

MULU MAGNIFICENT!

– Kent Henderson

‘SPELEOGENESIS’

ACKMA’s journey to Mulu effectively started in 2001, when Brian Clark ‘abandoned’ the management delights of Naracoorte Caves to Steve Bourne and fled to the Sarawak jungle. At the time, I’d never really heard of Mulu, but that didn’t stop me (and subsequently others, such as Arthur Clarke) suggesting to Brian that it would be ideal for an ACKMA Conference! I have known Brian for approaching twenty years – he might be occasionally silly but he is not stupid. Having convened the 13th ACKMA Conference at Mt. Gambier in 1999, he was having none of it, certainly not ‘on another planet’, such as Mulu.



Members in the pool at the Marriott Resort.

However, the idea of having ‘just’ a non-conference year ACKMA Annual General Meeting at Mulu, after years of quiet (?) urging and ‘you’d be lucky to get 30 to 40 people’, finally convinced Brian to nod positively on that proposal. I seriously doubt anyone but Brian Clark could have pulled it off, particularly with the eventual ninety (!!) attendees (which was up to a stratospheric 110+ at one stage)! But more on Brian, and his amazing staff, later... The exotic delights of the ‘world’s biggest caves’ certainly had its allure...

The entrance to Langs Cave. Photo: Sasa Kennedy.



Our Mulu trip was unique on many levels. At a normal ACKMA event, whether full conference or AGM weekend, members pretty much stay at the same location and share the same experiences – meals, papers, show cave visits, late night conviviality, or whatever. Mulu was different. Attendees were relatively evenly split between staying in Mulu National Park accommodation or at the Royal Mulu Resort. On that basis alone, some members only saw each other occasionally during the week. Additionally, the wide variety of show cave and wild cave trips on offer, and the relatively small groups on each, meant that individual experiences varied greatly. Indeed, aside from staying at the Marriott in Miri at the start, we were really only together as a complete group twice – for the ACKMA AGM itself and the following evening meal at the Royal Mulu Resort on the Saturday, and the ‘Final Dinner’ at the Park on the Thursday. Normally, after any ACKMA event, it is my custom to write a ‘blow by blow’ description for the subsequent ACKMA Journal, but clearly such is not possible on this occasion. I will, therefore, share some of my personal experience, and leave it to others to share their own. Some will appear herein, and perhaps some in the next Journal edition. Hopefully, collectively, we can paint a reasonable overall picture...



The archeological dig at Niah Great Cave.
Photo: Miles Pierce.

The Royal Mulu Resort from a nearby hill.
Photo: Chris Skelding.



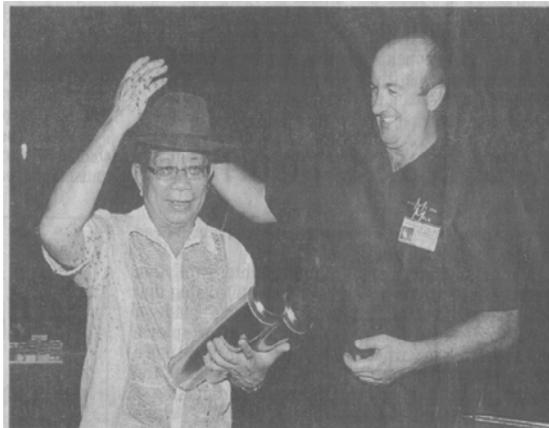
OUR JOURNEY BEGINS...IN MIRI

The flight to KL, and then two hours across to Miri in Sarawak, West Malaysia, put us at the start of our 'Mulu Adventure'. Through the vagaries of flight scheduling, some us (including myself) arrived in Miri a day early – on Wednesday 21 April – which gave us most of that day to sample the delights of beautiful, downtown Miri. Well, it was downtown anyway. A nameless person did previously advise that the best thing about Miri was the 'road to the airport as you're leaving...' Slightly unkind perhaps (but maybe only slightly...). Brian had booked us all into the very swanky Marriott Hotel Resort. He got

us a 'deal' (as he would...). It has the most enormous pool, of which ACKMA members made copious use – of course – particularly its bar right on the water's edge. Yummy food too – the mango cheesecake is to die for!

By the evening most ACKMA people had arrived and we were favoured by a sumptuous poolside banquet (some only got out the pool just in time – life is tough at the top!). We were delighted with the presence of a number of dignitaries, namely Datuk Patinggi Tan Sri Dr George Chan Hong Nam, Deputy Chief Minister and Minister for Tourism, Mr Abang Arabi Aimran, Regional manager (north) of the Sarawak Forestry Corporation, Ms Nur Asikin, Park Warden Mulu National Park and Mr Haider, Park Warden of Niah National Park. Datuk Patinggi favoured us with a welcoming address, and said he was looking forward to receiving ACKMA's comments and advice on cave and karst management in Sarawak. (Indeed, Steve Bourne, with input from other members, has put together that advice which has been duly forwarded). Steve responded as ACKMA President and presented Datuk Patinggi with bottles of Australian wine and an Akubra hat.

Interestingly, the local press was there in force, and the following article appeared on Page 2 of the English-language *Borneo Post* the next day (Friday 23 April). Clearly, it is excellent to see ACKMA having a positive influence.



SOUVENIRS FROM DOWN UNDER: Dr Chan receives Australian wine and a leather hat from Steve Bourne on behalf of the Australian Cave and Karst Management Association.

State awaits recommendations of international cave experts

MIRI: Sarawak is awaiting recommendations from international experts on good management and conservation of caves systems in Mulu and other national parks in the state.

Deputy Chief Minister Datuk Patinggi Tan Sri Dr George Chan said proper management will enable the state's natural heritage to be conserved for posterity.

"Help us manage our assets right with your ideas and views to make sure that

we are doing it right," he said during a dinner reception for the Australian Cave and Karst Management Association on Wednesday.

He said the state government would invest in conservation efforts for Mulu National Park, which is a United Nations Educational, Scientific and Cultural Organisation (Unesco) World Natural Heritage Site.

Dr Chan, who is also

Minister of Tourism and Heritage, pointed out that the experience and expertise of the association would help the state raise its caves and environmental conservation programmes to a higher level.

A group of nearly 100 association members of different disciplines and fields from Australia, New Zealand and other parts of the world were in Miri to visit Niah National Park and Mulu National Park.

NIAH GREAT CAVE

The next day the entire ACKMA party, in three buses, headed off to the Niah National Park (110 km south-west), to visit the Niah Great Cave in particular – which is seriously big. We were received at Park Headquarters, and then headed off on the 3.5 km (mostly) boardwalk to Niah, through thick rainforest.

The cave is noted (notorious...) for its 'bird nester collectors'. These locals have, for many years, scaled enormous bamboo poles and ironwood ladders to the ceiling of the cave to harvest the nests of swiflets – a vital ingredient (most unfortunately) of the 'highly regarded' bird's nest

soup in Chinese cuisine. The 'trade' in birds' nests is VERY lucrative. Needless to say, this matter if one of deep environmental concern. I will quote the Niah NP brochure:

'Collecting nests from the cave ceiling is a dangerous job and fatalities are not uncommon, but the price of raw birds' nests is so high that the risks seem worthwhile. Obviously such a valuable commodity is magnet for poachers and over-harvesting is a constant worry. Therefore Park management constantly monitors the caves to deter illegal collectors....harvesting is a seasonal activity and is subject to temporary bans by Sarawak Forestry to deter illegal collectors.'

Bird nest gatherer's bamboo poles in Niah Great Cave. Photo: Sasa Kennedy.



Yes, well... There are clearly many management issues here! On route to Niah Great Cave we stopped *en route* at Traders Cave (though which one must pass) – were we received an interpretive talk from a staff member. This cave was so named as it was the ‘wholesale market’, historically, for birds’ nests. Today, the key problem is to ‘balance’ the economic (and arguably cultural...) needs of the local indigenous population with the obvious environmental issues. Several years ago, the Sarawak State Government banned bird nesting – to international applause no doubt, but considerable local disquiet. They even had the army stationed in the cave to deter poachers. Today, nest harvesting is permitted seasonally under ‘strict conditions’. It is somewhat hard to comment further...

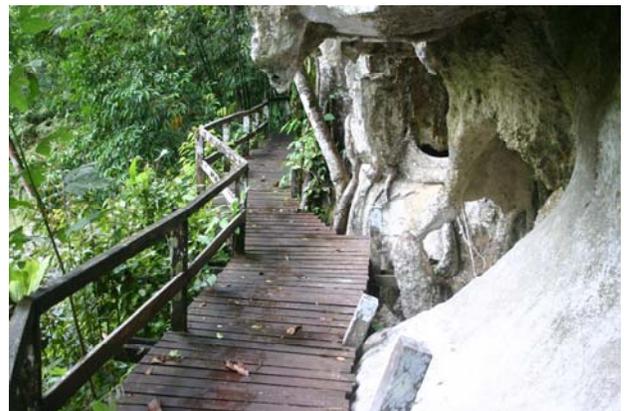


Attendees at Niah Great Cave Headquarters.

But back to Niah Great Cave itself. ‘Great’ in size it certainly is, at least. The west mouth of the cave is over 60m high and 250m wide. As you approach, one notes the considerable Paleolithic archeological excavations on your left, which were commenced in the 1950s. Human remains have been found dating back 40,000 years.

One then tours the enormous cave itself via its loop track, along which you view its huge ‘exit hole’ before returning to the main entrance. An important section of the cave, *The Painted Cave*, which loops off the main track, was closed to us by guides sitting on the steps blocking our entrance thereto. It was explained, apologetically, that they were ‘doing maintenance’. This was disappointing, but I will say no more. *Painted Cave* features the famous Niah Paleolithic cave paintings – and we were collectively sorry not to have seen them.

One could easily write an extensive article on Niah itself, but in the context of this monologue, I will avoid the temptation. As for the management of the cave....I have already mentioned the greatest challenge, the ‘bird nest’ issue. The tracking through the cave is adequate. Given the physical size of the cave you do need to carry your own light source – and unless it is powerful it won't help all that much. David Head of *Weidmuller* provided Steve Bourne with a purposely-built (one-off) wizz-bang LED light that reputedly ‘blinds koalas at several kilometres’. He first tried it out in Niah, and it was a tad useful! It later saw considerable service at Mulu, particularly in the Sarawak Chamber, I'm told (but with only limited success in the ‘world's largest underground chamber’). Given that it was heavily coveted by Brian Clark, it remained in Mulu after ACKMA's departure...



Riverside boardwalk between The Cave of the Winds and Clearwater Cave.

ONTO MULU

The following day (Friday 23 April) saw everyone on either the morning or afternoon thirty minute flight from Miri to Mulu. ‘By Air’ is pretty much the only way into Mulu (other than by a very long river boat trip....). It was interesting that Datuk Patinggi, in his speech to ACKMA, indicated that there were no plans to cut a road into Mulu. The primary concern in not doing so, he said, was environmental, and in

its rear entrance – just beyond which is what is described as ‘The Garden of Eden’ – of which more later. You then largely retrace your steps to the main entrance. The cave possesses understated track lighting, and also under stated feature lighting. The latter largely just allows you to appreciate ‘where the walls are’ in the immensity of the cave. Well done too!



A view towards The Garden of Eden from Deer Cave.
Photo: Ross Anderson.

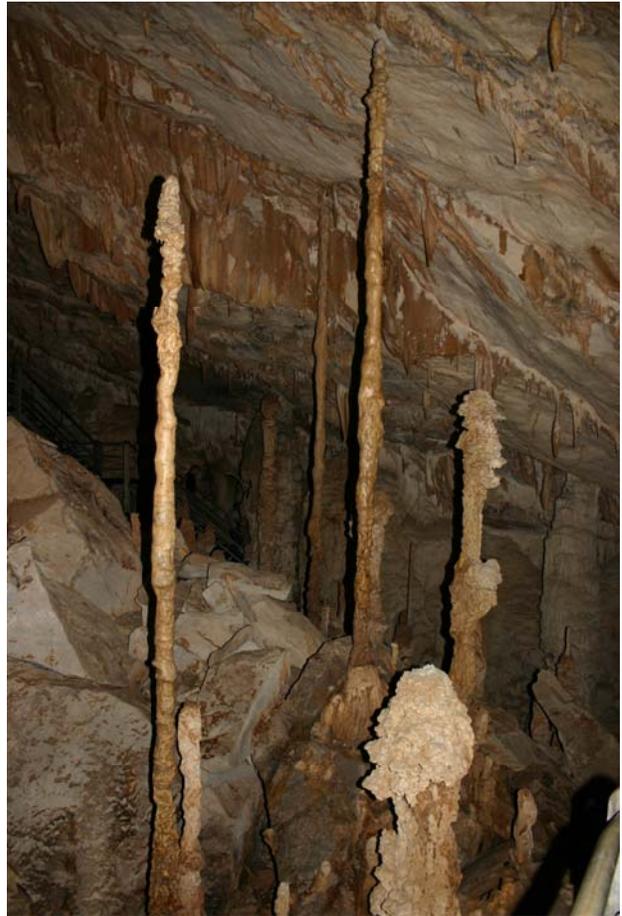
Upon exiting, late afternoon is the preferred time, one then back tracks from the entrance a few hundred metres or so to the Bat Observation Area to watch the bat exodus from the cave. This regularly occurs between about 5.30-6.30pm just before dusk (except if it’s raining) when up to 2.5 million bats exit to feed. Yes, that was million! It is a wonderful sight, to say the least. In the Bat Observation Area visitors can also view live ‘in-cave’ CCTV (or ‘Bat Cam’) of the bats milling in the cave itself, and also just within the cave entrance. Wonderful stuff!

Before our Mulu visit, Brian advised that malaria, so common in much of the tropical world, is virtually absent at Mulu. A definite lack of mosquitoes (millions of local bats feeding...) seems to be the answer!

Langs Cave is located a short walk to the right of the Deer Cave entrance – indeed this cave is effectively a side passage of Deer Cave blocked from it at its end by a rock fall. I was very (but most pleasantly) surprised by this cave. It is the ‘smallest’ of Mulu’s four show caves, and I did not expect what I saw! It is basically a single passage, which is packed full of excellent speleothem development. Whereas Deer Cave was formed over the millennia by a powerful underground river, Lang Cave was more influenced by standing groundwater dissolving the limestone rather than through the action of an eroding stream passage. It possesses some staggering decoration – as good as you’d see in the ‘best’ Australian show cave. And the infrastructure and lighting is first rate. The tracking is excellent too – a 240m walkway – with an internal circuit at the end of the cave before you retrace your steps to the entrance. The (largely raised) tracking is wood. Now, I have long been ‘cave

management-raised’ that wood and show caves do not mix. I can recall many examples in both Australia and New Zealand where degraded wood in a show cave smartly becomes a glutinous, polluting mess...

But Mulu is an exception – its wooden tracking, both board walks and handrail uprights (at least in Langs Cave) are of Borneo Ironwood. This is a local canopy species which is extremely durable and decay-resistant. In short, unlike virtually all other woods, it is fine in caves. The lighting in Lang’s is very recently installed LEDs – wonderfully done. The handrails in the cave were very largely thick, white ‘nautical’ rope. ‘Different’ surely, but in context I thought they worked rather well. This was the first time I’ve ever been a show cave whereupon, upon reflection after exiting, I had no criticism to make. I ‘award’ this cave 12 out of 10! I will add that Neil Kell said to me the lighting could be improved (what can’t?), and that he’d tweek it this way or that – but he would say that, even if he’d lit the cave himself!



Stalagmites in The Cave of the Winds

Clearwater Cave and the **Cave of the Winds** are the remaining two Mulu show caves and the next to capture our attention. They are accessed by a circa 30 minute longboat ride up the Melinau River (which flows past HQ). The ‘tourist route’ involves an *en route* stop (for about 15 minutes) at a Penan longhouse called *Batu Bungan*. Thereat one views (and maybe buys...) local handicrafts. The Penan is

the local indigenous people, who form the bulk of the employees at Mulu, whether in the National Park, the Royal Mulu Resort, or the Airport. After this short stop over, it was back on the boats and further upriver to the Cave of the Winds (which is a section of the huge Clearwater Cave System). It is an old stream passage cave, which is highly decorated – particularly towards its rear. There is significant air flow in the cave – hence its name.

The rear section, called *The King's Chamber*, is profuse with decoration, notably stalagmites – with virtually no stalactite development above. Of course, this is indicative of both the high porosity of the limestone and high water flows. Simply, drips do not hang around on the ceiling. Indeed, stalactites, particularly straws, are hard to find at Mulu (although both occur). Stalagmite decoration was widespread and most attractive. In terms of infrastructure, LEDs have not (yet) come to this cave – lighting is still mostly dichroics; which remains quite effective nonetheless. While the tracking (as now not unexpected) is mostly ironwood, the handrails and uprights, particularly in the initial areas of the cave, are (non-stainless) steel. Further in, there are wooden uprights and nautical rope handrails (as in Langs Cave) – obviously fairly recently installed. There is also a number Perspex barriers above handrails at intervals; clearly placed historically to 'protect' adjacent speleothems. In most cases, they didn't seem to me to be protecting very much at all, and Brian advised me later that they very much 'in the frame' for removal. Obviously, the Cave of the Winds is an upgrading work-in-progress, and I have no doubt that in due course it will reach the giddy heights of Langs Cave.



Geoff Deer on the bridge in Clearwater Cave.

Upon exiting the Cave of the Winds the next port of call is Clearwater Cave. You can get there by 'connecting' long boat, or walk the around 400 metres along a riverside boardwalk. I chose the latter, though some in my group took the former. You can also walk to Clearwater, via Cave of the Winds, from HQ (its 3.4 km – about an hour on foot). There are 'more than a few' steps to ascend to the Clearwater Cave entrance. Clearwater is a 150 kilometre long active underground river system (that's a tad long...). The show cave section has two branches. One takes you down to the river and over

a bridge (you then return to the junction). The second branch is to a 'dry' section known as *Lady Cave*. It possesses some excellent, large decoration. Again it is a work-in-progress – it even had a few 'mushroom' track lights (now unconnected to power) identical to those in Marakoopa Cave at Mole Creek, Tasmania! Mulu is full of surprises!

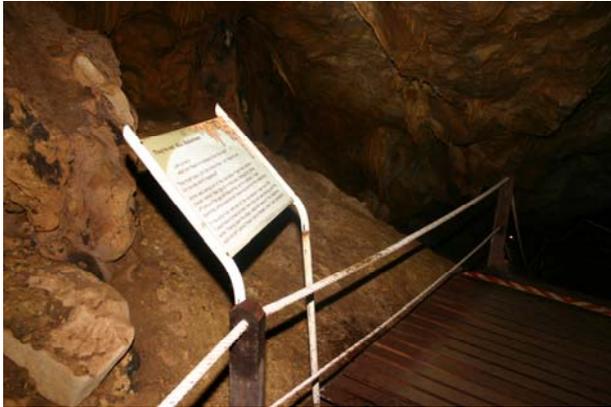


Infrastructure in Clearwater Cave.

There is one further show cave at Mulu – sort of – in that it is not yet open to the public as such (but will be within a few months). This is **Lagang Cave**. It is located about half way up river towards Clearwater Cave – about 15 minutes by longboat from HQ.

Lagang has two strings to its bow. Firstly there is the (about-to-be) show cave section, called **Fast Lane**, and a wild ('adventure') cave section. Many members did both trips, but I only did Fast Lane – so I can only comment on that (all reports on the adventure tour were most positive, I will add). The guide for my group (and I think for most, if not all, trips to it over the week) was none other than Mr. Brian Clark himself! This cave is obviously his 'pride and joy' and it is very easy to see why. It is simply sensational. I have rarely before heard Andy Spate, as one example, expound the virtues of a cave as he did this one. It has 'everything' – it is largely an old stream passage cave – with a new 1.5 km boardwalk. It is a through tour (yay!). The initial section exhibits just about every karstic geological delight you'd love to have in every cave – water (of

course), multiple sediment levels, scalloping, a wide variety of decoration – it is an interpreter’s dream!



Borneo Ironwood infrastructure with nautical rope handrails, in Langs Cave.

Then towards the back section you come to (largely) enormous speleothems, including some of the biggest flowstone/stalagmites and columns you are likely to see anywhere. The cave is only thus far partially lit – LED of course – and one narrower section towards the rear of the tour, which is quite ‘up close and personal’ has infrared trips. Oh, it’s good! Even the rear gate – which covers a ‘sizable hole’ is fantastic – as a particular ‘student’ of cave gates over the years I was mightily impressed with how Brian had closed the hole to humans, but not to bats and other fauna (see the adjacent photo).

So, all up? 10 out of 10 again Brian – and I am sure when it’s finished it will be – infrastructurally-speaking – in the giddy heights of Lang Cave’s 12 out of 10!



A racer snake in Racer Cave. Photo: Phil McQuinn.

THE ADVENTURE CAVES

There were quite a number on offer – six ‘easy’ (yes, well...) options, and two hard ones (Clearwater Connection and Sarawak Chamber). Let’s look at the ‘less hard’ ones first. I did three of these – Racer, Stonehorse and Fruit Bat Caves, so I will deal with them initially.

Racer Cave was my first effort – a half day trip. It is 25 minutes up river by longboat, and you are underground for about two hours. Our group’s trip

leader was Robert Gani –whom I knew (he was at ACKMA’s Chillagoe/Undara Conference in 2003) – and it was great to see him again! Needless to say Robert is a very competent guide (and he has plenty of friends at Mulu too!). Racer Cave is named after the bat-eating snake which habitually inhabits the cave – our group saw two of them; beautiful creatures! A short walk from the river brings you to the cave entrance, then it is up a scree slope, to rope ascend of, say, 6-8 metres, to ‘the squeeze’ immediately thereafter. Well...Kent’s girth has been expanding over the years, sadly. Anyway, everyone got through easily enough, except me. But with much encouragement and gratuitous instruction from the group, I eventually popped my cork out of the bottle (I had the same ‘fun’ on the return, of course... Sigh...).



Rope work in Racer Cave. Photo: Ross Anderson.

Racer is a sporty cave –the most challenging I had done for quite some years. We had two more rope climb/descends before we were finished, both coming and going. The cave has heaps of decoration, some really large stuff towards the rear (or at least as far as we went – the cave goes on considerably I understand). Towards the ‘rear’ a very substantial number of bats were heard, but largely unseen. Indeed, a feature of the cave is its fauna – lots of ‘strange’ creep crawlies. As an aside, it needs to be appreciated that we were ‘deep in the jungle’ at Mulu, of course. The range and number of species – flora and fauna – is voluminous. Brian reckons, perhaps, only 15% of local fauna is described – known to science. It is highly probably ACKMA members came across species never seen before, quite literally!



Brian Clark talks sediments and river levels in Lagang Cave

After Racer Cave, boating back to HQ and lunch, it was off to **Stonehorse Cave** – with largely the same group as the morning. This time the guide was our good friend Jeffrey Simum – who has attended the last ACKMA Conference at Margaret River. This cave is so named for a rock feature inside the entrance which reputedly looks like a horse’s head – although I think it should be *Ram’s Head Cave* (but I suspect not too many sheep have seen at Mulu – alive, at least...).

To get to this ‘adventure cave’ one walks about 2 km along the boardwalk to Deer Cave from HQ. Then there is a 40 metre climb up a quite steep limestone scree slope, through thick jungle, to the cave entrance. It was energetic, that climb, and very slippery. Indeed, coming down it at the end (and remaining vertical in the progress) was even harder! Stonehorse is a three hour trip and it was (at least to me) a very sporty and testing cave – harder than Racer. Indeed, the relevant Park brochure describes Racer as an ‘intermediate’ cave, and Stonehorse as ‘advanced’. Stonehorse contains several traverses (one 20m wide) and several rope climbs/descends. Its passages are large and open with 35 metre high ceilings in places. It contains much delightful decoration further in and, again, much fauna. Having done two testing caves that day, I was a tad sore, but certainly not sorry!



At the back entrance of Fruit Bat Cave.

The next morning, I was up for my third ‘wild cave’ – this time **Fruit Bat Cave**. I was also listed for the nearby **Kenyalang Cave** in the afternoon but I pulled out – according to Brian it had a ‘number’ of testing squeezes. ‘No thanks’, thought I. To get to Fruit Bat Cave one walks to the Deer Cave Bat Viewing Area from HQ, and then on another boardwalk almost as far away again – out about 700 metres all up. Similar to Stonehorse, there was a walk through the rainforest, then up about a 30 metre steep hill. It is not quite as testing as Stonehorse’s climb but you are very glad to get the cave entrance nonetheless!

Fruit Bat has not yet been opened to the public as an ‘adventure Cave’ but will be later this year. As its names suggests, it is the home of a large colony of fruit bats – one of the 30+ bat species at Mulu. Other than the ‘getting to the entrance’ scramble, I’d classify this cave as ‘easy’, certainly no more than ‘intermediate’. There were a few places where ‘minor scrambling’ was necessary, but mostly it is a straight walk-through cave. It is highly decorated in places; you do see LOTS of bats (or at least they were at home when we were there), and also lots and lots of cave fauna – including a fascinating cave-adapted pure white (presumably blind) crab, amongst many other creepy crawlies. Wonderful stuff!

When we got to the end of the cave, we came to a large-ish daylight entrance. ‘Oh joy’, I thought, ‘It’s a through trip!’ No such luck – it was promptly explained that it was a straight 40 metre sheer drop from this entrance into ‘middle of nowhere’ jungle – so we promptly re-traced our steps! One couldn’t argue with the logic...



An ACKMA caving group poised to depart.

About three-quarters of the way back, it happened to me. One has to appreciate that at Mulu we are talking about caves under a jungle; a very wet jungle. There are only two seasons – the wet and the very wet. We were in the former, but it still usually rained for an hour or two every afternoon (you do get wet on occasions...). Rain at Mulu is measured in metres, not millimetres. So, the caves are a tad damp, and often slippery – very slippery. And Kent slipped – into a hole. I first thought I’d broken a leg, but happily I was only very sore in several places, and this time I was sorry as well!

While not necessarily very painful, the climb down from the cave entrance and the long walk back to HQ was certainly slow and uncomfortable. Sigh... In any case, I decided prudence was better than valour, and called a halt to any further 'hard' caving for me.

Before moving to talk about (albeit of necessary briefly as I did not do them) the other wild cave options – some general comments about caving at Mulu. Firstly, it can be said, without question, the adventure cave guides at Mulu are very highly trained and extremely competent. I strongly doubt I would have personally got through Racer without Robert and Stonehorse without Jeffry. That said if these caves were offered in Australia as such, there would be obvious Occupational Health and Safety (OH&S) issues.

Rigging at Mulu pretty much consisted of knotted ropes 'thrown over and tied off' – not a karabiner or a harness in sight. But we were not in Australia, we were in Sarawak – our standards are not local standards. Of course, one could be fairly confident about the caving skill levels of individuals in the ACKMA group – most members were well known to Brian personally in any case, or at least by reputation. But, even so, we had our accidents. However, such fore-knowledge would not apply to Mr and Mrs Average (unknown) tourist. I know such types are assessed through 'beginner caves' before they can access harder ones...but still...



A group on Kenyalang Cave. Photo: John Brush.

THE 'HARD' WILD CAVES

Aside from the 'adventure section' of Lagang Cave which I did not do and to which I have already referred (it is classified as a 'beginner cave', by the way), there are two 'very hard' wild cave experiences available Mulu – Clearwater Connection and Sarawak Chamber. Indeed, I was down to do Clearwater Connection on the Thursday (the final day) at Mulu, but given my acquired infirmities, I pulled out. I was not alone in pulling out of the 'hard' trips – although a significant number of our 'fit' members did do them.

The **Clearwater Connection** trip, which takes much of a day, starts in The Cave of the Winds. It begins in the tourist section of the cave, followed by

a route over rugged terrain, including several boulder collapses, which requires much climbing and clambering. Eventually, one traverses a 1.5 km long section of Clearwater Cave river. Much rigging is required for the trip, and invariably participants get in some swimming.



Crossing a streamway in Clearwater Connection.
Photo: Garry K. Smith.

The other 'hard' wild cave trip is to **Sarawak Chamber** – the reportedly 'largest underground chamber in the world'. The trek to and from the cave takes a very full day – being a 10-12 hour round trip. The trip begins with three hours on the Mulu Summit Trail. Then things start getting tough! Access to the chamber is via Gua Nasib Bagus (Good Luck Cave) consisting of a three hour trek along a 800 metre river channel.

After a 200 metre traverse and up a steep boulder slope, you come face to face with the Chamber. Several groups were scheduled to do Sarawak Chamber over the week. A least one was cancelled/differed because of high water levels, but a couple of 'tours' made it. Given the hugeness of the chamber, and high humidity therein (i.e.: almost constant fog...) it was very hard to photograph, I'm advised. Indeed, the best photo taken can be seen in my *Editorial* elsewhere in this Journal...



Dale and Ben Calnin climbing to The Pinnacles.
Photo: Phil McQuinn.

OTHER ACTIVITIES

Another 'hard' activity, accomplished by a few groups during the week (and one group straight after the ACKMA event) was the three day guided trek to **The Pinnacles**. From Clearwater Cave, there is three hour walk to 'Camp 5' where one spends the night. It is described in the Mulu NP literature as 'comfortable jungle accommodation, with fully equipped kitchens, dining rooms and bathrooms'.

Getting up at dawn the next day, one faces the trail up to The Pinnacles. It is only 2.4 km long, BUT it rises 1200 metres in the process, and the last section is near vertical with ropes and ladders to climb. One has a second overnight at 'Camp 5' before returning to HQ on Day Three. Not for the faint hearted...

Other activities available during the week, of which many attendees availed themselves, included a trip to **The Garden of Eden** (traveling through Deer Cave, out its back entrance into the rainforest to view waterfalls, etc, and return) and the **Mulu Canopy Skywalk** (a 1.5 km suspended plank walk across the rainforest canopy, up 15-20 metres from the ground), the **Tree Top Tower** (a 'hide' near the top of the rainforest not far from HQ), and finally a longboat trip (half day) down river to **Long Iman** – an indigenous village.



'Team Korea', led by our good friend Kim Ryeon (2nd from the left).

THE ANNUAL GENERAL MEETING

This occurred in the 'Royal Chamber', Mulu Resort, on Saturday 24 April, following a meeting of the ACKMA Committee. The usual routine business was transacted, including the adoption of the Committee's Reports. If any member wants to be 'riveted', these are now available for you to peruse in the *Member's Only* Section of the ACKMA Web Site. Our Treasurer, Dr. Grant Gartrell, reported ACKMA to be in a sound financial position, with (in round figures) \$20K in our Australian bank account, and \$10K in our New Zealand Account. He recommended membership fees remained unchanged which, funnily enough, received no objection.

The Election of Officers for the ensuing year saw exactly the same faces re-elected. Sigh.... Andy

Spat rose and castigated the meeting – suggesting it was about time other members stood for the Committee, rather than just 'the same old faces'. I could not agree more. Hopefully, next year....



The entrance to the Tree Top Tower.

Cathie Plowman reported on next year's 19th ACKMA Conference at Ulverstone, Tasmania, in the absence (through illness) of our Conference Convenor, Tony Culberg. All is coming together well – it will be other tremendous ACKMA event! Upon the recommendation of the Committee, the AGM decided to not proceed with holding the 2012 AGM at Cango Caves in South Africa. There were a number of difficulties with this happening, for which the Committee saw no resolution.

However, it was approved that moves will be made to arrange an ACKMA-organised trip to Cango, hopefully in 2012, for about 25-35 members. As a 'Cango AGM in 2012' was not happening, it was resolved that submissions be called for to host the 2012 AGM 'weekend', and that such submissions be considered and voted upon at the 2011 AGM at Ulverstone during the next ACKMA Conference. Obviously submissions are called for! Any cave location that want to make a submission should do so either to Dave Smith, our Executive Officer, or myself as Assistant Executive Officer – I suggest, preferably, before the end of this year.

The AGM also approved ACKMA's full support for the bid by Jenolan Caves to host the 2014 International Show Caves Association Congress, and elected two new Fellows of ACKMA – Dr. John Watson and Cathie Plowman (see the separate report elsewhere herein).

THE FINAL NIGHT!

Obviously, as ACKMA members were fairly evenly split between HQ accommodation and the Royal Mulu Resort; the two groups dined there respectively, except after the AGM on the Saturday – when we were all at Royal Mulu – and the 'Final Night', the Thursday, when dinner for all was at the HQ Cafe.

And what a night it was! The smorgasbord was expansive, with even prawns and lamb chops! I must say I slightly disappointed we didn't each get

half a crayfish, as Brian provided one night during the 1999 ACKMA Conference at Mt Gambier (although nothing would surprise me where Brian is concerned...), but I lived with it! The 'entertainment' was memorable, to say the least. We had local perform an indigenous dance in full traditional costume; he was followed shortly thereafter by yet another 'exotic' dancer in the same costume, repeating the said dance with great competence – but he looked suspiciously familiar... (see the photo on the Back Cover hereof – top left hand corner).

Brian organized a blow dart competition at an 'unfortunate target' (say no more), which was great fun. It was decided to delay the 'finals' until after dinner, but we never got back to it... There was also a Mulu photo competition. In the end the joint winners were Garry Smith and Greg Martin. Their photos appear on the front cover of this Journal! Indeed, a great many photos have come into me since (many are featured herein), and many more will appear on the ACKMA web site in the near future.

So, a fabulous (late!) night, and an outstanding week, came to its conclusion. Most members flew out the next day, although a few lingered for a day or so. It was, without doubt, one of the best ever ACKMA events, which will be long remembered by all participants.

COPIOUS THANKS

Before moving to the comments of other members who attended in Mulu I must, on behalf of all attendees, warmly and most sincerely thank Brian, Sue and Jeremy Clark, and Brian, Jeffrey and all the staff at HQ, and at the Royal Mulu Resort, for making our stay so memorable. If there were any hiccups (and I have no doubt there were many!), we didn't see or know of them – a testimony in itself to the skill and dedication of Mulu staff at all levels. I would like though to say a few words about Brian Clark directly. As I said earlier, I do not think anyone else could have pulled it off – putting an overseas group of close to 100 people at Mulu was a gigantic task – and ACKMA people to boot! Oh my God – you'd have to be crazy!! When I first met Brian, all those years ago, he was far less mellow than he is today. Back then he did not suffer fools lightly (me included!). Undoubtedly he still doesn't;

the difference is that now you wouldn't know it. Brian has learnt, far more than many I suggest, not just how to manage a resource, but also the people involved, with great foresight and compassion (despite his sometimes 'gruff' manner – he is still Brian after all!). This was in constant evidence as we moved around during our Mulu 'week'. He knows all the staff (and there are a lot!) by name, together with just about every other 'local'; I never once saw Brian fail to thank whoever he was dealing with (by name), down to the 'lowliest' longboat man. Not once did he order staff, only suggest. The deep respect in which he is held is patently obvious. I must say, and it is a big call, that if there was a 'best cave/karst manager in the world' accolade, Brian would be on most short lists, mine included. Brian is a true visionary – a rare species amongst the human race. (Brian – I look forward to those several cases of Crown Lager arriving at my place any day!).



The primary source of our adulation
– Sue and Brian Clark.

MULU MUSINGS

EDITOR'S NOTE: I publish below a few 'Musings on Mulu' submitted by members. These I have edited to remove repetitions, panegyrics on Brian Clark and Mulu staff generally (covered in my article), and excess length. Space permitting, I hope to publish further 'musings' in the next Journal.

JAY ANDERSON writes: It seemed strange flying off to Miri, with Brian and Sue Clark and John and Barbara Watson, on 21 April (after attending the Geotourism Conference) – to just return a few days later. It was great to catch up with all our ACKMA friends in Miri. The evening dinner by the pool at the Marriott was fantastic. The day trip to Niah Caves was amazing. We enjoyed the walk to the caves – it was impressive to see the infrastructure

installed by the bird nesters. It was really hard to imagine anyone up so high! We noted a difference in the management between Niah and Mulu and it is excellent to see these sites protected.

Then, the group went off to Mulu for the ACKMA week. We really enjoyed our time at Mulu – it was fantastic to be able to spend so much time in the rainforest and caves. I was inspired by the depth of

knowledge of the local guides and their skills in engaging visitors. As Brian said 'you will need to visit Deer cave more than once' – what a cave!! We found the walk to the cave and the whole experience just great. I really enjoyed seeing the different moods of the cave – seeing mist and huge waterfalls from the roof after rain was spectacular. We really enjoyed the longboat trip upriver to Clearwater and Wind caves. Each cave was so different and we enjoyed everything!! It was also excellent to experience the Canopy walk – what a way to view the forest.



Oolites in Drunken Forest Cave.
Photo: Ross Anderson.

One day we went on a rainforest hike to the Sarawak Chamber. This was a very energetic walk thru the rainforest on narrow tracks for around four hours! We really enjoyed the creek crossings. It was a lovely overcast day and so the forest was not so steamy.

When we arrived at 'Good luck Cave' (how many people knew that was the name of the cave with the Sarawak Chamber in?!!) we saw a large pool of water (the cave stream disappeared into rocks at the cave entrance before flowing out of the cave about 30 metres away). Our guide (Bian) said that the water was too high to get to the Sarawak Chamber but that if a few of us were interested, we could have a swim and look at the cave passage. I went for a swim with a few others – it was interesting to see the high passageway and the scalloping on the walls.

On the way back to the Park HQ – our guides (Bian and Ishmael) took us to 'Drunken Forest Cave' – this was a small entrance in the side of a hill – quite deceptive for what it held inside – the cave opened out into some amazing passages. We saw some large cave pearls, gour pools and other wondrous sights. Some of our group also saw a scorpion!

Then it was back to the forest for our walk home. There had been a large storm back at HQ and our track was deep in water in several places – mud, more leeches..... Even without visiting the Sarawak chamber it was a long day and we got back around 6pm.

DIANNE VAVRYN writes: I had heard about Mulu many years ago in documentaries, caving magazines and from those who had been there – covering many subjects such as methods used by the local people to collect bird nests, the expedition that found Sarawak chamber and more. A dear friend Dr Les Hall had been there a number of times during and since the 1980s doing bat research and I had heard of the huge number of bats and the many species that used Deer cave. This is a place I thought I would love to see but never thought I would ever have the opportunity to do so.

Everything thing in Mulu was a highlight for me. The first cave visited was Niah Cave after a long drive from Miri. It was great seeing and poles used by those who collect the swiftlet nests for bird nest soup and hearing how the resource is being managed. A fern growing in the entrance was of interest to me. It looked like or similar to *Tectaria devexa* which is a rare fern in Australia known only from two populations, although it is recorded in Ceylon, Christmas island, Thailand, China and Malaysia – always associated with limestone. I was interested to know if this was the same fern but there being so many different species, it was a tall ask.

It is hard to put into words the emotions we felt as we arrived at Mulu, the limestone cliffs and the dense rainforest surrounding them, the bridge over the river to the park Head Quarters, the long boats parked down stream waiting to take visitors to their chosen destinations. After settling into our accommodation on the park we gathered at the Headquarters for our eagerly awaited trip to Deer Cave. As we strolled along the three kilometres of board walk and concrete path through dense rainforest and over several rivers we saw several cave entrances, many insects and a huge variety of plant species. Before entering Deer Cave we saw the very well decorated and very clean Lang Cave



Dianne Vavryn on the Rainforest Canopy Walkway.
Photo: Dianne Vavryn.

In Deer Cave, we saw swiftlets and bats, and many insects that feed on the rich excrement – and other insects that feed on them, not to mention the intricate weave of spiders' webs built on handrails

to catch flying insects. Standing in this immense cave one feels quite small and as with many caves the spiritual atmosphere is strong as you marvel at nature's handy work. As if that was not enough there was more – the emergence of the bats at dusk and the return to the cave of the swiftlets. Due to a heavy storm in the late afternoon not all the bats, estimated to be between two and three million (over thirteen species) emerged – but to us it was a wonderful sight to witness and some had the added advantage of seeing a bat hawk predate on a bat.

There were many very memorable aspects of Mulu for me. The longboat rides to our destinations, with the scenery along the river both up stream and down stream. The expertise of the boatman who were able to avoid shallower areas and the many submerged logs, branches and rocks, was awe inspiring.

Hard work going on in the park on the building of new infrastructure. Almost on a daily basis the holes dug for the posts filled with water from the rain and had to be bailed out before work could continue. Many trolley loads with timber and other building material pulled by hand brought to the building site gave an insight on how hard the people work. Kilometres of board walks and concrete paths through very difficult terrain and weather conditions, crossing swampy ground and rivers and through dense rainforest must have been a momentous and very difficult task by those who did the work; not to mention the large number of solid concrete stairs leading up to the cave entrance – all done by hand and a very long distance getting the materials there. The board walks, as well as making it very pleasant for the visitors to see the highlights, also are of benefit to the environment.

On my second visit to Deer cave it had been fine all day, only raining later that evening. I was fortunate in seeing swiftlets entering the cave, bats doughnutting in the cave entrance and a large bird fly into the entrance – before witnessing the emergence from the viewing area outside. The fly out was much thicker than my first visit and a site to behold.

It is hard to put one thing as the highlight as it was all special. Lang cave, Deer Cave, Wind Cave, Clearwater and the special care the guide gave me, Fast lane, Canopy walk, the tower, night tour, the boat rides and walks, visiting the market before Niah with the many fruits and hand craft. Visiting a Penan village and learning how some of the plant species are used and methods of communication to others when traveling through the forest, seeing the beautiful hand craft done by local people including fine bead work, ratan mats, blow pipes and musical instruments and more were all on display and for purchase, The Thursday evening dinner, one of the best ACKMA dinners I have experienced, the blow pipe competition was fun and the folk dancer was brilliant – I felt very emotional.

I thought the Mulu Interpretive Centre was excellent as were the interpretive panels throughout the park. The guides took good care of their charges; their enthusiasm was infectious. One

could not help but feel a deep affection for all those we had contact with.

GARRY SMITH writes: What an amazing experience the ACKMA trip to Mulu NP has been for myself and I am sure everyone who participated in the week of caving and activities. The movement of people to and from the Royal Mulu Resort and Park HQ each day via long boat and taxi was a logistical nightmare which Brian and staff handled without raising an eyebrow. The guided tours each day were run very professionally and generally on time, despite ACKMA participants constantly swapping around their scheduled cave tours. Mulu staff never appeared to be phased by the crazy 'orang puteh' under their charge. I will say that the heat and humidity was rather taxing on people not accustomed to these conditions, however the awe inspiring caves and rainforest sure made up for the climate.

A few comments on the infrastructure and access to caves. I found the many kilometres of elevated timber walkways were in a very good state of repair due to the obvious maintenance program undertaken by staff at the NP. The maintenance program of water jet cleaning certainly removed the algae and moss which thrives in the hot humid climate. There were only a few sections of slippery boardwalk which no doubt the staff will certainly clean in the near future. It is a bit like cleaning down and painting the Sydney Harbour Bridge; painters start at one end and work their way to the other end, then start all over again. Generally speaking, the sturdy walkways within the caves could easily handle a greater number of visitors without compromising safety.



Mulu Butterflies. Photo: Sonia Taylor-Smith.

What a fabulous cave trip is the 'wild cave' Clearwater Connection. It has it all – large chambers, snaking passages, huge rockpiles to climb, squeezes, lots of decoration, fast flowing streams to cross, etc. I could do that trip over and over again. During this trip I sustained a minor cut and was extremely impressed with the professionalism with which the guides sterilised the wound and applied a dressing. However, with the extremely damp environment of the Mulu caves and given that my legs are far from hairless, it may be an idea if the guides carried disposable shavers in

their first aid kit. (I certainly will carry one in my personal first aid kit after this incident). The removal of hair from around the wound would better allow band aids to adhere. Without the removal of the hair the band aid quickly lifted, so I used from my own first aid kit some broad 'Elastoplast' and applied it over the band aid fitted by the cave guide. With this wrapped right around my knee and over the band aid; everything stayed in place for the rest of the trip which included several swims. I won't comment too much about the later removal of the 'Elastoplast' from a hairy leg other than a wax job is more painful than the injury. I will say that the guide offered to fit a roller bandage over the band aid, but it was my choice to apply the 'Elastoplast' as I was confident that it would stay attached during constant movement of my knee.

In Deer Cave I would have found it a great advantage if there were a few solid fixed posts which I could have rested my camera on, so as to take a picture looking back toward the cave entrance. In the location past the stream crossing there is a small rock platform (right side of path – looking out of cave) which would be an ideal area for a small concrete viewing area; where it would be ideal to locate a few solid posts not prone to vibration (as are the posts along the rest of the elevated walkways). I realise that camera tripods have been banned in this cave to reduce the possibility of tripping up other tourists, however if a couple of solid posts were located in the appropriate spot for photos looking back out of Deer Cave, it would allow tourists to capture classic Deer Cave photos. In the long run this is good promotion for the Mulu Caves, when visitors go back home and proudly show off their photos to family and friends. This is a suggested alternative suitable for other cave operators around Australasia, particularly if they have a 'no tripod' policy. In the end you want visitors to promote your tourist caves.

The next couple of suggestions can be applied equally to operational management of "wild" caves, throughout Australasia even though I have used specific Mulu examples. There were a few wild caves which could do with a little more discrete track marking to keep visitors to a more defined track. This could be as simple as a fine fishing line with the occasional button size reflector or the occasional small reflector on a rock. I am talking about very small reflectors which would not show up in photos or look obtrusive when walking through the cave. As ACKMA members would be aware, keeping visitors to the one track reduces damage to sediment banks and confines guano compaction to a narrow pathway, thus ensuring there are areas of undisturbed guano which is vital to so many species of cave dwelling insects. Stonehorse, Kenyalang, Fruitbat and Clearwater Connection are examples of caves where a bit more thought could be put into unobtrusive track marking if these caves are to be used for wild caving groups in the future. At the Niah cave and Traders Cave (not in the Mulu NP) there was a great need for track marking to reduce compaction of guano and vegetation growing in the twilight zone.

I was impressed by the stainless steel anchor bolts extensively used to tie off hand lines throughout the wild caves at Mulu. They show good foresight in eliminating the need to replace them in our lifetime. However, I would question the tie off method of nylon ropes to the flat metal eye plates. On some handlines the sharp kinking of the rope through the eye is showing signs of the rope wearing through. I would suggest some sort of rope protector to reduce the sharp bend through the anchor bolt eye plate. This would extend the life of the hand lines and reduce the possibility of failure at the anchor point. Overall the Mulu trip was an amazing experience.



Magnificent ceiling scalloping in Fruit Bat Cave.
Photo: Ross Anderson.

LISA KING & TED BRATTSTROM wrote: We thought the Gunung Mulu World Heritage experience was exceptional. The opportunities provided by park management for visitors were truly representative of what a World Heritage visitor experience should include and how such a site should be presented to the public. The diversity of activities from show caves, adventure caves, canopy walks, walking trails, longer hikes, boat trips, the bat cam and tower as well as community tours helped connect visitors to Mulu's incredible resources and fostered a better understanding of why Mulu was inscribed onto the World Heritage list. The visitor infrastructure fit the rustic jungle environment while keeping the focus on Mulu's 'sense of place'. The visitor infrastructure was a means to an end, though in some cases it greatly lent itself to the overall Mulu experience such as the canopy walk, bat cam, evening bat observation area and the tower. It was a wonderful experience to walk on boardwalks through the jungle instead of being driven through it. Park tour guides were cheerful, friendly and knowledgeable about the sites without overdosing the visitor with too much information. Tours were appropriately priced and worth every ringgit. The visitor centre was available for those who were interested in reading in-depth about Mulu. The Park restaurant food was quite tasty and not overpriced!

As a result of these experiences we feel a sense of responsibility towards its future conservation. Mulu is without question one of the best presented natural World Heritage Areas we have encountered to date. We will be back!!!!

