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# SOUTHERN

CAVER

Volume 2

Number 3

# "SOUTHERN CAVER"

# PUBLISHED QUARTERLY BY THE SOUTHERN CAVING SOCIETY

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Tasmania.

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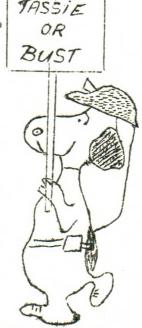
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......And the word didst spreade all across the countrye and did reache unto distante and far shores, that there was to be a greate gathering of peoples unto one another at this hollowe isle of Van Dieman's Land. They were to crosse the waters frome the maine continente on a greate shippe and the God Bachus woulde reside upon the aforementioned shippe. And greate woulde be the partaking and merimente during the voyage, during the gathering, and on the later journeye homewarde. And suche would be the verye nature of the gathering that all dedicated men woulde deaden thine owne soules, forsake their wives and mortgage all wordlye possessions to join the pilgrimage. And the worde furthermore sayeth that whomsoever cometh had better booke their passage now. Better stille, booke six months agoe. And whosoever sleepeth woulde fall bye the wayside, perchance

not even to gette unto the aforementioned isle (unlesse, mayhap, they were fortunate enough to gaine unto themselves a tickete of carriage on one of the vaste and wonderous inter-state birds). And great would be the celebration and inebriation upon their arrival, all during the presentation of the scrolls of the wise

and learned men that were to be spaketh unto the multitudes, and in the expeditions that woulde be taken unto the moste hollowe partes of this strange and wonderous isle, seeking to enlarge the greate booke by their endeavours. And some didst even say that there was to be a prize of monies unto whomsoever discovereth the greatest chasme, but this be a loade of bulle. And ye better believe it Noddye! And yea verily did the worde thus say that this strange gathering of peoples unto one another woulde be knowne as the 8th Biennial Conference of the Australian Speleological Federation, 1970, and woulde be the scene of much trogging and grogging, especially the latter.....



K.K.

# A.S.F. 8TH BIENNIAL CONFERENCE

The Southern Caving Society with the Tasmanian Caverneering Club will act as co-hosts for the Eighth Biennial Conference of the Australian Speleological Federation - to be held in Hobart from 27th to 31st December.

For the information of intending participants, a summary of Activities - as arranged by the A.S.F. Conference Committee now follows:-

Business will start at the Conference Centre, Hutchins School Boarding House, Sandy Bay, on Monday afternoon and will continue until Wednesday Night (30th).

HOW MUCH:? The maximum cost is \$25.00 per head. However, to assist those who do not want the full treatment the costs have been subdivided under the following four headings:-

(1)	Accommodation and food		\$10.00
(2)	Conference fee		5.00
(3)	Caveman's Dinner		5.00
(4)	Field trips (transport and carbide)		5.00

For anyone planning to attend only one, several or all of the activities connected with the Eighth Biennial Conference in Hobart a choice of any one of the Following nine categories of enrolment is available. (+ means yes, - means no).

Category	Conference Fee	Accommodation and Food	Caveman's Dinner	Field Trip	COST
1	+	+	4	+	\$25.00
2	÷ +	+ . 3.4			\$20.00
3	+	-	+	+	\$15.00
4	+	- :	+	_	\$10.00
5	+	-	-	- +	\$10.00
6	-		+	+	\$10.00
7	+	_	, · -	-	\$ 5.00
8	-	-	+ .	_	\$ 5.00
9	-	<u> </u>		+	\$ 5.00

No other combinations will be allowed.

# AREA DETAILS

(1) Mole Creek: This is Tasmania's premier caving area with some 120 known caves and it is expected that most mainland visitors will want to go there. It is the only significant Tasmanian caving area located in reasonably civilized surroundings. Part of the area is cleared for farming and many caves are located on private property. There is a wide choice of activities available with caves ranging from easy to severe. Mole Creek

caves are best known for the quality and colour of their formation and the area - both above and below ground - is a photographer's paradise. Due to the large number of caves a great variety of activities can be offered apart from photography. Exploration, cave diving, surveying, and the study of cave fauna and bone deposits are all profitable activities at Mole Creek. The small town of Mole Creek in the centre of the area provides shopping, postal and drinking facilities.

Trips will be led by members of S.C.S. and T.C.C.N.B. with S.C.S. concentrating on the headwater area of the Mole Creek where in the last few years they have carried exploration of seven major caves connected with the Mole Creek. Caves belonging to this system range from the easy (Wet Cave, Honeycomb Cave) to the severe and not yet fully explored Herbert's Pot system.

T.C.C.N.B. have a more general interest in the Mole Creek area but are particularly keen to assist cave divers to probe a number of promising siphons and resurgences.

Kubla Khan Cave is considered to be the finest formation cave in Tasmania. It contains three very large chambers and a wealth of varied decoration but is not an easy cave to traverse.

- (2) Junee Florentine: see article on page 13
- (3) Ida Bay: Although not a large area by Tasmanian standards it has some spectacular caves and has been the main interest of T.C.C. during the last three years. It has the two deepest cave systems in Australia.
  - (a) Mini Martin Exit Cave having a free ladder drop of 360ft is also Australia's longest save with 72 miles of passages mapped and at least

(b) another 12 miles explored.

Midnight Hole - Mystery Creek Cave has been regarded as the most severe pothole in Australia.

(4) Mount Anne: This is a remote area in difficult country in the southwest of Tasmania at an altitude of 3,000ft. The rock is precambrian dolomite dipping at a steep angle and forming a prominent ridge running north-east from Mount Anne for several miles. The ridge has many deep unexplored shafts and has good potential for deep vertical systems since the dolomite has a local relief of 2,000 feet. Until recently access was extremely difficult but the construction of the Scotts Peak Road and the cutting of a track by T.C.C. from the road to the ridge has improved the situation. The area can now be reached in five hours from the nearest road carrying a medium weight pack. The route involves a 2,000 climb. The country around Mount Anne has been glaciated and there is some superb scenery to be seen - spectacular glacial lakes and aretes. The base camp will be within striking distance of the 4675ft. high summit of Mount Anne. The dolomite country is difficult to traverse due to sharp pinnacles and ridges, deep clefts and shafts and covered by dense alpine scrub. At least one shaft has a first drop in excess of 300ft. Weather conditions at an altitude of 3,000ft in western Tasmania are notoriously changeable and during a cold spell snow showers may occur even in the middle of summer.

#### DETAILS OF FIELD TRIPS - BEING ORGANISED.

Trip 1 Mole Creek (31/12/70 - 13/1/71)

Organised caving will be planned for a period of up to two weeks. Since access to the area is easy participants can come and leave at anytime. We intend to have a central camp from where small parties can operate in areas suited to their interests. It is hoped to find an empty house for the duration of the conference but if we are not successful camping out may be necessary. Good camping sites are available. It is not intended to plan a day to day programme beforehand as this will depend on weather and fields of interests of those attending. A wide range of activities ranging from easy to severe will be available to suit everybody.

Leaders: Bob Cockerill, Rien de Vries, Frank Brown Jnr. and Bob Woolhouse.

Trip 2 Junee Florentine - Ida Bay (31/12/70 - 10/1/71).

The trip consists of two parts: five days in the Junee Florentine area followed by up to five days at the Ida Bay area. If you are short of time you can attend the first part only. The trip is intended for cavers with some experience of ladder work. Several days will be spent exploring swallets and potholes in the Junee area where ladder drops may be combined with waterfalls. If you possess a wet suit bring it along. It will be followed by sightseeing and exploring in some of the well decorated horizontal systems in the Florentine. A visit to Growling Swallet - for many years Australia's deepest cave may also be included.

The second part of the trip will be to Ida Bay. A couple of days will be spent on the northern side of Marble Hill including visits to Mystery Creek Cave and Loons Cave followed by another two or three days spent in Exit Cave involving an underground camp.

Leaders: Albert Goede, Alex Terauds.

Trip 3 Ida Bay - Mount Anne. (31/12/70 - 12/1/71)

Five days at Ida Bay followed by a two day rest in Hobart before proceeding to Mount Anne. A severe trip that should only be attempted by experienced cavers preferably also with some experience in the bush. The first part of the trip to Ida Bay will offer the opportunity of abseiling down Midnight Hole into Mystery Creek Cave followed by an underground camp in Exit Cave. A descent of Mini Martin may be made if there is enough interest and equipment.

Ida Bay will be a training ground for the second part of the trip — a five day visit to the Mount Anne area to attempt exploration of some of the doop potholes on the north-east ridge. Trip 3 will be led by Brian Collin who has considerable experience in leading exploration trips to both areas. Wet weather gear is essential and warm clothing should be brought. Remember also that bushwalking in shorts and sandshoes is a practice that is not recommended in the Tasmanian bush! If you are short of time you can attend the first part of the trip only.

Have you booked to come to Tassie for the Conference and to see some of Tasmania's well known caves?

We hope to see you here and a really good time is assured.

If you have not already booked contact without delay: The Secretary,

SOUTHERN CLYER -

The Secretary,
A.S.F. Convention 1970,
Box 641g,G.P.O., HOBART.
Tas. 7001

Caving in Tasmania differs considerably from the mainland. Conditions are generally severe and exposure due to heat loss is a problem which must be considered when choosing equipment. The need for adequate equipment to meet these conditions cannot be over emphasised.

It must be remembered that in Tasmania caving is usually combined with bushwalking, as those coming to the conference will find out. The topography is generally steep, the scrub thick, and weather conditions unpredictable. As an example of the latter, at Mt. Ronald Cross, one December, an S.C.S. party had weather so hot they went swimming in a tarn to cool off, while only a week later snow conditions prevailed and the tarn was frozen over. Snow can fall on Mt. Anne at anytime of the year. Those who underestimate Tasmanian conditions generally suffer as result, and sometimes even death has resulted.

Underground it is generally wet and cold. Warm clothing is especially necessary in caves such as Herbert's Pot, a very wet cave where trips usually last around 15 hrs.

#### Recommendations

Clothing: Two pairs of long, thick socks usually worn at once. Football socks give some shin protection. Greasy-wool or "Miners" socks do not compact underfoot when wet.

Underwear: personal preference of type but should be warm. Navy-blue colour does not show mud or clay stains.

Shirt: Preferably woollen, should have a long tail and long sleeves.

Jumper: Thick, warm, closely-knit and long e.g. football guernsey.

Trousers: Thick, hard wearing and tear-resistant material. Jeans are not suitable - usually too tight. Zippers jam and get clogged with mud. Woollen and corduroy trousers are perhaps best. Shorts are unsatisfactory for caving or walking.

Combination Should be large enough to allow unrestricted movements while Overalls:

wearing a complete set of clothing underneath but not so loose as to snag excessively. Overalls unserviceable due to excess tears in the seat and legs may be converted into a handy piece of gear by cutting off the legs. Worn over shirt and jumper with the long "skirt" tucked into heavy denim, drill cotton or corduroy trousers this makes an effective caving suit.

Parka: or waterproof coat for bush-walking and campsite.

Compass: and ability to use it is essential.

Whistle: hung around the neck is essential in the scrub.

# NOTES ON THE STREAM PASSAGE IN HERBERT'S POT, MOLE CREEK BY STEPHEN HARRIS

The stream passage of Herbert's Pot is reached only after hours of dry negotiation from the surface. Where the caver steps from a hole in the wall into the stream (a main tributary of Mole Creek) is the point which divides "upstream" and "down received. Known extensions in each direction have been explored for approximately the same distance. In both directions siphons temporarily barred exploration.

During the summer the stream has a small but steady flow and where first encountered is only ankle deep over awidth of four yards but further upstream and in numerable instances downstream there are many very deep pools (some probably as deep as fifteen feet) to be skirted. Upstream it has been noted that the differential corrosion of the limestone beds seems to dictate the stream profile markedly. As one proceeds upstream the limestone beds dip in the same direction at an angle of about 30°. At the head of each pool there is a dipping strata of resistant limestone about three or four inches thick jutting out and holding back the waters of the higher pool which tumble into the lower by way of a waterfall a foot or two high. Backed immediately behind these sloping walls are pebbles deposited by the stream. These possibly act as protection for these natural dams. The stream passage section usually narrows at this point of more resistant limestone and widens out again around the next pool and to it's waterfall.

It is interesting to note here that where the rock strata are thin it is rare for chambers or other sizeable development to occur because the beds of limestone, especially when weakened by fissures will not tolerate anywhere near as large a span as will thick beds. This section of the stream passage in Herbert's Pot, perhaps a quarter of a mile long certainly does not show extensive development apart from an occasional higher level grottoe or small gallery.

The large waterfall marks a change in direction of the stream. The water plunges thirty feet into a pool which is deeper but morphologically different from its smaller counterparts.

Before going beyond the waterfall, in fact only a few yards before; and with the crashing noise of water accompanying the caver's thoughts he may admire the perfectly straight pure white veins of calcite which dart under the feet, across the floors and up the walls, sometimes intersecting each other in varied pattern. These veins may be due to deposition of the mineral by groundwater in joints and fault fissures.

The stream comes to the waterfall after flowing through a long talus chamber of considerable size. In part of this chamber broken sections of crystalline calcite and old stalagmites measuring sometimes four or five feet across lie scattered among the blocks of limestone talus. Several minutes travel from this point takes us into some more recently discovered territory (January, 1970) where may be found a dry passage with long large banks of brown clay. This passage is on a slightly higher level and runs adjacent to a stillwater branch of the main stream (this stillwater probably takes water during flood times). Covering the clay in fair abundance is a

white powdery substance with a feel not unlike that of talc. This is the substance commonly called moonmilk by cavers.

There are points of equal interest in the downstream section of the cave. The walls in part of the stream passage show excellent examples of current scalloping. It is this scalloping which can indicate the direction of flow of water in stream passages since dried up. However in this vicinity the occurrence of another phenomenon may be noted. Much of the walls in a section of the stream passage including ledges and handholds used in an aerial bypass of a deep pool is composed of "soft rock". Although appearing in every way similar to solid limestone, and showing the same surface texture and form, this material turns out to be a clayey layer of variable thickness (usually about six inches), which has a thin crust of darker coloured calcium carbonate on its outer side. The clayey layer overlies solid limestone.

Toward the downstream siphon the chambers adjoining the stream passage become particularly large until the caver approaches a chamber of impressive magnitude. Herbert's Pot contains nearly every type of formation and many places of scenic interest apart from the environs along the stream passage. Climbing the scree slopes on one side of the chamber takes the speleologist into long sand passages of an upper level. This area is nearing the known frontier of the downstream section although this upper level still bypasses the siphon which temporarily halted exploration back on the stream passage. There are quite good stalagmites, stalactites, columns and delicately beautiful helictites in this area. Of particular interest, in the midst of these sandy passages are old gour pools which once contained water supporting "cave ice". The water has long since dried up leaving thin sheets of calcite which have collapsed and broken into pieces on the floor of the gour.

The whole length of the stream passage in Herbert's Pot is of great interest and it is hoped that further exploration will increase further our knowledge of this waterway.

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Thin strata of limestone often project from the floor of the pool

Pebbles & other fluvial debris.

(ABOVE) Profile of Stream in a section of Herberts Pot.

(BELOW) Plan of same section of stream passage.

STREAM

SOUTHERN CAVER:

30TH SEPT. 1970

#### AUSTRALIAS DEEPEST CAVES

- 1. MINI MARTIN (Ida Bay, Tasmania) DEPTH: 720ft Pothole linked with Australias longest cave, Exit Cave. Three ladder pitches 360ft (longest in Australia), 100ft, 80ft (Depth first attained by Tasmanian Caverneering Club in 1967).
- 2. MIDNIGHT HOLE (Ida Bay, Tasmania) DEPTH: 665ft Severe Pothole linked at bottom with Mystery Creek Cave (Entrance Cave) via the tight Match-box Squeeze. Six ladder or absell pitches 70ft, 40ft, 120ft, 30ft, 110ft, 180ft. (T.C.C. 1968)
- 3. GROWLING SWALLET (Junee-Florentine, Tasmania) DEPTH:560ft Large inflow cave with sizeable stream subject to flooding. Angle of stream bed 45 down in most places. Noise of water makes speech inaudible 2x30ft ladder pitches, 3 x 120ft ropes needed (T.C.C. 1957)
- 4. TASSY POT (Junee-Florentine, Tasmania) DEPTH: ? Sporty Pothole with ladder drops of 150ft and 90ft, and 70ft chimney. Tight squeezes. Pot is not yet bottomed, exploration at brink of 120ft shaft from chamber at 350ft (Southern Caving Society 1970).
- 5. SATANS LAIR (Junee-Florentine, Tasmania) DEPTH: 470ft Swallethole with stream diverted. Small entrance. Very large chamber at bottom with good decoration and 80ft waterfall through centre of ceiling. Sporty Pot requiring 9x30ft ladders (S.C.S. 1966).
  - FOSSIL CAVE-HOGANS HOLE (Bungonia, N.S.W.) DEPTH: 450ft Pothole with long crawls, foul air. Some decoration (Sydney Speleological Society 1969)
    - REVELATION CAVE (Ida Bay, Tasmania) DEPTH: 450ft Normally dry cave but small stream flows into it after heavy rain. Even grade, two short drops and one 60ft ladder pitch (T.C.C. 1969)
- 8. RIFT CAVE (Junee-Florentine, Tasmania) DEPTH: 430ft Inflow cave with small stream (T.C.C. 1947)
- 9. ARGYLE POT (Bungonia N.S.W.) DEPTH: 420ft Sporty Pothole with four ladder pitches up to 90ft long, tight squeezes, foul air. (University of New South Wales Speleological Society 1960).

# SOME CONTENDERS TO UPSET LIST

CAULDRON POT J.F.2 (Junee-Florentine, Tasmania) - Spectacular Swallet hole over 1,000ft above main rising in area (Junee Cave) Progress being slowed by great amount of water entering cave, bottom of first pitch not visible from 110ft down. (Discovered by T.C.C. 1969).

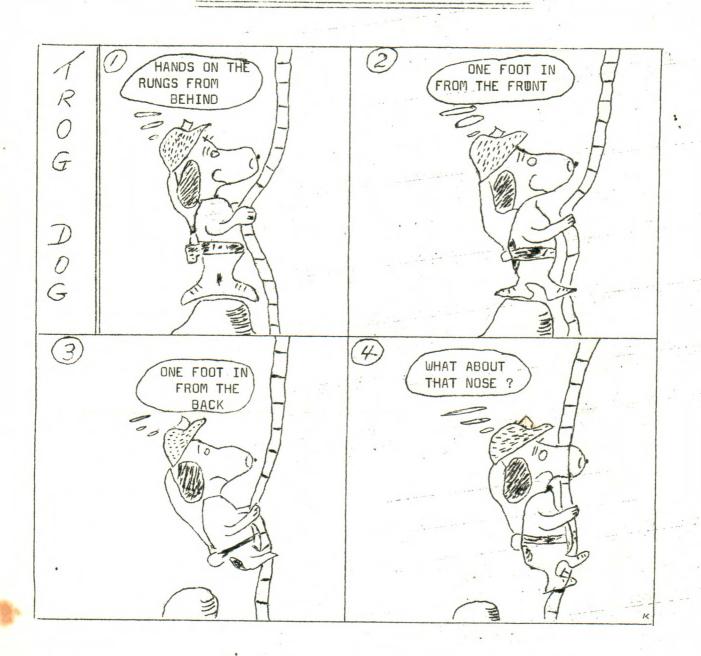
J.F. 4-5 (Junee-Florentine, Tasmania) Swallet 1,000ft above Junee rising. Progress being delayed by waterfalls (T.C.C. 1969)

cont.

AQUARIUS SWALLET (Mt. Ronald Cross, Tasmania) Swallet on edge of plateau, over 1,000ft above Surprise River. Further progress dependent on diversion or channelling of water. (S.C.S.1968).

THE "BIG" HOLE (Mr. Anne, Tasmania) Unexplored pot with first drop of over 300ft. (being explored by T.C.C.)

SPEAKING TUBE (Mt. Etna, Queensland)



#### SAFETY

#### PROTECTIVE HELMETS



Who needs head protection?

What makes a safety hat protective?

The head acts as a kind of computer for the rest of the body, and therefore, if injured could impare the effective workings of all parts of the body.

The most obvious type of head protection for the caver, is the Hard Shelled Safety Hat or Cap, or the Miner's Cap which has a bracket for a hat mounted lamp.

#### 1. <u>Vital Suspension System</u>

Hard shells are only part of the safety design for safety hats. The inner crown strap system is an equally vital element. If the shell rested directly on a person's head, a forceful blow to the shell would be transmitted directly to the head itself and the wearer could be stunned or seriously injured. Safety hats and caps therefore must have a headband and hemisphere crown strap arrangement (sometimes referred to as the 'suspension' to absorb and cushion the blow. This crown strap cradle, whether adjustable or not, must maintain a clearance of at least 3.17 cm (one and a quarter inch) between the top of the head and the hard shell. This suspension arrangement, then provides a shock absorbing space immediately above the head and also distributes the force of a blow to the headband surrounding the skull instead of letting the impact be concentrated in just one area.

Take away the suspension system and you no longer have a safety hat that will give adequate protection against heavy impact or sharp objects.

### 2. Correct Fitting and Wearing

It must be emphasized to all users of hard hats and caps that much of the protective value of these items is destroyed unless they are used correctly. As indicated previously the crown straps may have to be adjusted so a clearance of at least 3.17 cm (one and a quarter inch) is maintained between the top of the head and the shell. Care must also be taken in adjusting the headband size. If too tight discomfort or even pain can result. The

headband should be snug; but not tight and it may have to be readjusted from time to time because of haircuts or for a slightly snugger fit at windy locations.

Safety hats should be worn so the hat shell is always squarely on the head for maximum protection. When the shell is tilted back or to one side, it is less efficient in absorbing shock and deflecting blows. The suspension may also have to be adjusted so that it (and the wearer's head) are well centred within the oval of the shell. If there is less clearance on one side, the shell can more easily strike the head on that side when something hits the hat.

Hats should be inspected regularly and the shells replaced when cracked or chipped.

The headband and crown straps on all head protectors should be kept in good condition and replaced when necessary.

As caver s assume many odd positions whilst exploring caves and ladder climbing it is advisable to wear a chin strap to keep hat from falling off.

Only when the wearer knows how and why safety hats protect, and uses them correctly will he be getting the protection the headgear was engineered to give.

(Acknowledgement to Australian Safety News)

# FASHION REPORT

Did you see our worthy editor at Alek's and Joan's wedding?

You should have, he was stunning. He wore a delightful bright orange trog suit, complete with emblem on back. Following this debut of his new gown, he has starred in two gala performances in the scrub at Maydena, and in the snow looks even better than Santa Claus. But in all seriouscity it is a tremendous idea and one which we could all do well to follow.

#### TASMANIAN CAVING AREAS

#### JUNEE-FLORENT INE

Tasmanian cavers are fortunate to have large limestone areas right on their doorsteps, many of which are largely unexplored. One such is the Junee-Florentine area, a vast expanse of almost 50sq. miles of limestone situated west of the logging township of Maydena, and only 60 miles by road from Hobart. The limestone is very accessible as it is served by an extensive system of logging roads built by Australian News-print Mills Ltd. The area is uninhabited and generally thickly clad in rain forest vegetation. Although cave development is confined to certain parts of the deposit, caves over 400ft deep have been explored, and depths of 1,200ft are a possibility.

The area is one of rugged relief, the dominant feature being the heavily glaciated Mt. Field Plateau, which rises over 2,500ft from the river level. The western side of the plateau is drained northwards by the Florentine River, the southern side, or Junee area, eastwards by the Tyenna River. The Mt. Field area is a national park, and a popular skiing area. It once also protected the Florentine Valley, and caves such as Welcome Stranger, but this part of the reserve was revoked by the state government to allow exploitation of timber resources. A 40 acre caves reserve exists at Junee Cave.

The caves occur in Gordon Limestone, which is Ordovician in age. It is a massive, hard, dense, well jointed and fossiliferous limestone, varying in colour from dark blue to grey. This formation attains a maximum thickness of 5,000ft in the Florentine Valley, where it outcrops over an area 15 miles long and 2 miles wide. In the Junee area it outcrops in a belt 1 mile wide and 7 miles long. Much of the limestone exhibits its typical mature expression as button grass plains i.e. flat swampy land close to the local base level. The higher relief areas occur where the limestone is overlain by more resistant rocks. The limestone has a maximum relief of 700ft in the Florentine Valley, and over twice that in the Junee area, where streams are known to sink 1,300ft above the Junee rising.

The limestone overlies the calcareous Florentine Valley Mudstone, and is in turn unconformably overlain by Permian sediments, and a considerable thickness of Jurassie dolerite. The limestone has been strongly folded in the Devonian during the Tabberaberan Orageny. In the Junee area, three major anticlinal ridges are obvious, and in the Florentine section, the valley is cut into an anticline to the Florentine Valley mudstone with adjacent synclines under the Mt. Field and Tiger-Gordon Ranges. The area has been extensively faulted during the Tertiary orogeny and glaciated in the Pleistocene.

Caves have been known in this area since 1890, but organised caving activity is a comparatively recent advent. Some caving took place in the area following the formation of the Tasmanian Caverneering Club in 1946. The Southern Caving Society was formed in 1965 and the main project still is very solid scrub-bashing in the Junee area. This was concentrated in

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areas around Chrisps Rd., systematically working eastwards towards the Junee catchment, the most promising area. The T.C.C. commenced work in this part of the area in 1969, so S.C.S. has now moved back to work the area west of Chrisps Rd. Both clubs are exploring swallets in the area. The Florentine Valley has long been the province of both clubs.

Many swallets are known at the top edge of the limestone in both districts, but only a few can be entered. Very few effluxes are known, and only one or two of these can be entered. The higher relief areas contain caves which are mainly developed more or less vertically, while the lower areas in the Florentine Valley have some well decorated horizontal systems. In addition to the caves listed, literally hundreds of other little holes are known. These are the main ones:-

GROWLING SWALLET was discovered in 1947, and by the mid 50's had been penetrated to a depth of 500ft by T.C.C. It is a very active inflow cave with a large stream subject to sudden flooding. The entrance is large and situated in a 60ft high face. The river descends at an angle of approximately 45°. There are two 30ft ladder pitches. The cave contains no decorations but has a good glow worm display and many fossils. It trends S.W. and the roar of the water makes speech inaudible. The bottom was finally reached at 560ft by T.C.C. in 1957, and this stood as the Australian depth record for several years.

TASSY POT was discovered by Don Frankcombe in 1967, and explored to a depth of 250ft by T.C.C. An extension was found in 1970 by S.C.S. and this is still being explored. The cave contains long ladder pitches and a 70ft chimney. Exploration has reached the - 350ft level, where a further drop of 120ft is yet to be laddered.

SATANS LAIR was discovered and first explored by S.C.S. in 1966. It is a swallet with the stream diverted. The first ladder pitch is 120ft to a small chamber, from where a chimney leads to a 30ft ladder drop and a steep descent for 120ft. A series of drops follow, and finally an 80ft drop into a very large, well decorated chamber, with an 80ft waterfall through the centre of the ceiling. The cave is 470ft deep.

RIFT CAVE was discovered and first explored by T.C.C. in 1947. It is situated in a large doline and is the swallet of a small creek. The depth reached was 430ft, but the cave was subsequently lost. It was rediscovered and named in 1962. A dig at the bottom about this time was abandoned after only a few feet.

PILLINGERS CREEK CAVE is a dry cave discovered in 1946 and explored by T.C.C. to a depth of 300ft, via a 170ft shaft. In the late 1950's the cave was descended to a depth of 325ft and the shaft avoided by traversing the talus slopes. These slopes are particularly dangerous, as they are covered with rounded dolerite boulders. Other entrances exist in the area of this cave which probably link in with it to give a combined depth of around 400ft. The caves development is controlled by joints in the upper levels, bedding plans lower down.

BONE PIT is a dry cave 300-350ft deep discovered in 1952. It was first explored by T.C.C. The entrance is a 30ft ladder pitch into a 20ft high cont.

SCUTHERN CAVER

cleft. A series of talus climbs follows, also a 140ft and a 90ft ladder pitch. The cave is influenced by N.N.W.-S.S.E. jointing and has not been really thoroughly explored.

RESCUE POT This cave was discovered by two Maydena residents in 1967, and first explored by them led by a friend (?) in 1969. The story is too well known to bear repeating, save to say that several broken bones and one rescue later, S.C.S. took over exploration, making one descent to the bottom, at - 350ft. The cave is the swallet of a small creek and is not thoroughly explored. It contains a 90ft ladder pitch and some very dangerous talus, and in general is not recommended.

FRANKCOMBES CAVE is situated in the Florentine Valley, and was named in honour of Don Frankcombe, A.N.M. Manager at Maydena. The cave has at least, 3,000ft of passage and good decoration. The morphology of the cave is interesting and some outstanding fossils are exposed. Much of the cave is traversed by crawling, and a small intermittent stream is present which is subject to flooding.

CASHION CREEK CAVE (WESTFIELD CAVE) is a well decorated stream cave with 800ft of passage.

PYGMY CAVE is a small, strongly joint controlled cave consisting of a number of small chambers with good decoration and connected by crawls.

OWL POT is a dry cave found by Don Frankcombe and explored by S.C.S. to a depth of 250ft, where further progress is prevented by a flowstone wall. The cave has a 110ft ladder pitch, and two big chambers.

ZULU POT was discovered in 1967 by S.C.S. It consists of a shaft 170ft deep with a ledge at - 90ft. A passage 20ft from the bottom is yet to be explored. A large stream sinks 50yds uphill from the cave.

WELCOME STRANGER is another of Don Frankcombes discoveries. It is an outflow stream cave with over a mile of passages explored and mapped by S.C.S. The cave contains some outstanding decoration and is developed on four levels.

JUNEE CAVE Discovered in 1890, this is the source of Australias largest underground stream, the Junee River. The average flow is 30 cusecs, but the cave is blocked by a sump after 50yds. Divers have penetrated 500ft. Recently, exploration by T.C.C. has located a number of promising holes, some of which are probably tributaries of the Junee River

- J.F. 2 CAULDRON POT a waterfall flows into a doline. A ledge 120ft down has not yet been reached. Cave is over 1,000ft above Junee rising.
- J.F. 4 is an inflow cave explored for 50 yds. There is a strong draught and good glow worm display. Progress halted by waterfall.
- j.F. 5 links to J.F. 4 via two 60ft ladder pitches to a point below the first waterfall. Further progress stopped by more waterfalls. Cave is over 1,000ft above Junee rising.

#### LANDSLIDE AT LIENA

During recent severe floods in the north of the State, a landslide occurred at Liena, and an article in "The Mercury" (1/9/70) concerning it inspired a trip to the area to learn more. The slip occurred on a mountain appropriately known as The Dropout, and opened a stretch of hillside  $\frac{1}{4}$  mile wide before flowing one mile down across the road to Echo Valley, a trail riding camp owned by Mr. & Mrs. Harry Young and situated on the alluvial flats of the Mersey River directly opposite Croesus and Lynds Caves.

The slide destroyed a barn only 100yds from the homestead and deeply buried many paddocks and fences beneath mud, huge tree trunks and other debris. According the Youngs, at the peak of the slide, house was shaking. At the head of the slide the hill looks almost as if it has exploded, with many large slabs of limestone shattered and thrown in all directions and trees scattered.

The cause of the slip is unknown but a possibility is that it could partly be due to the blocking of an efflux nearby a couple of years ago, and resultant buildup of pressure after heavy rain.

A creek previously serving Echo Valley has disappeared, and a number of new streams have appeared, flowing from the slide and adjacent areas to the south, but we will have to wait until the current spate of wet weather concludes to see just how much of the water is of underground origin, and investigate the upper reaches of the slide at first hand. At present it is very unstable and dangerous, with further sections of the hillside loosened and threatening collapse, but when things have settled down a bit the area appears to offer interesting prospects for caving. It is believed there are a number of holes on the Dropout.

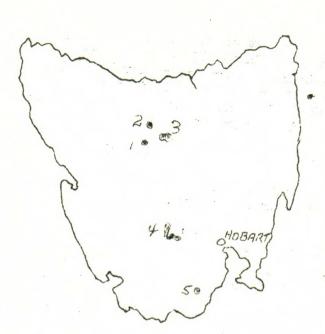
#### ABSTRACT

# A CAVE IN DOLERITE AT WAYATINAH, TASMANIA

By A.H. Spry & G.E.H. Hale Jour. Geol. Soc. Aust. VOLX1,Pt.2, Dec. 1964 (3 photographs & 1 text figure) PP213-216

A cavity occurs in Jurassic dolerite 600ft. below the surface. Found during tunnelling activities by the Hydro-Electric Commission and since sealed off, the cavity is approximately 60ft long with a maximum width of 30ft and height varying from 4 - 30ft. It was formed by conversion of dolerite into a mixture of calcite, limonites, zeolites and clay, ground water then leached out the soluble minerals to leave a cavity, later depositing calcite and clay within it. Blocks were wedged off the roof by growth of calcite within joints. The cave was full of water when first entered.

K. Kiernan



Bad weather over the winter quarter has seriously hampered caving activities. Never-the less, there have still been a good number of trips, with some members even braving snow conditions while scrub-bashing. Underground exploration has been continued at Mole Creek and Maydena; surface exploration of Maydena, Hastings, Lorinna and Railton and surveying at Maydena. It is heartening that a number of new members have joined the ranks, and for two of them their first laddering trip was to the far reaches of Tassy Pot!

-00000000-

# 1) LORINNA

(1 Trip)

This area has again been visited and some rather interesting information gained. The mystery cave on Limestone Creek has again figured prominently in this. It is supposedly situated somewhere in the gorge, but reports of what bank are conflicting, however, the waters of the lake will not reach this level, so its discovery does not appear urgent.

The efflux at the Showground (L. 201) has proved of interest following reports that it goes. It is flowing quite strongly during winter and at the moment no-one seems very keen on pushing the squeese at the end. Reports of a walk-in cave near the cemetary are yet to be investigated. The informant considered it may be the top end of (L. 201) in which case it is probably the one mentioned in A. McIntosh-Reid's geological report.

The area opposite the showground on the western side of the Forth River has been investigated but is all of very low relief with much surface drainage and thus does not appear to warrant further attention. The Middlesex sheet indicates a further outcrop of quite good relief further downstream and this still requires attention.

As only one cave (I. 201) has been found below flood level it appears the major loss in this area will be on the surface, not underground.

# 2) RAILTON

(1 Trip)

This area had not previously been visited by the Society, and it appears highly doubtful that it will again. Although the area of Gordon Limestone is quite extensive it is of low relief and generally buried below a thick mantle of clay. No sign of significant karst development was noted cont.

SOUTHERN CAVER

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although surface creeks appear absent over part of the area. The only major sign of solution activity observed was in the limeworks quarry on the Latrobe road where there is a considerable sub-surface development of lapiaz and solution channels up to 6 ft across, but all is infilled with terra rosa. The quarry face is 50ft high and a very deep pool developed on the floor is indicative of the high water table.

# 3) MOLE CREEK · (2 Trips)

As usual, work done in this area has been concentrated in the section of the Mole Creek System upstream from Wet Cave.

Yet another exploration trip has been to Herbert's Pot, this time heading downstream past the siphon to thrash the large talus chamber at the end. No extension was effected, and due to there being a number of prospective members on the trip only 12 hours was spent underground.

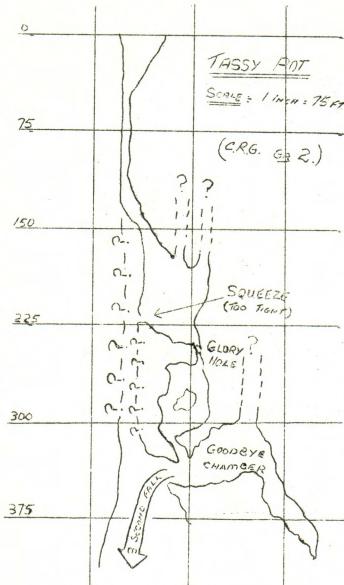
Some solid rockfall thrashing has been done in the lower chambers of Georgies Hall  $(\underline{\text{M.C.201}})$ . An attempt to explore beyond the upstream siphon via Peppermint Crawl was abandoned due to the high creek level in the cave on the day. There is a good draught blowing through this section of the cave.

There has been a big revival of interest in the Mole Creek System over recent months, but it still refuses to yield its secrets. However, with surveying underway more exploration trips planned, and a possible water tracing effort to find out which of the tributaries entering Herbert's really comes from Kelly's Pot, things should start to happen. But as the known extremities of Herbert's continue to expand, the time factor is something of a problem. With most exploration trips now requiring at least 15 hours underground (at either end of the cave), some thought has been given to the possibility of underground camps, but as the numerous, squeezes, crawls etc. present quite a problem to the transportation of gear, and the only good campsites are a fair distance from the entrance, this will require much more consideration.

# 4) MAYDENA (JUNEE-FLORENTINE) (6 Trips)

The Society's biggest success for some time came when a deep and sporty extension was discovered in Tassy Pot, in the Florentine Valley. This cave was discovered by Don Frankcombe of A.N.M. early in 1967, and first explored by the Tasmanian Caverneering Club to a depth of 250ft after which it seemed to narrow off. It was visited by S.C.S. on 20/6/70, primarily as a tourist trip, but things developed. At the bottom of the two ladder pitches (150ft and 90ft), an insignificant looking, wet muddy and restricted crawl was explored. This led on into a very small chamber and a squeeze which did not look very inviting, but inspired by an appreciable draught this was negotiated by the party, which found itself in an interesting 70ft chimney. This chimney is of varying width, due to large talus slabs within it, being in places a tight squeeze, and elsewhere being very wide and necessitating fully outstretched manoevres, while it is

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necessary to transfer to a single vertical face to climbdown the final 15ft. At this point, all began to wonder where the water table was, but pressed on over a further 10ft Scale: / inch: 75 kg drop, and a steep, narrow passage was entered. This led on through a couple of squeezes out on to a catwalk on the side of a great shaft, and across into a chamber at -350ft. Still no water table. The big shaft is approximately 80ft across, and falls from the upper levels to the bisible floor which was estimated to be 100ft below; on the next trip five members reached - 350ft with 100 ft of ladder. However, one look at the drop showed that the previous. party had underestimated its depth, so the pitch was not rigged. One member chimneyed 50ft down a rift at the end of the big chamber to attain a depth of around 400ft, but this promising looking lead did not It had been a battle to get the gear in, but it was more so to get it out again, and by the time the surface was reached 12 hours had been spent underground. Definite plans are in the making for a weekend descent by a strong party.

Also in the Florentine Valley, a small, heavily decorated, but as yet unexplored upper level has been found leading off from near survey point(C3)

in Welcome Stranger. The entrance to this is up a tight vertical squeeze. This extension appears to form a fourth level of development in what now appears as a quite complex and strongly joint controlled cave.

In the Junee area the discovery of a new swallet near Sesarne(J.F. 208) has brought to six the number of good streams known to be sinking in the  $\frac{1}{4}$  mile wide stretch of hillside above Chrisps Rd. It is noted that the Creek previously entering Sesarne now goes underground some 25yds further up the valley. Some attention has been given to locating a rising and Don Frankcombe has informed members of one below the main road. A programe of water tracing is envisaged for this area.

At least 12 new holes have been discovered in the vicinity of Bone Pit  $(\underline{J.F.\ 203})$  and Rescue Pot  $(\underline{J.F.\ 201})$ , but most appear to close off after a few feet. However, several promising ones remain to be explored, including a 60ft pot  $(\underline{J.F.\ 211})$  which may lead to the unknown cave beyond the

SOUTHERN CAVER

talus choke in Sesarne.

very sticky.

One party spent an interesting morning in the Rescue Pot area before abandoning scrub-bashing. Clambering over logs and crossing rugged lapiaz can be hazardous at the best of times, and a foot of snow on the ground does not help much.

# 5) HASTINGS

There has been little activity in this area in the past quarter. Freshly arrived from W.A. by way of Bendithera (N.S.W.), Western Australian Speleological Group members Peter and Julie Henley were guided through the Binney Tunnel to Hells Half Acre in Newdegate Cave. A sadistic way to introduce them to the joys of caving in Tasmania if ever there was one! It was noted that the muddy sections, including the slide down to the creek in Mystery Chamber have dried out considerably and are now just

Scrub bashing has been done on the N.E. side of Cave Hill, via Creekton Rd., Chestermans Rd. now being blocked by a large fallen tree near the Wolfhole track. Sometime was spent below the "no thoroughfare" road branching off Creekton Rd. to run parrallel to Chesterman's looking for dolomite which did not appear very prevalent, and although one small collapse was noted it appears most of the dolomite is west of this area.

#### K. KIERNAN, TRIP SECRETARY

(2 Trips)

#### \*

# ANSWERS TO "TERAUD'S TEASER NO. 2"

ACROSS				DOWN
1. Caved				l Cabins
4 Ladder		•		2 Valid
9 Belayed			_ 141	3 Days
10 Solve				5 Abseiled
ll Nude				6 Deluges
12 Bridge				7 Reed
13 Ewe				Adobe
14 Vein				13 Entrance
16 Ease				15 Entombs
17 Bed			k-	17 Bylaw
19 Stormy	Support of			18 Smiled
20 Slim			++ .	21 Lured
24 Woman				22 Swim
25 Apparel				23 Spit
26 Master				
26 Tided			***************************************	-

#### CAVE NUMBERING

At long last, cave numbering is under way in Tasmania. The system adopted is that T.C.C. has numbers 1 - 200 in all areas, while S.C.S. has 201 - 400 and T.C.C. (N.B.) 401 - 600. The clubs will apply their allotted numbers in all areas and will move to a new series when all have been used. This system appears to offer the most convenience, and also fits in with numbering done already by T.C.C. Due to there being a clear division between all Tasmanian caving areas it appears unnecessary to have an alphabetical prefix on the tags, although one is necessary for reference. No firm decision has yet been reached on areas and prefixes.

Brief details of holes numbered so far by S.C.S. (Date numbered in parenthesis)

J.F. RESCUE POT (30/5/70) Pothole with dangerous talus. 350ft deep with 90ft ladder drop.

J.F. 202 (30/5/70) 100 yds W. of J.F. 201 Unexplored swallet hole with very spectacular waterfall entrance into 90ft deep collapse doline.

<u>J.F. 203 BONE PIT</u> (5/7/70) Large cave with long ladder pitches. 300 - 350ft deep.

J.F. 204 (5/7/70) Unexplored pot near J.F. 203. 30ft drop.

J.F. 205 (5/7/70) 30ft ladder drop, no continuation, near J.F. 204.

 $\underline{J}$ -F. 206 (5/7/70) Promising swallet in large doline near  $\underline{J}$ -F. 205. Exploration incomplete.

J.F. 207 VOLTERA (5/7/70) Swallet of large stream in very large doline. Water entrance unnegotiable. Dry entrance blocked at depth of 50ft.

J.F. 208 (5/7/70) Unexplored cave, small entrance into chamber.

J.F. 209 (5/7/70) Dry cave in creek bank, not properly explored.

J.F. 210 SESAME (5/7/70) Small cave in big doline, choked at depth of 50ft. Former swallet now abandoned.

J.F. 211 (5/7/70) Unexplored pot, 15ft in diameter and 50ft drop.

J.F. 212 (19/7/70) Unexplored pot with 30ft drop.

J.F. 213 (19/7/70) Swallet of tiny creek in deep doline. Very small entrance under face. Unexplored.

J.D. 201 - 203 HAMOIK I (14/6/70) Low roofed outflow cave. 350ft of passage and 50ft deep. Some decoration. Glow-worms. Entrances numbered in upstream direction.

J.D. 204 - 205 HAMOIK II (14/6/70) Low roofed inflow cave with two independent creeks, 200ft of passage. Some decoration.

..cont.

L. 201 (25/7/70) Efflux at Showground. Very tight but reportedly goes.

L. 202 CANNED CRAWL (26/7/70) Small cave at Limestone Creek with long crawl and short dhimney.

L. 203 SHAWL POT (26/7/70) Small pot at Limestone Creek with drops of 15ft and 25ft. Some decoration.

M.O. 201 GEORGIES HALL (22/8/70) Large cave with talus and superb decoration. Linked to Wet Cave. Part of Mole Creek System.

K.K.

#### CAVE FAUNA

Wetas have been collected from Canned Crawl at Lorinna, Hamoik II at Jukes-Darwin and a member's home at Taroona but are yet to be identified, as is a spider collected from just beyond the thresh hold in Tassy Pot, where a colony of them were observed in company with frogs. Anaspides have been collected from Welcome Stranger. Details of some Tasmanian pseudo scorpions, some of which were collected by the society appear in the paper: Dartnall, A.J. Some Tasmanian Chthonid Pseudo Scorpions Pap. Proc. Roy Soc. Tas. 104 pp. 65 - &

#### CAVE FLORA

An interesting fungi (?) has been observed in Welcome Stranger. It appeared as a number of needle like projections up to one inch long radiating from a central core.

# BONES

Bones collected from Welcome Stranger appear to be of the native rat to be collected.

Many bones have been observed in Tassy Pot but are yet

# SURVEYING

Mapping has continued in Welcome Stranger and Voltera has been traversed to grade 3. Part of the Kelly's Pot survey has been plotted, but the traverse has not yet been completed.

#### - CAVE TERMINOLOGY -

- CHAMBER The largest order of cavity in a cave or cave system; it will have considerable length and breadth but not necessarily great height.
- CHIMNEYING Ascent or decent by means of body and/or limb pressures against two walls.
- CHOCKSTONE A rock wedged between the walls of a passage.
- CHOCK Rock debris or cave fill completely blocking a passage.
- COLUMN A formation joining roof(or overhang of wall) to floor, and separate from the wall, due to the junction of a stalactite with a stalagmite.
- CRYSTAL POOL A pool, generally with little or no overflow, containing crystal deposits
- CURTAIN A thin wavy or folded sheet of dripstone formation, hanging from the roof or projecting from a wall.
- DEAD CAVE A dry cave in which there are no dripping decorations.
- Cave features due to secondary precipitation of calcite, aragonite, gypsum and other rare minerals.
- DOLINE: A natural depression on the surface of a limestone region.
- DOLINE
- COLLAPSE A natural depression due to collapse into a cavity below.
- DOLOMITE 1. A mineral like calcite but composed of a double carbonate of magnesium and calcium.
  - 2. A rock composed predominately of dolomite minerals.
- DRIPSTONE Secondary preciptation from falling drops in forms such as stalactites or stalagmites. Usually of calcite but sometimes of aragonite or gypsum.
- DUCK 1. As an ordinary caving expression, a water trap in which the submerged part is so short and shallow that it can be passed by a simple "duck under" without swimming.
  - 2. As a technical expression used by the Cave Diving Group, not a water trap but a passage with an airspace above water of only a few inches so that actual progress means total immersion no limit in length.
- ECCENTRIC A adjective (or noun) referring to decorations such as stalactites or stalagmites which have abnormal attitude.

# TERAUD'S TEASER - NO. 2

1		2		3.	1/1/	1//	4	5		6		7
	111.	e lawy	1/4		11/1	8	1/1	,	1/4		1/1/	<u> </u>
9	7/						1/1	10				
11	11.		1//	11	1/1	77	1/1		1/1		1/1	
	11:	7/:	11/1	13	11/1	12	181		077		17/1	
1111	14	15	11/1		110	16		16	1//		1/1/2	1/2
1/1	1/4		11/1/			17	11/1.		111	11.	11/	15
1/4	19		K.J.		1111.		1//	1110	20	21	111,	
22	11/		1//		1///		11/1	23	11/		1/1/2	TV
24					1111	25			9111	-	(MA)	
	1/1		1//		1/1/2		11/1		1/1/		1111	
26						11/2	1/1	27				

# CLUES

# ACROSS

- 1. Went underground
- 4. Ascent aid
- .9. Helped descend with rope
- 10. Find answer
- 11. Bare
- 12. Span
- 13. Sheep
- 14. Blood vessell
- 16. Leisure
- 17. Resting place
- 19. Tempestuous
- 20. Thin
- 24. Adult female
- 25. Attire
- 26. Teacher
- 27. Passed

# DOWN

- 1. Huts
- 2. Sound
- 3. Periods
- 5. Descent with rope
- 6. Floods
- 7. Marsh grass
- 8. Sunburnt brick
- 13. Vay in
- 15. Blocked in permanently
- 17. Local statute
  - 18. Grinned
  - 21. Enticed
  - 22. Move in water
  - 23. Expectorate

FOR AMSWERS SEE PAGE 20.

#### CLUB NOTES

#### WELCOME ABOARD

The President and Committee have much pleasure in taking this opportunity to extend a welcome to the following new members.

Chris Harris
Leonie Smith
and
Graeme Watt

# CONGRATULATIONS

. . . . . . . . . . . . . . . . . . . .

To Geoff Fry on his election to the position of Secretary to the Society.

Our thanks to Ron Mann for his valuable work in this position over the past 17 months.