

Learning the 'Organic' way

The Ram Hattikudur
Advanced Training in
Conservation (RHATC)
Fellows went on a field trip
to Hunsur and Coorg

The RHATC course by Zoo Outreach
Organization aims to bridge the gap for graduates
and young professionals between academic learning
and on-the-ground needs by providing real-time
training in different aspects of conservation.

<https://rhatic.zooreach.org>



Our first stop - Gerry Martin and Chandini Chhabra's Liana Trust, in Hunsur.

The Liana Trust is on a farm nestled adjacent to the Devi Kere Lake in the outskirts of Hunsur. The accommodation buildings on site are creative, yet very practical and blend right into the farm. Gerry and his team at Liana Trust study snake behaviour, snake ecology, and research on snake venom. They also conduct education workshops on snakebite mitigation and human-snake interactions. From being accustomed to having posters on the wall, all of a sudden,

our new normal was to have Russel Vipers and scorpions in vivariums around us.

The first discussion with **Gerry** was supposed to be a casual chat, but it ended up being very thought provoking. Some of the poignant topics that he brought up made us question the current practices in conservation. Here are a few topics he discussed with us:

- In the education for mitigation of snake human interaction we often measure the effort we put into educating the public,



but rarely do we measure the impact it has had on them.

- Scientific research shows translocating a snake does not help with conservation. The chance of survival of snakes that are translocated is very low. So, snakes are not being rescued, rather they are being removed.
- All the veterinary courses in India are only for domestic animals, so the domestic vets train for wildlife directly on field
 - *Could you imagine if you were your doctor's guinea pig? Would you allow your doctor to experiment on you?*
 - *In the modern world when there are courses introduced on new topics such as Data Analytics it's quite shocking that a profession like veterinary sciences for wild animals, a profession that has existed for ages, has no specific course or specialization.*
- A question Gerry asked that was startling and had us thinking was "What is really wild in today's world?"

Gerry also explained snake behaviour and demystified some myths based on research. He mentioned that a snake's first instinct is not to attack humans, given the chance, they would rather flee than attack humans. Their venom is precious to them because the primary function of their venom is to immobilize prey and kill it. So, their first option is not to waste their venom, they use it as their last resort. This aspect of snake behaviour was an eye opener to many.

The fellows also got to try their hand at the radio telemetry to track a Russell's Viper on the farm. To make the experience even more

sensory, Gerry also gave us access to his treasure trove of various snake's skin, fangs, unhatched crocodile eggs, ostrich and emu eggs. From the expressions of wonder on each fellow's face you could tell that getting to touch such specimens makes a huge difference in the learning process.

Some of the key takeaways regarding conservation from Gerry were:

- Conservation cannot be based on ethics, as it is subjective. It should be based on science.
- The three important questions to ask before getting into conservation are:
 - Why do you want to do it?
 - How do you want to do it?
 - What do you want to do?
- Always question your approach to see what you are doing wrong. It's common to think we are doing the right thing, but questioning our approach will make us see the flaws and make it better.

Besides the other conservation work that Gerry and his team do, they take in abandoned exotic pets. By giving these exotic animals a home, it prevents these non-native species from interacting with native species in the wild.

Fun fact about reptiles: Did you know that the gender of some reptiles could depend on the temperature the eggs are incubated at?

Insights from Chandini Chhabra:

Chandini is an educator who creates inspiring learning experiences for children in the fields of science, math and ecology. Her way of

teaching is very innovative and is in tune with the way the current generation of children learn. She also educates other educators. Some of the key takeaways and learning from our conversation with Chandini were:

- Don't make education self-centered, make it for everyone's learning experience.
- It's only human to avoid knowing if your work has actually had an impact, but as an educator it is important to measure your impact to know if you are making progress.
- When you have to choose between a long-term engagement or one time engagement, go for the long-term engagement. You'll have a better chance to make an impact in a long-term project and also have the ability to measure your impact as opposed to a one time project which will probably only be enough to sow the seed.
- Educating educators such as school teachers and equipping them with the right tools to teach will help create a bigger impact in the long-term. After all, by doing it yourself there is only so much you can do and only so much time you have. But if you empower educators, it's like creating an infinite chain reaction.

During our time at the Liana Trust we also had the chance to interact with Romulus Whitaker and Janaki Lenin. Stay tuned to know more about interaction with them as it will be covered in another Zoo's Print article.

For the second leg of the trip, we headed to the Rainforest Retreat in Madikeri.

Rainforest Retreat is an eco-lodge situated within the Mojo Plantation, a certified organic

farm in Madikeri. Mojo Plantation was founded by Drs. Sujata and Anurag Goel in 1994. Sujata has a PhD from the Botany Department of Delhi University and Anurag has completed his studies (PhD in Molecular Biology) in Toronto, Canada. Their daughter Maya has also played an integral part in helping set up and establish the plantation. A few steps into the property and you will realize that you are in a rare gem of a place. The Rainforest Retreat has tall, towering native trees and one has to cross over a few streams on wooden bridges to get to the cozy cottages. Sounds like a fairy tale, right?

Day 1 at Rainforest Retreat:

We reached Rainforest Retreat just in time for a scrumptious lunch. After lunch we couldn't help but head straight to the stream at the property for a dip. Without exaggeration, the stream looked just like the ones you'd find on a Windows screensaver.

Later that evening we went for the Sterling walk. It was a short walk, but it had some steep climbs. There were spectacular views along the way and at the highest point we had gotten to see undisturbed panoramic views of the Western Ghats with the native shola forest-grasslands far into the distance. Just after the sunset, we were able to see Saturn and Jupiter against the evening sky with our naked eyes.

During the trip the weather was mostly cloudy and there was an occasional drizzle or bursts of rain during the other times. Fortunately, that night the skies cleared for some time and we were able to stargaze. Obuli Chandran, a science and astronomy

accompanied us on our trip. He showed us the Andromeda galaxy, Pleiades, Hyades Cluster through his astronomy binoculars. The weather that night was not favourable for him to set up his telescope, but read along to know and see some more about our astronomy viewings in Coorg.

Day 2 at Rainforest Retreat:

The following day we had gone for the Ridge walk. The Ridge walk is adjacent to Mojo Plantation. We saw some of the post effects of the landslides that took place in 2018 after a record high rainfall. We learned about how the landslide areas were stabilized by planting bamboo, hibiscus, banana, and vetiver. This restored patch of vegetation will help prevent further soil erosion.

After the Ridge walk, we returned to the Rainforest Retreat for Lunch. During lunch we had the chance to interact with the neighbouring estate owners, Abishek and Anna. Our interaction with them will be covered in another Zoo's Print Article. After lunch, some of us helped with peeling cinnamon bark and the others helped plant sweet potatoes in their veggie garden. Getting our hands dirty while planting sweet potatoes triggered the inner child in us and we broke into an impromptu mud fight. We headed to the stream to wash up after the mud fight, but the friendly fight continued and more people joined in and it sure was 'more the merrier'. Later that evening, Anurag showed us some photos and videos of some regular visitors to the plantation. These



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include the Barking Deer, porcupines, Small Indian Civet, Brown Palm Civet, Nilgiri Marten, Plum-headed Parakeet, Grey Mongoose, White-bellied Woodpecker, Malabar Grey Hornbill, and the Malabar Gliding Frog.

After Anurag's presentation, we went for a nocturnal walk with him to check out the nightlife scene in the wild for ourselves. The croaks and calls of the creatures around us were intense against the stark quietness of the place. For some of us, it was our first experience to go into the wild at night. So, we were tip-toeing taking each step, very carefully, and flashing our torches side to side frantically when the walk began. As we began to see the frogs, cicadas, spiders, and snails were so absorbed by it our franticness eased that we began to let loose and just be in the moment. We also spotted snakes including a *Boiga beddomei* (Beddome's Cat Snake), *Boiga thackeray* (Thackeray's Cat Snake), an unidentified *Boiga* species, and *Fowlea piscator* (Checkered Keelback).

Day 3 at Rainforest Retreat:

Sujata took us for a plantation tour and showed us a wide variety of trees and crops. We saw food crops such as cardamom, pepper, vanilla, wild pepper, kokum, and of course, coffee. At Mojo Plantation they have retained the natural landscape of the land, with many native trees and they grow the crops in between the existing landscape.

Having the experience of running a certified organic farm for many years, Sujata explained to us how they have dealt with pests the organic way. As two biologists, Sujata and Anurag have used their scientific

thinking approach and merged it with traditional practices to come up with their own recipes for pest repellents and manure. The decisions regarding the plantation at Mojo since its establishment 27 years ago has been thought out for the long term with sustainability as the key driving factor.

The biodiversity identified at Rainforest Retreat during the 3 days:

We identified 15 species of amphibians, eight species of snakes (including road kills), 58 species of butterflies, eight species of spiders, five species of dragonflies, three species of snails, and 18 species of birds.

Other highlights from Rainforest Retreat:

The food at Rainforest Retreat needs a special mention. It was delicious, hearty, healthy, and nourishing. Most of the ingredients used are organic and you can tell that it makes a world of a difference.

Another highlight of Rainforest Retreat is the staff, who are warm, friendly, and extremely knowledgeable about the plantation, biodiversity, and about the landscape around them. A special shout out to Ravi and Muthu for sharing their knowledge of the biodiversity and of the land with us during the Sterling walk and Ridge walk. We left the Rainforest Retreat with some wise and beautiful words from Sujata. She said "If you spend time listening to the land, life itself will sustain you."

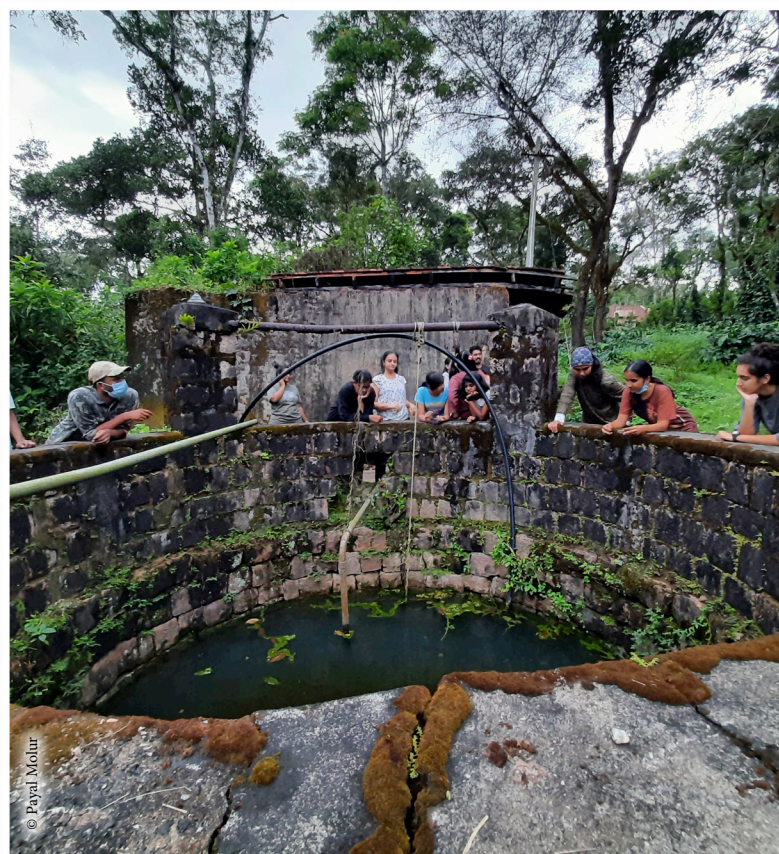
For the last part of the trip, we headed to one of the RHATC Fellow – Ashritha's coffee estate near Shanivarsanthe in northern Coorg.



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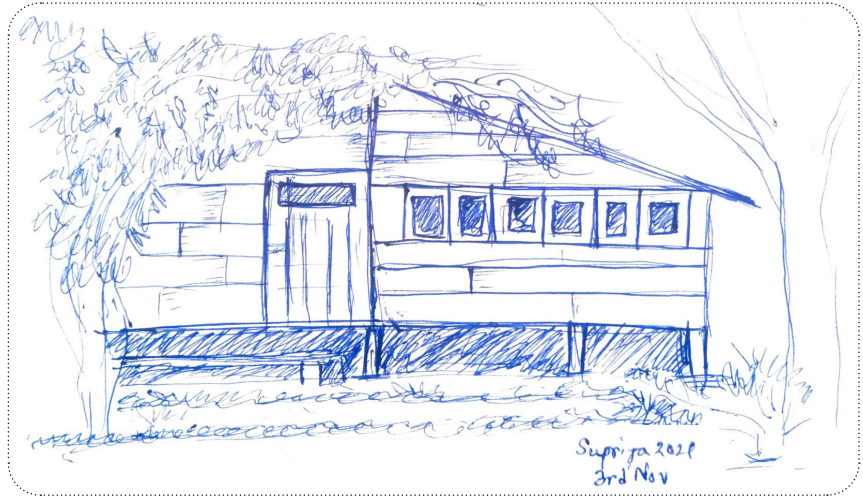
The estate is called **Yedehally Estate**. We were warmly greeted by her family and they prepared some delicious traditional food for us. The coffee at her home was one of the best coffees I've ever had, of course, it came from her estate and was as fresh as it possibly could be.

Ashritha took us around the plantation for a walk and showed us how the coffee bean is extracted from the coffee fruit. Besides being surrounded by Robusta and Arabica coffee plants we got to see some of the native trees such as the native tall Mango Tree, Soap Nut Tree, ficus, Malabar Ironwood, and many more. We saw some turtles swim around in the pond. She also mentioned there is a bird checklist with more than 110 birds in the estate which she has noted from the past eight years. We also spotted some birds, including the Malabar Grey Hornbill, Malabar Barbet, Malabar Parakeet, Malabar Whistling Thrush, Plum-headed Parakeet, Puff-throated Babbler, Racket-tailed Drongo, Flameback, Verditer Flycatcher, White-browed Wagtail,

Laughing Dove, Red-whiskered Bulbul, Mottled Wood Owl, Black Drongo, White-cheeked Barbet, House Crow, Cattle Egret, and warbler species.

Later that evening, the skies were clear and we had the chance to stargaze again. Obuli set up his telescope and we got to see Saturn, Jupiter and its 4 moons, Andromeda galaxy Cygnus, Cassiopeia, Andromeda, Perseus, Auriga, Taurus, and Orion (See back cover picture). The following day we went to the Bisile Ghat view point. The expanse of greenery with waterfalls and streams was breathtaking. The view was so good that it got the entire lot to shut up for a while (a rather rare moment) and got many of us sketching.

After the Bisile Ghat viewpoint we went to Mookanamane Falls. While some were skipping stones, some others tried and failed miserably. The time at the falls was a combination of fun, frolic and oddly even solitude, well we do have some very deep thinkers.



**Liana Trust
dormitory**



**The road to
Malabar Grey
Hornbill's at
Yedehalli**

**The cozy
cottage at
Rainforest
Retreat**

Overall, the trip was a very educational one with tons of laughter and fun along the way. We got to have some mind-blowing experiences with the places we saw and people we met. If learning was so interactive and fun, no student would dread a Monday!



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