FROM THE STATE DIRECTOR’S DESK

Engaging with our Volunteers on our shared mission of nature conservation and environment protection has always been an exciting experience, which has given us much new learnings. Observation of the Volunteers Anniversary Day with the participation of our 26 regular Volunteers in a get-together at Elephant Rehabilitation Centre, Kottoor was a memorable day for all in which the volunteers individually shared their experiences over the years and we could relive the moments how as OneWWF we had overcome various hurdles and moved forward with our mission in the State. We could organise the Asian Waterbird Census also in the three southern districts of Thiruvananthapuram, Kollam and Pathanamthitta as part of our Green Partnership Programme with the Social Forestry Division of Kerala Forests & Wildlife Department. When the Trivandrum Bird Race helps us to observe and keep track of changes in the bird habitats in the Capital City, the Asian Waterbird Census helps us annually to monitor major wetlands which acts as water bird habitats, identify changes across the year and also threats and challenges, assess the change in the number and species of birds and come out with annual reports. We are witnessing dynamic participation from colleges in our ECHO program also. For the proposals received, we have conducted an in-house review and given the comments back to the team for improvement. With our active engagement with some colleges, we could organise Campus Bird Count in three campuses with the involvement of the students. We have been part of the District Bird Atlas program being carried out across Kerala and we have been looking after the three southern districts. With the involvement of 50 Expert Birder Volunteers, we were involved in the surveys in forest and non-forest areas across the three districts during this period too. In Ek Prithvi, the State Panda Fest and the National Panda Fest was a totally different experience for all participants, be it the School Management, Teachers, Non-Teaching Staff, Students and the WWF Staff Team. The State Panda Fest was organised as the culmination of the year-long programme in the 5 schools in and around Neyyattinkara which witnessed the dynamic participation from all the schools. Out of that, one team of two students got the opportunity to attend the National Panda Fest organised in WWF India Secretariat, New Delhi. The experience of travelling to New Delhi and the exposure and interaction that the team involving two students and their teacher got was totally different as shared by them. As for the Rivers Project, the institutional visit, interaction with experts and secondary data collection and compilation is progressing well. In the Post Flood Impact on Biodiversity Project, after multiple reviews and corrections, the Final Study Report was submitted to Dr. Preeetha, Nodal Officer at Kerala State Biodiversity Board. As part of preparing the Detailed Project Report for Marine Turtle Conservation along the northern Coast of Kerala for NCSCM and MoEFCC, we carried out the on-ground field survey along the coastal belt from Chavakkad to Kasargod. The data collected will be analysed, prioritised and initiatives outlined in the DPR. In our awareness and outreach programmes, we served as resource persons to handle the sessions for the Refresher Course in Environment Science organised by UGC-HRD of Kerala University at Kariyavattam Campus. We also put up our exhibition stall in the Kerala Science Congress organised at IRTC, Palakkad in the month of January. We also played active role in the meeting organised by like-minded individuals on addressing forest fires in Kerala and also in the meeting of the Working Group on Environment and Disaster Management in Thiruvananthapuram Corporation. We observed World Wildlife Day 2020 with TKM Arts & Science College with the support of Kollam Social Forestry Division. The State Office Staff Team visited Chavakkad and interacted with the Local Marine Turtle Conservation Groups to have first-hand experience of marine turtle conservation along the Kerala Coast. The team members were really lucky to witness the hatchlings coming out of the nest during the late evening hours.

Renjan Mathew Varghese, State Director

IMPORTANT NEWS ON NATURE AND ENVIRONMENT

‘Silent death’: Australia’s bushfires push countless species to extinction

The Australian bushfire season has burned through about 5.8 million hectares of bush, known across the world for its unique flora and fauna. Ecologists said that months of intense and unprecedented fires will almost certainly push several species to extinction. The fires have pushed back conservation efforts by decades, they say, and, as climate heating grips, some species may never recover. Climate scientists have long warned that rising greenhouse gases will spark a wave of extinctions. Bushfires don’t just burn animals to death but create starvation events. Birds lose their breeding trees and the fruits and invertebrates they feed on. Ground-dwelling mammals that do survive emerge to find an open landscape with nowhere to hide, which one ecologist said became a “hunting arena” for feral cats and foxes (The Guardian, 3 January 2020).
**CMS COP13 concludes in India with major new actions for migratory species**

The Thirteenth Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS COP13) concluded in Gandhinagar, India with the adoption of a number of significant resolutions and decisions to address the conservation needs and threats facing migratory species around the globe. Ten new species were added to CMS Appendices at COP13. Seven species were added to Appendix I, which provides the strictest protection: The Asian Elephant, Jaguar, Great Indian Bustard, Bengal Florican, Little Bustard, Antipodean Albatross and the Oceanic White-tip Shark. The Urrial, Smooth Hammerhead Shark and the Tope Shark were listed for protection under Appendix II, which covers migratory species that have an unfavorable conservation status and would benefit from enhanced international cooperation and conservation actions. CMS COP13 also adopted the Gandhinagar Declaration, which calls for migratory species and the concept of ‘ecological connectivity’ to be integrated and prioritized in the new Framework, which is expected to be adopted at the UN Biodiversity Conference in October (www.unenvironment.org, 24 February 2020).

**Coronavirus declared a pandemic by W.H.O**

The World Health Organization described the new coronavirus as a pandemic for the first time on 11th March 2020. Tedros Adhanom Ghebreyesus, the World Health Organization’s director-general called for countries to protect one another against the common threat. He said that although this is the first pandemic caused by coronavirus we can believe that this is the first pandemic that can be controlled. WHO advised that everyone must wear a mask outdoors and submit to constant temperature checks, which are administered at the doors to every office building, store and restaurant, as well as bus, train and subway stations — even at the entries to apartment houses and residential neighbourhoods. People who suspect an infection should get temperature checks, flu tests, white blood cell counts, CT lung scans and laboratory tests for the virus (The New York Times, 11th March 2020).

**Honey Collectors of Sundarbans switch to apiculture to fend off tiger attacks**

From time immemorial, people from the villages of Sunderbans have been venturing into the dense mangrove forest inhabited by the Royal Bengal Tiger to collect the sweetest produce of the forest, honey. Maulis (honey collectors), as they are called in Bengali, often risk their lives in the peak season to collect honey, armed with nothing but a prayer to Bon Bibi (the Forest Goddess). Going by the official estimates, at least five to six of these honey collectors (official figures) are killed by tigers every year. In an attempt to ensure that the honey collected from the Sunderbans does not involve such life risk, Directorate of Forest 24 Parganas (South), along with WWF India, has come up with a novel mechanism of community apiculture for collecting the forest produce. The villagers of the fringe areas of Sunderbans have set up three cooperatives societies, the members of which have been provided with training and equipment, such as honey collection boxes. These boxes are placed inside forest camps and adjoining nylon netted forest areas of the Sunderbans (23rd March 2020, The Hindu).
Kerala demolishes skyscrapers over environment violations

A total of around 343 flats - home to about 2,000 people - were destroyed over the weekend in what has been described as one of India's largest demolition drives involving residential buildings by the Kerala Coastal Zone Management Authority (KCZMA). It was created to prevent degradation of coastal and marine areas, says permission for the buildings to be constructed was given by local officials without its approval. The KCZMA said the location of the apartment complexes, in the municipality of Maradu, was a critically vulnerable area where no new construction was allowed. The Supreme Court had ordered the demolition last year, after a committee found that they were built in breach of rules protecting coastal areas. The court said builders were in breach of construction rules and called illegal construction in the area a "colossal loss" to the environment. It also referred to the devastating floods in Kerala in 2018 and said they were the result of "the entire environment being degraded and coastal zones being illegally occupied" (11 January 2020, BBC News).

Survey of Vellayani Lake begins

Navy undertakes hydrographic survey that will assess extent of silt deposit. The much-anticipated hydrographic survey of Vellayani Lake by the Indian Navy as part of the Revive Vellayani project, launched jointly by the Swasthi Foundation and the State government, is under way. The survey, covering the entire lake area, will create its comprehensive bathymetric map. On completion of the survey, the bathymetric map will aid estimate the quantum of silt that needs to be dredged from each area. A geospatial study conducted earlier had found considerable reduction in the area of the lake. In 1973, it was 558.93 hectares. In 1992, it had dwindled to 267.89 ha; in 2001 to 267.14 ha; and in 2011 to 243.39 ha. At present, the extent of the lake is only 222 ha (The Hindu, 31st January 2020).

SPECIES OF THE ISSUE

Gharial

(Gavialis gangeticus)

Inhabiting in the rivers of the northern Indian subcontinent, they are also known as the gavial or the fish-eating crocodile and amongst the longest of all living crocodylians. It is olive-coloured, with a very long and narrow snout and with 27 to 29 upper teeth and 25 or 26 lower teeth on each side. The males have a hollow bulbous nasal protuberance at the tip of their snout. The grow up to 9 meters in length.

EXPERT TALK

Sustainable Future for People and the Planet

The Planet has a boundary and hence the natural resources available are also limited. What we should always be aware about is:

• Our population is increasing steadily
• Our per capita needs are increasing
• There is only one Planet with limited resources to meet these increasing demands.

When we look at all the environmental issues around us, one common thing is “We Humans”. Our consumerism, globalization, industrialization, green revolution etc. has caused 99% of these problems. Hence we need to be the change in the society.

With regard to utilization of resources, whatever be it, it has to be “Wise Use” of resources. Wisdom and wise choices are something which comes with experience and expertise. So we cannot leave decision to the hands of politicians, or if it be, they should be ready to learn.

We should reorient our minds about “Waste”. Anything in the wrong place is waste. So our general approach should be to Reduce Waste - Reuse - Recycle.

The development of the countries should not be assessed on the scale of Gross Domestic Product (GDP), but more encompassing indices like Gross National Happiness (GNH), which looks at the quality of life too.

The agendas of Central and State Governments should not be short- term oriented, just covering their term period. But policies, strategies and programs for nature and environment should go beyond this, on the long term, and should also overlook geographical divide, political differences, religious splits etc.

We should reiterate our basic needs as 1. food, 2. water, 3. housing, 4. clothing, and not as 1. fast food, 2. bottled water, 3. maximum no. of 3 BHK AC fitted houses, 4. foreign brand clothing

For food, it should be fresh and locally available. For water, we should stress on rainwater harvesting and wise use of potable water. For housing, it should be one dwelling unit per family as per local conditions. For clothing, it should be
‘decent clothing’ and not ‘luxury’ and going by everyday style statements.

Wetlands and Rivers provides two of our basic needs i.e. food and water. So no compromises can be allowed on its quantity (extent) and quality. Conversion/ reclamation of wetlands, encroachment and pollution of rivers, over-extraction of resources from rivers etc. should be stopped at all cost.

Forests should be protected as they are, since they sequester carbon which regulates climate change and provides oxygen, which sustains healthy life on the Planet. Degraded patches of forests should be restored. Fragmented forests should be reconnected through afforestation programmes. Monocrop plantation should be avoided in forest areas. Invasive alien species should be removed and replaced with native species.

Green cover/ trees outside forests should also be protected with priority because they face much anthropogenic pressure. They provide fruits, food, shelter etc. and are home to many small and big lifeforms. They provide many values, functions and services to man, animals and the Planet.

The marine ecosystem holds wealth of bio-resources and the coastal ecosystem is home to many people including fishermen, provides livelihood opportunities, and is a platform for tourism and recreation. Pollution of the marine ecosystem by any means should not be allowed. Extraction of resources should be regulated and restricted as per the need. Development of the coast should be prioritized based on consultations with the stakeholders and after carrying out a through Cost-Benefit Analysis.

Agriculture, farmers and farm laborers should be given their due recognition and all possible support, both in terms of money and materials, because they cater to the food security of our nation. Agriculture should move from chemical intensive to eco-friendly organic farming and should not harm the environment in any way.

Important ecosystems outside forest area like Laterite Hillocks, which acts as sponges of Planet Earth, Sacred Groves, which are the abode of native vegetation, Mangroves, which are breeding, feeding and nursery ground of many aquatic species should be protected without any compromise on their extent or quality.

Humans should be oriented in the best possible manner on the concepts such as “Ecological Footprint” and how to live within its limits. Earth Overshoot Day and how to use resources wisely and sustainably, so that it remains for the future also.

Industries and businesses should move to eco-friendly/ environment friendly practices with shift in their raw materials, sourcing, processing, disposal of waste, delivery etc.

Ultimately, at all levels, we need a New Deal for a Sustainable Future for People and the Planet. We should move from running after our greed to meeting just our basic needs.

Renjan Mathew Varghese
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**CHILDREN’S CORNER**

Match the following Ramsar Site in India to their geographical locations/ state

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Ramsar Site</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Keoladeo National Park</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>Loktak Lake</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>Ashtamudi Lake</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>Chilka Lake</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>Harike Lake</td>
<td>E</td>
</tr>
<tr>
<td>6</td>
<td>Assam Conservation Reserve</td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>Bhoj Wetlands</td>
<td>G</td>
</tr>
<tr>
<td>8</td>
<td>Tso Kar Wetland complex</td>
<td>H</td>
</tr>
<tr>
<td>9</td>
<td>Chandertal Wetland</td>
<td>I</td>
</tr>
<tr>
<td>10</td>
<td>Point Calimere Wildlife and Bird Sanctuary</td>
<td>J</td>
</tr>
</tbody>
</table>

Ans: 1(H), 2(A), 3(D), 4(B), 5(G), 6(F), 7(E), 8(C), 9(J), 10(I)

**ACTIVITIES OF WWF-INDIA**

**KERALA STATE OFFICE**

**Volunteers Engagement Programme (VEP)**

**Volunteers Anniversary Day**

The day was observed at the Elephant Rehabilitation Center, Kottoor on 18th January with the participation of 26 Volunteers. They had a wonderful morning birding session and a visit to the Elephant Rehabilitation Center. The staff team and volunteer team cut a cake to celebrate the Day and shared their experience during the volunteering with WWF India.
Asian Waterbird Census (AWC)

The annual Asian Waterbird Census 2020 in Pathanamthitta District was conducted with the support of Social Forestry Wing of KFD and State Wetland Authority Kerala on 25-26 January 2020. The Team covered seven sites of the district with the participation of 35 Volunteer Birders. An orientation session was conducted on 25th evening at the Marthoma Retreat Centre, Kozhanchery and was led by Sri. C.Harikumar, Co-ordinator of Pathanamthitta Birders. The same protocol of the Water Bird Monitoring Program was kept for this also and the team counted 4796 birds belonging to 57 species from 7 sites.

AWC was conducted in Thiruvananthapuram District on 01-02 February 2020. An orientation session was conducted on 1st February 2020 at the Activity Centre within the Museum & Zoo Campus as many fresh birders from All Saints College and other institutions were part of it and was led by Sri. A.K.Sivakumar, Senior Education Officer of WWF-India. The same protocol of the Water Bird Monitoring Program was kept for this also and the team counted 3192 birds belonging to 50 species from 10 sites.

AWC was conducted in Kollam District on 15-16 February 2020. The orientation session was conducted on 15th February 2020 and was led by Ms.Anushreedha Sivanandan, Project Officer of WWF-India. The team counted 4760 birds belonging to 60 species from 8 sites. Both the AWCs were conducted with the support of Social Forestry Wing of KFD and State Wetland Authority Kerala.

Campus Bird Count

Kerala State Office conducted the Campus Bird Count in 3 colleges in line with the national-level Great Backyard Bird Count. It was really an experimental learning session for the 60 Volunteers who participated.

Bird Atlas Surveys

Kerala State Office has been part of the Bird Atlas Surveys for Thiruvananthapuram, Kollam and Pathanamthitta. It is being conducted in 4 phases with the participation of 15 regular Volunteer Bird Experts. In the survey in the 3 districts, there has been participation of 30 Birder Volunteers. Completed 27 sample sites in Thiruvananthapuram with 108 checklists, 29 sites in Pathanamthitta District with 116 checklists.

Ek Prithvi

We organised the State Panda Fest with the participation of 210 individuals including students, teachers and parents. Initially, we had a discussion meeting of School Principals on the conduct of State Panda Fest on 9th in which 16 representatives participated.
As for the State Panda Fest, the Cyclothon with 30 odd cyclists from Neyyattinkara under the leadership of Mr. Prakash P. Gopinath, Bicycle Mayor of Thiruvananthapuram started off from Neyyattinkara and continued on their route upto the venue of the Fest i.e. Sai Krishna School, Chenkal. This was followed by the formal inauguration of the State Panda Fest by Mr. K. Ansalan, MLA of Neyyattinkara in the function presided over by Mr. Renjan Mathew Varghese, State Director, WWF-India. Ms. Radhika Suri, Director, Environment Education, WWF-India in her keynote address gave an overall picture of the various programmes under Environment Education and detailed on how it is impacting lives and making a change in citizens and the country for a better tomorrow. Mr. Rajendran, Director, AMAS Kerala and the Principals/Headmasters of all the five Ek Prithvi schools Mr. Pratap Rana K., Bharatheeya Vidyapeedom Central School, Parassala, Mr. N. Sreekantan Nair, Shree Vidyadhiraaja Vidhyanilayam Higher Secondary School, Neyyattinkara, Mr. Hrishikesh, Sree Saraswati Vidyalayam, Ooruttambalam, and Mr. R. Radhakrishnan, Sai Krishna Public School, Chenkal gave their felicitations. Mr. A.K. Sivakumar, Senior Education Officer, WWF-India gave the vote of thanks. The inaugural session was followed by presentations by the teams from the four participant schools. Few Parents-cum-Teachers also came forward and shared their excitement on how this programme, inspite of the short duration, has been able to make a change in their children on stopping elders from burning leaf litter, plastics and other waste in the home backyard, reducing eating junk food, especially packaged wafers and soft drinks etc. Based on the presentation of the students and on the School Estate Survey carried out earlier, it was decided that the team from Sree Saraswati Vidyalayam, Ooruttambalam will represent Kerala in the National Panda Fest to be held in WWF-India Secretariat in New Delhi from 5-7 February 2020.

A six-member team from the State was part of the National Panda Fest organized by WWF-India at their Secretariat in New Delhi as the culmination of the yearlong environment education programme, Ek Prithvi. It was a totally different experience for Nandana and Vaishnavi, Class IX students of Sree Saraswathy Vidyalayam, Ooruttambalam. They were accompanied by their Teacher Ms. Sugathakumari and also the WWF-India Kerala Team comprising of Mr. Renjan Mathew Varghese, State Director, Mr. A.K. Sivakumar, Senior Education Officer and Ms. Rahana Iqbal, Education Officer-Ek Prithvi. The three-days Fest helped them make a national connect to the schools teams from across 13 other states of India extending from Leh-Ladakh to down south. The change adopted by Sree Saraswathy Vidyalayam of replacing plastic pens with refillable fountain ink pens and now to bamboo pencils and pens was highly applauded.
Kerala State Office conducted two Eco-Trails for Sree Vidyadhiraja HSS and Sree Vivekananda Memorial Public School at Elephant Rehabilitation Center with the participation of 80 students on 14th and 18th January 2020. The students got a very good opportunity to learn about the life of elephants and the biodiversity around the ERC.

One Planet Academy (OPA)

A half-day workshop was conducted for the teachers of Ek Prithvi Schools in which 25 Teachers participated. Following to the introduction session, Senior Education Officer led a session on OPA with video clippings. Education Officer led a session of the upcoming activities of Ek Prithvi. The workshop concluded with lunch.

Ongoing Project “Assessment of Kerala’s Top Ten Rivers at Risk and River Restoration Plans and Programs” for Dept. of Environment and Climate Change, Govt. of Kerala

The institutional visits and secondary data collection is in progress. The work of preparing the factsheets of six rivers is also progressing. The Project Team has initiated correspondence with Mr Areendran, Head, IGCMC, WWF India to arrange to prepare the basemaps. As part of this ongoing project, we associated in the International Conference on “Rivers for Future” being organised by Dept. of Aquatic Biology & Fisheries, University of Kerala in the first week of February, provided registration kit materials i.e. WWF India notebooks and pens and conducted Inter-Collegiate Quiz Competition on Rivers at the venue involving teams from different colleges. We have also contacted agencies working on rivers in Kerala i.e. River Collectives to compile details of their work and present it as part of this project. The regular update to the PAC members is also in progress.

Ongoing Project “Post Flood Impact Assessment on Biodiversity – for selected faunal groups” for Kerala State Biodiversity Board, Govt. of Kerala

Post multiple corrections of the Draft Report, the Final Report (Draft) was submitted to Dr Preetha at Kerala State Biodiversity Board. Post review of the report, Board has requested us to carry out presentation of the outcomes, findings, and suggestions of the study to the Biodiversity Management Committees (BMCs) in the respective districts. The presentations have been completed in Alappuzha, Kannur and Idukki. The Final Report is now to be printed and hard copy to be submitted to KSBB with audited Utilisation Certificate and Expenditure Statement.

WWF-India Exhibition Stall at Kerala Science Congress 2020

As in previous years, based on our shared mission and good working relationship, we were invited by the Kerala State Council for Science, Technology and the Environment (KSCSTE), Govt. of Kerala to put up WWF-India exhibition stall as part of Kerala Science Congress at Palakkad from 24 to 27 January 2020. Mr Harish Kumar, Administrative Assistant took the lead role in arranging this. This helped us achieved more visibility for the organisation and our work and better outreach and networking.
**Meeting on addressing Forest Fires**

The State Director was invited to the meeting titled “Fire Free Forest” organised at Lenin Balavadi on 28th January 2020 by Tree Walk and other concerned individuals. The State Director participated and shared information and took active role in the discussion on how to control forest fires.

**Meeting of the Thiruvananthapuram Corporation Working Group on Environment and Disaster Management**

The State Director is a Member of the Working Group on Environment and Disaster Management of Thiruvananthapuram Corporation. The State Director attended the Meeting of the Working Group called on 1st March 2020 at the Thiruvananthapuram Corporation Office as part of the Master Plan preparation. We are taking an active role in this to ensure better protection of the nature and natural resources and to have improved networking with LSGI with the objective of pushing nature conservation and environment protection to the mainstream of the development agenda.

**World Wildlife Day 2020**

With the ultimate aim of protecting wildlife and for better networking to make youth more aware about wildlife and need for its protection, WWF-India Kerala State Office organised the observation of World Wildlife Day 2020 with TKM College of Arts & Science, Kollam on 3rd March 2020.

**Field Visit to Chavakkad**

A field visit was organised to Chavakkad with the entire KLSO Team from March 8 - 10, 2020, to see the area and have better interaction with the Local Marine Turtle Conservation Groups so that the State Office staff will have more field exposure and thereby better awareness about the Marine Turtle Conservation work that we do in Chavakkad with the LMTCGs.

**Preparation of Detailed Project Report for Marine Turtle Conservation in northern Kerala**

We carried out field survey of the Kerala coast from Chavakkad to the northern tip of Kasargod from March 1 - 15, 2020 with the ultimate objective of gathering better knowledge on the coast of northern Kerala and the issues faced by Marine Turtles. The data and information collected with photos were the foundation for the preparation of DPR for MTC.

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*Mr. Renjan Mathew Varghese*

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