

MALAYSIAN MAGIC AND HIGH FLYING TALK

- Mia Thurgate

It's not often that a person's wishes get granted, so when I found out I was being sent to Gunung Mulu National Park, Sarawak to attend a forum on karst and World Heritage I was beside myself! Having read the account of the Royal Geographic Society's early expeditions to Mulu in the 1980s I had been dreaming about travelling to this part of the world for a long time. So I guess it's understandable that the two days of travelling to get there from Bathurst seemed to go on forever.

The Asia Pacific Forum on Karst Ecosystems and World Heritage

The Forum was held at the Royal Mulu Resort, adjacent to the Park Headquarters of Gunung Mulu National Park, which was recently added to the World Heritage List. Registration commenced on the morning of Saturday 26 May 2001. The afternoon was taken up with formalities including the launch of the new Vision Air service to Mulu and formal High Tea with the Chief Minister for Sarawak. Later in the evening delegates gathered again for the Gala Dinner that featured dishes made from local produce including giant river prawns and birds nest soup (which is an acquired taste).

Sunday saw the start of the Forum, which was attended by over 70 delegates from all over the world, with most coming from the Asia Pacific regions. The delegates represented key staff from a range of government and private organizations, both national and international, so there was some 'high flying talk' over the next few days.

After morning tea on the first day, the delegates broke into small groups to discuss the issues and principles behind World Heritage nomination and assessment of karst ecosystems. The Forum met as a whole after lunch to discuss the issues raised by the groups, resulting in an outline of the issues and draft guidelines for the nomination of future World Heritage karst areas. The afternoon ended with an inspection of Clearwater Cave, which is discussed later in this article.

Dinner that night was followed by a cultural show featuring the resort staff. The costumes were very bright and colourful, the dancers very graceful, and every dance told a different story. It was unfortunate that we did not have a commentary to explain the meaning of the dances, but I was lucky enough to find someone in the crowd to tell me a little about it. Brian Clark and I managed to catch the dance troupe just before they left and were able to take a few photos. After dinner drinks and conversation lasted until late in the night.

Monday was a busy day starting with group discussions to prepare a priority list of karst areas for each country that may be listed in the future as World Heritage areas. I was assigned to a group that considered the karsts of some of the larger South East

Asian countries, but I understand from those that discussed Australian possibilities that a serial nomination of the southeastern impounded karsts was high on their list.

The session after lunch started with a number of presentations from several delegates including:

- Stuart Chape (Environment Australia) who made a presentation in the Asia Pacific Focal Point for World Heritage;
- Gordana Beltram who spoke about the RAMSAR Convention and the listing of subterranean wetlands;
- Elery Hamilton-Smith who presented information about the WCPA Caves and Karst working group, and;
- John MacKinnon who discussed the ASEAN karst program.

Following these presentations, the forum discussed and recorded the actions needed to develop a network for managers of karst protected areas. The afternoon ended with a field inspection of Deer Cave. During dinner that night a ceremony was held to award the family of the late Dr Clive Marsh with the WCPA Packard Award.

Later that night a small group of us were taken on a night cruise in a long boat with John Kulay from Royal Mulu Resort as our able guide. With dinner having finished late, we had missed the fireflies that swarm at a certain point along the river not far from the resort. It was hard to be disappointed as the trip was very serene and we were lucky enough to spot tiny musk deer and civet cats along the shore.

The morning of the last day started with presentations of case studies from Puerto Princesa (Philippines), Halong Bay (Vietnam), Naracoorte Caves and Thung Yai – Huai Kha Khaeng (Thailand), all existing karst World Heritage areas. The small group discussions following these presentations resulted in a checklist of critical management issues for managers of karst protected areas.

The final session of the Forum included the development of future actions and identification of areas needing technical assistance for developing World Heritage nominations. Dr Natarajan Ishwaran from UNESCO then lead the plenary review of the Forum discussions, and Tim Wong from Environment Australia summarised follow-up actions. The formal part of the forum ended with a brief closing ceremony and review of the success of the meeting. A few impromptu slide shows then filled in the time before the final dinner.

The Giant Caves Of Borneo

During the course of my visit to Borneo, I was lucky enough to visit the four main show caves at Mulu prior to the forum, and then to see two of these caves again during the forum field inspections. I also joined the

post forum field trip to see the caves at Niah National Park. Below are some of my impressions of the caves and readers must forgive me if I wax lyrical as these were some of the most spectacular caves I have ever seen in my life, and the surrounding scenery isn't half bad either.

Wind Cave and Clearwater Cave

Wind Cave and Clearwater Cave are accessible along steep hiking trails or by a river ride by long boat. I didn't manage to do the walk, but highly recommend the boat trip. Visitors have the opportunity stop at a local village along the way to see some of the local handicrafts for sale. The river itself is beautiful, with thick rainforest lining the shores, broken occasionally by sheer limestone cliffs. I could have drifted down that river for hours!

The second stop on the trip is Wind Cave. This was the first cave I had seen in the National Park, and I was awestruck by the sheer size of the passages. I later came to realise that this was a considerably smaller cave than some others in the area. The entrance doline is beautiful and the view back to the outside world is magical with rainforest plants casting a green light and fantastic silhouettes. At first the formations are few and far between, but as you move deeper into the cave, they increase in number and size and are quite impressive. Not surprising considering the amounts of water leaking into the caves at Mulu! Lighting is very basic and fairly minimal in most of the cave and generator, only operating for part of the day, supplies electricity. The path taken by most visitors is mostly concrete with handrails used in steeper sections. The high moisture levels in the cave cause some problems for the preservation of the infrastructure and visitor safety.

After taking in the sights of Wind Cave, visitors continue a short distance downstream to the beautiful Clearwater Cave resurgence. At the embarkation point an area of boardwalks, shelters and an enormous generator can be seen. The cave is entered by a climb up some very steep steps. This place is amazing! The beautifully sculptured passages that seem to stretch on forever, and the clear river waters below generate its appeal. Huge daylight holes pierce the roof high above. The cave continues for over 20 km upstream from the end of the path! For visitors there are options for adventure trips in both Wind Cave and Clearwater Cave. There is also the opportunity to finish the visit to this area with a very pleasant swim in the clear stream waters near the resurgence.

Lang's Cave and Deer Cave

These caves are accessed from the park headquarters by following a 3 km raised wooden boardwalk through the rainforest. Permits (which costs only a few dollars) can be purchased from the office, which also administers the on-site accommodation. There is also a small interpretation centre that is in need of a facelift as some of the displays are a little static and tired looking. Even so, it is worth visiting as there is a lot of

interesting information and some great photos to take in.

My first visit to these caves was in the afternoon before the Forum started, and John Kulay from the Royal Mulu Resort was assigned to be my guide for the afternoon. The walk to the caves was just beautiful but in places the boardwalks and paths are a little slippery so care is needed. Finally we came to an opening in the forest where there are platforms and rows of seats underneath a roof, which acts as the bat watching area. From here visitors can take the right fork in the path and visit Lang's Cave. This is a small (well, by Malaysian standards) well-decorated cave and well worth the detour. Again, basic lights, paths and handrails have been installed. The handrails are built out of wood, which is perhaps not the most suitable material as I managed to find a rotten one to lean on. Work is ongoing to improve the infrastructure, so these problems will no doubt be solved shortly.

By this stage a storm was brewing nearby so we quickly headed off on the opposite path leading to Deer Cave. We were a bit late in our timing and arrived after the generators had shut down for the day, so I saw the cave by torchlight. As much of the cave is twilight zone, it didn't seem to matter too much and I'd go so far as to say this is a great way to see the cave.

Deer Cave is absolutely enormous! I have no idea how far above our heads the roof was, but it was a long way up. I could hear the millions of bats and birds flying around above us, and on the cave floor was the largest guano heap I had ever seen in my life. By this stage John had realised my passion for cave fauna and took great delight in pointing out the myriad of life found there. The millipede that squirted out a luminescent blue-green fluid was one of my favourites! At the end of the cave we stood on a platform high above the river and looked out to an entrance aptly called the Garden of Eden. I wish my camera could have captured that view, but it was just too far away and the cave too vast to have a hope.

We moved back outside in the hope of witnessing the bat exodus that the cave is famous for, but the weather was against us and they weren't moving out that night. But I didn't leave disappointed. We were standing in a narrow cliff-lined valley, looking up into the sky when suddenly several small groups of hornbills passed overhead. At almost the same time, a huge number of fruit bats started streaming over the valley, high above the hornbills. Darting in and out of the bats were several hawks, and beneath these a few swiftlets were making their way back into the caves.

We watched this spectacle until it got dark, then as we walked back towards the way home, clouds of fireflies swarmed in the rainforest. Our trip back was very slow as we darted off into the forest every now and again to catch glimpses of various animals, or to follow the sound of an animal calling. Shining our torches along the handrail, we saw an insect highway. Spiders, beetles, hairy caterpillars, millipedes, cave crickets and enormous stick insects were just some of the beasts we found using the handrail. I lost all track of time and

really think that there may be room for a rainforest at night tour. We finally reached our pick up point to find no vehicle waiting, so stopped at the nearby bar for a drink. It was only then that I realised we had been gone for seven hours! I couldn't believe all that I had seen that day and the memories will last a lifetime.

Having missed the spectacle of the bats leaving the Deer Cave on the first visit, I was fortunate to have the chance to make up for it during the Forum's field inspection of the cave. I first watched the bats while standing just inside the entrance to the cave. As I looked up I could see hundreds of bats silhouetted against the evening sky. They were flying into a circular formation, and once a certain number of bats had joined the circle, they would peel off and fly away in a short line. Looking off into the distance they appear as a series of 'dashes' drawn on the sky. As each 'dash' flies away, another group of bats has already started forming a circle (sometimes a figure eight) near the cave mouth. I watched the remainder of the spectacle from the viewing platform, and the activity went on for at least an hour. Just incredible and a sight that really is worth seeing. It would be worth installing some interpretation about the bats and their flight at the viewing platform.

Niah Caves

Niah Caves are just as stunning as Mulu, but the focus of the experience is quite different. The park has on-site accommodation and a cafe serving the most wonderful food. There is also a small interpretation centre that contains some interesting displays relating to the caves and wider park area. Access to the caves is also via a raised wooden boardwalk, but first it is necessary to catch a water taxi across the river. At the start of the boardwalk, visitors can also visit the archaeological displays in the local branch of the Sarawak Museum (recommended).

The lowland coastal rainforest along the boardwalk is stunning and quite a contrast to the upland rainforest of Mulu. Along the way visitors may see beautiful birds, butterflies, monkeys and even a few squirrels. There are also a number of walking tracks running off the boardwalk as well as a path leading to the local long houses for those wanting an interesting cultural experience (time precluded this on our trip).

The first stop in the caves area is a large chamber known as Trader's Cave. Inside this chamber are wooden structures that are the remains of a roofless village that once housed a thriving market at which birds' nest collectors were able to trade the nests they had collected for food. Trade ceased sometime in the 1960s, but the structures that remain are an interesting talking point. The cave is open on one side and looks down into a rainforest-filled gully and across to steep bluffs on the other side. While we didn't see much life inside the caves, the large squashed scorpion on the floor suggested that there could be some interesting tenants.

A short distance from Trader's Cave is the entrance to Great Cave. This enormous system contains several

kilometres of raised boardwalks and is absolutely enormous. First stop here was at the ancient burial sites just inside the cave. Our trip leader, Julian Inglis told us that this site has been the subject of a lengthy excavation project run by the Sarawak Museum. Burials at the site have gone on for over 30,000 years, and along with human remains, pottery, tools, ornaments and coins have been found. The site has also yielded a great deal of information about the prehistoric fauna of the area.

Immediately opposite the burial site visitors can see the precarious structures that are used by the nest collectors to scale the high walls of the cave. These long, narrow ironwood poles have been used for centuries to collect the edible nests of the millions of swiftlets that inhabit the cave. Declines in the numbers of swiftlets have created a need to police the collecting and to place restrictions on the amount taken and the time this can occur. This has created a need for policing of the cave and has created some tensions. Plans are being developed to improve the situation and to monitor and protect the birds. At the time of our visit many collectors were at work, but given the size of the cave we could only make out tiny dots of light moving along the roof.

Along with the birds there are hundreds of thousands of bats in the cave, although nowhere near the numbers at Mulu. Both the birds and the bats produce enormous quantities of guano, and there is a small guano mining industry in operation. The guano is home to vast numbers of invertebrates, several reptiles, and in one area at least, a few feral chickens! The vast quantities of guano that rain down from above make the path quite slippery and it is impossible to come out of the cave looking too clean.

The path of the cave winds past numerous entrances and roof holes that provide a stunning view out to the rainforest-clad surface. After winding through Great Cave, visitors eventually came to one of these entrances and join another raised boardwalk. This passes through a valley then climbs upwards, finally ending at Painted Cave. This site contains ancient rock paintings depicting people in boats, thought to represent 'ships of the dead'. The paintings can only be viewed from a distance as they have been fenced off, and unfortunately rusty wires from an older (and much more closely located) protective fence partially obscure the paintings. Even so, they were very interesting and unlike any rock art I had seen before.

Batu Caves

After leaving Borneo, I managed to make a detour to Batu Caves, on the outskirts of Kuala Lumpur. Batu Caves are found on the outskirts of K.L. and are popular tourist destination. The local Hindu community uses several of the caves as temples. At the bottom of the caves are a number of colourful stalls where visitors can get a cold drink or a meal, and worshipers can buy trinkets and offerings to take into the temples. To gain entry to the caves, visitors pass through an ornate gateway and walk past groups of

long-tailed macaques to climb 272 stairs before reaching the top.

The host for my visit was Liz Price who is the Conservation Officer for the Malaysian Nature Society. This group is currently managing and running tours of Dark Cave. This cave was first developed for tourism in the 1970s and much of the infrastructure was upgraded in the late 1980s. Today much of this has fallen into disrepair and the MNS is trying to find ways to raise funds and improve the situation. Over 2 km of passage has been mapped in Dark Cave, and much of this is very large and beautifully decorated. Liz pointed out that one of the more interesting management problems the MNS is facing is the displacement of the native cave fauna by introduced cockroaches. So far the cockroaches have only invaded the area near the cave entrance, but there is concern that one day they may overrun the deeper parts of the cave.

Dark Cave is home to many thousands of bats and a very interesting invertebrate fauna including a number of rare and endemic (native) invertebrate species. Most of these are not seen by visitors, but I was very fortunate to have Liz Price to take me off the beaten path to see the more interesting animals close up. My favourites were the rare trapdoor spider only found in Batu Caves, and the beautiful creamy white cave racer (a snake). Amongst biologists, Dark Cave is fairly well known, as there have been a number of studies published about the cave fauna. Liz is keen to see a great deal more research on a range of topics done at this site. This was a very enjoyable experience and well worth the detour from the airport.

A pressing engagement (namely a plane to catch) cut short my visit to Batu, so I had only half an hour to quickly look around one of the temples. I visited one of the larger sites, known as Temple Cave. There are paths and platforms in the caves but otherwise infrastructure is minimal. Around the cave walls are ornate shrines decorated with bright colours and metallic paints. There are also many statues of the various Hindu deities. It would be a very interesting experience to see these temples when they are full of people.

Conclusions

I found the Asia Pacific Forum on Karst Ecosystems and World Heritage to be interesting, challenging and a real eye-opener. Although I knew that karst was present in the Asia Pacific region, I had no real idea of the extent and nature of these areas. Seeing how colleagues operate in other parts of the world, learning about their caves, cultures and management issues was all very fascinating. I look forward to seeing the formal outcomes and reports from the workshop in the near future. The prospect of the development of a karst manager's network in the region is very exciting and I trust that ACKMA members will be supportive. I understand from Elery that the Atlas of Karst in the Asia Pacific Region that was produced for the workshop is also likely to be published.

My visits to the great show caves of Malaysia proved to be a very interesting program. Mulu had much to offer in terms of the size and majesty of the caves and the wonderful setting of rainforests, rivers and mountains. This is the quintessential place for nature lovers and those who want exciting sport caving opportunities. Niah offered a very different type of experience, with the contrast of ancient and modern cultures and lowland forests. Batu was a surprise in the suburbs, allowing a glimpse into the religious customs and culture of the area, while next-door one of the last bastions for an important cave fauna is being preserved in Dark Cave.

There are many issues and problems that the managers of these great caves are facing. Many of these are quite familiar such as lack of resources and bureaucratic delays. Others relate to improving the presentation and interpretation of the caves and surrounds and the development of guide training programs. The guides and other staff I came in contact with are all very keen and interested in learning and developing their skills further. Many are self-taught and are to be commended for their efforts. Most express a desire to learn more and frustration at the lack of availability of good information relating to their areas. The situation is slowly improving.

Thanks go to the Jenolan Caves Trust for allowing me the opportunity to visit the caves and attend the World Heritage Forum, to the organisers of the forum, Sarawak Forest Department, the management and staff at Royal Mulu Resort and Rihga Royal Hotel; Julian Inglis; Liz Price and all my friends and colleagues, both old and new, that shared the experience.