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SPELEO SPELEO



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Holocaust entrance pitch.

SPELEO SPIEL

NEWSLETTER OF THE TASMANIAN CAVERNEERING CLUB, Inc.

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PRESIDENT:
Trevor Wailes 214 Summerleas Road, Kingston, Tasmania 7050. Ph 291382

SECRETARY:
Nick Hume 9 Primrose Place, Sandy Bay, Tasmania 7005. Ph 251934

TREASURER:
Leigh Douglas 33 George Street, North Hobart, Tasmania 7002. Ph 343789

QUARTERMASTER:
Bob Reid 21 Haig Street, Lenah Valley, Tasmania 7008. Ph 280983

EDITOR / TYPIST:
Stuart Nicholas 7 Rupert Avenue, New Town, Tasmania 7008. Ph 283054

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FORWARD PROGRAM

Wednesday MAY 1 - General Meeting: Principal topic for discussion will be the draft management plan for Kubla Khan, as noted in the AGM info elsewhere in this Spiel.

Late APRIL / early MAY : KD trip - Dean is keen; is anyone else? Exact date is dependant on the weather, ie risk of flooding! See Stuart Nicholas for this trip.

Late APRIL / early MAY: NIGGLY CAVE (JF 238) - to do AUSTRALIA'S NEW LONGEST UNDERGROUND PITCH.... Yes, Niggly Cave has a shaft in it shown by surveying to the top and bottom (not down it yet!) to be approximately **175** metres deep!!! (Get those leg trainers in action....) See Rolan for this quadricep quandary...

AND NOW.... a note (OR TWO) from the QUARTERMASTER!

(a) Bob Reid, our esteemed quarterperson, informs me that he can supply rappel racks complete with brake bars for the meagre price of \$50.00! Buy yours now before the next CPI increase - you can even buy a spare for that money!

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(b) Bob Reid, our esteemed quarterperson, (again) informs me that people are borrowing Club lamps and other paraphenalia OK, but they are **NOT BRINGING THE LAMPS & GEAR BACK PROMPTLY!!** This is at least inconvenient, and at worst fairly disastrous if we have (another) rescue callout - especially in the case of lamps. So please do the right thing and borrow the stuff, but **BRING IT BACK PROMPTLY!!**

EDITORIAL

With rivetting news like that above, we really don't need an editorial this month, but I'll say something anyway. A recent trip into Ice Tube (JF345) showed the bolt anchors to be in fair condition, but certainly not pristine. Corrosion in the threads of some will soon render them dangerous. British data indicates that a significant fraction of the total number of bolt failures are due to stripping of the threads under load. Wear and corrosion (with corrosion accentuated by repeated bolt placement and removal) are the causes of the thread failures in the anchors.

Stainless steel non-removable bolt / hanger combo units are made which are claimed to be far more resistant to corrosion than the presently used type of anchors. Should we replace the existing anchors with this type? Should we adopt a policy of leaving hangers and bolts, suitably greased, in anchors permanently (assuming visiting groups didn't remove them...)? Perhaps change (back) to the driven-in "rock climbing" style of bolt with fixed hanger? Establishment of known secure anchors will prevent the growth of "bolt farms" at the tops of pitches and hence increase the "wilderness value" of a cave which fixed anchors detract from. Safety will not be compromised - fewer bolts means less confusion about which are secure. Making a tool to remove the original anchors is not a problem. Worth a thought?

Stuart Nicholas

PRECIPITOUS BLUFF

20 to 24 November, 1990

Participants: Rhys Jones (Research School of Pacific Studies - ANU), Kevin Kiernan (Forestry Commission), Steve Stanton (PWH), Rolan Eberhard and Nick Hume (TCC).

The expedition was organised largely to allow Rhys and Steve to examine the PB karst for any shelters/artefacts indicating a late Pleistocene aboriginal presence. Such early occupation has been documented at Wargata Mina (cave) 25 km north of PB and a migratory route connecting both areas via the New River valley seems plausible. Further potential sites were found during recent expeditions (Speleo Spiel #241-242, #252-253 & #258-259) and warranted a qualified inspection. In addition, Kevin wanted to look at recently discovered fossil-phreatic upper levels in the Bauhaus Cave System. These may have harmonised with former sea levels (+100m ASL) altered subsequently by eustatic/tectonic changes, or at least to higher water table levels of a previously less denuded karst landscape. He was also interested in some small-scale glacial ridges on the slopes of PB. Rolan and myself provided local karst knowledge for the group, performed hydrological studies and even managed some surface exploration in between time.

The afternoon of the first day was spent in Cueva Blanca (PB4). Despite seeming an ideal site, no archaeological material was found. The cave represents former phreatic conduit (resurgence?) for Bauhaus waters, and gives ready access to the system's very early levels of development. Rolan descended a 30m pitch to the present active level and released tracing agent in *Inundation* - a lake series terminating the downstream of the cave. I then placed detector bags throughout nearby Damper Cave in order to establish entry points of Cueva (*ie* Bauhaus System) waters (see surveyed relationships in Speleo Spiel #258). Only some 40m separates

Inundation from the closest approach of Damper Cave, although the tracer didn't bridge that gap during the two hours of that day's caving. The "archeos" also briefly inspected a near-entrance side passage area in Damper.

On Wednesday I detected tracer emerging from a submerged floor hole in Damper Cave streamway - an interesting result (see below for interpretation). The point is some 120m in from the cave entrance (35m upstream from survey station #2). The group then went part way up PB summit walking track to the caves Weeno (PB23), PB27 and Skylab (PB28). Rhys commented that PB27 particularly, was : "...one of the most promising looking sites...". Again, nothing unambiguously qualifying as evidence was found. Flakes of spalled limestone created likenesses of conchoidal fracturing, mineral-staining associated with flowstone gave the impression of ochre and crumbling wood fragments appeared in unlikely places. It was all very deceptive, but Steve and Rhys remained hopeful and kept looking. Kevin and Rolan entered *Gaping Grin* main chamber via Mezzanine (PB26) and I surface-explored the cliff line immediately east of the area.

Thursday the group wandered the karst glade south of Damper Cave (intersection of plain and slope) towards and eventually beyond the Quetzalcoatl Conduit (PB3) area. "NR1", a small shelter described from HEC investigations of the area (Forster et al, 1983) as a very probable site, yielded nothing. PB2 entrance was hopelessly infilled with breakdown. HEC track marking tape was pursued around the ridge to Quetzalcoatl Conduit and the area in between given a thorough surface exploration. Two hundred metres south east of PB3 is the overhang of Divers Entrance (PB11) - a short surface exposure of Quetzal. streamway. Nearby, Pendulum Palace entrance (PB12) and PB13 were examined without success, despite an ideal location with respect to aspect, source of water and lagoon surrounds. Breakdown blocks and mud extensively inundate floors inside both caves, with virtually no soil profile evident other than in the small infall debris-cones at entrances.

That afternoon, a return was made to Cueva Blanca for a more systematic inspection. Steve explored to the north west of the cave, reaching the sinkhole feature marked on the *Precipitous* 1:25000 topo. sheet. A few minor overhangs were turned up there and also immediately upslope from Cueva. Rolan continued a series of conductivity / pH / dripwater measurements begun earlier in Damper Cave. Dolerite cobbles extracted from Cueva revealed little in the way of weathering-rind formation, despite obviously very old stratigraphic association. Kevin commented that rind thickness was a useless indicator of age-since-deposition in the static conditions prevailing in caves.

Friday was raining and cold, discouraging any early start. Rolan checked his instrumentation in Damper, then followed the edge of New River Lagoon for a couple of kilometres north of the campsite before striking inland. Little in the way of karst features was seen, apparently thanks to thick detrital covering and vile vegetation. Kevin braved hail and snow for a bit of observational geomorph. on the summit plateau of Precipitous Bluff, returning late in the day. Steve explored further to the north west of Cueva Blanca, finding thickness of vegetation to be in proportion to distance travelled.

I wandered up the summit walking track to about 350 metres ASL (a point some 400 paces beyond Log Doline) to check the deep doline / gulches that appear south of the track at that level. Deep grikes were encountered in generally steep / unfriendly terrain, including a few minor wells and shafts. Descending through a calcareous siltstone interruption of the limestone stratigraphy at c. 200m, I came atop a 30m vertical-sided uvala/cave entrance complex. Small towers and steep ground were negotiated while spiralling down to a lower side of the depression. The entrance was impressive, but without enough draught to indicate anything very major below. I lacked light and rope to do more than gaze down a steeply angled shaft. This and smaller nearby entrances were (blue) taped during the climb back up the slope.

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I emerged at the track 200 paces above Log Doline - one entrance in a doline near the return point was carrying a good draught. While only brief, my sojourn hinted at further things to be found in this particular area if one is prepared to put in sufficient effort. Aspect is important, for many of the features have been inundated from colluviation along the broader flanks of PB (ie. away from relatively protective isolation of the track ridge.)

The trip was fairly short by usual PB expedition standards - Kevin came away pleased with his findings; Rhys and Steve were a bit disappointed with the lack of obvious evidence for ice-age occupation; Rolan and myself content with our hydrological contributions. It will be interesting to see reports from other group members whenever they get published. Even the apparently negative archaeological outcome has implications for early migration patterns. Rhys conceded high vegetation density (barring movement) may be sustained here in the cold and dry conditions prevailing elsewhere in Tasmania during the Last Glacial Maximum, among a number of other possibilities. Many thanks to Kevin and Rhys for the opportunity to tag along.

~~*~*~*~*~*~*~*~*

Knowledge of the different levels and present hydrology in PB's various cave systems tempts interpretation of genetic sequences. Bauhaus water originally passed over the top of present Damper Cave, as evidenced by well developed fossil phreatic conduit in Cueva Blanca, which presumably once harmonised with a much higher regional water table level (Cueva Blanca entrance = +40m ASL). Following this stage there seems to have been very rapid downcutting (ie the narrow blackened vadose canyon) of as much as 30 metres below Kokoku's and Gaping Grin's upper levels - a scale more easily attributable to tectonic uplift of the landscape (and hence (sea?) water-table level retreat) than any reasonable eustatic sea level change).

Bauhaus entry switched to the before mentioned floorhole, without apparently developing any presently visible vadose rift in the cave wall of Damper. This may indicate sea-level retreat below the present stand (Damper is at c. 10m ASL) - allowing a connective passage to develop below present floor level of Damper Cave - one that has subsequently been inundated by glacio-fluvial clastic debris. An immature vadose from of passage is also seen submerged in Floating Anxiety Sump, ie downstream Bauhaus (Speleo Spiel #258).

Bare rock is visible on the higher side of the floorhole (possibly marking the former top of vadose passage), while the other side is a submerged slope leading to almost total detrital blockage of the entry conduit. Subsequently, the low-roofed sections of Quetzalcoatl Conduit and parts of Damper may have developed by paragenesis (upward vector dissolution enforced by detrital infilling of cave passage), and enhanced by a post-glacial return of sea-levels to their present stand.

Bauhaus water may have incised former entry to Damper above the left-side passage far in from the entrance (survey indicates close approach of both caves at that point) - any connection now sealed by copious flowstone emanating from the roof. Further examination of cave morphology, possibly including use of dating methods, will hopefully clarify marine/tectonic influences on PB karst.

Nick Hume

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GROWLING SWALLET (JF36)

8 January, 1991

Party: Bob Reid, Mark Bryce, Steve Bradford and Dean Morgan.

A late decision the night before had Growling Swallet as the target for the day. Mark and Steve have been members of the Club for a couple of years but had apparently never been there.

I had an old sleeping mat in the back of my car and this was chopped up into four sit-upon squares which we took and placed at the top of the ladder climb / Avon's Aven at the beginning of Necrosis so the next people to get trapped there will at least not have to sit on cold rocks. A leisurely trip was made as far as Mainline and part of the way along it until time ran out. The water levels were very low and the trip was quicker than expected so we even had time to wash all the gear in the stream at the entrance and laze about in the sun!

Dean Morgan

Bob Reid has access to an international electronic mail network which, amongst many other things, has a category for caving articles and info. The following item is from the network (ex USA) - we have just had an S&R exercise here, but thankfully in more congenial and less biological (aracnidic??) atmosphere! Get a load of this!!

From: csdon@mtsu.edu (Don Lance)
Date: Wed, 17 Oct 90 12:48:41 CDT
Subject: Check out this story...

SPIDERS, THE NCRC, AND YOU

Disclaimer : The following story is told by the author's opinion. Whereas some people may find the following experience exhilarating, the author reserves his right to find those people insane!

(Definition : NCRC = National Cave Rescue Commission)

How many of you have ever been to Texas? How many of you have ever been to an NCRC seminar? How many of you have ever been to an NCRC SEMINAR IN TEXAS?

Well, the 1990 NCRC was held in San Saba, Texas, and it was an experience for everyone. One experience is related here. The members of this group were primarily Tennessee Central Basin Grotto members, but also two instructors (Leroy and Rod), several Puerto Rico friends (Javier, Mimi, and Josie) and the Nashville Grotto Chairman (Jody) were also there.

Much of the field work was done in caves located in Colorado Bend State Park, which is normally off limits. NCRC got permission to work there. This is where this tale takes place...

On with the story...

...We went to this one cave called Matt's Rain Drain. It was located in a gully in the desert that was over a half mile from the nearest 'road'. I had brought my video camera, but when I found out about the hike with rescue equipment, I chose to

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leave it behind. I wish I didn't! When we got there, there was this pit in the side of the gully. It was about 8 feet in diameter, and about 40 feet deep. At the bottom was a nice-sized room with some passage. The most outstanding thing about the pit, however, was the SPIDERS. Actually, they were granddaddy long-legs, but when there were THOUSANDS of them you really don't notice! All the walls of the pit were covered, to the depth of a couple of inches, with them. It looked as if the walls had grown hair!

Well, the instructor (Rod) said, "What are you waiting for!?! Get down there and practice rescuing!". Suuuurrrreeee, we thought. We drew straws, and Jody and I won!!! We were to be the surface team. (Whew!)

Everybody else rappelled in. The entire walls were moving as they went down, and big clumps of spiders kept peeling off the wall and falling in. I must admit I found it amusing to hear the men in the team screaming just about as loud as the women were down there! ("Uuuuuuuuu--uh! Hey, get off me man! Whoa!")

Even though I was on the surface, spiders began crawling out everywhere onto me! They were everywhere. It was the wildest thing I've ever seen! Have you ever tried to concentrate on belaying someone when you're covered with spiders?

Down in the pit, Jeff Parnell said that when he looked up he could see spiders LEAPING off the walls and sailing into the pit. And whenever a washtub-sized gob of spiders hit you, he said it felt like being hit with a wet towel. He said after you got some of the spiders off (you never really got totally rid of those little guys), they would walk over to the walls of the pit, climb up, and LEAP off again. It was like they enjoyed it! He also said that there were so many spiders you could SMELL them--- a sort of sickly sweet smell.

Then the rescue problems started. The 'victim' was Leroy, who had volunteered, but he didn't realized what he had volunteered for. After tying him firmly down in the rescue litter (arms at his sides), we began to haul him up. When he got almost to the top, it turned out that the team below had miscalculated and had tied the haul line too far from the litter. We had to lower him down and try again. All this time he was covered with spiders, and he wanted us to rescue him QUICKLY. (Imagine that!) We hauled him up a second time, and still the haul line was too far from the litter.

At about this time a big gob of spiders peeled off the wall and fell onto his face. With no way to get them off, he began to try shaking his head and blowing/sputtering with his mouth. This worked somewhat, but somehow not to his satisfaction! To our amazement, our victim then began twisting and turning, and then untied himself from the litter! He then climbed HAND OVER HAND out of the litter and out of the pit in an escape that would have made Houdini proud!

Beats anything I've ever seen. Well, the instructor called the rescue off (time was short), and everybody began climbing out. They found, to their enjoyment, that the bouncing a rope makes during climbing helps even more spiders into the pit. One woman, Josie, used prusik knots in her Texas-Y climbing system (a system that is usually pretty slow when compared to rope walkers, and prusiks make it even more so). Slightly discouraged by Josie's progress, one guy from TCBG (Eric) could stand it no longer. "I'm climbing out behind you Josie!!!"

Within the space of seconds, he was underneath Josie! He really did climb FAST! (I wonder why?) As a matter of fact, he was so fast that the rest of us thought he was going to bring out Josie on his shoulders... After everyone finally got out of the pit and gathered the rescue equipment, Jody said, "Now that wasn't such a chore, now was it?". Jody spent three days in the hospital.

Caves Near Chuave, Papua New Guinea

by Rolan Eberhard

Introduction

Chuave, a town in Simbu Province in the highlands of Papua New Guinea, is situated on an extensive belt of Tertiary limestone. This extends south-easterly from Kundiawa to the Asaro River and into Eastern Highlands Province. The uplifted beds form a precipitous escarpment from Kundiawa to Chuave, at which point a valley carrying drainage from the north-east crosses the deposit. South of Chuave the limestone rises dramatically again, reaching an altitude of 2850m at the summit of Mt. Elimbari. It is an impressive landscape, containing well developed karst features including numerous caves.

Expatriate cavers were active in Simbu in the 1970's. Speleological interest focused on the Porol Range, the slopes of Mt. Elimbari, and to a lesser extent, the Chimbu Gorge north of Kundiawa. A major find in the Porols was Bibima, a swallet explored to a depth of 494m in 1974, and currently PNG's third deepest system. In more recent years little cave exploration has been done, although the area has a depth potential of 600-800m (Bourke, 1980).

The local people have been making use of the caves for their own purposes since long before the 1930's when Europeans first entered the Highlands. Traditional uses include providing shelter, refuge in times of war, a source of food in the form of flying foxes, and a place to intern the dead. Vertical shafts were apparently sometimes used to dispose of witches and the diseased. The abundance of rock art in many cave entrances attests to their cultural significance, and some sites are of considerable archaeological interest.

A brief trip to Kiren Cave (Eberhard, 1990), near Keu Village on the northern flanks of Mt. Elimbari, sparked my interest in an area of streamsinks and dolines nearby. These occur within an enclosed valley trending north-south between Fikombaru and Chuave (see Figure 1). I made several reconnaissance trips there in late 1989, and the four principal caves that I investigated briefly are described below.

Kirowa

Kirowa, located about 30 minutes walk from Chuave near Gomea Village, is a well known cave. Various names have been applied to it in the literature. Presumably this is partly a result of the way different authors transcribe local pronunciations, but this alone does not entirely explain the proliferation of names. The cave referred to here, as well as by Bourke (1978), as "Kirowa", has also been called "Kiowa" (Wilde, 1974, Wilde & White, 1976), "Gomea" (Wilde, 1973), "Kaimomo" (Wilde, 1973, 1974), "Kimomo Cave" and "Topia River entrance" (Read, 1973). Champion (1968) lists the latter two as separate caves, though in the context of Read's article it seems that only one cave is involved. Deharveng et al (1982) talk of "Gomea Cave" containing the "Kiowa River". In response to my questioning, an informant from Gomea Village seemed to think that "Kirowa" was the most appropriate name for the cave.

The cave is a large resurgence with the most easily accessible sections being fossil upper levels. A slippery climb from a large opening in the cliff face above the rising leads up to a spacious entrance chamber. Several holes in the ceiling allow daylight to enter here, and calcite drapings and the sculptured nature of the rock give the place a cathedral-like atmosphere. Two obvious passages lead off. One is a broad, flat-floored tunnel that may be followed to the edge of a 4m drop. According to Wilde (1973), the river passage that lies below this pitch has been explored downstream to where it resurges.

From the entrance chamber the second passage is reached by ascending a 15m slope on the right. This opens out into a large gallery containing a bat colony. Further along the passage are massive calcite formations in the form of columns, flowstone and gours. The active riverway is again met, though it is still possible to continue for some distance along the upper level. At the furthest point I reached it was necessary to climb down much closer to water level, and here the river was racing through a 4m wide canyon.

Lombila

The Lombila River sinks in a large depression to the south-east of Kirowa. In addition to the swallet entrance, several other entrances are known. One is a shaft named Angugu that joins the river passage via a 44m shaft. The system was first entered by this route in 1976, though at that time the cavers were apparently unaware that the river they encountered went underground just a few hundred metres upstream. This fact was verified in 1978 when the main swallet entrance was entered. The explorers pushed downstream of the point where Angugu joins, proceeding for "several hundred metres further till again stopped by another narrows section" (Bourke, 1978).

The main river passage is an impressive borehole some 10m in diameter. Minor rapids and pools occur along its initial length, and tree trunks jammed in the ceiling at various points testify to the force and volume of water during floods. Torrential rain at certain times of the year probably makes this a fairly regular occurrence.

A number of side passages branch off the main streamway. In order of increasing distance downstream they are as follows: (1) a tributary stream entering from the left - local intelligence gives Langomo (see below) as the source, (2) a dry gallery on the right leading into a high chamber where another entrance possibly joins, (3) a ramp on the right leading up to the base of a shaft entrance frequented by bats, and (4) Angugu - see Wilde & White (1976) for description and map.

Judging by the amount of water it takes, Lombila is probably the principal source of the river in Kirowa. It is possible that the through-trip would be a fairly straightforward, granted that the size of the river and risk of flooding make it a serious proposition. Definitely a dry season cave. The distance between the two caves is in the order of 2km, and although Wilde & White (1976) predict "numerous vertical wet pitches to be found", the height difference may not be all that great.

Langomo

Three entrances in close proximity appear to be associated with this cave. The lowest is a streamsink of moderate size that is reputed to join Lombila. The water can be followed underground for a short distance to where a sump is encountered. A dry entrance in a cliff face just uphill is a more interesting prospect. It consists of a large rift out of which cold air was draughting at the time of my visit. Entry requires the descent of an initial 10m drop. Below this are various passages and undescended drops mentioned by Read (1973). He refers to it as Oriro Cave.

A third entrance is located further uphill again. This is a large doline, of which one side is a massive overhanging entrance. At the bottom is a flat mud floor and little apparent passage development. However, a crawl that leads off at one point is likely to connect to the active system below.

Kirove

Kirove is most easily approached from Fikombaru. It is another swallet that may feed Kirowa, though conceivably the water emerges elsewhere. The entrance is an impressive arch draped with large stalactites and some 50m wide by 40m high. Two streams that merge outside have cut a deep trench on the right side of the entrance. It is possible to scramble up to a broad platform close to the ceiling on the left. From here a traverse over greasy slabs leads down to waterlevel. A spacious passage descends in a series of rapids and short waterfalls to a sump approximately 150m from the entrance.

Summary

Exploration potential in the Chuave-Elimbari area is good. Lombila offers exciting river caving with the likelihood of realising a connection with Kirowa. Although the depth potential of this system is not great, the possibility that Langomo is part of the same system may offer significant additional depth. The prospects for deep caves are better to the immediate south. Swallets have been reported from the eastern slopes of Mt. Elimbari, and one small cave is known to exist on the summit itself (Wilde, 1973).

In PNG terms, access via roads and foot tracks to many of the caves is relatively good. However, the local people can be unpredictable in their response to would-be cavers. In most cases I had few problems visiting the caves described above, however, in other areas I did experience difficulties. As already mentioned, there are strong traditional associations with certain caves, and villagers may be reticent about letting outsiders in as a result. Sometimes payment is demanded for the privilege. The situation may be further complicated where several people claim to be "papa bilong graun" (ie. owner of the land) for particular caves, often with conflicting views as to whether access should be granted and at what price.

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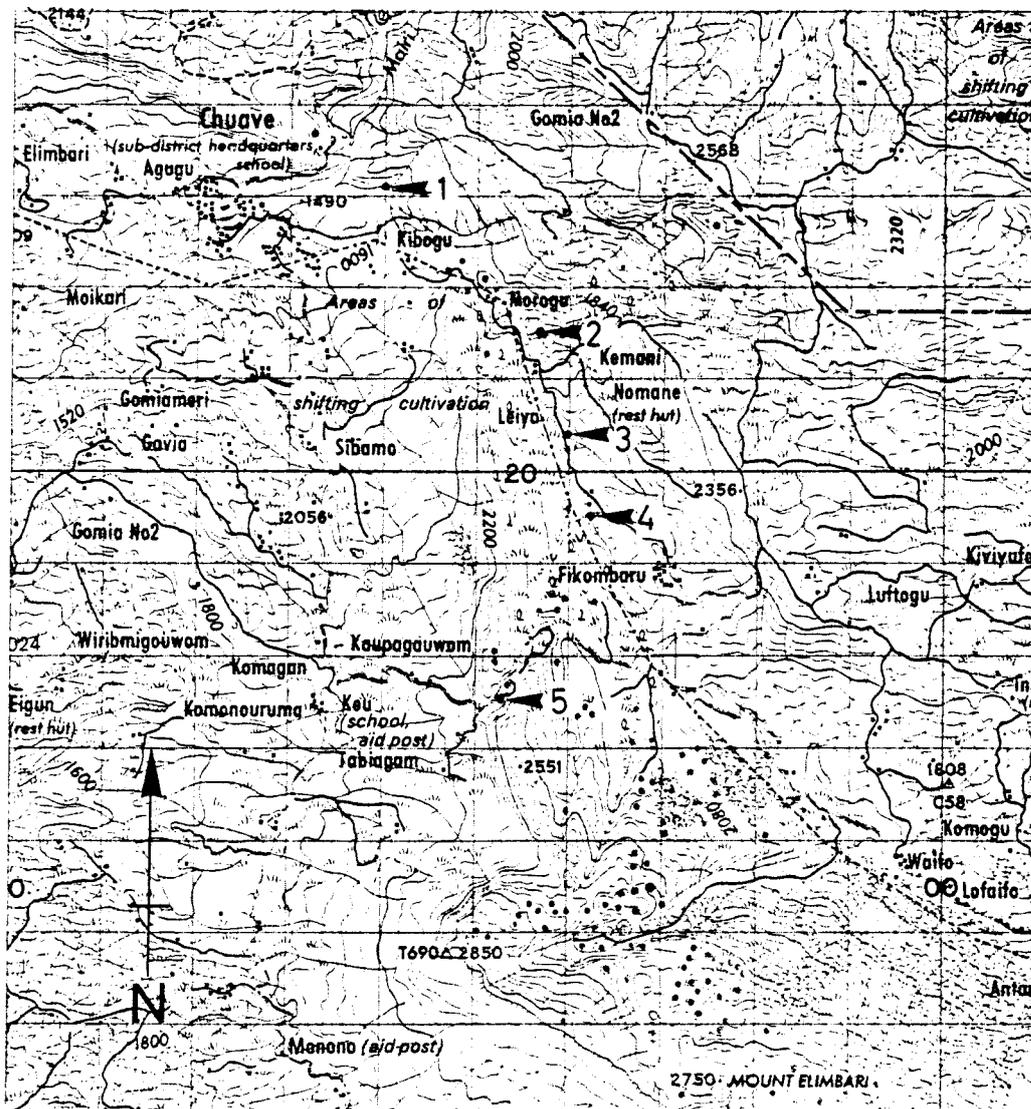
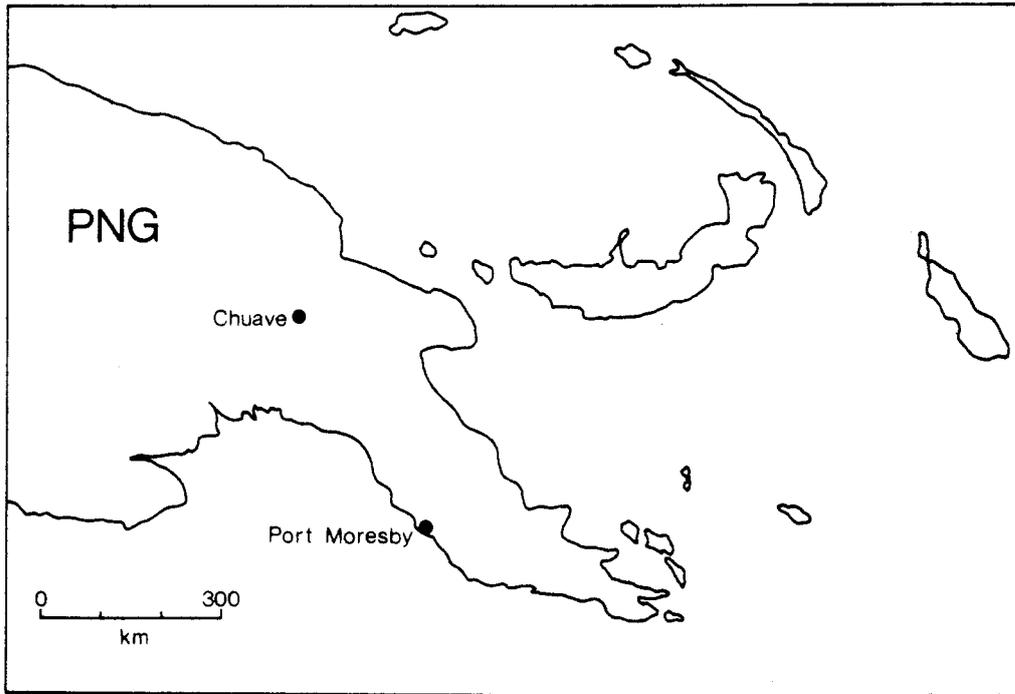


Figure 1: Approximate location of caves in the area between Chuave and Mt Elimbari. Grid lines are at 1km intervals, with 40m contours. 1: Kirowa, 2: Lombila, 3: Langomo, 4: Kirove, 5: Kiren Cave.

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THE ANNUAL GENERAL MEETING - held MARCH 27, 1991.

A reasonable turnout of about 17 people saw something of a "spill" in the regime that runs our esteemed club. The office bearers as elected (and there was an election!) are listed below.

Matters discussed included the need for a monthly "official / formal" meeting - this will be instigated from the first Wednesday in April, ie the next meeting date. The idea is to give everyone something to come along for and a forum in which to discuss any issues, large or small - the meetings will usually be short, but **will occur**.

So, note that GENERAL MEETINGS will happen on the first Wednesday of every month, starting at 8.30pm in the back meeting room of the Wheatsheaf Hotel, South Hobart. The third Wednesday of the month will still see the non-formal gatherings as of the past, maybe with slides or whatever.

Other discussion included the need for a possible amendment to the Constitution to ensure our exemption from taxation liability and a motion was carried to that effect. Input to PWH re the Kubla Khan draft management plan was called for and this will be discussed at the General Meeting on the first Wednesday in May. Copies of the relevant sections of Andy Spate's draft management plan, plus a couple of copies of the document complete, will be available for perusal before then, and at the meeting, from Stuart Nicholas.

Office bearers for 1991/92:

President	Stuart Nicholas
Hon. Secretary	Rolan Eberhard
Hon. Treasurer	Simon Morgan
Vice President	Dean Morgan
Quartermaster	Bob Reid
Editor	Stuart Nicholas
Librarian	Stefan Eberhard
Archivist	Stefan Eberhard/Albert Goede (for maps)
Cave Diving Officer	Nick Hume
General Committee	Trevor Wailes
	Nick Hume
	Tim Sprod
	Caleb Pearce
Honorary Auditor	Ian Ross
Public Officer	Stephen Bunton

On behalf of all members of the Tasmanian Caverneering Club, Inc. I would like to express my appreciation of the work done by Trevor Wailes as President of TCC since 1981, ie a ten year term! Well done Trev - hang in there - its always good to have a devil's advocate in the ranks!

Thank you also to all other office bearers without whom our little Club could not exist. I trust we will continue on as Australia's most productive **caving** club. If there are any gripes out there, please don't be backward in coming forward and making your problem known. Phone numbers of the office bearers will appear at the front of the magazine and a complete member list will be printed in the near future.

Stuart Nicholas

TASMANIAN CAVERNEERING CLUB Inc.

PO BOX 416J, SANDY BAY, TASMANIA, 7005

MEMBERSHIP RENEWAL FORM.....1991/92

FIRST NAME:..... LAST NAME:.....

HOME ADDRESS:.....

SUBURB:.....CITY:.....

STATE:.....POSTCODE:.....

MAILING ADDRESS:.....

SUBURB:.....CITY:.....

STATE:.....POSTCODE:.....

PHONE (home):.....(work):.....

PLEASE RETURN THIS FORM WITH YOUR FEE TO THE CLUB AS
SOON AS POSSIBLE - FEES ARE LISTED BELOW

PLEASE TICK

FULL MEMBERSHIP (18 years and over)	\$28.00	<input type="checkbox"/>
JUNIOR (under 18 years) & STUDENTS.	\$21.00	<input type="checkbox"/>
SPELEO SPIEL (only):	\$21.00	<input type="checkbox"/>
FAMILY MEMBERSHIP:	\$35.00	<input type="checkbox"/>

Annual subscription fees are due at the Annual General Meeting in the last week of March each year. They must be paid before the end of June - if not, you will be deemed unfinancial and your name removed from our files. The Tasmanian Caverneering Club relies on prompt payment of subscriptions in order that it may produce the Speleo Spiel regularly and keep equipment in good condition.

PLEASE PAY PROMPTLY!!