

AUSTRALIAN SPELEOLOGICAL FEDERATION

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Junea Cave (Junee Rising)

JUNEE-FLORENTINE

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ASF NEWSLETTER

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ASF NEWSLETTER

AUSTRALIAN SPELEOLOGICAL **FEDERATION**

WORD FROM THE PRESIDENT

Conservation continues to be one of the major issues facing Australian speleology. This is not just because we have become more aware but rather mining is booming and like all booms, it is running an extremist course. Colong and Mt Etna are known to all of us, Marulan and Buchan are now moving into the limelight. Some Tasmanian areas are threatened and the most recent news includes a possible threat to the fabulous caves of south west Western Australia. There is little doubt that caves are under heavier threat than ever before in this country. This brings me to the few points which I think are important to us all.

We must firstly give very careful attention to the validity of our own arguments. The mining industry recently comforted us all by pointing out that their operations affect only 0.02 percent of Australia's land surface and by highlighting their rehabilitation of mined areas. Their arguments are valid in some situations but where limestone is concerned they are sheer nonsense. The unfortunate reflection is that I have often heard conservationists use the 'gross percentage' kind of reasoning.formalized records which turn our So perhaps we are hoist with our own petard.

Secondly, we have given inadequate. attention to the fact that a cave or cave area is only part of a much wider natural and environmental system. Lloyd Robinson pointed out in a recent letter how the south western caves could be damaged by mining in surrounding areas, not by or during the mining, but by long term changes in the total environment resulting from the mining and accruing of years afterwards. Almost on the same day I received details of the threat to the unique Devils Hole Pupfish of Nevada, which has survived since the Pleistocene in a single isolated colony; it is now threatened with extinction not because of direct damage to Devils Hole but because of the accumulated effect of irrigation pumping many miles away.

Finally, I am deeply concerned about the way in which we are often delayed and disadvantaged in conservation arguments by finding ourselves without adequate records or maps of our own findings. We cannot afford to wait until an area is threatened to accumulate and systematically record information. This must be done over a long time and in a systematic way. We must not depend on data hidden away in personal memory or personal notes, but rather upon adequate exploration into hard data to support any argument we may later have to mount.

> ... ELERY HAMILTON-SMITH

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 sent circulars in the near future.

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 later.

ADDRESS CHANGE - HIGHLAND CAVING GROUP

HCG wish to announce that their address has been changed from that shown on the inside front cover; the new address is - 44 King St, ST MARYS, NSW 2760 -

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 (6 days)
- 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

VISIT BY BRO. NICHOLAS

Once again Sydney cavers had the opportunity in August to welcome Bro Nicholas on his now regular swings through this part of the world. He spoke to HCG, MSS, SSS and SUSS on the neutral ground of the Bankstown Conservation Society.

OVERSEAS VISIT BY MR R. SKINNER

The popular mamager of Hastings Caves in Tasmania, Roy Skinner, has been recommended by the Tasmanian committee of the Churchill Trust for a Churchill Fellowship to study tourist cave management overseas. The Federation has supplied him with a number of contacts overseas and his itinerary will include the United States and several European countries. We wish him well and trust that his findings will be of benefit in tourist caving throughout Australia.

CAVES OF AUSTRALIA - ERRATUM

On page 11 of the last issue of <u>ASF Newsletter</u> the heading should have referred to Mullamullang as no. 2 in the series, not no. 4 as shown

CONSERVATION ACTION

COLONG

No-one enjoys a good stir so much as this Editor, so long as it's constructive and productive. So no-one was more disappointed when Associated Portland Cement Manufacturers (Australia) decided to move its Annual General Meeting to Melbourne this year. For the price of a share and contribution to Colong Committee's coffers, a good time was had by all at the company's expense in 1969 and 1970. The Melbourne move turned out to be bad strategy. Several hundred conservationists, rounded up by Harvey Cohen (ex-CEGSA).made 1971 even more memorable and produced a bonanza of publicity and cracked APCM's cement a little more. The directors attempted to ram through a motion empowering themselves to decline to register transfers of less than 20 shares, a thinly disguised essay at disenfranchising potential one-vote dissidents. However an astute conservationist objected that only 20 days notice of motion had been given, whereas the law requires 21. Undeterred, the chairman duly declared the motion passed by about 18 million to 1800 votes. However, under threat of an injunction the company had to later declare the resolution invalid and will need to wait another year to try again. In the meantime, the probability that Colong Caves will be entirely reprieved grows day by day.

LAKE PEDDER

(EXTRACTS FROM

AN

ANONYMOUS

CORRESPONDENT)

The fight to prevent flooding of 200 square miles of south west Tasmania has heightened recently. The Lake Pedder Committee is raising money by selling postcards showing Lake The postcards are being distributed to all interested, and it is recommended that suitable letters of protest be addressed to the Premier, Mr A. Bethune, c/o Parliament House, Hobart. Similar complaints could also be made to the Federal Minister for the Environment, Mr P. Howsen M.H.R., Parliament House, Canberra. The Federal Government secured bridging finance for the scheme during the construction period, but Mr Howsen has refuted argument against a referendum, mamely that Commonwealth/ State financial agreements were so tight as to prevent implementation of an alternate scheme. The State Government is not interested, but a 17% increase in the price of household electricity (but not industrial), making it the second most expensive in the country, has incensed the public and press. My informant seemed very disappointed at the lack of missionary fervour on the part of speleological societies. Apparently the only mainlanders to do anything were SUSS. Yet the scheme directly or indirectly poses a threat to large areas of more less totally unexplored limestone in the south west. He concludes :

"I am convinced that if we can stop the flooding of Lake Pedder, we will be a long way towards stopping flooding of caving areas in the south west in later projects. If we don't win Pedder we will probably have virtually no chance of winning later battles."

CAVES AND KARST

OF

JUNEE - FLORENTINE,

TASMANIA

by Kevin Kiernan

PROBABLY THE MOST EXCITING CAVING AREA IN AUSTRALIA TODAY, JUNEE-FLORENTINE IS AN EXTENSIVE LIMESTONE BELT TOTALLING ABOUT 50 SQUARE MILES IN SOUTH-WEST TASMANIA, ONLY 60 MILES BY ROAD FROM HOBART. IT CURRENTLY CONTAINS THE TWO DEEPEST CAVE SYSTEMS ON AUSTRALIA, AND VIRTUALLY EVERY TRIP RESULTS IN NEW DISCOVERIES . . .

The earliest settlement occurred in the late 1800s at Fitzgerald, a small town in the SE corner of the belt, and caves were quickly noted. In 1925 the discovery of osmiridium in the Upper Gordon Valley resulted in the construction of a track across the limestone to the now abandoned town of Adamsfield, and one of the ill-fated Dawson settlements wehere cattle farming was attempted in the Florentine. Unfortunately, documentation of the cave discoveries of this time is lacking, but at least this has meant that today's cavers are having the pleasure of "discovering" some caves which were probably known long ago.

In the 1950s when timber interests moved in, the town of Maydena appeared a mile west of Fitzgerald, and the ruination of the area's scenery commenced. But the pangs of progress at least provided an extensive network of logging roads which made the limestone more accessible. The first organized caving was in 1946.

The area is one of rugged relief, the dominant feature being Mt Field Plateau, a glaciated mass rising to an elevation in excess of 4000ft. The limestone outcrops in the form of a large "L" shape south and east of the plateau in the valleys of the Tyenna and Florentine Rivers. Topographically the area lends itself admirably to division into the Junee and Florentine areas, although the two may well be linked underground.

Many of the caves of the Junee area lie within the Mt Field National Park but in the Florentine, Growling Swallet is the only significant cave protected - others, including Tassy Pot and Welcome Stranger were in a part revoked to allow exploit= ation of timber. Junee Cave itself is outside the park but uurrounded by a 40acre forestry reserve. Australian Newsprint Mills Ltd restricts access to their roads making for good safety and cave preservation, but the main protection is the rugged terrain.

The Florentine Valley has been geologically mapped by Corbett (1963). A rough sketch map of Junee is given by Hughes (1957) who also gives some information on the limestone, as does Jennings (1955). The caves are developed in Gordon Limestone a hard, dense, well bedded and widely jointed rock of Middle to Upper Ordovician age. The rock is generally of high purity, a dark blue colour when fresh, weathering to light grey, and has a maximum stratigraphic thickness of 5000ft in the Florentine. The limestone overlies mudstone which in turn overlies lower Ordovician quartzites, breccias and conglomerates, then an Upper PreCambrian (?) dolomite which outcrops at Tim Shea. This is regarded (Goede 1967a) as a separate karst area although the outcrop of the two formations is as close as several hundred yards at the Gap.

Overlying the limestone on the eastern margin of the Florentine and in the Junee area the limestone is unconformably overlain at approximately 2300 ft by a near horizontal succession of Permian sediments, generally comprising the basal Wynyard tillite and marine mudstones including the Fern Tree and Malbina groups. A thick sill of Jurassic dolerite caps the plateau. The Paleozoic succession has been folded on a large scale in the Middle Devonian. Tertiary faulting has affected most formations and many of the major caves occur in the fault zones.

The area experiences a cool temperate climate with rainfall of 50" p.a. As a result dense rain forest covers the lower mountain slopes. Thus conditions for solution of the limestone are favourable, with the dense vegetation and high precipitation ensuring that large quantities of acid waters, including meltwater, pass underground quickly, initiating cave development. Over much of the area solution has progressee sufficiently to leave the limestone exhibiting its typical mature expression as button grass plains i.e. flat swampy ground close to local base level. Where the limestone is protected by more resistant overlying rocks it attains its greatest relief, over 1300 ft at Junee and 800 ft in the Florentine. The main caves are restricted to the higher relief areas.

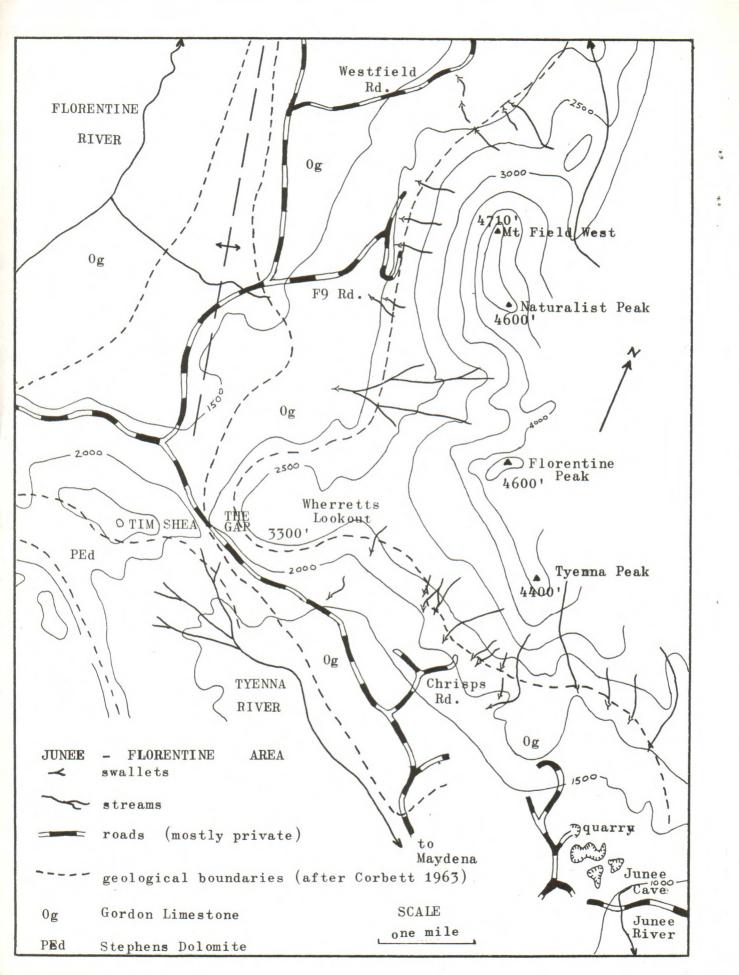
Most of the caves lie at an elevation sufficient for them to reach great depths without their entrances being adversely affected by frost shattering. However, between the Gap and Chrisps Road, the limestone reaches an elevation of perhaps 3000 ft, not far from the tree line, and frost shattering is very evident with many of the large holes blocked and the limestone standing out as cliffs of broken rocks 100 ft high.

THE CAVES

The caves of Junee - Florentine are primarily of a vadose nature serving as conduits for the water off the mountain. Drainage from the dolerite and Permian is generally diverted underground as soon as it reaches the limestone. Thus the unconformity is marked by a series of swallets, some being very active while others are almost abandoned. Many contain Pleistocene glacio-fluvial gravel deposits. The gradient of these caves is invariably very steep, for example Tassy Pot descends 800 ft in less than 200 ft horizontally, and of a potential descript to its efflux of 1240 ff in $2\frac{1}{4}$ miles. Khazad Dum drops 1000 ft in the first $\frac{1}{2}$ mile. Although many swallets are known, few effluxes have yet been located, but for very minor ones dotted about the Florentine. However the main efflux for the caves in the south is Junee Cave.

All the tributaries of the Florentine River from off the limestone go underground for at least part of their course and even the Florentine itself loses as much as half its water to underground meander cuto fs. Lawrence Ck, a sizeable stream, disappears for about 2 miles of its course. The area is of low relief, much of the cave probably permanently waterlogged. The course can be roughly traced by a series of dolines leading to a most impressive rising to the north-west. The stream probbly does not sink to a particularly great depth and still floods along its old surface bed in winter.

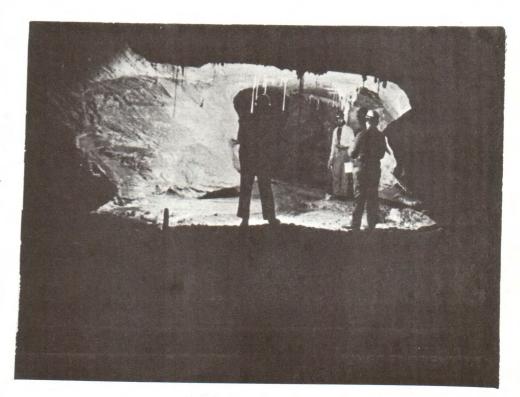
In the north, Florentine streams once having found their way underground generally have a fairly uninterrupted course to flow into or rise near the River. South of Mt Field West, however, a major anticline brings the underlying mudstone to the



JUNEE-FLORENTINE



Typical rain forest environment in the Florentine



In Welcome Stranger



In the doline at entrance to Khazad Dum

surface, cutting off underground drainage from the eastern margin of the valley to the Florentine River. Some risings are known, but appear insufficient to account for all the water sinking near the unconformity, leaving two alternatives for the fate of this water. Either it deflected along the strike to join the River several miles to the north, ot it must flow east or south under the mountains of its catchment. Growling Swallet, which takes the biggest disappearing creek in the whole area trends a long way SE to a sump. Also, a large flow disappearing below Mt Field West is not present 800 ft below the surface in Tassy Pot, 450 ft further down a dry valley. The slight horizontal development at the bottom of Tassy Pot trends east. Thus it would appear that if the water sinking here effluxes anywhere it may well be in the Junee area, probably between the Gap and Chrisps Road. This would invloved underground breaching of a major surface drainage divide of Wherretts Lookout and Tyenna Peak – an underground course of over 2 miles – plenty of scope for a big cave.

Above Chrisps Road, 6 major streams, the 4 largest averaging between 2 and 5 cusecs, sink into a stretch of hillside $\frac{3}{4}$ mile wide. This water presumably reappears at a large rising reported to exist near the Tyenna River, although this could even be tied up with hhe disappearing water from the Florentine.

Between here and E. Junee, a lot of water sinks into caves such as Satans Lair and numerous impenetrable swallets. Again there are insufficient risings known. The main feature at E. Junee is the Junee Cave rising itself. This cave pumps out an impressive average flow of 30 cusecs, and a minimum of 10, but is penetrable only 150 ft to a sump. The Junee system is fed by numerous small streams, the two largest being Khazad Dum (proved 22/8/71) by A.Goede) and presumably Cauldron Pot (2-3 cus.) which are $2\frac{1}{2}$ miles to NNW. Cave diving at the rising has revealed the presence of 550 ft of water filled passage up which the river rises from a depth of 55 ft, conditions being too dangerous to proceed beyond this point. Long efforts to enter the Junee system from above have only recently begun to bear fruit with the exploration of Khazad Dum, although even this has by no means exhausted the possibilities, having been explored for only $\frac{1}{2}$ mile towards the rising, leaving nearly 2 miles still unknown. The Junee master cave, if it exists, must really be enormous surface expressions of it include uvalas $\frac{3}{4}$ mile across and over 100 ft deep, $\frac{3}{4}$ mile NNW of Junee Cave.

The caves provide good sport. They are renowned as being deep, wet, grotty, physically exacting and occasionally dangerous. The danger arises mainly from the wet, cold conditions which expedite the onset of rxposure, and the unstable nature of some of the caves. This losseness is occasionally structural, and due to piles of non-limestone rocks, including large dolerite boulders, littering many of the streamways.

The lower relief areas of the Florentine contain quite a few horizontal setems some of which, like the mile long Welcome Stranger, are quite extensive. These are about the only decorated caves in the Junee - Florentine area of any significance. The tourist caver is perhaps the least well catered for in this area.

In general this is a tremendously exciting and rewarding area. It is a place where exploration is in such a young stage that major swallets can still be found with ease. It is the home of "insignificant" caves 200 ft deep, of ladder drops up to 270 ft and caves requiring 20 hour expeditions to bottom. Big horizontal systems are promised. Junee-Florentine has something for everyone.

(N.B. Cave names are omitted from the map for conservation reasons)

CHECKLIST OF MAPS

The caves of the area are listed in three categories. The first consists of caves named but as yet unnumbered the second of officially numbered caves together with the area prefix JF, the third of caves both unnumbered and unnamed. The caves in the second and third categories are listed with a number for reference purposes but this in noway represents any Tasmanian cave numbering Other small holes are known in addition to those listed. The list is current to 23/8/71.

NAMED, UN-NUMBERED

ANTICLIMAX: 60ft. pot, no continuation (J)
DEEFOUR POT: single shaft of 130ft. blocked at bottom; discovered 1960. (J)
THE DUNGEON: Small cave near Growling Swallet with two 20ft. shafts and containing numerous bonds. (F)
FROG POT: Small cave 125ft. deep with ladder drops of 90ft. and 30ft. separated by a short tunnel. (J)
GROWLING SWALLET: Large inflow cave 550ft. deep and subject to flash flooding; noise of water makes speech inaudible; survey Gr. 4 to depth of 240ft.; fossils and good glow-worm display. (F)
LAWRENCE CREEK CAVE: small cave with only 30ft. negotiable; near JF23 and JF24. (F)
LITTLE DIPPER: small cave 80ft. long and 70ft. deep; discovered 1946; survey Gr. 4. (J)
PILLINGERS CREEK CAVE: dry cave at least 325ft. deep; 170ft. pitch which can be by-passed; very dangerous talus of rounded dolerite boulders. Gr.4. (J)
ROTTEN CAVE: Small cave with decaying decoration.(J)
RIFT CAVE: Inflow cave with small stream to depth of 430ft.; discovered 1948, rediscovered and named 1962. (J)
RATANS LAIR: Swallet with series of ladder pitches to depth of 470ft.; longest pitch 120ft. and 80ft.; well decorated, very large terminal chamber with 80ft. waterfall entering through centre of ceiling. (J)
SETTLEMENT CAVE: Cave near old settlement taking part of the Florentine River in wet weather; 600-700ft, with three

10.

SETTLEMENT CAVE: . Cave near old settlement taking part of the Florentine River in wet weather; 600-700ft. with three 13

entrances. (F)
UDENSALA: Small inflow cave with loose talus to depth of 100ft. (F)

NUMBERED

JF1: 'Dry' cave app. 150ft, deep; strong draught but becomes too tight; a few chambers. (J)
JF2 CAULDRON POT: Spectacular swallet; 14ft. pitch beside waterfall into large rift; water into talus at bottom. (J)
JF3: Pot 160ft, deep; no continuation. (J)
JF4 & 5 KHAZAD-DUM: Swallet at least 950ft, deep being Australia's deepest cave; several ladder drops of 20-90ft; at least one mile of passages mapped; exploration incomplete.
JF6 CASHION CREEK CAVE: Small stream cave 800ft. long with good decoration and interesting fauna.
JF7 FRANKCOMBE CAVE: Cave at least 3000ft. long; good decoration and interesting fauna (F)
JF8 JUNEE CAVE (Junee Rising): Outflow cave being the source of the Junee River; discovered in 1890 (?). (J)
JF9: Steeply sloping bedding plain tunnel blocked 50ft. in. (J)
JF10: Small swallet with restricted stream passage and spectacular ladder drops to depth of 320ft.; exploration incomplete. (J)
JF11 RAINBOW CAVE: Small swallet with 200ft. of passage ending in deep pool (F). in deep pool (F).

JF12: Unexplored pot with 60ft. initial drop. (J)

JF13 DRIBBLESPIT SWALLET: Wet pot 300ft. deep with main pitch of 180ft. (J)

JF14: Pot with initial drop of 70ft.; passage continues unexplored. JF14: Pot with initial drop of 70ft.; passage continues unexplored. (J)
JF15 HAIRYGOAT HOLE: Dry cave 150ft. deep with short ladder drops; constriction at bottom (J)
JF16: 30ft. shaft with unstable floor; small side chamber with numerous bones. (J)
JF17: Small cave 60ft. long and 15ft. deep in 15ft. cliff face. (J)
JF18: 20ft. deep cleft; no extension; numerous insects. (J)
JF19: 30ft. hole in limestone face in 30ft. deep sinkhole; small extension. (J)
JF20: Two small holes joining at depth of 30ft.; no extension; fossils; adjacent to JF19. (J)
JF21: Large shaft 30ft. deep, no extension (J)
JF22: 200ft. deep nothole; small vertical entrance with two JF21: Large shart 30ft. deep, no extension (J)

JF22: 200ft. deep pothole; small vertical entrance with two
extremely narrow squeezes; chamber 50ft. down then steep slope to
110ft. fitch; dead end. (J)
JF23: Double entrance near Lawrence Ck. Cave to complex system
50ft. deep; subject to frequent flooding; not fully explored. (F)
JF24: Small cave near JF23 explored to depth of 50ft. and still
going strong; incredibly muddy; subject of flooding. (F)

JF25: Small cave SE of Welcome Stranger with small entrance chamber and 150ft. of narrow passage. (F)
JF26: Cave S. of JF25; choked 15ft. in; no potential. (F)
JF27: Small cave close to JF26; choked 30ft. in; potential dig. (F)
JF28: Small swallet in large doling with about 10 unexplored holes; great scope for exploration in rockfall. (F)
JF29 NIAGARA POT: NIAGARA POT: Swallet of Cauldron Pot; 300ft. deep and still going strong; impressive waterfall at entrance (J) JF30: Unexplored inflow cave taking small part of Junee River; can only be entered in very dry period. (J) JF31: Small cave near JF30 with 300ft, of wet passage explored; continues slightly larger on far side of squeeze (J). JF32: Small cave near JF33; about 50ft, deep. (J) JF33 DEAD HORSE CAVE: Tiny cave discovered 1946; horse skeleton at bottom. (J)

JF201 RESCUE POT: 350ft. deep swallet with small stream; 90ft. ladder drop; a few hundred feet of passage; scene of rescue of two "amateur" cavers in 1969; dangerous talus. (J)
JF202: Impressive swallet with 5 cusec stream hammering over waterfall into vertical entrance; pitches of 60ft. and 30ft. (latter in waterfall); virtually no passages; total depth 110ft.; virtually no passages; total depth 110ft.; virtually no passages; total depth 120ft.; virtually no passages; total depth 120ft. (J)
JF203 BONE PIT: Large dry cave 300-350ft. deep; numerous bones; discovered 1951. (J)
JF205: 30ft. pitch into chamber with aven. (J)
JF206: Swallet hole; access through dry entrance to depth of 100ft.; depth issuing from passages too tight. (J)
JF207 VOLTERA: Swallet of small stream in very large doline; wet entrance un-negotiable dry entrance blocked at depth of 50ft. (J)
JF208: Tiny horizontal entrance into large passage 500ft. long terminating in large chamber; some decoration. (J)
JF209: Dry cave in creek bank; corkscrews; not properly explored. (J) JF210: SESAME 1: Small cave in large doline; choked at depth of 50ft.; former swallet now dry. (J) JF211 SESAME 2: 30ft. pitch and short slope to further 50ft. drop into talus chamber; strong draught through hole in false floor; may 30 with work (I)

JF212: Unexplored pot with 20ft. drop. (J)
JF213: Unexplored small swallet; low entrance under cliff; might have to crawl. (J)
JF214 PYGMY CAVE: Small dry cave with two or three small chambers connecting by crawls; good decoration including long straws and moonmilk. (J)
JF215 ZULU POT: Short horizontal passage to ladder drop of 170ft. with ledges at -90ft. and -150ft.; loose walls; passage in wall 20ft. up from bottom not explored. (J)
JF216: Unexplored cave; walk in entrance to ladder pitch. (J)
JF217: Unexplored pothole. (J)
JF218: 50ft. pot with short passage at bottom. (J)
JF219-220: Small cave with decaying decoration. (J)
JF221 OWL POT: Large dry cave 250ft. deep with two sizeable chambers and 110ft. ladder drop; decoration damaged by timber trucks passing overhead. (F)
JF222: Small pot beside Tassy Pot: 40ft. deep with 25ft. ladder drop. (F)
JF223 TASSY POT: Severe pothole 800ft. deep with ladder drops of 150ft., 90ft., 270ft., and an 80ft. chimney. (F)
JF224: Small pot 70ft. deep; two 30ft. pitches separated by a short slope. (F)

JF225 THREE FALLS CAVE: Small cave with some decoration, picturesque setting behind largest of a series of waterfalls dropping 60ft. into doline; perhaps the most spectacular entrance at Junee-Florentine; magnificently exposed unconformity at entrance. (F) JF226-7: Small stream cave 150yds, long with entrances at both JF226-7: Small stream cave 150yds. long with entrances at both ends. (F)
JF228: Small stream cave explored for 1000ft.; no decoration; subject to flooding; sumps; exploration incomplete. (F)
JF229 WELCOME STRANGER: Outflow stream cave with over a mile of well decorated passage developed on several levels. Longest and best decorated cave at Junee-Florentine. (F)
JF230: Very small grotto (J)
JF2351: Small swallet explored to depth of 60ft.; still going strong. JF251: Small swallet explored to depth of bolt, still going storig.

(J)

JF252: 70ft. pot near creek; horizontal constriction at bottom. (J)

JF253: Small gotto 60ft. long. (J)

JF254: (2/5/71) Pothole in large doline at elevation of approximately 3000ft.; short horizontal passage to 80ft. drop. Dead end. Interesting collapse cave at least 50ft. long inside of doline — branching passages along inside of doline — branching passages along

UN-NAMED, UN-NUMBERED

- 1. 2. 3-5
- Small cave behind Junee Cave with one chamber (J)
 60ft, pot near Rift Cave, (J)
 Three unexplored holes above the Gap. (J)
 Outflow cave being the source of Chrisps Creek; apparently fairly large; discovered 1940's. (J)
 Small unexplored swallet below F9 road; wet entrance too tight, dry entrance with 20ft, drop through loose rockfall. (F)
 Small swallet below F9 road; 40ft, deep; 2 short ladder pitches into small chambers seperated by tight 20ft, crawl ends in talus blockage with draught. (F) 8.

- ends in talus blockage with draught. (F)

 Small cave on F9 road with 33ft. ladder pitch into chamber; no continuation. (F)

 20ft. deep cave near JF218. (J)

 25ft. shaft near JF218 with chamber at bottom. (J)

 Small cave near JF218; chamber and sloping passage to depth of 20ft. (J)

 60ft. pot in valley west of (Pygmy) Cave Hill; partial choke by false floors, talus blockage at bottom. (J)

 Small swallet 100ft. deep near JF4-5; app. 700ft. of passage; possible link to JF4-5 by digging. (J)

 Small efflux near Cashions Ck. Cave; generally very restricted and can be followed for only 60ft. glow-worms and other fauna. 11. 12. 13. 14. 15.
- 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27.

- 32
- Small swallet 100ft, deep near JF4-5; app. 700ft, of passage; possible link to JF4-5 by digging. (J)
 Small efflux near Cashions Ck. Cave; generally very restricted and can be followed for only 60ft, glow-worms and other fauna.

 (F)
 Very small cave NW of Frankcombe Cave; pool in bottom; 30ft, deep. (F)
 "Brandenburg Concerto No 1 Pot": Small swallet 30ft, deep; dead end, short rock climb; near JF3. (J)
 "Bran. Con. No. 2 Pot": 60ft, pot near (17). (J)
 "Bran. Con. No. 3 Pot": Pot with small entrance near (18); bottom of entrance pitch not visible from 40ft, down. (J)
 Small cave NE of JF203 with low passage into chamber; 40ft, long and 15ft, deep. (J)
 Unexplored cave above JF203 with 30ft, entrance pitch to chamber. (J)
 Small unexplored (?) swallet below Growling Swallet track with entrance 5ft. x 3ft. (F)
 Deep shaft on ridge west of Frog Pot; no details. (J)
 Small swallet above Westfield Rd.; small drop to chamber; depth 40ft. (F)
 Shaft of 30ft, near Rotten Cave; no extension. (J)
 Hole near and possibly linked to main rifit in JF10. (J)
 40ft, pot near JF15; blocked at bottom. (J)
 Pot near JF25 with 65ft, free hanging pitch; a way through to a further 15ft, drop at the bottom may go; no draught. (J)
 Inexplored pot near (29) with long entrance drop. (J)
 Unexplored 100ft, pot near JF218. (J)
 Cave only 70ft, long south of the Florentine settlement; takes half the flow of the Florentine River cutting of an oxbow. (F)
 Small cave taking some of the Khazad-Dum water from the opposite side of the doline; short slope to 15ft, drop; exploration incomplete. (J)
 Unexplored pots SE of JF4-5. (J)
 Unexplored pots SE of JF4-5. (J)
 Unexplored pots ear Chrisps Ck. with 60ft, entrance drop. (J)
- 35-38
- 39. 40.
- Unexplored pots SE of 3F4-5. (J)
 Unexplored pothole near Chrisps Ck. with 60ft. entrance drop. (J)
 Unexplored hole near (41). (J)
 "Tims Cave": Large cave near the Gap; discovered and lost in 1925; may be Growling Swallet. (J or F?)

TOTAL CAVES LISTED = 132

REFERENCES

CORBETT, K.D. (1963) The Geology of the Florentine Valley Area (Unpub. B.Sc. Thesis) GOEDE, A., (1967a) Caves of Tasmania Speleo Handbook pp.256-272. GOEDE, A. (1967b) Tasmanian Cave Fauna — Character and Distribution Helectite 5 (4): 71-86. HUGHES, T.D. (1959) Limestones in Tasmania Geol. Surv. Min. Res. 10 (Tas. Mines Dept). JENNINGS, I.B. (1955) Geology of Portion of the Middle Derwent Area (Pap. Proc. Roy. Soc. Tas. 89) Also numerous copies of Speleo Spiel. Southern Caver and S.C.S. News.

CAVES OF AUSTRALIA

No. 3:

TROG DIP

by Ken Lancaster

BUCHAN BOASTS TWO LONG CAVES WELL KNOWN FOR THEIR SPORTING GROTTINESS - SCRUBBY CREEK CAVE AND TROG DIP. BOTH HAVE YIELDED MAJOR DISCOVERIES IN THE LAST FEW YEARS. BOTH LOOK LIKE BEING MASTER CAVES.

lrog Dip has been explored haphazardly over the years by Victorian cavers, three sumps being passed. A major advance in 1968 by Peter and Margot Matthews was a survey of the first 2000 ft in co-ordinate form. Readings taken over numerous weekends, camping nearby, with trips up to 14 hours, saw the completion of a high grade survey terminating some 100 ft prior to the vaults.

Two years elapsed before another VSA party was able to gain access to the normally sumped off system. During that period of non-entry speculative interest grew and those who were lucky enough to have ventured past the third sump to the Vaults in earlier times were looked upon with awe. Like the ever growing fish you caught last weekend, so too the Vaults grew bigger with stories of running for hours in a huge chamber with endless walls.

Consequently, there were five consecutive ventures to crack the third sump in April and May 1971, all being failures. Some parties were stopped by flooding and others were misinformed as to the directions and took a wrong path to the Sewers. It wasn't until the sixth trip, a week later, that the third sump had an airspace and draught. The draught at the peak of its cycle howls through the Knee Bender with such velocity as to simulate the sound of water thrashing down from just beyond the corner. Interesting!!

Most of the old mysteries were then cleared up as several survey trips were run. An insight into the whole system has now been obtained, but this has created a new complex of problems.

DESCRIPTION

Trog Dip is an outflow cave approximately 3950 ft in length, running almost due south through a hillside with little variation in level. The first section is a rather obvious path through chamber-like passages until an extensive rockfall is negotiated. The onward track, although not quite as elusive as Scrubby Creek (when you are leading a party of six and suddenly you become the sixth person, that's elusive!) it takes a few trips to familiarise oneself without being indecisive.

Once past the rockfall the main stream passage is entered. For approximately 1800 ft it closely averages 5 ft in width with varying heights between 6 and 20 ft and only one or two small chambers in between to the first sump. Common beliefwas that if water was flowing at this stage the third sump would be full, however recent efforts have indicated the possibility of a new system emerging between the two.

From the sump the passage leads into the Sewers section, a most formidable 420 ft crawl through 2 ft x 2 ft mud tunnels to where it terminates just 50 ft from an extremity in Hopes Cave, with a 4 ft level difference. A linking passage most likely but a plunging roof joining the mud has been a stopper to our efforts.

A right turn after the first sump continues the main passage to the second sump. A not-so-obvious path through the Hip Crusher of minute dimensions, then on to Gravel Grovel. This section, normally only 40 ft long, feels more like 400 ft. The floor consists of the most glutinous mud available in Buchan and with a roof height of only 12-15 ins (fortunately flat), this is extremely hard going. After one exhaustive survey trip it took each member, with equipment, little short of an hour to hegotiate the crawl. Carbide lamps are renowned for extinguishing here. Any equipment has a tendency to gain in volume from the adhering mud.

The third sump is usually flooded, resulting in mant missions being aborted. A particularly treacherous section with water, as both roof and floor slope in addition to a slight turn. After a further 80 ft of squeezes and crawls the Vaults are entered.

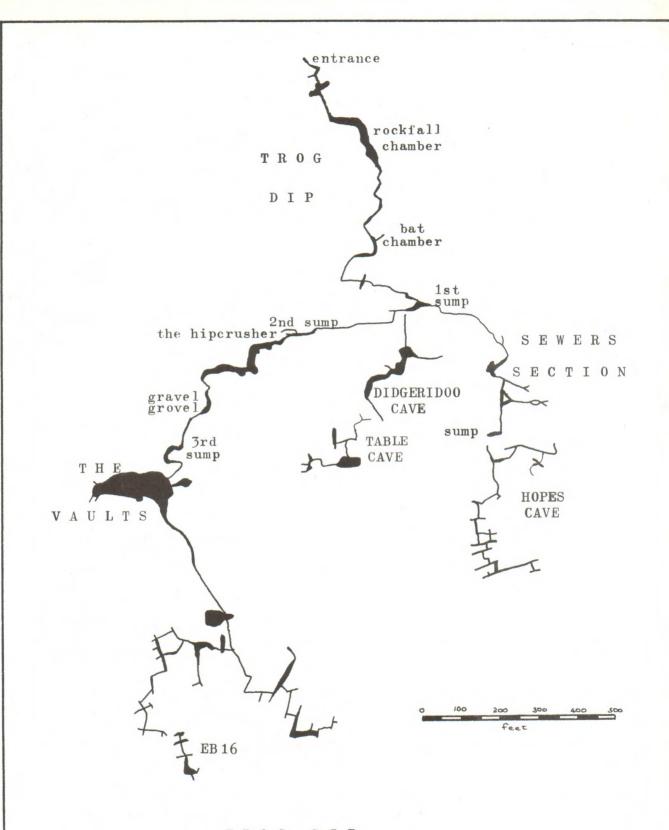
This section is of strikingly immense dimensions which never cease to amaze me; it makes a vivid contrast with the prior 2000 ft stomach crawl. The Vaults, situated about midawy in the system, represent a puzzle, as the question arises as to why so much development took place at that particular spot. Extending some 200 ft west the Vaults terminate in a massive rockfall. It is possible there may be a further passage beyond the rockfall, but recent efforts have failed to find one. It is also possible that there may be abother system entering from the ceiling.

One of the interests here in the Vaults is a thick layer of deposited clay over the floor - large stone blocks some 20-30 ft high with mud adhering firmly to all sides. As the rest of the system is relatively clean, the point is raised as to the origin of the mud. Possible flood marks have been noted up to 20 ft on the wall, suggesting one theory. The theory of a system entering through the ceiling has not yet received any backing evidence.

The main passage south to the junction is wide and easily negotiable. Beyond, the structure changes from apparent meander to definite joint control, with passages gradually diminishing to inaccessible size. Some of the southern extremities coincide with sinks down a valley as indicated by the combined surveys to date. EB 16 is such an example. It is some 30 ft deep, a fissure containing a large amount of broken glass and vegetable matter. Needless to say, so is the corresponding section of Trog Dip. However, a solid wall of blue limestone provides adequate protection from the would-be blaster.

GENERAL

As a whole the hydrology of this system must be unique, linking up a total passage length of 6000 ft in a rectangular area only 1600 ft x 800 ft. The area has seven main caves, six of which are considered to be tributaries of Trog Dip, which itself has approximately 3900 ft (excluding the Vaults) and is essentially forked in shape. At its extremities Didgeridoo Cave to overlie Trog Dip but



 ${f T}$ R 0 G D I P and nearby caves

there is 90 ft of limestone vertically between them with no apparent link. A voice connection has been made between Didgeridoo and Table Cave.

Trog Dip has a catchment area of something like 4 million square feet. And at a rough estimate over 8 million litres of water are caught if only 70 points of rain fall. By a quick calculation, $2.5 \times 10^{-6} \%$ of this total volume would fill the third sump. However, as yet there is nowehere near enough information to indicate how quickly it would sump off, but present work is directed at finding an answer. We have, for example, been able to obtain a day-by-day check of rainfall in the area for the last 12 months. to provide an expected clearance time.

RATHER FORTUITOUSLY, ON THE LAST DAY ON WHICH I HAD HIRED THIS TYPEWRITER, THE NEWS WAS RELEASED THAT THE NSW GOVERNMENT WAS AT LAST PREPARED TO COME TO A COMPROMISE ON THE COLONG ISSUE. I ASKED WARWICK COUNSELL, AN unswas MEMBER WHO WITH MILO DUNPHY OF THE COLONG COMMITTEE HAS BEEN FIGHTING THE BUNGONIA SOUTH MARULAN END OF THE BATTLE, TO FILL WHAT LITTLE SPACE WAS LEFT IN THIS ISSUE. I WISH TO THANK HIM FOR HIS ALMOST IMMEDIATE RESPONSE.

COLONG
-- A COMMENT ON THE
LATEST DEVELOPMENTS

by Warwick J.Counsell

On 2/11/71 State Cabinet announced it would revoke leases held at Colong Caves by Associated Portland Cement Manufacturers (Aust.) Ltd if the company would accept in exchange proposed extensions of its leases at South Marulan, opposite Bungonia.

While everyone acclaims this decision to "SAVE COLONG", do the extensions to APCM(A)'s quarry at South Marulan/Bungonia really represent an intelligent alternative? These extensions to the company's leasehold comprise 7 acres of former reserve which was set aside in 1962 to protect the north side of the Bungonia Gorge. It was gazetted out of the Reserve on 18/9/70 and on the same day at $10 \, \mathrm{am}$ APCM(A) made application for a mining lease over the area. (Note that applications for Mining Leases may not be made over any part of a Reserve until an announcement is made in the Government Gazette, releasing the land from a Reserve) (which had not occurred). Was this action by APCM(A) due entirely to rapid communication?

Though relatively small this extension is atop precipitous cliffs at the eastern end of Bungonia Gorge, 1000 ft above the creek, and represents a short-sighted addition to a quarry which is already potentially dangerous to bushwalkers and employees. Its operation by APCM(A) on the northern side of the gorge has been the subject of complaints by locals and visitors for many years. Despite statements by the company that nothing is being dumped over the edge, and claims by the Mines Department that operations are under close scrutiny, the rubble screes emanating from the quarry have grown steadily bigger over the last few years.

I take this opportunity to appeal to anyone who has ever seen rubble or waste being dumped from this quarry into Bungonia Ck to write to me at the address below supplying where possible dates, times and nature of occurrences, and whether any photographs are available. This could enable action to be taken to ensure that any escalation of the quarrying activity does not force closure of the Bungonia Gorge.

W.J. Counsell, 4 / 1 Queensborough Rd, CROYDON PARK, NSW 2133

DOWN UNDER ALL OVER

news from around the societies

- have continued systematic surveying and exploration at Abercrombie and B M S C Tuġlow. Trips also to Colong, Blue Rocks, Bungonia and the lava caves in western Victoria. The May issue of <u>Oolite</u> has some interesting historical material on Cliefden and Belubula areas.
- Proximity to limestone (is there a club in Australia that's closer to CQSS) ensures a phenomenal number of trips. As well as the many trips to Mt Etna and Limestone Ridge, reports are turning up on exploration at seldom or never before visited places like Nebo(sandstone caves, aboriginal paintings and carvings further possibilities), Stanage Bay (3 small sea caves, one used as a nursery by Taphozous georgianus), Mt Bora (120 miles north of Rockhampton one cave in granite inhabited by T. georgianus), Taragoola (not far from Gladstone nothing much).
- No newsletters have reached the editor from CSS since the Maxwell C S S Newton extravaganza dated November 1970. That same issue reported that The Very Latest would fenceforth be produced quarterly but none have appeared so far as is known. The best one can do is report that President John Mendum reported last year that the society had discovered 120 ft cave at Bungonia, 200 ft extension downstream at North Deep Creek (Yarrangobilly), 60 ft extension in Bullio (Wombeyan), surveying and water tracing at Cooleman and Yarrangobilly, and photography and bone collecting generally.
- Have continued playing host to speleology at large. As well as the K.S.S usual crowd from Newsastle, visitors have come from UQSS, SSS, the Australian Museum and New England University. Mike Grey (Aust. Mus.) and Dave Horton (NEU) whizzed around with Col Carter et al. collecting spiders at Carrai and Yessabah. An abandoned dig in Carrai clearing has been started up again in July and much rock removal is now under way. Caves at Mt Pleasant and Windy Gap have been surveyed and numbered by NUSS.
- President Ron Groenhout has reported the main events for 1970-1 a N U S S search and rescue practice at Yessabah, run jointly with KSS and attended by 5 clubs, further mapping at Wallaringa Cave. This editor formed the opinion, though, that the most active thing about NUSS this year has been its little newsletter $\underline{\text{Cave}}$, which has appeared fairly regularly. And of course, cave numbering has been carried out in the Macleay at Mt Pleasant and Windy Gap.
- are going through a rather quiet period apparently, although Secretary 0 S S Ray Rowney has been very prompt in answering correspondence. As a result of representations about lack of information from 0SS, Greg Tracey has agreed to write something and we are looking forward to this and to a resumption of publication of $\underline{\text{Descent}}$.

- It's an active life for the average SSS member and one wonders how SSS they find time for their very large caving programme in addition to heavy social commitments, what with moon watching, mars watching green ginger and goon night (how's that again?), theatre parties and seminars on Jenolan and Wombeyan. Bungonia, though, heads the trip list on quantitative basis with Jenolan, where several projects are in progress, coming in second (see reports in detail on these areas. There was, of course, also the premier social event of the year, the dinner, again stolen by Miss Mary Gaudron's little irreverencies.
- reports a riotous and highly successful annual dinner attended by such S U S S notable ex-members as Alex Jones (speaking on "The PsychosexualAspects of Speleology") and Doug Miles (an involved story about a horse and a caver). Jenolan has again hit the headlines with several hundred feet of cave (re)discovered in Mammoth and another few hundred quite new passage located in Wiburds Lake Cave. In both cases artificial climbing aids have been introduced in attempts to scale schimneys.
- Revolutionary fervour struck at the AGM when heads rolled in all UNSWSS participated in the Revolutions save the Committee which survived almost intact. Most of the cave work has been done at Bungonia, but many trips have gone elsewhere. At Cliefden macrophotography of helictites helped support an interesting new theory of their formation, while at Tuglow surveying continues and water tracing have been attempted. Narrangullen provided a change of scenery, with cave diving, aven climbing, surveying, dog fights in motor boats etc. At Jenolan, UNSWSS participated in the $8\frac{1}{2}$ th Biennial Conference and helped locate 300 ft of new cave in Wiburds Lake Cave (see Jenolan report).
- Another monster issue of <u>Down Under</u> with some good news: the dam on U Q S S the Dumaresq River which threatened to flood some of the Texas Caves has been shelved indefinitely. Caving continues both in Queensland and at large there are reports on Jenolan, Punakaiki (NZ), Waitomo (NZ) and the Gazelle Peninsula (TPNG) as well as on several trips to Chillagoe, Wyberba (17°F in Queensland?), Texas, Mt Etna, Stradbroke Island (yes, there are some caves but they are hardly worth the effort of getting to), and Flagstone Ck (caves in alluvium).
- The club magazine Nargun seems to have established itself at a most vs A commendable level of consistency, punctuality and quality under the new management of Al and Julie Watt (ex-UQSS). Most activity this year has of course been at Buchan, and an area publication is in preparation to help strengthen the case for conservation and encourage further work. A trip to Mole Ck in Tasmania was the choice for VSA at Easter. Why not? After all, one can get from Melbourne to Mole Ck in two hours or so, and that's barely enough time to get past Dandenong, never mind to Buchan. Prohibition Pot, Devils Pot, Shish Kebab and Kubla Khan were given the once over.
- The continuing sage of caving in the west . . . There has still been W A S G no official word from WASG which seems a shame seeing they have paid ASF membership fees for no less than 62 people. My apologies to these 62 speleos starving for their money's worth on news of caving out west the only communications I've had were from a fellow who regretted he'd never heard of ASF until the March newsletter atrived mysteriously, and from expatriate Peter Henley in Canberma whose report appears elsewhere in this issue. (sorry, next issue)

AND NOW, CONGRATULATIONS TO TCC ON THEIR 25TH ANNIVERSARY . . .

This month we celebrate the 25th anniversary of our club - the oldest in Australia. The inaugural meeting of the Tasmanian Caverneering Club was held on 13th September, 1946, as a result of the influence and enthusiasm of Professor S.W. Carey. One of the first trips to be held after the club came into existence was to the Junee area where members explored Junee resurgence and several small caves nearby. This trip was not without excitement. Our founder nearly foundered in the swollen Junee River after a party had reached the end of the cave and established the presence of a siphon. It is consider that after 25 years the Junee River still keeps its secrets prospects of finally unlocking these look brighter than at any time during the club's In a quarter of a century the wheel has come full circle and in the last two years the club has once again concentrated its efforts in this area with considerable success. Last summer saw the descent of Khazad Dum to a depth of 950 ft - a new Australian record. The club is already preparing for the coming Khazad Dum season. The team spirit and close friendships which characterized the club in the early days is with us today and membership stands at an all time high. We can look back with prode and satisfaction on our past record and look forward with confidence to the future in our state where still so much of its underground world remains to be discovered. ((by Albert Goede, abstracted from Speleo Spiel 61: 1))

AREA REPORTS

TASMANIA

by Kevin Kiernan

I D A B A Y

Tourist, or to use the favoured word, "familiarisation" trips continue to Exit Cave. Can't help but wonder just how familiarised some people have to be. TCC are planning an area publication or at least a submission to try to get Exit declared a National Park. This will be a cute little exercise but a complete waste of time of course. If the miners want Exit Cave they'll get Exit whether it's a National Park Seems that after the demise of part of Mt Field National Park, all the Pedder National Park and other places, people would wake up to the fact that there's no point enlarging our Park system until the strength of protection is increased. Seems cavers here think that if they get something reserved that is that. What we need is a 'coup de club' to stir up the groups on conservation.

HASTINGS

SCS has mapped 4 minor and 2 major caves and joined main entrances. A trip to Trafalgar Pot one Wednesday night linked it with nearby Waterloo Swallet known to be long-lost Erebus). This was one of the best trips for years despite the rather diabolical necessity to go to work the next day. Extension there now only a few hundred feet from Newdegate Cave, the main system (tourist) in this area at one mile plus. Unsuccessful try at fluoresceining a spectacular but very blocked swallet in the Permian on far side of hill to Hells Half Acre in Newdegate. Suspect green stuff probably beat watchers. Swallet is 3200 ft distant from pushable suspected emergence in HHA, and 700ft higher. Swallet impenetrable so may be scaling pole job working from bottom. One new cave found and dug to no avail, 7 or 8 numbered, much more to be done.

NEW SOUTH WALES

JENOLAN

by Andrew Pavey

1971 has been a busy year at Jenolan with quite a bit of speleology. SSS led off with a meteorological study in Mammoth Cave which has entailed returns every month to take copious notes of temperature, humidity and airflow. At the request of the Tourist Dep't, SSS investigated possible tunnels into the Imperial Cave system, requiring some high grade surveying. The T.D. did not like the final proposal for a tunnel site - well, you can't win them all.

J41 was the scene of a number of surveying and resurveying trips - small extensions found - famous dig continues for 76 ft of tight passage - tribute to Les Chin and other diehards - another Bungonia Efflux? Much surface exploration -SSS in Eastern Limestone and at far northern end of outcrop, and SUSS in the southern limestone. SSS entered a new decorated chamber after digging above the Glass Cave.

A significant "discovery" by SSS earlier in the year turned out via heated exchanged to be an old (and best forgotten?) SUSS discovery. SUSS itself had more luck. While en route to the Great North Cavern (... "you can't get lost" ...) a party blundered, slithered and squirmed into a section containing Railway Tunnel size passages and plenty of Mammoth mud. Dubbed 'Cant Get Lost Section' - more found on subsequent trips - also turned out to be an old SUSS find - what price SUSS's records?

BUNGONIA by Andrew Pavey

UNSWSS has prepared a 3-D foam plastic model of Bungonia which was used in the case against dumping leases (see ASF Newsletter 52). UNSWSS and SSS have now numbered, tagged, surveyed and positioned 117caves and related features at Bungonia. Bungonia Gorge was abseiled recently - a mere 900 ft - no caves seen on descent - prusikking out contemplated

Jenolan was scene of gathering of clans in August when members of SUSS, SSS, UQSS, UNSWSS, VSA, TCCNB , NUCC were present at same time. Quite coincidental. Tourist Department must have brobed. Was quickly dubbed ASF 82th SemiBiennial Conference & incredible social intercourse developed, spurred on by huge NUCC marquee and lots of Jenolan Rain (the latter on account of a rare conjunction of rainmen Les Chin and Henry Shannon). Good time had by all and plenty of caving as well. The interesting occurred when Jim Seabrook (SUSS) disputed ability of Henry Shannon (UQSS) to estimate passage lengths, particular reference to one in Wiburds Lake Cave. Argument adjourned to said cave where all was well, Jim and Henry had talked about different passages and and behold if the cave wasn't suddenly a thousand feet longer! Further work on the following day by six people from many societies found a further 300 ft, with more prospects yet.

Jenolan was the subject of a seminar organised by SSS in May. Ten speakers from SSS, SUSS, BMSC and MSS covered work on exploration, hydrology, meteorology, surveying etc. While presentation of papers left much to be desired, this was a valuable step forward in speleology; it seems a pity though that it had to wait until SSS had the initiative to do something - where is the NSW Co-ordination Committee? The results will be published in due course.

but not undertaken (... "poor light"..)
Optical levelling on surface has now been completed and accurate heights of cave entrances established. B4/5 was levelled to improve estimates of depth (what an incredible job!) UNSWSS will be installing pluviograph recorders etc. in various locations and all speleos are asked not to interfere with them

REVIEWS

CAVES by J.N. Jennings. Oxford University Press, Melbourne, 1970. 32pp., 19 line drawings, soft cover

This is one of a series of 27 booklets in the series "Life in Australia", which covers such diverse topics as dingoes, orchards, agricultural shows and Wilsons Promontory. This title, and presumably the whole series, is clearly aimed at youngsters. The level of writing and large print size would appeal to an intelligent 9 year old. With this in mind, though, it would have been preferable to break the continuous text into short sections Otherwise, in format and content, though not in level of sophistication, it resembles a promotion of the National Audubon Society, USA, "Cave Life" by C.E. Mohr and R. Gurnee.

The subject is introduced by reference to the significance of caves in aboriginal mythology and anthropological research. A short discussion of cave formation is followed by accounts of the activities of speleological societies, mention being made of work on the Nullarbor, at Bungonia, Cooleman Plain, Wee Jasper and elsewhere. Techniques of exploration are covered and there is a short description of speleobiology.

Like many childrens' books, much of the text is written in the second person with a light adventurous spice, though it is unlikely that its readers are going thereby to be converted to caving. However, at a time when even primary school children are conducting practical projects in ecology, pollution and environmental conservation, a discussion on the special problems of cave conservation would have been neither too abstract a concept for youngsters to grasp, nor a barrow for the author to push.

Not many books devoted entirely to caves have been published in Australia and despite the juvenile appeal, 65 cents seems a small enough price to pay to keep your library up to date.

(Reviewer's copy supplied by courtesy of Oxford University Press, Melb.)

Symposium on the Origin and Development of Caves. <u>Trans. Cave Res. Grp. Gt. Britain</u> 13 (2): 63 - 130. (multilith). Price to non-members of CRG £1.25.

This is a transcript of the Fourth Annual Symposium of the Cave Research Group in March 1971 at which invited speakers from Europe, Britain and Canada presented short discussion papers dealing with recent advances on the perennial theme of the origin and development of caves and their features.

Papers covered lithological factors affecting cave genesis (T.D. Ford), controlling factors in caves development (A.C. Waltham), the influence of geologic structure (D.C.Ford), concepts of karst water tables and water flow (D. Ingle Smith), the role of abrasion (M.D. Newson), mixed water corrosion (A. Bogli), problems of solution chemistry (L.G. Bray) and the implications for caves of the Ice Ages (G.T. Warwick)

This seminar reveals a considerable advance in process and methodology on a similar symposium of the National Speleological Society (USA) some years ago. However, it seems to have concentrated almost entirely on processes in cool to cold temperate environments at a time when a good deal of work is being done in tropical regimes. A notable omission from the impressive list of academic participants was Paul Williams who has done much methodologically divergent work on the morphometric analysis of karst landscapes in both temperate and tropical areas including New Guinea. Nevertheless, the papers presented give a succinct and on the whole remarkably lucid overview of the trend of thought in this subject. One could mention in particular the perceptive paper by D.C. Ford on the was in which geological structure affects cave development; This should be of relevance to limestone and cave morphology in the frequently highly folded regions of south east Australia.

- JRD

BAT RESEARCH NEWS

The editor is pleased to announce that <u>Australian Bat Research News</u>, a joint publication of the ASF Bat Research Committee and the Australian Bat-banding scheme has reappeared. Issue no 9, dated December 1970, includes conservation news, some research news and a partly abstracted 90 item bibliography of recent bat literature. The publication is for private circulation only. Speleologists with an interest in this field may be placed on the mailing list. Address correspondence to the Editor:

Elery Hamilton-Smith, c/o CSIRO Division of Wildlife Research, P.O. BOX 84, LYNEHAM, ACT 2602

CONSERVATION - ANOTHER ANGLE

"I am beginning to think of myself as something of a hypocrite as a caver. Whenever a conservation case comes up for caves, the general hue and cry goes up that these caves should be preserved for the <u>public</u> and their recreation. However it seems that caving clubs themselves are becoming more orientated in the <u>other</u> direction and are fast setting themselves up as bontrollers' of areas with gates on caves, and access agreements. In fact,

I read in one club magazine that it was policy to discourage anyone other than members of revognised caving groups from entering caves. If this were Australia wide policy, we would be likely to go down under the mining companies' claims that they were of more benefit to the community at large than caves available to the privileged few in the caving cliques."

(Al Watt in the Editorial to Nargun 3 (11): 1)

This is a serious, constructive criticism of the inconsistency of some of the policies of both the Federation and of several clubs. What do you think?

late note: For accommodation at ASF Committee Meeting, white immediately to CSS, P.O. Box 530, CANBERRA 2601

Number Fifty Three CONTENTS September 1971 A word from the President 2 GENERAL NOTICES 3 CONSERVATION ACTION - Colong, Lake Pedder CAVES AND KARST OF JUNEE-FLORENTINE, TASMANIA by Kevin Kiernan . AUSTRALIA - No. 3: Trog Dip by Ken Lancaster .. PRESS - COLONG - A COMMENT 14 by Warwick J. Counsell . 15 DOWN UNDER ALL OVER - News fromm around the Societies Area Reports - Ida Bay, Hastings, Jenolan, Bungonia 17 by Kevin Kiernan & Andrew Pavey REVIEWS -CAVES 19 SYMPOSIUM OF CRG 20 BAT RESEARCH NEWS CONSERVATION - ANOTHER ANGLE 20 by Al Watt .

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and if you think the <u>ASF Newsletter</u> has suddenly increased remarkably in quality of printing, why don't you look up the 1966-67 issues and ask your Society's ASF representative why it has taken so long to get back to a standard which Ian Wood and Ted Anderson established years ago?