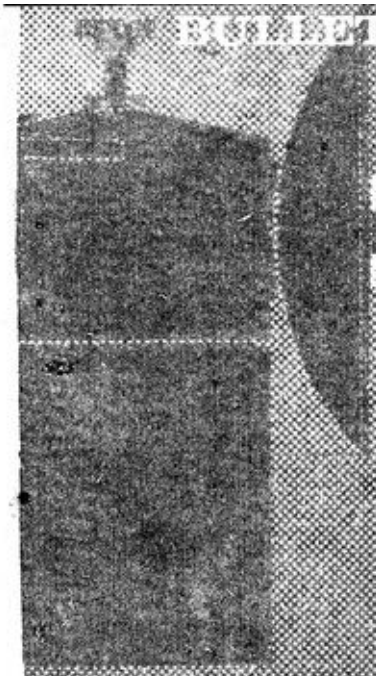

BULLETIN OF THE SYDNEY UNIVERSITY SPELEOLOGICAL SOCIETY

Lumen in Tenebris

SUSS

AUGUST 1975

Volume 15 No. 4

SUSS

FOUNDED 1948

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University of Sydney,
N.S.W. 2006

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MEETINGS

2nd October - Yarangobilly slides
6th November

CULLEN ROOM
OLD UNION
7.30PMsharp!

EVENTS AND TRIP LIST.

SEPTEMBER

19 Combined universities Dinner.

20-21 Jenolan (FULL)

24 Jenolan Subcommittee Meeting.

27-28 Bungonia TONY AUSTIN.

OCTOBER

2 October GENERAL MEETING Old Union.

4-6 Jenolan B. WELCH or M. HANDEL.

NOVEMBER

EARLY J.C.H.A.P.S. Meeting JENOLAN.

8-9 CLIEFDEN Seminar and Fie ld Study at Clieften. R.KING

29-30 CLIEFTEN Taplow Maze surveying R.KING

29-30 Yarangobilly Research Group Seminar in Canberra. P.WINGLEE

DECEMBER

SOMETIME Brittle Bazaar trip?, Jenolan. M.HANDEL

4 SUSS Meeting

ALSO N.S.W. Liason Council in late October.

Jenolan trips are run nearly every weekend, contact R.KING or B.WELCH.

R.KING 969-4843 B.WELCH 99-1013

P.WINGLEE 83-9182 T.AUSTIN 7507785

M.HANDEL 73-2028

AUSTRALIAN SPELEOLOGICAL FEDERATION.

CODE OF ETHICS

The Federation expects that the following rules will guide the actions of members of A.S.F. Societies.

1. (1) They will in reporting their work, avoid and discourage sensationalism, exaggeration and unwarranted statements.

   (2) They will in publishing their work take particular care to acknowledge other peoples' contributions to the work involved: either as clubs or individuals, pulished work, personal communications or whatever.

   (3) They will be discrete in disseminating information that might endang r caves. In particular they should not broadcast their knowledg: of entrance locations or routes.

2. (1) They will treat guides and other officials of tourist caves courteously and respectfully.

   (2) They will endeavour to be courteous to the general public, but will defend caves from the attentions of the uninstructed where this is deemed necessary for the protection of the cave.

3. (1) They will carefully observe the established rules of good camping conduct especially in the removal and proper disposal of rubbish.

   (2) They will bury their faeces when camping in bush conditions, but should avoid the catchment areas of caves.

4. (1) They will have specific or tacit approval from the owner or guardian before entering private property or caves reserves.

   (2) They will follow normal local practices regarding gates on properties or reserves.

   (3) They will not, except in cases of emergency, presume on the goodwill of owners in dry areas for supplies of water. Prior arrangements must be made.

   (4) They will take care to avoid interference with crops or stock.

   (5) They will, where a cave entrance has been blocked by the owner to prevent injury to livestock, reblock the entrance after use and liase with the owner to erect some fence or other less offensiv. means to protect the integrity of the entrance.

5. (1) They will not leave rubbish in caves; their own or other peoples! Spent carbide, flashbulbs, wrappings and other refuse must be brought out of the cave.

A.S.F. Code of Ethics (cont.)

5. (2) They will not disfigure caves by any unnecessary markimgs. Survey marks should be small and inconspicuous.

(3) They will take care to avoid disfigurement or destruction of cave decoration or any other natural features of the cave. Disturbance should be confined to tracks. In areas of clean flowstone floor, muddy clothing or boots must be removed and only clean clothing worn. Tracks should be rigidly adhered to. Helmuts should not be worn in the vicinity of stalactite clusters.

(4) They will not under any circumstances leave faeces in caves, they will prepare themselves beforehand or, when underground, make provision for the removal of faeces.

(5) They will take stringent precautions to isolate all artificially introduced organic wastes from the cave.

6. (1) They will, when visiting an area frequently visited by another club, do all in their power to co-operate with that club.

(2) They will conduct disputes in a restrained and gentlemanly manner.

7. (1) They will behave responsibly in environmental matters.

(2) They will endeavour to protect the caves of Australia.

THE EVALUATION OF THE NATURAL ENVIRONMENT FOR OUTDOOR RECREATION.

SYNOPSIS:

This article, adapted from an Economics essay, is primarily designed to suggest the scope and methodology and its problems in assessing the economic worth of recreation in the natural environment. Given that decision making bodies generally use some sort of cost-benefit analysis, the two techniques of visitor survey and travel cost for deriving a demand curve and thus total recreation benefit are analysed for their bias and comparability within this framework. There are many problems in this field of Recreation Economics, including the abuse of such techniques, yet it is felt that the present situation makes its development important. The economic analysis in the original essay has been omitted.

The scope for economic evaluation in the natural environment is limited. There are many reasons for limiting the destruction of the natural environment, some of which are: to preserve aesthetically pleasing landforms and vegetation and unique habitats, to maintain the overall viability of the ecosystem as well as the provision of recreational opportunities. Of these, only recreational activity could be even attempted to be valued in money terms despite the philosophical and practical objections even here. Economic growth and development demands the transportation of natural resources into consumption and investment goods in order to increase

continued from previous page.

the general "welfare" of society. However this often destroys the potential of the exploited areas to provide recreation opportunities, another form of welfare. It is the role of economics to assess the relative merits of different uses of scarce resources. "Although there are many areas of economic theory that will yield more elegant results, the need for decisions in this field is becoming increasingly urgent. Public policy decisions are made on the basis of a wide variety of influences and considerations and its economic value is one of them.(1)

Clearly, the satisfaction derived, by an individual from recreation is comparable to that gained by the consumption of a physical good.(1) Some people may gain great satisfaction out of a good being cheap and simple or because it is associated with a sophisticated self image or enjoy the mystique of the act of buying. All these are features in the analysis of the utility from market goods but are comparable to some of the characteristics of recreational experiences and thus they cannot be considered simply beyond valuation. The difficulty however arises because outdoor recreation is generally speaking a non-market commodity and so methods must be formulated to overcome this problem.

When deciding on a certain type of resource allocation model generally there are guidelines that should be followed, it must;

i) have an appropriate optimising criteria for the whole system,
ii) be compatible with the other measures in the analysis, and
iii) it must be empirically quantifiable. (7)

There have been many attempts to devise a method of assigning a value to the recreational experience and the study of Recreation Economics is particularly well developed in North America. Methods such as gross expenditure, value of catch and simple admission fee have long since been disreguarded. (1,4) Generally the methods now in use revolve around the derivation of a demand curve and either measure the consumer surplus or the discriminating monopolists revenue method. Each refers to all or part of the area under the demand curve. (3,5,7)

The derivation of demand curves are performed broadly to;

i) test the significance of the independent variables affecting demands,
ii) predict the demand and pattern of use in the short term and
iii) derive an estimate of the user benefit in money terms of the recreational experience. (8)

Economic evaluation for governmental decisions is usually done within the cost-benefit frame work and so I will concentrate on the applicability of (iii) to this analysis, despite the many criticisms of the whole methodology. The direct recreation benefit is but one of the economic returns to society from this activity, others are option-demand (non-user benefit from the availability of a choice of activities), increases in local business, the creation of a market for recreational goods eg motor boats and off-road vehicles, the provision of commercially exploitable wildlife eg fish and game in North America) and the social returns to people being refreshed by recreation.

cont.

There are two common ways of estimating this demand, either by getting the consumer to reveal his preferences directly by visitor survey on willingness to pay and so build up a demand curve or indirectly by some variant of the Hotelling - Clawson travel cost method. (2) The latter uses the concept of taking the cost of travel as a surrogate for an admission fee that varies with distance. (1) Using various assumptions notably: a population with homogenous tastes to recreation and the only enjoyment occurs from the onsite activity. Both of these assumptions break down rather dramatically. Besides it often being hard to construct relatively comparable zones eg. with the same proportion of city and country people, those nearer the site are likely to be more aware of it than those far away. Also various studies have shown that pleasure driving is one of the most popular outdoor recreation activities.(8) The visitor survey approach has all the standard disadvantages of interview type information and is generally distrusted. Moreover it has an added potential to bias because the subjects may, by adjusting their answers hope to change the decision in question to favour them. These studies would often be made after their is some pressure to either preserve or develop the site or to exploit or destroy it. People would have an expectation of future plans and may overstate the value they place on it to increase the arguement for preservation or to understate the value in the hope of getting a lower admission fee. This anticipation cannot be assumed to be random and if left unadjusted could lead to a great error in the calculation (7). (For a full explanation of these methods and the problems see any of the references.

After the current benefit has been estimated there comes the risky activity of forecasting future use considering all factors including the capacity. There is also the question of what discount rate if any to use.

Many researchers and writers have taken much time and effort to show and overcome the problem of an income bias.(6) The demand curve reflects the diminishing "marginal utility" of Recreation AND Income so that extra willingness to pay may reflect more ability to pay than value.(5) It is also relates to the point that a higher proportion of upper income earners to engage in outdoor recreation than those with less opportunity. Nevertheless there is great truth in this arguement but I disregarded it as we are not concerned with an accurate figure for absolute welfare but rather a relative one to suit the cost-benefit methodology. The price system and quantification of values into dollars contains and intrinsic bias to favour those an higher incomes and those goods that are privately marketable but that debate is beyond the scope of this article.

Despite the rather substantial problems involved, I feel that this analysis will prove particularly useful in recreational areas that have high capacity and are user orientated.(1) However, one of its major problems is abuse. The benefits here represent an opportunity cost when the natural environment is destroyed and coupled with other economic factors give a difference in welfare between its alternative uses. However this is not a final figure for onto this MUST be considered all the other intangibles previously mentioned.

REFERENCES.

(1) Clawson M. & Knetsch J.L. Economics of Outdoor Recreation. John Hopkins Press Baltimore 1966.
remains the classic for the layman and covers the previous work of the two pioneers in this field.

(2) Capel R.E. & Pandey R.K. Evaluating Demand for Deer Hunting: A Comparision of Methods (Jan. 1973)

(3) Estiation of Benefits from Deer and Moose Hunting in Manitoba. (July 1972) Canadian Journal of Agricultural Economics
these articles present this methodology in action with a follow-up study.

(4) Knetsch J.L. "Outdoor Recreation Dema nds and Benefits" Vol XXXIX No4 (Nov. 1963)

(5) Seckler D.W. "On the Uses and Abuses os Economic Science in Evaluating Public Outdoor Recreation" Vol XLII No 4 (Nov. 1966)

(6) Pearse P.H. "A New Approach to the Evaluation of Non-Priced Recreational Resources." Vol XLIV No 1 (Feb. 1968)

(7) Beardsley W. "Bias and Non-Compatibility in Recreation Evaluation Models" Vol XLVII No 2 (May 1971) Land Economics University of Wisconsin Press.

(8) Planning Workshop P.L. Strategic Recreation Study for Colo Shire 1971 Pp72-93

Most of the work done onthis field has been done because of and after " "outdoor Recreation Review Commission"(ORRRC)., that ran for many years; its reports being published in 1962 on the needs of the U.S.A. in this area for the next 40 years. The Journal of Laisure Research National Recreation and Parks Association, contains much more specialised analysis Thanks to Ludwig Reider for much time and assistance in preparing my essaay.

PETER WINGLEE.

The following letter was received from the New South Wales Cave Rescue Group.

"This is intended to be the first in a series of information sheets released by the Liason Officer of the NSW Cave Rescue Group.

The Cave Rescue Group held its inaugral meeting on 22nd Oct. 1974, when a constitution was accepted and a temporary committee of five elected. The Cave Rescue Group was formed in response to comments from speleologists, and at the request of the NSW Police Rescue Squad. The group will be applying for membership of the NSW Volunteer Rescue Association at their meeting in Canberra on 14 - 16 June 1975.

NSW Cave Rescue Group (cont)

The Cave Rescue Group sees itself fulfilling several functions, these are in general outlined in items 2(a) & 2(b) of the Groups constitution.
"(a) To provide an organisation for interested persons to specialise in cave rescue and associated activities.
(b) To promote and cooperate with any organisation or association whose aims and objects are similar to this organisation."

It is intended that these aims will be fulfilled by attracting interested cavers to the membership of the group so that efficient techniques of cave rescue can be developed and practiced, and so that surveys of current practices and equipment can be made. The information obtained will be disseminated to the members of the Cave Rescue Group and to other interested people.

The Cave Rescue Group carries extensive insurance, both against personal injury to members of the Cave Rescue Group while participating in, or travelling to and from rescues and practices; and also against public liability. The latter cover is necessary should any legal action be taken against the Cave Rescue Group, following any accusations of negligence, this includes a clause pertaining to treatment. It is not generally realised by the caving fraternity the grave financial risk in which they place themselves in the event of giving assisstance to those in need.

Currently the only volunteers that Police are entitled to call out are the members of the Volunteer Rescue Association ofNSW, and consequently members of the Cave Rescue Group have the advantage that formal liason and legal recognition has already been achieved.

The Cave Rescue Group is not intended to be a new club; nor to be a 'brain drain' of expertise from the speleological societies of the state, but rather as a clearing house for information and an instrument of assessment. Formal meetings and Technique Development weekends will be held as infrequently as possible, so that little load will be placed on members. There are, however, sub-committees of the group charged with investigation of specific facets of cave rescue, and it will be through membership of such committees that motivated members will be able to make perhaps the greatest contribution.

Naturally, a call-out system will be maintained, but it is felt by the committee in the light of past experience, that call-out from the capitol cities will be very infrequent. The aim of the group is rather to have a broad membership from all of the caving fraternity, so that it will be highly likely that members of the Cave Rescue Group will be in the area where assistance is required and that amember of the Cave Rescue Group will be able to take over the control and responsibilty of the Rescue, utilising their own expertise as well as experience gained by membership pf the Cave Rescue Group.

Since the Cave Rescue Group will not be another club, but will comprise members of other caving clubs, the Cave Rescue Group will not

apply for membership of the A.S.F., however, it is intended that the Group will work in close co-operation with A.S.F., particularly by requesting observer status on the N.S.W. Liason Council.

It should also be noted that the Vice President of the Cave Rescue Group is the Convenor of the A.S.F. Committee on Cave Safety.

A final comment; the Cave Rescue Group has been formed entirely outside the current club structure in NSW and it aims for membership of cavers and speleologists rather than that of clubs, but it is through the clubs and societies that prospective members of the Cave Rescue Group are perhaps most easily contacted.

Any enquiries regarding the structure and aims of the Cave Rescue Group should be forwarded to:-

The Liason Officer, NSWCRG.
Philip Toomer
2/19-21 Tunks Street,
Waverton. 2060. Ph. (02) 929-0432.

Requests for membership application forms, which also serve as a data record, should be made to:-

The Membership Officer, NSWCRG.
Don Matts
176 William Street,
Bankstown. Ph. (02) 70-0374.

The Groups present postal address is:-

The Secretary
New South Wales Cave Rescue Group
40 Acacia Avenue.
Punchbowl.

Philip Toomer.
Liason Officer. NSWCRG
1975.

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SUN-HERALD January 19, 1975.

UNDERGROUND EVEREST?

LONDON, Saturday (AAP-Reuter)

Twenty British cave scientists hope to find a 'speleological Everest' when they visit the Central Highlands of New Guinea later this year.

The area, one of the worlds least explored, had possibilities of revealing a cave system deeper than any yet discovered.

The team also expects to find many troglodytes- prehistoric cave creatures probably with transparent bodies and special sensors for a world without light.

RK.

(They failed to locate any caves deeper than had already been found in the area by the earllier mixed expedition of1973. Ed)

Some Hydrological Observations concerning The Frustration, New Year & Zed Caves at Cooleman Plain. New South Wales

L. G. Rieder.

Of the seven or so known cave entrances in this part of the plain only three are known to actually carry water. The two major caves, i.e. Frustration and New Year, contain what is a common stream which is know to come from the insurgence in the north-east. Actually the Frustration, New Year and Zed Caves should be properly looked upon as one system because they are hydrologically as well as genetically connected. The third cave is that located in the north-west, which only flows intermittently during any year. It should, however, be pointed out that this water has not been physically traced to the resurgence but it is assumed that it makes its way there because of general valley and underground drainage conformance. The presence of some dolines between the insurgence point in the north-west and the main trunk valley also support this view. Speaking relatively, however, it is not as important as the semi-blind valley on the north-eastern branch off the main trunk valley because it supplies most of the water that has been physically traced to the resurgence and the New Year and Frustration and Zed Cave sections of the conduit.

The streams in the caves are water table streams which are presently cutting down into the beds and removing material rather than aggrading. The characteristic features are sharp projection solutionally derived with little or no travertine development. In the New Year Cave, the stream has breached a dyke producing a dog leg. The downstream portion from this breach is marked by a train of felsite boulders which runs for some 20 metres almost to the entrance chamber of this cave and makes movement along the low stream passage most uncomfortable.

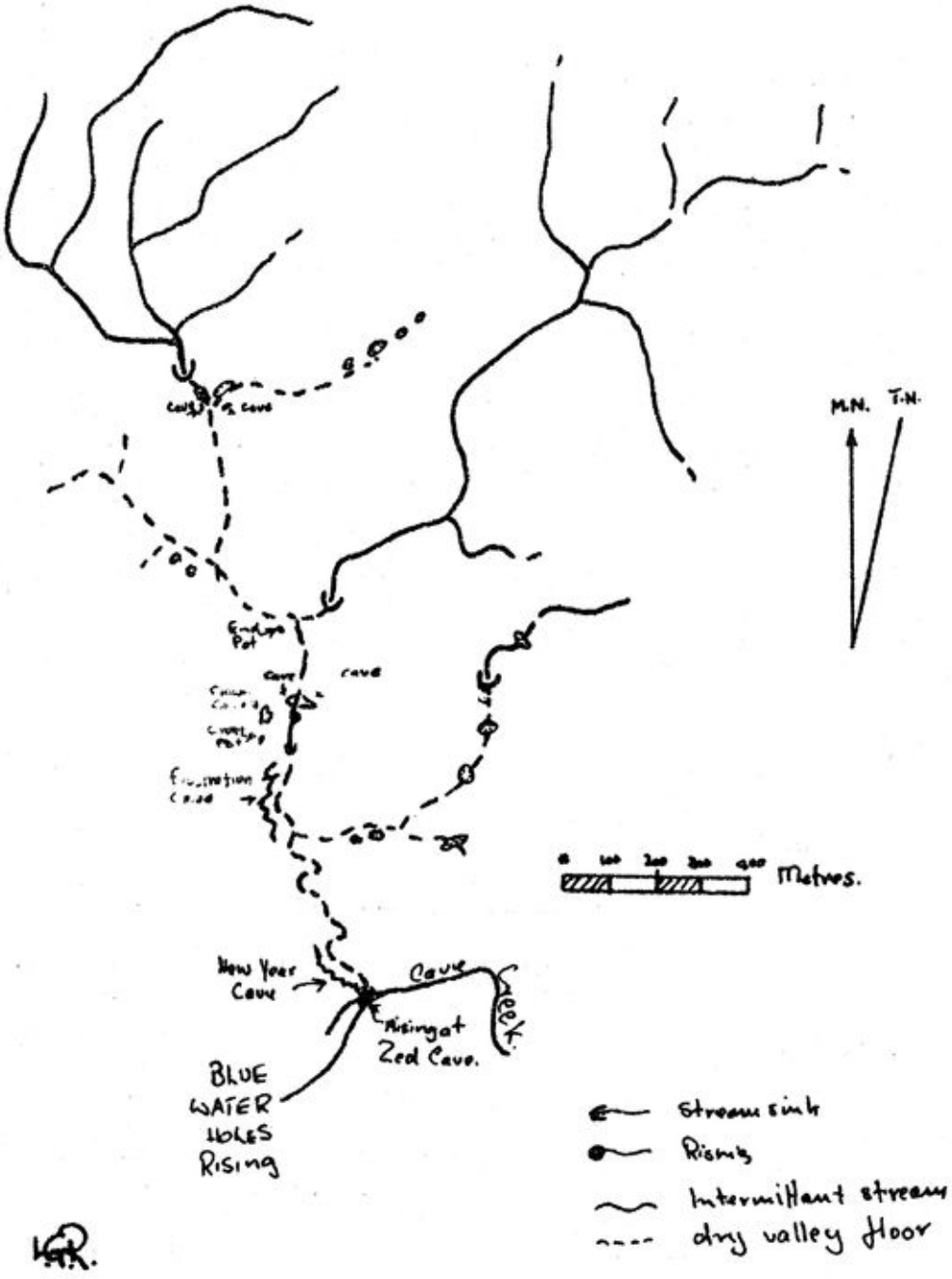
Base level for the stream may be considered to be the floor of Caves Creek at the entrance to the Zed Cave from which a large percentage of the water flows. The floor of Zed Cave lies about a metre above the surface of the floor of the Caves Creek. It can thus be considered as a nick point with resulting down-cutting occurring now in order to regain stability in the system. Some small portion has already found its way to the lower level and this is evidenced especially in the New Year Cave section where some of the stream passages have been abandoned altogether or contain only a small trickle flowing only in flood conditions.

The rate of down-cutting of the valley containing Caves Creek has undoubtedly proceeded at a greater rate than that of the valley system under study which is connected to it. Such condition provides for a lowering of the water table and for a change in base level. This rate of down-cutting is thought to be related to the amount of discharge which is expected to increase downstream along with valley depth, development of gorges, valley widening, greater channel width, alluviation and scouring. All these features are common for the lower section of Caves Creek.

A schematic representation of the situation here is provided with Diagram overleaf.

Map next page.

MAJOR SURFACE AND UNDERGROUND DRAINAGE PATTERNS, NORTHERN COOLEMAN PLAIN.



JENOLAN 16 Jun '75 - Non Permit Trip.

Present: B. Welch.

I arrived at Jenolan at 7.45am on Monday, parked the car at No.1 Car Park and walked through the Devil's Coach House and then up the valley to Mammoth Campsite. From here I proceeded up the J41 Bluff, locating one small cave entrance a short distance above J88. The ridge was then followed up to the dirt road which runs along the Divide east of the pine plantation. This road was followed northwards until a fire trail leading northeast was reached, and was followed down the ridge until the Jenolan River was reached and was flowing at an estimated 0.06 cumec (or 2.25 cusec or 5.50Ml/day).

A short distance downstream a spectacular waterfall about 10m high was encounted. From here I cut cross country rejoining the river about ¾ mile north of Wiburds. It is here that the river flows onto gravel beds that extend down the valley to the Blue Lake, and it was apparent that some of the water from the river was already sinking into the gravel beds. The river here was flowing at 4.5 to 5.0 Ml/day. The river was followed downstream to its usual sink next to a small outcrop in the river bed. However it was apparent that the river had recently been flowing up to 30m downstream The creakbed was followed downstream back to Jenolan Caves. It was fortunate that I did this walk as the next weekend Jenolan experienced one of its greatest floods in history, and observations on the flood and subsequent changes to the Jenolan River will be detailed in a later article. I returned to my car and spoke briefly with Dennis, one of the Guides, before returning home.

B. Welch.

JENOLAN 21-22 Jun '75

THE flood.

Present: B. Welch,(TL) D. Campbell, P. Campbell, G. Cox, G. Innes, M. Walker.

Fortunately everyone drove down on Saturday morning, if anyone had driven in to Mammoth Campsite on Friday night they would have been stranded there for some days. The drive from Sydney was terrible, especially after one turned off the highway onto the Jenolan road. The road from here on was strewn with fallen trees and rocks. At one point a boulder about ¼ the size of a car was encountered in the middle of the road, and a telephone wire across the road was driven through.

At Jenolan the first thing noticed was the water thundering out of the Devil's Coach House. We gathered on the western side ofthe creek and decided to carry our caving gear up the creek nearby.

However after putting our gear under shelter in an overhang opposite Bow Cave we pushed on up the valley. At times we had to traverse high above the valley floor to negotiate the floodswept valley.

JENOLAN (cont)

On the way up the valley both Bushrangers and Hennings were entered. Apart from the large amounts of water dripping out of the roof, supplying water to small pools and rivulets, there did not appear to be any flood waters in the cave. Wiburds was entered and a large stream was flowing through Lake Chamber and off down 22 passage. There was no lake and we negotiated the cave past the Dyke without encountering any further water. After leaving the cave we crossed the river up tream of Wiburds and made our way back downstream, recrossing just upstream of Mammoth cave to pick up some gear.

After spending the night at No.2 Car Park we entered Mammoth. The reason for the trip was twofold, we wanted to observe flood conditio in Mammoth again, and to show our English friends this spectacular cave. After leaving the cave the river had gone down sufficiently for us to be able to wade across without being washed away. Mike Walker was the envy of everyone, being used to English caves he wore his wetsuit. After visiting the Guides Office we departed for Sydney, having witnessed one of the largest floods recorded at Jenolan.

A subsequent report will be published giving full details and observations of the flood.

Bruce Welch.

Trip Report. JENOLAN 5-6 Jul '75

Present: B. Welch(TL), M. Handel, G. Smith, M. McGreevy (M's), B. Beeb , P. Dykes, J. Brown, G. Leeder, M. Hooper (P's).

After spending 2hours on Friday night repairing the creek crossings to the Mammoth campsite, another four hours were spent on Saturday morning, bringing them to quite a reasonable standard.

Under the leadership of Graeme Smith, a party proceeded to Hennings Cave to start a high grade survey. Another party led by Bruce Welch went to Twin Shafts to commence a high grade survey, however the needle on the new compass was not properly balanced, and the survey had to be abandoned.

Spider Cave - It was then decided to visit Spider Cave and push all the passages as far as possible. This was only the second trip into this new cave; and due to the lack of manpower and time on the discovery trip, the cave was not investigated fully.

With the aid of a long waistlength, the high earth wall at the South end of the large chamber was climbed, however the cave sedi ent reached all the way to the roof, a height of some 10 metres above the floor. There are, however, roof channels disappearing into the sediment, suggesting that there may be further cave in this area although probably filled w with sediment. Two thirds of the way up this slop e a largish tunnel (2mx2m) was investigated and continued for some 7 metres before ending in a beautiful formation barrier. This feature was called 'The Jail', due

Jenolan (cont).

to the way the small columns barred the way into the small chamber beyond. However, by de-trogging Bruce managed to negotiate between two columns and below some good helictites, (without damaging any of the formation) to reveal that the chamber beyond was also blocked by flowstones.

The tight passage leading from the main chamber up the dry stream bed was pushed by Malcolm and revealed over 10m of small passage, which continued to get smaller. This passage is leading directly to the creek bed of the Jenolan River (probably only a short distance from the point reached by Malcolm, and as such does not hold any prospects for further cave.).

The best prospects for further passage is the downstream end of this dry stream bed. At the present time it ends in a muddy sump the passage continues on, however, through a small space above the mud floor, and thus a small amount of digging would almost certainly lead to further cave. This view is supported by the fact that it appears that the whole chamber was once completely filled with sediment. This has been removed by this one intermittent stream, suggesting a large cave on the other side which could receive this huge amount of sediment.

Between the initial discovery of the cave and this, the second trip, Jenolan experienced one of its largest floods in history. It was evident that probably 1-2 cusecs flowed through the cave during the flood, but the sump had filled only to the depth of about 1m and had since drained away. The skull of a dingo was found floating in the few centimetres of water which remained. On the other side of the sump constriction clean gravel could be seen, further enthusing members of the party to commence digging.

However no digging can commence until the cave has been inspected by representatives from the Australian Museum, who are interested in the bones which are found in large quantities in the cave. This dig has prospects of breaking into the upstream sections of the Tourist Caves.

TWIN SHAFTS - Sunday was spent surveying Twin Shafts with the SRC Forrestry Compass. The survey showed that this cave is 44.25m deep, which brings the bottom of the cave well down the slope at the base of the cliff.

A passage off the chamber at the bottom of the large pitch revealed the words 'Big Red' scrawled in the flowstone wall. The two skeletons at the bottom of the cave appear to be of a kangaroo, and a wallaby, both of which are undisturbed.

The name 'Twin Shafts' appears to have originated from the twin shafts (about 5m deep) which lead down to the last (and lowest) level of the cave to where the skeletons are located. These shafts are cut in solid limestone and are separated by a natural limestone barrier only a few centimetres thick in places.

This cave is quite muddy from the top of the large pitch, however the lower sections are a little cleaner. There is no formation of any particular beauty or significance in the cave.

Jenolan (cont)

Also on Sunday, a small party entered Wiburds to inspect the level of the lake - apparently it was right up. All aspects of the flood will be discussed in a later article.

B. Welch.

Trip Report - JENOLAN 7-13 Jul '75

Present: P. Toomer, B. Welch, J. Kidston.

While waiting for Philip and John to arrive from Sydney, Bruce started to search the South Mammoth Bluff for caves. Two small caves were located, but not entered however. When all had arrived the Guides Office was visited and the permit presented. A quick inspection of flood damage in the Devils Coach House followed before returning to the Mammoth campsite to erect tents etc. The remainder of the day was spent inspecting the flood damage in the Jenolan River valley up as far as the ruin on Wiburds Flat. These observations are reported on fully in a seperate report, "Some Observations on the Jenolan Flood 21JUN75".

A complete ASF Grade 64 survey of Spider Cave was carried out on Tuesday. For a description of this cave see T.R. Jenolan 5-6JUL75. The evening was spent computing and drawing up the survey.

On Wednesday a further visit was made to the Guides Offic to ascertain if it was convenient to the Senior Guide if we surveyed the Old Doline entrance to Elder Cave. Approval was given and it was suggested that we might remove some of the rubbish from the sinkhole while we were there. The Guides also requested that we survey the Devils Coach House and it's side passages, to which we consented and an immediate start was made.

Starting at the permanent Survey Station on the pump house near the road bridge (a bolt numbered 401) we put an ASF Grade 7 Control Traverse through the Devils Coach House, then started putting an ASF Grade 6 survey down the western wall. By midday Friday we had completed the western wall, completed the eastern wall(by a traverse up the path), and a good start was made with the survey of the side passages. The evenings were spent computing the survey data for the Devils Coach House, except for Thursday evening. On this evening we had arranged a tourist inspection of the Orient Cave. Unfortunately John's car experienced two flat tyres on the way from Mammoth campsite to the Guides houses, the car was abandoned here and we sprinted down the hill hoping to catch the tour before it left, however we were too late. A return was made to the car and Ron Newbould was very kind in lending us a tyre pump which enabled us to get the car back to Mammoth campsite. This tour of Orient Cave was taken on the midday inspection on Friday. Dennis Bramston was the guide and we had a very enjoyable tour of the cave. There were 32 people on the inspection.

After this splendid tour the Elder Cave Sinkhole was surveyed, and rubbish removed as requested. Surprisingly enough this cave had a small

Jenolan--continued.

amount of quite pretty formation just outside the limits of direct sunshine, quite unusual for such an open site.

Saturday was spent looking at the holes discovered by Bruce on Monday, and they were surveyed. The firstis a small cave about 15m up the hill behind the doline on playing fields, at the back of a small collapse area. The entrance is in the roof of a very small chamber with old formation on the walls and the roof. The chamber is just large enough for two people, however there were no possible extensions. The second cave is about 5m lower down the hillsid on the top of a small outcrop. The entrance was enlarged by Philip and Bruce, and lead to a 4m descent down a fissure to an earth floor. Quite some time was spent enlarging two promising leads and a small crawl was entered, however further progress was stopped by extensive earth fill and rock fall. It appears that any cave that existed here has almost completely collapsed, although the cave seems quite stable now.

A cursory look at the nearby area of hillside was undertaken without any further caves beeing seen. Some holes in the road to Mammoth campsite were filled on Sunday, and some further repair work was done to the first creek crossing (the one at the base of the hill just as the road enters onto Playing Fields). The rest of the day was spent packing up and returning to Sydney.

Bruce Welch.

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NEW GUINEA EXPEDITIONS

The article appearing on page 75 refers to the British Expedition to New Guinea later this year. This 20 man expedition's target area is in the Lavani Valley below the Hindenburg Wall. It is arranged for the 6 months May to October and it's prime purpose is to search for a cave with a world's depth record, although scientific researches will also be carried out.

Budget for the expedition is somewhere around $125,000. However, considerable savings have been made by getting the RAF to fly them to Singapore Sponsorship was sought from the Royal Society and the Everest Foundation.

The Yanks, not to be outdone, are organising an even more ambitious expedition involving 30 people, 6 months and $250,000. However, I should imagine that on such a large scale, the finance would be it's major downfall. The area of investigation has yet to be ascertained. It is questionable whether such a large scale expedition is ethical or physically better than a smaller one.

Queensland is also proffering an expedition to the Lolet Plateau of New Zealand. A reconnaissance of this area last year revealed much promising material and depth potential. Some caves were discovered and two could not be bottomed due to lack of equipment. Best of luck from SUSS to the Australians.

Meanwhile, back in Sydney, planning has already begun for the second Niugini Research Expedition to the Central Highlands in 1976. The first expedition to this Muller Range area revealed two 300m deep caves and a cave into which the lo to30 cumecs, dry season River Otea sinks before it resurges again 1500m further down. Prospects for the expedition are thus most hopeful, as there are caves but metres from the track which either remain hidden in the dense jungle or time is not available to explore.

BOOK REVIEW - 'PNG SPELEOLOGICAL EXPEDITION'

1973 Niugini Speleological Research Expedition, Edited by a team under Julia M. James, pub. by the Speleological Research Council. 70 pages, 56 plates, 14 maps, 3 figs..

"To the Deepest Hole in the World" - this was the ambitious aim of this 27 man expedition in August,1973. Unfortunately, they didn't find it. Nonetheless, they had a lot of fun looking, and the discovery of the 5th and 6th deepest caves in the Southern Hemisphere is not to be sneezed at. This book is an account of that expedition.

The area of exploration was originally intended to be concentrated in the Lavani Valley, however, some aerial photographs by British Petroleum geologists revealed a proliferation of large dolines in an area to the NW and on the other side of the high Muller Range. Owing to the nature of thi area, it was named 'The Cheese'.

Of the 27 members, 15 were from Australia, 6 from New Zealand, and 4 from New Guinea. These included Atkinson, Dowling, Dyson, Glasby, James, Montgomery and Poozanoff (SSS), Pavey (UNSWSS), and Riley(SUSS).

The book itself contains the log of the whole expedition and also has sections pertaining to the more specialised areas - anthropology, surface flora and fauna, geology, physiography, medical, food, and finally a section on photography.

In this book is also contained an account of the discovery of the two 314m caves - Earthquake Hole and Sunrise Cave. All drawn maps of these a and the other caves investigated supply the reader with a visual means of assessing their importance, and the undoubted feature of the mapping section is the especially clear and vivid double page spread air photo interpretation of the Muller Range NRSE area by Neil Montgomery.

Photographic plates play a major part in documenting the expedition, and pics. accompany nearly every page. My one and only lament concerns this section of the work and is only a technical one. Most of the plates are taken from colour slides, and as such suffer to a fegree from lack of contrast, clarity and definition. For example, the aerial photo entitled 'a hole in the Cheese' practically needs a magnifying glass to spot the doline. Other pictures suffer from the lack of contrast also and turns spectacular. photos into but a mediochre image. However, the photographers deserve commendation for their subject choice and skills.

I feel that I haven't done the book justice in this short a space.

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New Members

At the last Committee meeting, Prue Kirby, Paul Greenfield, and Richard Fleming. The society sends its best wishes to the latter notorious person, who is currently recovering from an eye injury in hospital.

Wine Bottling

During the next few months SUSS will be holding wine bottlings in order to replenish the coffers. This is top quality white wine, and since speleologists are famous for their inebriated qualities, and are asked to contribute in this regard either at the wine bottlings (hic!), or by purchasing some of the aforementioned alcoholic beverages.

Tasmania

During May; 1976, Randall King is holding a trip to the major caving areas there; specifically, Junee - Florentine, Ida Bay & Mole Creek. The three weeks trip from Sydney would probably cost in the order of $200/person. It will function as a training trip for the 1976 New Guinea Expedition, however most of the major well known caves will be visited. Competent speleologists are invited to attend from all clubs. SRT only.

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