

Adding to Biodiversity through our Gardens

Variety of life on earth – plants, animals and microorganisms – comprise biodiversity. Together all these species along with humans protect each other and make earth habitable. Our non-sustainable practices are eradicating most of the living species. As such there is degrading of the natural capital upon which all our lives and livelihood depend. Bio diversity has always been important for creating sustainability because of the specialized roles each species plays in maintaining ecological balance.

It is threatened by over population of humans, the so-called infrastructure development, habitat destruction pollution, climate change and over exploitation of natural resources and habitat loss. In a biologically diverse ecosystem – living organisms depend on each other for survival- animal depend on plants for food and shelter and plants depend on soil for growth, on bees for pollination and reproduction, while fungi and bacteria decompose other organisms to fertilize the soil. Loss of bio diversity weakens these connections and there by harms the eco system.

The question is how can you and I contribute in adding to bio diversity through our gardens-

1. Start by planting trees in and around you – in gardens, parks and open areas especially the native varieties
2. Attract birds to your garden by providing food and shelter- hang wooden and terracotta bird houses.
3. Invite butterflies to the garden by not use chemicals , pesticides and planting flowers and shrubs which support the butterfly in its life cycle.
4. Most importantly add a pollinator garden. bees are very sensitive to spray of insecticides. Need to get in the practice of using natural homemade insecticide which do not harm the bees and thereby the pollination process. Bees pollinate 90% of plant species and contribute to more than 35% of world food supply
5. Add water to your garden for birds and other wild life. One can gave a bird bath, fountain or a pond.
6. Bring in more native plants to your garden since they adapt well to soil and local climate. They provide food for native wildlife and to beneficial insects and pollinators.
7. Say no to chemical and preventive pesticide spraying- use neem and cow-based sprays.
8. Reduce, reuse, and recycle as much as possible since this will lessen wastage, pollution and waste reaching landfills.
9. Say no to hybrids and grow desi varieties of plants-flowers, vegetable and fruits.
10. Create your seed bank of flowers and vegetables and keep genetic diversity in plants.
11. Grow local and buy local. Home gardens are traditional conservation system of the environment.
12. If possible, say no to lawn and grass. Since grass always needs chemicals and is a big water guzzler.
13. Keep mulching your pots and garden so as to reduce the need to constantly water and also to support the earthworm activity.

14. Do multi cropping, mixed cropping, companion planting rather than mono cropping of both flowers and vegetables. This creates immunity to pest attack.
15. Its time to change our mindset-rather than creating an ornamental garden. today's need is a utility garden because your garden is not just for the owner it is an important contributor to the functioning and sustainability of the larger ecosystem providing services like pollination, giving refuge for micro and macro fauna and allowing genetic flow between plant population inside and outside the garden.
16. Create a good water harvesting system-be it rainwater, garden water or grey water to reduce the burden on the depleting water table.
17. Work on the maxim on creating a rich, porous soil mix for the garden. healthy soil leads to healthy plants which are able to ward off the pest attack.
18. Use terracotta and environmental friendly pots to grow your plants rather than plastic pots.
19. Get into the habit of home composting and leaf composting. Healthier soil with more plant and organic matter has more carbon – for every 1%increase of carbon in soil it holds 20,000 gallons of water per acre.

Revising bio diversity loss is the only way to restore and sustain a healthy planet and the lives it supports. It's time to re-create our relationship with nature and put nature in the fore front of our decision making.