



# MEME

# Update

Management & Ecology of Malaysian Elephants

Issue 12

June 2016



**Because we can only manage what we measure — working towards an evidence-based conservation of Malaysian elephants.**



**RECOGNITION FROM SPAIN**  
— Alicia received an award for her work at MEME



**IVORY CRIME IN MALAYSIA —**  
Ivory crushing in Malaysia and another of our study elephants POACHED!



**STORIES & OUTREACH —**  
MEME's booth and outreach activities at Tenok and World Environment Day.

## It's about the people

Bill Clinton's 1992 presidential campaign was famously summarized by James Carville as *It's the economy, stupid*. Conserving biodiversity in the Anthropocene is a bit more complex than designing catchy political campaigns but, if I had to try, I would follow a similar formula – **it's about the people**. (And I spare you the insult.)

But please don't get me wrong. This is not about New Conservation and the idea that for conservation to matter it needs to serve the interests of people. Not necessarily. I strongly believe in conservation for the sake of conservation; in wilderness; in that biodiversity matters more than people. But this is a whole different discussion...

No. What I mean is that the best way to achieve effective conservation policies and practices is by infecting people with conservation values and then empowering them to have long and impactful careers. Andy Mack eloquently put it in a recent interview with Mongabay – [‘The key to tropical conservation: invest in people’](#).

Few times I've felt as proud as I did at [Conservation Asia 2016](#), the joint conference of [SCB Asia](#) and [ATBC Asia-Pacific](#) (29 Jun-2 Jul, Singapore). It was the first time in my life that I attended an academic conference without presenting any paper in the official program. And I didn't present any paper because I'm becoming redundant in a team with plenty of very well-qualified students and staff. MEME and our extended research group contributed as many as **13 presentations**. The University of Nottingham Malaysia Campus had 21 delegates, including five undergrads!

I know well that research alone doesn't necessarily translate into effective conservation. But seeing so much good research coming from young Malaysians and an institution that six years ago had no conservation in its program, makes me feel extremely optimistic about the role that this generation will play for the conservation of Malaysian elephants and other biodiversity. If things go according to plan, soon I'll be really redundant...

Ahimsa Campos-Arceiz  
MEME's Principal Investigator



# Elephant Pathways

By *TeckWyn Lim*

Over the last few months I have been interviewing forest communities regarding their relationship with elephants. Both in Perak and in Pahang rural people still suffer from elephants destroying their crops. The cost of living in the same landscape as mega-herbivores was clear but I was interested in whether there were anything that these people appreciated about the elephants.

I was quite pleased when one theme emerged independently from several respondents: they were glad that the elephants kept the jungle pathways open because without the herds of elephants moving along these paths they would quickly be overgrown, blocked by fallen trees and difficult for people to walk along.

I found the idea of elephants as the builders and maintenance engineers of the highways of the forest to be quite intriguing. Indeed, there is evidence that humans and elephants have been using the same routes up and down the Peninsula for thousands of years. The routes are mainly determined by topography: elephants and people obviously would choose the most flat and accessible routes to move through the landscape.

I find it intriguing that these jungle tracks were originally created by the elephants (and perhaps some extinct species of megafauna) to connect important sites including salt licks, fruit trees and caves in limestone outcrops. People would have then found it sensible to use the same routes to get to these locations, not only for the topography but also because the routes were kept accessible by the elephants.

Archaeologists and historians have identified several trans-Peninsula portage routes that have been used since ancient times. One of these routes was used by the northern states of Peninsular Malaysia to send tributaries of the Kingdom of Siam. The Sultan of Kedah would send the annual tribute via a convoy of elephants along a path that ran up north. Indeed, there are many places named after elephants along the main route up north to Thailand. For example, the town of Changlun in Kedah, means ‘elephant fell’ in Thai (ช้างล้ม), supposedly the spot where a tribute-laden elephant had fallen into the river.

Another ancient route goes all the way from Melaka to Kota Bharu in Kelantan. One spot along this route is a limestone outcrop inside Taman Negara known as Gua Gajah (Malay for ‘Elephant Cave’) or Batu Bidan (in Batek Tanum, the language of the local Orang Asli). I recently tracked the 5-km route from the Pos Relau Park Headquarters along a trail that is actively used by elephants, right up to the entrance of the cave. The Batek informed me that this trail was part of a route that had been used by their ancestors to travel from Pahang to Kelantan. Look at the topography of the area (Figure 1) it is clear that the trail follows the valley floor.

People continue to use the old elephant routes even in landscapes that elephants no longer inhabit. Forest trail maintenance without elephant means a constant effort of parang and chainsaw. And even in landscapes that are long cleared of forest the shadow of an ancient trunk remains part of our unrecognised heritage. As we travel on railways and motorways up and down the Peninsula we are unwittingly following trails originally blazed by pachyderms many thousands of years before.



Jeep Track (red line) to Gua Gajah (approximately 4 km); the area shaded green is Taman Negara.

\* TeckWyn is studying human-elephant relationships as part of his PhD research.



## That Sound from the Cave

By *Jessie Panazzolo*



Sitting in the Adelaide Airport anticipating my flight to Kuala Lumpur to meet the MEME team, I never foresaw the events that would soon unfold once I reached the green homeland of the Malaysian elephant.

Go out to the forest they said, it will be fun they said. I slid on my field shirt, field pants, reef shoes and waterproof socks and begun to trudge my way through the thick watery clay behind Teck Wyn, a PhD student with MEME and two Orang Asal guides. My feet stepped in the huge circular elephant footprints that made their way before mine. "This is why they must call this walk the Gua Gajah or elephant caves" I thought to myself, trying to avoid slipping on one of the smoothed out footprints into a pile of elephant dung. I heard the Siamang's beautiful 'woop'ing

song in the distance and the ferocious caws of the hornbill somewhere above me, Dhole? footprints followed in amongst the big elephant concave pits in the ground. Everything was peaceful. Everything was beautiful. The elephant clues led us all the way to these soaring limestone caves, it looked almost impossible how the trees poked out from the side as if to taunt me with their ability to defy physics. The elephant footprints led us all the way up to the entrance of the cave where I peered inside to take a glimpse at a bat that fluttered by, but the guides waited outside. The guides seemed on edge.

I took one more step into the cave and the guys yelled at me to get out of there. Before I knew it we were racing back down the side of the cave out through the forest. Why were we running? Are the Orang Asals afraid of bats? Then I heard it, my heart pounded as I picked up the pace through the mud sucking my feet into the ground with every step just like a bad dream where someone is chasing you but you cannot move a muscle. The ROAR of the tiger sent chills through my spine, it warned us to stay away from her cave, from her den, where her babies lay protected. That's what the Orang Asals heard. That's why they stayed out of the cave. The guides were no longer guiding but running after us, pulling trees out of the ground and hacking them into spears with their machetes. Teck Wyn and I stayed far in front. The only thing running through my head was "ELEPHANT CAVES?! ELEPHANT CAVES?! THAT CAVE IS CLEARLY NOT FULL OF ELEPHANTS!!"

We finally reached a point where we had clambered for two hours away from those caves, not a hint of a growl had been heard in a while and we felt safe enough to stop. My head felt dizzy, the ground was slippery and it took all my energy to keep myself from falling with every step. I collapsed on a log and dug into my lunch, the adrenaline had worn off when I realized I hadn't eaten breakfast that morning. My reputation for not functioning before eating had finally been overcome with the story that I had ran from a tiger on a totally empty stomach. "If this is what happens to the MEME team every time they go into the forest," I thought to myself, "they are a crazier bunch than I thought."

\* Jessie is a 3rd year undergraduate at the University of Adelaide, Australia. She was visiting Malaysia on a knowledge exchange trip before she went to work with the Orangutan Information Centre in Sumatra with the interest of using restored forest for species conservation.



## A Glimpse into the life of Research

By *Loo Yen Yi*

As a research assistant, I mainly help out Lisa (Ong) with her study on the ecological function of Malaysian elephants. Part of the research's aim is to explore Asian elephants' role in influencing forest structure and diversity. In order to do that, we set up research plots in remote forests to record both plant species and herbivory information within them. Another aspect of the research involves monthly fruits collection along trails. This provides us with information on both fruiting and elephants' food availability trends in the Royal Belum State Park. Our workload away from fieldwork comprises of processing leaves and fruit samples collected, taking photos of these samples for future reference, and data entry for further analysis. All this work is made possible by the vast knowledge of our field experts Param, Rizuan, Cherang, and Hussin who identify plant species for us in their mother tongue (Temiar). Sometimes I wonder if they are also qualified to have a PhD! It really impressed me that they know so much about the jungle.



What I learned so far is that it is definitely not a simple task to carry out a PhD research, especially in ecology because multiple replicates and a wide geographic range of similar habitats are needed to get significance. What's more, we can only merely estimate these processes in nature with the limited results we get, because there is no way to be absolutely sure of a theory until the whole globe has been sampled, which is next to impossible. Furthermore, it requires a lot of teamwork, decision-making and nature's grace to sample in the forest.

The five months that I have been working with Lisa have passed by like a breeze for me, partly because there is so much to do and partly because I enjoy time with such great company. I have never spent so much time in the forests studying and understanding how it works. Despite all kinds of insect bites and discomfort, I learned the way of simple living. All in all, I am grateful for this opportunity to work in MEME and receive the guidance of Dr Ahimsa, Lisa, Alicia, Ning and our forest experts which is valuable to me as I go on to do my own research in the future.

*\* Yen Yi is currently assisting Ong Lisa's PhD research. Her main task is to collect and process plant data from the forest, in the hope to discover the ecological functions of Malaysian elephants.*



Our field expert confirming plant species with the help of pictures from previous work.



## Hunting by the Jahais

by *Vivienne Loke*

Understanding the hunting practices of indigenous community is the first step to grasping how their hunting activities may or may not affect the wildlife population in the tropical rainforest. I conducted interviews in three villages of the Royal Belum State Park (RBSP), namely **Aman Damai, Tiang and Sungai Kejar** with a focus to understand their hunting practices.

From a total of 87 respondents, I found that no one reports to have hunted tigers and elephants. A majority of the Jahai community prefer to hunt arboreal animals such as the giant squirrel and white-handed gibbon, followed by medium-sized terrestrial mammals such as the barking deer and wild boar. Species that are big and more ferocious such as the gaur and sun bear were hunted to a lesser extent. This is largely due to their traditional hunting practices as they only use traditional hunting weapons such as blowpipes and spears, making it difficult to catch the larger and more dangerous animals.

Most of the meat hunted was for self sustenance and is shared with other villagers. Less than 3% of the respondents were found to have traded with outsiders. The remoteness of their village (13- 30 km to Banding) and lack of roads built around the state park contributes a lot in minimising the trade of wild meat.

In general, they would only hunt a particular animal if they see it while walking through the forest and if the animals run away they would also leave the animals alone most of the time. This is because they believe if they see it and are able to catch it, it is considered as their “rezeki” or fortune. Otherwise, they would accept it as their fate saying today they have no “rezeki”.

They also have taboo towards certain groups of people especially pregnant women or children from consuming certain species such as the white-handed gibbon, red giant flying squirrel, barking deer, porcupines and tapir. The Jahai people did explain that some species for instance- porcupines, are considered tabooed and thus are not hunted often.

Overall, species mentioned in the interviews were perceived as less abundant than before. Many of the villagers even voiced out about outsiders who enter the park to hunt illegally, some even carry shotguns. Being

in such a remote area and having blowpipes as their only tool, it is difficult for them to stop these events from happening. The increased pressure on wildlife populations from outsiders poses a threat to the livelihoods of the Jahai community because they are then forced to look for alternative sources of protein. This forces the Jahai community to change their lifestyle and hunting habits. Some became fishermen, while others turned to selling forest products in order to buy livestock to feed their families.

This actually demonstrates the importance of park regulations, patrolling and protection to prevent illegal hunters from entering either through the lack of enforcement or increased access through roads built. When a park is well protected, the livelihoods of the Jahai community would also be protected.

I am thankful for the opportunity given to me especially by Dr. Ahimsa Campos-Arceiz and not to forget the very dynamic and supportive team which includes the field manager, Alicia Solana Mena and the local indigenous research assistants, Param and Ridzuan.

**\*Vivienne is a final year student at Environmental Science, UNMC. This study is part of her final year project.**



Vivienne and Ridzuan interviewing the Jahai kampungs in Royal Belum.



## MEME in Spain

By *Alicia Solana Mena*

It was a great surprise to be invited to the **International Symposium of Conservation and Photography** (<http://www.edcnatura.com/noticias-edc.php>), jointly hosted by EDC Natura-Fundacion Omacha, a Spanish and South American based organization, respectively. The purpose of the symposium is to promote conservation within the community with the motto — **“If there’s no culture, there’s no memory, therefore no possible conservation.”**

It was flattering that MEME was recognised by the organization, which means firstly that our project continues to spread outside of Asia and secondly that they knew of me and my work, and wanted to hear about my experience in Malaysia.

I was invited to give a talk which I presented with the title of *“The Asian elephants in Peninsula Malaysia. Science and Conservation”*. I introduced MEME as a whole, our goals and the different fields we are covering, from ecology, behaviour to the management of Asian elephant. I tried to convey in just half an hour a faithful big picture of the conservationist, political, environmentalist, etc. panorama in Peninsular Malaysia and the role played by MEME in that scenario.

Being a Symposium dedicated equally to the world of photography and conservation, the public was divided equally as well, a very particular audience because each one has very different expectations when comes to attend a talk, but overall it was a public basically interested in nature and its preservation. I was not wrong, they were

very attentive to the explanations given their interests in asking questions after.

It was also an honour to be able to receive an award under the **Josef Cavanilles** category, in honour of the famed Spanish botanist and naturalist from 18<sup>th</sup> century and who was among the first Spanish scientists to use the new taxonomic procedures of Carl Linnaeus. This award recognizes the study and preservation of nature in new generations of scientists and naturalists, the first of such kind that I receive. It has been a great gift that makes me feel equally honoured and privileged; at the same time, it feels like a great responsibility to accept it. Now I feel that I need to prove that I really deserve it.

I’ve been so lucky to have this opportunity to meet professionals like **Josefina Castellvi** from the Ramon Margalef category awards. She is in her 80s and a pioneer oceanographer in our country that made a scientific expedition to Antarctica. She is also the Director of the scientific base on the island of Livingstone, a much-admired woman in Spain. Other professionals and conservationist such as the Colombian biologist **Fernando Trujillo (in cover picture)**, a great professional who has been working for more than 20 years in the conservation of river dolphins in South America, and a long list of other nature photographers, scientists, naturalists and passionate people with a common conservation interest and love for nature.

I want to thank **Julio Garcia Robles** and **Fernando Trujillo** directors of EDC-Natura Foundation Omacha to think about me, thinking I had something interesting to share in this event, and for the honor of this award that recognizes my humble and short career.

**\* Alicia is MEME’s field project manager and is also the most experienced elephant tracker together with our field experts Param, Cherang, Hussin and Ridzuan.**



# Electric Fences and Human Elephant Conflict (HEC)

By *Vanitha Ponnusammy*

As an initiative to remove rural core poverty, the Malaysian government allocated 2 acres of land to affected villagers. Most of these cleared lands were also homes to elephants which had led to elephants encroaching upon farmlands, often raiding planted crops. Exasperated farmers hence sought solution from village committee and local politicians, which led to government's initiatives in the use of electric fences.

Under the 10th Malaysia Plan, the Malaysian government expanded the electric fences project to help the 'rakyat' (malay word for 'people of the country') resolve human elephant conflict (HEC) and safeguard elephant conservation. To sustain the effectiveness of electric fences, maintenance is crucial and the Department of Wildlife and National Park (DWNP) had contracted this to third parties. These fences, however, range from 10 to 34 km. It is ineffective for just 1 or 2 contracted maintenance workers to monitor them on a daily basis. With limited monetary support, it requires a long-term participation of community effort, mainly by farmers together with the DWNP for successful mitigation.

Mitigating HEC is vital for elephant conservation, hence, we developed a survey to assess the efficiency of fences enactment and the perception of farmers with regards to maintenance ownership.

Interviewing local community in 12 electric fenced sites, majority provided positive feedback on the fences, stating that the implementation had enabled them to farm successfully, although there were instances of break-ins in a few of these sites.

In the aspect of electric fences maintenance, however, many farmers expressed reluctance. Since most of

them were not involved previously, they have a perception of 'Why should I maintain the fence when someone else is paid for it?'. Such perception has deterred maintenance ownership together with the DWNP. However, the farmers are willing to contribute to a community initiative to reduce HEC, perhaps because it is a collective agenda and not one individual that is solely made responsible for it.

Farmers, in general, are concerned that elephants are losing their habitat but they do not want the elephants to be in their backyard. MEME's view on elephant conservation is to shift from conflict to coexistence, which makes tolerance the key concept. The long-term participation of various stakeholders, especially the encouragement of electric fences ownership by farmers is vital. We need to promote a wider awareness of elephant conservation to the public, and to explore solutions such as the use of insurance or conservation tax, and other possible solutions towards community engagement to reduce HEC.

**\* Vanitha is an Assistant Professor at the Business School of UNMC. She is currently pursuing her PhD in Sustainable Business Practices.**



# Another Victim of Ivory Greed

By *Jamie Wadey*

Terminology can be somewhat of a tricky thing at times. When you hear stories, read news articles, or see Facebook posts, understanding the terminology can be the tipping point in which you become engaged and continue reading. **'Elephants poached for their tusks'** or **'Elephant Ivory stockpiles burnt'** are common headlines which give insight to the terrible situation elephants across the world face. Headlines like this have terminology such as 'poached', 'tusk' and 'ivory', which may not always be understood fully by everyone. Here I will explain these terms and then report on a recent poaching event of one of our collared elephants.



Some animals have teeth which extend past their mouth so that they are visible, even when their mouths are closed. These teeth are called 'tusks'. So a tusk is essentially just a very long tooth, but one which is continuously growing. Two common examples of animals that have tusks are elephants and wild pigs.

**'Ivory'**, on the other hand, is a hard, white material extracted from elephant tusks and other animal teeth. Ivory has been used by people for carving for more than 30,000 years! Elephant tusks are the most common source of ivory for carving but people use a range of other sources such as ivory from mammoths (i.e. extinct elephants!), walruses (large seals), narwhals (whales), and hippopotami, among others. It is important to distinguish ivory from rhino horn. The latter is made out of keratin, similar to what's in our nails and hair.

**'Poaching'** is when an animal is illegally taken from the wild, and often killed. When an elephant is poached for its tusks or ivory, it has to be killed first to remove its tusks (often through sawing through the skull).

With this in mind, the phrase **'Elephants poached for their tusks'**, essentially translates to an elephant being illegally killed just for two teeth - which is a sad thought to comprehend.



We are sad to report here **another poaching event** in Peninsular Malaysia. Awang Bakti (above) was an elephant translocated and fitted with a GPS tracking collar by MEME. One day in March 2016 his GPS locations started to repeat from the same area, which usually isn't of great concern as elephants can sleep in the same spot for multiple hours. However, the next day the GPS locations still hadn't moved. There were two possible reasons why this was happening: 1) the GPS had fallen off the elephant or 2) the elephant was no longer moving, suggesting it could be injured or dead. We went to investigate the repeating GPS locations and were devastated to find the dead body of Awang Bakti with his tusks removed (left top). He was killed by gunshot to the head and his face was chainsawed to remove his whole tusks (left bottom).

In our previous MEME update (Issue 11) Dr. Ahimsa mentioned the poaching of Awang Teladas, his tusks too were removed by cutting his face with a chainsaw. Both of these elephant corpses were found in a similar area and only five months apart (October 2015 and March 2016). This suggest these two cases are probably not isolated and elephant poaching is currently active within peninsular Malaysia.

\* *Jamie is a PhD student looking at the Movement behaviour and landscape usage of our collared elephants.*



# Ivory Crushing in Malaysia

By *Hii Ning*

On 14th April 2016, MEME witnessed Malaysia to become the 17th country to destroy our ivory stockpile. These are confiscated elephant ivory on transit to their final destination. According to the National Ivory Audit report, most of them came from African elephants. Our government has shown its commitment to curb illegal trade by destroying 9.55 tonne of ivory in their possession. Such action is anticipated to raise awareness for elephant conservation and to eliminate any possibility of these ivory channeling back into black market, thus halting and crippling the ivory trade.

When the first container (Top right) revealed the huge piles of ivory spanning more than metres in length, it was heart dropping. I've seen ivory on photographs, but seeing them with my own eyes made a huge impact on my senses. I could not imagine the number of elephants that had been killed to fill up this container alone. Can you imagine the pain and fear that an elephant undergone? The fear of flying bullets; fear of losing their offsprings; and eventually watching their face being hacked off by poachers. All these thoughts were going through my head and it all stems from human whom wants to fulfil their selfish needs. Witnessing the ivory being crushed, i could not help but feeling mournful for the elephants that had been killed for it but at the same time I did not want to see them disappear. (Bottom right: crushed ivory).

Ivory is a beautiful substance. People have been collecting it for millennia but only in recent decades, people became more greedy towards ivory. There aren't enough elephants with tusks to quench the current demand. With the rate of poaching now, we are witnessing a chain of local extinctions! Can you imagine safaris without elephants? Forests without their seed dispersers? We still do not know the effect of losing the largest megafauna species on land. How it will affect biodiversity, and how the ecosystem will function in the long run. We know too little to be losing our biological diversity at such speed.

Personally, I am not entirely favourable of destroying ivory. The impact of using these original parts as an educational material is much more provocative compared to a photograph. Moreover, I worry how these crushing activities might provoke more poachers towards live populations as a retaliation against conservation efforts. Most of these human behaviour we have yet to fully understand and it will be difficult to predict what is the most appropriate action to prevent these massacre from happening.

What's more concerning now is that poachers have turned their guns to Asian elephants which only males possess tusks and in comparison, have much smaller tusk size than African elephants. Slightly different from the savanna, forest elephants play crucial roles in the tropical rainforest which is still very understudied and minimally understood. Just compare the theory of the 'empty forests' and a thriving, lively forests— its not difficult to make a judgement for ourselves of which is better. We depend on the forest like how animals and indigenous tribes do, just in a different form. Our medicines, food, clean air, and water all comes from the forest which we take for granted. Please forgive me for digressing, but the situation is just too complicated.

Destroying ivory might help in the short term for public awareness. However, understanding the ecological functions of elephants can go further than just through ivory contrabands. Elephants should be respected for their similarities to us and they are not domesticated animal bred for our enjoyment and consumption. They are wildlife and play important roles for ecosystems and we should protect them from being the next Dodo.

\* Ning is a RA for MEME since 2012. She recently finished her MRes looking at elephant social structure using camera traps.





**Clockwise: (1-2)** Collaring activities has resumed in April with Yeop Bendang and Yong Jalong as the latest collared elephants added to the movement study. Many Thanks to the effort of the Elephant Unit of Perak state, Perhilitan and Kuala Gandah Elephant Conservation Centre. With these additional collars the local authority can be more updated on elephant movements to monitor human-elephant conflict.

**(3)** Awang Badur's collar has dropped off after 508 days of tracking. To our knowledge his home range covers approximately 308km<sup>2</sup>.

**(4)** Where the elephants passed, there is always a trail for all that leads to somewhere, especially in a dense rainforest.

**(5)** The forest is filled with wonders. Fruits with toothmarks, porcupine quills atop of tree trunks, beautiful feathers from Peacock pheasants and majestic but often weird looking seeds- all collected from the rich forest grounds.

**(6)** Field team processing fruit samples collected from forest floors. This is part of our study assessing how elephants would support the dispersal network of plant species.

**(7)** During fieldwork in Belum Temenggor Forest Complex, we came across many fallen trees. They are mainly felled by humans for acquiring wild honey and gaharu products. The amount that is being harvest on this tree was less than 1m wide but the whole tree was cut down. All else was left to rot.



# Outreach



**Anti-Clockwise: (1-2)** MEME has been conducting outreach activities to school students such as the St Paulian (as part of the Nottingham Young Researcher project) and to Nature Club at the Global Indian International School. Our goal is to spread more awareness about Asian elephants and our work to the wider public.

**(3)** Ahimsa was invited to present at the Biodiversity Forum "Human-wildlife conflict mitigation and action in agricultural sector" organised by Perhilitan and MPOC.

**(4)** We had our first exhibition with Tenok and Friends day held at Badan Warisan, KL. We owe Lisa (right in pic) a big thanks for all the beautiful posters she has created. Please follow us on Facebook (Management and Ecology of Malaysian Elephants) for future updates on exhibitions.

**(5)** Ee Phin gave a talk at the "Unforgettable elephants of Kenyir" photography exhibition held at Artlier Art Space and Gallery. Left: Christine Das, an elephant lover and artist. Barry Ong on the right whom is the mastermind behind the photographs.

**(6)** YB Datuk Seri Panglima Masidi Manjun, Minister of Tourism, Culture and Environment of Sabah learning about Asian elephants and MEME at World Environment Day in KK, organised by Yayasan Sime Darby and UCSF. (Second left) Chief Executive Officer Puan Hajjah Yatela Zainal Abidin.



## Our Supporters



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