

MAHARASHTRA ACADEMY OF SCIENCES



Report of One Day Workshop on **"Biodiversity: Conservation and Management"** held at National Chemical Laboratory, Pune

India has a rich and varied heritage of biodiversity encompassing a wide spectrum of habitats including Western Ghats, Eastern Himalayas, the hot spots or the crown jewels of India's diversity. The accelerated process of the loss of species demands serious attention. There are ways to bring the question in focus however, protection, maintenance and restoration / conservation are the solutions.

The *Maharashtra Academy of Sciences* (MASc), which has been instrumental in advocating the importance of biodiversity arranged a one-day state level workshop on 'Biodiversity: Conservation and Management on October 23, 2008. A beautiful expo of poster sized photographs of wildlife, flora and fauna of KAS plateau by Dr. Mukund V. Deshpande (Sr. Scientist, NCL) and Mr. Suresh Pardeshi extended a warm welcome to the delegates. Highlighting the value of biodiversity to mankind, deliberations in the workshop explored the eternal beauty of Western Ghats.

In the inaugural address, Professor H. N. Gour (Hon'ble member of Biodiversity Board, Government of India) congratulated the premier scientific organization for arranging a workshop (on the globally burning issue of ecological imbalance) focussing on maintaining and managing biodiversity. Admiring the timely step by MASc Prof. Gour highlighted the necessity to instill and nurture conservation practices and ethics in communities that would assure availability of resources and peaceful life for the present and future generations.

'Wild is beautiful' said the senior botanist Dr. Hema Sane in her inspiring speech on plant biodiversity that explored the richness of diverse flora in Maharashtra. "Biodiversity has an intrinsic value that is worth protecting regardless of its availability as a bioresource" she exclaimed and added "we must accept that whatever exists has a right for continuous existence". Demanding a social evolution in her speech she questioned, "How about a plant rights commission just as we have the human right commission?" which generated a positive response from the young audience.

Veteran scientist in Marine Ecology Dr. Aditi Pant shared her experiences of spine squeezing windy, snowy Antarctica expedition. In her colorful presentation, Dr.

Pant displayed the amazing world of underwater marine creatures, bird like snow petrol, Penguins, Blue eyed shag, exotic Lichens & mosses that enthralled the audience.

'Fungi' the second most diverse group of living organisms was discussed by Dr. Mukund Deshpande, the convenor of this workshop. Dr. Deshpande shared his views putting forth a different perspective on the insect-fungi relationship as well as evolutionary transformation of a saprophytic fungi to the insect-pathogenic ones. He espoused the need for a 'Fungi Park' where the enemies of the destructive insects would flourish with them!

As we know, microbes are ubiquitous and found even in the extreme environments like mud-volcanoes and hot water springs, although human efforts fail to cultivate them *in vitro*. Aimed at understanding the microbial diversity of extreme environments, Dr. P. K. Dhakephalkar (Sr. Scientist, ARI) presented a research paper emphasizing the beauty and applications of advanced molecular techniques in exploring the extreme environments.

"Smallest among the visible life forms though largest in number are the insects who exhibit a great diversity in forms" said Prof. Hemant Ghate, Modern College, Pune. Sting beetles to social insects and bugs to butterflies, he discussed the habits and habitats, diversity in forms, wonders like camouflage in the insect world as well as do's and don'ts of an insect museum.

Increasing human population pressure and interference in the nature are largely responsible for the accelerated loss of avian species, noted Dr. Satish Pande, a founder director of ELA Foundation. He said that avian bio-diversity of Western Ghats is dynamic and has been miserably affected by human activities. Traditional knowledge, literature and aesthetic values put together with environmental education, workshops and legislative provisions would surely propel the 'save biodiversity activity' he added.

"Biological diversity is a great miracle known to man! If the earth's history is compressed to 365 days then the modern man arrived on the scene only on December 31st that too just 4 minutes before the stroke of midnight; however he has caused the biggest threat to life-forms", said Dr. Vishwas B. Sawarkar, Ex-Director, Wild Life Institute, Dehradun. He indicated that extinction per thousand species per millennium have increased thousand times than the fossil record and the list of 25% of 5487 existing mammals on the verge of extinction, unfortunately include 49 from India. Dr. Sawarkar also said "We may hope for a better future if we implement the baseline – Economy and Ecology must go hand in hand."

'Teachers, NGO's and specially the student participants who came from all over Maharashtra, made this workshop a success', concluded Prof. G. D. Yadav (UICT, Mumbai) the President of MASc.

Vice-president of MASc Dr. Radhakrishnan (Sr. Scientist, NCL, Pune) highlighting Academy's contributions to the society, reviewed aims and objectives of MASc.

Secretary of MASc, Dr. S. S. Tambe (Sr. Scientist, NCL) on behalf of MASc expressed gratitude to the sponsors of the workshop namely Reliance Industries Ltd., Gharda Chemicals Ltd. and Hi-Tech Biosciences India Ltd., and also thanked Dr. S. Sivaram (Director, NCL), Fellows and Young Associates of MASc, researchers and teachers from various institutes and student delegates for their attendance. Mrs. Snehal Kulkarni anchored the workshop proceedings diligently.

Report by Ms. Anuradha Jape
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