BUTTERFLY GARDENING JNV Hr. Sec. School

WHY BUTTERFLY GARDEN?

- Everybody including children enjoy watching these flying beauties. Butterflies are not only aesthetically appealing, their diversity is a symbol of ecosystem health.
- Butterflies require specific plants for the larvae to feed on, so no plants means no butterflies.
- They pollinate flowers, and both adult & larvae are important food source for birds and reptiles.
- When we protect and provide them a habitat we are protecting other species as well. So they serve as umbrella species for conservation.
- The life cycle of butterfly tells us the story of ecological dependency of each living things on one another and nature's harmony.

Need for Conservation

- Most of the butterflies prefer hostplants which are poisonous or belonging to scrub jungle, degraded lands, roadsides/edge vegetation which are at threat due to unmindful developmental activities by man. This would lead to severe habitat loss for butterflies.
- For those butterflies depending on medicinal plants, their over harvestment presents threats for survival.
- As far as aesthetic sense is concerned, butterfly larvae are considered pests in the garden. The are killed by gardeners or applied insecticides. Seasonal pruning of branches in gardens, may lead to death of many larvae and loss of food plants.
- When initiative for butterfly gardening is taken, a number of other insects depending on these plants and those creatures depending them for food are also protected, thus protecting local biodiversity as a whole.

WHY IN SCHOOL CAMPUS?

- Schools are the ideal platform where initial steps of biodiversity conservation can be adopted and effortlessly followed up.
- Butterfly gardens provide nature based education and make young minds aware of ecosystem interactions.
- Active conservation practices in campus can provide a healthy environment for both learning and extra curricular activities.
- It inculcates in students attitude of environment protection, biodiversity conservation and sustainable development.
- Creating butterfly habitat in campus is a great way to expose students to the wonders of nature and enrich their learning experience.
- Observation of lifecycle, polymorphism, seasonal variations, mimicry in butterflies and ethology instill research aptitude in students.

Construction of Butterfly Garden

- Start with some field investigation and documentation on the kinds of butterflies are native to the area preferred.
- Select a landscape in campus and design your layout, that is best suitable for our need. Sunny place already accessible to butterflies preferable.
- Grow the plants (Host) the caterpillars like to eat and grow the plants (Nectar) that adult butterflies feed on.
- Different species of butterflies have different preferences of nectar, in both colors and tastes, wide variety of food plants will give the greatest diversity of visitors. Most preferable nectar plants which are also pleasing to eye to be selected.
- Plant the tallest, shrubby plants at the back and the smallest at the front. Armed plants should be planted away from reach of students. Climbers can be grown on fences.

- Butterflies need water just like we do. Keep a mud puddle damp in a sunny location, or fill a bucket with sand and enough water to make the sand moist.
- Create rock& pebble area: Butterflies use the rock & pebble area to bask in the sun and warm their bodies and dry their wings
- Provide a pesticide-free environment with easy access to sunlight and sheltering spots.
- Provide a brick trail so that the garden can be visited without upsetting the plants.

Steps Taken

- Formed a core student group of 26 students for achieving active based learning and implementing butterfly garden in the campus
- To generate interest in butterflies, students were taught of importance of pollinators, environmental dependency and different life stages (lifecycle) of butterflies (egg, larvae, pupa and adult stages)
- Students taken for field visit in and around JNV for making them familiar with common butterflies and their host plants.
- Selection of landscape and designing garden with inputs from students. 20 x 10m plot adjoining to existing garden found appropriate. The whole area including the existing garden to be remodelled for the project.

- The ground was cleared keeping existing hostplants in tact.
- Determined position of various plants in terms of shrub, herb, climbers, thorny plants etc.
- A garden trail is also designed.
- Students were divided into teams and assigned tasks like collection of hostplants, preparation of seedbeds, regular watering, weeding etc.
- Various native plant species are collected by the students from different places of campus
- We planted the 34 saplings belonging to 8 species, to add boost to soil we added organic compost, decayed leaves, dry grass clippings.

Most common butterflies found in the campus



Chocolate pansy

Lime butterfly

Common emigrant



Common mormon



Common tiger



Common crow

Host plants to common butterflies planted

Host plants (number planted)

• Capparis zeylanica (4)

- Capparis rheedi(2)
- Cassia alata(12)
- Hygrophila auriculata(5)
- Castor(6)
- Tragia spp(2)
- Hybanthus enneaspermus(2)
- Citrus(1)

Butterfly

- Common Gull, Pioneer, Orange Tip,Wanderer,Psyche
- Wanderer
- Common and Three-spot grass yellows
- Peacock Pansy
- Common Castor
- Angled Castor
- Tawny Coster
- Lime butterfly, Common Mormon

Students were introduced to field study



Demonstration of caterpillar and pupa stage



Caterpillars in Host plants



Preparing the ground for plantation









Digging the ground for plantation



Active participation from school students



Interacting with Students before Plantation



Plantation













Progressive days of Butterfly gardening



Conclusion

- The program brings butterflies and other wildlife into school garden for purposes of enjoyment, observation, study, and photography.
- A well-planned butterfly garden becomes a small, but representative sample of the surrounding habitat

THANK YOU