In PM SHRI Kendriya Vidyalaya No 1 Jalahalli West, our educational philosophy is deeply intertwined with nature, fostering a unique learning environment where students engage with the natural world. We chase butterflies and meticulously observe their early stages, which enhances our understanding of life cycles and metamorphosis. Additionally, our bird-watching activities, with over 75 species counted, including migratory ones, highlight avian diversity and migration patterns, offering lessons in adaptation, climate change, and conservation.

We have been sincerely documenting our campus biodiversity on **inaturalist.org** and have over 1540 records there.

Our school employs light traps to study urban moth populations, which allows us to monitor and document various species. This activity teaches students about nocturnal insects and their ecological roles. By observing and recording 237 species of moths, we contribute valuable data to entomological research, aiding in the study of urban ecology and environmental changes. The process of setting up and analyzing light traps also introduces students to scientific methods, data collection, and analysis, fostering critical thinking and investigative skills. The study led to an Award winning project “Moths-The unsung pollinators” by Ku Lakshmi KP and Ku Thanusha Lokesh under the guidance of Shri Ashok Sengupta at NCSC 2022 held in Ahemdabad.

PM SHRI

PM SHRI KENDRIYA VIDYALAYA NO 1 JALAHALLI WEST BENGALURU

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केन्द्रीय विद्यालय संगठन

Nature’s Laboratory

PROJECT INNOVATION

Pillar 1: Curriculum, Pedagogy and Assessment

Implemented by:

Shri Ashok Sengupta, Mrs K Latha, Mrs Renuka K, Mrs Ushma Teotia and Team

Exploring the world of spiders, both during the day and night, reveals the intricacies of these arachnids' lives and their significance in controlling insect populations. With over 25 species of spiders observed and photographed, students gain insights into the diversity of spider habitats and behaviors. This activity highlights the importance of predators in maintaining ecological balance and teaches students about adaptation and niche specialization. Observing spiders enhances our understanding of web architecture and the ecological services provided by these often-misunderstood creatures.

Ant populations offer a fascinating glimpse into social behavior and community organization. By documenting 40 species of ants and their intricate social structures, students learn about cooperation, division of labor, and efficient resource management. These lessons from nature parallel human societal functions and can inspire innovative approaches to teamwork and problem-solving. Studying ants' roles in ecosystems, such as soil aeration and seed dispersion, emphasizes the interconnectedness of life and the importance of every species in maintaining ecological health.

Spotted Orb weaver (*Neoscona*)

A rare Lichen Moth(*Gurna indica*)

Migratory Blue Throated Flycatcher (*Cyornis rubeculoides*)

Bi-coloured Ant (*Tetraponera rufonigra*)

Our school’s approach to studying termites is enlightening. By allowing a termite mound to grow and installing a board detailing their structure and behavior, we create a living classroom to understand these insects. Observing the mound's growth teaches students about engineering, architecture, and the role termites play in decomposing organic matter. This study reinforces principles of ecology, sustainability, and species conservation.