

Report on the celebration of International Day for Biological Diversity at IWST, Bengaluru

The United Nations proclaimed May 22nd as the International Day for Biological Diversity (IBD) to increase understanding and awareness of biodiversity issues. The theme for IBD of 2018 is “**Celebrating 25 Years of Action for Biodiversity**”. Celebration of IBD under the said theme provides an opportunity to raise awareness and action towards the important contribution of sustainable tourism both towards economic growth and conservation and sustainable use of biodiversity.



In this regard, Institute of Wood Science and Technology arranged a talk on “**Long term ecological monitoring of tropical dry forests**” by Dr. H.S. Suresh, Centre for Ecological sciences, Indian Institute of Science, Bengaluru on 22nd May, 2018.

The summary of the talk presented by Dr .H. S. Suresh is as follows:

The Center for Ecological Science has established a large 50 hectare permanent forest dynamics plot in the tropical dry forests of Mudumalai during 1988-89. Mudumalai is characterized by high density of large mammals, considerable seasonal fluctuations in climate and annual dry season fires (mostly human set). The objectives of the study include understanding the diversity of dry forests, mechanisms and factors that influence maintenance of the diversity and finally factors such as fire, large mammals and climate variability which drive the future of the ecosystem. Plot was established by following standard CTFS international protocols. Since 1989

plot is being monitored annually for recruitment and mortality and sizes of surviving stems are measured once every four years. Total population in the plot has shown considerable fluctuation over the years. This fluctuation is seen with individuals below 10 cm dbh. Canopy is relatively stable but showed little decline. Rates of mortality and recruitment varied over the years. There was high mortality among the individuals in lower size classes and the mortality rate in higher size classes was one of the lowest among different forest types in the world. Though there were fluctuations in density and rates of mortality and recruitment, basal area and biomass showed increase due to growth suggesting that the trees in the dry forests of Mudumalai are sequestering carbon. Other aspects of long-term monitoring included characterizing soils, research on invasive species such as Lantana and Eupatorium, mapping of spatial extent of fires every year, monitoring phenology of different species and its relation to climate, study of carbon cycle and short term impact climate variability on growth of trees with help of dendrometers.

All the employees of the Institute including students participated in the talk and actively with the speaker.