



PERIYAR BEATS



Cover Image: Sri. Aneesh P G, Beat Forest Officer, Thekkady Range

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FIELD DIRECTOR'S MESSAGE

BUILDING RESILIENCE IN A CHANGING CLIMATE

Dear Readers,

As we celebrate Wildlife Week, we pause to honor the incredible natural heritage entrusted to our care. This annual observance serves as a vital moment for reflection, not just on the beauty and diversity of our wildlife, but also on the profound challenges that threaten it. The most significant shadow currently looming over our ecosystems is that of the changing climate. This global phenomenon is already manifesting locally through erratic rainfall patterns, increased frequency of extreme weather events, and mounting ecological stress that impacts the very survival of our plant and animal species. We recognize the severity of this threat, which places tremendous pressure on our delicate landscapes and the wildlife they shelter.

However, this recognition is not a cause for despair; rather, it is a powerful call to action fueled by hope and determined effort. Our forests, the vast green lungs of our region, remain our most vital allies in mitigating and adapting to the climate crisis. They are far more than collections of trees; they are complex, self-regulating systems that actively sequester carbon, purify water, regulate local microclimates, and provide the indispensable shelter for biodiversity. Here at the Periyar Tiger Reserve, the Forest Department is intensely focused on enhancing the long-term functionality and resilience of our forests through dedicated, science-based activities. These include crucial habitat restoration projects, where we reintroduce native species to revitalize degraded areas and ensure that the forest can adapt to environmental shifts. Furthermore, we prioritize water conservation through the maintenance of check dams and water holes, securing vital resources for both the ecosystem and surrounding communities, particularly during periods of drought.

Crucially, our work extends beyond the flora and fauna to embrace community coexistence. We are actively engaging local populations as essential partners in conservation, empowering them with the knowledge and resources necessary to successfully transition from human-wildlife conflict to harmonious cohabitation, a philosophical approach central to the sustained health of our landscape. This is complemented by the deployment of technological interventions, such as advanced monitoring systems and spatial analytics, which allow us to better understand climate impacts and manage human-wildlife interfaces with greater precision and effectiveness. The vitality of our forests and the protection of our wildlife are, fundamentally, a shared responsibility. Hence, let us collectively recommit to being the informed and active guardians our wild environments require, and embrace the hope that stems from unified action.

Pramod P P, IFS

CCF(WL) & Field Director, Kottayam
and Executive Director, PTCF

PERIYAR TIGER CONSERVATION FOUNDATION

Vision

To enhance Participatory Forest Management through multi stakeholder participation in Periyar Tiger Reserve and adjoining landscape consistent with the state and national legislations

Mission

- ♦ To safeguard the Western Ghats
- ♦ To facilitate Environmental, Social, Economic, Cultural, Educational and Aesthetic aspects of Periyar Tiger Reserve and adjoining landscapes
- ♦ To support Ecodevelopment, Nature Education, Research, Ecotourism and Protection both technically and financially

Announcement

Periyar Beats will be accepting articles and entries from staff writers. Please send in your entries/field experience/ article on topics such as wildlife, forests and conservation in English/Malayalam to periyarbeats@gmail.com

WORDS FROM THE WILD

INDIA'S FOREST AND BIODIVERSITY RESILIENCE FOR A CHANGING CLIMATE

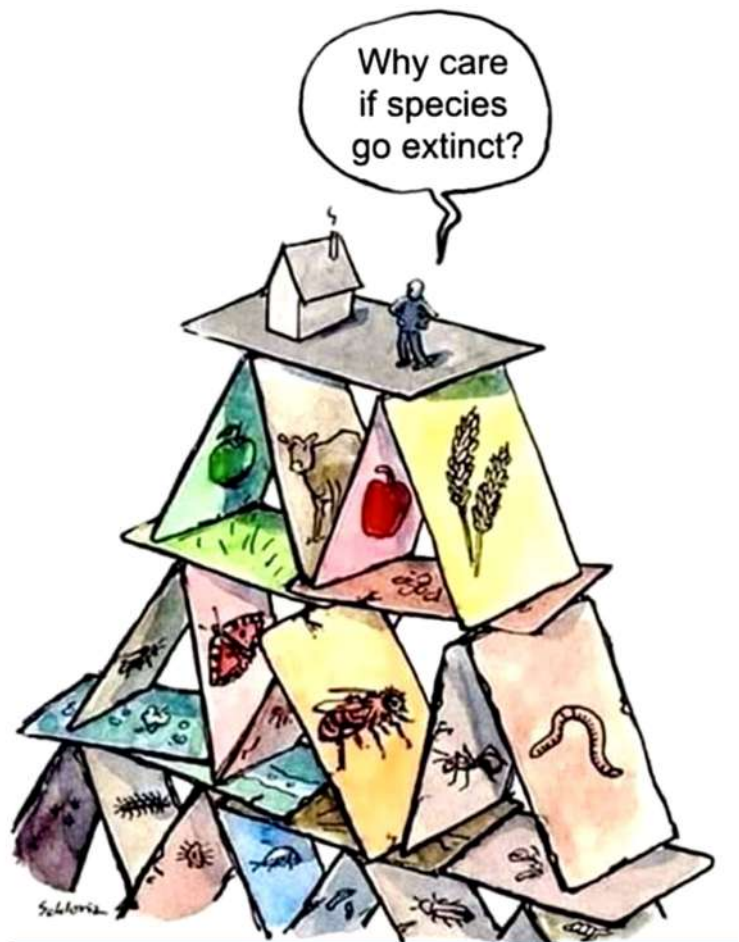
Quality over Quantity

Sethu Parvathy, Nature Education Officer, PTCF

India stands at a decisive moment in its environmental journey. Global assessments such as the Forest Declaration Assessment 2025 warn that the world is 63 percent off track to eliminate deforestation by 2030, with more than eight million hectares of forest lost in 2024 alone. Climate change is intensifying fires and degradation, pushing tropical ecosystems toward irreversible tipping points. At the same time, the IUCN Red List of Threatened Species continues to record alarming trends, over half of the world's bird species are in decline, and thousands of plants, insects and marine taxa have moved to higher threat categories. These findings are not abstract global warnings. These are signals that national forests and biodiversity systems must move rapidly from quantity to quality.

According to the FAO Global Forest Resources Assessment 2025, the country now ranks ninth in total forest area, at approximately 72.7 million hectares, and third in net annual forest gain. India has long been recognised for its quantitative success in increasing forest area. National programs such as the Green India Mission, National Afforestation Programme and Mission LiFE have collectively driven this growth, supported by millions of hectares of plantations, agroforestry systems and bamboo resources. As a result, India is the world's fifth-largest carbon sink, removing an estimated 150 million tonnes of Carbon dioxide each year. These numbers testify to decades of commitment by forest officers, communities and policy makers alike.

Yet this success story hides a crucial challenge. A large share of the recorded forest gain comes from planted or managed tree cover such as bamboo, rubber, eucalyptus and agroforestry plots. These, while valuable for carbon sequestration, do not always replicate the ecological functions of native forests. Globally, the loss of humid primary tropical forests has accelerated, and India's own evergreen and montane forests face similar pressures. When primary forests are replaced or degraded, the stability of carbon stocks and the survival of endemic species decline. The real measure of progress, therefore, is not just how many hectares are green but how resilient, diverse and self-sustaining those ecosystems are under a changing climate.



Climate change has already emerged as the single greatest multiplier of threats affecting forests in India. Approximately 36 per cent of the country's forest area is prone to fires, and the frequency of high-intensity incidents is increasing with rising temperatures, erratic rainfall and prolonged droughts. The Himalayan forests, northern Western Ghats and north-western dry zones are projected to face the highest fire and drought risk in the coming decades. Each event undermines carbon sequestration gains, erodes soil fertility and fragments wildlife habitats. Climate adaptation, once considered an auxiliary task, is now a frontline requirement.

To bridge the gap between area-based achievements and biodiversity integrity, India has launched a transformative initiative, the National Red List Assessment (NRLA) 2025–2030. Announced at the 2025 IUCN World Conservation Congress, this program will assess the extinction risk of about 11,000 native species: 7,000 plants and 4,000 animals, using globally accepted IUCN criteria but applying them at the national and regional level. The effort is led by the Ministry of Environment, Forest and Climate Change with the Zoological and Botanical Surveys of India as nodal agencies. By 2030, the country aims to publish comprehensive National Red Data Books that will, for the first time, provide a home-grown, evidence-based baseline for conservation planning.

Why does this matter for field officers and planners? Because global assessments often overlook local realities. A species listed as “Least Concern” worldwide may be critically endangered within a single Indian valley or shola forest. The NRLA corrects this imbalance by producing fine-scale data that can guide action on the ground. What to protect, where to focus afforestation with native species, and how to channel limited resources. It also links science with governance, future Environmental Impact Assessments and management plans are expected to incorporate NRLA findings so that development projects and compensatory plantations do not inadvertently threaten regionally endangered species.

The NRLA also underlines the importance of taxonomy and data integrity. Accurate species identification is not an academic luxury. It determines how protection funds and legal safeguards are directed. As these agencies map species vulnerability, their findings can be layered with climate-risk data, forest-fire frequency, drought indices and invasive-species maps, to create a “Net Positive Biodiversity Scorecard” for each landscape. Such integration would enable the Green India Mission and state-level programs to prioritize restoration of native flora in biodiversity corridors rather than large-scale monocultures.

India's conservation narrative is one of genuine progress tempered by complex new realities. Expanding forests has delivered global recognition and tangible climate benefits, but sustaining these gains requires deeper attention to what lies within the canopy, the species, the soils, the people, and the processes that make forests resilient. The National Red List Assessment offers the scientific foundation for this next phase, while the Forest Rights Act provides the social framework. When both are implemented in harmony, supported by data-driven planning and equitable governance, India can ensure that its forests are not only expanding but enduring. For every forest officer, researcher and community guardian, the message is clear. Our collective task is no longer just to grow forests, but to secure their future against the pressures of a changing planet.

Selected References

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- * FAO Global Forest Resources Assessment 2025.
- * Press Information Bureau. “National Red List Assessment Initiative (2025–2030)”. <https://pib.gov.in/PressReleasePage.aspx?PRID=2182269>
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PERIYAR'S BOUNTY

Lepidopygopsis typus

The Western Ghats of India, one of the planet's most important biodiversity hotspots, holds many hidden treasures, but few are as evolutionarily significant and critically imperiled as *Lepidopygopsis typus*. Known commonly as the Peninsular-Indian hill trout, this fish is not just another species. It is the sole occupant of its entire genus, *Lepidopygopsis*. The entire scientific lineage rests upon this one animal.



This fish is a marvel of endemism. It exists in an extremely restricted area, being found only within the Periyar stream-reservoir system in the southern Western Ghats. Its presence here, far from where similar-looking fish reside, once led scientists to believe it was closely related to the schizothoracine fishes of the distant Himalayas. However, modern genetic analysis has provided a fascinating twist: *Lepidopygopsis typus* is actually a distinct sister group to a variety of African and Asian barbins, showcasing a deep, ancient, and complex evolutionary history unique to this region.

The stakes for this living piece of history could not be higher. Recognized by conservationists as Endangered (EN), the species faces the highest threat level as mentioned in the IUCN Redlist. Even within its protected habitat, researchers describe it as "very rare." The combination of its irreplaceable genetic uniqueness and its highly threatened status makes *Lepidopygopsis typus* a top priority for conservation efforts in the region. Protecting the pristine freshwater environments that sustain this rare "Ghost of the Ghats" is essential for preserving the entire, irreplaceable ecosystem of the Western Ghats.

NEWS GALLERY

HONOURABLE INDIAN PRESIDENT SMT. DROUPADI MURMU VISITS SABARIMALA



Hon'ble President of India Smt. Droupadi Murmu's visit to the Sabarimala shrine on October 22 was secured by a meticulous joint operation. The officers of the Periyar Tiger Reserve and the Special Tiger Protection Force (STPF) VIPER led by Sri. Sandeep S, Deputy Director, Periyar West Division to ensured a safe passage for her through the protected zones of the PTR.



PERIYAR TIGER RESERVE CELEBRATES WILDLIFE WEEK A Grand Showcase of Conservation and Community Engagement

The Wildlife Week celebration is an annual, nationwide observance in India held from October 2nd to October 8th to raise public awareness about the crucial need for wildlife conservation and protection. Established in 1952 by the Indian Board for Wildlife, the week encourages people from all walks of life, especially students and educators, to participate in various activities like workshops, campaigns, and nature walks. The goal is to promote a greater understanding of the biodiversity that exists within the



country and the environmental challenges it faces, fostering a culture of stewardship towards India's rich natural heritage. In Periyar Tiger Reserve (PTR), the Wildlife Week truly transforms from a mere awareness campaign into a vibrant "people's festival". Here, the local communities, who have been integral to the Reserve's history, often take the lead in organising and participating in the festivities. This deep level of ownership underscores their historical and cultural connection to the forest, demonstrating the success of participatory forest management. The celebrations in PTR, therefore, become a powerful showcase of how sustainable conservation is best achieved when rooted in the wisdom, traditions, and active involvement of the people living closest to the wildlife.

The Periyar Tiger Reserve successfully observed its week-long Wildlife Week celebrations, demonstrating a profound commitment to conservation through diverse programs across its East and West Divisions from October 3rd, 2025. The events were a call for a harmonious approach towards nature and wildlife, a message strongly emphasized by Smt. Lekshmi R, Assistant Field Director.



Education and Conservation focus in Periyar West Division

The celebrations for the Periyar West Division commenced on October 3, 2025, with an inaugural function held at the Nature Education Centre, Pambavalley. Sri. Sandeep S, Deputy Director, Periyar West Division, officially inaugurated the event. Dignitaries present included Sri. Mukesh M K, Range Forest



Officer, Pamba, Sri. D Benny, Range Forest Officer, Azhutha, and Sri. Shaji M K, FDA representative, Periyar West Division. A significant initiative during the inauguration was the launching of a special logo for Wildlife Week and a Wildlife Week special paper bag featuring the printed logo. Sri. Sunil C G, Asst. Nature Education Officer, PTCF, Forest Officials, and members of various Ecodevelopment Committees (EDCs), including SAPP EDC members attended. On the same day, a pledge on wildlife conservation was simultaneously administered at San Thome High School, Kanamala and at Govt. High School, Kuzhimavu, Koruthodu, thus local schools in the conservation effort.

A core activity was the widespread Plastic Eradication Programme. With the support of SAPP EDC members and staff, a drive at Azhuthakkadavu was inaugurated by Sri. Mukesh M K, Range Forest Officer, Pamba, resulting



in the removal of a total of 62 kg of plastic materials, including PET bottles, wrappers, bottle caps, and carry bags, with 65 EDC members participating. Further plastic eradication programmes were organized at Kuzhimavu and Anakkallu area, collecting 23 kg of plastics, and at the Pamba area by the Sannidhanam Section (Pamba Range), where a total of 53 kg of plastic garbage was collected with the participation of EDC members from Attathodu and Staff.

The division also conducted a Screening of Wildlife Documentary for EDC members of Pamba & Azhutha Range at the Community Hall, Kalaketty. This was followed by another Wildlife Conservation Pledge at CKM High School, Koruthodu and Finally, on October 6 and 7, the celebration featured Water Colour Painting Competitions at Govt. Tribal LP school, Kalaketty, and Wildlife Quiz Competitions for students at Govt. High School, Kuzhimavu, and GHS, Kissumum, ensuring a strong educational outreach.



A Festival of Thekkady: Community and Partnerships at Periyar East Division

The week-long events became a festival of Thekkady, inaugurated by the Deputy Director of Periyar East Division, Sri. P U Saju, IFS, in the presence of Smt. Lekshmi R, Assistant Field Director. The inauguration included the traditional flag hoisting and the release of the Wildlife Week sticker. Representatives from the panchayat (Vice President Sri. K M Siddhiq, Block Panchayat Standing Committee Chairperson Smt. Lisamma James, and Panchayat Members), socio-political representatives from Kumily, RFOs of Periyar East Division, PTCF Professionals, Forest staff, and EDC members attended.



The subsequent days were dedicated to fostering community spirit and awareness through diverse activities. The Kalari Hall at Bamboo Grove served as the venue for art and literary competitions, while Gandhi Park in Kumily town hosted Gaanamela Music sessions by local musicians and literary discussions on nature literature in the regional language. The week concluded with an enthusiastic and colourful Public Awareness Rally Competition attended by EDCs, local Schools, Clubs, and Colleges.

In a unique outreach effort, PTR organized a Cricket tournament involving local teams such as Auto Brothers, tourism groups (CGH Earth, WGH-Poetree), the taxi drivers association, and a team from PTR itself. Furthermore, seminars were held on critical topics: "Organic farming and sustainable lifestyle" by Ms. Prakriti Vani, Organic farmer and "Tourism Potentials of Thekkady - Emphasis on adventure tourism" by Sri. Pradeep Murthy, Advisory Board Member of Tourism Department along with a session on "Cardamom-Forest Inter relationships." These seminars, inaugurated by Sri. P U Saju, IFS, and Presided over by Seminar committee Chairman Sri. A Muhammed Shaji, ensured the inclusion of tourism providers and industry experts, broadening the discussion on sustainable practices.

Wildlife Week - Valedictory function



The spirit of wildlife conservation shone bright in Kumily as we concluded our Wildlife Week Celebrations 2025! From the energetic competitions to public awareness rally and inspiring valedictory function, it was a week dedicated to our natural heritage. The valedictory function of Wildlife Week Celebration was held at Holiday Home, Kumily on 08.10.2025. Adv. Dean Kuriakose, Hon'ble Member of Parliament, inaugurated the function chaired by Smt. Daisy Sebastian, President Kumily Grama Panchayat. Sri. Rarichan Neeranakkunnel, District Panchayat President delivered the key note address. Sri. P U Saju , IFS, Deputy Director, Periyar East Division delivered the Wildlife Week message and Smt. Lekshmi R, Assistant Field Director detailed on the diversity and progress of Ecodevelopment activities. Representatives from Azhutha Block Panchayat, Kumily Grama Panchayat, Political parties, representatives from NGOs, Social leaders and representatives of various Ecodevelopment committee members were also present on the occasion. Sri. Rarichan Neeranakkunnel, District Panchayat President distributed the prizes to winners of various competitions held in connection with Wildlife Week celebration. It was followed by a cultural event by Kottayam Mega Voice.





ONE DAY TRAINING FOR PRIMARY RESPONSE TEAMS IN PTR

A one day training for Primary Response teams was conducted in Thekkady. PRT members from Thekkady, Vallakkadavu and Kumily Ranges took part in the training where Sri. John Mathew, DCF, SIP, Kottayam introduced the teams about their responsibilities, Dr. Prashob, gave a session on first aid. The training was facilitated by Smt. Priya T Joseph, Range Forest Officer, Flying Squad Range, Thekkady.



GAVI DISPENSARY RECEIVES ESSENTIAL EQUIPMENT IN PTR-KFDC JOINT EFFORT



In a significant initiative to strengthen healthcare within the Gavi settlement, the Periyar Tiger Reserve (PTR) and the Periyar Tiger Conservation Foundation (PTCF) jointly supplied essential equipment, including a refrigerator, almirah, and chairs, to the local dispensary for secure medicine storage and care of functioning. This successful collaboration, which involved the PTR Flying Squad Range Forest Officer, Smt. Priya T Joseph, the PTCF Sociologist, Smt. Akhila Suresh and the Kerala Forest Development Corporation (KFDC), was formalized in a ceremony where PTR Assistant Field Director Smt. Lekshmi R handed over the supplies to KFDC Chairperson, Smt. Lathika Subhash, with KFDC Managing Director, Sri. Raju K Francis, IFS also attending.

MISSION SOLAR FENCING

The thirty-second and final master training for the Mission Solar Fencing project was conducted at Kalari Hall, Thekkady, on October 28, 2025. The training session was convened with Periyar Range Forest Officer & Thekkady RFO (i/c) Sri. Vegi P V, delivering a welcome speech. Sri. M K Shameer, Asst. Conservator of Forests and Nodal Officer, Mission Solar Fencing gave the introductory talk about Kerala Forest Department's Decca Mission to mitigate Human Wildlife Conflict and the event was officially inaugurated by Sri. D K Vinod Kumar, IFS (Chief Conservator of Forests, High Range Circle). Sri. Manikuttan, Dy. Range Forest Officer (Gr.) Vallakadavu Range, PTR and Sri. Jayaprakash Range Forest Officer (Gr.), Nodal Officers for Idukki & Kottayam Divisions respectively, coordinated this training event along with the Research Range, Periyar Tiger Reserve. The training was handled by Sri. K V Anandan, Deputy Range Forest Officer, RRT, North Wayanad Forest Division. There were close to 60 participants from the Idukki Wildlife Division, Kottayam Division and Periyar Tiger Reserve, East and West Divisions.



EXPOSURE VISIT ON DAIRY PROCESSING FOR GRAZIER'S EDC

A team consisting of seven members from the Graziers EDC, along with two officials from the Ecodevelopment Range and the Facilitator, visited the College of Dairy Science & Technology, Kolahalamedu for a one-day training and exposure program on 23 October 2025. The objective of the visit was to gain practical knowledge and understanding of milk processing and the preparation of various milk products, both with and without the use of machines. This visit served as the first phase of the training, providing participants with a foundational understanding of dairy operations, processing techniques, and value addition possibilities that could be adapted for livelihood enhancement within their EDC.



ONE-DAY ENTREPRENEURSHIP TRAINING FOR SHG UNITS & EDC MEMBERS

A one-day training programme on Entrepreneurship Development was organized for SHG units, EDC members, and staff of the Periyar Tiger Reserve on 24th October 2025. The training was inaugurated by Smt. Lakshmi R, Assistant Field Director, Periyar Tiger Reserve. The training sessions were conducted by Kapital Park, with sessions led by expert resource persons who regularly deliver state-level entrepreneurship and follow-up trainings. They covered topics, including Introduction to Entrepreneurship, Understanding Enterprises; Concept and Need, Activity Overview and Presentations, Green Business Opportunities, Digital Platforms and Opportunities in Enterprise Development. Interactive activities and group discussions were part of the sessions to enhance participant engagement and practical understanding. A total of 47



participants took part in the training. The valedictory session included the distribution of prizes to winners of the group activities. The function had the presence of the Assistant Field Director and the Range Forest Officer, Flying Squad, Staffs from Ecodevelopment and Vallakadavu Range, Sociologist, Nature Education Officer and Facilitator. Similar training was conducted at Periyar West Division as well at Angel Valley Community Hall, Angel Valley on 31st October 2025.

NATURE CAMPS

NATURE CAMP

A one day nature camp was organized for students of Govt. Vocational Higher Secondary School, Kumarakom at the Regional Agriculture Research Station, Kumarakom on 17.10.2025 by Azhutha Range. Sri. D Benny, Range Forest Officer, Azhutha Range inaugurated the programme. Sri. Sunil C G, Asst. Nature Education Officer, PTCF took the awareness session. A visit to Agriculture Biodiversity part of Krishi Vigyan Kendra was also carried out as part of the camp.



Sri. Harikumaran Nair, Dy. Range Forest Officer, Kumarakom Section, Smt. Rejitha, Beat Forest Officer, Kumarakom Section, Sri. Ramesan, Forest Watcher, Sri. Sreejith, Protection Watcher, Sri. Vijayakumar and Smt. Anjali, Teachers, GVHSS, Kumarakom was also present on the occasion and coordinated the programme.

EXPOSURE VISIT OF FOREST TRAINEES

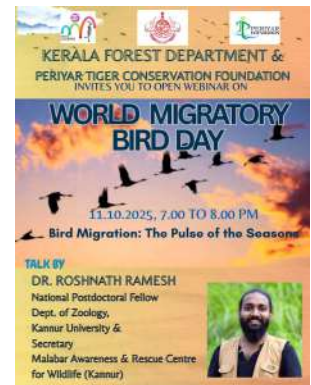
SFTI Arippa Trainees attended a session on Human-Wildlife Conflict mitigation by Sri. Veji P V Range Forest Officer, Periyar and Thekady Range and a demonstration of the Dog squad, Periyar Sniffers, as part of their training



WEBINAR

WORLD MIGRATORY BIRD DAY

To commemorate World Migratory Bird Day on October 11, 2025, a highly engaging webinar was hosted from 7.00 to 8.00 PM. The event featured Dr. Roshnath Ramesh, a Postdoctoral Fellow from the Zoology Department at Kannur University, who delivered a special lecture titled 'Bird Migration: The Pulse of the Seasons'. The insightful session, which explored the fascinating journeys and ecological significance of migratory birds, was exceptionally well-received, drawing an attendance of over 100 participants.



WORLD EARTHWORM DAY

To celebrate World Earthworm Day, a webinar was held on Tuesday, October 21, 2025, from 7:00 PM to 8:00 PM (IST). The event featured a talk on 'An introduction to earthworms: importance and diversity' delivered by Dr. Prasanth Narayanan S., Research Scientist at the Advanced Center of Environmental Studies and Sustainable Development, Mahatma Gandhi University, Kottayam throwing light on the diversity and significance of the group, threats faced by the group including presence of invasive earthworm even in Protected Areas was highlighted.





Visit and interaction with Sri. Arunkumar Pandey, IFS, Chief Wildlife Warden, Chhattisgarh at Periyar Tiger Reserve on 24.10.2025



Photo by Smt. Bismi Wills
Beat Forest Officer, Vallakkadavu Range



Photo by Sri. Sumesh P S, Beat Forest Officer, Ecodevelopment Range

UPCOMING EVENTS

- * **November 1 - 7 - Malayala Bhasha Varacharanam**
- * **November 14 - Children's Day and Special School Nature camp**
- * **November 21 - World Fisheries Day**
- * **Outreach programmes**
- * **Nature Camp**
- * **Vanamithra Camps**
- * **State wide Training on All India Tiger Estimation Phase-1**
- * **Impact Assessment study on Sabarimala Ropeway project**
- * **Impact Assessment study on Sabarimala pilgrimage**



Photo by **Sri. Ramesh Babu M**, Conservation Biologist, Periyar Tiger Conservation Foundation