

## FROM THE STATE DIRECTOR'S DESK

Kerala holds a high position as the choice of many citizens of India with regard to settling down. This can be attributed to the overall development of the State, be it, healthcare, education, housing, sanitation etc. But this is not the condition for the animals inhabiting the various ecosystems in the State, be it, forests, wetlands or oceans. There are several reports of mortality of many species of animals and birds throughout the State. The major cause is anthropogenic – careless and carefree attitude of human beings. And the alarming fact is that, the list includes many endangered animals also. Kerala is blessed with a wide range of biodiversity of flora and fauna due to the wide variation of ecosystems that we have all along the State. But many of times, our human actions are in such a manner that we consider ourselves as the most supreme being and take it for granted that all other species are at our disposal for our betterment and development. Many a times we forget the fact that co-existence is the mantra to sustaining all living forms on this planet Earth. The recent reports of killing of marine species, mainly turtles, and that too the endangered Olive Ridley Turtles proves this. After the State level Olive Ridley Turtle Conservation Workshop organized by WWF-India, Kerala State Office in association with

MoEF and Kerala Forests and Wildlife Department and the raids in Vizhinjam and surrounding areas and the release of 5 turtles back into the open ocean, there was some sense of conservation in these areas. But it has returned back to its previous state and the killing of turtles continue and goes unchecked. The pathetic condition of our natural animal wealth is also brought to light by the recent incidents of increased street vendors selling species of birds which cannot be traded as per existing laws and legislations as per their global and local conservation status. The business flourishes, only because there are buyers. We are not just satisfied by keeping pets like dogs, cats, ornamental fishes etc, but we are always looking for variety and we buy these wild species without any serious thinking. There are several reports coming in of great cruelty towards captive elephants. A recent report says that many of these elephants are blind, because they are purposefully made blind by the mahouts themselves for their self protection, in the event of the animal going wild, mainly during the musth season. We need to love and care for animals and co-exist with them considering the fact that every organism has its own right on this living planet.

*Renjan Mathew Varghese, State Director*

## IMPORTANT NEWS ON ENVIRONMENT AND NATURE

### GLOBAL

#### **Huge coral reefs could disappear by 2100**

Two fifths of the planet's most significant marine environment, a stunning expanse of coral reefs stretching across south-east Asia, has been lost and the rest is likely to disappear by the end of the century, a World Wildlife Fund report warns. Pollution, over-fishing and climate change are destroying the area known as the Coral Triangle, which covers an area about half the size of the United States and is home to more than 30 per cent of the world's corals and more than 35 per cent of coral-reef fish – around 3,000

species. Within this biological wonderland – which spans Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Timor-Leste – are 18,500 islands rich in mountain forests and woodlands. The escalation of practices such as deforestation, coastal reclamation, destructive fishing and the pumping of pollution and sewage into sea in the last 40 years has already led to the destruction of about 40 per cent of coral reefs and mangroves in this unique environment. If such practices are unchecked, half the species in the Coral Triangle will continue to disappear at a rate of 1-2 per cent a year. The reefs, which also support fishing and tourism, are also the nursery for numerous fish species. If carbon emissions continue apace, the region will be struck by increasingly severe drought, typhoons and political unrest (*The Hindu*, 21.05.09)

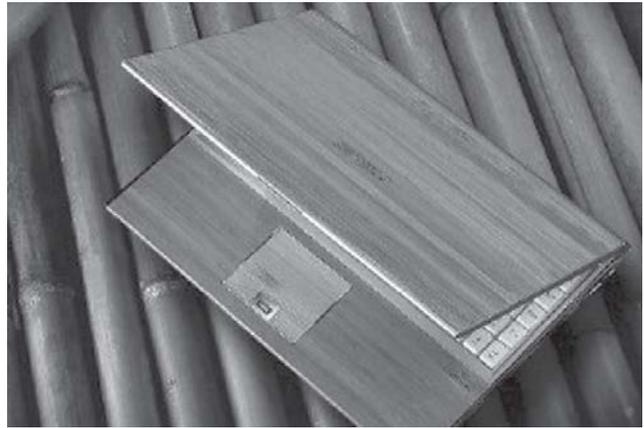
## World Bank backs tiger conservation programme

The world's diminishing population of tigers - which could face extinction within a decade - found a potential saviour on Friday after the World Bank put its weight behind a new international conservation programme. The partnership with the Smithsonian Institution is a personal project of the Bank's President, Robert Zoellick. The initiative will seek to strengthen and expand a patchy system of tiger reserves across the 13 countries, including India, Indonesia, Thailand, China and Russia, that are home to the world's rapidly diminishing tiger population. The joint Smithsonian-World Bank conservation effort will begin by training hundreds of forest rangers in new anti-poaching techniques at the Smithsonian's centre near Washington, and strengthen ties between countries where tigers live. Zoellick said reinforcing and expanding a patchy system of reserves could bring lasting benefits to local populations. "This is more than economic. This is about building a sustainable economy. What we are trying to create here is self-interest in tiger preservation. It can range from getting a job as a forest ranger to getting a job in tourism." The bank has set aside an initial \$1m for the project (*The Hindu*, 22.06.09)

### NATIONAL

#### An eco-friendly laptop

Bamboo remains one of the most versatile grasses. It has increasingly been replacing plastics and wood products. It has also entered the world of computers. Here is an end-to-end eco-friendly bamboo notebook or laptop, an innovation in green computing. It is green throughout its life cycle - from conception and production, to recycling and disposal. These notebooks, launched by ASUS Technology (India), are exquisitely designed with real bamboo to give a personalised and exclusive feel. It complies with RoHS (restriction of hazardous substances) and WEEE (waste electrical and electronic equipment) standards. It has restricted the use of 37 hazardous substances which are opposed by the RoHS directive. Also, the notebooks use super hybrid engine that can extend the battery life by 35 to 70 per cent compared to other notebooks. Stanley Wu, country manager (notebook business), ASUS India, says the notebook is made from



the Moso species of bamboo. The track pad is also made of bamboo. The entire panelling of the ASUS U6V and the mouse bundled along with it are made of bamboo. Every piece can be further enhanced with treatments that yield different colours, or by laser-etching distinctive designs on the bamboo-clad cover. The notebook uses super hybrid engine that reduces the yearly carbon dioxide emission by 12.3 kg a piece. The company has so far shipped approximately six million notebooks a year. This works out to a massive reduction of 73.8 million kg of CO<sub>2</sub> emission per year, equal to saving 36 million trees annually. The ASUS U6V bamboo is priced at Rs. 1,10,000 in India. The company offers a 2-year global warranty for the product. Mr. Wu is confident that the notebook will usher in a new era of green computing. (*The Hindu*, 14.06.09).

### STATE

#### And now water cards for the people

The Centre for Water Resources Development and Management (CWRDM) here has launched a Rs.9.63-lakh project to issue water cards that indicate quality of water in each household. Madhavan Komath, principal investigator of the project, said the scheme was already under way. Water samples collected from wells in Kunnamangalam were being analysed for determining their quality. The water card would provide results of analysis of water and suggest remedial measures needed to remove pollution, if any, to each householder. Dr. Komath said "the water card is as important as ration card, identity card, and health card... by giving this water card, an awareness of the quality of water will be created. The house-owner and other members of the family would have an idea of the quality of water he drinks. The introduction of water cards can be one of the options for solving water quality problems. "The water card project is expected

to be a major step forward in efforts to spread awareness of water quality among the common people." (*The Hindu*, 24.05.09)

### **Sixty two fish species identified during Vembanad count**

In a heartening development for nature lovers and fans of the picturesque Vembanad lake, the second Vembanad Fish Count held here on Wednesday has identified 62 species of fish and 14 species of crustaceans and molluscs including shrimp. This is in contrast with 50 and 11 each species of both categories that were identified in last year's count. According to officials of the Ashoka Trust for Research in Ecology and the Environment (ATREE), who masterminded and led the fish count, the opening of the Thanneermukkom barrage at the right time and availability of saline water could have helped the increase in the population of the aquatic species, including sea fish, in the lake, which has been facing the threat of pollution and encroachment for long. The highlight of the fish count was, however, the discovery of a totally unexpected inhabitant near the Punnamada region of the lake. A Sucker Catfish, an exotic species that is usually seen by the common man only in aquariums, startled the researchers, 170 of whom had fanned out across the lake in 11 groups. Another interesting revelation from the event was the improved water quality in the lake. This could be because of the recent rain and the increased water flow that has been enabled with the opening of the Thanneermukkom barrage, ATREE officials said (*The Hindu*, 28.05.09).

### **Experts see a new threat to sea turtle**

Speakers at a workshop on marine biodiversity conservation, organised by the World Wildlife Fund (WWF)-India and the Department of Forests and Wildlife, observed that extensive construction of sea walls along the coastline of Kerala was leading to the loss of nesting grounds of sea turtles, a protected species under the Wildlife Protection Act 1972. Experts from the Forest Department and Marine Conservation Programme pointed out that sea walls block the path of adult female sea turtles, which crawl to the beach for nesting and laying eggs. Speakers suggested that seawalls be replaced by breakwaters, built over a limited stretch of beach, to reduce the strength of waves and help conserve the nesting habitats of sea turtles. Principal Scientific Officer, Kerala State Council for Science Technology and Environment, Kamalakshan Kokkal, Marine Conservation Programme senior coordinator M. Vinod, WWF-India State director Renjan Mathew Varghese and A. Bijukumar of the Kerala University Department of Aquatic Biology and

Fisheries led the sessions at the workshop. Former scientist of the Central Marine Fisheries Research Institute Appukkuttan Nair said that the sea turtles are taken as an indicator for marine conservation because

## **SPECIES OF THIS ISSUE**

### **Southern Birdwing (*Troides minos*)**

India's largest butterfly, endemic to Peninsular India. It has a wingspan of 140-190mm. The butterfly is locally very common in the southern and central Western Ghats. Also found in southern Maharashtra and northern Goa where it is uncommon. Found in diverse habitats from low-land evergreen forests near the coast to mixed deciduous forests, dry scrub and agricultural fields. Its velvety black forewings are decorated with white streaks running along the venation. The hindwing is coloured with distinct yellow patches bordered by black pattern of veins. The female is larger than the male. Female can be identified by the triangular black spots lying central to the long yellow patches. It is more commonly seen during the monsoon and immediate post monsoon months. The best time to see this butterfly is in the early morning, near Lantana bushes. Despite its restricted range and endemism, the butterfly is not known to be threatened but the IUCN recommends continuous monitoring.



## **CHILDREN'S CORNER**

### **'Butterfly Record'**

**Surveying of these flying jewels is an attractive hobby for students, which can give both pleasure and knowledge. The following steps will help you in making a 'butterfly record'.**

First you have to find out the butterfly species present in your school/ home compound (can make use of books).

- Ø Identify the flowers and plants on which they are found.

- Ø Identify the plant species in which butterflies will lay their eggs (It is the feed plant of caterpillar).
- Ø Collect photos of these butterflies, nectar plants, eggs and larvae.
- Ø The identified data and collected photos can then compiled to form a butterfly record and can exhibit in your school.
- Ø Also these data can make use to build a butterfly garden.

## ACTIVITIES OF WWF-INDIA KERALA STATE OFFICE

### Internship – NUALS, SMC and IIT Chennai

WWF-India Kerala State Office had a good intake of intern students from various institutions across the country. Ms. Pimi Ann Shaji and Ms. Poona Anna Zachariah, students of M.A. in International Studies from Stella Maris College, Chennai joined us for a period of two months. They were very involved in the daily activities of the office and also very much helped in the education and other outreach programmes. They also assisted in preparing the materials for the animal signages as part of the Thiruvananthapuram Museum & Zoo Complex project. They also completed a brief study on the 'Corporate Social Responsibility (CSR) of Corporates and Industries in Kerala'.

Ms. Parvathi Shaji, second semester student of the five year B.A., L.L.B. (Hons) Degree Course of The National Unival University of Advanced Legal Studies (NUALS), Kochi joined us for a period of one month. She assisted the WWF team in organizing the Forest Certification Workshop. She also did a literature survey and review and came out with a quality compilation titled 'Recent environmental issues of Kerala, environmental laws and legislations, violation and correction measures'. This material would be very helpful as we propose to hold an environment education and awareness programme to engage lawyers in the society.

Mr. Vishnu M.J., student of Integrated M.A. in Development Studies, Indian Institute of Technology (IIT), Chennai joined us for a period of one month internship in the month of June 2009. During his period he helped in preparing a flipchart set on 'Climate Change and its Impacts'. He was also associated with the WWF project on 'Preparation and installation of Information Panels, Signages and Handbook for the Thiruvananthapuram Museum and Zoo Complex' and he was instrumental in preparing the layout for the information panels.

WWF would like to take this opportunity to thank all the interns for their valuable contributions.

### Exhibition at Koodalmanikyam Temple, Irinjalakuda from 5<sup>th</sup> May, 2009

As part of the annual festival and exhibition at Koodalmanikyam Temple near Irinjalakuda, an exhibition was arranged. WWF-India in association with Kerala Forests and Wildlife Department put up an elaborate exhibition on the various aspects of 'Biodiversity of Kerala'.

### Design and Installation of Information Panels for the Deer Park at Ottakkal, Thenmala

Thenmala has a Deer Park under the Kerala Forests and Wildlife Department and managed by Thenmala Ecotourism Promotion Society (TEPS). This facility is visited by thousands of visitors every year. The main attraction is the deer population comprising of three species. It was proposed to prepare, design and install Information Panels on the Deers in this facility and the work has been entrusted to WWF-India, Kerala State Office and it has been successfully completed in a period of two months time. The project was funded by TEPS.



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**Submission to the NGO Meet convened on 14<sup>th</sup> May, 2009 by Kerala Forests & Wildlife Department towards better nature conservation and environment protection.**

**General:**

1. Wildlife outside forests also to be given significance in conservation.
2. Out of the box thinking to be encouraged with regard to local conservation needs and efforts.
3. Project formulation to be done on a necessity mode and based on local framework.
4. Comprehensive development projects to be considered to take into confidence the local people also.

**Forest Department:**

5. Possible expansion of forest protection force as required.
6. Monitoring and follow-up of ongoing programmes/ projects very necessary to ensure success. System to be institutionalized and made transparent.
7. Participatory Forest Management should fully become participatory. Necessary corrections/ capacity building be done as felt necessary.
8. Training and capacity building of forest protection staff on various aspects of biodiversity conservation and its modern trends, tools and techniques.

**Networking:**

9. Role of each player should be clear - Government should strengthen enforcement, NGOs for implementation of projects, relevant technical inputs from R&D institutions through research and field studies
10. Forest Department should tie-up with local groups to increase efficiency and effectiveness.
11. Local conservation groups to be supported and strengthened.
12. Proper recognition/ reward system for genuine conservation efforts
13. Networking, training and capacity building of related agencies like Police, Coast Guard, Marine Enforcement Agency, NCC, NSS etc

**Research & Documentation:**

14. Forest Department to have database and archive of research on different aspects of biodiversity completed and ongoing being implemented by various agencies.

15. Gaps in documentation and research on biological resources to be identified and studies undertaken and supported.

**Forest Certification – 18<sup>th</sup> & 19<sup>th</sup> May, 2009**

As you are aware, the increased demand for forest certification is likely to affect the economic prospects of wood based industry and plantations, including farm forestry/agro-forestry systems in India. The Small and Medium Enterprises (SMEs) are particularly vulnerable in this context due to the lack of capacity and awareness but have an important role to play to promote forest certification in the country. In order to meet the growing demand for forest certification in the global market, the Indian industry has to look for certified forests/plantations to source their raw materials. In India, forest certification is still at very early stage and at present only one private plantation in Tamil Nadu secured FSC Forest Management Unit certificate. WWF has established the Global Forest and Trade Network (GFTN) to facilitate trade links between companies committed to achieving and supporting responsible forestry and thereby creates market conditions that help conserve the world's forests while providing economic and social benefits for the businesses and people that depend on them. GFTN-India was launched on 3<sup>rd</sup> December 2008.

In this context, a consultative meeting and training workshop on "Forest Certification in India" was organized by WWF-India in collaboration with the project associates on 19<sup>th</sup> May 2009 (9.30am - 5.30pm) at Hotel Taj Residency at Kochi, Kerala. The objectives of the meeting were to:

- § Understand the scope for forest certification in India, with special reference to Kerala State.
- § Identify suitable approaches to promote forest certification
- § Create awareness on "credible forest certification" and the benefits to the key stake holders
- § Build capacity among SME wood processors in Kerala to provide certified forest products.

The participants of this meeting included SME wood processors, forest and plantation managers, farm forestry/agro forestry growers, timber traders, (including wooden handicraft exporters), paper and pulp companies, retailers dealing with wood and non-wood forest products, NGOs, R & D institutions, Government, certification bodies, financial institutions, builders and architects. The programme was inaugurated by Sri P.K. Mohanty IAS, Principal Secretary (Forests), Govt. of Kerala. Dr.T.R. Manoharan, Dr. Sejal Worah and Mr. Allan Smith led the sessions.



### Reconstitution of the State Committee into State Advisory Board and induction of new members

The Mission and Management Rules of WWF-India have been revised and in this context the State Committee has been reconstituted into State Advisory Board. The existing and newly joined members of the reconstituted Board are:

- § Mr. A.V. George, Chairman
- § Mr. Sunilkumar, Member
- § Dr. B. Sreekumar, Member
- § Mr. G. Anand, Member
- § Mr. G. Vijayaraghavan, Member (New)
- § Dr. Bhaskaran C., Member (New)
- § Mr. Ravi DeeCee, Member (New)
- § Mr. Renjan Mathew Varghese, Member Secretary

### Class at PRS for Children’s Clinic

PRS Hospital regularly conducts Free Children’s Clinic especially for the poor. WWF-India, Kerala State Office has been associated with this programme. Mr. A.K. Sivakumar, Education Officer addressed the children during the clinic held in the hospital on 29<sup>th</sup> May, 2009.

### Talk at LeCole Chempaka and UST Global on the occasion of World Environment Day on June 5<sup>th</sup>

As part of World Environment Day celebrations, Mr. Renjan Mathew Varghese addressed the students of LeCole Chempaka School during the function organised as part of the morning assembly. A talk was given using multimedia presentation to the staff of UST Global at Technopark as part of the day.



### Marine biodiversity – Training and capacity building workshop

For the protection and conservation of our marine and coastal ecosystem and its biodiversity, a multi pronged approach is necessary, which includes enforcement, education and awareness programmes and strengthening of local conservation groups. It is in this regard that WWF-India jointly with Kerala Forests and Wildlife Department organized a one day ‘Training and capacity building workshop of marine biodiversity with special significance to marine turtle conservation’. The workshop was organized on 8<sup>th</sup> June, 2009 at the Vanasree Auditorium, Kerala Forests and Wildlife Department Head Quarters, Thycaud, Thiruvananthapuram. The workshop was attended by Forest Department field protection staff, protection staff from Coast Guard, Marine Enforcement Agency, local NGOs active in coastal conservation, fishermen representatives etc. The programme was inaugurated by Mr. D.K. Verma, IFS, Conservator of Forests (Social Forestry) in a function presided over by Mr. Renjan Mathew Varghese, State Director, WWF-India. The technical sessions were led by Dr. Bijukumar, Lecturer, Dept. of Aquatic Biology and Fisheries, University of Kerala, Dr. Kamalakshan Kokkal, Principal Scientific Officer, KSCSTE and Dr. Vinod M., Senior Co-ordinator, Marine Programme, WWF-India. Local conservation groups shared their experience from the field. An open session was also included for the participants to have interaction with the scientists and experts.



### Staff outing to Kallar and Ponnudi

WWF-India, Kerala State Office staff, families and internship students went for an outing trip to Kallar and Ponnudi on 18<sup>th</sup> June, 2009. It was a real rare experience for all to get to know each other better and to have very good interaction. The group started out from Trivandrum by 8.00am. The 1.5km long trekking to Meenmutty waterfalls turned out to be a real challenge especially in the rugged terrain and heavy rainfall. But the team was enthusiastic enough to complete the trek, but returned back drenched. The group had lunch at Kallar and then proceeded to Ponnudi. The group was greeted with dense fog on the way itself and on top also the climate was very cold and windy. The group returned to the City by 7pm.



### Nature Photography Competition at TKMIM on 19<sup>th</sup> June, 2009

As part of the nature club activities, LEAVES in association with WWF-India announced an Amature Nature Photography Competition. The entries were evaluated and winners selected. In this regard, a talk and Prize Distribution function was organised at TKM Institute of Management on 19<sup>th</sup> June, 2009. The talk on 'Ecological Footprint' was delivered by Mr. Renjan Mathew Varghese, State Director, WWF-India. Mr. A.K. Sivakumar, Education Officer also spoke on the occasion.



### Planning Workshop on Marine biodiversity Conservation along Thiruvananthapuram Coast

Formation of the First Model Coastal Eco-development Committee (EDC) has been proposed for Vizhinjam and surrounding areas to address marine biodiversity conservation and related issues along the coastal stretches. The proposal came in the discussion and planning meeting conducted at Thiruvananthapuram jointly organised by WWF-India and Kerala Forests and Wildlife Department. The meeting was attended by officials from various enforcement agencies, NGO representatives, local fishermen community representatives and panchayat authorities. The meeting was convened in the light of the recent frequent reports of marine species killing along the coastal stretches of Thiruvananthapuram which mainly includes turtles, whale sharks and dolphins which are all included under Schedule 1 of Wildlife Protection Act. The meeting opened with a presentation by Mr. Renjan Mathew Varghese, State Director, WWF-India which gave an overview of the issue and its intensity, what is the present status and the way forward. After the presentation, it was time for open discussion which was led by Dr. Bijukumar, Lecturer, Department of Aquatic Biology, University of Kerala and Dr. Appukuttan, retired Senior Scientist, CMFRI. The others who contributed includes Mr.

Pradeepkumar, DFO, Forests and Wildlife Department, Sri. Denson Castro, Vice President, Vizhinjam Grama panchayat, Fr. George Gomez, Ms. Latha from People for Animals and Ms. Aswathy from KSCSTE.



### Haritha Koottayma

The campaign against indiscriminate tree felling for road widening in Thiruvananthapuram City gained much momentum with the group coming together at Lenin Balavadi on 26<sup>th</sup> June, 2009 and deciding to conduct a series of roadside signature and awareness campaigns. The first campaign was organised at Thampanoor on 29<sup>th</sup> June, 2009. This was followed by campaigns in different places in the evenings covering Sasthamangalam, Vellayambalam, Kawdiar, Ayurveda College Jn etc. Mr. Vishnu, Intern and Harishkumar from WWF were involved in organizing the events.

### Teachers Training Workshop

First of the Teachers Training Workshop series on Environment Education in Kerala during the academic year 2009-2010 being organized by WWF-India, Kerala State Office and supported by CPR Environment Education Centre was held on 24<sup>th</sup> June 2009 at Govt. Higher Secondary School, Thodupuzha. Fifty two teachers from three taluks of Idukki District participated in the workshop. "Save Idukki Campaign" movement and authorities of the Thodupuzha Municipality provided all the local support for the successful conduct of the workshop. The workshop was inaugurated by Smt. Sheela Jayan, Chairperson of the Thodupuzha Municipality in the function presided over by Smt. K.S. Vijayakumari, Chairperson of the Standing Committee, Health and Education, Thodupuzha Municipality. Sri. Muraleedharan Nair, Headmaster of the School, Sri. James Mlakkuzhy, Vice Chairman of Save Idukki Campaign felicitated the workshop. The technical sessions were led by Sri . Raveendran and Sri A.K. Sivakumar. Activity session and action plan preparation was also conducted.

## EDITORIAL BOARD

Mr. A.V. George  
Mr. Renjan Mathew Varghese  
Mr. A.K. Sivakumar

Kerala is blessed with enchanting natural beauty.  
It is nourished by 44 rivers and a chain of backwaters.

It is confronted with environmental problems due to pollution  
on account of urbanization and industrialization.

The health consequences of exposure to dirty  
environment are considerable.

The people of Kerala are highly conscious of  
the need to protect the environment.

Kerala State Pollution Control Board is committed  
to control environmental pollution.

It administers various environmental statutes for the  
prevention and control of pollution.

**Join us in maintaining and restoring the  
wholesomeness of the environment**



**KERALA STATE POLLUTION CONTROL BOARD**  
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