



WWF's mission

'To stop the degradation of our planet's natural environment, and build a future in which humans live in harmony with nature'

FROM THE STATE DIRECTOR'S DESK

I would like to take this opportunity to thank all our volunteers, supporters, partners, sponsors, friends and well-wishers, who through their various contributions, have helped us in our mission in the State, with special mention to Department of Environment and Climate Change, GoK, Energy Management Centre, Kerala Forests and Wildlife Department and Kerala State Biodiversity Board.

I would like to place on record our deepest sense of gratitude for all the support that we have received from WWF-India Secretariat, namely from Mr. Ravi Singh, Secretary General & CEO, Mr. Karan Bhalla, Chief Operating Officer, Dr Sejal Worah, Programme Director and all the other heads of the various programmes, namely Ms. Vishaish Uppal, Sustainable Livelihoods and Governance, Dr. Diwakar Sharma, Monitoring and Evaluation, Dr. Dipankar Ghose, Species and Landscapes, Dr. T.S. Panwar, Climate Change and Energy, Mr. Vinod Malayilethu, Marine, Ms. Moulika Arabhi, Centre for Environmental Law, and Ms. Radhika Suri, Environment Education.

The support given by the administrative divisions are also gratefully acknowledged, namely, Ritika Agrawal, Human Resources and Manpower Development Division, Mr. Sanjeev Singh Rana and Mr. Sathish, Operations Division, Mr. Vivek Dayal and Mr. Rajesh Puri, Finance Division, Ms. Roopali Srivastava, Mr. Umesh and Mr. Rahul, Conservation Products and Ms. Rituparna Sengupta and Mr. Himanshu Pandey, Communications Division.

The colleagues at the other State Offices have also been sharing, supporting and encouraging us to tide over difficult situations and we would place on record our gratitude to Ms. Farida Tampal, Hyderabad and Telangana State Office, Mr. Hari Somashekhar, Karnataka State Office, Ms. Sangita Saxena, MP & Chattisgarh State Office, Ms. Saswati Sen, West Bengal State Office, Ms. Archita Baruah Bhattacharya, Assam and Arunachal Pradesh State Office, Ms. Arti Gupta, Himachal Office, Mr. Mautik Dave, Valsad Divisional Office, and Mr. Arun Soni, Udaipur Office.

We have had very good interaction with the Western Ghats Nilgiris Landscape Office in Coimbatore and we would like to place on record our thanks to Mr. Boominathan, Mr. Samuel Thomas, Mr. Tiju Thomas, Mr. Saravanan, Ms. Mullai Pandian and Mr. Vinayan.

The moral support and timely advice given by the State Advisory Board under the leadership of Mr. G. Vijaya Raghavan as Chairman has been our guiding and correcting force and we are very grateful to all the Members of the SAB – Mr C. Balagopal, Dr. C. Bhaskaran, Prof. Saji Gopinath, Mr. Ravi DeeCee, Mr. Sunikumar, Mr. A.V. George and Mr. Suresh Elamon.

The staff at Kerala State Office has worked in one mind and spirit and that is the only reason we have been able to achieve so much. I would like to place on record my deepest sense of gratitude and appreciation to my colleagues who have stood with me shoulder to shoulder to live out the mission of WWF in Kerala.

Renjan Mathew Varghese

STATE OFFICE PROFILE

Renjan Mathew Varghese, State Director

(2006 – Till date)

A.K. Sivakumar Senior Education Officer

(2000 - Till date)

L. Pushpakumari Senior Admn. & Accounts Officer

(1986 – June 2019)

R. Harishkumar Administrative Assistant

(1998 – Till date)

STATE ADVISORY BOARD PROFILE

Mr. G. Vijaya Raghavan Chairman (Former Member, Kerala State Planning Board & Director, SunTec)

Mr. C. Balagopal, Vice-Chairman (Former Managing Director, Terumo Penpol)

Mr. A.V. George, Member (Chairman, AVG Group of Companies)

Dr.C. Bhaskaran, Member (Professor (Retd.), Dept. of Extension, Kerala Agricultural University)

Mr. Ravi DeeCee, Member (CEO, DC Books)

Mr. C. Sunilkumar, Member (Senior News Photographer, Mathrubhumi & Former Member, State Wildlife Board)

Prof. Saji Gopinath,Member(Associate Professor, Indian Institute of Management – Kozhikode)

Mr. Suresh Elamon, Member (Wildlife Photographer & Film Maker)

SUPPORTERS

- WWF-India Secretariat, New Delhi
- Ministry of Environment, Forests & Climate Change (MoEF&CC), Govt. of India, New Delhi
- Department of Environment and Climate Change (DoECC), Govt. of Kerala
- WIPRO
- C.P. Ramaswamy Environment Education Centre (CPREEC), Chennai
- Kerala State Remote Sensing and Environment Centre (KSREC), Govt. of Kerala
- Energy Management Centre (EMC), Govt. of Kerala
- Kerala State Biodiversity Board (KSBB), Govt. of Kerala
- Department of Museums & Zoos, Govt. of Kerala
- Kerala State Electricity Board (KSEB), Govt. of Kerala
- Agency for Non-Conventional Energy and Rural Technlogy (ANERT), Govt. of Kerala
- Kerala Birder & Yuhina Eco Media
- Kerala Forests and Wildlife Department (KFD), Govt. of Kerala
- Johnson Lifts & Escalators, Chennai
- Animal Welfare Board of India, Govt. of India
- NIMS, Thiruvananthapuram
- Thenmala Ecotourism Promotion Society (TEPS)

PARTNERS

- GeoVin Solutions Pvt. Ltd., Thiruvananthapuram
- Centre for Environment and Development (CED), Thiruvananthapuram
- Centre for Innovation in Science and Social Action (CISSA), Thiruvananthapuram
- Academy for Mountaineering and Adventure Sports (AMAS), Neyyattinkara
- Indus Cycling Embassy (ICE), Thiruvananthapuram
- Kerala Swathanthra Matsya Thozhilali Federation (KSMTF), Thiruvananthapuram
- National Fishworkers Forum (NFF)
- Schools and Colleges across Kerala
- Local Marine Turtle Conservation Groups (LMTCGs) Green Roots Nature Conservation Forum, Thottapally, Alappuzha, Green Habitat, Surya Arts & Sports Club, Mahatma Arts & Sports Club, & Fighter's Club, Chavakkad, Thrissur, Theeram Prakriti Samrakshana Samithi, Kolavipalam
- Friend of Marine Life, Thiruvananthapuram
- Kerala Legislative Assembly Office
- YMCA, Thiruvananthapuram

MEDIA

- The New Indian Express
- The Hindu
- Godfrey's Graphics
- SIMPLE Graphics

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Conservation Projects and Programs

1.1 Conservation Projects

1.1.1 Marine Turtle Conservation along Kerala Coast

WWF India has been supporting the Local Marine Turtle Conservation Groups (LMTCGs) along Kerala Coast, mainly focussing Chavakkad, for the protection of the Marine Turtles. For the last two years, Johnson Lifts & Escalators, Chennai has been financially supporting us. We have been engaging with Surya Arts & Sports Club, Puthenkadapuram, Mahatma Arts & Sports Club, Thottappu, Fighter's Club, Blangad, and Green Habitat, Edakazhiyoor in Chavakkad, Thrissur. We have given them training, infrastructure support, financial support, and conducted awareness programmes in schools around the area. An Interim Report was prepared in May 2018 and submitted to the funding agency for their comments and suggestions on the progress of the work and also the way forward. Field visits were conducted to meet the LMTCGs and discussed the season's nesting experience, progress of our project and the way forward. The Marine Turtle Field Databook was reviewed by the State Director and finalized which was shared with the LMTCGs requesting them to fill-in the details for the nesting season. This data was to be uploaded onto the Marine Turtle Information System – Kerala Coast (MTIS-KC). An agency was assigned to fabricate the nest protection enclosures which can be dismantled and assembled to host 1 - 3 nests. The field kits including GPS, Torches etc. were handed over to the Team Leaders of the LMTCGs. The LMTCG Volunteer Honorariums were transferred to the respective LMTCGs bank account. The awareness and outreach programmes included Awareness Workshop for the Teacher-in-charge of Eco-Clubs in Chavakkad, Capacity-building Workshop for 40 Volunteers in September 2018, Outreach programs conducted along with Surya Club and Mahatma Arts & Sports Club in different schools which was attended by a total of 1647 students. An abstract of the paper on the "Protection of the Marine Turtles along Kerala Coast by the LMTCGs" was prepared and submitted to the Indian Biodiversity Congress at Dehradun from February 14-16. The Final Activity Report of the project with all details and associated photographs have been prepared and submitted to the funding agency. The funding agency has expressed their satisfaction in the present project, but has expressed their desire to fund other projects in the year ahead. In this background, a proposal titled "Promoting Eco-Tourism in Munnar and Periyar by reducing the Plastic Footprint" has been prepared and is ready for submission.

1.1.2 Bird Atlas

Under the Green Partnership Programme (a collective of NGOs across the State volunteering for biodiversity surveys and monitoring especially outside forest areas) of the Kerala Forests & Wildlife Department, WWF India Kerala State Office takes lead in the 3 southern districts: Thiruvananthapuram, Kollam and Pathanamthitta. As part of the preparation of the district-level Bird Atlas of these districts, non-forest areas of Thiruvananthapuram and Pathanamthitta were completed last year and the same for Kollam is now ongoing. Surveys

are being conducted by our Volunteer Expert Birders, mainly during the weekends at Peppara WLS of Thiruvananthapuram district and Ranni Forest Division of Pathanamthitta district. Around 30 Birders are engaged across these three districts. We organized the dry season Bird Atlas Survey in Shendurney WLS from 16-20 January 2019. Thirty-two Volunteer Expert Birders and few other birders joined the survey by keeping to the Bird Atlas survey protocol Around 159 species of birds including 16 endemics were reported in the survey.

1.1.3 Assessment of Kerala's Top Ten Rivers at Risk

In the light of the sad state of affairs of all the forty-four Rivers of Kerala, being polluted beyond acceptable limits, WWF India Kerala State Office had prepared an R&D proposal titled "Assessment of Kerala's Top Ten Rivers at Risk and River Restoration Plans and Programmes" and submitted it to the Dept. of Environment and Climate Change (DoECC), Govt. of Kerala. We have been intimated that the proposal has received administrative sanction. In this regard, as invited, the State Director went for an initial discussion at the DoECC Office. Mr Jude and Mr Toms represented DoECC in the meeting. It was decided that as the first step, secondary data will be collected and compiled and then a formal meeting would be held to discuss and decide on the list of Kerala's Top Ten Rivers at Risk. The State Director and Ms Anushreedha, Project Officer prepared an initial list of 10 rivers that are under threat, with the available data. The parameters have been identified and for those applicable for individual rivers, a value of 1 has been assigned and otherwise 0. For some parameters for which data is not readily available, we shared the excel sheet with a list of 4 water resource experts in the State and took their inputs to finalize the list of Top Ten Rivers at Risk. On completion of this initial work and the submission of the list, the project was fully approved in October 2018 and the funds finally released in March 2019.

1.1.4 Project on Post Flood Impact Assessment on Biodiversity – Selected Faunal Groups

As per the invitation for Expression of Interest for conducting a Post-Flood Impact Assessment on Biodiversity by Kerala State Biodiversity Board (KSBB), we submitted a proposal. Further on, they invited the State Director for a presentation in front of a Technical Committee. Based on the proposal and presentation, KSBB has informed us that they have granted an amount of 6 Lakhs. The study will cover four faunal groups, namely Birds, Butterflies, Dragonflies and Frogs across seven locations in Kerala. Subsequently, the MoU was signed and the field work is going on now. Initially the project was sanctioned for just 3 months extending from January to March 2019. But the field work and the scant data available has led us to submit a letter for extension of the time period till August end so that we can cover pre-monsoon, monsoon and post-monsoon periods also. Following this, an Interim Report was prepared and presented in front of the Technical Review Committee on 20th March 2019. Based on this, extension was been approved till August 2019. Mr Sujith V. Gopalan, Field Team Leader is now in the process of reworking the field data collection schedule to include seasonality as well.

1.2 Conservation Programs

1.2.1 Documentation of the Birds of Kerala Raj Bhavan premises

We were requested by the Office of the Comptroller of Kerala Raj Bhavan to conduct a short term documentation of the birds in the Raj Bhavan premises. A team of Volunteer Expert Birders under the leadership of Senior Education Officer Mr A.K. Sivakumar conducted the scientific survey within the campus keeping to standard birding protocols. Forty-one species of birds were recorded. The 'Report on Birds of Kerala Raj Bhavan' was finally submitted to the Comptroller.

1.2.2 Mitigating Invasive Alien Species in Kerala

Three single-day workshops on "Invasive Alien Plant Species of Kerala" were conducted at Vazhachal, Wayanad Wildlife Sanctuary and Silent Valley National Park as a joint venture of WWF-India, WGNL Programme, Kerala Forests & Wildlife Department and Kerala Forest Research Institute (KFRI).

The workshop on 21st June at Vazhachal was inaugurated by Mr S V Vinod, DFO and he also released the handbook on 'Invasive Alien Species of Vazhachal'. Mr Muhammed Rafi, Range Officer felicitated the workshop. Fifty-one participants including the frontline staff who are engaged in IAS eradication at the field level and student volunteers from three colleges participated in the workshop. Mr Tiju C Thomas, WGNL Programme, Mr A K Sivakumar, Senior Education Officer, WWF India and Ms Anushreedha Sivanandan, VEP Intern, WWF India, co-ordinated the workshop. The session on Invasive Alien Species of Vazhachal was led by Dr T.V. Sajeev, Principal Scientist and Research Coordinator of KFRI.

On 28th June, the workshop at Wayanad WLS, Muthanga, was inaugurated by Mr N.T. Sajan IFS, Wildlife Warden. Mr Sambudha Majumdar, IFS, ADCF of the Sanctuary, Mr Ajay Ghosh, Assistant Wildlife Warden of Muthanga Range and Smt. Ramya Raghavan, Assistant Wildlife Warden of Bathery Range felicitated the workshop. There were sixty-five participants including the front line staff and three student volunteers from Kerala Veterinary and Animal Sciences University. The first technical session on 'Eradication of *Senna spectabilis*' was led by Dr T.K. Hrideek, Scientist at KFRI and the second session on 'Other Invasive species like Mikania, Lantana, and Mimosa' was led by Dr T.V. Sajeev. Mr A.K. Sivakumar and Ms Anushreedha coordinated the workshop.

On 20th July 2018, the workshop was conducted for the staff of Silent Valley National Park. Mr Sivakumar, and Mr Tiju C. Thomas, Associate Coordinator, WGNL Program of WWF India coordinated the workshop. Fifty participants including the frontline staff, who are engaged in IAS eradication at the field level, participated in the workshop. The session on Invasive Alien Species of Silent Valley National Park was led by Dr T.V. Sajeev. In the afternoon

session, a film on Invasive Alien Species was screened and the workshop was concluded with an interactive session and feedback on the program was also collected.

1.2.3 Paaristhithikam – State Environment Awareness Campaign (SEAC)

WWF-India Kerala State Office rolled out "Paaristhithikam" (State Environment Awareness Campaign) of DoECC at Thrissur on the theme 'Understanding Plastics in our Daily Life' covering 30 schools. It was a collaborative programme, Sarva Shiksha Abhiyan Thrissur and Corporation of Thrissur. The campaign included a Teachers Training Workshop on 19th January 2019, where information on types of plastics and its use in our day to day life was disseminated. This initial program was attended by 43 participants from 30 schools. As the next step, these teachers went back to their respective schools and educated their students. Then on 28th January 2019, we distributed a set of 3 waste collection bins in each school to encourage "sorting" of different forms of plastic. The students were asked to bring clean and dry plastic wastes from their home and fill the bins kept at the school. Along with this, the students were given a data collection form which they could enter the details of the plastic waste collected from their homes. This would help them assess the amount of plastic each household would accumulate over a period of time. The Thrissur Municipal Corporation cooperated with us in collecting the sorted waste from the schools and properly disposing it. The corporation was especially thankful to us for educating the people on plastic waste management as it greatly helps them with sorting the waste at the source.

As part of "Paaristhithikam 2017-18", WWF had installed two litterbins, fabricated in the shape of a bottle, and had installed them at two relevant points in Punchakkari, so that people could use it to dispose off bottles, mainly after consuming liquor, instead of throwing them around carelessly. On receiving information that the bins were now full, a team comprising the State Director, Ms Anushreedha and Mr Jaichand, on 25th August 2018, cleared one of the litterbins – collecting glass and plastic separately. The other bin was filled with household waste which included used diapers and organic food waste wrapped in plastic bags. We did not expect this and so were not prepared to handle such waste. In lieu of this, it was decided that necessary follow-up will be taken up in consultation and cooperation with the Panchayat authorities to clear the bin as agreed beforehand. The clearing of the bin was taken up later on also, as we saw that the bin was full, during our regular birding in and around this area.

1.2.4 Asian Waterbird Count in Thiruvananthapuram, Kollam and Pathanamthitta

We conducted the Asian Waterbird Count (AWC) in Thiruvananthapuram, Kollam and Pathanamthitta on 6th, 12th and 13th January 2019 under the Volunteer Engagement Program in association with Social Forestry Wing of Kerala Forests & Wildlife Department. AWC in Thiruvananthapuram covered ten wetlands and recorded 4936 birds belonging to sixty-one species including twenty-eight migratory, as compared to the counts in the past

two years; 3121 birds of fifty-seven species in 2018 and 4442 birds of seventy-seven species in 2017. Thiruvananthapuram district showed a considerable increase of 58%, in the individual count of water birds compared to the previous year. AWC in Kollam was held in eight different sites and gave a count of 6649 birds belonging to sixty-five species, of which thirty-three are migratory. Kollam district showed fewer counts except in the Neendakara – Sakthikulangara harbour. The total count only showed a slight increase of 17% from the previous year's 5697. AWC in Pathanamthitta district covered seven different wetlands and had a tally of 4944 birds belonging to sixty-nine species compared to last year's 8048 from sixty species. The 2019 count includes 29 migratory species, whereas in 2018 it was twentyfive. This shows a decline by 39% in the total count from last year. Although the total count went down, species count and number of migratory birds has gone up slightly.

1.2.5 Preparation of a Handbook on Birds of Vazhachal Forests

WWF organized a Workshop for the Preparation of a "Handbook on Birds of Vazhachal Forests" in association with the Western Ghats Nilgiris Landscape (WGNL) Program of WWF-India. It was conducted from 23rd to 24th January 2019 in which WWF Volunteers and members from the tribal community of Vazhachal participated. The field knowledge of the local people and sharing of experience by the Volunteers made it a great success.

1.2.6 Common Bird Monitoring Program (CBMP) 2019

Kerala State Office coordinated Common Bird Monitoring Program (CBMP) 2019, a PAN India participatory citizen science project in three southern districts of Thiruvananthapuram, Kollam and Pathanamthitta. We provided orientation sessions on CBMP for 145 college students with the support of our volunteers. The orientation for Kollam and Pathanamthitta districts was on 14th February 2019 and at Trivandrum it was conducted on 15th February.

1.2.7 Heronry Count

Volunteer Expert Birders of WWF India Kerala State Office conducted the Heronry Count of Thiruvananthapuram district in the month of June and documented the number of species, state of the heronries, number of individual birds and nests. They also observed the trees and the attitude of the public towards these heronries. The major heronries were found at Ottashekharamangalam, Vizhinjam, Edappazhanji, Nanthancode, Vembayam and Kochuveli.

1.2.8 OPCC Stakeholder Consultation in Kochi

Kochi being one of the finalist cities in the One Planet City Challenge of WWF-India, a Stakeholder Consultation was organized by the Climate Change & Energy Division in association with Kochi Municipal Corporation and ICLEI South Asia on 3rd August 2018. The meeting was chaired by Ms Soumini Jain, Honourable Mayor, Kochi Corporation and had presentations from various stakeholders including Transport Department and Kochi Metro. The Deputy Mayor and other Councillors were also present in the meeting. The participants actively involved in the interactive and feedback session. The State Director also attended the meeting and took active participation in the discussions. On 4th August, the OPCC Cyclothon/ Walkathon/ Marathon was flagged off by the Honourable Mayor from the Durbar Hall Grounds at 6:00 am. The participants covered a stretch of 5 Kilometres. The event concluded by 8:00 am with the prize distribution ceremony.

Environment Education Programs

2.1 EE Projects

2.1.1 Wild Wisdom Quiz 2018

WWF-India Environment Education Division has rolled out the Wild Wisdom Quiz across the country. But in Kerala, we have hit upon a roadblock as we have come across an order issued by the Director of Public Instruction (DPI) regulating programme among school students involving collection of money. The State Director met the DPI in person on 30th July 2018 and he has given us the permission to go ahead. Several rounds of follow-up was done with the schools and the registration was closed by 7th September. Around 1500 registered for the quiz. The Q&A keys were sent out to all registered schools. They conducted the School-level Quiz in their own schools with the proper directions from State Office and then sent the list of top two scorers via email.

The City Level Quiz was held at St. Mary's School, Pattom on Sunday, 16th September 2018. Being the 11th edition, the competition had good participation of around 24 school teams in the Junior Category (classes 3 - 5) and 26 teams in the Middle Category (classes 6 - 8) despite the delay in registration due to permission from DPI and the floods in August. Around 100 students plus their parents and Teachers-in-charge attended the program. The Quiz Master of the day was Mr Renjan Mathew Varghese, State Director of WWF-India. Mr A K Sivakumar, Senior Education Officer of WWF-India gave the introductory remarks. The Junior Category Quiz was conducted from 10:30 am to 1:00 pm. The preliminary written round was attended by all teams and from this the top 5 schools went to the final round. Ms Diya VS and Ms Marwa Sajjaad from Christ Nagar International School emerged as the winners in this category. The second place went to Master Priansh Nair and Ms Sradha Lin Ajay from Bhavans Vidya Mandir at Eroor and Master Nakul Dinakar & Master Kishan Sivadas from Loyola School finished at the third place. Mr Tharun Kumar, Regional Officer of CBSE Thiruvananthapuram Region addressed the teams and others present and gave away the prizes to the winners including the Panda trophies, medals and books. The middle category quiz was conducted on the same day from 1:30 pm to 4:00 pm. Master Jeremiah Mathew Darvy & Master Adithya Krishna A K from Vimala Public School, Thodupuzha emerged the winners in this category. The second place went to Master Krishnarpith N & Master Sravan Sankar of Bhavans Varuna Vidyalaya, Thrikkakara and the third place to Master Abel T Rinosh & Master Adithya Kishor from Loyola School, Thiruvananthapuram. Fr John C C, Principal, St. Mary's School addressed the gathering in the afternoon and gave away the prizes. Ms Anushreedha, VEP Intern gave a presentation on OPA, for everyone present, before the lunch break. WWF Staff, Volunteers and Student Volunteers from the NSS Unit of St Mary's School under the able leadership of Mr Leju P Thomas managed the logistics.

Renjan Mathew Varghese, State Director, Kerala State Office was the Quiz Master for the Coimbatore City-level held at Coimbatore on Monday 3rd September 2018.

2.1.2 WIPRO earthian programme

WWF-India Kerala State Office has been requested by CPREEC, Chennai, to co-ordinate the WIPRO earthian programme in Kerala again this year. The Orientation Workshop for School Teachers and Students was conducted on 24th October 2018 at Trivandrum Hotel, Statue Jn., Thiruvananthapuram. Twenty-three students, sixteen teachers, six volunteers, four office personnel and one official from CPREEC attended the workshop. The technical sessions were led by Mr Renjan Mathew Varghese, State Director, Mr A K Sivakumar, Senior Education Officer and Mr U T Arasu from CPREEC, Chennai. In the post lunch session, an introduction to One Planet Academy was given by Ms Anushreedha Sivanandan, VEP intern. Ms Veena M. and Mr Ratheesh K., Volunteers facilitated the discussion sessions and managed the logistics.

The Regional Recognition Event for Wipro earthian was organized by Kerala State Office on 22nd February 2019 at Trivandrum Hotel, Thiruvananthapuram with a total of fifty participants which included students and teachers. The projects carried out by the various schools were presented here and everyone actively participated in the discussions.

2.1.3 Urja Kiran – Energy Conservation Awareness Campaign (ECAC)

Kerala State Office organized three Energy Conservation Rallies in connection with the State Energy Conservation Awareness Campaign of Energy Management Centre titled "Urja Kiran". The students were given a talk on "Ecological Footprint and Energy Conservation" and based on this the participants were encouraged to come up with attractive placards with relevant designs and catchy slogans. These were then used during the rally. The first rally was on 13th December 2018 at SNGS College, Pattambi and sixty-five students participated. On 17th, the second rally was conducted at NSS College, Thrithala in which sixty students participated. The last one was held at Government Polytechnic College, Shoranur on 18th December 2018 with the participation of seventy students. Ms Anushreedha, VEP Intern and Mr Murukan Pareparambil, Volunteer, coordinated the rallies.

2.1.4 Implementation of ECHO Project in Kerala

WWF-India Environment Education Division has included Kerala in its Building Conservation Heroes (ECHO) Programme under VEP. It was decided to implement the programme in association with the Boomitrasena Clubs under the Dept. of Environment and Climate Change (DoECC) functioning in various colleges across the State. Based on the discussions with DoECC, five colleges in Kollam district were shortlisted in September. Senior Education Officer and Ms Anushreedha Sivanandan, VEP Intern visited all the 5 colleges and got the Letter of Understanding (LoU) signed. The official launch of ECHO in Kerala was held at TKM College of Engineering, Kollam on 3rd November and the chief guest was Adv. Rajendra Babu, Hon. Mayor of Kollam Municipal Corporation. Along with the inauguration, a two-day Orientation Program was conducted to sensitize the participant students on ECHO and "Beat Plastic Pollution" which is the theme for World Environment Day this year. Senior Education Officer, Ms Anushreedha, Ms Veena M. (Volunteer) and Mr Shibu K.N. (expert in Solid Waste Management) led the workshops at TKM College of Engineering on 3rd & 4th November. Workshops were also conducted in the other chosen colleges as follows: 13th & 14th at St. Gregorios College, Kottarakkara, 16th & 19th at SN College, Kollam, 23rd & 24th at NSS College, Kottiyam and 27th & 28th November at Sree Narayanan Institute of Ayurvedic Studies & Research Puthur.

2.2 Commemoration of Environmentally Important Days

2.2.1 World Migratory Bird Day 2018

WWF-India and BCM College, Kottayam, with the support of KSBB conducted a 2 day program on 18th and 19th of May 2018, to observe World Migratory Bird Day and the theme was "Unifying our Voices for Bird Conservation". On 18th, the awareness programme was inaugurated by Mr Anjan Kumar, IFS; Conservator of Forests (Planning & Research), Kerala Forests and Wildlife Department and the function was presided over by Dr. Annu Thomas, Vice Principal of the College. Mr Renjan Mathew Varghese, State Director, WWF-India also spoke on the occasion. Dr Priya Thomas welcomed the guests and participants and Dr Elizabeth Basil of Department of Zoology delivered vote of thanks. This was followed by technical sessions led by Mr A.K. Sivakumar, Senior Education Officer on "Biodiversity and Migratory Birds". Mr C.N. Balakrishnan, Resource Person from KSBB led another session on "Biodiversity Conservation Initiatives". Mr C. Harikumar, Expert Birder and Volunteer, WWF-India helped the students with identifying birds in the field and differentiating between resident and migratory birds. One unique aspect of the programme was the session titled "My Words for Birds" in which the students contributed to bird conservation through poems, captions, short stories etc. On 19th, at 6:45 am, Mr Sivakumar gave the team a nature interpretation activity in the background of the estuarine ecosystem (backwaters) at Kumarakom Bird Sanctuary. The event concluded with an interactive session where each participant shared their experiences of the 2 days.

2.2.2 Earth Day 2018

Kerala State Office observed Earth Day 2018, on 22nd April 2018, in association with People for Sustainable Development (PFSD) and Southern Railways, Thiruvananthapuram Division in which PCRA, EMC - Kerala and Government College, Kottayam were also partners. The focal theme of the event was "End Plastic Pollution". It included a formal inaugural session, a rally covering the five platforms of Thiruvananthapuram Central Railway Station and an exhibition on biodiversity, endangered species and other related topics. Since 9:30 am is a busy time the event was held within the Thiruvananthapuram Central Railway Station and it reached out to a large number of passengers who were from different walks of life.

2.2.3 World Environment Day 2018 - Rain Walk at Vazhachal Forests

Rain Walk 2018 was conducted on 5th June 2018, at Vazhachal Forests as part of observing World Environment Day. It was conducted by WWF – India Kerala State Office, under the Volunteer Engagement Programme, together with Vazhachal Forest Division. The program was inaugurated by Ms V K Geetha, Tribal Chieftain of the Kadar Tribal Community of Vazhachal in the event organised near the Forest Department Dormitory. Around 24 Volunteers, mainly students from St. Thomas College, Thrissur, St. Aloysius College, Elthuruthu, Christ College, Irinjalakuda, Sree Krishna College, Guruvayoor and few other Volunteers from across Kerala participated. Mr A K Sivakumar, and Ms Anushreedha Sivanandan, VEP Intern coordinated the event. Along with enjoying the forests and the monsoon rains, the volunteers also took part in collection of plastic waste along the roadside where the walk was conducted. They were equipped with gloves and sacks for this purpose. The day concluded with sorting and understanding the plastic waste that was collected and properly disposing it via the concerned panchayat authorities.

Kerala State Office prepared a Multimedia PowerPoint presentation as resource material for World Environment Day 2018 on the theme "Beat Plastic Pollution". A set of posters on the theme of 'Beat Plastic Pollution' and a poster titled 'Ten Commandments to Beat Plastic Pollution' was also prepared. The materials were uploaded onto our official google drive and the link was shared with more than 50 WWF-India associates like schools, colleges, volunteers, youth clubs etc., by email.

2.2.4 International Tiger Day 2018

The International Tiger Day was observed with from 27th to 29th July at Wayanad Wildlife Sanctuary (WWLS), Muthanga, as joint venture by WWF-India, Kerala State Office, Wayanad Wildlife Sanctuary, Kerala Veterinary and Animal Sciences University (KVASU), Pookode and National Green Corps - Wayanad. There were 29 volunteers from KVASU, Sree Krishna College at Guruvayoor and other volunteers from the State. Mr A K Sivakumar, Senior Education Officer, WWF-India, Mr Ajay Ghosh V, Assistant Wildlife Warden of WWS, Mr M P Sajeev, Deputy Range Forest Officer addressed the gathering in the informal inaugural function. Mr Vishnu Omanakuttan, Conservation Biologist led the technical session. This session was followed by a short walk in the forest to understand the landscape of WWS and also to familiarise the participants on the local flora and fauna. On the 2nd day, the participants experienced "feel the nature", a semi meditation activity from 5:30 to 6:00 am. This was followed by a 9 km trek through the forest. Then Mr N Ravi Kumar, Assistant Coordinator of Western Ghats Nilgiri Landscape Program of WWF- India led a session on Tiger Enumeration Techniques. After lunch an activity session was conducted where the participants were divided into 5 groups and each group was given 5 different themes. They were asked to prepare captions and slogans on "Tiger Conservation" focusing on the individual theme. From these, around 100 captions were selected and placards were made.

Ms Anushreedha S S, VEP Intern coordinated this activity. The team retired for the day by 11:00 pm. On the 3rd day, 29th July i.e. International Tiger Day, Volunteers, WWF – India team, the Student volunteers from the various colleges and Forest Department Staff travelled to Sulthan Bathery town and met around 110 Student Volunteers of National Green Corps from local schools at Assumption Junction to take out the Tiger Day Rally which was flagged off by Mr T L Sabu, the Municipality Chairperson. The concluding function was held back at WWS and the participants assembled at the hall for an action plan discussion and feedback session. Mr Ajay Ghosh, Assistant Wildlife Warden, WWS congratulated the team on their success. Mr A K Sivakumar of WWF - India delivered the vote of thanks.

2.2.5 Wildlife Week 2018

Kerala State Office had become part of Wildlife Week 2018 by collaborating with Christian College, Kattakkadda and Catholicate College, Pathanamthitta. In Christian College, Kattakkada, on 8th October 2018, Mr Renjan Mathew Varghese, State Director inaugurated the event and delivered a thought provoking talk on "wildlife" along with a multimedia presentation. "Home - Our Garden of Eden", a documentary of 24 minutes duration by Mr Suresh Elamon which covers the immense urban biodiversity of Thiruvananthapuram City also was screened in the forenoon session. In the afternoon session, Senior Education Officer conducted a quiz on wildlife with five rounds including visuals. Installation of five bird baths prepared by the students using flat earthen vessels was also undertaken within the college campus. 120 students attended the programme.

Ms Shameena S and Ms Anushreedha Sivanandan, VEP Intern took part in observing Wildlife Week at Catholicate College, Pathanamthitta. Following the formal inaugural session, Ms Shameena led a session on "Urban Wildlife" and Ms. Anushreedha led another session on "Invasive Alien Species" (IAS) which is a major threat to wildlife. The action component of the same was identification and eradication of IAS from the campus and the participants did it well. In the post lunch session, Shameena and Anushreedha together led a Wildlife Quiz which turned out to be a great interactive learning experience for the students. 153 students attended the programme from various disciplines.

2.2.6 International Day for Volunteers 2018

On 5th December 2018, 22 Volunteers of WWF gathered at Shanghumukham Beach and tended the avenue plants kept on either sides of the walkway. Weeds were removed from the ones with plants, the broken pots were replaced with new ones and new plants were planted in the empty pots. The plants were also given a thorough watering.

2.2.7 Volunteers Anniversary Day at Kollam 2019

Volunteers Anniversary Day was organized on 11th January 2019 at Kollam Beach with a clean-up drive on the coast in which around 75 volunteers participated (ECHO volunteers

and others). The Volunteers were divided into seven groups & assigned to collect specific type of waste from a pre-assigned 500 meters on the beach. The waste collected was segregated as (1) thin plastics and carry bags, (2) thermocol cups, (3) hard plastics including ice cream cups & spoons, (4) paper wastes, (5) clothes & footwear, (6) glass bottles and (7) plastic bottles. The 2-hour clean-up drive resulted in the collection of 15 gunny bags of waste which were then handed over to Kollam municipal corporation authorities for proper disposal.

2.2.8 World Wetlands Day 2019

Kerala State Office observed World Wetlands Day at 6 different colleges. It was conducted at Government College for Women, Thiruvananthapuram on 2nd February 2019 with a participation of 31 students in association with the College. At SN College, Kollam there were 48 participations and St. Thomas College, Kozhencherry (150 participants) on 4th February 2018. On 5th February, SN College for Women at Kollam had 126 participants and on 6th February the program was at DB College, Sasthamkotta with 70 participants. The program at NSS College at Kottiyam was on 7th February and there were 110 participations. The State Director and Senior Education Officer delivered talks on World Wetlands Day at all the 6 venues.

2.2.9 National Science Day 2019

With the objective to raise awareness among college students on science, we conducted a Science Quiz at All Saints College on 27th February 2019. The event helped us to reach out to around 100 students and it was used as a good opportunity to sensitize the students on various aspects of science including nature, environment, biodiversity, wildlife etc.

2.2.10 World Forestry Day & World Water Day 2019

WWF conducted the Vana Suraksha - Jala Suraksha Rally at Mukkali near Silent Valley National Park in connection with the observance of World Forestry Day and World Water Day in collaboration with the Park on 22nd March 2019. 70 college students and 15 Forest Watcher Trainees took part in the rally. They prepared posters with attractive captions on forest and water conservation.

2.2.11 Earth Hour 2019

On the morning of 30th March 2019, a Cyclothon was organised by WWF-India Kerala State Office jointly with Indus Cycling Embassy, CET Cycling Club and LNCPE Cycling Club with 42 cyclists carrying the placards with GIVEUP collaterals. Simultaneously, interactive games were organised in the Trivandrum Museum & Zoo Compound to interact with the early morning walkers and joggers and sensitise them on Earth Hour. In the evening function organised at Manaveeyam Veedhi, the participants were enthralled by some 'naadanpattukal' by a local band. Advocate V K Prasanth, Honourable Mayor of

Thiruvananthapuram Corporation, was the chief guest of the function and he addressed the gathering and signed the Letter of Intent on behalf of Thiruvananthapuram Municipal Corporation for the GIVEUP Campaign. The Mayor also gave away the cycle arranged by WWF as part of the Gift a Cycle Campaign of Indus Cycling Embassy to a school student. Four standees with the collaterals on the GIVEUP campaign was prepared and displayed at the different venues of the Earth Hour Campaign.

2.3 Friday Forum

Friday Forum is a monthly interactive platform for the school students of Trivandrum City at the Museum Auditorium, listen to talks on relevant environmental topics from an expert and participate in open discussions. This is a very successful EE programme conducted by KLSO, since the past many years, jointly with the Department of Museums & Zoos and they provide their auditorium free of cost for conducting the programme. In the last academic year, we could not conduct the programme regularly because of the unavailability of the venue. But this year a decision was taken to conduct this program regularly as per the demand of the school. In this regard, an Annual Calendar for Friday Forum was prepared by the Senior Education Officer and the State Director and was formally communicated to the Department of Museums & Zoos requesting for support.

On 7th September 2018 Ms Aneesha Ani from Friends of Marine Life, an NGO working in the field of marine conservation in Kerala gave a talk on the topic 'Our Ocean & Coast – Challenges and Conservation Action'. The talk included a power point presentation. The fragile ecosystem under the sea and the threats it faces were presented to the students. The students were impressed by the talk and it reflected in the interactive session at the end of the talk. About 96 students from 4 schools participated in this forum.

The next forum on 5th October 2018 was on the topic "Urban Wildlife". Mr S. Radhakrishnan, Deputy Director (Wildlife Education) Rtd, Kerala Forests & Wildlife Department was the expert who interacted with the students on the importance of forests and wildlife, especially Urban Wildlife. About 121 students along with 4 teachers attended.

Friday forum for the month of November 2018 was conducted on 5th November. The topic for the forum was "Energy Conservation". Mr B V Subhash Babu, Energy Technologist from Energy Management Centre (EMC- Kerala), interacted with the students on the importance of energy conservation and its significance in our daily life. 42 Students along with 2 teachers attended the Friday Forum.

Friday Forum in December was conducted on 7th December 2018. The topic "Ecological Footprint" was led the session by Mr Renjan Mathew Varghese, State Director and 114 students participated.

2.4 Nature Education Camps & Eco-Trails

2.4.1 ATKINS Munnar Eco-Trails

WWF-India Kerala State Office conducted 10 'ATKINS Munnar Eco-Trails' at Munnar and Pambadum Shola National Park in collaboration with Munnar Wildlife Division and HRW & EPA of Kannan Devan Hills Plantations Ltd. 345 students and teachers participated in the Eco-Trails. As part of this programme, we also organised 5 workshops on 'The importance of Munnar and its uniqueness', like Shola Grassland Ecosystem, in 1 Teacher Training Institute, 2 Colleges and 2 Schools located in and around Munnar.

2.4.2 Amateur Naturalist Training (ANT)

We conducted 3 modules of Amateur Naturalist Training at Arippa Forests, Peppara WLS and Pambadum Shola NP and a total of 35 participants underwent the training. The first module of bird watching was conducted at Arippa forests. The second module was on ecosystem interpretation and the instructor described the biodiversity and also the interspecies relationships that were observed at the location. It was conducted at Peppara WLS. The third and final module was a complete nature camp and was held at Pambadum Shola NP, Munnar. Here the participants got to try out the knowledge they received in the previous two modules.

2.4.3 Field Study Trip for students of MSc Wildlife Science of TERI University, New Delhi

A Field Study Trip for 11 students and 2 faculty members of MSc Wildlife Science from TERI University, New Delhi was conducted at Periyar Tiger Reserve from 10th to 13th December 2018. This was part of their curriculum and included visit to Iringole Kavu along with other locations within PTR. Sessions on bird watching, telemetry and camera trapping etc. were given as part of the field study.

2.4.4 Thiruvananthapuram Bird Race

This is an initiative to popularize bird watching among people from all walks of life, irrespective of age or gender. It was held in the Capital City on Sunday, 23rd December 2018 and covered seven locations. The half-day event was organized by WWF-India jointly with Department of Museums & Zoos, Govt. of Kerala. The program resulted in recording 148 species of birds.

2.5 Classes and lectures delivered

2.5.1 Climate Leadership Programme

Sustera and ATREE-CERC organised a Climate Leadership Programme with the participation of 20 youth from different backgrounds. The technical sessions were organized at Kanthari,

Vellayani, Thiruvananthapuram. The State Director was specially invited to deliver the lead talk titled 'Addressing Climate Change: from global to local' on 4th June 2018.

2.5.2 Class at Cotton Hill Girl's High School

The Alumni of Cotton Hill Girl's High School regularly organises extra-curricular training and capacity building for a batch of 50 selected students hailing from the most financially backward section of the society. In this regard, Dr Thara invited WWF representative to give a talk on what WWF is and what we are doing around the world. Mr A K Sivakumar handled this session in the school on 30th June 2018.

2.5.3 Teacher's Training Workshop on 'Marine Turtles' and 'ESD'

As part of Marine Turtle Conservation Programme, Kerala State Office and Eco Clubs of Chavakkad conducted a Teacher's Training Workshop on Marine Turtle and ESD at Shikshak Sadan, Chavakkad. Mr N J James, Coordinator of Eco Clubs welcomed the guests and participants followed by 2 interactive technical sessions. Mr Renjan Mathew Varghese, State Director, WWF-India led the session on Marine Turtles and Mr A K Sivakumar, Senior Education Officer led the session on Education for Sustainable Development. 32 teachers participated in the workshop.

2.5.4 ECHO Workshop at All Saints College

Under the Building Environment Conservation Heroes (ECHO) platform targeting college students, a full-day workshop was organised on 13th March 2019 at the College and was attended by 50 students of the Zoology Department. Mr. Renjan Mathew Varghese, State Director, Ms. Anushreedha Sivanandan, Volunteer, Mr. Kaushik Narayanan, OPA Intern and Mr. Harith, VEP Intern took the lead in organising the event.

2.6 Participation in Exhibitions

2.6.1 World Environment Day 2018 – WWF Exhibition Stall in the State-level event

The State-level observation was organized by DoECC, Govt. of Kerala, at Kanakakunnu Palace Grounds on 5th June. WWF was invited to put up an exhibition stall. Posters on the theme 'Beat Plastic Pollution' were displayed here and the stall was managed by Mr Harish Kumar, Administrative Assistant and Ms Jennifer Philip, Intern. The State Director attended the workshop as part of the event and actively participated in the deliberations.

2.6.2 Karshaka Dinacharanam Exhibition, Edappal

Murukan Pareparambil, our active Volunteer and District Co-ordinator for Malappuram informed us that WWF could put up our exhibition stall at the Karshaka Dinacharanam being

organized by the District Administration of Malappuram at Edappal on 13th and 14th August 2018. Mr Harish Kumar travelled to Edappal to setup and manage the exhibition stall.

2.6.3 Sarga Sangamam 2018, Kaniyapuram

A WWF exhibition Stall was setup at Muslim High School for Boys, Kaniyapuram as part of Sarga Sangamam 2018 on 27th November 2018. Mr Harish Kumar handled the exhibition and around 400 students visited the stall.

2.6.4 School Science Exhibition, Karakonam

WWF Exhibition stall was setup at Sree Chithira Thirunal Residential Central School, Kunnathukal, Karakonam as part of their Science Exhibition on 28th November 2018. Mr Harish Kumar handled the exhibition and 600 students and Teachers visited the stall.

2.6.5 Kerala State Biodiversity Congress 2019

We put up the WWF exhibition stall at the Kerala State Biodiversity Congress 2019 organised by Kerala State Biodiversity Board from 26th to 28th January 2019 at Government Brennan College, Thalassery. Around 900 people including students and general public visited the exhibition and our stall. This has helped us to reach out to the general public in a large way.

2.7 Other Partnership Programmes

2.7.1 Inauguration of Cloth & Paper bag making unit at Cheshire Home

Cheshire Home, the home for the physically challenged, has initiated a project by training its inmates and providing machinery to produce Cloth & Paper bags to replace plastic carry bags and thereby reduce environmental pollution. The inauguration of the scheme was on 6th April at Cheshire Home, Kuravankonam, Thiruvananthapuram. As a special invitee, the State Director attended the event.

2.7.2 Birders Meet at College of Forestry, Thrissur

A.K. Sivakumar, Senior Education Officer and five Volunteers participated in the Annual Bird Monitoring Workshop held on 10th June 2018 at College of Forestry, Thrissur and actively participated in the discussions and sessions. It was about Heronry Count, Common Bird Monitoring Programme, Asian Water bird Census, Pelagic Bird Survey etc.

2.7.3 Seminar on 'Beating Plastic Pollution in Campuses'

Ms. Jennifer Philip, Intern represented WWF and attended the seminar organized on 'Beating Plastic Pollution in Campuses: The Way Ahead' by CISSA and KSCSTE at Department of Botany, University College, Palayam, Thiruvananthapuram on 11th June 2018 and took active participation in the discussions and deliberations.

2.7.4 Bird Survey in Periyar Tiger Reserve

Senior Education Officer and five volunteers participated in the Annual Bird Survey conducted in Periyar Tiger Reserve from 11th to 14th May 2018, which was jointly organized by Periyar Tiger Reserve and Kerala Birders.

2.7.5 Vembanad Fish Count

The State Director, Interns and other Volunteers of WWF-India participated in the Annual Vembanad Fish Count organized by ATREE-CERC Alappuzha and Kerala University of Fisheries and Ocean Studies with the support of DoECC and KSBB in the southern part of Vembanad Lake on 24 May 2018.

2.7.6 World Ocean Day 2018

Ms Jennifer Philip, Intern from Bennet University, Noida represented WWF and attended the seminar organized as part of Observation of World Ocean Day by KSBB at Department of Aquatic Biology & Fisheries, Kariyavattom Campus, University of Kerala on 8th June 2018.

2.7.7 Clean up drive in Veli Estuary Opening

August 2018 witnessed the ever highest rain in the nearest past in the State of Kerala which ultimately resulted into a heavy flood. When the drainages of Thiruvananthapuram City filled with water, the authorities opened the estuary at Veli and the entire water logged within the City drained out into the Sea along with all the waste dumped into the drainage canals. Overnight, a major portion of the waste was brought back by the waves and deposited on either side of the estuary which included plastic bottles, thermocol pieces, footwear, glass bottles and other plastic wastes. The State Director, his wife and Senior Education Officer were part of the Clean-up drive on 2nd August 2018 which was organized by 'Friends of Marine Life', an NGO concerned with marine ecosystems. The waste was collected in a segregated manner, counted or weighed and transported off for safe disposal.

2.7.8 Ozone Day 2018

The State Director was invited as the Chief Guest for the observation of the International Day for the Protection of the Ozone Layer organized by the Department of Environmental Sciences, All Saints College, Thiruvananthapuram, on Tuesday, 18th September 2018. The State Director delivered the lead talk titled 'Montreal Protocol and the SDGs'.

2.7.9 Release of the poster on Birds of Thiruvananthapuram

The Green Partnership Programme of Kerala Forests and Wildlife Department associates with many NGOs especially those with proven track record of birding. As an initial step towards the Kerala Bird Atlas – a poster on Birds of each district was prepared by Dr P O Nameer (Professor and Head, Department of Wildlife Sciences & Centre for Wildlife Studies,

College of Forestry, Kerala Agricultural University) and his team. This was released by Advocate K Raju, Hon'ble Minister for Forests, at a function held at Vanasree Auditorium, Forest Headquarters, Thiruvananthapuram on 4th December 2018. The WWF Team, responsible for coordinating the atlas in Thiruvananthapuram district, received the poster from the Minister.

2.7.10 Invited Talk in Nature Camp at Neyyar WLS

As a collaborative action with National Green Corps (NGC) and Kerala Forests & Wildlife Department, the Senior Education Officer was invited to deliver a talk at Neyyar WLS for NGC Camp with the objective of sensitizing the participants on "Biodiversity conservation for sustainable development". Around 50 NGC members of Thiruvananthapuram attended the programme.

2.7.11 Workshop on 'CRZ Notification Amendment 2018

The State Director and intern Ms Jennifer Philip attended the workshop organized by KSMTF & NFF on 'Coastal Regulation Zone Notification Amendment 2018' at Trivandrum Press Club on 7th June. The submission prepared by the Marine Programme in consultation with CEL was also shared in the workshop.

3. Policy and Advocacy level interventions

3.1 Possible outreach initiatives during the upcoming blooming of Neelakurinji

The blooming of Neelakurinji which happens once every 12 years in the hills of Rajamalai and surrounding areas of Munnar is expected to begin by August of 2018. Around 3-4 lakh visitors are expected to reach Munnar during this period choking the area in all ways. The Tourism Department and the Forests and Wildlife Departments have been making preparations for the same for the last one year. WWF with our presence here, under the Western Ghats Nilgiris Landscape Programme, needs to reach out to these visitors to educate them about the Landscape, the ecosystems and its wildlife. A brainstorming session was conducted within the office to look at various possibilities and consultations were carried out with Mr Sebinster and Mr Saroop, who are active Volunteers based in Munnar.

3.2 Workshop on Sustainable Munnar – Vision 2050

HRW & EPA, Munnar was organising a one-day workshop on 'Sustainable Munnar – Vision 2050' on 28th July and the State Director was specially invited to attend the same. Because of the difficulties in travel to Munnar, he compiled inputs received from Mr Boomi, Mr Tiju, Mr Sivakumar and Ms Anushreedha into a WWF Submission to be tabled in the meeting and the same was shared with Mr Mohan C Varghese, Convenor of the workshop.

3.3 ANERT National Workshop

The Agency for Non-Conventional Energy and Rural Technology (ANERT), the Government agency to promote renewable energy in the State, realised the need to update and highlight its work and become more effective and efficient. In this regard, a National Stakeholder Consultation was organized at the Poovar Estuary on 10th August 2018. The State Director attended the workshop and contributed towards preparing the roadmap ahead for ANERT.

3.4 KSBB Consultative Meeting on Biodiversity Conservation

The KSBB called for a meeting of experts in the field of biodiversity conservation to brainstorm on how it can work more effectively towards its mission of biodiversity conservation in the State. On being invited, the State Director and Ms Anushreedha attended the meeting on 14th August 2018 at the Government Guest House, Thycaud, Thiruvananthapuram and took active participation in the group discussions and deliberations. The meeting was facilitated by Shri S M Vijayanand, Former Chief Secretary of the State. In the background of this meeting, a brainstorming session was conducted within our office and a WWF submission was prepared to be tabled in the next meeting.

3.5 Recent Kerala Floods & its Impact on Biodiversity

KSBB convened a meeting of the experts in the State to discuss on the recent floods in Kerala and its impact on biodiversity. The meeting was held at Government Guest House, Trivandrum on 4th September 2018. WWF India was represented by the State Director and

Ms Anushreedha, VEP Co-ordinator and took active participation in the discussions and deliberations. Later on, the Field Data Collection Sheet shared during the meeting was thoroughly reviewed, reworked and resubmitted to KSBB for perusal.

3.6 Marine Turtle Nesting Sites – Representation to KCZMA

DoECC also holds the portfolio of Kerala Coastal Zone Management Authority. Knowing our work on Marine Turtles along the Kerala Coast, the Officer-in-charge of KCZMA requested us to submit a formal representation to them giving details of the Marine Turtle nesting sites along the Kerala Coast with geographical co-ordinates and highlighting their significance, threats faced etc., and requesting to give protection status. The same has been prepared and submitted to KCZMA for consideration.

3.7 Letter to KSBB – Conservation Programs and mobilizing CSR funds

In the wake of the recent floods in Kerala and its heavy impact on natural ecosystems and its biodiversity, KSBB has cancelled all the regular conservation programs of this FY. Since WWF India had also applied for the various projects and programmes schemes and the proposals were under consideration, we also received a formal letter of cancellation. In this regard, the State Director has written a formal letter to the Chairman, KSBB suggesting that instead of cancelling all these projects and programmes we could work together to bundle all these projects and programmes and mobilise CSR funds for the same.

3.8 Discussion with Directorate of Revenue Intelligence (DRI)

Mr. Sreejith, Assistant Director, DRI, Kochi visited our office in Thiruvananthapuram on 18th September 2018 and had a discussion with the State Director on how WWF and DRI can effectively and efficiently work together in Kerala and outside for curbing illegal wildlife trade.

3.9 Paper on realigning Social Forestry Division of Kerala Forests and Wildlife Dept.

Mr Anil Bharadwaj, IFS, PCCF (Social Forestry) invited the State Director for a meeting and requested for a document to be prepared on how the Social Forestry Division can be realigned to the broader concept of "Protection of Biodiversity outside Forest Areas" rather than just inside. Based on the discussions with Dr Sejal and Mr Vinod, the State Director put together the paper and submitted it to the PCCF's Office for consideration.

3.10 WWF invited into the Kerala State Biodiversity Board State-level Expert Committee

WWF recognized as a lead agency in the field of biodiversity conservation in the State by being invited into the Kerala State Biodiversity Board State-level Expert Committee. The first meeting of the same was convened on 1st March 2019 at Hotel SP Grand Days and Mr. Renjan Mathew Varghese, State Director attended the meeting and suggestions and

recommendations were put forward to mitigate pressures on biodiversity especially from invasive alien species.

3.11 Reporting of Wildlife Trade and Mortality to TRAFFIC

TRAFFIC-India works closely with WWF-India and we have been sending state level reports of wildlife trade and mortality to TRAFFIC-India in the prescribed format. This year also, the reports were meticulously prepared by the State Director and sent.

3.12 Elephant Conservation Workshop at Fort Kochi

As an initiative of networking among key personalities on the issues faced in Elephant Conservation, a workshop was organized at Fort Kochi in which Dr Sejal Worah, Programme Director, WWF-India addressed the gathering about WWF's initiatives and involvement in Elephant Conservation and related issues. We were able to reach out to around 60 key people in Kochi and we look forward to establish a good networking among the elite community of Kochi for the cause of nature conservation and environment protection. Along with this, a public display of Elephant sculptures made of dried Lantana stalks, were displayed along the beach in Fort Kochi which attracted the attention of thousands of international, domestic and local visitors.

4. Networking

4.1 Biodiversity Project "Interact-Bio" in Kochi

International Council for Local Environmental Initiatives (ICLEI), Delhi has invited WWF-India Kerala State Office to be a partner in their upcoming project Interact-Bio to be implemented in Kochi funded by the Federal Republic of Germany. Ms Monalisa and her team from ICLEI came down for an initial discussion on the project. Further on, the State Director was invited to the Stakeholder Consultation Workshop held at Grand Hotel, Kochi on 27th October 2018. The State Director had compiled a WWF Approach Note on the project and tabled the same in the meeting and also participated in the deliberations.

4.2 Workshop on National Biodiversity Strategy and Action Plan (NBSAP)

The State Director was invited by KSBB to the workshop organized on 20th October 2018 at Government Guest House, Thycaud. He shared many of our findings from our previous experiences and also participated in the deliberations.

4.3 Technical Workshop on Elephant Conservation

The State Director attended the two days Technical Workshop on Elephant Conservation organized by MoEF&CC jointly with WWF and others and hosted by Kerala Forests and Wildlife Department on 11th and 12th January 2018 at Hotel Apollo Dimora, Thiruvananthapuram. Mr Boominathan, Mr Ajay Desai and Mr Mohan Raj from WWF were also present in the workshop. It was a great learning and sharing experience and useful platform to interact with the experts in Elephant Conservation and also senior most officers of the Forests and Wildlife Department of the three southern states.

4.4 Kerala Renewable Energy Congress 2018

As part of Akshaya Urja Utsav, Centre for Environment and Development organized the first Kerala Renewable Energy Congress at Kanakakunnu, Thiruvananthapuram from 26th to 28th February. The State Director attended the congress and took active participation in the discussions and deliberations. The awards for the winners of the painting competition organized by WWF as part of the event were also given away by the Minister in the final day Akshaya Urja Award Function.

4.5 Workshop on Impact of the Blue Economy on Fisheries

We were able to put forward our suggestions and recommendations with regard to the contribution towards the impact of blue economy on the fisheries sector in the One-day Workshop on Impact of the Blue Economy on Fisheries organized by KSMTF and NFF at Thiruvananthapuram on 7th March 2019. The State Director and Mr Pravin Kumar, Project Officer, Fish Forward, WWF-India attended the meeting and took part in the discussions and deliberations. The meeting provided us a platform to meet with the various stakeholders in the particular sector and present WWF's position on the blue economy.

4.6 Promote Eco-Labelling and Fisheries Certification for sustainable fisheries management

With the above objective, WWF-India Marine Programme and the Kerala State Office joined hands to organize the One Day Stakeholder Workshop on 'Adopting Best Practices for Sustainable Fisheries Management on 20th March at Mascot Hotel, Thiruvananthapuram. The State Director, Mr. Vinod Malayilethu, Senior Co-ordinator, Marine Programme, Mr. Pravin Kumar, Project Officer, Fish Forward, Dr. Appukuttan and Dr. Sunil Mohammed, Senior Scientist from CMFRI, Kochi led the proceedings of the workshop. The workshop witnessed very good technical presentations followed by group discussions and open deliberations with the involvement of all participants. The workshop paved way for good networking with the stakeholders, and coming to a consensus through discussions and charting the way forward for sustainable fisheries management in Kerala in the days ahead. Representatives of Fisheries Department, Latin Catholic Diocese, Fishermen Union representatives, NGOs working in this sector and other experts attended the workshop.

5. Publications

5.1 Technical Paper to the journal being published by SILT, Kottayam

School of Indian Legal Thought, Kottayam is bringing out a journal and based on the invited lecture given by the State Director in their National Seminar, it was requested to prepare and give a Technical Paper in line with the presentation. This was prepared and submitted.

5.2 Publication of bimonthly Newsletter Mruthika

The work is progressing to complete the backlogs of compiling the bimonthly newsletter Mruthika. The content has been compiled by the State Office and the layout work is being carried out at Godfrey's Graphics. Six issues of Mruthika of 2017 are now being made ready for publication. This helps us to reach out to 1000 institutions and individuals from across the State and outside and also helps us to effectively and efficiently communicate our work to our network. December

5.3 Write-up on Kerala Floods to Communications Team

In the background of the devastating floods which occurred in Kerala, the Communications Team in WWF-India Secretariat specially requested the State Director to prepare an article based on a conservationist's viewpoint of the flood. This was prepared in a comprehensive manner and handed over to the team.

5.4 Kerala Floods – White Paper by WWF

As discussed and decided in the SAB Meeting to table a WWF White Paper on the Recent Floods in Kerala, the State Director prepared the initial draft, circulated it internally and organized a brainstorming session, reworked the paper and has circulated the same to the SAB Members for comments and suggestions.

5.5 Printing of 'Workbook on Tiger' for Children

Ms Jennifer Philip, Intern, from Bennet University has made an informative compilation which can be published as a Workbook on Tiger for Children. The contents were shared with Dr Dipankar Ghose, Director, Species and Landscape, WWF-India Secretariat for his comments and suggestions on how to go forward.

5.6 Published Eco-Trail Students Journal

WWF-India was awarded a project by ATKINS to organise Eco-Trails for school students and sensitise them on nature conservation and environment conservation through on the ground experience. In this regard, schools from Munnar from selected as the students are mainly from the tea estate workers families and are financially backward. To conduct the Eco-Trails most effectively, an Eco-Trail Students Journal was prepared and published.

5.7 Publication of Biodiversity Handbooks

WWF published three Biodiversity Handbooks titled Urban Birds of Kerala, Butterflies of Kerala and Biodiversity of Munnar in the month of March 2019.

6. Internship

6.1 Hariharan Kannan, student of M.A. in Natural Resource Governance Tata Institute of Social Sciences, Hyderabad

He underwent his internship at WWF-India, Kerala State Office, Thiruvananthapuram during the period from 7th May to 8th June, 2018. During this period, he has (i) Participated in the observation of World Migratory Bird Day 2018 on the theme 'Unifying Our Voices for Bird Conservation' with the awareness programme on Friday 18th May at BCM, College, Kottayam and the field birding session on Saturday 19th May within the Bird Sanctuary at Kumarakom (ii) Review and modify the PowerPoint Presentations regularly used by WWF-India Kerala State Office for our education, awareness and outreach programmes by finding relevant video clippings from the web and incorporating them into the presentations by embedding them as hyperlinks (iii) Review and update the Tiger Facts File for the upcoming observation of International Tiger Day on July 29 (iv) Preparation of multiple choice questions for the upcoming WWF national level wildlife quiz titled Wild Wisdom 2018 to be held in September – October (v) Compile the Annual Report of WWF-India Kerala State Office for 2017-18.

6.2 Haritha Sara Kuriakose, student of M.Sc Zoology of Christ University, Bengaluru

She underwent her internship during the period from 24th April to 24rd May, 2018. During this period, she has been able to take part in our various programmes and activities like (i) Ongoing project titled 'Marine Turtle Conservation along Kerala Coast' - comprehensively compiling the data and information at the global, national, state and local level on Marine Turtle conservation which will go into our report and to the Marine Turtle Information System – Kerala Coast at turtlekerala.org. She also visited the Turtle conservation sites at Kolavipalam and Chavakkad and interacted with the Local Marine Turtle Conservation Groups also (LMTCGs), (ii) Make a PowerPoint presentation for the upcoming World Environment Day 2018 on the theme 'Beat Plastic Pollution' which will now be shared in the WWF Network in Kerala State with the objective for network partners to take local initiative to organize events as part of the WED, (iii) Participated in the observation of World Migratory Bird Day 2018 on the theme 'Unifying Our Voices for Bird Conservation' with the awareness programme on Friday 18th May at BCM, College, Kottayam and the field birding session on Saturday 19th May within the Bird Sanctuary at Kumarakom, (iv) Participated in the Vembanad Fish Count 2018 conducted on 24th May in Vembanad Lake by Ashoka Trust for Research in Ecology and the Environment (ATREE) CERC Alappuzha jointly with Dept. of Fisheries, Dept. of Environment and Climate Change and KUFOS.

6.3 Jennifer Philip, student of BBA - LLB (Hons) of Bennett University, Greater Noida, UP

She underwent her internship during the period from 4th to 29th of June, 2018. During this period, she has (i) Represented WWF and attend various seminars and workshops including Talk on 'Addressing Climate Change – from global to local' as part of the Climate Leadership Programme conducted by Sustera at Kanthari, Vellayani on 4th June, Manning the WWF

stall at the Observation of World Environment Day by Dept. of Environment & Climate Change, Govt. of Kerala at Kanakakunnu on 5th June, Workshop organized by KSMTF & NFF on 'Coastal Regulation Zone Notification Amendment 2018' at Trivandrum Press Club on 7th June, Seminar organized as part of Observation of World Ocean Day by Kerala State Biodiversity Board at Dept. of Aquatic Biology & Fisheries, Kariyavattanm Campus, University of Kerala on 8th June, Seminar organized on 'Beating Plastic Pollution in Campuses: The Way Ahead' organized by CISSA and KSCSTE at Dept. of Botany, University College, Palayam, Thiruvananthapuram on 11th June, (ii) Prepared Tiger Quiz and Workbook on Tigers for School Children to be used in the upcoming Observation of International Tiger Day on 29th July

7. Proposals Prepared and Submitted

7.1 Proposal on Top Ten Rivers at Risk in Kerala

The Dept. of Environment and Climate Change, Govt. of Kerala has invited R&D proposals. In this regard, the two years proposal titled 'Top Ten Rivers at Risk in Kerala and River Restoration Plans and Programmes' have been prepared, shared with Rivers, Wetlands and Water Policy Division of WWF-India and reviewed, necessary corrections made and submitted for funding. We have been informed that the Internal Review Committee has inprinciple approved the proposal. Further on, the State Director was invited for the presentation of the proposal in front of the R&D Committee on 26th June 2018. The R&D Committee Members have put forward some suggestions to improve the proposal and the same now has to be incorporated.

7.2 Proposal for study of Post-Flood Impact on Biodiversity

As per inviting expression of Interest for conducting a post flood impact study on biodiversity, we had submitted the proposal to Kerala State Biodiversity Board and they had invited State Director for a presentation. Based on the proposal and presentation, KSBB has informed us that they have granted an amount of Rs 6 lakhs and the format of MoU will be send soon. October

7.3 Proposal for Eco-Trails to be funded by Atkins

A detailed proposal for fundraising for 'Kurinji Eco-Trails for the local schools of Munnar' was submitted to Atkins. This is very relevant as the local schools and student community has to see, know, feel, enjoy and realize the value of the resources at their immediate surroundings as they are the custodians of the resource in future.

7.4 Proposal to State Wetland Authority Kerala (SWAK), Govt of Kerala

The proposal to conduct the Asian Waterbird Census and its related activities have been compiled into a formal proposal and submitted for funding. Asian Waterbird Census which is now done as a low-key affair can be escalated into a well-structured programme with better participation with financial sustainability. More involvement of Volunteers, better networking with other like-minded institutions can improve the quantity and quality of this programme.

7.5 Proposal for developing a Cadre of Young Conservationists

An environment education proposal has been prepared and submitted to Mr. Ravi Singh which envisages engaging with more Volunteers, capacity building of Volunteers and infrastructure improvement thereby bird monitoring programs and such can be done in a better way. This has been prepared compiling the points discussed during SG & CEO's visit to Trivandrum and also during the State Offices Meeting.

8. Fundraising

8.1 Support for Seminars, Symposiums and Workshops of Dept. of Environment and Climate Change

Under this scheme, the proposal titled 'WINGSPREAD 2018 – Workshop on Impact of Climate Change and other Anthropogenic Pressures on Avifauna – its habitat, diversity and distribution' was prepared and submitted for funding in May 2018

8.2 Biodiversity Awareness Programme Scheme of Kerala State Biodiversity Board

Under this scheme, the proposal titled 'State-level Capacity building of District Nodal Officers of Scouts & Guides towards Volunteering for Protection of Biodiversity (Jaiva vaividhya samrakshanam sannadha sevanathiloode – Scouts & Guides inte panke)' was prepared and submitted for funding in May 2018.

8.3 Biodiversity Conservation Project Scheme of Kerala State Biodiversity Board

Under this scheme, the proposal titled 'Rapid Assessment and Prioritisation of Tourism Area Management (RAPTAM) in Kerala and its impact on Biodiversity and the Local Community' was prepared and submitted for funding in May 2018.

8.4 KMA Annual CSR Conclave at Kochi

The State Director attended the Annual CSR Conclave organized by the Kerala Management Association at the Le Meridian, Kochi on July 6th in which corporates and businesses presented their CSR mandate and NGOs presented their ongoing work under CSR funding.

8.5 Promotion of Sales of WWF-India Conservation Products 2018-19

On arrival of the hard copy of the Catalogues for 2018-19, we got the ball rolling for promoting the sales of WWF-India Conservation Products in the State. The lists of prospective buyers were selected very carefully from a very exhaustive list and the Catalogue along with the covering letter of the State Director was dispatched. Further on, we started receiving orders. Necessary follow-up through phone and email was conducted and meticulous and timely servicing of the customers was ensured.

9. Other Activities

9.1 State Office Meeting in New Delhi

State Director and Senior Education Officer participated in the 3 day State Office Meeting held at Zorba De Buddha, New Delhi from 20th to 2nd August 2018. They shared the Outreach, Engagement and Outcome of the ongoing activities from July 2017 to June 2018. Kerala State Office had an outreach of 24526 and engagement of 15655 from 51 different activities. They also shared experience and suggestions during all the sessions of the meeting.

9.2 State Advisory Board Meeting

The meeting of WWF-India Kerala State Advisory Board was convened on 5th September 2018 at the Conference Hall of CADRRE, the Autism School on the Plamoodu – PMG Road from 11:00 AM to 1:00 PM. The SAB was formally being convened after a long gap of 5 years. Mr. G. Vijaya Raghavan, Chairman and Members Dr. C. Bhaskaran, Mr. Suresh Elamon and Mr. C. Sunilkumar attended.

9.3 Project Officer - Fish Forward 2 Project

Mr. Pravin Kumar joined the Marine Programme, WWF-India in the Fish Forward 2 Project and has started working out of the Kerala State Office from 27th September, 2018. His administrative reporting will be to the State Director and his technical reporting will be to the Marine Programme Office.

9.4 Synergy between the South State Offices

Based on the task assigned to the State Director by the SG&CEO, a Zoom Call was arranged in the month of October with Farida, Hari and Saravanan to discuss how a synergy can be created among the four South State Offices. There was very good discussion during the call and 4 actionable points have been identified. The same was shared with Mr. Singh. He has requested to have a Zoom Call with the four State Heads with himself and Mr. Karan Bhalla. It was discussed and decided that each State Head will take responsibility of one actionable point, work out more details, have discussion again and then go for the Zoom Call as suggested by Mr. Singh. A physical meeting is also proposed to discuss the final action plan.

9.5 WWF Global Education Summit 2019

For the first time, WWF-International convened the first WWF Global Education Summit 2019 from $28^{th} - 31^{st}$ January 2019 and WWF India being the host, the event was held at the Auditorium in WWF India Secretariat, New Delhi. The State Director was invited to attend the summit with the objective to meet and interact with the WWF Education Team from across the globe. The event turned out to be a really great experience sharing and learning platform for 4 days.



Earth Day - Inaugural session



Earth Day - Rally at Railway Station



Earth Day - Rally at Railway Station

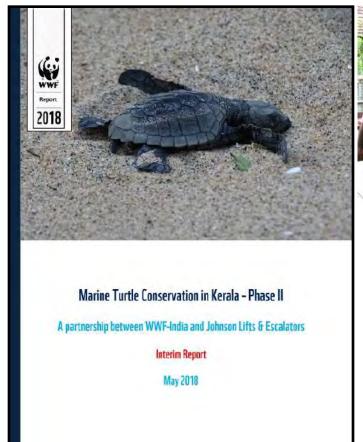


Earth Day - Exhibition at Railway Station





Earth Day - Exhibition at Railway Station





Field visit carried out at Chavakkad as part of Marine Turtle Conservation



Resource Material Kit on World Environment Day 2018



Participants of Periyar Tiger Reserve Bird Survey

World Migratory Bird Day 2018 at BCM College Kottayam and Kumarakom Bird Sanctuary



Poster Release and inaugural session



Participants



Session on Biodiversity by Senior Education Officer



Session on Biodiversity Conservation initiatives by



Presentation by participant students



Presentation by participant students



Group discussion by participant students



Participant students during the field trip





Participant students during the field trip



Participant students during field trip



Heronry of Painted Storks





Vembanad Fish Count





Posters published by Chengannur Christian College, on the theme of 'Forest Fires'





Field Data book as part of Marine Turtle Conservation



Renjan Mathew Varghese leading the session in Climate Leadership Programme at Kanthari organized by Sustetra and with the organisers

Rain Walk 2018 at Vazhachal Forests



Inaugural session by Smr.V.Geetha, Tribal Chieftain of Kadar tribal colony of Vazhachal



Participants during the field interpretation



Volunteers collecting plastic waste from forests areas



Proper disposal of collected plastic waste from forests areas by volunteers



World Environment Day 2018 – WWF Exhibition Stall in the State Level Observation



Birders Meet at Thrissur



Heronry count at Thiruvananthapuram



Workshop on 'CRZ Notification Amendment 2018

Workshops on Invasive Alien Species of Kerala at Vazhachal



Welcome address by Sri.Tiju.C.Thomas of WGNL project of WWF-India



Introductory address by Sri. A.K.Sivakumar, Senior Education Officer of WWF-India



Inauguration and Release of the Handbook on IAS by Sri.S.V.Vinod, DFO, Vazhachal

Participants



Interactive Session on the theme by Dr. T V Sajeev, Principal Scientist and Research Coordinator of KFRI

Discussion session of the workshop

Workshops on Invasive Alien Species of Kerala at Wayanad Wildlife Sanctuary



Inaugural address by Sri.N.T.Sajan IFS



Participants



Interactive Session on *Senna spectabilis* by Dr.T.K.Hrideek, Scientist of KFRI



Interactive Session on the theme by Dr. T V Sajeev, Principal Scientist and Research Coordinator of KFRI



Identification of Invasive Alien Species during the field trip



Eradication of Invasive Alien Species during the field trip



Interactive session of SG & CEO with staff and volunteers



SG & CEO with staff





Senior Education Officer and Volunteers during the Bird Atlas data collection in Thiruvananthapuram

SG & CEO during field trip to Punchakkari wetlands with Senior Education Officer



Bird Atlas sampling area map



Sri. C.Harikumar and Volunteers during the Bird Atlas data collection in Pathanamthitta



Bird Atlas sampling area map—Pathanamthitta



Teachers Training Workshop on Marine Turtle and ESD at Chavakkad



Ass. Educational Officer release the book on ESD during the Workshop



Sri, N.J.James concludes the Workshop



Handbook on Invasive Alien Species at SVNP



Workshop on Invasive Alien Species at SVNP



Inaugural Session of International Tiger Day 2018



Field trip for volunteers during ITD 2018



Session on Tiger Enumeration by Sri,N,Ravikumar



Session on Tigers by Sri, O.Vishnu



Volunteers engaged in slogan making and placard making



Sri.T.L.Sabu inaugurates the Rally



Sri.T.L.Sabu flag off the Rally



Tiger Conservation Rally proceeds



Final Assessment of capacity building exercise of volunteers by A.K.Sivakumar



Feedback session by volunteers



Feedback session by volunteers



Tiger Conservation Poster Series





Clean up drive in Veli Estuary Opening





Heaps of plastic, thermocole and footwear wastes collected during the drive



Volunteer team with the collected waste



Veli Estuary after the clean up drive









OPCC Stakeholder Consultation in Kochi





Litterbin Clearing in Punchakkari





ANERT National Workshop





State Office Meeting at New Delhi





State Office Meeting at New Delhi

Capacity Building Workshop as part of the project , Marine Turtle Conservation in Kerala













Capacity Building Workshop as part of the project , Marine Turtle Conservation in Kerala













Photo Gallery Page 3 Wild Wisdom Quiz 2018 in Thiruvananthapuram



The participants



Winners of Junior Category at City Level



Volunteers in action during the Quiz



WWQ City Level for Middle category



Winners of Middle Category at City Level

Volunteers and staff during the Quiz

WWF White Paper on the post-flood approach in Kerala with regard to nature conservation and environment protection

 Kerala should invest money, machinery and manpower in meteorological data collection in the most comprehensive manner covering the entire State and its scientific analysis and dissemination of accurate and timely information to all concerned authorities and other users.

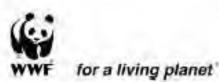
De-siltation of dams to be carried out with the best available expertise and technology so that the actual water holding capacity can be realised.

3. Encroachments within reservoir beds, catchment areas, dam flow channels, river beds and other wetlands should be vacated on a war footing. Flood mapping of major water-bodies of the State should be carried out and permanent physical markings done along with sensitisation of the local population should be conducted. The same should be carried out for the coastline also. Encroachments and illegal construction should be pulled down and limits should be decided up till where building construction and other activities can be allowed.

4. The Kerala State Disaster Management Authority (KSDMA) should be reconstituted with officers from the forces (Army, Navy, Air Force, Police, NDRF and Fire & Rescue) at the helm of affairs because they are trained to take quick decisions and issue orders and they are followed under the Chain of Command. All others like revenue officials, experts from the respective relevant fields can all be made part of the KSDMA. It should have regional offices in South, Central and North Kerala.

Natural disaster zonation map should be prepared at the district level, disaster action plan prepared and quick response team constituted at the earliest.

6. Proper municipal solid waste management with segregation at source, collection, transportation and safe disposal should be strictly implemented so that careless dumping of unsegregated waste in wetlands and landfills can be avoided. An integrated approach of centralised and decentralised waste management should be adopted.



WWF-INDIA Kerala State Office, Vanchiyoor P.O Thuruvapanthaputam = 695.035 Telefax: 0471-2302265 E-mail: wwfkilso@gmail.com

18 August 2018

Representation being submitted by WWF to the Kerala Coastal Zone Management Authority (KCZMA) recommending protection of Marine Turtle nesting beaches along Kerala Coast

Marine Turtles are invaluable species in the ocean ecosystem. By grazing on sea-grass, controlling sponge distribution, feeding on jellyfish, transporting nutrients or supporting other marine life. Marine Turtles play vital roles in maintaining the health of the oceans.

The coast of Kerala is annually frequented by Marine Turtles, namely Olive Ridleys and very rarely by Green Turtles during the nesting season. They have been reported from the northern tip of Kasargod to the southern tip. Vizhinjam. While Marine Turtles are protected under Schedule I of the Indian Wildlife Protection Act (1972). their numbers have drastically decreased over the years due to illegal harvesting of eggs (northern coastline) and meat (southern coastline) by local community.

Olive Ridley turtles only nest along the coast of Kerala and they face several threats. both at sea and on the beach when they come ashore for nesting. At sea they are susceptible to entanglement in fishing nets and other man-made debris resulting in death, or many of them are injured and incapacitated by engines of fishing vessels etc. Towards the coasts - sea walls, inadequately planned coastal afforestation, berthing of boats, coastal infrastructure development and tourism activities, unchecked dumping of unsegregated municipal solid waste, illegal beach sand mining etc., adversely affect the nesting Turtle habitats.

Towards the southern side of Kerala, Turtles are killed for their meat and it is marketed as remedy for treating asthma. Towards the northern side of the State, the Turtle eggs are collected from their nests for human consumption, many a times a single egg is sold at Rs 10.

Marine Turtles exhibit no parenting behaviour, and hence, the young ones are left at the mercy of nature. Land predators (feral dogs and jackals), loss of nesting beaches, artificial illuminations/ lights, untimely rains, sudden increase in average temperature etc. are threats to the survival of the nesting turtles on the coastline of Kerala.

Because the population of Turtles in the ocean are decreasing, it causes an imbalance in the normal prey-predator relationship between Marine Turtles and Jellyfish and Photo Gallery Page 6



Friday Forum on the topic 'Our Ocean & Coast – Challenges and Conservation Action'





Ozone Day Observation

Awareness and Outreach programs as part of the project , Marine Turtle Conservation in Kerala





GVHS, Kadappuram





GFUP School, Kadappuram





Interaction with the fishermen community

Awareness and Outreach programs as part of the project , Marine Turtle Conservation in Kerala





EHSS, Kadappuram





Friday Forum on Urban Wildlife

Photo Gallery Page 3

Wildlife Week at Christian College, Kattakkada





Inaugural Session



Address by Senior Education Officer



Participants



Address by Teacher-in-charge



Installation of Bird baths

Photo Gallery Page 4 Wildlife Week at Catholicate College, Pathanamthitta



Inaugural Session



Participants



Session on Invasive Alien Species



Session on Urban Wildlife



Activity Session



Quiz on Wildlife

Photo Gallery Page 5

Workshop on the WIPRO earthian Sustainability Education Program 2018



Welcome Address



Introduction by Sri.U.T.Arasu



Session on Water and Sustainability



Session on Biodiversity and Sustainability



Session on Framework of the project



Participants



Marine Turtle Conservation – Awareness Programmes in schools in Chavakkad











Marine Turtle Conservation – Awareness Programmes in schools in Chavakkad





Marine Turtle Conservation – Awareness Programme for Kudumbasree Members



Friday Forum



ECHO Orientation Workshop





ECHO Orientation Workshops







WWF Exhibition Stall



Observation of International Day for Volunteers



Friday Forum



Urja Kiran 2017 - 18





Urja Kiran 2017 – 18 – Awareness Programmes and Energy Conservation Rallies





Urja Kiran 2017 – 18 – Awareness Programmes and Energy Conservation Rallies



Thiruvananthapuram Bird Race 2018



Talk in Nature Camp at Neyyar WLS





Field Study Trip for students of MSc Wildlife Science of TERI University





Asian Waterbird Count in Thiruvananthapuram, Kollam and Pathanamthitta



Volunteers Day at Kollam – Beach Cleanup Campaign



Volunteers Day at Kollam – Beach Cleanup Campaign & Get-Together



Bird Atlas Project



Workshop on Birds of Vazhachal





Field activities on Birds of Vazhachal





Paaristhithikam Project in Thrissur jointly with SSA Thrissur





WWF Global Education Summit in WWF-India Secretariat, New Delhi











Elephant Conservation – Exhibition and Workshop at Kochi





World Wetlands Day 2018 at SN College, Kollam





World Wetlands Day 2018 at SN College for Women, Kollam



World Wetlands Day 2018 Awareness Programmes at Govt. Women's College, Thiruvananthapuram





Common Bird Monitoring Programme – Orientation Session and Field Bird Watching





WIPRO earthian programme – Regional Recognition Event at Thiruvananthapuram





Observation of National Science Day and Science Quiz Competition at All Saints College



World Wetlands Day 2018 at DB College, Sasthamkotta



World Wetlands Day 2018 event at St Thomas College Kozhencherry





Workshop on the Impact of the Blue Economy on Fisheries organized by KMTF & NFF





ECHO Workshop for students of All Saints College, Thiruvananthapuram





Workshop on Eco-Labelling & Fisheries Certification for Sustainable Fisheries Management





Group discussions at the Sustainable Fisheries Management Workshop



Group discussion



Fisheries Dept. representative speaking



Dr Appukuttan addresses the participants



State Director addresses the participants





Earth Hour Cyclothon – ICE Members and students of LNCPE





Earth Hour Cyclothon – Guests at the Flag-off





Earth Hour Cyclothon Flag-off and participants with the placards





Earth Hour Evening Function at Manaveeyam Veedhi





The Mayor signing the GIVEUP Campaign Pledge on behalf of Thiruvananthapuram Corporation





Earth Hour – Switch Off & Candle Light Vigil





Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.panda.org

World Wide Fund for Nature – India (WWF-India) Kerala State Office

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