

Agasthya



Close encounters of the wild kind

There have been some interesting developments since the first issue of *Agasthya*. As mentioned in that issue Dr. Meg Lowman or "Canopy Meg" as she is called, kept her rendezvous with Agasthyamalai. She in fact formally released *Agasthya* at Singampatti field station and planted a sapling of *Madhuca* at our new field station site. After returning from her visit she had this to say

"I recently had the privilege of visiting the field research sites of T. Ganesh and Soubadra

Devi in the Tiger Reserve of the Western Ghats. Their canopy work is very important for India's ecological stewardship, and seeing their ladders, as well as the Western Ghats forests with its incredible wildlife was very impressive. I hope to return for some long-term collaboration between the Center for Canopy Ecology (based at New College of Florida) and ATREE canopy research."



Dr. Meg Lowman releases

Kodayar. Though the exact date was not printed on the film, the photo was roughly taken between the 4th and 6th of March. There is now definite evidence of the large cat in the evergreen forests of the Reserve.

I am really happy to state here that *Agasthya* received tremendous encouragement and support both from ATREE and outside. It is now a challenge for us not only to keep it going but also make it interesting. For this we will require people to contribute and comment on the issues. So far the response has been encouraging. We have plans of opening it to other groups working in the region. Happy reading!

T. Ganesh

Camera Trapped!



After we hinted in the last issue about the elusive KMTR tiger, the cat was finally photographed using a camera trap deep inside the evergreen forests near Upper

Bats in the absence of birds?

One morning while looking for *Cullenia* trees in a forest fragment, I noticed hundreds of *Prunus ceylanica* seeds scattered under a *Cullenia*. I got curious and started looking for the *Prunus* tree. I found it 100m away. My assistant told me that it was the *Vaval's* (Bat) work. I wondered which species of bat it could be. We ventured late next evening to investigate. We finally found a brown, medium sized fruit bat, hanging from a tiny twig in the

foliage of the *Cullenia*. Though it was dark, we could clearly see it dropping *Prunus* seeds. Interestingly, *Prunus* is a temperate genus and the fruits elsewhere are ideally adapted for dispersal by birds. In Kakachi, only one species of bird helps in its dispersal though, bats and civets appear to be the major

seed dispersers. Has the paucity of birds made *Prunus ceylanica* adapt to nocturnal animal dispersal? Several questions crop up and the presence of species like *Prunus* makes dispersal systems at Kakachi very interesting and different from the expected.

Chetana H. C.

Fruit Bat



Inside this issue:

Do religious enclaves save vegetation?	2	Small shrew... big brain	3
A learning experience	2	Tahrs in the mist	3
My first foray into the canopy	2	Discovering and counting trees - Sensitizing children to conservation	4
Mechanization versus rural livelihood	2	Some memorable days at Upper Kodayar	4
Kanis and their Local Knowledge Base: Some Concerns	3	Fascinating mountain ranges and fanciful legends: Agasthya weds Cauvery	4
Towards a plastic-free KMTR	3		

Do religious enclaves save vegetation?

Like other ranges in KMTR, Thirukurankudi is home to many endemic plants including a narrow endemic *Indotristicha tirunelveliana*. Despite the fact that this range is blessed with many seasonal and perennial streamlets, information about the ecological impact of anthropogenic pressure on these riparian forests is unavailable. Inside KMTR, invariably all ranges have at least one temple close to river banks. Thirukurankudi is home to two of them, viz., Nambikoil and Thaipatham. During festive and holiday seasons, the number of pilgrims are high in these areas. Associated activity like cooking at the river banks, cutting shrubs for fire wood and discarding polythene waste has lead to the destruction and alteration of vegetation. This is especially true when, a



Indotristicha tirunelveliana

few months ago a site was visited for a reconnaissance survey. Saplings and treelets of some of the species that were commonly seen earlier are almost completely absent now. Prolonged anthropogenic pressures on riverine environments not only alter the vegetation and physiognomy of riparian forests but may also have major effects on riparian ecosystem function, much of which is unknown. Riparian community dynamics in these areas will be very difficult to understand if this continues.

One fine day, aggregation of these smaller issues may evolve into an unsolved colossal problem! We can only hope that it is addressed and redressed before it is too late.

Kottaimuttu

My first foray into the canopy

Entering a rainforest is a truly shocking experience for a person who is been used to working in semi arid grasslands. I was overwhelmed by the forest as I entered it. All I could think of was being greedy, because I wanted to take in so much of the view, that 180° of vision was not enough. Walking in grasslands among the vast tracts of golden grass stretching into the horizon takes one back to our ancestors roaming the Savannah, but a closed dense rainforest is something entirely different. Something I still cannot describe except for the fact that I wanted to drink in the view. But, I hardly had time to explore the forest floor before being strapped into a harness, being taught the basics of the Single Rope Technique and was hauled into

the canopy in Kakachi, KMTR. As usual I was being quite piggy with the fact that the view was so different. Being in the canopy of a *Cullenia* tree was truly a humbling experience. First, the height from the ground hits you. Second, you can only marvel at the way most of the animals, LTM's and Giant squirrels to name a few, negotiate up there without even setting foot on the ground. And third, being in the canopy of a *Cullenia* reminds one of those childhood days of sitting on the shoulders of your grandfather and looking at the world below you over an unfortunately bald head, absolutely no match for the *Cullenia* canopy though.

Aditya Bhaskaran.

A learning experience

Our visit to Agasthyamalai range of mountains left an indelible impact on us especially when we understood the necessity to study canopies in India and around the world. From our visits to different parts of the Western Ghats, the Tamil Nadu side of Agasthyamalai seems to enjoy a certain unique protection, which was evident during our transit from the plains. Although a single tea plantation corporation is manning this area, it has helped check unwanted threat to this sanctuary. While most of our understanding of evergreen and shola forests is confined to our class room, this visit opened up a series of questions towards understanding the ground realities of conservation. Development interspersed with natural habitat has raised several questions about our strategies towards progress and also the concept of protected areas. The dam at the entrance was an oppressive image of industrialization, with no or little regard for the environment. Particularly, we were disappointed as we approached the large reservoir and noticed hundreds of tree stumps that would have been a part of the large and continuous evergreen vegetation. Although our excitement to explore was never ending during this visit, it also provided us a few critical insights of every individual's responsibility towards conservation.

Navrun Jacob, Siddharth John and Srinivsan K.



A view of the Western slope

Mechanization versus rural livelihood

The river Tamarabarni once known as Porunai flows from the Agasthyamalai mountains and irrigates the fertile plains of the Tirunelveli district. A large number of people not only from the district but also from far of places such as Theni and Dindigal near Madurai sustain their livelihood from the waters of this great river. The indigenous



Mechanized harvesting

communities of Pallar who come from these far away places camp near the Tamarabarni during the harvest season. They work as labourers in farms and are given only rice and no money for their help in cutting, bundling, winnowing and transporting paddy in carts. This scenario changed post 1998 when harvesting machines ap-

peared resulting in decrease of manual labour. Since then the seasonally migrating farming communities have stopped coming to the villages in the river basin and were denied a secure food source that forced them to seek employment to buy rice. The consequence of mechanization thus forced the Pallar and other such communities to migrate to cities in search of alternate livelihood. One then wonders if it is right to mechanize farming in a country where there is sufficient human resource.

Joseph Anthony

Kanis and their Local Knowledge Base: Some Concerns

The Agasthyamalai region is popularly known for its endemic and diverse flora and fauna but not much is known about the ethnic Kani community that reside in this region. Kanis live within KMTR in scattered hamlets in the Thambaraparni basin. They depend on forest resources

for their day to day activities. Due to a number of eco-development schemes implemented by forest department and initiatives taken by the government and non-governmental organizations, there has been a gradual downward migration of their populations. Most of them have settled in the Mundanthurai plateau leaving about 30% of the families in their old locales. As a consequence of this, fewer peo-



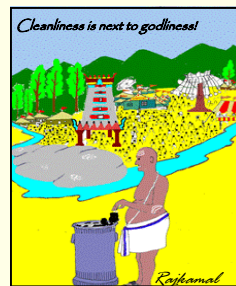
A Kani settlement

ple go into the forest leading to a general decline of indigenous knowledge of forest plants. During some informal conversations with Kanis, we found only family members above the age of forty have good knowledge about the flora, fauna

and their utility in local medicine. A number of researchers take members from such groups into the forest to help identify plants. They are invaluable for the forest department, which employs many of them at the field level. It is a matter of concern that there is an alienation of the younger generation from the traditional Kani knowledge systems.

V. Ganesan

Towards a plastic-free KMTR



KMTR has several religious enclaves which are accessible to people. Prominent among them is the Sorimuthaiyan temple which attracts about 400,000 people during 'Aadi Amavasai' (new moon day in the

month of August) festival from surrounding villages. During the festival, the biggest menace has been the poly-bags which are used by food stall keepers and campers that accumulate in large quantities. The polythene bags with left over food are many a times ingested by wild animals which prove harmful to them. We are presently working on a ban replacing poly-bags with cloth bags. We are also using various media such as FM Radio, street plays as outreach tools to highlight the woes of poly-bags in this sanctuary.

R. Vivek

Small shrew... big brain

While visiting KMTR to plan some work on ants, I came across a few abandoned cardamom plantation sites. Typically in these sites, the canopy is intact while the other strata are either missing or disturbed. Considering that there are several cardamom sites in and around the reserve, they deserve some attention as they shelter diverse taxa. This is when I hit upon an idea of sampling across taxa such as ants, butterflies and birds to see if there is a change in the understorey communities in sites that were recently abandoned and those that were abandoned several years ago, keeping the primary forest as a control. On one of these explorations in the cardamom sites, I noticed a

small creature crawling in the litter and to my surprise I found it to be the Pygmy Shrew (*Suncus etruscus*). The creature was injured and probably dropped by a predator but was still alive.

Study of rodents across the globe has been extremely fascinating because of the fact that, specially designed traps with scrumptious bait, do not seem to be good enough to lure and trap them. Instead the rodents

Pygmy Shrew found in an abandoned cardamom estate



normally neatly skirt around the traps and escape. On the contrary, it is hilarious that during sampling, ecologists either encounter all the species except the focal species, as it happened with me in this case or sometimes nothing at all often leading to a lot of frustration. Pure animal instinct and survival tends to outsmart most of our efforts to study them, be it lures, traps and what not.

Savitha Swamy

Tahrs in the mist

We set out on a trip to Muthukuli on 3rd April when rains prevented the normal field fare in Kodayar. By 8am we were on our way after packing ourselves in the Jeep. Within half an hour we saw a large herd of about 18-20 gaurs. Hardly had the excitement passed before someone shouted "Tahrs"!! We all turned towards the cliff on the other side of the path to see six



Nilgiri Tahr in Muthukuli

stout Nilgiri Tahrs, the elusive wild goats endemic to the mid-elevation and higher ranges of the Shayadris. They were busy nosing the grasses on the rocky hill. The first glimpse of the Nilgiri Tahrs in the wild was an unbelievable experience. After the Tahrs moved out of sight, we had our breakfast on a cliff near the seventh saddle of the Upper Kodyar dam, overlooking

the vast plains stretching from the western slopes of the Ghats towards the Arabian Sea. It felt like having breakfast on the roof of the world! After a fallen tree prevented the Jeep from moving further, we continued on foot. We came across the dilapidated summer palace of the King of Travancore, where we feasted on wild raspberries. Later we saw four more Tahrs. When the mist surrounded the vast grasslands and the rocks, we knew it was time to turn back.

Rajkamal Goswami

Discovering and counting trees – Sensitizing children to conservation

On 16th June 2007, we introduced the children of ATREE's Green Brigade at Singampatti to the fascinating world of trees. A presentation was made on trees and their role in the life of humans, animals, and the environment in general. We followed this with some field activity such as counting trees planted by ATREE in the villages. ATREE has been distributing saplings of several species of trees free of cost to village people for several years in the Singampatti region.

We conducted a demonstration on counting trees and taking measurements on trees in the field station. After this, the group was split into four according to their villages (Ayan Singampatti, Zamin Singampatti, Indira Colony and South Papankulam). Each group elected a leader who was made responsible for organizing the tree counting. They were provided with notebooks, pens, tailoring tape and a 1.3 m stick for collecting data. 28 children participated in this program. They started collecting tree census information in their respective villages and enjoyed this activity immensely. We monitored their census and encouraged them.

On the 23rd June, another meeting was organized where different groups shared their data. We verified the data and gave suggestions for improvement. The group from Ayan Singampatti



ATREE's Green Brigade after the field activity

enumerated more than 200 of ATREE's saplings belonging to 20 species. The other groups also collected similar data. The Green Brigade children faced some difficulties like identifying species and taking GBH measurements. We entered their data in the computer after verification and gave away prizes to the best team. We are continuing with the census and hope it will end by July 2007. ATREE has given more than 10,000 saplings belonging to 50 species to the villages. We hope the brigade finds more than 2000 of these.

Mathivanan

Fascinating mountain ranges and fanciful legends: Agasthya weds Cauvery

The local communities in the Agasthyamalai range have innumerable stories about Sage Agasthya, who according to them still roams these mountains collecting herbs to practice Siddha medicine. His popularity is growing, if one goes by the number of pilgrims to the Agasthyar peak - the tallest in the entire range. What really surprised me was the mention of Sage Agasthya when I visited Talakaveri—place of origin of the Cauvery River. I got a little curious and wondered if Agasthya roamed the Kodagu hills also to promote Siddha. A few enquiries revealed that Sage Agasthya, on his way to the south, was enamored by a beautiful damsel called Cauvery and asked her father for her hand in marriage. As the story goes, Cauvery, being a dutiful daughter agreed to marry the sage but with a condition. She told Agasthya that if he left her alone even for a moment, she would leave him. And it so happened that the sage did leave her alone for a while and went to a nearby stream for his bath. It was then that Cauvery decided to leave her husband. She

started her penance to transform herself to a life saving river for the dry regions east of the Kodagu hills. As the mighty Cauvery plunged from the hills to the plains, the force of the river was so much that the pleats of her sari, which were in the front moved back. This legend is carried on even today as the charming ladies of Kodagu wear their sarees with the pleats at the back. Undaunted, Agasthya came further south and continued his practice of Siddha medicine and settled in the Agasthyamalai hills that gives rise to the beautiful Thamrabarni River.

Soubadra Devy

Traditional Coorgi attire.



Some memorable days in Agasthyamalai

If you look at the map of Tamil Nadu to locate Upper Kodayar, what you will find is a reservoir shown in blue. But most of us are unaware of the rich biological wealth of this place clothed in Tropical Wet Evergreen Forests. I was fortunate to spend one and a half years roaming through these forests, courtesy of ATREE's research station and would like to share an exciting moment from those days.

One sunny afternoon my field assistant Chian and me were returning to the field station after lunch at Nalmukh. We were half way when we saw a furry brown creature moving through the shrubs, a Brown Palm Civet, unusual at this time of the day. I was surprised that the noise of the engine did not scare it off. I asked Chian to go near the animal. He was only a meter away from the civet and yet it did not pick up his smell, still busy searching for *Elaeocarpus munroni* fruits among the leaf litter. After a minute, it sniffed the air and made its way up into the forest struggling up the steep edge. If I had a camera in hand, I could have frozen that memorable portrait of man and animal close to embracing each other. But this sense of lost opportunity gave way to a pleasant feeling that we had saved this wonderful creature. What if somebody else had found it? May be Chian and I were God sent samaritans for the civet.

Patrick David



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"Benefit derived from the cultivation of coffee and such paying crops would be insignificant as compared with the damage that would be done if the water supply available for irrigation in the plains was diminished".

D. Brandis, On the Agasthyamalai Range in 1882.