

**GAYA ISLAND RESORT**  
DISTINCTIVELY BORNEO



# 01 January 2019 – 28 February 2019

## Gaya Island Resort

### Nature Conservation Update



A YTL LUXURY RESORT



[WWW.GAYAISLANDRESORT.COM](http://WWW.GAYAISLANDRESORT.COM)

**YTL HOTELS**  
Treasured Places. Treasured Moments



# Conservation through wildlife research

## New record of fauna species



- Common name : Monkey Moth
- Family : Eupterotidae
- Order : Tagora
- Species : T.pallida







# Conservation through wildlife research

## New record of fauna species



- Common name : Orange Knee Stick Insect
- Family : Heteronemiidae
- Order : Lonchodes
- Species : L. Genuiculatus





# Conservation through wildlife research

## New record of fauna species



- Common name : Planthopper
- Family : Nogodinidae
- Order : Unknown
- Species : Unknown







# Conservation through wildlife research

## New record of fauna species



- Common name : Spotted Scat
- Family : Scatophagidae
- Order : Scatophagus
- Species : S.argus





# Conservation through wildlife research

## New record of fauna species



- Common name : Yellow lined jumping spider
- Family : Salticidae
- Order : Epeus
- Species : *E. flavobilineatus*





# Conservation through wildlife research

## New record of fauna species



- Common name : Malayan box turtle
- Family : Geoemydidae
- Order : Cuora
- Species : *C. amboinensis*



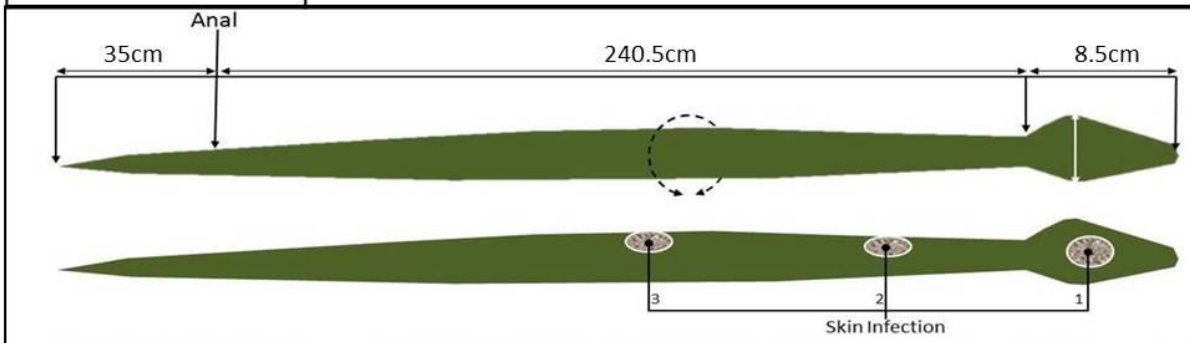


# Conservation through wildlife rescue

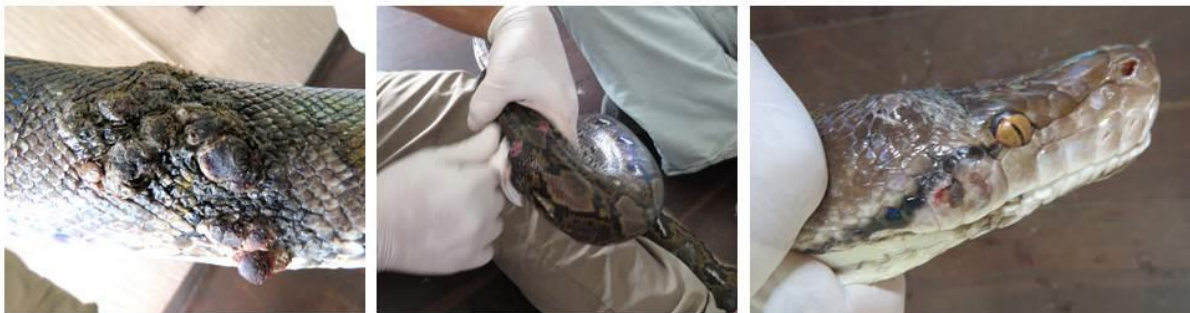
## Reticulated python

### Description

Vernacular name	Ular sawa batik
Common name	Reticulated python
Family	Pythonidae
Genus	Python
Species	<i>P. reticulatus</i>
Weight	4.47 KG
Sex	?
Diagnosis	Skin infection caused by ticks



On 04<sup>th</sup> February 2019, Tuesday a reticulated python appeared within Gaya Island Resort complex seeking for warm places to regulate its body temperature. Concerns on the safety of our resort's guests, it was caught and placed in our temporarily cage. However, when we run through its condition, certain parts of its skin was damaged and infected. This case commonly caused by the ticks and we did removed few ticks that still attached on it. We decided to keep the python and treating the wounds before releasing it back into its main habitat.







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## Conservation through wildlife research Red Giant Flying Squirrel (7 wonders)



Red giant flying squirrel is one of the wonders of Gaya Island Resort. With a preliminary habitat research on early 2012, we concluded that this species should exist in Gaya Island. In order to support the theory, we have conducted 3 solid months of research in-search of the flying squirrel. It was quite challenging where methods used are base on my previous research on Lowland habitat where the squirrel begin it's day around 5.30 in the evening. After more than one month of research at Gaya Island we came to an end where we need to change the method according to the Island habitat and ecology. The following method had given us a great findings on Island's flying squirrel characteristic, it active between 6.45pm to 7.15pm. However, finding one flying squirrel in Gaya Island it's more or less wishing for a rain in a dry season. Therefore, implementing the artificial nesting box is the only way or chance for us to have high percentage of sighting. 4 boxes are installed around the resort complex and through this initiative sightings are almost guarantee.

Below are the recent images taken around 2:00pm on of the box above Gaya Island Resort Wildlife Centre.





# Conservation through habitat restoration

## Seagrass planting



Once the seagrass nursery completed, trip to collect the seagrass seedlings was initiated on 23<sup>rd</sup> January 2019. We have collected 5 species of seagrass at the nearby water village. We spent more than an hour digging the grass at various spot.



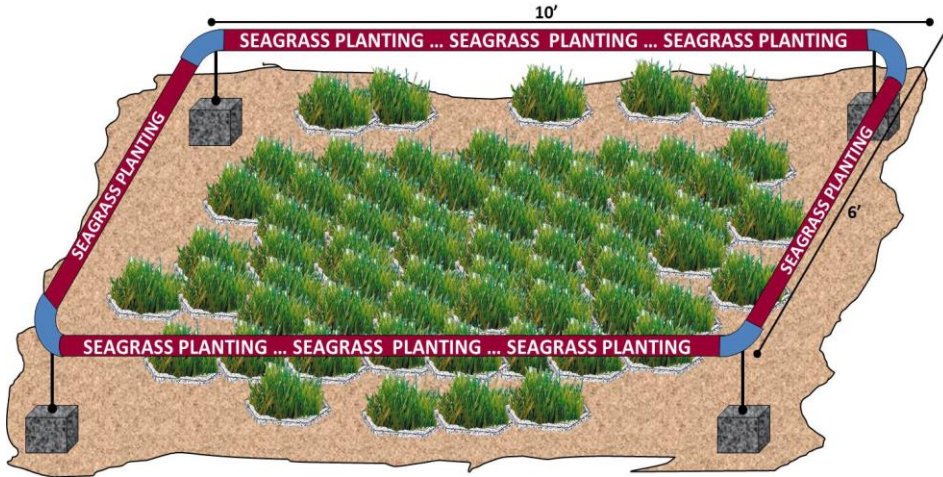
Seagrass seedlings was brought to GIR and gone through few processes before planting it in the nursery. Seagrass collected are sieved as to remove unwanted particles and placed it into a basin. Once the process is over, all seagrass collected are segregated according to the species and followed by planting it in the nursery. This is part of our research on method of establishing seagrass nursery.



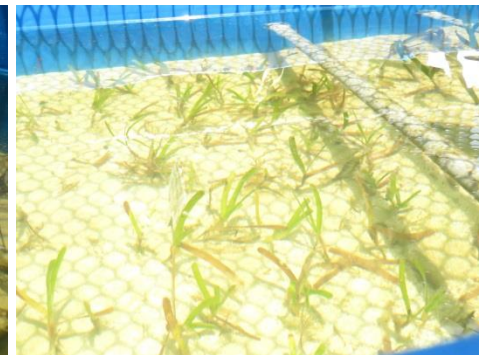




# Conservation through habitat restoration Seagrass planting



- Top left image is our planting site projection and we are looking at to plant in an area of 4000m2.
- Bottom images are the current seagrass planted in the nursery.
- Seagrass nursery is monitored on daily basis by recording the growth rate, salinity level, temperature reading as well as PH reading. Reading as per middle images.







# Conservation through habitat restoration Seagrass planting project report by Megan



## January Report – Gaya Island Resort – Megan Hooker

### What I did this month for my project

This month we were able to complete the tanks which will be used for the seagrass nursery. We made various modifications in the first week of January to prevent leaks and ensure that the flow of water was strong enough to circulate the water properly, and on 8<sup>th</sup> January I collected and planted the first seagrass samples. We also completed the roof, which prevents rainwater from diluting the tanks and also from falling leaves etc entering the tank and possibly blocking the pipes.



On the 23<sup>rd</sup> January, we were able to collect the first samples of seagrass from outside the resort boundaries as the tide was low enough. There is a huge amount of seagrass there and therefore we were able to collect plenty of individual plants without disturbing the existing meadow. We collected 5 species, including a variety of pioneering/mid-successional and climax species.



We were able to plant two species immediately in the top tank, and left the others in the tanks so as not to dry out and planted them the next day. Larger species have been planted directly into the sand in the bottom of the tanks (*Enhalus acoroides* and *Cymodocea* sp), and smaller species have been planted in tupperware boxes so as to prevent them being covered over by sand shifting.

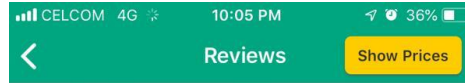


### Next steps

Next month I will be monitoring the growth and survival of the transplanted individuals. I have counted the individual 'samples' for each species, and for the species with 'runners', the number of genets and so will continue to monitor this. I will also survey the planting area to see what fauna is currently using the area so that I can compare this data to the fauna using the area once the seagrass is planted.

### Hotel Activities

This month I have conducted nature walks, night walks, tavajun treks, mangrove kayaking and flying squirrel monitoring. I took an Australian couple (Edward and Janelle) kayaking, and both Charlie and I had a long conversation with Edward, as he has recently completing a PhD which involved some camera trapping. We have kept in contact and he sent us some useful resources for R.



naturalists (thank you Rashid) and some ecology students from Cardiff university (thanks Megan and Charlie). The Mangrove talk on the kayaking experience was very informative and paddling through the narrow channels was a real experience, both spooky and beautiful at the same time.

The integration of university research with the resort has been a stand-out feature for us, more places need to emphasise the importance of ongoing research in the tropics. Many ecotourism experiences will spout a few facts at you about the environment, but few give a sense of what remains to be discovered. I hope that supporting remains a core part of the Gaya Island vision as the resort sits on top of a biodiversity hot-spot. It would also be nice to see some more resources thrown at Rashid and the Naturalist team to help them continue to catalogue and monitor the flora and fauna of the island.



ben.uzair  
Gaya Island Resort



96 likes

ben.uzair Meg, a student naturalist from the UK at @gayaislandresort was kind enough to email us photos of our mangrove kayaking experience. Now, that is service right there, and an absolute luxury touch.

Although a short tour, but learnt alot about the lifespan and the importance of mangroves for our ecosystem. THANK YOU!



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# Conservation through Wildlife Research

## Camera Trapping Implementation



20<sup>th</sup> December 2018, the date where we implemented the camera traps project. DGFC has provided 35 camera traps to us in support of the project. However after one month of trial, some of the camera traps are not functioning well and returned to DGFC for repair purposes. Currently we have installed 21 camera traps on site. Charlie (Intern from Cardiff University) is leading the project. This project carries few objectives which are;

1. Recording wildlife species and statistic
2. Habitat variable and statistic
3. Recording intruders
4. Impacts assessment and statistic







# Conservation through Wildlife Research

## Camera Trapping Implementation report by Charlotte



### Monthly report - January

Charlotte Taylor

#### Camera trapping project:

Placed 3 more cameras out along an off-track stream near Tavajun Bay (07/01/2019) and one more in an off-track area in the forest (29/01/19) so now I have a total of 21 cameras out in the field. Began my pilot studies by changing SD cards in cameras and recording data in spreadsheets including updating Elisa with issues with camera traps being broken. Began irregularly checking cameras - 28/12/2018, 04/01/19, 08/01/2019 and 10/01/2019 - doing different trails on different days. Began regularly collecting SD cards every week with the help of Justin, Meg and Rashid. Started planning and writing methods section for my final paper after reading papers about camera trapping.

Animals captured on camera so far are *Megapodius cumingii* (Philippine megapode), *Macaca fascicularis* (long-tailed macaque), *Sus barbatus* (bearded pig), *Varanus salvator* (water monitor lizard), *Nasalis larvatus* (proboscis monkey) and *Rattus norvegicus* (Norway rat). The most common is the long-tailed macaque. Images of the macaques and pigs are found on various cameras along each trail and in off-track areas suggesting they roam all over the forest. Common behaviours are beginning to show - e.g. I have seen pigs and rats using the same track at the same times each day.

Next month, I will begin less frequent SD card changes (every 3 weeks for off-track and Loop cameras, it will remain a weekly change for Hill cameras due to high guest usage). I will have finished my pilot studies and begin collecting and recording real data for my report. I aim to obtain data from DGFC to compare to mine to see if my data is normal or abnormal.

#### Tourist engagement:

Interacted with guests from UK, Canada, Australia, New Zealand, Mexico, Belgium, China, America, Malaysia, Sweden, Italy, Germany, Korea, Hong Kong, Taiwan, Holland, Russia, Austria and Croatia. I lead nature walks, kayaking sessions, red giant flying squirrel observation and conservation talks with an average of seven guests per walk, and an estimated average of six guests per kayaking session. Guests come into the centre to enquire about activity availability; some people come in just to have a look around or ask about wildlife they've seen or want to see so I answer their questions and try to identify species etc.

Guests seem interested in my project, so I have created folders of the most interesting images to show during the nature walk introductions, conservation talks and if anyone is just interested in seeing them. On 08/01/2019, I took two guests along with Justin and an interested member of staff to change the SD cards of cameras on the Loop Trail. I showed them how I set each camera up and we took a camera so we could look at the images while we were walking.

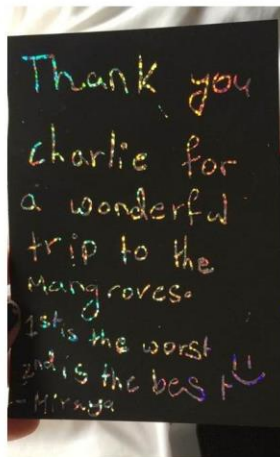
I spoke to a guest from Australia who had done camera trapping research and recommended an R package called sunTime, a book by Andy Field (Discovering Statistics) and online videos by Hadley Wickham about R. He told me to keep in contact with him about my research. I have received reviews from guests, one who said "the integration of university research with the resort has been a stand-out feature for us", one thanking me for kayaking, and one 10 year old girl who gave me a hand written note to say thank you for a mangrove kayaking trip.

#### Other

I have assisted with treatment of a green turtle which is being cared for by Scott at Tavajun Bay. It is receiving antibiotics and being given a diet of seagrass, squid and fish oil whilst being treated for floating syndrome. I helped Meg plant her seagrass in her now finished tanks.



Map shows trails and camera positions. Red = Hill trail, blue = Loop trail, bright green = off-track (forest transect), dark green = off-track river, purple = resort edge closest to forest.



Thank you note from a girl from a family I took on a mangrove kayaking trip



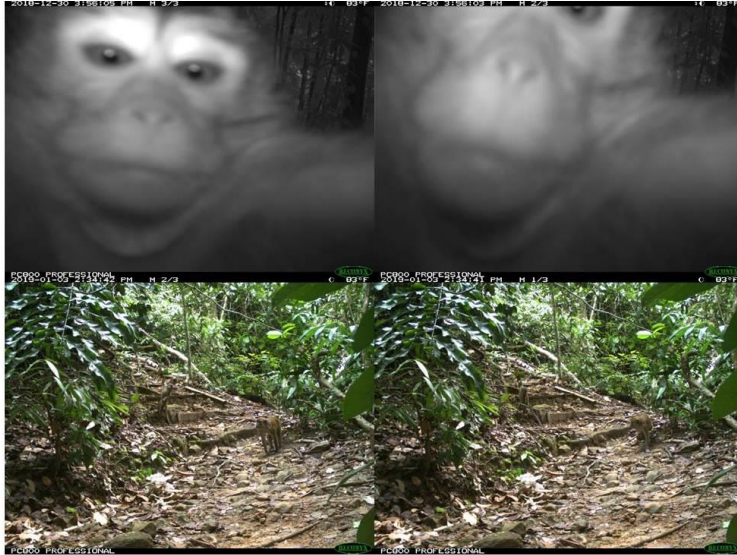


# Conservation through Wildlife Research

## Camera Trapping Implementation report by Charlotte



*M. fascicularis*



*S. barbatus*



*M. cumingi*



*R. norvegica*



*V. salvator*





# Conservation through Wildlife Research Camera Trapping Implementation report by Charlotte



*N. larvatus*







# Conservation through awareness programme “Miraya and Kaehn”



Educating kids on the important of conserving our mangrove forest.

- Visit the mangrove forest and collecting mangrove seeds.
- Visit the mangrove nursery and planting the seeds.







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# Conservation through awareness



We are responsible for what we have done. Our logo floating in the ocean and this is the result for what we have done for the past few years. This is a great lesson and reason for changes.

Shared by  
Justin Juhun