

## Workshop on Freshwater biodiversity Conservation at St. Philomena's College, Mysuru, Karnataka

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A two-day workshop was organized on 28 and 29<sup>th</sup> March 2015 jointly by the Department of Zoology, St. Philomena's College, Mysuru and Zoo Outreach Organization, Coimbatore with the financial support of the University Grants Commission, New Delhi. Selected 46 students from the department of Zoology took part in it. The main objective of the workshop was to impart knowledge on the status of the freshwater biodiversity and to teach them active learning tools. The workshop had both indoor and outdoor activities to help the participants to understand about the importance of freshwater biodiversity and the need for its conservation.

Rev. Fr. Leslie Moros, Principal of the College inaugurated the workshop. During the inaugural he said that the present generation should commit themselves to do something for the betterment of the environment. Individual responsibility is needed to bring in mass positive attitudinal change among the society. With this introduction the session started with know each other. The third author gave introduction to the workshop and its objective. He also introduced the *The Sahyadri Freshwater Teaching Guide* that was used throughout the workshop and also other education materials developed by ZOO with the support of CEPF.

Some of the activities tried during the workshop day are: assessment tools (both Brain map and attitude assessment), facts about the *Sahyadri*, map reading, water footprint and value of freshwater, freshwater types, species assessment, illustrated history of Western Ghats, know your species – odonates, fish, mollusc and aquatic plants, species status and



**Workshop setup and classroom session**



**Tracing the History of Western Ghats through illustrations was a fun activity**

trends, and a demo on the *Sahyadri* education packets.

The teaching guide that was used for the workshop was developed during the Critical Ecosystem Partnership Fund in 2013. The purpose of a Teaching guide for educators is to translate scientific data from the report of 'The status and distribution of Freshwater biodiversity in the Western Ghats, India' (<http://data.iucn.org/dbtw-wpd/edocs/RL-540-001.pdf>) into

stimulating concepts and messages that appeal to stakeholders and connect with their emotions and personal benefits. For any educator, it is difficult to generate interest among the audience in freshwater fish, dragonflies, water plants,

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**Field trip at Ranganthittu Bird Sanctuary**



**Fishing game to understand sustainable utilisation**

snails and slugs. The teaching guide provides a means of making those freshwater critters and systems interesting to youngsters through games, competitions, drawings, song writing, role play and live debates, etc. This guide also helps to engage any age group by relating the pitfalls of ignoring freshwater habitats and by learning about the animals fascinating lives and habitats. The manual and other teaching tools such as handouts, posters, packet materials (in 5 south Indian languages) and graphics can be downloaded [http://zooreach.org/ZOO\\_WILD\\_Activities/2012/Aug2012\\_Edu\\_Cons\\_FWBWG.htm](http://zooreach.org/ZOO_WILD_Activities/2012/Aug2012_Edu_Cons_FWBWG.htm)

The participants interaction during the attitude assessment was very good and they understood the concept and the assessment methods. The *sahyadri* mapping activity helped them to understand all facts related to the Western Ghats, rivers, freshwater species and associated people who benefit out its resources. The illustrated history helped them to trace out the entire history of the Western Ghats starting from 5000 BC. They took part in the drawing and also in the presentation with great involvement that gave them a high satisfaction. Some of them used colouring materials for the first time in their life time and that made them feel proud. These activities helped them to identify their hidden skills as well. Using laminated illustrated cards to make the

participants understand about the freshwater types was very useful. They could easily find out the difference between 15 water body types and understand different freshwater habitats. The animal examples freshwater species selected for the workshop were very apt and their ecological role was well understood.

Spreading the word of species conservation is one of the objectives of the workshop. This workshop encouraged the participants to create awareness among different stakeholders. During the workshop the participants were encouraged to share what they learned today with as many as people as possible. Use of packets facilitated to achieve that goal. A demonstration was given to all participants, ways and means to reach out the public using the resource materials. At the end of the workshop participants took an oath and pledged to contribute individually towards the conservation of freshwater species.

On the second day a full-day field visit was organized. All the participants were taken to Ranganthittu Bird Sanctuary. The Bird Sanctuary established in 1940 has records of 170 birds visited the water body over years. The participants were taken around the bird sanctuary and they observed 16 different kinds of birds against 34 birds reported during that season, mammals, reptiles and many invertebrates.

Play way learning is the best method to teach complicated scientific topics. During the field trip games were played to make them understand how researchers develop their observation skills to study species or habitat. Fishing game to explain sustainable utilization was played with selected members while others watched the game. At the end adaptations game was played to explain them how species are adapted to live successfully and to meet the challenge in the environment. The organizers would like to thank University Grants Commission, New Delhi for the financial assistance to organise this programme and for ZOO and CEPF for free education materials. Thanks to Mr. Babu, Department of Malayalam and the Laboratory assistants for their support in organizing the workshop.



**ZOO's Packet demo**