the most useful manner, and seconf to provide librarians and bibliographers with a simple reference list.

Mansfield (1967) has published a similar study of British speleological periodicals, but this has not been done for Australia prior to the present paper. However, uueful bibliographic data does occur in library lists published by Sydney University Speleological Society, Sydney Speleological Society and Cave Exploration Group (South Australia), and the authors acknowledge the value of these in preparation of the present paper. The <u>Speleo Handbook</u> of the Australian Speleological Federation provides an extremely useful guide to the literature of specific aspects of Australian speleology through its selected bibliographies, while some major papers will serve to list the majority of significant references to their area of study.

CLASSIFICATION OF SPELEOLOGICAL PUBLICATIONS

Perhaps one must first state the assumption that publication is an essential part of speleology, and not just an optional fringe activity. Speleology is a science and the development of scientific knowledge is based upon the publication of one's results for hhe pusposes of record and transmission to others. Even if one argues that he is not a scientist, but merely a cave explorers he still does not avoid the responsibility of effective publication - exploration without adequate recording is merely vulgar curiosity.

One sometimes hears non-publication defended on the grounds that it promotes conservation. Experience suggests this to be a fallacy, as non-publication encourages repetition of 'exploration' with increased damage. Further, attempts to ensure protection of caves through adequate reservation of cave areas will demand evidence, and the compilation of such evidence is greatly hindered if there has not been adequate documentation of speleological results. At the same time, anyone with a responsible interest in speleology can only deprecate open and widely distributed publication of the exact location of certain caves.

The general systems of classification used by librarians are generally of limited use in examining the publications of a limited subject at any depth. Virtually all of the publications dealth with in this paper would be classified by the librarian under either manuscript records or periodicals. A further analysis is essential for present purposes, and this is tabulated below :

1. Basic records of exploration : field notes, trip reports, original maps etc. ("manuscript records" in library terminology)

2. Primarily internal publications : circulars, newsletters, annual reports etc.

3. "Results" publications : journals, monographs etc.

This classification, in dealing with the publications of speleologival organisations, naturally omits the publication of speleological results in general scient0 ific journals. The use of such journals to publish speleological research is increasing and obviously that is the desirable way to publish specialised papers.

Mansfield (op cit.) discusses the fact that the terms used in titles of publications may be inaccurately applied or misleading, and suggests that the best titles are those which do not attempt to convey any indication of standard. This problem can also be seen in Australia, although perhaps not quite so markedly, as Australian societies have tended, in general, toward unpretentious titles. Catalogues of Australian publications are added as appendices to this paper. Appendix 1 lists publications, while appendix 11 provides a summarised list, classified according to the categories listed above. The remainder of this paper will be devoted to discussion of each type of publication with an attempt to suggest guidelines for societies.

BASIC RECORDS OF EXPLORATION

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Basic records are not usually thought of by speleologists as publications, in that they usually exist in one or a very limited number of copies. Without arguing about the strict definition of publication, they are the most essential and valuable of all documents dealt with here. An effective system of basic records will include three types of material - field notebooks, formally prepared trip reports, and maps.

In our experience, field notes are rarely kept as permanent records. They should be, partly so that any suspected errors in later reports or maps can be checked against the original notes, and partly so that any data which appeared inconsequential at the tiee amd was not included in formal reports may later be retrieved if it assumes a new significance. Trip reports and maps provide the raw material for further documentation and publication, so their safekeeping is a matter of considerable importance. They should always be prepared in at least two copies, and the copies kept in separate places to minimise chances of complete loss or destruction.

Although it has been stressed that these basic records are the most essential of all speleological documents, they are by nom means the most useful. As knowledge is accumulated, so this should be summarised into more widely published papers om specific cave areas or aspects of cave science so that it is readily available for

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use. Few Australian cave areas are adequately covered by such publications, although notable exceptions include the Nullarbor Plain (<u>Caves of the Nullarbor</u>, prepared by SUSS and CEGSA), Chillagoe (SSS), the various papers of Jennings on Wee Jasper and Cooleman (in <u>Helictite</u>), or those of Rose on Yarrangobilly (<u>Cave Science</u>, U.K.). It is in fact striking that the less visited areas e.g. Coorow, North West Cape, or the volcanic caves of Victoria are far better documented than the well-known and often visited areas such as Buchan or the south east of South Australia. Many of these areas are well covered by trip reports and other basic records, but have never been adequately covered by synoptic papers. However, it is understood that a number of such publications are nearing fruition.

PRIMARILY INTERNAL PUBLICATIONS

The classification above suggests a difference between circulars and newsletters. This is a slim boundary, but in practice a useful one. A circular can be defined as a publication issued purely to maintain liaison with members and to keep them informed, which is not published as part of a permanent series, while a newsletter is part of a permanent series, usually numbered, easier to refer to at a later date. Thus the circular, although very valuable in itself, should never be used to record data of permanent significance, as it is both difficult to index and often almost impossible to locate in back issues. The authors would suggest that circulars (under this definition) are, however, far preferable to poorly edited and produced newsletters on an irregular or impermanent basis.

As the newsletter format facilitates filing and indexing, so it can be used as a medium for the publication of news on new discoveries, notes on techniques and abstracts, reviews and other data of on-going value. At the risk of accusations of prejudice, one can point to the former SSS publication Stop Press as an example. For a newsletter to achieve optimum value, it should conform to at least some of the normal conventions of publication. Perhaps the first thing that can be said is that the path to hell is paved with good intentions; Australian speleological societies have certainly added a considerable number of stepping stones. One only has to examine Appendix II to see the publications listed as defunct, superseded or hibernating. The problem is that such publications become hard to trace and increasingly non-available to the researcher, so the knowledge published in them tends to be lost. This comment applies even more strongly, of course, to journals where more significant material is included.

Some publishing conventions are demanded by the requirements for postal registration as a periodical and need not be repeated here. Other are, however, very important from the point of view of filing or indexing or other aspects of practical use. Some of these are listed below:

- Page size should be uniform. Quarto 10" x 8" is manageable and widely used, though use of A4, 11¹/₇" x 8" is increasing.
- 2. If any change in title or format (undesirable, but sometimes unavoidable) is necessary, then this should always be at the start of a new volume.
- 3. Title, number and date of issue should appear on cover and every page.
- 4. If numbered in volumes (which should be annual, or for some period or number of issues unspecified), then page numbering should be continuous throughout each volume and not on a per issue basis. This facilitates compilation of indexes, which add immeasurably to the value of a publication.

- 5. Adequate margins should always be left for binding purposes. Fold-ins larger than normal page size should always be so folded and placed as to allow this.
- 6. If contents are departmentalised, then the order should be standardised from issue to issue for easy reference.

Annual Reports, Yearbooks, handbooks of techniques etc. are all extremely useful publications for administrative, tari or administrative purposes. This is usually most appropriate for the larger societies and most such publications have achieved a very satisfactory standard. Such annual publications are probably best when their use and purpose have been clearly defined and they have been prepared with their target clearly in mind of the editor. One special word is always necessary in regard to tarining manuals. These can be extremely useful and many Australian speleologists will pay tribute to the first edition of the TCC handbook which provided an early manual at a time when no others were available in the country. However, the many errors of fact which crept into the second edition (published by the northern branch) can only be regretted.

RESULTS PUBLICATIONS

The results of speleological activity require publication either in journals or monographs so that they are permanently available for reference. Here the impermanent publication is even more damaging than in the case of such things as newsletters, particularly if the journal contains papers of real value. The great number of speleological journals published in Australia which are now defunct or dormant, and consequently are only available for consultation with considerable difficulty, are of great nuisance value but little else. Any speleological society undertaking publication of such a journal with any pretensions of being serious must see that it is very readily available and widely distributed. No such undertaking should be commenced without a certainty of continuation, at least for a reasonable period. Obviously, many societies will point out that this is not possible for them to achieve - the answer, therefore, is to publish in other existing journals which have achieved meal stability, rather than to commence an unsatisfactory one.

Some "journals" have, of course, contained little material of consequence, and would therefore be better referred to as "magazines" as being of lesser permanent significance. They have placed with newsletters in Appendix II. Again, these would have done much better to have remained at newsletter level rather than attempt to achieve something more pretentious.

Journals should always aim at meeting the usual standards in presentation of papers. Standard conventions may be found in the CSIRO Guide to Authors, while there are a number of standard texts on the preparation of scientific papers.

Because any journal can be only as good as its subscription list is long Australian speleology can obviously support only a very few godd journals. There is certainly no room for competition between journals, so it is important that each develops a distinctive editorial policy which sets it aside from others, preventing any competition.

Perhaps some further point may be given to the comments made about lack of availability of these publications by drawing attention to the fact that of all the publications listed in appendices to this paper, only 14 are recorded in the Catalogue of Scientific Seruals in Australian Libraries, and 5 of these are recorded by one library. The Federation Library is equally far from being a complete set.

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Publication at mpnograph level is only now beginning to be developed, with the Occasional Paper series of the Cave Exploration Group (South Australia) providing an excellent example. <u>Mt Etna Caves</u>, recently produced by the University of Queensland Speleological Society, and <u>Caves of the Nullarbor</u>, published on behalf of SUSS and CEGSA by the Speleological Research Council Ltd are outstanding in this field. These, and the fourth in the CEGSA Occasional Papers series, <u>Mullamullang Cave Expeditions</u> <u>1966</u>, have zet an entirely new standard of publication in Australian speleology. The latter was described by a very experienced reviewer (Butcher 1968) as "one of the best expeditions reports I have even seen! **

Although not quite within the scope of this paper, reference must also be made to another highlight of Australian speleological publication - the <u>Speleo Handbook</u>, published by the Federation. This is a reference book of great value, and although it is hoped it will have many future editions, it cannot be considered as a serial publication. However, it is listed here because of its very great value and significance. As mentioned earlier, it is a research tool of considerable utility, providing not only a compilation and summary of data relating to Australian caves and caving, but also a guide to selected references throughout the speleological literature.

POSTSCRIPT

This paper originally concluded with some suggestions for future development. Paramount among these was the establishment of "an effective and completely comprehensive abstracting service". Some years later and quite independently, it seems, Greg Middleton also realised this need and began discussions with the other author; the result, <u>Australian Speleo Abstracts</u>, the first issue of which appeared in December 1970. Shortly afterwards, at its 8th national convention in Hobart, the Australian Speleological Federation established a Commission on Bibliography and gave formal support to the new publication. Further work on a comprehensive bibliography of Australian cave literature, begun by Bud Frank in 1967, is presently under way. These are very significant steps in the development of speleological publication in Australia.

Reprinting of past publications, which was also suggested, has not yet been done to any extent, though SUSS reprinted a number of its scarce earlier journals in 1960. Both SSS and NUSS are currently believed to be considering reprinting items which have long been out of print, and there has been some discussion between SUSS and CEGSA on the possibility of reprinting, or preferably a second edition revised, of <u>Cavesof the</u> <u>Nullarbor</u>. Another edition and thorough revision of the now unavailable though much sought after <u>Speleo Handbook</u> is due but this enormous task is unlikely to be undertaken for some time. The second edition of this invaluable compendium will be another milestone in the development of Australian speleology.

Another development is the publication of papers from the Biennial Conventions of the Australian Speleological Federation. Following the Seventh Convention in South Australia during December 1968, a transcript was prepared and published by the joint efforts of Margot and Peter Matthews from VSA, and CEGSA who had acted as organizers of the Convention. This publication developed along somewhat ad hoc lines, but in organizing the Eighth Convention in Hobart in 1970, the Tasmanian societies planned a similar publication. The future of this requires review to ensure stability.

** the first of a two part monograph on Mammoth Cave, Jenolan, NSW, was published in December 1971 by the Speleological Research Council Ltd. for Sydney University Speleological Society, after this paper was received. The title is : <u>The Exploration and Speleogeography of Mammoth Cave, Jenolan</u> - ed.

REFERENCES

BUTCHER, A.L. (1968) : Short Reviews. <u>Newsl. Cave Res, Grp. Gt. Britain</u> <u>111</u> : 23 MANSFIELD, R. (1967) : A Survey of British Caving Periodicals. <u>Stud.Speleol.</u> 1 (5) : 285-294.

APPENDIX 1: ANNOTATED CATALOGUE

Notes: Although this catalogue is as complete as possible, there are still some publications about which adequate data is not available. The author would appreciate further information. Unless otherwise stated, publications are duplicated.

Australian Speleological Federation Newsletter: Nos. 1- 6 (1957-59) irreg., 4to or f'scap. 7-22 (1960-63) quarterly, 8vo. 23 + (1964-) quarterly, 4to. Australian Bat Research News (published in conjunction with C.S.I.R.O., Division of Wildlife Research): Nos. 1-6 (1964-66) irreg., 4to (multilith). 7 + (1967-) irreg., A4 (multilith). Helictite (published by Edward A. Lane, editors E.A. Lane and Dr. A.M. Richards): Vol. 1 (1962) + quarterly, 4to (multilith with plates; 4 issues per volume, annual). Blue Mountains Speleological Club Down Under: Vol. 1, (1) (1969) Name changed to **Oolite:** Vol. 1, (2) (1969) + irreg., 4to. berra Speleological Society The Very Latest (and other titles): Vol. 1, (1)-(60) (1960-65) Newsletter and circular. Vol. 2, (1) - Vol. 5, (9) (1966-70) f'cap or 4to, usually monthly. Vol. 5, (10) (1970) + approx. bi-monthly, A4 (Multilith). (Series interrupted April-October 1966. An informal news circular appeared under a variety of names during this period.) Cave Exploration Group (South Australia) Annual Report: 1957 +, annually, 4to. **Occasional Papers:** No. 1 (1958) +, irreg., 4to (No. 4 multilith). Newsletter or Circular to members: 1956-66 quarterly, f'scap. 1967 + quarterly, 4to. This is an unnumbered series, but has appeared at fairly regular intervals since commencing. Usually titled 'newsletter' but conforms to above definition of a circular.) **Central Queensland Speleological Society** The Explorer: Vol. 1 (1) (1970) + monthly, f'cap. **Cooranbong Speleological Association** CSA Reports: Nos. 1-3 (1957-59) irreg., 8vo (1 & 2), 4to (3). CSA Newsletter: No. 1 (1959) - Vol. 4 (1961) generally monthly, 8vo. Caesar: Vol. 4 - Vol. 5 (7) (1961-62) generally monthly, 8vo. Annual Report: 1959-60 (only one issued). **Darwin Speleological Group** Newsletter: no details available (No. 3, Sept. 1962, F'cap. circular) **Highland Caving Group** Calcite (originally The Caverneer): No. 1 (1960) + irreg., 8vo, 4to or A4. (Lately unnumbered.) Illawarra Speleological Society Yearbook: 1966-67, 1967-68. Apparently only issues. ISS Newsletter: Vol. 1 (1970) + monthly, 8vo.

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Kamnen Snalaolo	nical Sociaty
Troa:	gida occiory Vol. 1 (1960) + monthly, 8vo., generally twelve issues per volume.
Motropoliton Cool	
Metropontan Spen	sological Society
100 66191	
National Universit	y Caving Club
Newslet	ter: Vol. 1 - Vol. 3 (4) (1964-66) irreg. t^{2} cap, and 4to.
Spereog	(antit. vol. 5 (5) (Sep. 1966) + meg., 4to, One volume per year with variable number of issues.
Newcastie Speleol	ogical Association
Informa	tion: No. 1 (1967) + irrég., t'cap., circular.
Newcastle Univers	ity Speleological Society (formerly Newcastle Technical and University College Speleological Society)
Cave An	inual: No. 1 (1963) only issue, 4to.
Cave:	July, 1960 + irreg, 4to and f'cap,, unnumbered circular, Commenced volume numbering and continuous pagination from March 1971 as Vol 9 (3) seven times a year from
Orange Costactori	
Crange Spereologi	
Contrat	Vol. 1 (1) (1961), (2) & Vol. 2 (1) (1962) apparently all issued.
Descent	: Vol. 3 (1966) + supposedly quarterly, 4to.
	(See also supplement to SSS Communications , Vol. 2 (1956).)
Port Moresby Spel	eological Society
Cave Ta	ik-taik: Vois. 1-3 (1961-63) all issued. Voi. 1, one issue, Vois. 2-3, two each. Originally 8vo., reprinted 4to.
Ryde Speleologica	I Association
Newslet	ter; No. 1 (Nov. 1960) 4to. only known issue.
Southern Caving S	ociety
Souther	n Caver: Vol. 1 (Jul. 1967) + quarterly, 4to (production suspended between Jan. 68 and Jan. 70).
S.C.S. N	lews: No. 1 (Jun. 1971) + circular.
Sydney Speleologi	cal Society
Year Bo	ok: 1962 + annually, 4to. (Since 1971, published as the March issue of J.S.S.S.)
News Sh	ieet: 1954-57 irreg., 8vo., circular.
News Bu	Iletin: May 1957 - July 1959 generally monthly, f'cap. then 8vo. (renamed Communications, see below).
Commu	nications:
	1, (1956) 4to, journal
	2. (1956) 4to, journal
	3. (1959) News Bulletin renamed Communications in August 1959, no Vol. No., 3. inferred. Monthly, 8vo.
	4. (1960) monthly newsletter, avo., vol. no. shown as from No. 2
	6. (1962) monthly, 8vo., Nos. 1=8 only (see Stop Press)
Occasio	nal Papers:
Stop Pre	No. 1 (1963) + integ., 410, (No. 1 also marked communications, vol. 7 (1).) May 1962, December 1969, populative persenties the start of supplement to Communications and con-
0.000110	tinued to be marked as such until July, 1963, although Communications ceased as a newsletter in Nov.
	1962.) 8vo to Nov., 1964, thereafter 4to. Commenced volume numbering and continuous pagination as
lournal	trom January, 1967 as Vol. 11, No. 1 (indexed annually since 1967).
Journal	Vol. 14 (1970) + monthly (successor to Stop Press):
Australi	an Speleo Abstracts (published in association with A.S.F.):
	1970 (1) Dec. 1970) + bi-annually, 4to.
Sydney University	Speleological Society
Yearboo	ok: 1955-1967, annually, 4to.
SUSS C	ircular: 1956 - Sept. 1960. Monthly.
SUSS N	ewsletter: Vol 1 (1961) - Vol 10 (1970) irreg, dto (some issues avo.) Variable no. of parts per vol - 1 (9) 2 (9)
	3.(6), 4.(4), 5.(6), 6.(10), 7.(5), 8.(9), 9.(5), 10.(9).
SUSS B	ulletin: Vol. 11 (1971) + approx. monthly, 4to.
	(successor to Newsletter)
SUSS JO	ournal: Vol. 1 (1950) + ? Irreg., 4to.
	Vol 1 has three issues Vois 2-5 two each Vol 6 four and Vol 7 two to date (7 (2) July 1968)
Termanian Causen	Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968).
Tasmanian Cavern Handbo	Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club pk: Let Edition, 1953, horiz, Ruo
Tasmanian Cavern Handbo Rulletin	Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to.
Tasmanian Cavern Handbo Rulletin	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.)
Tasmanian Cavern Handbo Rulletin Speleo-S	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. : Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) : piel: Old series, 1961-62. irreg., f'cap., circular. New series, No. 1 (April 1966) + monthly, f'cap.
Tasmanian Cavern Handbo Rulletin Speleo-S Tasmanian Cavern	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) spiel: Old series, 1961-62. irreg., f'cap., circular. New series, No. 1 (April 1966) + monthly, f'cap. eering Club (Northern Branch)
Tasmanian Cavern Handbo Rulletin Speleo-S Tasmanian Cavern Handbo	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) spiel: Old series, 1961-62. irreg., f'cap., circular. New series, No. 1 (April 1966) + monthly, f'cap. eering Club (Northern Branch) pk: 2nd edition, 1963, horiz., 8vo.
Tasmanian Cavern Handbo Rulletin Speleo-S Tasmanian Cavern Handbo Troglod	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) Old series, 1961-62. irreg., frcap., circular. New series, No. 1 (April 1966) + monthly, frcap. eering Club (Northern Branch) pk: 2nd edition, 1963, horiz., 8vo. yte: Nos. 1-10 (1966-1967) monthly, 4to.
Tasmanian Cavern Handbo Bulletin Speleo-S Tasmanian Cavern Handbo Troglod University of New	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) Old series, 1961-62. irreg., tricular. New series, No. 1 (April 1966) + monthly, tricap. eering Club (Northern Branch) ok: 2nd edition, 1963, horiz., 8vo. yte: Nos. 1-10 (1966-1967) monthly, 4to. South Wales Speleological Society
Tasmanian Cavern Handbo Bulletin Speleo-S Tasmanian Cavern Handbo Troglod University of New Newslet	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) Spiel: Old series, 1961-62. irreg., frap., circular. New series, No. 1 (April 1966) + monthly, frap. eering Club (Northern Branch) ok: 2nd edition, 1963, horiz., 8vo. yte: Nos. 1-10 (1966-1967) monthly, 4to. South Wales Speleological Society ter: Vols. 1-3 (1960-1964) all issued, irreg., Vols. 1-2 8vo., Vol. 3, 4to.
Tasmanian Cavern Handbo Bulletin Speleo-S Tasmanian Cavern Handbo Troglod University of New Newslet Spar (su	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) Spiel: Old series, 1961-62. irreg., frap., circular. New series, No. 1 (April 1966) + monthly, frap. eering Club (Northern Branch) ok: 2nd edition, 1963, horiz., 8vo. yte: Nos. 1-10 (1966-1967) monthly, 4to. South Wales Speleological Society ter: Vols. 1-3 (1960-1964) all issued, irreg., Vols. 1-2 8vo., Vol. 3, 4to.
Tasmanian Cavern Handbo Rulletin Speleo-S Tasmanian Cavern Handbo Troglod University of New Newslet Spar (su	 Vol. 1 has three issues, Vols. 2-5, two each, Vol. 6, four and Vol. 7, two to date (7.(2), July, 1968). eering Club ok: 1st Edition, 1953, horiz., 8vo. Nos. 1-4 all issued (1957-60), 4to. No. 4 marked on cover as Vol. 2.) Spiel: Old series, 1961-62. irreg., frag., circular. New series, No. 1 (April 1966) + monthly, frag. eering Club (Northern Branch) ok: 2nd edition, 1963, horiz., 8vo. yte: Nos. 1-10 (1966-1967) monthly, 4to. South Wales Speleological Society ter: Vols. 1-3 (1960-1964) all issued, irreg., Vols. 1-2 8vo., Vol. 3, 4to. ccessor to Newsletter: Vol. 1 (1965) - Vol. 6 (3) (1970) irreg., generally monthly, 8vo, then 4to. No. 1 (New Series) (1971) + approx.

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University of Queensland Speleological Society

Down Under: August, 1962 + irreg. 4to or f'cap. One issue 1962, 63, 65, 66 and 68; two issues, 1964. Commenced volume numbering and continuous pagination as from March, 1969, as Vol. 8 No. 1, quarterly, 4to. From Vol. 9 (1970), five times a year (indexed annually).

(Conservation) Bulletin:

No. 1 (1965) - No. 6 (1968) irreg., 4to or f'cap., publication apparently suspended.

Victorian Cave Exploration Society

Circular: Dec. 1957-1962 irreg., f'cap.

Newsietter Nov. 1962 - Dec. 1966 irreg., 4to and f'cap.

Victorian Speleological Association (incorporating both the Victorian Cave Exploration Society and the Sub-Aqua Speleological Society) Annual Report: 1967-68 + annually, 4to.

Nargun: Vol. 1 (1968) + monthly, 4to. (prior to this a monthly unnumbered programme circular was issued.) Copies of a special report on the Glenelg River region were duplicated and made available as a special paper.

Western Australian Speleological Group

Journal: Vol. 1 (1962) one issue only, 4to.

The Western Caver:

Vol. 1 (1960) + irreq., 8yo to 3.(2), then 4to. Variable number of parts per volume: 1.(4), 2.(3), 3.(4), 4.(9), 5.(6), 6(6), 7.(6), 8.(6), 9.(4), 10.(2+).

APPENDIX 11: CLASSIFIED SUMMARY

Obviously, classification is in some cases very much a matter of opinion and, as already pointed out, the boundary between newsletters and circulars is a slim one. Similarly, of those publications in the defunct, superseded or apparently hibernating column, it is quite beyond the present author s extra-sensory perception to distinguish between the categories of defunct and Notes: apparently hipernating.

CATEGORY

NEWSLETTERS & MAGAZINES

ANNUAL REPORTS, YEARBOOKS,

CIRCULARS

ACTIVE

CEGSA Newsletter InFormation **ISS Newsletter** SCS News Speleo-Spiel (New Series)

The Very Latest

ASF Newsletter

Journal of S.S.S. MSS Journal

Southern Caver

SSS Yearbook

Helictite

Calcite Cave (since 1969)

Nargun

Spar Speleograffiti SUSS Bulletin Trog

Aust, Bat Research News

Down Under (1969 +)

CEGSA Annual Report

* from 1971 incorporated in J.S.S.S.

VSA Annual Report

APPARENTLY HIBERNATING Cave (to 1968) Conservation Bulletin (UQSS) Darwin S.G. Newsletter Down Under (to 1968)

DEFUNCT, SUPERSEDED OR

Speleo-Spiel (Old Series) SSS News Bulletin SSS News Sheet Stop Press (1962) SUSS Circular VCES Newsletter

Cave Talk-Talk **Central West Caver** Communications (3-6) CSA Newsletter Descent Stop Press (1963-69) SUSS Newsletter The Western Caver Troglodyte **UNSWSS** Newsletter

CSA Annual Report ISS Yearbook SUSS Yearbook TCC Handbook

Cave Annual Communications (1-2) CSA Reports SUSS Journal TCC Bulletin WASG Journal

MONOGRAPH SERIES

JOURNALS

Australian Speleo Abstracts

Speleo Handbook, published by A.S.F., Caves of the Nullarbor, published by jointly by CEGSA and SUSS, and Mt. Et-N.B. Caves, published by UQSS and A.S.F. Conference Proceedings have been omitted from these appendices as they are ial publications.

CEGSA Occasional Papers SSS Occasional Papers

ABSTRACTS

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etc.

Number 54

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CAVES OF AUSTRALIA

No. 4: EASTER CAVE

by Lloyd Robinson

THE AUTHOR, A MEMBER OF wasg, sss AND iss, IS NOW LIVING IN WOLLONGONG, NSW, BUT HAS DONE MUCH OF HIS CAVING IN THE WEST WHERE HE TOOK PLACE IN SEVERAL OTHER DISCOVERIES. LLOYD HAS BEEN CAVING LONGER THAN THERE HAVE BEEN CLUBS IN AUSTRALIA AND HAS MANY TALL TALES AND TRUE TO RELATE, INCLUDING A DESCENT OF THE DRUM AT BUNGONIA IN 1946 USING A WINCH.

VETERANS OF THE FIELD TRIPS FOLLOWING THE 1964 ASF CONFERENCE IN PERTH WILL NOT QUICKLY FORGET THE HIGHLIGHT OF THEIR TOUR, A WET TRIP THROUGH EASTER CAVE, NOSES SCRAPING THE ROOF AN INCH OR TWO ABOVE THE WATER

Two hundred yards walk off the road, six miles from Augusta in the lower South West of Western Australia, is the entrance to Easter Cave. Entrance is gained by a 44 ft ladder pitch at the bottom of a doline with a diameter of 50 ft. Like other caves in the area (Augusta Jewel, Harleys, Bone etc.), the solution pipe entrance pitch enters the system through the ceiling of a near surface cavern. Unlike most others, the Easter ladder pitch has the added attraction of frequently having a welcome at the bottom in the form of a live snake, usually a dugite, a particularly venomous type found in WA. The doline and the three solution pipes connecting the the first cavern together make an excellent animal trap.

Easter is a phreatic cave in coastal dune limestone; one of the Augusta caves situated in a narrow band of karri covered limestone between encroaching sandhills to the south west and swamplands to the north east. Typical of other Augusta caves in the area (i.e. Augusta Jewel, Moondyne, Labyrinth and Deeondeeup) it is a very shallow system; 135 ft from the surface to the water table. However what it lacks in depth it makes up for in horizontal development. It is by far the most extensive to date of the Augusta group, with more than 6000 ft of passage which known length would be increased if one undertook the task of surveying the minor leads and the labyrinth section.

The cave entrance, being an animal trap, was apparently a nuisance to stock owners for a fence had at some time been erected around the edge of the doline. Some say that the cave was once shown to tourists. Others claim that this was not correct. The author was told a number of conflicting and confusing stories concerning the caves in the area by the locals during a first visit in 1957.

Little is known of the cave during the fifty years prior to 1958. In March of that year Lex Bastian and Lloyd Robinson rediscovered the cave after a bushfire had burnt out the heavy undergrowth. The following day a large party (mostly locals) descended the pitch into the entrance cavern. This cavern and an adjacent small one were all that were found. Remnants of partly burnt (from bushfires) and rotting timber steps were found on top of the soil cone under the solution **p**ipe used as an entrance. The main cavern did not have the appearance of other tourist caves; the floor did not have the trampled look, nor were many decorations damaged. Further, the angle at which the steps were cut into the bearers did not suit the entrance

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pipe. An elderly resident (Mr S. Longbottom) claimed (prior to the discovery) that the set of steps had been taken from a disused tourist cave and lowered down the entrance for early explorers to gain entry.

In the lower passage to the small cavern the unmistakable marks of burnt blackboy were noticed on the floor. Inside the small cavern the only inscription found in the cave was written in charcoal on a small shawl: "JAMES DONOVAN, JESSIE WARD, SEPT. 11, 1884".

A faint draught was discovered by Bastian and Cliff Spackman under a wall at the lowest part of the cavern where the soil from the soil cone had been washed by rainwater coming down the pipe. The explorers of the Augusta Jewel and a party from Perth succeeded in tunnelling 40ft through sandy soil into a new section of cave on Good Friday, 1958 (hence the name Easter Cave). The tunnellers now found themselves in a cavern with massive formations and a large soil cone. Exploration was carried out as far as the Epstein Sculpture Cavern where an injury temporarily halted progress. At a point known as the Y Junction the water table was reached at a still lake. Bastian and party later completed exploration of the system to the left of the Y Junction over rocks and deep pools to Lake Michigan, and the right around the Epstein. No evidence of previous entry was found, indeed this is one cave in the Augusta area where no claims are made by locals for other than the first two caverns. As a result of this and other discoveries Bastian was able to muster enough enthusiasm to form the Western Australian Speleological Group.

In December 1963 Dave Lowry investigated a low, partly water filled crawl heading off from the Beach, down to the left from Epstein, and located a powerful draught. In the following month a party of 4 under T.O'Donnell succeeded in forcing a very wet low passage 40 ft long and entered a vast new section many times larger than that already known. Over the next few years WASG members (D. Lowry, T.Bain, T.O'Donnell, P.Bridge, P.Henley, B.Robinson) led many exploratory excursions into the new extension, gradually adding more and more. Lowry in 1964 commenced the task of surveying the system. In January 1970 a surface station was marked near Tiffanys, by the use of RDF equipment.

With a cave such as this it is difficult in a short description to do justice to the many features. Among the main features one must mention the large number of lakes, the massive fractured flowstone formation at the Y Junction, the helictites and straw showers, the cave pearls, Tiffanys (crystal pools containing 2" long crystals of calcite), the Epstein Sculpture (a huge helictitic structure) and some acute rhombohedral crystals of calcite in the form of a stalagmite 3 ft high, just before the Y Junction.

In the interests of conservation, visits to Easter Cave have been restricted by WASG who have built a lockup grill in the manmade tunnel. Much work as well as exploration remains to be carried out.

REFERENCES

BAIN, T.D. (1964a): Extending Easter Cave. <u>Western Caver</u> 4 (1): 2-4 BAIN, T.D. (1964b): A further report from Easter Cave. <u>Western Caver</u> 4 (2): 7

BAIN, T.D.	(1967) :	The Geomorphology of the Cape Hamlin Coastal Limestones and the Sand Dunes. <u>Western Caver</u> 7 (6): 9-18.			
BAIN, T.D. & LOWRY, D.C.	(1964) :	<u>Notes on Cave Development in the Augusta-Margaret</u> <u>River area</u> . Notes for Field Trips, Fifth Biennial Conference Australian Speleological Federation.			
BASTIAN, L.	(1964) :	Morphology and De v elopment of Caves in the South West of Western Australia. <u>Helictite</u> <u>2</u> (4) : 105			
BASTIAN, L.	(1967) :	Notes on the Origins of Caves, South West Western Australia. <u>Western Caver</u> <u>7</u> (5) : 5-13.			
LOWRY, D.C.	(1965 a):	Recent Fluctuations in the Lake Levels in Caves in the Augusta Region. <u>Western Caver</u> <u>5</u> (1) : 1-2.			
LOWRY, D.C.	(1965b) :	(Trip Reports) Dec. 19/20, 1964. <u>Western Caver</u> <u>5</u> (1) : 3-4.			
Also personal	field and o	ther notes of L.N.Robinson, 1964.			
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INTERNATIONAL NEWS	A number o the auspic e joined in f	f international meetings have been held recently under es of the International Union of Speleology which ASF 1970 :			
Ьу	. IUS Subo begin a of spele	commission on Terminology, Austria, September 1971,to comprehensive, authoritative, multilingual dictionary sological terms.			
John R. Dunkley	. Second International Cave Rescue Meeting, Belgium, Sept. 1971				
	Seminar on Theoretical and Experimental Methods of Karst Denudation, under patronage of IUS Commission of Karst Erosion Organized by Drs Marjorie Sweeting and Paul Williams at Oxford University, England, September 1971 (it is understood that Mr J.N. Jennings participated).				
	IUS Commiss aspects of speleologis	sions are at work by correspondence on several other ultimate interest to both the scientific and amateur st.			
Members of ASF socie	ties and ot	thers interested in any facet of speleology overseas,			

Mem including addresses of contacts, location of caving areas, literature and information on speleological institutions and tourist caves (suitable for travellers), are invited to contact either of the undersigned Convenore of the ASF Commission on International Relations :

> J.R. Dunkley, 22/53 Alice St, WILEY PARK, 2195

E. HamiltonySmith, P.O. Box 36, CARLTON SOUTH, 3053 December 1971

FAST RUNNING OUT OF UNEXPLORED LIMESTONE ON THE MAINLAND, AUSTRALIAN CAVERS ARE TURNING SOUTH ТО TASMANIA. EAST TO NEW ZEALAND. AND NORTH TO NEW GUINEA. HERE ARE TO BE FOUND POSSIBLY THE LARGEST AREAS OF ALMOST TOTALLY UNEXPLORED LIMESTONE IN THE WORLD, HUGE AREAS OUTCROP FROM INDONESIA AND WEST IRIAN THROUGH THE STAR MOUNTAINS, CENTRAL HIGHLANDS, THE OWEN STANLEYS AND IN NEW BRITAIN, NEW IRELAND . BOUGAINVILLE etc. etc. ad nauseam. AN ACCESSIBLE INTRODUCTORY ARTICLE IS BADLY NEEDED. BUT IN THE MEANTIME HERE ARE TOO EXTRACTS EMPHASIZING THE DIFFICULTIES OF CAVING UP NORTH . . .

CAVES AND KARST IN THE BAINING MOUNTAINS, N.W. GAZELLE PENINSULA, NEW BRITAIN, TPNG

by R. Michael Bourke

The area is an immense limestone range rising to over 5500ft in western part of the Bainings. It is marked as the Raulei Range on some maps. Along the eastern edge it consists of sheer cliffs rising 1000 - 2000 ft above the level of the surrounding countryside. These cliffs are scarred by landslides and bear large white areas which, when not shrouded in cloud, are visible from high spots on the lowland part of the Gazelle. The top of these cliffs represent the highest points of the range, and the land slopes westward to the Bismarck Sea on the western shore of the peninsula. The surface topography is characterized by innumerable dolines visible from the air.

Friday morning we drove from Keravat to the end of the road and the first Baining village, Rangulit. Our arrangements for carriers had gone astray, so it was not till after lunch that we did the four hour walk up to Yakum village where we spent the night. Next day we walked to Yalum village. Normally a seven hour walk, we did it in a solid $9\frac{1}{2}$ hours as I insisted upon "exploring" an old track and developed blisters in the process. John pulled out after an hour's walk as he wasn't up to the conditions. Yalum is a large isolated village at the base of the cliffs. It is over 3000ft. On a previous trip to the village Hal and I had explored a small cave an hour's walk from the village.

We changed carriers at Yalum and on Easter Sunday climbed the range in 4 hours. We investigated a crashed Japanese bomber on the way.Camp was set up at a helicopter landing pad near a trig point ("Hiran" Nandan) at 5654ft. Below the trig point the cliffs dropped vertically, perhaps for 1000 ft. The only reported water is а small stream that drops into a doline. It was this doline that I had heard of It had been reported as over 100ft deep from several expatriates and villagers. however when we abseiled in that afternoon it proved to be only 40 ft deep. The doline was 130ft long and 12ft wide. It contained, of all things, a pile of Coke tins Have to thank the U.S. army for that one. Another nearby doline was also proved caveless. The cold wet conditions made a Hotham and gas cooker necessary that night.

A description of the area may be in order. The most prominent feature is the continuous mass of dolines and chasms that make access impossible in places. The dolines are often steep sided and chasms of 60ft are not uncommon. The vegetation is tropical forest, but covered in mosses and forever dripping wet. The ground is covered in a thick mat of rotting vegetation and fallen trees. Mists move through adding to the novel environment. There is now a single track that crosses to the western coast, but another new one is used commencing from another village.

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Monday morning we found the remains of a crashed helicopter. The doline in which it was situated was caveless. The track follows the edge of the cliff from the trig point to where it descends the cliffs. We followed it looking at dolines adjacent to it. About halfway along the track crosses a small chasm via a log. This chasm opens onto the cliff face and continues away from the cliff for several hundred feet. About 70ft from the cliff edge it is possible to descend the chasm.I abseiled 30 ft to а chockstone and could see a further 50 ft down. Stones rattled down muchfurther than this. The walls were quite unstable. It is about 4 ft wide and over 100 ft long. Lack of equipment and loss of my torch prevented further descent so I prussikked out. A further four dolines and chasms adjacent to the track were explored, none of which led to caves. Hal looked into a cave near the edge of the cliffs. He could see light coming from an opening in the cliffs and the cave extending in the opposite direction. The area where the track descends the cliffs is a crazy jumble of clefts that defy description. After lunch in a tropical downpour we descended to the village in four hours. On Tuesday we walked to Rangulit in twelve hours. This is a good ten hours normally, but my blisters were becoming troublesome.

The area is very worthwhile and, as they say, the potential is great. On the army maps there are two areas of many square miles in the Bainings marked as dolines and "rough and broken terrain". Logistics of getting to the caves present problems. For our trip three days were required going in and two days getting out. This left 2 half days for caving. One cannot "live off the land" for food, shelter and fuel as one can in inhabited areas, so camping equipment must be carried in as well as caving gear. The dissected topography, the fallen vegetation and lack of access tracks make exploration more difficult in an area where there is no local knowledge of cave locations.

(from <u>Down Under 10</u> (4) : 111-113)

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BOROMAI CAVE, BOUGAINVILLE

by Peter Robertson

I have a small band of followers and every fortnight we hike about 4 miles up a 2000 ft ridge, past Boromai village, then steeply down into a deep limestone gorge cut by a river. In the hot sunshine and 98% humidity this is quite an effort. The river emerges from a cave at the bottom of creeper covered limestone cliffs 300 ft high.

Beyond an entrance cavern 150 x 40 x 50 ft high the cave is quite a maze and appears to go under the river to reappear half a mile downstream on the other We intend to do some water tracing to check this but are holding off for bank. things quieten a little in the village nearby. The villagers a while until had not taken kindly to what they regarded as our depredations on their food However, on of our number, a fluent Pidgin speaker, managed to supplies. negotiate a compromise which required that cave exploring be done only in the company of a villager. Next trip into the cave we came across an almost transparent crayfish with internal organs visible. Before we had a chance to collect it, our companion grabbed it and as soon as we exited, cooked and ate it!!

We have mapped about half a mile of passage and systematic exploration and collection of specimens is continuing. At the moment we are stopped at the bottom of a 40 ft waterfall and will need to bolt our way up to proceed.

(above material derived in severely edited form from <u>CEGSA Newsletter</u> Oct - Jan 1972, and <u>JSSS</u> 15 (10) DOWN UNDER ALL OVER

. . NEWS FROM AROUND THE SOCIETIES

Not very much to report this issue owing to the fact that it follows closely behind the September issue so that not much more news has come to pass . . .

has conferred Honorary Life Membership on Fred Aslin, a well-known, C E G S A hard working member of the Group.A very successful year of exploration is reported: the newly discovered Sand-funnel Cave at Naracoorte has gone over 1200 ft, and after many years work Sellicks Hill Cave at last looks as though it will go in a big way. This promising cave was first broken into by the Highways Department during construction work and following a draught, only a few rocks have to be removed. And of course there is still Victoria Cave.

No direct news received, but it is worth recording the excellent S C S co-operation between SCS and TCC which could serve as an example to mainland clubs. Agreements about cave numbering and exploration also extend on the social front - a joint film night was the attraction in September.

member Joy Whaite seems to have been ransacking Goulburn newspaper S S S archives and has turned up many fascinating historical references to Bungonia and Wombeyan. This is a hitherto almost completely neglected aspect of Australian speleology.

has at last completed its mammoth study of Mammoth Cave, Jenolan, the SUSS first such monograph on an Australian cave. It will be published in two parts by the Speleological Research Council Ltd, Sydney. Wiburds Lake Cave (Jenolan) is now the big goer, with a recent survey totting up over 5500 ft and revealing that the cave extends well beyond the surface limestone outcrop.

seems to be a watering place for working visitors from the mainland. T C C Recent visitors: Norm Poulter (HCG/SUSS), Peter Henley (WASG) and Noel White (NUSS/KSS). The 25th Birthday Party was a roaring success and some fashionable trog suits complete with ties were seen. Niagara Pot has been pushed down to 450 ft and is still going though the 3°C water temperature was enough to suspend work until summer.

for a university society has an unusually active trip list for this UNSWSStime of the year. The club newsletter <u>SPAR</u> is being produced very regularly now and has contained quite a few significant articles, notably on Bungonia.

HOLLOCH -

A REVIEW ARTICLE

by John R.Dunkley

LE HOLLOCH ET SON KARST (Das Holloch und sein Karst) by Alfred Bogli. Editions de la Baconniere, Neuchatel, Switzerland, 1970. (Supplement no. 4 to "STALACTITE"). 109pp., 28 figs., 7 tables, 2 key maps, 54 references. Text in German and French on alternate pages, photo-offset multilith.

Holloch (Hell Hole) is the longest cave in Europe (109.18km, or 69m.) and is second in the world only to Flint Ridge Cave, Kentucky. It is found in the remote Swiss valley of Muota near the village of Muotathal. Although entered as long ago as 1875 and visited by Martel and even opened briefly to tourists in 1900,only a few kilometres were known when the Swiss Speleological Society gegan exploration in 1948. Year by year, expedition after expedition has extended knowledge of the cave,which was the longest known in the world from 1955 to 1967.

Attempts have been made without success to break into the cave from alpine karstfields and meadows a thoudand metres above the entrance,without success. Although there are innumerable dolines and potholes, most are less than 20m. deep and the deepest is only 67m. They are invariably blocked with erratics from the last glaciation, indicating the great antiquity of the cave. Clav in the upper galleries appears to date from the Upper Pliocene and these levels can be correlated with preglacial stands in the valley outside. The incredible variety of lapies which has developed since in the alps above Muotathal can be attributed to the aggressive effects of the 2400mm (93") precipitation on a surface largely denuded and planed by Pleistocene glaciers. Almost all of this immediately goes underground and, together with some water from elsewhere, discharges 55 million cubic metres per annum at the efflux, below the cave entrance. This varies from a winter low of 10 cusecs to a summer flood of 176 cusecs, when much of the cave is inaccessible.

Most of the galleries have clearly formed in the phreatic zone as evidenced by the network pattern and elliptical cross-sections, though tributaries often follow abandoned phreatic tubes and modify them by vadose action. In some parts one walks up and down, up and down as passages follow the bedding plane corresponding to an ancient water table in this highly folded region.

Holloch is not well endowed with decorations. Its stark beauty is best appreciated by those with an understanding of subterranean hydrology and morphology : the elliptical phreatic pressure tubes, the corrasional rock mills, and the results of fluviraption and corrosion. In fact the sheer unbelievable power of water under high pressure.

The author of this book began his work in Holloch in 1946 and has continued since. His best known contribution to speleology, the <u>mischungskorrosion</u> theory, was formulated here. The German and French text does not help us foreigners appreciate this mind boggling cave and it is to be sincerely hoped that the Swiss Speleological Society will see fit to commission an English translation of this fascinating book.

"Nose karren", developed on exposed bedding plane at angle of 70



Alpine lapies field on near horizontal surface,





Rock Mill (about 1 ft. across and deep) formed by mechanical corrosion.



Characteristic elliptical phreatic pressure tube passage, Mixed weter corrosion hollows often form at the intersection of the bedding plane.

TASMANIA

by Kevin Kiernan

JUNEE - FLORENTINE

TCC has been surface surveying, linking on the surface Khazad Dum, Cauldron Pot and Niagara Pot. Niagara turned out 37' lower than Cauldron which in turn was about 100' above K.D. Doubts about Albert accuracy of survey expressed. Goede conned the University out of 101bs of fluorescein which he, Kevin Kiernan and a geomorphologist student tipped into The efflux was at Junee Khazad Dum. after 11 hours. Uni trips are good, ωe didn't have to get dirty going caving, just looked at one or two nige entrances to pass the time. Niagara is 450' deep and still going. SCS is chasing effluxes along Chrisps Road. TCC has recently finished several hundred feet of ladder in preparation for the coming summer's assault on Khazad Dum. Mainlanders who visited Khazad Dum after the Conference will be relieved to learn that a decent track in has now been cut.

ADAMSONS PEAK

SCS went looking under logs and behind bushes for rumoured caves but haven't even found the elusive dolomite yet.

MOLE CREEK

SCS has been surface traversing on Mole Ck system at last. Only little bits of cave so far. Survey postponed for solid think after_striking magnetic deviation s of order 10° in Georgies Hall (MC 201). Kubla Khan touristed again.

POSTSCRIPT

1971

FOR

WESTERN AUSTRALIA

by Peter Henley

The lack of news from W.A. seems to be brought about by the involved initiation procedures which amongst such tasks as drinking grog while hanging upside down in a pothole full of vipers, includes an oath of secrecy. However, leaks do occur so here's a little information . . The South West - Augusta region is still popular but other areas have been visited from time to time. Long drives in often harsh conditions tend to keep cavers in the South West. Water levels in Easter Jewel complex at Xmas 1970 were lowest in about 10 years and the first duck in Easter was dry again. Deeondeeup Cave (old tourist) has been closed to cavers for 10 years. The water passage from Jewel (found by Lloyd Robinson) was found navigable and L.Robinson, W.Stengl and P.Henley went through in January 1970. Also in January 1970 a lot of survey work was carried out and cave positions about Jewel were accurately marked: with RDF An amusing feature was the equipment. siting of the toilet block right over the Organ Pipes!!

W.A. Conference veterans may be interested to hear of an extension of ConferenceCave towards Connellys Cave in a still not fully explored stream passage. This system, part of Mammoth Cave system, is beina surveyed to assist the W.A. Museum in studies of fossil remains. Other caves in the area have been gated and grilled but vandals have nevertheless managed to break in.

It is now 2 years since I foolishly offered to rehabilitate the Newsletter rather than see it taken over by one society where it would have languished for ever. Its standard is now, I hope, the highest of any serial in Australian speleology, due to the active assistance of

people like Ted Anderson, Andrew Pavey, Ian Wood, Norm Poulter and John Holliday, and the encouragement of ones like Greg Middleton, Albert Goede, Kevin Kiernan, Ian Bogg, Henry Shannon and of course EHS. And the perception of those too numerous to mention who know that only a national body with its combination of cooperation, conventioneering, competition and caving can eliminate parochial, petty power politicking and raise the standards and image of speleology overall. I hope the next Committee has the good sense to keep a good thing going.

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