



*Malaysia Field Trip*  
*Clara & Ellen 2016/17 Winter*





## Introduction

We, Clara, Tang Tsz Ching & Ellen, Chan Yee Ting, visited Malaysia during the semester break. First part of our trip (27/12/2016- 4/1/2017) was organized by Geography & Resource Management Department. During the period, we visited few cities in peninsular Malaysia, including Kuala Lumpur (KL), Ipoh and Taiping. Concentration study topic for our group is urban forest. Second part of our trip (4/1/2017- 8/1/2017) was primarily spent in Mount Kinabalu, to study the unique ecological value and to promote proper waste disposal.

## Urban forests: A brief introduction

Urban forest, in a wider sense, refers to any kind of woody plant vegetation growing in and around human settlements obtaining area of more than 6 hectares. It could be regarded as a human ecosystem, in which natural ecosystem is modified by functional roles of human. From natural perspective, urban forest facilitates carbon sequestration, energy conservation, ecological corridor maintenance and urban biodiversity, which in turn improves environmental quality. From cultural perspective, urban forest reduce psychological stress, energy cost and contribute to more sustainable urban planning. With these benefits, urban forests should therefore be conserved and protected. In our trip, mainly 2 urban forests were visited, namely Bukit Nanas in KL and Taiping Lake Garden in Taiping.



Fig 1 Bukit Nanas Skywalk

## Urban forest: Bukit Nanas in Kuala Lumpur

Bukit Nanas was gazetted as a forest reserve in 1906. Area of it is 9.3 hectares nowadays. During the early years of Kuala Lumpur's formation, pitched battles occurred between rival clans and warlords. Bukit Nanas, as site of a fort in the 19th century, was protected with pineapples planted all around the hill. Since "Nanas" in Malay means "pineapple", name of the forest is actually in memorization of local history.

## Urban forest: Taiping Lake Garden

History of Taiping Lake Garden was even longer than Bukit Nanas. Established as a public garden in 1880, the Garden obtains an area of 64 hectares. Landscape of Taiping Lake Garden is highly connected to historical development of the city. Taiping was once a tin mining city. With annual rainfall of over 4000 mm, abandoned mines transformed into various lakes. Taiping later entered its British colonial era, which was the time when the lakes were planned to become lake-garden that resembled Kensington Park in London.



Fig 2 Taiping Lake Garden



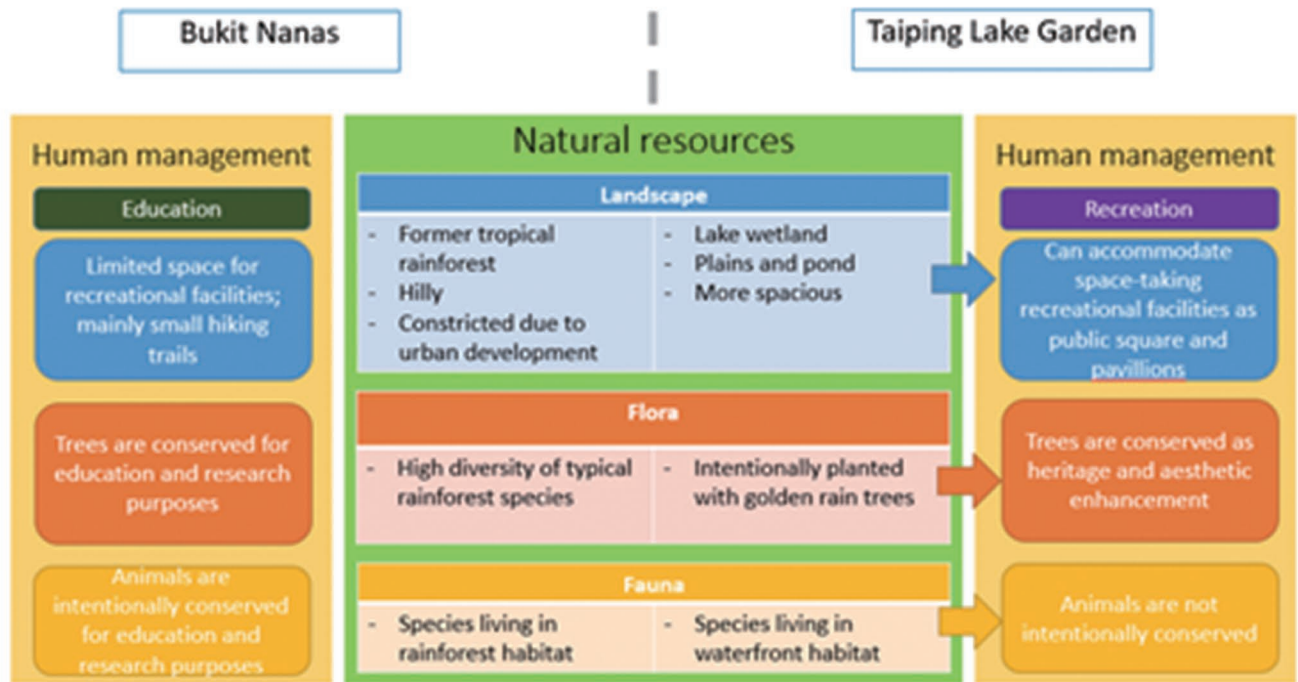


Fig 3 Comparison between Bukit Nanas and Taiping Lake Garden

**Comparison of urban forests**

As suggested in the above, urban forest is a kind of human ecosystem consisting of resource system and human social system (Boyden and Millar, 1978). In the following part, we would compare and contrast natural resources in these 2 forests, which in turn leads to different usages and managements of the locations.

Landscape of Bukit Nanas is former original tropical rainforest which is hilly. This limits spaces for constructing recreational facilities there. As a result, only space-saving constructions such as concrete walking trails, canopy walk bridge, park gate, education center, signboards, rubbish bins and souvenir shops could be found. Both typical and rare species of trees could be found in the forest, such as jelutong trees, surian wangi, bamboo, lianas and certain red wood species. Various animals with different scarcities are recorded as well, such as silvered leaf monkeys, long tailed macaques, snakes, small reptiles and even civet cats. Diversity in flora and fauna resources make it perfect for environmental education. Canopy walk, trail ecological tours and animal genotype projects have been carried out here. Although local guide told us that people could enjoy themselves by picnicking and play ball games as in real jungles, no such kind of

activities could be observed.

Meanwhile, landscape of Taiping Lake Garden is lake wetland, which is flatter with less up and down. The area is much larger than Bukit Nanas as well, allowing large recreational facilities as pavillions, public square and boat club house to be built. Trees in the Lake Garden were mainly "golden rain trees", which turn into sharp, yellow color during blossom period. Not being a native forest as in Bukit Nanas, these trees were planted more than 100 years ago for their royal color and beauty. They are therefore conserved as heritage and for aesthetic purpose, rather than education purpose as in Bukit Nanas. Animals found in the Lake Garden are common species, such as Common Water Monitors. They are therefore not intentionally conserved. From the above, we see that resources in different urban forest indeed affects their way of management, with Bukit Nanas being educational, while Taiping Lake Garden being recreational.

**Threats to urban forests**

As in many parts of the world, urban forests in Malaysia are also under constant influences of urban encroachment. In 1906, when Bukit Nanas was gazetted as a forest reserve, its land area was 17.5ha



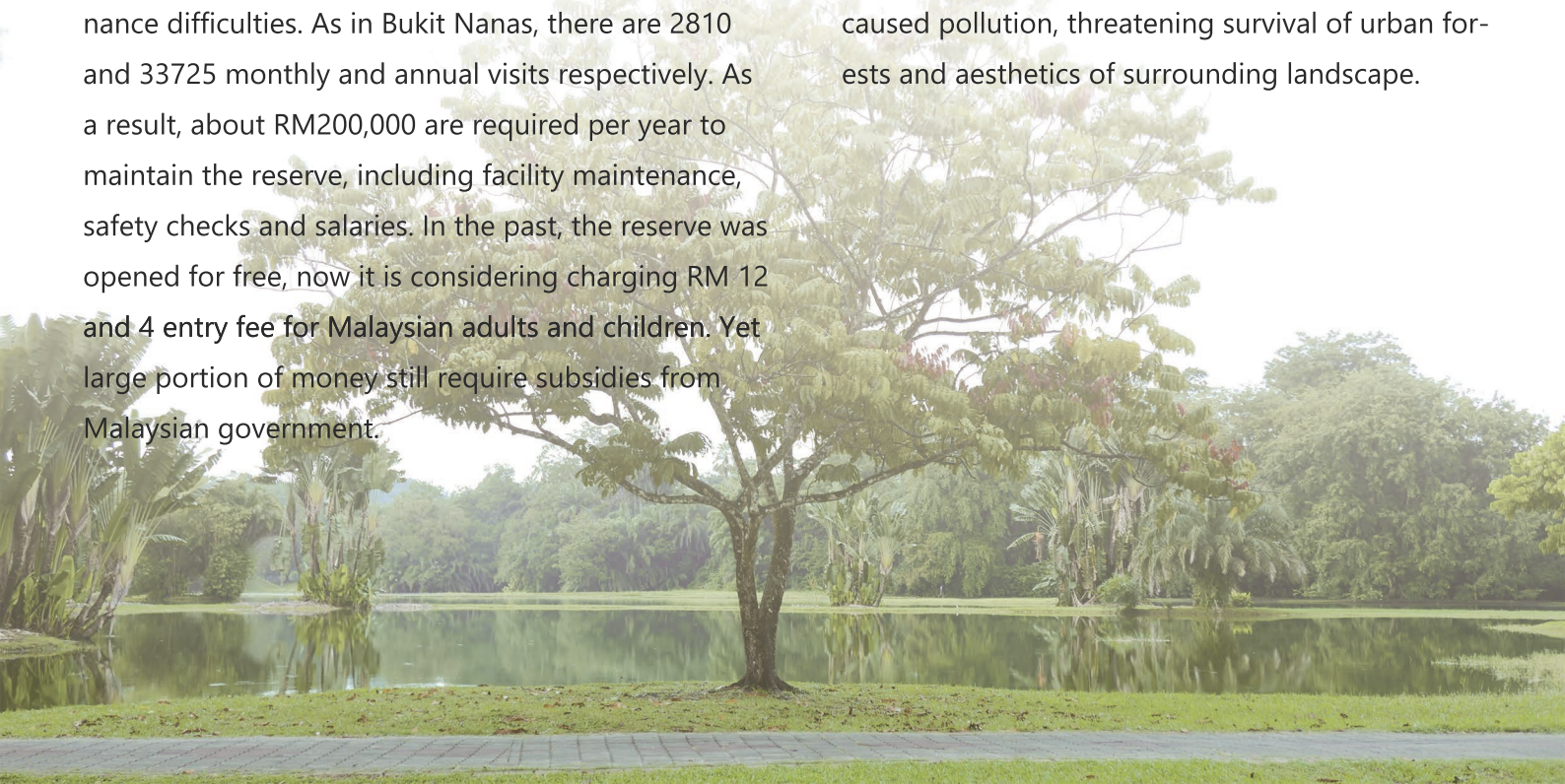


Fig 4-7 Recreational Activities in Bukit Nanas and Taiping Lake Garden

originally. Construction of KL Tower took up a large part of the forest, diminishing its area to 9.3 hectares today. Also, among 4 permanent forest reserve areas in KL, only the smallest reserve, Bukit Lagong (2.1ha) did not lose its land after announced as a reserve. While areas of the other three reserves: Bukit Nanas, Sungai Puteh and Sungai Besi, have been decreased by 55%, 36% and 32% respectively.

Furthermore, urban forest reserves are having maintenance difficulties. As in Bukit Nanas, there are 2810 and 33725 monthly and annual visits respectively. As a result, about RM200,000 are required per year to maintain the reserve, including facility maintenance, safety checks and salaries. In the past, the reserve was opened for free, now it is considering charging RM 12 and 4 entry fee for Malaysian adults and children. Yet large portion of money still require subsidies from Malaysian government.

As in Taiping Lake Garden, land pollution is unavoidable with frequent recreational activities. When we walked in the Garden, we met a local man who was running. He actually told us that there was a "Rubbish Lake" in the Garden! Due to curiosity, we walked to the "Rubbish Lake" on the other day and found that the lake was indeed unpleasant. Some used packages of food floated on the lake and algae bloomed all through the lake, probably due to eutrophication. Human activities indeed caused pollution, threatening survival of urban forests and aesthetics of surrounding landscape.







# Mount Kinabalu

Mount Kinabalu, a World Conservation Site under UNESCO since 2000, is another highlight in our trip. We hiked from Timpohon gate (1866m) to the peak (4095m) for two days one night. As mentioned in the beginning, on the way to the peak, we studied the abundant ecological values of flora and promoted proper waste disposal.





*Fig 8 Cracks and tiny streams favorable to weathering*



*Fig 9 Long dyke showing indicating tectonic movement*

**The geology of Mount Kinabalu**

Mount Kinabalu is the highest mountain in southeast Asia. Geologically, it is considered as a young mountain because it was only formed 15 million years ago by tectonic movements. Until now, the mount is still elevating 0.5cm every year. The granite pluton was covered by sandstone at first and now are mostly eroded. The granite pluton has been undergoing erosion in different ways continuously, such as physical cooling and expansion, chemical and biological weathering. As shown in the figures, natural pools are

formed with continuous and persistent precipitation. Gaps between rocks are easily found, which are formed with daily thermal expansion and contraction. Long dyke can be found as the evidence of tectonic movements.



*Fig 10 Walking in a granite landscape*



*Fig 11 Beautiful lake formed by precipitation*



### The floras of Mount Kinabalu

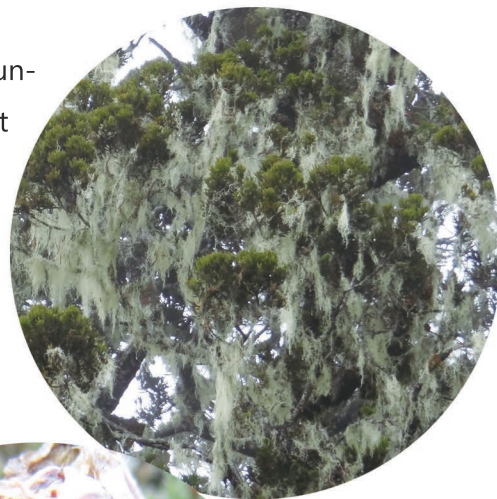
Located in the tropical zone, the floras are abundant comparing to its counterpart. The height and climate provides conditions for the abundant floras. The site is considered as one of the richest floras in the world. Over 5,000 species of vascular plants can be found on mount Kinabalu. Mainly four topological vegetation zones can be divided, which are lowland (<1200m), lowland montane (1200-2000m), upper montane (2000-2800m) and subalpine (2800-3400m) (Kitayama, 1992). Zones are clearly divided because of the rapid increase in elevation. Among the zones, the most abundant species can be found between 900-1200m (Grytnes & Beaman, 2006). Unfortunately, we did not have enough time to study plants in the zone because we started from 1866m. Yet, diverse floras that are distinguished from HK were identified on the way. Also, each shelter displays the distinct flora and fauna species.

The mountain guide introduced two flora species to us. A specie of raspberries was found in the tour. The guide picked some for us to taste. The sweet red fruit reduces thirstiness when hikers are climbing exhaustively. Second, the guide pointed at *Nepenthes* to draw our attention. Those *Nepenthes*, in terms of size and characteristic, are different to the specie we see in flower market in HK.

There are more species that the young guide cannot remember and introduce one by one. Some interesting species were recorded and checked after trip. Remarkably,

Usnea, a type of fungus, was easily found on trees in elevation 2500m and above. Being air pollution sensitive, Usnea is considered as a monitor of air quality. The white Usnea can be found only when the air quality is excellent.

*Rhododendron rugosum* was recognized on the way as the specie blossomed by the time we visited.



#### Top-Down

Fig 12 Usnea

Fig 13 Edible raspberries

Fig 14 *Rhododendron rugosum*

Fig 15 *Nepenthes*



### Tourists' satisfaction

According to a research, tourists' satisfaction was found to be highest for personal achievement, that is hiking to the Low's peak, while less people showed satisfaction towards the ecological value of Mount Kinabalu. Possibly it is because tourists do not understand the distinct geology and floras on the mount. Being a UNESCO conservation site, its ecological value should not be overlooked. It is beneficial to sustainable tourism if tourists understand the beauty of the mount more. Comparing the mountain heights, there are mountains that are even higher and give deeper sense of achievement, which threaten competitiveness of mount Kinabalu. The uniqueness and attractiveness, therefore, shall be emphasized with the abundant ecological values. In one hand the mount tourism can be sustainably developed. In another hand, the tourists are able to appreciate and respect the invaluable nature. To the end, tourists get satisfied from personal achievement to the Mount's ecological values.

### Waste disposal on mount Kinabalu

Mount Kinabalu is a mount with high ecological, recreational and educational values. Negative impacts which associate with visitors' activities undoubtedly have to be controlled and minimized. In our trip, we not only focused on the ecology and recreation, but also education on 'waste disposal'. Recent years, Mount Kinabalu is facing growing pressure of visitors. Total 150 Climbing permit per day are provided. Hikers have to apply and compete the permit in a first-come-first-serve basis before the hike. As Mount Kinabalu is getting popular, it is not surprised to see the quotas fully booked. An extension of guesthouse was under construction by the time we visited. The number of visitors are increasing annually, which may also bring about the waste issue. It is important to promote proper waste disposal among visitors.

### The 'Leave No Trace' (LNT) concept

LNT concept is the guiding value for minimizing negative impacts from outdoor recreation, which was developed in the U.S. back in 1960s. Seven principles are guiding outdoor activities, which are to

- ☞ Plan Ahead and Prepare,
- ☞ Travel and Camp on Durable Surfaces,
- ☞ Dispose of Waste Properly,
- ☞ Leave What You Find,
- ☞ Minimize Campfire Impacts,
- ☞ Respect Wildlife and
- ☞ Be Considerate of Other Visitors.

Some of the principles are strictly followed as the Mount Kinabalu Park's Policy. For instance, the tour is planned ahead by the park. Hikers must start the hike before 10:30am. In the second day, hikers are banned to continue the journey if they fail to reach Sayat-Sayat Checkpoint by 5am. Campfire is strictly prohibited. Among LNT principles, proper waste disposal is not strongly promoted. Proper disposal can be classified as reducing waste production and waste on the mount, littering and recycling waste. Proper waste disposal is beneficial to the budget planning and the mount's environment.

### Importance of proper waste disposal

Reducing waste during the hike is significant to the environment and budget planning of Mount Kinabalu. Bins are set to avoid littering. Yet, the bins are located on the mount which are only accessible on foot. Clearers have to hike endless stairs to collect waste daily. Environmentally, plastic waste is non-biodegradable and thus not desirable to the physical environment. Food waste may attract animals. Mount ground squirrels (*Dremomys everetti*) were often found nearby the shelters and bins. Eventually, food waste affects wildlife habitat.





Fig 16 Remindful signs located along the trail // Fig 17 Recycling bins // Fig 18-19 Waste found along the trail (Top-left to bottom-right)

In addition, improper waste reduces aesthetic value of the mount, as the waste is everywhere and messy. Therefore, being responsible hikers, waste should be treated appropriately on the mount.

### Observation of waste disposal on the mount

From our observation, little waste was found on the mount. The waste is concentrated nearby the shelters. Those are mainly some candy's papers and lunch containers. Also, some cigarette butts were found along the trail. It is common for mountain guides and local hikers to smoke on the way. Recyclable and non-recycling bins are put in each shelters. Those bins are covered by wire mesh to prevent disturbance from wildlife. Yet, the waste separation is not done clearly as no direction is given to the types of recyclable materials. Foreign hikers may get confused on by the recycling system as different countries run differently. In the largest shelter, signs are displayed to promote reducing the use of non-biodegradable plastic bags.

### Promotion and recommendations of proper waste management

On the way, we shared our ambitions of waste reduction with other local and international groups of hikers. They showed appreciation and affirmation to our action. We picked up waste on the ground, especially the candy's papers. We collected our waste and threw them only until we returned to the main entrance. Suggestions are proposed here to encourage proper waste disposal. Firstly, lunch box can be provided with less waste. Before the hike, individuals were given a paper lunch box and a bottle of water. Inevitably, the containers would become waste. It is suggested to distribute bottle water upon request. Secondly, apart from reducing the use of plastic bags, it is also encouraged to pack their own waste, but not throw them into rubbish bins on the mount, not to mention littering. Experimental site(s) can be established to remove all rubbish bins, to investigate if hikers keep their waste or throw the waste simply on the trail.



# People met in the Journey





## People and stories in Malaysia

One of the aims of our trip is to enhance our personal growth. During the trip, we communicate, appreciate and support each other. We do not only know more about our own personalities, but also make friends with people around the world. People we met and stories we had in the trip make it an irreplaceable experience to us.

### Jen, our local tour guide of 1st half of field trip

At the first half of our journey, we met various friendly people. For example, Jen was our local tour guide for the first half of the field trip. Although she did not have an university degree, she was very knowledgeable, knowing lots of culture and practices in Malaysia. Jen was also a hard-working person and she is always willing to equip her knowledge in different field. Once in a rubber institute, she raised out questions eagerly to the host, even more active than students like us. Though only recovered from breast cancer for months, she is already working as a tour guide professionally. We really appreciate her willingness to learn and share.

Jen was also very friendly and nice, once in Ipoh, she took us to a local supermarket, in which she taught us local brands of Malaysian tea and coffee. She also led us to a local ice-cream shop, where she ordered a family sized ice-cream for us to share. Even after the trip, she was willing to answer my questions relating to our post-trip presentation for Geography and Resource Management department.

### A Muslim lady, working for the Malaysia Oil Palm Board

Besides, we met a Muslim lady in the Malaysia Oil Palm Board. Apart from guiding us to tour around the board, she also chatted with us about various culture and daily issues in Malaysia, which gave us lots of insights from her job to Malaysia. She explained the differences in leading different foreign tours, such as Japan, Singapore and Hong Kong.

Meeting her in the beginning of the field trip, her sharing enriched our understanding towards Malaysia, such as the various religions and race. Surprisingly, she mentioned every residents have to state their religion in their own identity cards. Comparing to Hong Kong, Malaysians highly value and respect religions. In addition, she said that although she loved shopping, she could not come to Hong Kong, since the Halal choices in Hong Kong was too limited. She reminded us to be cultural sensitive. Meeting and talking to all these people have enriched our knowledges, as well as our understanding towards people with different culture.

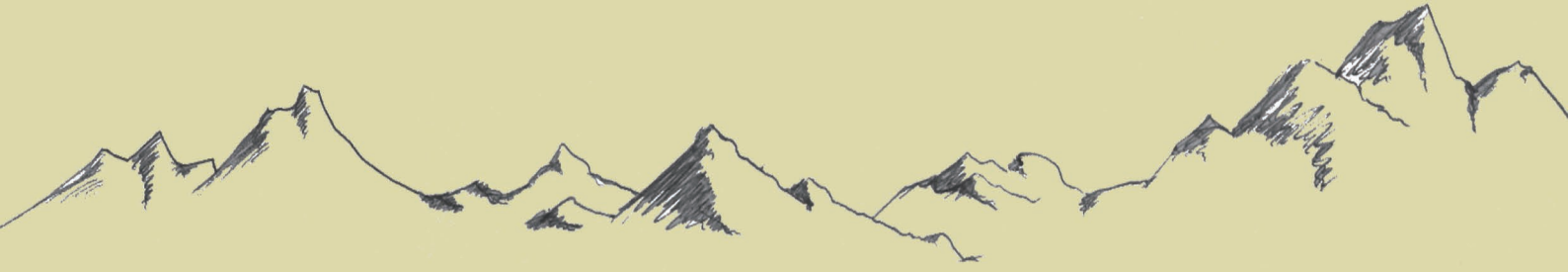




# People met in the Journey







### **Hikers in Mount Kinabalu, our companions**

Mount Kinabalu attracts hikers all around the world. In the period of hike, we met people from Hong Kong and Malaysia. In the first day, we met two young Hong Kong guys who were hiking back to the Timpohon gate. It was encouraging to talk with them because we got to understand and imagine the gorgeous scene from the peak. They were helpful as they shared two pairs of gloves to us that we forgot to prepare. Being the third last group to start the hike, we only met two groups hiking up on that days. There was a group of 20 Malaysian hikers and we met few of them. Surprisingly, they were all from the same high school. It is challenging to keep contact with a large number of high school friends for a long time. In addition, busy life in Hong Kong makes us difficult to come together for a night, not to mention a two-day trip. In the second day, we met another group of four local hikers. They did not know each other before the trip. They gathered because of the common interest. We shared our different culture when we back to the restaurant in the guesthouse. They are so friendly that they are willing to offer a ride to us when we visit Sabah again. Until now, we still keep in touch with two of them. We celebrated Chinese New Year with songs. Also, we often share our daily life such as interest and occupations with text and photos.

### **John, our mountain guide**

We met John once we finished all the registration and settled payment. He explained to us the length of trail and time required which was useful to us. He was informative about the trail. He knew the reminding length of walk to reach next shelter. While we were hiking, we got tired and tired. By those moments, John encouraged us to keep going and taught us skills to hike continuously. Impressively, he supported me and said (Ellen) that I was a god leader in this hike in the end of the trip. He recognized our difference and positions in only two days. Although he could not teach us floras as we desired, he showed his best to enrich us knowledge in floras. For example, John pointed at the tiny Nepenthes that we totally ignored. He was a very fit guide. He said that he led mountain tour triple a week. Sometimes, he disappeared for half an hour and later returned to us because he ran up speedy to train his fitness. He inspired us to be passionate with our occupation. As final year students, we often worry about searching a job. While truly the financial need shall not be ignored, it is in equivalent that we shall not lose our passion.





### **Alberta, the volunteer in Kota Kinabalu youth hostel**

Returned to the hostel in Kota Kinabalu, we got to know Alberta, a Yuennam volunteer. Coincidentally, we arrived the hostel in the same day. It was her first time to visit Malaysia. Being a fresh university graduate, she would like to take a break before looking for jobs. Because of the limited budget, she came to work voluntarily for two weeks. She gave us some insights on our graduation trip. In the last night, we shared local culture, pop music, drama, recommended souvenirs and so on. We had been chatting for over an hour in the lobby. Therefore, we also met different interesting visitors in the lobby. For instance, there was a guy from Belarus who was interested in knowing Chinese language. He was passionate with traveling and he shared his advantageous stories to us. There was a group of Shenzhen visitors who did not prepare well for the trip. He asked lots of questions for recommended places to visit in Kota Kinabalu. In the last night, we exchanged different cultures and ideas. An opened mind is needed for us to explore and appreciate the differences and similarities.







# Our Little stories & Reflection



**KINABALU PARK**  
WORLD HERITAGE  
(LOW'S PEAK - 4,095.2 M,  
MT. KINABALU)

**ID KAHANDAMAN DI**  
GUNTING BIN LAGADAN (1964)  
HUGUAN MANANANUD TUTUMAKAD NULU  
KINABALU IH NOKOPOGULU

**KABONG om KURO** (1888),  
**LEMAING KOMO** (1851)  
MANANANUD NULU KINABALU



### Little story I : Feeling sick at Mount Kinabalu Hostel

Mount Kinabalu acquires an altitude of 4095m. People might easily get highland sickness if they do not get used to the low-oxygen content air, developing symptoms as discomfort, breathlessness, poor sleeping patterns or limited capacity for physical exertion. To prevent getting highland sickness, I (Clara) started taking Chinese medicines (Rhodiola) two weeks ago, which require a 3 times per day treatment. As a person who does not get used to taking pills, I often forgot to take the pills. It was fortunate for me to have friends as Ellen to become my pills-taking "alarm clocks". Nonetheless, although pills had been taken, altitude of Mount Kinabalu was still a great challenge for me. As we arrived at the 3272m hostel at 4:00 p.m., I started to feel headache but due to extreme hungriness, I chose to eat rather than taking a rest. The headache grew more intense after eating, as oxygen was insufficient for both digestion and

brain functioning. As told by our tour guide, if we wished to see sunrise at the mountain top, we have to sleep early at 7:00 p.m., so that we could wake up at 2:00 a.m. and slowly hike up to the mountain. Yet as the headache grew, I kept changing positions on bed but could not sleep. Worrying to affect the others, I went out of the room and set down alone at the restaurant downstairs. As I walked closer to the restaurant windows, I exclaimed in amazed as what in front of me was an amazing scenery, with countless stars sprinkling despite moon shining, while clouds floating like a sea extending miles away below! Viewing such a breath-taking scene, I felt the tininess of human and was suddenly touched and relieved. I stayed alone for a few more minutes and returned back to sleep. Thanks to the Mountain God, I had a good-quality sleep that night.





### Little story II: Our way to the top

Besides Ellen and I (Clara), there were other two good friends coming with us in our Mount Kinabalu journey. As more experienced hikers, Ellen and I walked faster than the other two. It is important for us to maintain as a group, so as to make sure that nobody was left behind. On the other hand, hiking with people with similar speed would make a journey happier, especially when you did not want to miss out special moments, such as sunrise. At the beginning of the hike, we needed to go from the entrance to the mid-level hostel. During this period, we took the pair-up strategies with me hiked faster with one friend in the front, while Ellen and the tour guide hiked slower with another friend behind. Since the slower friend loves plants, we helped her to take photos of them so that she could walk at normal speed without missing lots of things. That was a nice cooperation in fact. Yet as we hiked up the top of the mountain after a brief sleep, our former strategy did not work anymore as one of our friends had extreme headache and needed to go back to hostel. As the remaining three of us then continued to hike, the other friend decided to let Ellen and I go first, with the concern that she might hinder us for seeing the sunrise due to her slow speed. In the end, Ellen and I decided to hike faster on our own. We became to only two people who could make it to the top.



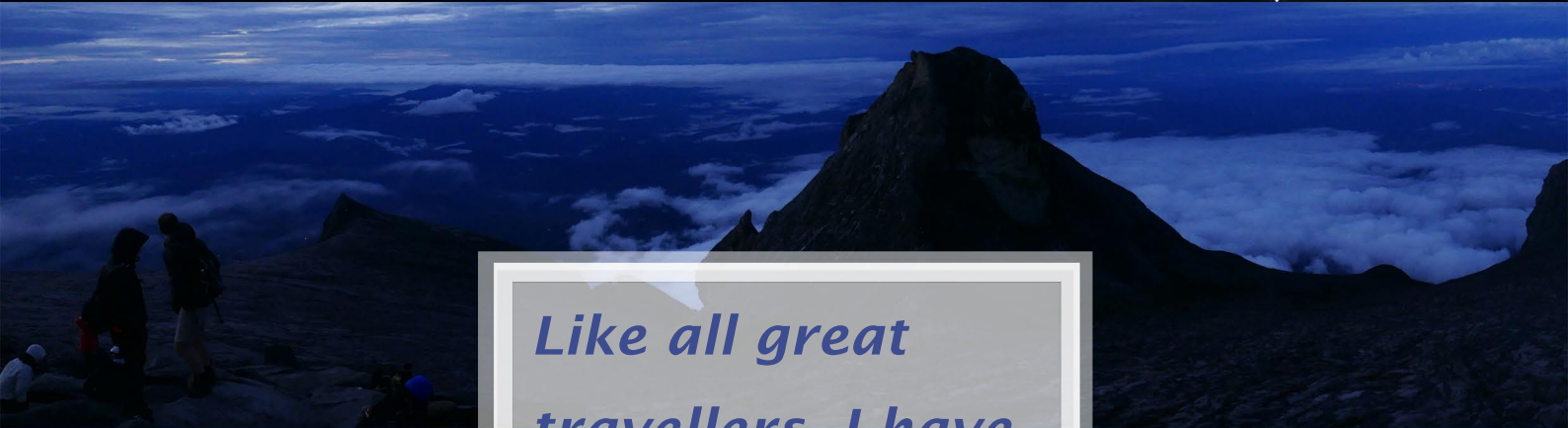
Fig 35 Reached the Low's peak

Although it seemed bad to left our friend behind, we believed that the decision was reasonable. As when we further hiked up, slopes were getting steeper as tilting for 70 degrees. No fences and steps were available on the mountain top, making it harsh for inexperienced hikers. Only having two of us, Ellen and I helped with each other as we further hiked up. We waited each other when one needed to take a rest, reminded the other for an easier path, and shared our resources together. We even carried our backpack alternatively, so that one would not be exhausted. After a long hike, we finally reached the top of Mount Kinabalu and the great sceneries above made it worthy to go!

### Conclusion

To sum up, the trip to Malaysia was a wonderful memory to both of us. As we followed the Geography department in the first half of the field trip, we did not need to worried about administrative matters, so that we could be focused on our studies and learned much about urban forests in Malaysia. While in the second half of the trip, we suddenly became main organizers and that everything had to be planned, discussed, operated and completed on our own. During this process, we communicated with each other and worked as partners. While facing challenges as climbing up Mountain Kinabalu, we encouraged and supported each other. From this valuable experience, we did not only develop strong friendship among ourselves, but also become more understanding to our own personalities, which is definitely essential to our personal growths in the future. It is indeed one of the greatest experience in our university life!





*Like all great  
travellers, I have  
seen more than I  
remember, and  
remember more  
than I have seen.*

*---Benjamin Disraeli*

