SOUTHERN CAVER



PRECIPITOUS BLUFF SPECIAL ISSUE

"SOUTHERN CAVER"

Published Quarterly by the Southern Caving Society.

Postal Address: P.O. Box 121 Moonah, Tasmania 7009.

Club Room: 132 Davey St., Hobart.

EDITORS:

Dave Elliott and Ron Mann

MAGAZINE COMMITTEE:

Steve Harris, Kevin Kiernan, Michael Cole, Graeme Watt

COVERS:

By courtesy of Graeme Watt

VOLUME 7 NUMBER 2

OCTOBER, 1975

CONTENTS:

THE CASE FOR PRECIPITOUS BLUFF	
By K.W.KIERWAN	
Limestone Quarrying Vs. National ParkPage	2
The Legal BattlesPage	8
Location and Access	13
Geography, Topography, Climate and Vegetation	13
The Society's Expedition	17
Cave List	19
Speleological Conclusions	23
Conservation Conclusions	27

THE CASE FOR PRECIPITOUS BLUFF

By K.W. Kiernan

LIMESTONE QUARRYING VERSUS NATIONAL PARK

Introduction

From time to time various encroachments have been made upon many parts of the South-west, in the form of hydro-electric developments, and the activities of extractive industries, principally forestry but also some mining interest.

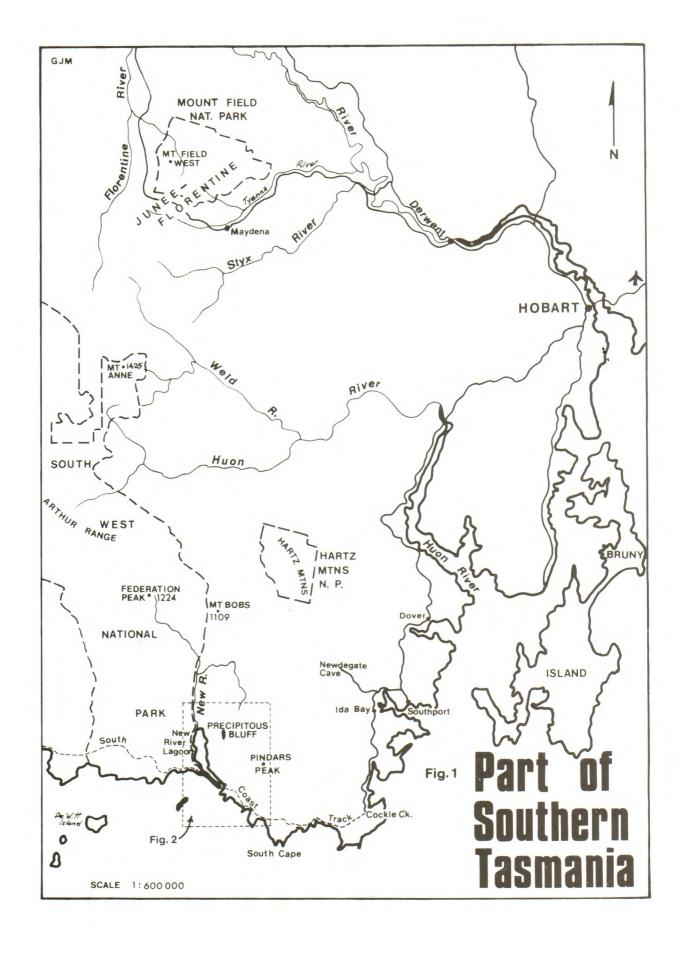
Early geological reports of high grade limestone at Precipitous Bluff have given the area a considerable reputation. It was as a consequence of the development of such tales of legendary riches that the South-West Committee came into being in 1962, a federation of groups interested in the South-west and its future as a whole, concerned that careful planning and conservation should minimise any progress-based damage to the area.

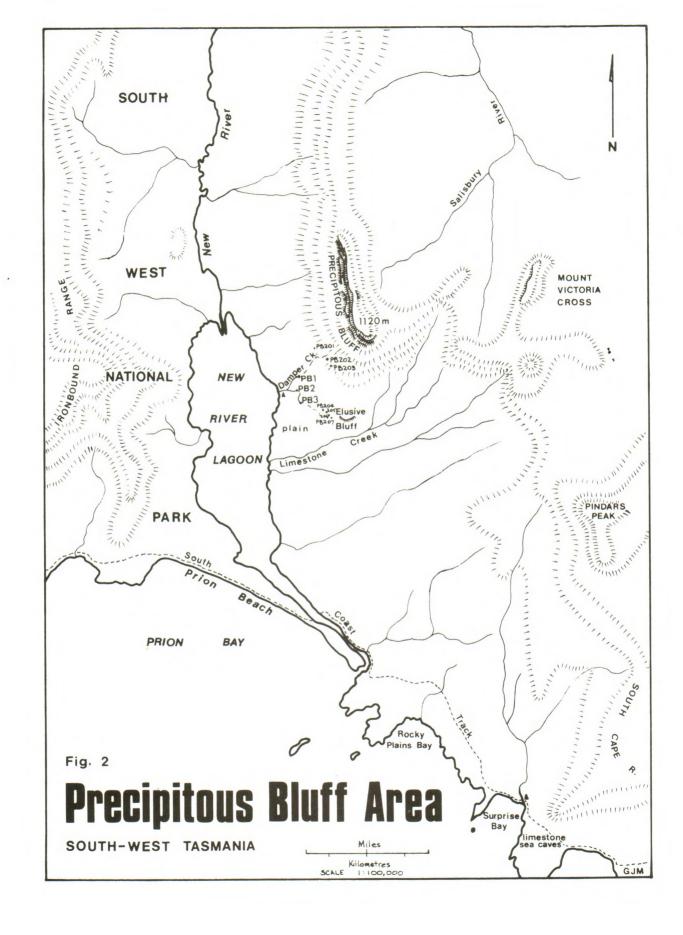
One of the first actions of the Committee was to ask the State Government for the establishment of a fauna reserve covering the entire South west area. Around the same time the committee also asked that the Government re-open and improve the South Coast track for bushwalkers. This track had originally been built as a safety measure to facilitate escape of ship-wrecked fishermen. The Government acceded to the second request, the new track lying slightly inland from its predecessor. This was done at Government expense through the Public Works Department which continues to maintain the track yearly and provide boats at the New River Crossing.

reserve in existence in the entire South-west being an area of 2400 hectares at Lake Pedder, well inland and 64 km. North-west of Precipitous Bluff. This had been gazetted as a national park in 1955.

In May, 1965, amid rumblings that modification to the Pedder Park was being contemplated, the Government established an interdepartmental committee of enquiry to consider the future development of the S.W. It included representatives from the Hydro-Electric Commission, Forestry Department and Lands and Surveys Department. The South-West Committee (SWC) sought membership but was refused. The enquiry reported to the minister on April 7th, who took the findings to parliament on May 31st.

The SWC then prepared a master-plan of its own for the planned development of the South-West, zoning the area for purposes of tourism, fauna protection and other purposes, and seeking the establishment of a large new national park.





Subsequently the Lake Pedder dispute flared as a result of plans by the Hydro-Electric Commission to inundate the Lake Pedder park as part of the Fiddle Gordon (Gordon Stage 1) power development.

The outcry brought about by the Lake Pedder plans resulted in the setting up, on June 14th, 1967 of a select committee of the Tasmanian Legislative Council (upper house) after the relevant bills had already passed the House of Assembly, in response to a call by the SWC.

It is unfortunate that of the fifteen recommendations made by the Committee only two, the flooding of Pedder and setting up of a new parks authority were fully complied with, while another, the establishment of a south-west park, was only partially full-filled. A third of the area of the new park was being obliterated by the new Hydro-Electric impoundment.

The new National Parks and Wildlife Service was established by Act of Parliament in 1970, amalgamating the functions of the previous Scenery Preservation Board and Animals and Birds Protection Board. Concurrently, the South-west District, including the Precipitous Bluff area and New River Lagoon Basin became a Conservation Area under the second schedule of the Act.

In December, 1968 a new South-West National Park 1785 hectares, less than half the area recommended by the Select Committee, was established The Precipitous Bluff area was not included, despite its having been included in the area recommended. The eastern border of the park being New River, New River Lagoon and Prion Beach.

It appears that subsequently at least one company B.H.P. Ltd., undertook some prospecting in the area, revealing the limestone to be of a high purity in at least one section. They took the matter no further.

A change of government occurred after the approval of the Gordon River Hydro-Electric proposal. The previous Labour regime under Mr. Eric Rece was replaced with a Liberal-Centre Party coalition, headed by Mr. Angus Bethune.

While the new Premier remained as determined as Mr. Reece to defeat the continuing conservationist pressures over Lake Pedder, Liberal election promises had included a new deal for conservation, and so under this Government steps were taken to include the P.B. area within the South-West National Park. Following a suggestion by the Australian Mining Industries Council that mining should be allowed in reserves, Mr. Bethune said this was "wholly unacceptable." He said the Government anticipated the whole south-west would soon be a national park and in the meantime would not grant any exploration licence in the area. (Mercury 23/3/72 - page 1)

Late in 1971 the present threat to Precipitous Bluff and the shores of New River Lagoon first emerged. A Melbourne based prospecting company, Mineral Holdings (Australia) Pty.Ltd., applied for a special exploration licence in respect of the limestone deposits around the base of the mountain following a report dated November 20th, 1971 by Mr. T.D. Hughes, former chief geologist for the Tasmanian Department of Mines, then operating as a private consultant. The report indicated large reserves of high grade limestone although exploration was confined to a small area. Access was by helicopter.

However, it a pears the company placed their datum peg defining the licence area on the sandspit forming the western bank of the elongate mouth of New River Lagoon at Prion Beach. This then, was just inside the boundary of the South West park, as a consequence of which the application was disallowed at an administrative level.

Subsequently a second peg was placed by Mineral Holdings and the application re-advertised. Objections were lodged by a number of individuals and bodies including the Australian Conservation Foundation, the Tasmanian Conservation Trust, SWC, Hobart Walking Club, Launceston Field Naturalists Club, Society for Growing Australian Plants and Mr. R. Wyatt. Also among the objectors was Mr. Peter Murrell, Director of the Tasmanian National Parks and Wildlife Service.

A sudden State election in April, 1972 resulted in Mr. Reece's Labour Party being returned to power. As far as the south coast was concerned, and conservation in general, the new Government appeared obviously opposed and official action on the enlarged south-west park proposal ceased. As a result, the new Government instructed National Parks and Wildlife Service Director, Mr. P. Murrell, to withdraw the objection to the Precipitous Bluff mining proposal lodged under the previous administration.

THE LEGAL BATTLES - DEVONPORT

The decision of the mining warden following the hearing of December, 4th was that the lease not be granted to the company.

After commencement of the hearing the objectors tried to have the case abandoned on the grounds that Mineral Holdings had not placed and/or maintained a datum peg marking out the lease area as demanded by Mines Act regulation 4. The Warden failed to agree with this contention.

Subsequently Mineral Holdings claimed the objectors had no right to object as they did not have a legal interest in the area. Connsel for the objectors argued that the maintenance of the track and provision of boats at the New River crossing by the Public Works Department constituted in effect the granting of a licence to bushwalkers to use them. As a licence legally constitutes an interest walkers had an interest in the area, which by virtue of its being available to anyone constituted a public interest. The warden agreed with this.

In evidence during the subsequent hearing conservationists claimed that exploratory activity would disrupt the aesthetic and scientific values of the area, in particular increase the risk of fire.

Beyond defence of the actions in marking out the lease Mineral Holdings hardly presented a case. Ecological considerations passed unchallenged. Their only assertion was that they had no plans to develop P.B., merely a ridge said to be a separate hill. This claim was subsequently repeated on several occasions.

In handing down his finding the warden, Mr. J. Temple-Smith, agreed that the value of the area in its present "pristine and primeval" condition, "far outweighed the nebulous benefits which could be expected from mining activity."

Subsequent to the Devonport hearing, Mineral Holdings entered into day long discussions with the Department of Mines. Following press statements by the Premier to the effect that the company may appeal against the decision, it was finally announced that an appeal had been lodged by Mineral Holdings taking the issue to the Supreme Court.

Financial problems faced the objectors in meeting costs for the appeal and both State and Federal Governments were approached. The then Federal Minister for the Environment and Conservation, Dr. Moss Cass expressed interest in seeking full details of the Precipitous Bluff case marking the beginning of Australian Government interest in the south-west.

Meanwhile the Southern Caving Society expedition was under way in an effort to obtain information on spelcological aspects and to get publicity for the preservation campaign. The South West Committee was also in action, putting the finishing touches to its second proposed plan for the south-west.

In mid February a shock article in the Launceston Examiner revealed that state cabinet had approved a principle the inclusion of PB in the South-West National Park. No announcement was made at the time. A subsequent statement by two Government ministers that no official announcement could be made before the appeal was heard agreed that an agreement had been established "in principle". The statement refuted claims by the Examiner that Federal pressure had been involved, including claims that the Federal Attorney General, Senator Murphy was examining ways of blocking any attempt to export the limestone. The Examiner contended that fear of another issue as nationally embarassing as Pedder was a prime cause. The Government statement said that agreement had nothing to do with federal pressure, and that it had in fact, been arrived at on December 12th, 1972. It later became clear that the Government nonetheless considered the possible mining development as permissible whether reserve status was granted or not.

THE SUPREME COURT APPEAL

At a brief hearing counsel for both parties met. Mineral Holdings announced that it would seek the introduction of new evidence. The objectors stated they would oppose such a step. In the meantime they prepared themselves should their opposition fail.

This appeal was then unexpectedly dropped and an application made in chambers to the Master of the Supreme Court for a declaration against the decision of the mining warden. This application failed. Subsequently the appeal proper to the Supreme Court took place. In his decision handed down on 8th June, 1973, Mr. Justice Nettlefold reversed the Warden's decision, and found that the objectors were not competent to object. Subsequently a number of interesting events transpired.

Through the offices of the then federal Conservation Minister Dr. Moss Cass, Urban and Regional Affairs Minister Tom Uren and the then Attorney General Lionel Murphy, the Australian Government undertook to provide financial aid to enable a further appeal by conservationists. The Government assistance extended to the payment of a significant portion of conservationists costs for the initial appeal, plus an undertaking to very substantially aid them to meet the cost of an appeal to the full bench of the Supreme Court and if necessary to the High Court. This precipitated a head on verbal collision at the subsequent Premiers Conference when the Tasmanian Premier Mr. Reece castigated the Prime Minister Mr. Whitlam, who in a news release announcing the establishment of a Committee to investigate the National Estate had claimed Precipitous Bluff to be a natural feature of national significance.

In his angry retort Mr. Reece complained both that he should have been informed of the decision to provide financial aid, and that if mainland interests considered Tasmania's wilderness should be conserved in the national interest then the Australian Government should compensate Tasmania, a claimant state, for the development it was forced to forego.

Mr. Reece was again prominent in the dispute at this time when it was revealed that Mineral Holdings' application for a special prospectors licence had lapsed six months previously, since which time a Hobart Partnership, Matrix Mining, had staked a claim to much the same area. Although the Mineral Holdings application had ceased to exist, six months after it had lapsed, and in the face of a conflicting claim, Mr. Reece extended the new non-existant application, adding to the general feeling of public disquiet about the issue, since one of the directors of Mineral Holdings had been previously found to be a former senior official of the Mines Department in Launceston, and the geologist who staked the claim and the geologist who held discussions with the Mines Department, subsequent to which the initial appeal was lodged, were both former chief geologists for that department.

In late June, 1973 a public meeting was conducted at the Hobart Town Hall. Invitations to speak were extended to Tasmanian Premier Mr. Reece, the Minister in charge of National Parks, Mr. Costello, the Warden of the very pro-mining Esperance Municipal Council, Matrix Mining and Mineral Holdings, in addition to conservation interests. After initial acceptance the Tasmanian Government advised that it would not provide a speaker, while Mineral Holdings and the Esperance Council both pulled out at the last minute on the grounds that the matter may be subjudice, despite Hobart legal advice to the contrary. From a perusal of their previous press statements conservationists constructed and presented a statement of attitude for these parties. The pro-conservation speakers spoke of the value of wilderness and the nonsensical economics of the scheme, noting also the total dissociation from Mineral Holdings, and disinterest in the Precipitous Bluff limestone voiced by both B.H.P. and Armco, both of which companies had been claimed by Mineral Holdings to be interested in securing the title. This was the sole premise which economically justified the little company of Mineral Holdings trying to prospect the area.

Perhaps the most devastating evidence was expressed by a partner of Matrix Mining who had sent a consulting geologist to the area. He reported that to consider mining limestone in the area was utterly preposterous and would provide limestone at nearly twice the cost. as rock't of a similar grade could be back-loaded from Japan. He further noted the recent proving of accessible deposits of high grade limestone in South Australia.

FULL BINCH APPEAL

In a decision handed down on the 26th May, 1975, the Full Bench consisting of Justices Green, Neasey and Chambers dismissed the conservationist's appeal by a unanimous ruling.

Mr. Justice Green said that although "... reference has been made to various groups such as the Tasmanian Conservation Trust and the South West Committee, these organisations have no standing in this matter. The objectors (and the appellants) are the four persons who signed the notices of objection and they are the persons who must demonstrate that they are possessed of the requisite estate or interest."

He considered that the objectors were not possessed of an estate or interest.

Mr. Justice Neasey also said that "... 'estate or interest' are words used in a technical sense, and that a licence to use the land in the ways which the objectors claimed they were entitled to does not constitute an 'interest'".

It would appear that the definition of "estate" and "interest" covers only those who have a proprietary interest in the area in dispute and the public, although Crown land may be involved, have no right of appeal.

Counsel for the appellants argued that the objectors had an estate or interest in the area by rights of fishery or navigation in adjacent waters or waters covering part of the subject land.

Mr. Justice Green however said "This submission was not made in the wardens court or to Nettlefold J., nor has its factual basis been established, and I do not think it is open to us to consider it in this court."

On the same subject Mr. Justice Measey noted "Fascinating as it might have been to examine this ingenious submission, had any evidentiary basis been laid for it in the hearing before the warden, I do not in any, event find it necessary to do so because in my opinion such public rights if they exist in Tasmania at all, are not within the purview of S 15C(3)".

The National Parks and Wildlife Service released its draft management plan for the South West Park on 27th May, 1975 one day after the Full Bench decision was handed down.

Precipitous Bluff is included in the recommended boundaries and the plan is open for public comment for a six month period.

The release of the plan has, in effect, prevented the possible mining of the Bluff area for at least six months until a decision on final boundaries of the South West Park is made. There is still a chance that Precipitous Bluff will be included.

LOCATION AND ACCESS

Precipitous Bluff is situated on the eastern shore of New River Lagoon a natural, brackish, 15 km. long impoundment behind sand dunes and a large spit known as Prion Beach, at almost the exact centre of the south coast of Tasmania. The specific area under discussion is centred at longitude 146 35' and latitude 43 31'

A walking track extends to the mouth of New River Lagoon from Cockle Creek (35 km.) to the east. Normal walking time is 2 days, although the return trip has been done in that time.

The track, which services the coastal areas, passes along Prion Beach en route to Port Davey and Scotts Peak and ismaintained at Government cost by the Public Works Department which provides row boats at the mouth of New River Lagoon to facilitate crossing of the river and access to Precipitous Bluff some eight miles to the north.

A track commences at the limestone quarries at Lune River and passes through alpine country in the Mt. La Perouse and Mt. Wylly area thence to the summit of Precipitous Bluff. A marked route connects this track to the shore of New River Lagoon at the mouth of Damper Creek. This route normally requires three days to traverse.

The area may be visited by boat but due to shallow water it is not usually possible for sizeable boats to enter the channel of New River at the lagoon mouth. Light aircraft do not land on Prion Beach, although light amphibian aircraft have been used for access to the lagoon area itself. Prion Beach is a heavily utilised air drop site.

Within the area there are a number of secondary routes, including one onto Precipitous Bluff from Limestone Creek. A further route crosses a button-grass plain to a limestone ridge 3 km. south of the summit. This is a potential route onto the mountain.

GEOLOGY AND TOPOGRAPHY - CLIMATE AND VEGETATION

The dominant feature of the area is Precipitous Bluff itself which rises boldly from the lagoon shore attaining an elevation of 1219 m. in less than $2.4~\rm{km}_{\bullet}$

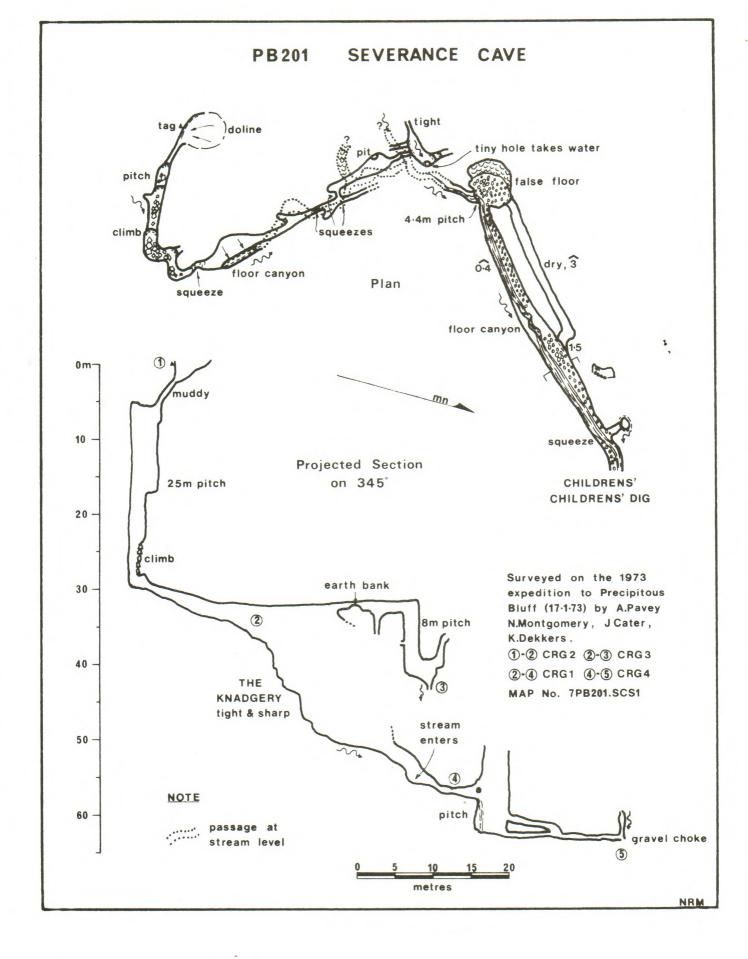
The mountain features three distinct changes of slope relative to transition of rock types. The basal rocks exposed are ordovician quartzites, overlain by the Gordon Limestone in which the caves are developed. The limestone is of synclinal occurrence, striking approximately north—south, and only very gently dipping. It is unconformably overlain at an elevation of around 300 m. by Permian sediments, at which point the mountain slope changes from approximately 30 degrees to approximately 45 degrees. It is difficult to accurately ascertain the location of the unconformity due to a thick humus development. The upper 300 m. consists

of vertical cliffs of Jurassic Dolerite. An unusual feature is the lack of talus deposits at the foot of these, where the vegetation continues right to the foot of the vertical rock. A narrow belt of sediment up to 0.5 km. wide deposited by the New River, bounds the western flank of the Bluff. To the south the limestone is of subdued relief and generally obscured by sand deposits towards the coast.

The extent of the limestone outcrop is difficult to ascertain. It appears to extend north-wards along the western slopes of the Bluff, and may be related to similar deposits 32 km. to the north of the flanks of Mount Bobs, which forms the divide between the Cracroft and New Rivers. It is not known if the limestone outcrops on the western side of New River valley.

The area experiences a cool temperate climate with annual precipitation of the order of 177-228 cms. This has led to the development of rainforest vegetation and very peaty soils. The firebreak effects of New River Lagoon blocking fire damage from the west has left the slopes of the Bluff untouched by this agent. Some sections have the appearance of having been burnt due to a number of dead trees, but this phenomenon in fact, relates to the natural process whereby Myrtle is replacing the over age Eucalypt forest.

The rapid variation in altitude and temperature has resulted in vegetation of a wide range of types and patterns giving an entire cross-section of the south-west flora. In this aspect the forests of Precipitous Bluff are incomparable and of immense value.



THE SOUTHERN CAVING SOCIETY EXPEDITION

The Southern Caving Society Expedition to Precipitous Bluff was organised in response to the realisation that the Precipitous Bluff battle was an issue in which speleology had a large stake, even though caves constitued but a minor part of the area's attractions to the principle objectors to the lease proposal.

The basic aim was by drawing together speleologists competent in a wide range of disciplines, to endeavour to further what speleological information was available on the area. This was an attempt to further the case for the area's preservation.

EXPEDITION PARTICIPANTS

BELL,	Rosalind	-	Member,	Southern	Caving	Society,	Tasmania
			Cavernee	ering Club	0.		

CATER, John	-	Member,	New	Zealand	Speleological	Society.
-------------	---	---------	-----	---------	---------------	----------

DEKKERS,	Keith	 - Member, Western		Austral:	ian Spele	ological	
		Group,	New	Zeala	nd Spel	eological	Society

DUNKLEY,	John	(B. Ec.),	Dip. Ed.	-	Member,	Bungonia	Committee; P	resident
					Sydney	University	Speleologic	al Society;
					Editor	Australian	Speleologic	al Feder-
						lewal attan		

FISHER, Chris	*****	Member, University of N.S.W. Speolo-	
The second secon		gical Society.	

LASBY, Phil.	****	Member,	Sydney	Speleological	Society.
--------------	------	---------	--------	---------------	----------

TALTIA 3	Kevin	(Leader)	-	Mem	per, Southern	Cavin	g Soc	iety; T	asman-
				ian	Caverneering	Club;	Lake	Pedder	Action
				Comm	mittee.				

ALDDLETON,	Greg	(B.Sc.)	 Member,	Sydney	Spe	leologica	al Society;	
							Committee.	

- Member, Southern Caving Society; Tasmanian Caverneering Club.

GLEESON, Leigh

KIERNAN, Kerrin (Indan)

MI

MONTGOMERY, Neil

PAVEY, Andrew (B.Sc.)

RADCLIFFE, Peter

SKINNER, Andrew

EXPEDITION ACHIEVEMENTS

Exploration

The principle achievement lay in exploration of the lease area and the discovery of several caves therein. At the northern extremity Damper Cave PB1 was extended to double its previous known length. A further quarter mile of passage was discovered when a party swam across a deep pool which had stopped a previous party in 1961, to enter the extension which includes some well decorated sections (see Survey and Photograph page).

One party swam into the unexplored outflow entrance of PB3 to discover a cave 1 km. in length with good decoration and several other entrances. It has been named Quetzalcoatl Conduit (see Survey and Photo graphs).

Surface exploration towards the limestone hill proposed as a quarry site by Mineral Holdings, disclosed that access to this area was, contrary to statements, made by a Mineral Holdings witness at Devonport, not inaccessible. In addition, the area was particularly interesting. Immediately at the foot of the hill is a valley situated at least 15 metres below the level of the button grass plain. This valley carries some drainage around the hill and along the margin of the forested area to sink into the mouth of PB207. There may be other minor sinks in the valley. The hillside above PB207 is marked by a series of vertical pots including PB204, PB205, PB206, which may lead down into the PB207 system. None of these entrances has been explored.

One hole was found above Damper Cave and may give access to that system from bout 35 m. above.

East and to the north of Damper Cave the discovery of potholes about 250 m. up the hillside represented the first time an attempt had been made to locate and enter the holes rumoured to exist on the mountain itself. PB201 was explored to a depth of 82 m. and two other small pots found.

Further north again, a pothole was found near the blocked swallet of the creek flowing in the second valley north of Precipitous Bluff. It has a 18 m. entrance shaft but was not explored.

In addition, PB2 was also visited. The water emerging into a karst window at the entrance of Quetzalcoatl Conduit PB3 passes through this cave before joining with the waters flowing from Damper Cave to debouche into New River Lagoon.

Surface exploration also established that Limestone Creek appears to lie just south of the southern boundary of limestone of any significant local relief. It is presumed that any caves occurring to the south of this point would be water filled, although this could prove to be an erroneous assumption.

A boat voyage some 5 km. up New River from the northern end of the lagoon resulted in the location of a large number of creeks flowing from the east, although no creeks were followed up north of Damper Cave PB1. The potential in this regard remains very high.

Surveying :

PB1 Damper Cave, PB3 Quetzalcoatl Conduit and PB201 Severence Cave were surveyed. The entrance area of PB207 was sketched to Grade 2.

Biological Investigations:

Biological collection during the expedition represented the first systematic collection known to have been undertaken in the area, with a large number of specimens collected from both the caves and on the surface.

To date positive identification has been received for one new species of the beetle genus Idacarabus. Dr. Barry Moore of C.S.I.R.O., Canberra who identified the specimen has commented that it bears more resemblance to I. troglodytes than to the other member of the genus I. cordicollis, but is more slender. He suggested that the genus Idacarabus would prove to be represented by a single species from certain cave areas and geographically isolated in occurrence.

CAVE LIST

- PB.1 DAMPER CAVE: Outflow stream cave over 1 km. long, generally low roof, talus, deep pools, good decoration, ends in small muddy passages. Discovered TCC 1961, extensions all beyond pool 400 m. SCS 1973.
- PB.2 Un-named stream cave 100 m. long passing through spur of hill talus, deep water, discovered and explored TCC 1961.
- PB.3 QUETZALCOATL COMDUIT: Very wet cave 1 km. long, often with very deep water and little air space, four entrances, two sizeable chambers, some glow-worms, good decoration in two main localities. Outflow entrance discovered TCC 1961, exploration SCS 1973.
- PB.201 SEVERENCE CAVE: Constricted pothole 82 m. deep with main shaft of 24 m., good decoration in lower levels. SCS 1973
- PB.202 Small pot-hole 20 m. deep.
- PB.203 Small pot-hole blocked with clay.
- PB.204 Unexplored hole in ridge north of PB.207, slope leads to 10 m. shaft; other holes in same doline.
- PB.205 Unexplored hole south of PB.204, vertical drop 3.5 m. to steep slope.

PB.206 - Unexplored cave with two potential entrances, main one consists of very steep mud slope dropping at least 6.5 m.

PB.207 - Unexplored inflow cave slightly below level of button grass plain, drains area around proposed quarry site, strong draught, impressive entrance 5 m. wide and 1.6 m. high at foot of small cliff.

PB.208 - Unexplored hole 270 m. above lagoon in second valley off Precipitous Bluff cliffs. Entrance is a 14 m. shaft near blocked swallet.

PB.209 - Elongate hole dropping 3 m. to 45 degree mud slope, situated 33 m. above PB.1 and to north. Unexplored.

Notes on the above listing method

The list above is in accordance with the present system of Tasmanian cave numbering, whereby the Tasmanian Caverneering Club allocates numbers 1-100 in any area, the Northern Caverneers 101-200 and the Southern Caving Society 201-300.

The caves listed as PB. 1-3 above were numbered by painting the rock face outside the cave in 1961. The numbers are still visible.

Of the caves in the 200 series, PB.201, PB.204, PB.205, PB. 206 and PB.207 were physically numbered by means of small aluminium tags with the number punched thereon. Time did not permit tagging of PB.202 PB.203, PB.208 and PB.209. However, for reference purposes it was decided to follow the New South Wales principle of allocation of numbers even though the caves be not physically tagged at the time.

Numbers were not allocated for other entrances to the PB.3 system found during the course of exploration. Of the above caves, all but PB.1, PB.2 and PB.3 were found in 1973.

Photographs opposite:

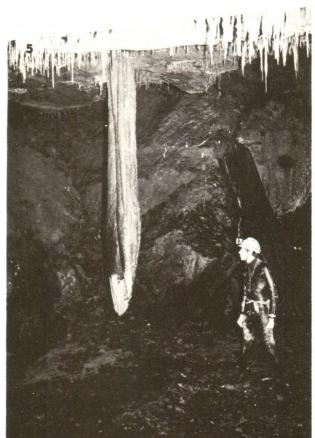
- 1. P.B. from New River Lagoon
- 2. Affixing Number Tag.
- 3. View and Entrance to Damper Cave (PB 1)
- 4. Karren Surface at Surprise Bay S.E. of P.B.
- 5. Andrew Pavey Examining Large Stalactite in PB 7.











SPELEOLOGICAL CONCLUSIONS

The 1973 trip to Precipitous Bluff did much to clarify rumours and guesswork which had clouded the area in speculation in the past few years.

A previous trip by a small team in 1961 laid the foundation for much of the work done in 1973, through its discovery and exploration of Damper Cave PB.1 for 360 m., discovery and exploration of PB.2 and discovery of the entrance of PB.3, now known as Quetzalcoatl Conduit. However, time and manpower prevented that team doing anything in an attempt to establish the boundaries of the limestone or examine the higher slopes. Subsequently bushwalkers reports of shafts high on the mountain suggested the limestone relief to be as much as 620 m.

It is now known that the unconformity between the limestone and overlying Permian sediments lies at around the 305 m. level, with the upper limestone beds apparently impure and shaley and initial swallet development at around 290 m. The exact location of the unconfirmity is obscured by the soil mantle. Other reports from walkers still suggest the relief may be higher in other localities, notably the southern end of the mountain. A large unexplored swallet known as Vanishing Falls lies on the N.E. side of the mountain at an elevation of 400 m. the water evidently resurging only 200 m. lower some 3 km. to the North-west.

Of the pot-holes discovered behind the campsite only two were explored, the deepest being a narrow system 82 m. deep with a main shaft of 24 m. Development was found to be northwards along strike. Other pot-holes nearby were not explored due to lack of time, though a number of smaller holes were found to be blocked with clay. Thus, while the limestone is apparently separated from the dolerite by Permian, it appears clay resulting from breakdown of dolerite, will still prevent exploration of some of the pot-holes near the unconformity, through their blockage with this material.

Two major outflow caves were explored, both around 1 km. in length, (despite incomplete exploration) generally low roofed (1.2 to 1.8 m.) but with higher areas containing some decoration. Very cold water makes wet suits a must for deep pools and streamways. It would appear that drainage in to the higher potholes rapildy coalesces upon reaching approximate vadose base level at the innermost parts of the outflow caves. Exploration at the far end of one revealed a large number of small tributaries entering the complex through a system of clay-choked passages. Development along strike from the north permits the caves to be somewhat longer than could be expected by drainage directly westwards from the unconformity to the lagoon.

Biologically the trip proved most rewarding with the collection of a number of new species. The area's geographical isolation from other karst areas suggested the potential existence of such species. Ample scope remains for further collection.

From the point of view of sport caving the caves are excellent often containing long stretches of deep water with comparatively little air space, and long shafts. Of the caves found, several remain to be explored in addition to the far extremities of Quetzalcoatl Conduit PB. 3 where significant air movement continues through an air space of some 10 cm. above very deep water in the streamway. the area provides expedition-type caving trips, which are becoming increasingly popular.

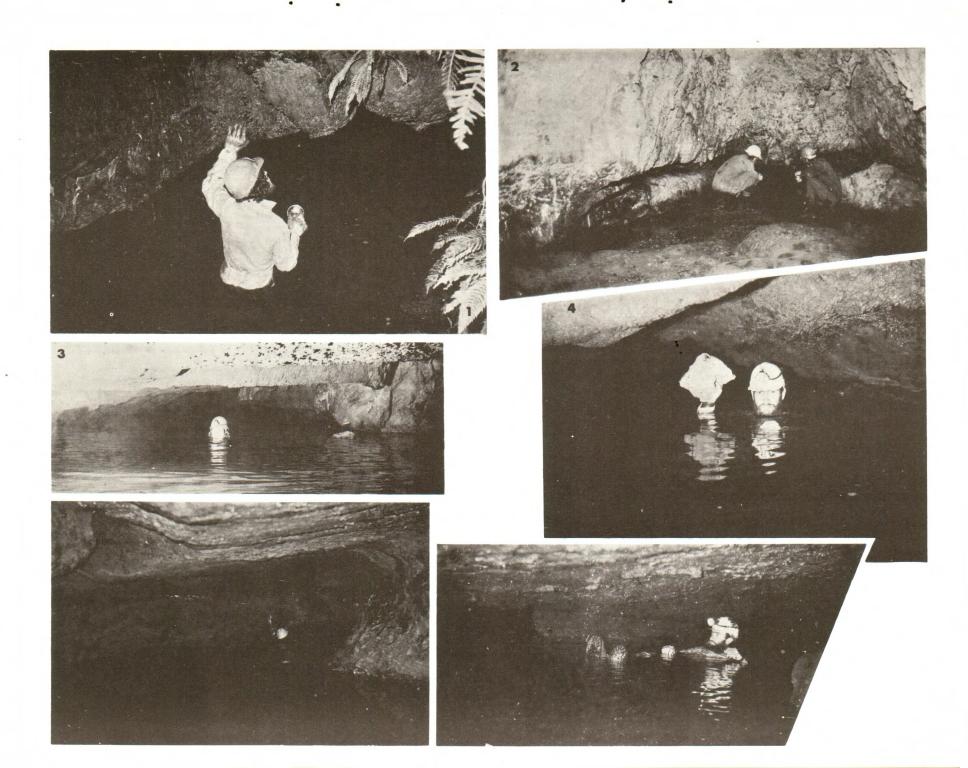
To place Precipitous Bluff then, in context with other Tasmanian cave areas, it could be said that it has now reached "major" status, being one of only five areas where maximum cave lengths are known to exceed 1 km. There is no doubt many more caves await discovery.

To the inevitable question as to whether the caves are suitable for public display through tourist development, it can be answered that considering the area's present isolation it is not feasible. However, it would be physically possible, and it may prove that, given adequate protection, the caves could well prove a tourist resource to future generations when other tourist caves have been destroyed through the pressures of over-use.

In view of the areas speleological values, together with the indisputable value of the surface landscape, the conservation of the karst of this area is of particularly high priority.

Photographs Opposite:

- 1. Phil Glasby at Entrance to PB 3
- 2. P. Ratcliffe & K. Kiernan in Stream Passage of Reece Cave (PB 207).
- 3. K. Kiernan Walking Upstream
- 4. Greg Middleton
- 5. PB 3 Stream.6. Greg Middleton relaxes at Upstream Extremity of Exploration in PB 3.



CONSTRVATION CONCLUSIONS

Repe ted attempts have been made to gain National Park (State Reserve) status for the south-eastern coastal area, principally by the South-West Committee, as a very major part of its aspiration to securing as large a part of the South-west as possible as par land.

The large and growing body of public opinion, expressed through the Committee, has long valued Precipitous Bluff and New River basin, and sought its preservation. Unwillingness of the legislature has frustrated all approaches. The South-West has become a political football with pro and anti conservationist elements in administrative positions and a succession of governments of equally diverse attitude pandering to the wishes of differing factions.

In the midst of this situation only the South-West Committee has tried to objectively evaluate the area. Its first master plan perhaps came closest to conservationists ideals, the expression of its second having bowed to some developments as inevitable, but would appear more reasonable to any government. The findings of the 1967 Interdepartmental enquiry have never been made public. Its refusal to allow conservationists representation suggests that it may not have been an objective in approach as desirable, being at best seriously inadequate to examine all the values concerned.

Clearly then, there is a need firstly to evaluate the area and its differing potential functions, and secondly to act to ensure adequate protection of its natural values where their priority has been established.

Due to encroachments upon the South-West in specific areas such as Lake Pedder, Cockle Creek and Port Davey there has been a tendency to regard the region as a number of units vaguely linked by geographical considerations rather than as a single unified whole. To a certain extent this has been dictated by expediency, and indeed has shown in this report though hopefully on a limited scale. However, there is a clear need to recognise the entirity of the region as constituting an individual entity in itself, with its major features inter-dependent and totally reliant upon one another for overall integrity, just as within any section the features are themselves interdependent: at Precipitous Bluff for instance the affect of the limestone and its caves, diverting drainage underground influencing vegetation development.

Specifically, the mining lease proposal for the hills near Precipitous Bluff has wide implications. It would do more than affect the immediate area, although this is not recognised by Mineral Holdings, who attempt to justify their proposal by stating that the potential quarry site is two miles from Precipitous Bluff, which they regard as being the summit dolerite cliffs only. To the average walker, however,

Precipitous Bluff includes the entire foothills area, and New River Lagoon - the last large wilderness water body left in the South West. The establishment of a quarry and facilities at the proposed site would despoil the view from mountain peaks for many miles around and constitute a major scar upon the face of the South-West.

Considering the arca in a specific light the affect would be catastrophic, threatening the introduction of fire to an unburnt wilderness of incomparable interest and value, already in wide use by outdoor recreation enthusiasts. One of the most readily accessible spurs of Precipitous Bluff would be destroyed along with fine views of the summit obtainable from that point. The tranquility and undisturbed nature of the area would be despoiled, its limestone caves and scientific values destroyed.

Mr. J.H. Hemsley, former chief wildlife officer for Tasmania, said at the Devonport mining wardens court hearing "the area should undoubtedly have national park status." Indeed, the south-eastern coastal area, including Precipitous Bluff, Mt. LaPerouse and Pindars Peak is a particularly important sector upon which any proposed reserve is heavily reliant. It is already part of the South-West Conservation Area and must be dedicated as part of the national park.

The importance of the South West wilderness is greatly underrated. The total region amounts to little more than 2 million acres, only 473,000 acres of which is presently parkland. Compared to national parks now being established in other parts of the world, notably the U.S.A., the area of which is often several million acres, it is not unreasonable to consider reservation of the entire south-west.

Firstly, it must be borne in mind that as the last temperate wilderness in Australia it must serve the needs of the entire nation. The extent of present usage by mainland visitors can be gauged to some extent by the expedition representation shown elsewhere in this report. The right of non-Tasmanians to use the national asset that is the South-West should be as unchallenged as the right of Tasmanians to use the Great Barrier Reef or Ayers Rock. State boundaries and parochial attitudes should never compete with the interests of people overall.

Secondly, it must be remembered that the South-West has already suffered severe encroachments and consequent reduction of effective areas by forestry operations and the Hydro Electric Commission. As outdoor recreation comes increasingly to the forefront of national life, fragile wilderness is subjected to increasing pressures. Not only must present trends and needs be recognised, but those of the future anticipated. Deterioration of parklands through overuse is already a serious problem in some overseas countries where restrictions have had to be placed on access. The need for wilderness must be established now with satisfactory and permanent steps taken for its protection for posterity, as such a landscape once destroyed can never be re-created. The options must be kept open for the longest possible time.

If after establishment of parkland, the national need for a development within a park boundary becomes indisputable, then ample provision exists for such to be written into the management plan for that park.

The proposal to mine in the New River Lagoon basin near Precipitous Bluff is in direct conflict with the principles of connervation. It would immediately erase long term options, destroy the arsthetics of the area together with its recreational and possibly its scientific values. It may scar a landscape, damage a unique forest, destroy a major limestone cave complex and unique life forms found no where else on earth. The present national and even the state situation renders such development of the area unwarranted and foolhardy.

One can only hope that the apparent interest being shown in the South-West by the Australian Government heralds new thinking, and a recognition of the need to take initiatives on a national level to protect Australia's finest wilderness, even if such action is in conflict with parochial state interests.

EDITORS' NOTE:

The bulk of this article was written shortly after the Society's expedition to Precipitous Bluff with the intention that it be issued as a separate publication independent of "Southern Caver". For various reasons the project failed to materialise.

With the handing down of the decision of the last full court appeal, and the publication of the Draft Management Plan for the South West National Park, interest revived, and as no satisfactory account of the Society's expedition to Precipitous Bluff had appeared in this journal, the opportunity was taken to update the article and rectify the situation.

We must here acknowledge the work of Steve Harris in updating the section dealing with the court hearings.

