

NEWSLETTER of the NILGIRI NATURAL HISTORY SOCIETY

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EDITORIAL BOARD

Anita Varghese¹, Archana Sivaramakrishnan¹

Mathew John^{1,2}, Sumin George Thomas¹

Manju Vasudevan¹

¹ Keystone Foundation, Kotagiri, Nilgiris - 643217, Tamil Nadu, India.

² Last Forest Enterprises (P) Ltd., Kotagiri, Nilgiris - 643217, Tamil Nadu, India.

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For membership and other details contact :



Nilgiri Natural History Society,
144-A, Bee Museum, Club Road. Opp. Hill Bunk,
Ooty -643 001, Nilgiris, Tamil Nadu, India,
email: contact@nnhs.in,
Phone No: +919442619577



Indian Kangaroo Lizard (*Otocryptis beddomei*)

Indian Kangaroo Lizard is an endangered reptile found only in South India. In Kerala their distribution is confined to Trivandrum & Kollam districts. A good population is observed in Thenmala and Shenthuruni regions of Kollam district and Agasthyamalai of Thiruvananthapuram district. The peculiar running pattern using the hind legs (upright) gives them the name Kangaroo lizard. They are usually found in thick ground cover of evergreen forests.

Cover photo: **M. Divin Murukesh**
From Shendurney Wildlife Sanctuary

EDITORIAL

Welcome to the twelfth issue of the Newsletter of the Nilgiri Natural History Society. The past few months have witnessed incessant and record shattering showers across the coast of Tamil Nadu, bringing life almost to a standstill and wreaking havoc. The Nilgiris received a fair share of showers too, but despite the untoward events, the people and the landscape have shown resilience. However, it is a lesson to bear in mind.

The current issue brings to light the south-west region of the Nilgiri Biosphere Reserve - Nilambur, the land of teak plantations, rivers, rainfall, evergreen forests and indigenous communities. The conservation and research efforts and natural history in the region have been highlighted in this issue. To start with the Biodiversity Nature Park in Nilambur set up by the Kerala Forest Research Institute which serves as an information hub to visitors and as a gateway to the Nilgiri Biosphere Reserve. Along with the visitors to the Nilgiri Biosphere Reserve, the butterflies too seem to be using Nilambur as its migratory corridor. The evergreen forests of Nilambur are home to abundant wildlife and even the tree holes seem to harbour quite an array of insect life. The birthplace of many streams the Chaliyar River and its tributaries, and these waters harbours several endemic and endangered aquatic species, a snapshot of the fishes is described in this issue.

Along the banks of these rivers and streams live the indigenous communities, who essentially are the custodians of the forests of Nilambur, and indigenous knowledge is plentiful, as evident in the Natural Historians section where Gopiyettan from Eruttukutti shares his views. The gold deposits in Nilambur and the Assyrians provided an interesting twist to the origin of indigenous communities in the upper plateaus of the Nilgiris. Despite nature's bounties at their disposal, the health of indigenous communities of the Nilambur is diminishing and the determinants would be various as discussed in this issue.

We have introduced a new section to the newsletter 'Visitors to the Nilgiris' and this issue features the visitor from Japan, the Blue and white flycatcher and we hope that more come by in the months to come.

Finally, the regular feature of the newsletter the young voices from Nilambur, Pillur and Punanjanur and the activities of the Nilgiri Natural History Society.

The Editorial Board wishes to thank all the contributors to this issue of the newsletter and look forward to many more contributions.

Happy Reading!



Biodiversity Nature Park in Nilambur

- Dr. U.M. Chandrashekhara

During the year 2007, the Kerala Forest Research Institute established a Bioresources Nature Park (BNP) at its Sub Centre in Nilambur. Located adjacent to the Teak Museum, the BNP is now evolving both as an *ex-situ* plant conservation area with plants categorized and presented under eight thematic areas such as orchid house, fern house, hydrophytes garden, xerophytes and succulents garden, medicinal plants garden, palms and rattan garden, butterfly garden and taxonomic garden. All the themes are presented in a landscaped garden carpeted with grass. The ambience of the general area is also enhanced by a wide variety of ornamental plants. Within

destination and public nature education site for local people and thus they are willing to re-visit and recommend the BNP to their friends and colleagues. However, a few respondents, whose travel motivations are solely to have fun and enjoy the BNP as a play ground and a picnic spot, are either definitely not willing to re-visit or recommend the BNP to their friends and colleagues. Since the objective of the BNP is to serve as a base for public nature education, the BNP staff try to enforce the codes and conduct of the BNP on visitors which can make the BNP unattractive to certain visitors. The survey also showed that the BNP visitors mostly came to gain access nature or enjoy the scenery of the garden. However, after the visit they felt that they have significantly higher satisfaction than expected as they gained additional educational experiences such as exposure to plant diversity, botany,

gardening and plant propagation. They also stated that the educational functions of BNP by having theme areas and biodiversity knowledge dissemination activities are closely knitted with recreational functions, thus enhancing the visitors' satisfaction. The KFRI has recognized the fact that positive feelings about goods and services of BNP is leading to repeated visit by the visitors and also attracting new visitors. Therefore, attempts are being made to emphasize more on the educational role of BNP in public image and in turn enhance the BNPs attractiveness to visitors. For this purpose, KFRI offers high quality knowledge-based educational programmes and to improve the visual illustration of the biodiversity and beauty of plant diversity.

KFRI Subcentre, Nilambur, Kerala. Pin: 679 342 e-mail: subcentre@kfri.res.in



eight years of its establishment, the BNP is recording an increase in annual turnover of visitors from 12.8 lakhs to 25.6 lakhs. The increasing trend of annual visitors is an indication of the fact that the visitors are being attracted to the BNP for its educational and recreational functions. Recently, an on-site survey was conducted to examine the effects of visiting BNP on visitors' experience and satisfaction. Over 90% of the respondents felt that the BNP is becoming a most popular travel



FRESHWATER FISH

of the Karimpuzha River through indigenous lens

Satish Chandran & K.G Ramachandran



Local Name : **Aaral**
Scientific name : *Mastacembelus armatus*
Habitat : Found normally in rock holes and tree roots under water. Sometimes found in wooden holes of those trees fallen down into rivers
Habit : Spend their time under water day and night and feed on insects mostly and at times on small fishes
Status : Very common in Karimbuzha and other streams around

Local Name : **Arana**
Scientific name : *Osteochilus longidosalis*
Habitat : This fish is found near the rock-blocks in running water
Habit : Spend most of the day under water feeding on small fish and insects
Status : Sharp decline in population, Sandmining is a major reason of declining population

Local Name : **Cheraan**
Scientific name : *Channa marulius*
Habitat : This fish found mostly in the deep muddy parts of river and streams
Habit : Feed on insects, small fishes, frogs and spend time in depth of water and moves on as couple
Status : Few are found here when compared to past. The reason for decline is believed to be the absence of silt down the water.

Local Name : **Chundan**
Scientific name : *Gnoproktopterus Kolus*
Habitat : Seen normally in the depth of rivers
Habit : Active during night in deep water and feed mostly on small insects
Status : Common in Karimpuzha



Local Name : **Chattali**
Scientific name : *Barilius getensis Day*
Habitat : Found mostly in rivers and fields and in slow running water
Habit : Feeds on small insects and rests on the surface of water
Status : Common in Karimpuzha

Local Name : **Kadunna**
Scientific name : *Tor-tor (Hamilton)*
Habitat : Found commonly near the rock-blocks in running water
Habit : Spend most of the time under water and feed on small fish, frogs, other insects
Status : Very common in Karimpuzha

Local Name : **Koyatti**
Scientific name : *Ompok bimaculatus*
Habitat : Mostly found in river, streams
Habit : These fish prefer spending day and night under the water and feed on small fishes and insects
Status : Rare. Very few are found these days.

Local Name : **Pootta**
Scientific name : *Etroplus Suratensis (Bloch)*
Habitat : Found in still water near the banks of rivers, streams and fields
Habit : Spend their life close to river bed
Status : Common in Karimpuzha



Local Name : **Poosan**
 Scientific name : *Travancoria Jonesi Hora*
 Habitat : Found mostly on sands where there is low water movement in river, streams and paddy fields
 Habit : Spend most of the day under water feeding on small fish and insects
 Status : May be endangered in Karimpuzha and hardly found in any streams recently. Excessive sand mining is causing a decline of population of this fish. Poisoning to catch fish has become a threat.

Local Name : **Kulapparal**
 Scientific name : *Rasteora danciconius*
 Habitat : Found in still water near the banks of rivers, streams, ponds and fields
 Habit : Feed on small insects, grass and moss and rest on top of water day and night
 Status : Very common in rivers, streams and fields

Local Name : **Kannanchutti**
 Scientific name : *Aplocheilus linetus*
 Habitat : Found in still water near the banks of river or streams
 Habit : Normally active on the top of water daytime and feed on small insects and tender tip of grass plants
 Status : Rare. Poisoning and use of electric shock in the water to catch fish have caused the decline

Local Name : **Kallamkkari**
 Scientific name : *Garra maclellandi*
 Habitat : Live most of the time in river. Lay eggs in streams and paddy fields during monsoon months.
 Habit : Like to spend day and night near rocky outcrops in running water mostly under water. They feed on rock moss
 Status : Common in Karimpuzha and found more during monsoon



Local Name : **Koytha**
 Scientific name : *Mesonoemacheilus triangularis Day*
 Habitat : Found mostly on sands where water movement is less in river, streams and paddy fields
 Habit : Like to spend time under water and feed on the 'Ekkal' of sand or mud
 Status : There is decline in population due to excessive sand mining

Local Name : **Varal**
 Scientific name : *Channa orientalis*
 Habitat : Commonly found in river, streams and paddy fields
 Habit : They spend their days and nights on the surface of water and feed on insects, small frogs and other small fish
 Status : Common in Karimpuzha and many found in water bodies of rural land

Local Name : **Mananjil**
 Scientific name : *Anguilla bengalensis bengalensis (Gray)*
 Habitat : Found normally in rock holes and mud holes in deep water of rivers and streams
 Habit : Feed mostly during night on small fish, frogs, insects
 Status : Very few as compared to past. Decline largely caused by the use of extreme poisoning and explosives in order to catch fish

Local Name : **Kotti**
 Scientific name : *Mystus armatus (Day)*
 Habitat : Found in still water near the banks of rivers, streams and fields
 Habit : Feed on small insects and like to spend time under water. The sting of this fish is painful for some period of time
 Status : Very common in Karimpuzha

Many of these fish are part of the diet of the local indigenous people and also a source of medicine for ailments like asthma.

K G Ramachandran is the Area Manager & Coordinator for activities at the Village Conservation Centre, Keystone Foundation, Nilambur (ramu@keystone-foundation.org)
 Satisb Chandran works at the Keystone Resource Centre in Nilambur

Butterfly migration in the Nilgiris: pieces of the big picture

Anoop Das K.S and Divin Murukesh



The word 'butterfly' brings to mind images of colour, flight and even some fascinating stories of witches who take the form of butterflies to steal milk and butter!

These six-legged, scaly winged, colourful creatures have always been a source of wonder for human beings especially in their metamorphosis from a crawling voracious leaf-feeder to a mild and vibrant shaded flyer.

The mass movement of butterflies also called as seasonal migration or dispersion is one of Nature's splendid air shows! The migration of the North American Monarch butterflies *Danaus plexippus* as a model organism is well studied. Many species of butterflies in the Western Ghats also migrate seasonally and this has been monitored for some years now in the Nilambur valley of the Nilgiri Biosphere Reserve. The Nilambur area is geographically and ecologically unique with an abundance and variety of fauna and flora in spite of its high human population. One third of this region is under natural forest cover with an abundance of Teak and has the mighty river Chaliyar and its tributaries originating from the Southern Western Ghats flowing through it.

In southern India butterfly migrations have been recorded in small and large scale from the beginning of the last century (Williams

1927; 1930 & 1938). In comparison with the large body of scientific work carried out on the taxonomy and ecological aspects of insects, the scientific observations on migrations are few as far as the southern Western Ghats are concerned. Among the observed and recorded butterfly migrations in Western Ghats – the migration recorded from Kothagiri Hills towards western plains in Kerala through Vellingiri Hills and Anaikatty Hills is regular and comparatively longer with occasional sightings of the mass movements up to 350 kms and having a width of upto 1km (Eswaran 2006). But the continuity of this migration has not been traced and mapped, there exist only personal communications between different naturalists and environmentalists. Some observations show that the migration proceeds up to the Malabar Coast till March – April and stops at the Ponnani Estuary of Malappuram District.

A similar migration with similar species composition was observed by Kunte (2006) at Chinnar Wildlife Sanctuary during October towards south-west direction. Right now there is no evidence

to connect the migration from Nilgiris to western plains with the one observed in Chinnar, but since the exact origin of the migration from Nilgiris was not understood and the species compositions are similar, the chances of a meta-population dispersal from a single or a group of epicentres at Nilgiris towards west and south direction cannot be ruled out and should be seriously considered. In such a case it's necessary to confirm the nature of the phenomena and presence of such epicentres of mass insect production in the region since the epicentres must be one among the un-replicable habitats in the region.

The movement of butterflies starts by late September from the north eastern side of Nilambur, part of the Western Ghats and take a route through Nedumkayam forest range and travel through densely populated areas of Nilambur. The mass movement is not restricted to a single species. Most of the time the group contains three or four species such as Blue Tigers, Common Emigrants, Blue Bottles and Common Crows. The butterfly congregations on the milk weeds along the river banks and their mass mud puddling was observed. The movement of thousands of butterflies can be seen for a week and after that most of



involvement of local public, voluntary assistance in local sampling and recording of mass movements can be promoted. Once the place of origin, the route taken and the destination of the migrant species is deciphered, ecological characterization of the origin and destination sites can be done and the factors which trigger migration can be identified. Later we can identify the vulnerability of these habitats and that may help draw management guidelines for the area.

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K.S Anoop Das, Ph.D., Assistant Professor, Center for Conservation Ecology, Dept. of Zoology, Mampad College PO, Malappuram Dt, Kerala, India, 676 542, www.mesmampad.org

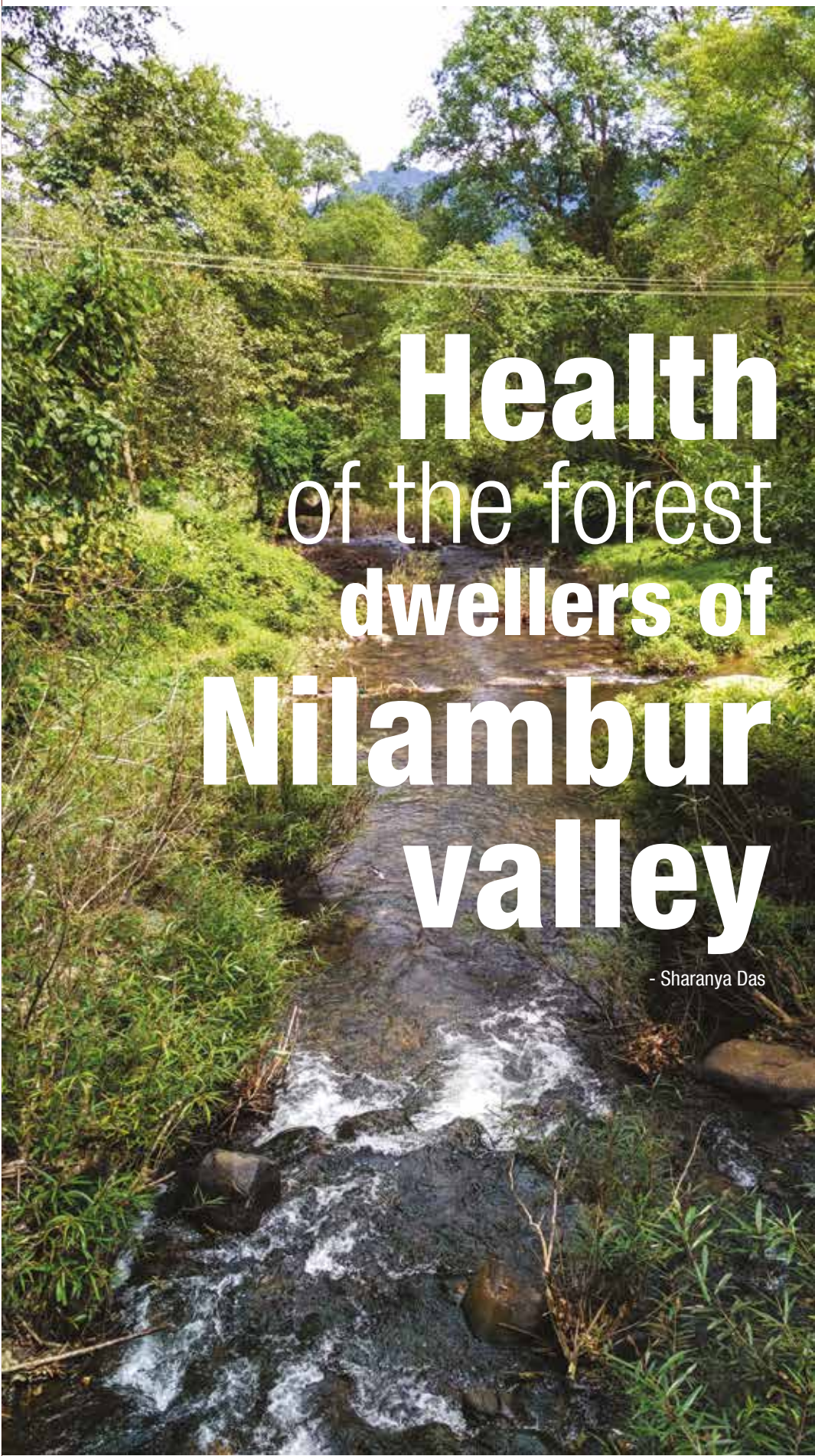
M Divin Murukesh, Ph.D. Fellow Centre for Conservation Ecology, Dept. of Zoology, M.E.S. Mampad College, Kerala, India, e:divinmrcr@gmail.com

the congregations are observed at their stop over sites including deep forest patches. The epicentre of the mass production is a mystery still. One can presume that a lower occurrence of parasitoids might have lead to the proliferation of butterfly masses. The mystery behind the mass production and propagation of butterflies from their epicentres can be kept as the central question in the whole course of migration. Also the term 'migration' is somewhat vague, as the return journey is not performed by the individuals to the place of origin. Instead they are forming large groups and leaving small groups in supplementing the local populations. That

is while returning, most of the fragments are scattered and dropped in several places and most of them may complete their life at the stop over sites. Ecologically, the mass movement may provide genetic recharge to the local population and also help to maintain the local population at its equilibrium. Favourable environmental factors such as climate, resources etc. during the movement are also crucial for the dispersal.

In order to better understand these questions, a regular monitoring of the resident and migratory population of the select butterflies involved in migration needs to be taken up. Through





Health of the forest dwellers of Nilambur valley

- Sharanya Das

One always thinks of life being good when one lives close and as one with Nature. This notion of healthy forests and healthy people didn't seem to quite match in Nilambur area especially in the lives of the indigenous people like the Paniya, Kattunaickan and Cholanaikan. The very same people who lived closest to healthy evergreen forests seemed to be the not so healthy.

The notion of overall wellbeing is directly linked with nature and more eminent in indigenous community. The social determinants of health of indigenous peoples are not the usual as the ones for the non-indigenous peoples. For a non-indigenous population, the social determinants can include income, education, employment, living conditions, social support and access to health services. Whereas for an indigenous population it is much more than that, along with the above mentioned determinants, lack of cultural identities such as loss of language, environmental deprivation, spiritual and emotional disconnectedness have an impact on their health.

Their physical, emotional, mental and spiritual link to nature play a role in strengthening or weakening their wellbeing in a major way. These four elements play an important role to bring a balance in not only to an individual's wellbeing but they also have an impact on the community health. For the indigenous people land, forest, food and health as well as connections, relations, family, community are key components of wellbeing and the absence of the aforesaid creates an imbalance and thus leads towards ill health in the indigenous peoples.

Cultural identity is not only the access to culture but the opportunities for expressing one's culture which is not an individual experience but a collective one. The expression of culture could be understood not merely as rituals or festivals but even their link to the forest could also be imbibed as their culture. The togetherness of venturing inside the forests to collect honey or gathering for food has come down in recent times. There could be many reasons for this, the dependence on the Public Distribution System (PDS) or reduced access to forests because of laws or even the erosion of traditional knowledge that taught how to fend for oneself in the forest.



The loss of this opportunity turns into repressed hostility which in turn explodes into depression, alcoholism and substance abuse along with other forms of expressing one's grief. One might ask, if the younger generation hasn't been introduced to the culture, traditions or even the language due to various reasons (one of them can be the mere fact the children go to boarding schools to study), how does it then affect their wellbeing? Through conversations with elders from the communities we understand that it is a collective health and well being, along with their indigenous identity that is slowly being devalued which then affects their well being.

When Keystone Foundation took up health related issues in the Nilambur area with the expertise of two people who were trained in community health work, we saw cases of acute anaemia, diabetes, leprosy, tuberculosis, alcoholism among others in a span of two years. In this same time health awareness, general hygiene, education on reproductive health and food habits were part of health interventions. We are amazed at the positive change that has come about in such a short time and are encouraged by its tangibility. Today four young women from the indigenous community have joined hands with the Keystone team to spread health awareness. These health workers are supported partially by the Forest Department who have played an important role in facilitating the work.

The forest dwellers of Nilambur live in relatively remote locations, have limited access to public healthcare and welfare and have cultures that are unique. Will this health intervention lead to overall wellbeing of the communities who live close to the forests in Nilambur, perhaps is something that only time can tell? While being remote helps them maintain their unique culture, how well can they negotiate better access for their basic needs will remain a challenge for the future.

Sharanya is the Additional Programme Coordinator at Keystone Foundation (sharanya@keystone-foundation.org)

Nilambur and Nilgiris

Rev. Philip K. Mulley

Nilambur, as a micro-region in the Nilgiri Biosphere Reserve, is said to have a spread of 265sq. kms. (Encyclopedia of the Nilgiri Hills,2012-644). The area receives a very high annual rainfall of 2500-5000mm. Situated almost on the lap of the Nilgiri ranges towards Malabar, the historical, cultural and geographical features pertaining to the area offer fascinating insights into the human livelihood patterns obtained here. Nilambur is the basin of Chaliyar river flowing into the Arabian Sea at Beypore (Kozhikode). What is significant is that the river carries the waters of all South flowing tributaries extending from Mukurthi Peak, the sacred sentinel of the Nilgiris to Glenrock Valley and beyond at the top of Gudalur. The most ancient auriferous sands apart, the flat areas in Nilambur had long been cultivated. Since the early 19th century large patches were clear felled and planted with Teak and later Rubber since 1878.

Historically speaking, this micro region seems to have had some curious antecedents. Nilambur was once known for its gold deposits. Some reliable historians have also hazarded a guess that extensive gold washing practice in Nilambur and surroundings in the past had brought Assyrians from West Asia to set up colonies. Asko Parpola, the famous Indus Valley expert has also suggested that some of these Assyrians later moved upto Nilgiris and probably sired the Todas in the pre-Christian era. Kerala historians claim (1999) the discovery of a stone inscription of about 1500years old in Netunkayam forest enclave in Nilambur. What is more crucial is the copper plate granted by the Kadamba king Ravivarman (489-515AD). An earlier Kadamba king Vishnuvarman(about 460AD) had similarly issued a Gudalur grant. Such evidences indicate that active human populations were present in the Nilambur-Gudalur sectors as early as the 5th and 6th centuries. These early rulers obviously had a lot to do with settled communities rather than the tribal folk. Though some traces of Old Stone Age tools have been noted in the Nilambur plains, history of these findings is not known. So also is that of the rich forest vegetation. Only a handful of tribal communities viz. Allar, Aranaadan, Taccanaadan, Malapanikkar,

Kaatunayakar, Sholanayakar and Malamuttans are said to have been traditionally associated with Nilambur amsom (territory). How have been these forest based populations sharing the land use with settled communities for the past 1500 years or so are by no means part of a simple interpretative exercise.

After the disappearance of the well attested Chera hegemony in this part, several small principalities began to emerge in the larger Malabar region since about the 12th century AD. Most of their constituent units were called "kovilakams" or temple-based communes under hereditary rulers. These rulers mainly hailed from Nayar clans. Incidentally, a leading Kerala historian K.V.Krishna Ayyar has made (1938) the far fetching claim that these Nayars were originally hill tribes on the slopes of the Western Ghats! If that were to be so we need to work out a new hermeneutics altogether, of tribal empowerment and biodiversity issues! Whatever that be, the paramount chief among the kovilakams, the Zamorin of Calicut (of Nediyruppu Kovilakam) eventually emerged as the chief broker of political power in Malabar. The Thirumalpad of the neighboring Nilambur Kovilakam became the active associate of the Zamorin. What I wish to add here is the extra territorial

machinations this Nilambur chief was able to foist on Nilgiris.

Gudalur part of the Nilgiris at least from about the 13th century was under the chief of Kurumpurainadu and his vassal Nambalakotta Vazhunavvar. A descendant of the Kurumpurai dynasty (Kottayam near Kannur), Kerala Varma Pazhassi Raja contested the British attempts to subjugate Malabar and resisting to the last, met his heroic death in 1805. The whole of Pazhassi Raja's territory including 46,600 acres of Mudumalai forest was by arbitrary means awarded to the Nilambur Thirumalpad by the British. Later in 1888, the whole of Ouchterlony Valley was also granted by the British as 'Janmabhogam' to the Nilambur Thirumalpad. Though the Ouchterlony Valley in 1873 and Gudalur in 1877 came to be made part of the Nilgiris, the legal anomalies relating to the Nilambur Janmi tenure have continued to persist in the land ownership patterns in Gudalur. The Nilgiri region thus seems to continue to carry the Nilambur fall out. But the interface between the biodiversity management in Nilambur and the Nilgiris would hopefully revitalise and promote the intangible and tangible cultural heritage of the Nilgiri Biosphere Reserve.

Rev. Philip K. Mulley blogs at fromamongstthebluehills.blogspot.in and can be contacted at philpkmulley@gmail.com



The Moundadansetti temple in Mudumalai ante dating Nilambur presence by not less than 300 years (about 1500.AD)

BLUE-AND-WHITE FLYCATCHER

(Cyanoptila cyanomelana)

Blue-and-white flycatcher (*Cyanoptila cyanomelana*) is a migratory songbird in the old world flycatcher family Muscicapidae. The species is also known as the Japanese Flycatcher. It breeds in Japan, Korea and in parts of northeastern China and far eastern Russia. It winters in south-east Asia, especially in Vietnam, Cambodia, Thailand, Sumatra and Borneo.

This rare visitor was spotted on 21st November 2015 by Mr. A. Bhoopathy, naturalist and conservationist, along with his grandson A. Indrajith. This is the first record of this species in the Nilgiris.





What's there in water-filled tree holes in the rainforests of the Western Ghats?

Anoop Das K.S^{1,2*} and Nishadh K.A³

The drive to find a home of one's own, can take you places, ask *Homo sapiens*! Or ask arthropods, the Phylum of animals which consists of insects and spiders. Most of them exist close to water—a river or a pond or in marshes and swamps. But some of them would prefer a habitat quite tinier and more unique like rainwater-filled tree holes. The ecosystem of a tree hole is not much different from a small town for a travel weary wanderer.

Decomposing leaves in the rainwater collected in a tree hole are the primary energy sources for its community members, which include insect larvae, microbes, protozoa and bacteria. Scientists use tree holes as a microcosm to study life up and close and to address fundamental ecological questions on species survival and richness. Life cycles play out in full here with predator larvae carrying out executions of micro-organisms even as they struggle to lay their hands on the limited resources available—all in a thimble full of water. Recently a study conducted by our lab showed for the first time that

dragonflies breed in tree holes in the Western Ghats. *Lyriothemis tricolor* was found using the water-filled cavities in trees to deposit its egg to form larvae, and the study published in the Journal of Threatened Taxa, a peer-reviewed journal on wildlife, conservation, taxonomy and ecology. The study was conducted by the authors with scientists from Zoological Survey of India & Salim Ali Centre for Ornithology and Natural History.

Water filled tree holes form as a permanent or ephemeral freshwater aquatic habitats, occupied by an array of invertebrates largely and shared by aquatic insects. In a sub-tropical forest of the Western Ghats, in Silent Valley National Park and New Amarambalam Reserved Forest we investigated the functional variation in the aquatic insects in water-filled tree holes. World-wide 47 species of insects are known to breed in small water cavities like the tree holes. All major tropical forests have reported insects thriving in tree holes though none have been reported from the Indian subcontinent.

Conservation measures hitherto undertaken in the State were big mammal and/or top predator based. As believed earlier, conservation of top order animals may not necessarily conserve lower order organisms, which has been demonstrated in recent studies. Invertebrate conservation is a totally different ball game as shown in this study wherein subtle changes in forest structure or altitude by way of tree holes locations have had significant impact on insect diversity. This project has provided the start for infusing the concepts of invertebrate conservation into the management plan of the area. Translating and applying the results of these scientific investigations into practical conservation guidelines that are executable by conservation practitioners and/or by policy makers is essentially the next step which has already been initiated through some proposals. An effective conservation action plan has to be made, in accordance with the results of this study so as to implement management measures in the Western Ghats.

The research, was supported by the US-based Critical Ecosystem Partnership Fund (CEPF) through ATREE- Bangalore. The study adds weight to the point of view that the Western Ghats is still relatively less explored in terms of its bio-diversity, especially with regard to insects.

¹Centre for Conservation Ecology, Department of Zoology, M.E.S Mampad College, Malappuram, Kerala, India- 676 542. E-mail: dasksa@gmail.com

²Wildlife Research and Conservation Trust, Anupallavi, Chungathara P.O., Malappuram-, Kerala, India-679334

³Environment Impact Assessment Division, Salim Ali Centre for Ornithology and Natural History, Anaikatty P.O, Coimbatore Tamil Nadu, India- 641 108

*Corresponding author

K.S Anoop Das, Ph.D., Assistant Professor, Center for Conservation Ecology, Dept. of Zoology, Mampad College PO, Malappuram Dt, Kerala, India, 676 542, www.mesmampad.org





Conversations with a Paniya elder Gopiyettan

K G Ramachandran

My work in Nilambur with Keystone Foundation has taken me to the remote corners of this region. My friends are the tribal people who live in these corners and they have let me enter many parts of their lives. The Paniya are a community who live by farming, fishing, gathering from the forest and wage work. As one enters Eruttukuthi village on the banks of the Chaliyar river one is sure to see this familiar sight of a man in his sixties carefully tending his home garden. Gopiyettan has a broad open smile and spends a lot of time with his plants which are food and medicine to him. His home is a brick structure, and one acre around it, is his to tend and farm.

This man of indigenous wisdom has his own way of thinking about Nature. Occasionally he opens his heart and speaks about his past, forests, farming and so on. He can be a romantic when he speaks about walking through the woods: “there are times, I have been forced to stop in the middle of the forest. Not because of any wild animals, but because of some unseen, unknown flower spreading its fragrance somewhere close by. I stand there still for many minutes enjoying it.” When I asked him the name of that flower he replied, “The name does not matter when you enjoy it.” -Thus speaks the philosopher ‘Gopiyettan’.

Like most people of his community Gopiyettan has long been a harvester, expert in collecting almost all wild produce from the forest. Honey, black dammar, gooseberry, shikakai, garcinia fruits and many other herbal plants like *Orila*, *Moorila*, *Nannari*, *Padakizhangu*, *Mothakka*, *Kollakkai*, *Karinkurinji* are on his list of produce from the forest. Even at his age, he is strong and

goes out with young people to the forest when the harvest season begins. He laments though: “These youngsters (harvesters) do not think about the future when they harvest. For instance, *Nellikai* (Indian gooseberry) was harvested in the past (20-30 years back) without cutting down any big branches. Those days we clear the land around the tree, we climbed the tree and collected only mature fruit with the help of long hooks. Now, small branches are cut down in the beginning and later the tree as a whole in order to make harvesting easier. See what has happened, there are only a few trees left in our forests now.”

Gopiyettan remembers that in the past none of the people from outside came into the forest to collect its produce. There were no organisations and not many private traders. There were hardly any shops close by. Pothukallu was the nearest market where hill products were sold and there were only three buildings in the whole town. The people in the hamlet walked more than 12-15 kilometres to reach Pothukallu. There was no bridge to cross the river; only rafts or country-boats were used.

Once when I walked with him into the forest he told me “Termites, ants and likewise all other creatures and animals live in families like ours. Perhaps we have learned the skills to build houses from termites. Look how beautifully termites make ‘palaces’ for their shelter.” Another time he talked of climate change, “In the past we slept on the rocks and now we sleep within the buildings made of rocks. All the rocks became houses, and our country (native) and houses became frying pans.”

The traditional physician in Gopiyettan worries about his own people’s attitude towards the herbal medicines. In his view,

most of the wild plants are useful for human and animals as medicines or as food. He thinks herbal medicines is best for people. He confirms that the people need to have faith in these medicines, but, sadly they do not have it now. A concoction made with a type of eel (fish) and some herbal plants blended in coconut oil is a medicine prepared by Gopiyettan. It is believed to be very effective in combating body pain and is confirmed so by some people who have used it.

Gopiyettan has also got a substantial knowledge of different variants of uncultivated food plants grown in the forests. He admitted that *Kattukizhangu* and *Churuli chappu* are his favourite foods. He said that no other foods have ever given the taste as delicious as these two. He claims that if the boiled *kattukizhangu* is eaten before taking to forest trails, it can give anyone the energy to cover any great distance in the mountains and forests: “these foods (uncultivated) are really good but ‘beef and chicken’ are the road to hospital.”

Gopiyettan has received awards for best tribal farmer twice in the last couple of years from Pothukallu Grama Panchayat and Nilambur Taluk respectively. There are several varieties of plants – wild, horticultural, vegetable and commercial – on his land. One cannot find him resting during the day. He is either working on his piece of land or out working on some place in the vicinity. The singer in him comes out in the evenings, over a little alcohol. He might sing four or five lines of a tribal melody (maybe known only by him) and then stop, leaving you excited and in anticipation, and promising you, with a loud laugh, more of the songs only if you buy him more of the same stuff. After a while though even if you don’t buy him more the songs will flow melodiously: he is enchanted by his own songs.

And as I walk back to my home away from the forests, Gopiyettan follows me silently to lead me to the bridge that I have to take. He is a well respected elder of his community and known for his knowledge and experience. He is always humble to ask about what he doesn’t know about the world outside and confident of the knowledge that he holds of the deep forests and its bounties.

K G Ramachandran is the Area Manager & Coordinator for activities at the Village Conservation

Centre, Keystone Foundation, Nilambur (rami@keystone-foundation.org)



பிதரு சத்த

வெள்ளெரிகோம்பே ஊர் சிறுவர்களால் உருவாக்கப்பட்ட இயற்கை மாத இதழ்

முள்ளி ஆற்றின் கரை துய்மையடைந்தது

கெத்தை அணையின் வழியாக வரும் முள்ளி ஆறு பில்லூர் அணையில் சேர்கிறது. கடந்த நவம்பர் மாதம் கெத்தை அணையில் திறந்து விடப்பட்ட தண்ணீரால் முள்ளி ஆற்றில் அதிக வெள்ளம் பெருக்கு ஏற்பட்டது. ஆற்றின் கரையில் நீண்ட காலமாக குவிந்து இருந்த குப்பைகள், செடி கொடிகள் அனைத்தும் வெள்ளநீரால் அடித்து செல்லப்பட்டு முள்ளி ஆற்றின் கரை தற்போழுது சுத்தமாக காணப்படுகின்றது.



பழமையான தேன் பிடிக்கும்

மரம் விழுந்தது

பில்லூர் பகுதி கெத்தை காடு கிராமத்தின் அருகே உள்ள ஆற்றின் கரையில் இருந்து பழமையான தந்தி மரம் கடந்த 2015 நவம்பர் மாதத்தில் பலத்த சூரவளி மழை காற்றால் வேருடன் சாய்ந்தது. ஆற்றின் குருக்கே விழுந்தது. இந்த பழமையான தந்தி மரத்தின் வயது 50 முதல் 80 வரை இருக்கலாம் என இப்பகுதி பெரியவர்கள் கருத்து தெரிவித்துள்ளனர். இந்த தந்தி மரத்தில் ஒவ்வொரு வருடமும் 7 மலைதேன் கூடுகள் கட்டும் இந்த மலை தேன் கூடுகளின் இருந்து கெத்தைகாடு மற்றும் வீரகல் மக்கள் தேன் சேகரித்து வந்தனர். இந்த மரம் விழுந்ததால் தேன் சேகரிப்பவர்கள் கவலையடைந்து உள்ளனர்.



காளான்

பில்லூர் பகுதியில் தற்போழுது பருவமழை பெய்து முடிவடையும் நிலையில் உள்ளது இதனால் குளிர்காலம் ஆரம்பித்துள்ளது. இதனால் இயற்கைகாக உற்பத்தியாகும் காளான்கள் பில்லூர் பகுதிகளில் முளைத்துள்ளன. இவற்றில் மணிதர்கள் உணவுக்காக பயன்படுத்தும் காளான்களின் பெயர்கள் கீழே வறுமாறு.

1. கொண்ட கிகம் (காளான்)
 2. சுண்டிகிகம் (காளான்)
 3. நாய்மூக்கு கிகம் (காளான்)
 4. அரிசிகிகம் (காளான்)
 5. காதுகிகம் (காளான்)
- தன்னிகிகம் எனப்படும் தண்ணீர் காளான் எனப்படும். ஒருவகை காளான் உள்ளது. இவற்றில் உள்ளே தண்ணீர் குடிக்கலாம். இந்த நீர் சுவையாக இருக்கும். இதுதவிர சில விச காளான்களும் உள்ளன இந்த விச காளான்களை சாப்பிட கூடாது

இந்த மாதம் காட்டில்

கிடைப்பவை

1. முன்னை கிரை.
 2. சிங்கை கிரை.
 3. நரலை கிரை.
 4. வசளைகிரை.
 5. சோரகிரை.
 6. ஈந்த தளிர் கிரை
 7. தொண்டை கிரை
 8. தேன்
 9. மலை நெல்லிகாய்.
- தற்பொழுது பில்லூர் வன பகுதிகளில் உள்ள சிங்கை. முன்னை போன்ற கிரை தாவரங்களை புழுக்கள் ஆங்கங்கே தாக்கி சேதப்படுத்தியுள்ளது.

This section was compiled by N.Chandran, a Village Coordinator based in Pillur

மணிபுறக்கள் சாவு

பில்லூர் பகுதி, கீழ் பில்லூர் கிராமத்தில் கடந்த நவம்பர் மாதம் திடீரென சோரை எனப்படும் மணிபுறக்கள் மற்ம் நோயினால் பாதிக்கப்பட்டது. சரியாக சாப்பிடாமல் ஒரே இடத்தில் அமர்ந்து இருந்த சில மணி புறக்கள் இறந்து கிடந்தன.



பில்லூர் ஏரியா வனவிலங்குகள்

பில்லூர் பகுதி கிராமங்களில் காட்டுயானைகளின் தொல்லை சற்று அதிகமாக உள்ளது. மானர், கெத்தைகாடு, வீரகல், கோரபதி ஆகிய கிராமங்களில் பயிரிடப்பட்டு இருந்த வாழை. இலவபஞ்சு போன்ற பயிர்களை சேதம் படுத்தியது. இந்த காட்டு யானைகளின் நடமாட்டம் பில்லூர் பகுதிகளில் உள்ள அனைத்து கிராமங்களிலும் காணப்படுகின்றது. காட்டு யானைகள் காட்டில் வளர்ந்துள்ள சிங்கை, அரப்பு, மூங்கில், வடுந்திர உள்ளிட்ட தாவரங்களை விரும்பி உண்ணுகின்றது. கூட்டமாக வரும் காட்டுயானைகளை விட தனியாக வரும் ஒற்றை காட்டுயானைகளால் எற்படும் சேதங்கள் அதிகம் என பில்லூர் விவசாயிகள் கருத்து தெரிவித்துள்ளனர். பில்லூர் பகுதிகளில் தற்பொழுது பயிரிடப்பட்டுள்ள நேந்திர, கதளி, வாழைகன்றுகளை காட்டுபன்றிகள் அதிகமாக தோண்டி சாப்பிட்டு சேதப்படுத்தியுள்ளது.

தெரிந்து கொள்ளுங்கள்

இவரை பற்றி

பில்லூர் பகுதி பூச்சமரத்தூரை சேர்ந்த திரு. மாரி வயது 70 இவர் பூச்சமரத்தூர் கிராமத்தின் மண்ணுகாரர் ஆவர். இவர் ஒவ்வொரு வருடமும் விவசாயம் தொடங்கும் முன் செய்ய வேண்டிய பூணுகள் மற்றும் அருவடை செய்யும் பொழுது கடைப்பிடிக்க வேண்டிய பூணுகள் முறையாக கடைப்பிடிக்க வேண்டும் என மக்களிடம் வலியுறுத்தி வருகிறார். மேலும் இவர் பூச்சமரத்தூர் முனிஸ்வரன் குகை கோவிலுக்கு பெண்கள் செல்ல கூடாது. இந்த கோவிலுக்கு பன்றி நர பலியாக வெட்டப்படுகின்றது. இந்த முனிஸ்வரனுக்காக திணை அரிசியில் செய்யப்பட்ட பன்றி இறைச்சியை உருக்கு கொண்டு செல்ல கூடாது பாதிவளியிலேயே சமைத்து சாப்பிட வேண்டும். என்று திரு. மாரி கூறியுள்ளார்.



ನಿಸರ್ಗ ಸುದ್ದಿ

ಪುಣಜನೂರು ಮಕ್ಕಳು ಸಿದ್ಧಪಡಿಸಿದ ಮಾಸಿಕ ಪರಿಸರ ಸುದ್ದಿ

ಕತೂಹಲಗಳು :

ಈ ತಿಂಗಳಲ್ಲಿ ಕಾಡಿನ ಭಾಗದಲ್ಲಿ ಹೆಚ್ಚು ಮಂಜುಗಳಿಂದ ಕೂಡಿರುವುದು ಹೆಚ್ಚಾಗಿ ಆಗಿರುವುದರಿಂದ ತಡವಾಗಿ ಬಿಸಿಲು ಬರುವುದು ಕಂಡುಬರುವುದು.

ಉಪಾಯಗಳು

1. ತಾರಿ ಮರದ ಚಿಕ್ಕೆಯನ್ನು ವಾಯುವಿಗೆ ಜೀರಿಗೆ ಸೇರಿಸಿ ಅರೆದು ರಸವನ್ನು ಕುಡಿಯುವುದು.
2. ಸೆಲೆಯದ ಮರ ಅದರ ಪಟ್ಟಿ ಜೀರಿಗೆ ಹಾಕಿ ಅರೆದು ರಸವನ್ನು ಅಲರ್ಜಿಗೆ ಕುಡಿಸುವುದು.
3. ಗಜ್ಜಲಿಕೆಯ ಚಿಕ್ಕೆಯನ್ನು ಅರೆದು ಜೀವಣಿಗೆಯಲ್ಲಿ ಅರೆದು ರಸವನ್ನು ಕುಡಿಯುವುದು.
4. ಇವರ ನೆನೆಪು ಇದೆಯಾ?

ಸೆಣೆಯೇಗೌಡ-35 ತಂದೆ ಚನ್ನಂಜೇಗೌಡ ತಾಯಿ ಚನ್ನಂಜಮ್ಮ ಈ ಹಿಂದೆ ಇವರು ಚಿಕ್ಕೆಯನ್ನಿರಿ ಪೋಡಿನಲ್ಲಿ ವಾಸವಾಗಿದ್ದರು. 20 ವರ್ಷಗಳಿಂದ ಶ್ರೀನಿವಾಸಪುರ ಕಾಲೋನಿಯಲ್ಲಿ ನೆಲೆಸಿರುತ್ತಾರೆ. ಇವರು ಇಚಿಂನಿಂದಲೆ ಕಿರು ಅರಣ್ಯ ಉತ್ಪನ್ನ ಸಂಗ್ರಹಿಸಲು ತಾತ ಮತ್ತು ತಂದೆ ತಾಯಿಯದರೊಂದಿಗೆ ಹೋಗುತ್ತಿದ್ದರು. ಹೆಜ್ಜೆ ಮತ್ತು ತುಡುವೆ ಜೇನು ತೆಗೆಯುವುದರಿಂದ ಪರಿಣಿತಿ ಹೊಂದಿರುತ್ತಾರೆ. ಪಟ್ಟಿ ಜೇನು ಕೂಡುವುದು ಅದರ ಜೊತೆಯಲ್ಲಿ ರಾಗಿ, ಜೋಳ, ಅವರೆ ಬೆಳೆಯನ್ನು ಬೆಳೆಯುವರು. ಇವರಿಗೆ ಪತ್ನಿ ಒಂದು ಗಂಡು ಒಂದು ಹೆಣ್ಣು ಮಕ್ಕಳಿದ್ದಾರೆ. ಹಳ್ಳಿಯ ಜನರಿಗೆ ಜೇನುಪಟ್ಟಿ ಕೂಡುವುದರ ಬಗ್ಗೆ ತರಬೇತಿಯನ್ನು ಕೊಡುತ್ತಿದ್ದಾರೆ. ಹಳ್ಳಿಗೆ ಮಾದರಿಯಾಹಿದ್ದಾರೆ.

ಈ ತಿಂಗಳು

ಹುಲುಬೆ ಹೂ, ಕಗ್ಗಲಿಕಾಯಿ, ಕಳ್ಳನ ಹೂ, ನೆಲ್ಲಿಕಾಯಿ, ಹುಣಸೆಕಾಯಿ, ತಾಂಡಸಿ ಹೂ, ಪಕುಳದ ಹೂ ಮೊಗ್ಗು, ಸೂಡಲಿ ಹೂ, ತಗತೆ ಹೂ, ಗುಲ್ಮದಕಾಯಿ, ಉಡುಪೆ ಹೂ.

ಪ್ರಾಣಿಗಳ ಚಲನವಲನಗಳು

- 09/09/2015 ರಂದು ಮುನೇಶ್ವರ ಕಾಲೋನಿಯ ಕುಳ್ಳುಮಾದೇಗೌಡರ ಜಮೀನು ಆನೆ ನುಗ್ಗಿ ರಾಗಿಯನ್ನು ನಾಶಮಾಡಲಾಯಿತು.
- 15/09/2015 ರಂದು ಎತ್ತೆಗೌಡನ ದೊಡ್ಡಿಯ ಮಾದೇಗೌಡರ ಜಮೀನಿಗೆ ಆನೆ ನುಗ್ಗಿ ರಾಗಿಯನ್ನು ನಾಶಮಾಡಿತು.



10/10/2015 ರಂದು ಶ್ರೀನಿವಾಸಪುರ ಕಾಲೋನಿಯ ಕುಂಬೇಗೌಡರ ಜಮೀನಿಗೆ ಆನೆ ನುಗ್ಗಿ ಜೋಳವನ್ನು ನಾಶಮಾಡಿತು.

ಮುಖ್ಯ ಸಾಮಾಚಾರಗಳು

1. 02/09/2015 ರಂದು ಬಂಡ್ಲೆ ಮತ್ತು ಹೊಸಪೋಡು ಜಮೀನು ಬದಿಯ ಕೇಸ್ನೋನ್ ಸಂಪನ್ಮೂಲ ಕೇಂದ್ರದ ವತಿಯಿಂದ ಹಣ್ಣಿನ ಗಿಡಗಳನ್ನು ನೆಡಿಸಲಾಯಿತು.
2. 27/09/2015 ರಂದು ಪಶು ಸಂಗೋಪನಾ ಇಲಾಖೆ ವರಿಯಿಂದ ಕಾಲು ಬಾಯಿ ಜ್ವರದ ಖಾಯಿಲೆಯ ಲಸಿಕೆಯನ್ನು ಪುಣಜನೂರು ಗ್ರಾಮ ಪಂಚಾಯಿಯ ವ್ಯಾಪ್ತಿಯ ಗ್ರಾಮದ ದನಕರು ಆಡುಗಳಿಗೆ ಲಸಿಕೆಯನ್ನು ಹಾಕಿಸಲಾಯಿತು.
3. 09/11/2015 ರಂದು ಕೈಗಾರಿಕೆ ಇಲಾಖೆಯ ಚೇತನ ಹವ್ಯಾಸಿ ಬಳಗದ ಕೈ ಮಗ್ಗದ ಯಂತ್ರ ತರಬೇತಿ ಪಡೆದವರಿಗೆ ಹೊಸಪೋಡು ಶ್ರೀನಿವಾಸಪುರ ಗ್ರಾಮ ಫಲನಭವಿಗಳಿಗೆ ಮಗ್ಗದ ಯಂತ್ರವನ್ನು ವಿತರಿಸಲಾಯಿತು.
4. ಕೊಳ್ಳೂರು ಮುಖ್ಯ ರಸ್ತೆಯಿಂದ ಬೂದಿಪಡೆಗದವರೆಗೆ ಡಾಂಬರ್ ರಸ್ತೆ ನಿರ್ಮಾಣವನ್ನು ಮಾಡಲಾಯಿತು
5. ಈ ಭಾಗದ ಪುಣಜನೂರು ಭಾಗದಲ್ಲಿ, ಮಳೆ ಹೆಚ್ಚಾಗಿ ಬೀಳುತ್ತಿರುವುದರಿಂದ ಸುವರ್ಣವತಿ ಜಲಶಯ ನೀರು ಭರ್ತಿಯಾಗಿದೆ.
6. ನಾವು ನೋಡಿದ್ದು ಕೇಳಿದ್ದು 28/10/2015 ರಂದು ಹೋಸ ತಂಗುಳು ಹಿಟ್ಟು ಕಿರಿಯ ಭಾಗಕ್ಕೆ ಹೋಗಿ ಕೋಟ್ಟಿ ಹಕ್ಕಿಮರಿಯನ್ನು ನೋಡಿ ತುಂಬಾ ಖುಷಿಯಾಯಿತು (ಅನು ಕುಮಾರ್ 6 ನೇತರಗತಿ)
7. ನಿಮಗೆ ಗೊತ್ತಿದೆಯಾ? ಗೌರಿ ಗಣೇಶ ಹಬ್ಬದ ಸಮಯದಲ್ಲಿ ಗಂಗೆಗೆ ಕಾಯಿ,ಬೆಲದಕಾಯಿ, ಸೋಡಲಿ ನೆಲ್ಲಿಕಾಯಿ, ಸೀಬೆಕಾಯಿ, ಬಿಲ್ಲಪತ್ರಕಯಿ ತೋರಣ ಕಟ್ಟಿ, ದೇವಸ್ಥಾನಗಳಲ್ಲಿ ಗಿರಿಜನರು ಪೂಜೆ ಸಲ್ಲಿಸುವರು.

ಮಾಡಿದ್ದು

1. 02/09/2015 ರಂದು ಬಂಡ್ಲೆ ಮತ್ತು ಹೊಸಪೋಡು ಗ್ರಾಮದ ಬದಿಯಲ್ಲಿ ಹಣ್ಣಿನ ಗಿಡವನ್ನು ನೆಡಲಾಯಿತು.
2. 26/09/2015 ರಂದು ಮತ್ತು 08/11/2015 ಶಾಲಾ ಮಕ್ಕಳನ್ನು ಕಾಡಿಗೆಕರೆದುಕೊಂಡು ಹೋಗಿ ನಾಟಿ ಔಷಧಿ ಮತ್ತು ಪರಿಸರ ಶಿಕ್ಷಣದ ಬಗ್ಗೆ ಶಿವಣ್ಣನವರು ತಿಳಿಸಿಕೊಟ್ಟರು.
3. ಕೇಂದ್ರದಲ್ಲಿ 27/10/2015 ರಂದು ಕ್ಯಾಂಪ್ ನಡೆಯಿತು. 22 ವಿದ್ಯಾರ್ಥಿಗಳು ಭಾಗವಹಿಸಿದ್ದರು. ಪೃಥ್ವಿ ಮತ್ತು ಶಿವಣ್ಣನವರು ಪಷ್ಟೆ ಮತ್ತು ವ್ಯವಸಾಯ ಭೂಮಿಯ ಬೆಳೆ ಮತ್ತು ಕಾಡು ಪ್ರಾಣಿ ಹಾವಳಿಯ ಬಗ್ಗೆ ತಿಳಿಸಿಕೊಡಲಾಯಿತು.
4. 01/11/2015 ರಂದು ನೇಸರಿ ಜೇನಿನ ಸರ್ವೆಯನ್ನು ಮಾಡಲಾಯಿತು.

ಮುಂದಿನ ತಿಂಗಳು

- 2 ಗ್ರಾಮದಲ್ಲಿ ಗ್ರಾಮದ ಹಿರಿಯರು ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಕಾಡಿಗೆ ಕರೆದುಕೊಂಡು ಹೋಗಿ ಔಷಧಿ ಸಸ್ಯಗಳ ಉಪಯೋಗಗಳ ಮಾಹಿತಿ ತಿಳಿಸುವುದು. ಪುಣಜನೂರು ಮತ್ತು ಕೋಳಿಪಾಳ್ಯದ ಸರ್ಕಾರಿ ಶಾಲೆಗಳಲ್ಲಿ ಪರಿಸರ ಸಂರಕ್ಷಣೆ ತರಗತಿಯನ್ನು ನಡೆಸುವುದು. ನೇಸರಿ ಜೇನಿನ ಸರ್ವೆಯನ್ನು ಮಾಡುವುದು.



Sivanna is a Field Assistant at Keystone Foundation (shivannaprofessor@gmail.com)

കാട്ടുപൂവ്

നിലമ്പൂരിലെ കുട്ടികൾ തയ്യാറാക്കിയ പരിസ്ഥിതി മാസിക



കാട്ടുവിശേഷം

നവംബർ മാസം അവസാനത്തോടുകൂടി നെടുങ്കയം, മണ്ടക്കടവ് കോളനികളിൽ നിന്നുള്ളവർ കാട്ടിലെ തേക്കിനടി വെട്ടൽ ആരംഭിച്ചു. കാട്ടിലെ ചില ഇടങ്ങളിൽ നെല്ലിക്ക ശേഖരണം ആരംഭിച്ചിട്ടുണ്ട്.

വനങ്ങളിലെ കുളങ്ങളും അരുവികളും ഇപ്പോൾ തന്നെ വറ്റിയ നിലയിലാണ്. കാട്ടിലെ കുളങ്ങളിൽ വെള്ളത്തിന്റെ ക്ഷാമം മൂലം ആനകൾ ഊരുകൾക്കടുത്തുള്ള പുഴകളിലെത്തിത്തുടങ്ങി.

നാരങ്ങാമൂലയിൽ റോഡുമുറിച്ചുകടന്ന ഒരു കാട്ടുപ്പന്നിയെ വാഹനമിടിച്ചു പരിക്കേൽപ്പിച്ചു കടന്നുപോയി.

നാട്ടുവിശേഷം

നെടുങ്കയം ഗ്രാമത്തിൽ നവംബർ മാസം വനാവകാശനിയമപ്രകാരം ഒരു ഊരുകൂട്ടം നടന്നു.

കേരളത്തിൽ നവംബർ മാസത്തിൽ തദ്ദേശസ്വയംഭരണ തെരെഞ്ഞെടുപ്പ് നടന്നു. നെടുങ്കയത്തുള്ള ബുത്തിലാണ് മണ്ടക്കടവ്, മാഞ്ചീരി, നെടുങ്കയം എന്നീ ആദിവാസി ഊരുകളിൽനിന്നുള്ളവർ സമ്മതിദാനാവകാശം നിർവഹിച്ചത്.

നവംബർ മാസമായപ്പോഴേയ്ക്കും ചുട്ട് നന്നായി അനുഭവപ്പെടാൻ തുടങ്ങി. ഗ്രാമങ്ങളിലെല്ലാം പന്നികൾ വന്ന് ചേമ്പും കപ്പയുമെല്ലാം നശിപ്പിക്കുന്നതായി കർഷകർ പറഞ്ഞു.



തന്ത്രങ്ങൾ

മുറിവുണക്കി: വനങ്ങളിലും നാട്ടിൻപുറങ്ങളിലുമെല്ലാം കണ്ടുവരുന്ന വയലറ്റ് നിറമുള്ള ഒരു സസ്യമാണ് മുറിവുണക്കി. ശരീരത്തിൽ മുറിവുണ്ടായാൽ പച്ചവെള്ളത്തിൽ മുറിവ് നന്നായി കഴുകി മുറിവുണക്കിയുടെ ഇല പിഴിഞ്ഞു അതിന്റെ നീര് മുറിവിൽ പുരട്ടിയാൽ മുറിവ് പെട്ടെന്നുത്തന്നെ ഉണങ്ങും. മുറിവിൽ നീർ തട്ടുമ്പോൾ കഠിനമായ നീറ്റൽ അനുഭവപ്പെടും.

അറിഞ്ഞോ ?

1. വാണിയംപുഴ ഗ്രാമത്തിൽ 35 കുടുംബങ്ങൾ ഏകദേശം ഏഴ് ഏക്കർ സ്ഥലത്തിലായി കൃഷി ചെയ്തുവരുന്നു. വാണിയംപുഴ കർഷക സംഘമാണ് ഇത്രയും സ്ഥലത്ത് കപ്പ (മരച്ചീനി) കൃഷി നടത്തുന്നത്. ഇതാദ്യമായാണ് ഇത്രയധികം സ്ഥലത്ത് ഊരിലുള്ളവർ കൃഷി ചെയ്യുന്നത്.
2. ആദിവാസി ഗ്രാമങ്ങളിലെ ബദൽ വിദ്യാലയങ്ങളിലെ അധ്യാപകർക്ക് കഴിഞ്ഞ കുറെ മാസങ്ങളായി ശമ്പളം ലഭിച്ചിട്ടില്ല. കുറെ ദൂരെ നിന്നെത്തി ഉൾക്കാട്ടിലുള്ള പല ഊരുകളിലും അക്ഷരവെളിച്ചം എത്തിക്കുന്നവരാണ് ഇവരിലധികം പേരും.

ഇവർ ഇങ്ങനെ!

മണ്ടക്കടവിലെ ഒരു യുവകർഷകനാണ് ബാബുരാജ്. സ്വന്തമായുള്ള 35 സെന്റ് സ്ഥലത്താണ് ഇദ്ദേഹം കൃഷി ചെയ്യുന്നത്. ജൈവകൃഷിരീതി പിന്തുടരുന്ന ബാബുരാജിന്റെ കൃഷിയിടം വാഴ, കുരുമുളക്, മഞ്ഞൾ, റബർ എന്നീ വാണിജ്യ വിളകളും പച്ചക്കറികളും നിറഞ്ഞതാണ്. കൂടാതെ കോഴികളെയും മീനുകളെയും ഇദ്ദേഹം വളർത്തിവരുന്നുണ്ട്. എട്ടോളം തേനീച്ചപ്പെട്ടികളും ഇദ്ദേഹത്തിനുണ്ട്. ഭാര്യയും മൂന്നു മക്കളുമടങ്ങുന്നതാണ് ബാബുരാജിന്റെ കുടുംബം. കൃഷിയിൽ ബാബുവിന്റെ സഹായി ഭാര്യയാണ്. 2015 ൽ കരുളായി പഞ്ചായത്തിലെ മികച്ച ആദിവാസി കർഷകനും ബാബുരാജാണ്. കൃഷി ഒരു പാരമ്പര്യ ജീവിതരീതിയല്ലാതിരുന്ന കാട്ടുനായ്ക്കസമുദായംഗമായ ബാബുരാജ് മറ്റു സമുദായംഗങ്ങൾക്കൊരു നല്ല മാതൃകയാണ്.



വിരുന്നുകാർ

- ആന - 15
- കൊമ്പനാന - 8
- കാട്ടിൽവെച്ച് കണ്ടത് - 10

പക്ഷികൾ

- ഇരട്ടത്തലച്ചി - എല്ലാദിവസവും
- മൈന - എല്ലാദിവസവും
- മുളംതത്ത - 20 ദിവസം
- കൊക്ക് - എല്ലാദിവസവും
- എര - എല്ലാദിവസവും
- പൂത്താംകീരി - എല്ലാദിവസവും
- ഉപ്പൻ - 10 ദിവസം
- മരംകൊത്തി - എല്ലാദിവസവും

K G Ramachandran is the Area Manager & Coordinator for activities at the Village Conservation Centre, Keystone Foundation, Nilambur (ramu@keystone-foundation.org)

Diary of Nilgiri Natural History Society



Trails:

Mullur- Mandarai trail:

In August, NNHS organised a trail to the Dry Deciduous forests adjacent to the Mamaram toll gate. The trek started in a cultivation area and moved onto the forests around Kunjappanai and Mandarai. The trek was led by Mr. Shivalingam who's an avid birder and is familiar with the landscape and the various flora and fauna of these forests.

Talks:

--"Are all cats gray in the dark?" – Explored through coats, quotes, tails and tales:

Dr. Shomita Mukherjee, a principal scientist at Salim Ali Centre for Ornithology and Natural History (SACON), Coimbatore has been working extensively on various small cats in North East India. She gave a talk on the diversity of small cats like the Jungle Cat, Marble cat, Leopard cat, Clouded leopard and the Fishing cat

which aren't necessarily given the same importance and conservation status as the big cats (Tiger, Lion & Leopard).



Introduction to Nilgiri Biosphere

Reserve:

Sri Prakash Vidya Niketan from Vishakapatnam, A. P hosted Nilgiri Natural History Society (NNHS) for a talk during their recent visit to The Nilgiris.

The students from Sri Prakash Vidya Niketan were introduced to the Nilgiri Biosphere Reserve by the Nature Educator of Nilgiri Natural History Society. The talk covered the landscapes, people and diverse life forms that make the NBR special. The current status of key species in this region was also highlighted. The students very eager to know more about the NBR as well as some issues that posed a threat.



Outreach Sessions at 'The Lawrence School', Ooty:

NNHS has been conducting a series of talks with the Nature Club, at The Lawrence School, ooty. These talks have covered a series of modules (where the Kurinji Blooms – a conservation education manual developed by Keystone Foundation) as well as a few specialist talks as well. The motive behind these talks and discussions has been to increase awareness



and sensitivity to the Nilgiri Biosphere Reserve.

A Talk on Dr. Salim Ali and Man- Animal Interactions in India by Tara Gandhi:

On the occasion of Dr Salim Ali's 119th birthday, Tara Gandhi, one of Dr. Salim Ali's students spoke of his life, his work and the inspiration behind her new book, Birds, Wild Animals and Agriculture. The talk covered human animal conflicts with emphasis on conflict with wild animals and resolutions in the context of agriculture. Crop management and sensitising people to the plight of animals with shrinking habitats using community level projects was a key element of the work in mitigating conflict.

Events:

Moth Night, 2015:

Moths are the sibling group of the butterflies that outnumber their charismatic counterpart in species richness by about 10 times. There is a staggering diversity (ca. 160,000 species) within moths, be it in their sizes, colours, shapes and habits; and yet we know very little about these little marvels of evolution because of their mostly nocturnal habits and shy, less flashy nature. Begun in 2011 and celebrated every July, National Moth Week (NMW) is an annual, global citizen science initiative whose aim is to spread awareness and interest on one of the most diverse and yet little known group of animals.

NNHS based in Ooty, along with Keystone Foundation in Kotagiri, organized an evening with the moths for the second consecutive year. Moth Night 2015 was organized on July 25, 2015 at The Nature Interpretation Centre, Longwood Shola in Kotagiri. The event was a success with

around a dozen participants in attendance, who were quite keen on knowing more about the denizens of the night. The weather, in its contribution, was not the best for watching moths but still, we could observe a number of species from families such as Geometridae, Eupterotidae, Tineidae, etc., including a newly emerged adult moth in the process of expanding its wings.

Careers in Conservation:

Interested Candidates from Emerald Heights College, Providence College, Stanes School, Lawrence School & Government Arts College interacted with eminent ecologists and scientists. Students got a chance to see some of their work first hand as well as engage with them in conversation regarding their work and the story of how they got there.

Some of the organisations that were kind enough to participate were Nature Conservation Foundation(NCF), Worldwide fund for nature(WWF), Wildlife Research and Conservation Society(WRCS), Zoo Outreach Organisation and Nilgiri Natural History



Society(NNHS). This event was aimed to facilitate conversations between students and ecologists, scientists working in the field of conservation. The event had also been planned to increase awareness of the range of activities that come under "conservation" as well as provide information on the different ways in which one can become a part of these activities.

The highlight of the event though, was the 'Drum Circle' which couldn't have taken place without the Invaluable Help of Keith Mendonce(percussion coach) and Abhishek(music enthusiast) who's brainchild it was.

Wildlife Week Celebrations, Tiruppur:

NNHS and Keystone Foundation were part of the Wildlife Week Celebrations organised by the Government of Tamil Nadu and the Forest department. We had information posters, books and stickers for sale. Our stall was one of the rare ones which showcased the lesser known diversity of insects of the Nilgiris.

There were a number of interested visitors at our stall who also wanted to become members of the society.

Tamil Birders Meet, 2015:

NNHS participated at the Tamil Birders meet which took place at the Tamil Nadu Agriculture University, Coimbatore. The agenda behind the meeting was to highlight the need to collaborate for better monitoring and understanding of birds from across the state. Another aspect which was highlighted was to increase communication between birders across the state.

Outreach and Awareness programmes, Series 1:

A series of outreach programmes and education activities has been initiated by Keystone Foundation and NNHS in the Hasanur , Punajanur and Sigur regions. The most recent camp was conducted for school students at the Keystone Resource Centre in Punanjanur. A wide array of activities were planned and implemented. The children gained an insight into the complex dynamics of how the environment works, as well an opportunity to better their already sharp observational skills. When the children were out on walks, their observation skills were quite amazing to see. We helped them sharpen their skills, and also explained what factors are crucial when noting observations in the field.

Workshops:

Human Wildlife Interactions

Stakeholder Workshop at Coonoor and Kodaikanal:

The stakeholder workshops at Coonoor and Kodaikanal were the last in the series that were initiated by Keystone Foundation and NNHS with the co-operation of various institutions. This was an open forum where institutions facilitated conversations between the farmer groups and the forest department to share their perspectives on man- animal interactions and discuss some of the key issues that lead to conflict. Some of the main opinions and concerns presented during the discussion session were the need for a subsidy for building electric fences (or other physical mitigation barriers) for protecting agricultural fields, lack of communication and clarity from the forest department regarding compensation mechanisms. There were farmers present who aired their concerns; farmer groups present made their opinions and standing on the topic also quite clear. The issue of waste management in urban areas was highlighted, and was also considered one of the main factors contributing towards increasing interactions between humans and wildlife in these landscapes. Some of the other issues highlighted were the need for increasing communication between different governmental agencies governing this region, as well as better planning in the development of infrastructure, taking into consideration the needs of wildlife. Failure of various mitigation measures,

some rudimentary while others were technologically advanced were highlighted. Farmer groups and forest officials present expressed great interest in wanting to try out the basic observation and monitoring systems to better understand animal movement and behaviour.

A Conference on Human- Wildlife Interactions:

A Conference on Human- Wildlife Interactions was organised by Keystone Foundation, NNHS and Tamil Nadu Forest Department- Coimbatore Circle in Kotagiri on the 6th and 7th of October, 2015.

Beat Box with Birdsongs:

Sound Art Project to Promote Conservation Awareness;

The 'SkyIslandBeatBoxproject' is a collaboration between musician Ben Mirin from New York, photographer PrasenjeetYadav from Bangalore, and V. V. Robin, a bird ecologist from the National Centre for Biological Sciences (NCBS) to take bird songs to a larger audience.

NNHS organised for the troop to conduct a workshop at 'A Place to Bee' restaurant on 12th September as part of their tour. In these workshops, participants made original music using a combination of bird songs and 'beatbox' as a means of spreading awareness about birds and their conservation. The music was mixed with high-quality photographs and footage of these birds to create a video linking birds responsible for the sounds in the composition.

Puppetry workshop on Pollination and it's importance:

Dr. Bhanumathi from 'Pavai centre for Puppetry' in association with Nilgiri Natural History Society (NNHS) conducted two workshops for children at the Adi Dravidar Middle School, Doddabetta and Mavanalla Tribal Residential School on the 26th and 27th of November 2015, respectively.

Each workshop lasted for four hours and the theme, Pollination was introduced to children between the age group of 11-13 years. The focus of the workshop was to raise awareness on the importance of pollinators in different biomes.

The children were taught to construct simple hand puppets and to come up with a five minute presentation based on their understanding of the theme.

The newsletter of the Nilgiri Natural History Society (NNHS) aims to cover the many dimensions of natural history - conservation issues, lay observation, cultural representations and traditional knowledge. The newsletter will carry communications about research in Keystone Foundation in the areas of conservation, environmental governance, culture, livelihoods and enterprise. In keeping with the pan Nilgiri Biosphere Reserve (NBR) nature of the Society, space will be allocated for reporting of events/views from elsewhere within the country and from outside the country. Additionally a section will be devoted to research summaries by students who work in the region of the NBR. Guest editors will be invited for special editions. News items gleaned from printed sources about the NBR will be featured. Separate sections will carry information on NNHS and Bee Museum activities. The species focus will feature species of special conservation status, endemic to the Western Ghats and present in the NBR.

SUBMISSION OF ARTICLE

The NNHS newsletter articles are reviewed by the Chief Editors and a member of the editorial board. Articles are invited for the following section: i. Natural History News from India (400 words); ii. Natural History News from the World (400 words); iii. Research Initiatives in the NBR - student contributions (400 words); iv. Species focus (250words).

Articles should be submitted by email to:
anita@keystone-foundation.org or
archana@keystone-foundation.org

Authors should provide complete information including an email address and phone numbers. Articles need to be submitted in standard word processor formats only. Rich text content and other forms are not accepted. Figures and texts need to be sent in separately with adequate labelling and numbering in context to the articles sent. Pictures in the manuscript also need to be sent in separately in TIFF, JPEG or PNG formats with resolution not less than 250 dpi.

Reference style:

Papers in Journals and other periodicals
Hanely, T.A. and Hanley, K.A. 1982. Food resources partitioning by sympatric ungulates on Great Basin rangeland. *Journal of Range Management* 35: 152-158.
Papers in Edited Books, Symposia Proceedings, etc
Cole, D.W. and Rapp, M. 1981. Elemental cycling in forest ecosystems. pp. 341-409. In: D.E. Reichle (ed.) *Dynamic Properties of Forest Ecosystems*. Cambridge University Press, Cambridge.
Books
Lieth, H. and Whittaker, R.H. (eds.). 1976. *Primary Productivity of the Biosphere*. Springer-Verlag, Berlin.
Reports, Dissertations, etc
Sollins, P., Reichle, D.E. and Olson, J.S. 1973. *Organic Matter Budget and Model for a Southern Appalachian Liriodendron Forest*. Oak Ridge National Laboratory, Oak Ridge, U.S.A.



Euphaea dispar *Nilgiri Torrent Dart (Damselfly)*

Photo: M Divin Murukesh - From Silent Valley National Park



DISTRIBUTION: Bright Orange-Red damselfly endemic to southern part of Western Ghats. Found along the streams of evergreen forests.

HABIT AND HABITAT: Usually perches on dry twigs and boulders. Males show the iridescent wing spot after a flight and perch by spreading the wings. In females the bright orange red replaced by dull yellow. Their range majorly confined to the hilly streams of evergreen forests.