

Newsletter of WWF - India, Kerala State Office

FROM THE STATE DIRECTOR'S DESK

The Wild Wisdom Global Challenge is going well across the country with good participation of schools and their students. WWGC provides a unique opportunity for students from across the country, irrespective of their location – whether they are in the city, in a village, or in very remote areas, to get quality reading and learning materials and explore the natural world based on each year's theme. The competitions at various levels, i.e., school level, city/state level, national and international levels is a great encouragement for them to read, explore, learn more, and perform well. The Dragonfly Festival under the banner of Biodiversity Festival has been received well with college teams actively participating in the regular wetland biomonitoring around them. Dragonflies are indicators of a clean and healthy wetland ecosystem. So when the college students and their teacher-in-charge visit the wetland every month to observe the Odonates – Dragonflies and Damselflies, they are not just observing them, but observing nature in general and also taking note of the various changes in and around the wetlands like pollution, reclamation, etc. Such kind of Citizen Science initiatives alone can protect the ecosystems mainly outside forest areas including mangroves, sacred groves, wetlands, laterite hillocks, waterfowl habitats, etc. Our forests are considerably well protected by the Kerala Forests and Wildlife Department and with adequate legal provisions available. However, ecosystems outside forests are under much threat and degradation because of the lack of proper recognition and availability of legal provisions to protect them. Hence a participatory approach with a bottom-top approach can develop a sense of belongingness and appreciation in the local people and encourage them to move towards the protection and upkeep of these precious ecosystems, which are very much essential for sustaining the lifeforms inhabiting them and ensuring our sustenance too. The ECHO program, Building Environment Conservation Heroes, is also well received in Kerala and we

have 10 colleges registered with us. Every year, we take up observation of many environmentally important days. This year, we took up observation of World Cleanup Day with a very different and impactful initiative. We mobilized our volunteers to come together at Cheshire Home – the home for the physically challenged situated at Kuravankonam, Thiruvananthapuram, and clean up their garden area getting rid of weeds and leveling the ground and then setting up a Kitchen Garden in the entire area. Our volunteers were very enthusiastic about this work as they fully realized the impact this work can bring to the home and its inmates. The administrators and the inmates gave us full support and encouragement. The beach combing along the selected beaches to observe and count shorebirds and the waterbird monitoring in Ramsar Sites i.e. for Ashtamudi Lake in Kollam District is also progressing well. We could also carry out Campus Bird Count in three colleges in the Capital City of the State under the leadership of our Expert Bird Volunteers and with the involvement of the college student teams. As in previous years, we observed the World Migratory Bird Day also. Wildlife Week in the first week of October was observed with our involvement with many agencies, mainly the Department of Museums and Zoos, Govt. of Kerala, Mar Ivanios College, and Cotton Hill Girls High School. We were also able to represent WWF in the Viswa Yuva Kendra Workshop on "Role of Youth in Waste Management" organized at Govt. Women's College organized under the leadership of Dr. Anilkumar, our Volunteer and in the Induchoodan (Father of Ornithology in Kerala) Commemoration Photography Exhibition mainly organized by Warblers and Waders. The active involvement of our Volunteers, regular as well as new ones, and the good relationships and partnering that we have with Government Departments, R&D Institutions, NGOs, and people's organisations are what works for us to take forward our mission across the state in Kerala.

Renjan Mathew Varghese
State Director

IMPORTANT NEWS ON NATURE AND ENVIRONMENT

Global

Sand dredging is 'sterilizing' ocean floor, UN warns

Sand is the most exploited natural resource in the world after water but its extraction for use in industries like construction is only loosely governed. Around 6 billion tons of marine sand is being dug up each year in a growing

practice that a U.N. agency said is unsustainable and can wipe out local marine life irreversibly. Sand is the most exploited natural resource in the world after water but its extraction for use in industries like construction is only loosely governed, prompting the U.N. to pass a resolution last year to promote more sustainable mining. The findings from the United Nations Environment Programme (UNEP) coincide with the launch of a new platform 'Marine Sand Watch' backed by funding from the Swiss government that monitors dredging activities using marine tracking and artificial intelligence. "The amount of sand we are withdrawing from the environment is considerable and has

a large impact,” UNEP’s Pascal Peduzzi told a Geneva press briefing. (Source: *The Hindu*, 22 September 2023)

Invasive species cost humans \$423bn each year and threaten world’s diversity

Invasive species are costing the world at least \$423bn every year and have become a leading threat to the diversity of life on Earth, according to a UN assessment. From invasive mice that eat seabird chicks in their nests to non-native grasses that helped fuel and intensify deadly fires in Hawaii, at least 3,500 harmful invasive species have been recorded globally in every region, spread by human travel and trade. Their impact is destructive for humans and wildlife, sometimes causing extinctions and permanently damaging the healthy functioning of an ecosystem. Leading scientists say the threat posed by invasive species is underappreciated, underestimated, and sometimes unacknowledged, with more than 37,000 alien species now known to be introduced around the world and about 200 establishing themselves each year. The assessment, produced by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the leading UN body on biodiversity science, was produced by 86 experts – including scientists and Indigenous communities – over four and a half years. Most invasive species reports were noted in the Americas with 34% of all reports, followed by Europe and Central Asia (31%), the Asia Pacific (25%) and Africa (7%). Three-quarters of reports were in terrestrial ecosystems, mostly woodlands and boreal forests. The authors found that the cost of biological invasions had risen 400% every decade since 1970 and projected at it would continue to soar in years to come. (Source: *The Guardian*, 4 September 2023)

Global water cycle ‘spinning out of balance’: UN Meteorological Agency

The report showed that over 50% of global catchment areas experienced deviations from normal river discharge conditions. The World Meteorological Organization said that the hydrological cycle was increasingly out of balance due to climate change and made a call for a fundamental policy shift towards better monitoring. “We are seeing much heavier precipitation episodes and flooding. And at the opposite extreme, more evaporation, dry soils and more intense droughts,” said WMO Secretary-General Petteri Taalas in a statement as the U.N. agency released its State of Global Water Resources report for 2022. It showed that over 50% of global catchment areas experienced deviations from normal river discharge conditions, with most of them drier than normal, citing China’s Yangtze River as an example. (Source: *The Hindu*, 12 October 2023)

National

Botanical Survey of India gets patent for bamboo-based reusable straw

The patent office of the Government of India has granted a patent to the Botanical Survey of India for ‘reusable straw and its manufacturing’. The reusable straw is developed from a species of endemic bamboo plant that is found in the Andamans and Nicobar Islands. The bamboo species *Schizostachyum andamanicum* was discovered on the island about three decades ago and now its economic potential has received a boost with the granting of the patent for reusable straw and its manufacture. Lal Ji Singh, regional head and scientist at BSI’s Andaman and Nicobar Regional Centre in Port Blair said that this species of bamboo is characterized by a thin large hollow erect culm (stem) with long internodes and has the potential for developing into a straw. “It is a novel way to replace plastic straws with an organic alternative. This is a future technology to enhance the economy of farmers and bamboo growers of the island, if they cultivate this endemic bamboo species at a commercial level,” Dr. Singh, who is behind the invention said. (Source: *The Hindu*, 7 September 2023).

Dragonfly: The faces of wetlands in India

The Dragonfly Festival, being conducted across 11 States in India by WWF India in collaboration with other organizations, aims to create awareness for the conservation of these insects. In cities across India, a number of organizations and individuals have embarked on a journey to document the dragonflies and damselflies during the Dragonfly Festival. Initiated by WWF-India in partnership with Bombay Natural History Society, India Biodiversity Portal, Indian Dragonfly Society and other like-minded partners, the Dragonfly Festival is a citizen science movement that has been running for the past five years. (Source: *The Hindu*, 12 October 2023)

The climate blind spot in India’s river interlinking projects

Massive infrastructural projects aimed at mitigating drought and floods may instead worsen water levels, a new study in Nature Communications has found. For four decades now, India has put its weight behind river interlinking projects that transfer excess water from one river basin to the other — a \$168 billion answer to a swelling water stress crisis. Prime Minister Narendra Modi in 2020 said projects like the Ken-Betwa link have “huge potential to change the fate” of the regions they touch; other ministers called them a ‘permanent’ solution to droughts. A new study published in Nature Communications, however, challenges these claims: many hydro-linking projects in India and globally are altering monsoon cycles, disturbing complex hydro-

meteorological systems, which in turn “may worsen the water stress across the country, making the interlinking projects ineffective or possibly even counterproductive,” it says. (Source: *The Hindu*, 7 October 2023)

State

New dragonfly species discovered in Wayanad

Christened Red-rumped Hawklet, the species is profoundly seasonal, taking to the skies exclusively during the month of October, conclude researchers after a year-long study. This discovery hints at the possibility of other species awaiting revelation in the same landscape. A new dragonfly species has been discovered in the verdant landscapes of Wayanad. The dragonfly has been given the scientific nomenclature *Epithemis wayanadensis*, to mark the lush and biodiverse Wayanad plateau nestled in the Western Ghats. The discovery was a collaborative effort led by Vivek Chandran and Subin K. Jose, Researchers of the Environmental Science Department at Christ College, Irinjalakuda; David Raju, a Seasoned Naturalist and Wildlife Photographer; and Zeeshan Mirza, a Researcher from the Max Planck Institute for Biology in Germany. (Source: *The Hindu*, 6 October 2023).

Eco-restoration project covers Anamudi Shola National Park in Munnar with natural grasslands

Munnar Wildlife Division has converted a park filled with exotic species of trees into 50 hectares of forest land, encouraging wildlife presence and food and water for animals in an anticipatory step towards curbing human-animal conflict. From a stark burnt-out land, the Pazhathottam area in Anamudi Shola National Park, near Munnar, in Idukki has transformed into a green heaven teeming with life, thanks to an initiative by the Forest department. The area stands as an example of how an eco-restoration project could help grow natural grasslands and ensure proper food for wild animals. Munnar Wildlife Division converted a park filled with exotic species of trees into 50 hectares of forest land. The project was implemented through the United Nations Development Programme (UNDP). It was started in 2019 and completed in 2022. “As part of the project, exotic species were cleared from the forest land, and natural grass was planted. Within months, the area was converted into a natural grassland. After changing the area to a natural grassland, the area once again saw the presence of Bison and other wild animals. Now, Nigiri Pipit and such birds are regular visitors in the area, and often, wild elephants arrive here. After the restoration, natural streams in the area were also revived. It also ensures water security in the summer season in the Chilantiyar area that is downstream the Pazhathottam region. The eco-restoration project is

being implemented with the participation of local residents. The department has formed an eco-development committee (EDC) named ‘Haritha Vasantham’ for the project. It is for the first time in the State that an EDC has been formed for an eco-restoration project,” Munnar Wildlife Warden S.V. Vinod said. (Source: *The Hindu*, 17 September 2023)

SPECIES OF THE ISSUE

Malabar Black Narrow-mouthed Frog *Melanobatrachus indicus*



Melanobatrachus is a genus of narrow-mouthed frogs in the family Microhylidae and lives amongst leaf-litter, rocks and other ground cover of moist evergreen tropical forests. It is endemic to wet evergreen forests of southern Western Ghats in Kerala and Tamil Nadu states of India. They are an Evolutionarily Distinct and Globally Endangered (EDGE) species. It is classified as “Endangered” by the International Union for Conservation of Nature”

CHILDREN’S CORNER

1. Find the odd one out – Frog, Tadpole, Newt, Froglet, Toad (Newt)
2. Frogs have _____ skin. (Permeable)
3. Frogs live on every continent except Antarctica – True or False (True)
4. What is a group of frogs called? (Army)
5. _____ frog is the only known frog species with dentary teeth. (Guenther’s marsupial)
6. The Purple Frog or Pignose Frog (*Nasikabatrachus sahyadrensis*) is endemic to which region in India? (Western Ghats)

7. Where in the world can you see poison Dart Frogs? (Central and South America)
8. Which is the largest living frog in the world? (Goliath Frog)

ACTIVITIES OF WWF-INDIA KERALA STATE OFFICE

Wild Wisdom Global Challenge

The date for the State-level On-ground Quiz at Mary's College, Thrissur on November 8, was finalized in consultation with the Teacher-in-charge of the schools. Renjan Mathew Varghese, State Director was invited by the WWF-India, Chennai Office to be the Quiz Master for their State-Level Quiz on 27th October.



Nature Connect

Dragonfly Festival

A State-level Orientation for Wetland Biomonitoring for Volunteers was conducted online on 20th September in which they were trained to conduct the survey and upload the data to the India Biodiversity Portal (IBP) website. Wetland Biomonitoring started in Kerala at Vellayani Lake and Bharathapuzha River on 23rd September and at Kole wetlands on 27th September. David Raju took a session on Dragonfly Photography organized by WWF.

Dragonfly Walk at Punchakkari Wetlands

Kerala State Office conducted Dragonfly Walk at Punchakkari Wetlands on 28th October 2023. The team comprised of 22 participants along with a WWF-India staff member and four members from SOS. Dr Sujith gave an overview of how and where to observe Odonates and additional protocols to be followed during the Walk. The team observed fifteen species of Odonates – both dragonflies and damselflies.



People 4 Planet

ECHO

The ECHO Bootcamp was organized by WWF India Kerala State Office in collaboration with Christ University Nodal Office, Thiruvananthapuram on 22nd and 23rd September 2023. Ten colleges across Kerala had registered and one Teacher-in-charge and four representative students (Core Members) participated in the Bootcamp. The ECHO proposals from all ten colleges were then collected.





Observation of World Cleanup Day 2023

On World Cleanup Day 2023, WWF-India, Kerala State Office, in partnership with ICE (Indus Cycling Embassy), AMAS Kerala (Academy for Mountaineering and Adventure Sports), and Dolphins United, embarked on a remarkable mission at Cheshire Home, a home for the physically challenged, situated in Kuravankonam on 16th September. The team of volunteers embarked on de-weeding an area of 3 cents of land, followed by cutting channels, laying a thin layer of manure, digging pits, and planting.



Beach Combing

On 9th September the team visited Perumathura beach and recorded the sighting of a Common Tern and four Spot-billed Ducks from the shore. Reji Chandran and the Team conducted beach combing at Poovar Beach and recorded a Parasitic Jaeger. On 21st October, monthly beach combing

was conducted at Poovar Beach and sightings of Lesser and Greater Sand Plovers, Little and Great Crested Terns, Ruddy Turnstone, and a Temmink's Stint were recorded.



Waterbird Monitoring Program in Ramsar Sites

Dr. Nirmal George led the monthly Waterbird Monitoring Program at the Ashtamudi Lake, on 16th September and 14th October at Asramam Mangroves and nearby locations. He reported 21 and 22 species of birds in the month of September and October, respectively.

Campus Bird Count

WWF Volunteers conducted the Campus Bird Count in three colleges in Thiruvananthapuram – All Saints College (26 September & 30 October), MG College (27 September & 25 October) and Mar Ivanios College (28 September & 31 October). In the month of September, around 24, 18, and 17 species were recorded by All Saints, M G College, and Mar Ivanios, respectively. While it was 20, 16, and 27 species in the month of October correspondingly. Indian Thick-knee was the significant sighting from the All Saints College. The count was a volunteer-led activity under the guidance of A.K. Sivakumar. There was a total of twenty-four volunteers in September and Twenty in October from three colleges became part of the count.



MG College



All Saints College

World Migratory Bird Day 2023



WWF-India Kerala State Office observed the World Migratory Bird Day with two different sessions. The field session at Punchakkari Wetlands in Thiruvananthapuram was conducted on 14th October, led by Jaichand Johnson for 6 Volunteers. The Orientation Session on documenting the migratory birds of Kesavadasapuram Paddy field also was

led by him on 16th October at MG College. Following this, an action plan was prepared to document the migratory birds of Kesavadasapuram Paddy field, which is close to the college, on a weekly basis with the help of birder volunteers. Around 70 student volunteers were actively involved in the sessions. The Volunteers will continue the documentation till January 2024 and prepare a publication – “State of Migratory Birds of Kesavadasapuram Paddy field”, on the occasion of World Wetlands Day 2024.



Observation of Wildlife Week

The Kerala State Office was invited for observing Wildlife Week by various institutions. The State Director gave an interview at Akashavani on 4th October 2023. The Kerala State Office joined with the Department of Museum and Zoo to observe Wildlife Week on 2 October 2023. The program was inaugurated by the Honorable Minister for Animal Husbandry and Zoos, Smt. J Chinchu Rani and MLA Sri. V.K. Prasanth. The State Director spoke to the audience about the importance of wildlife conservation. The winners of the painting competition conducted as part of World Elephant Day 2023 were given trophies by the Honourable Minister during the function. The State Director was also invited as Chief Guest for the Valedictory function held on 8th October. He addressed the audience reiterating the importance of wildlife conservation and gave away the prize and certificates for the various programs conducted by the Department of Museums and Zoos, Thiruvananthapuram.





Kerala State Office observed a single-day workshop for College Students in association with the Directorate of Museums & Zoos on 4th October 2023. Following a session on “Know Our Wildlife”, an activity session followed in which the students portrayed the established linkages with Wildlife and Human Life based on the session. Then a Fun Quiz was led on characters inspired by wildlife in cinemas. Post-lunch, the State Director, led a session on “Man- Animal Conflict – Case studies from Kerala”. The last session was to make any creatives like a picture, song, story, cartoon, poster, etc. on the theme “My Wildlife” and present it to the audience. There were around 30 participants, which included students from Kattakada Christian College and WWF Volunteers.



The State Director led a session on “Partnership for Wildlife Conservation” in Mar Ivanios College on 5th October 2023. The session was attended by 140 participants. Mr. Sivakumar, Senior Education Officer led a session on “Biodiversity of Kerala” at Govt. Cotton Hills HSS, Thiruvananthapuram arranged by Prof. Abraham Thomas, WWF Volunteer on 9 October 2023. Around 120 students attended the session.



Others

VYK Workshop on Role of Youth in Waste Management at Govt Women’s College

The State Director attended the VYK Workshop on the “Role of Youth in Waste Management” at the Govt Women’s

College on 14th September 2023. Dr. Anilkumar, Assistant Professor, Dept. of Botany and Volunteer, WWF-India coordinated the program. The event was inaugurated by Mr. Geromic George, IAS, District Collector, Trivandrum.



Induchoodan Commemoration Bird Photography Exhibition

The State Director and Senior Education officer attended the inaugural meeting of the Induchoodan (Father of Ornithology in Kerala) Commemoration through Bird Photography Exhibition held at the Museum Auditorium on 20th September. SEO then attended the session by Dr V. Santharam of Rishi Valley School and did see the photo exhibition associated with the event on 23rd September.



Invited Talk

The State Director was invited to talk on “Sustainable Development and Sustainable Development Goals” at K V Peroorkada as part of the PM Shri Schools Scheme on 31 October 2023. Around 120 students listened to the talk.



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