

Biodiversity in my Bengaluru Backyard

Title Biodiversity in my backyard

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Grade (you must be grade 9-12) 10

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Biodiversity to me, is the coexistence of a variety of lifeforms from microbes, fungi, insects, birds, reptiles, plants to mammals and more in a habitat to sustain a healthy ecosystem. I'd like to present my observations of biodiversity in and around my backyard, where we don't use any pesticide or fertilizer and let nature take care of itself with minimal intervention from us humans. Sharing three collages containing photos of the diverse beings spotted in and around my backyard. The photos were clicked by my family.



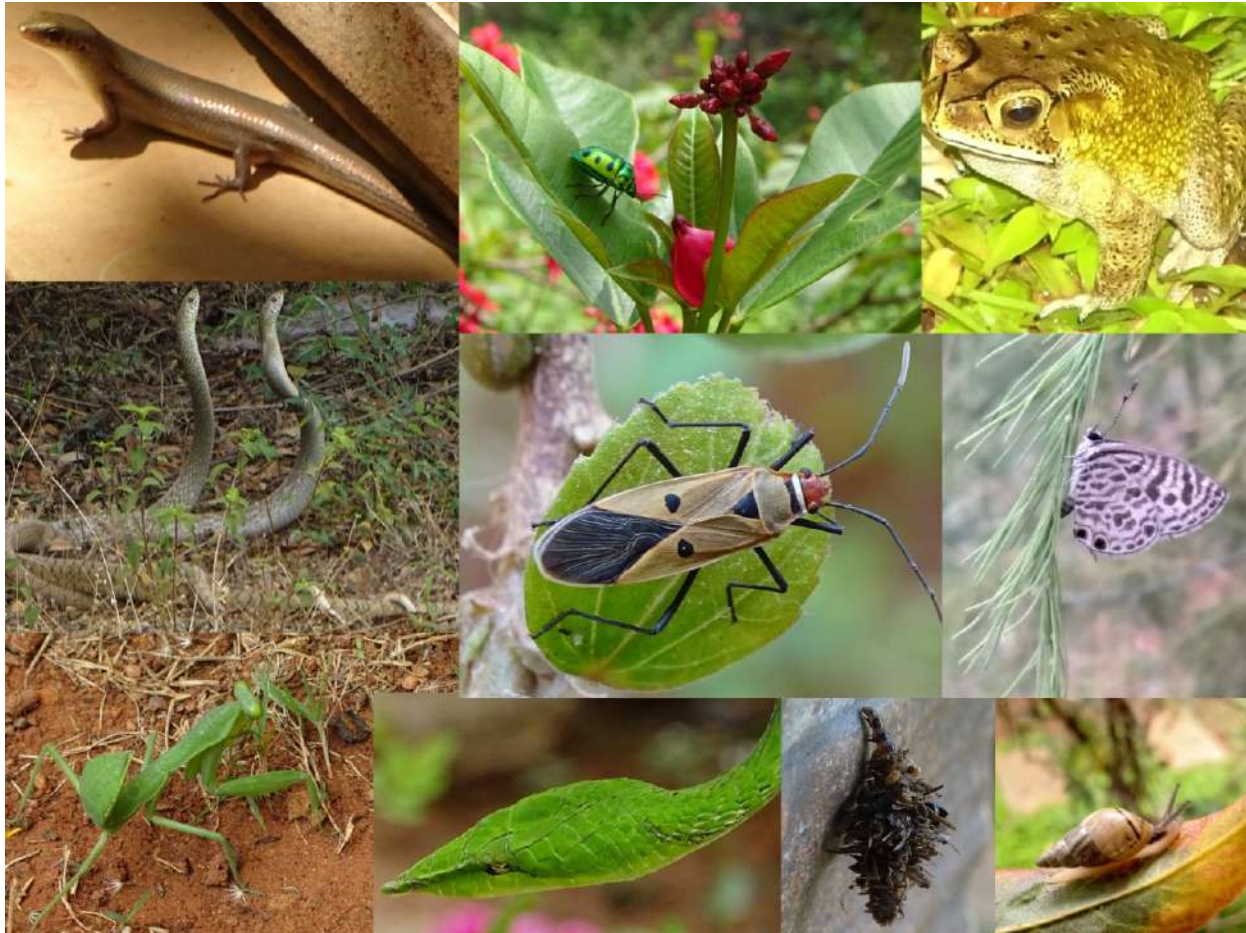
row 1 - Asian Koel female, Bulbul, Pied bushchat

row 2 - Greater coucal, Owl, Kingfisher

row 3 - Bees, Sunbird, Bee-catcher

A glimpse of some of our wonderful flying friends that frequently visit. They are a vital part of the

environment. They have varying functions from aiding the production of natural fertilizer, playing the role of seed-dispersers to preying on insects and maintaining the balance of our local ecosystem. The owls are the predators of the night, taking care of unwanted pests. During the day we can count on the bulbul, Asian koel, bee-catcher, white-throated kingfisher and other birds for pest control and seed dispersal. And our local crows who apart from being seed-dispersers, pest consumers, also help clean up dead animals' carcasses and organic waste. The birds' droppings also serve as natural fertilizer. Sunbirds, bees and other little birds transport pollen while fluttering from flower to flower seeking nectar. The pied bushchat is an enthusiastic insectivore and helps keep a check on the pest population.



row 1 - Indian Skink (*Eutropis carinata*), Green Jewel Bug (*Chrysocoris Stollii*), Indian Bullfrog (*Hoplobatrachus*)

row 2 - Rat snakes (*Ptyas mucosa*) in combat dance, Cotton Stainer Bug (Genus *Dysdercus*), Common Pierrot Butterfly (*Castalius Rosimon*)

row 3 - Praying mantis (*Mantis religiosa Inornata*), Green vine snake (*Ahaetulla nasuta*), Bagworm (Genus *Thyridopteryx*), Small garden Snail

Here is a glance of some of the insects, reptiles, amphibians that grace our backyard and the vicinity. The skink consumes pests keeping our plants safe. The butterfly helps in the pollination of plants. We also have our friendly snail which disposes of dead vegetables and plants. The rat snakes control the rodent population. The camouflaged vine snake makes sure the frog and lizard population is kept in check, apart from gobbling on other insects and small birds. The grasshopper transports and disperses seeds. The frog acts as a countermeasure to the snail to make sure it doesn't eat too many living plants while also eating any pests that get in its way. The bagworm, though being a pest, upcycles waste to make an architectural masterpiece for its house. The green jewel bug, despite being a pest, is a visual delight that continues to inspire our fascination and love for Mother Nature. Why worry about pests when they are naturally kept in check! Did I mention that even the mosquitoes are naturally controlled?



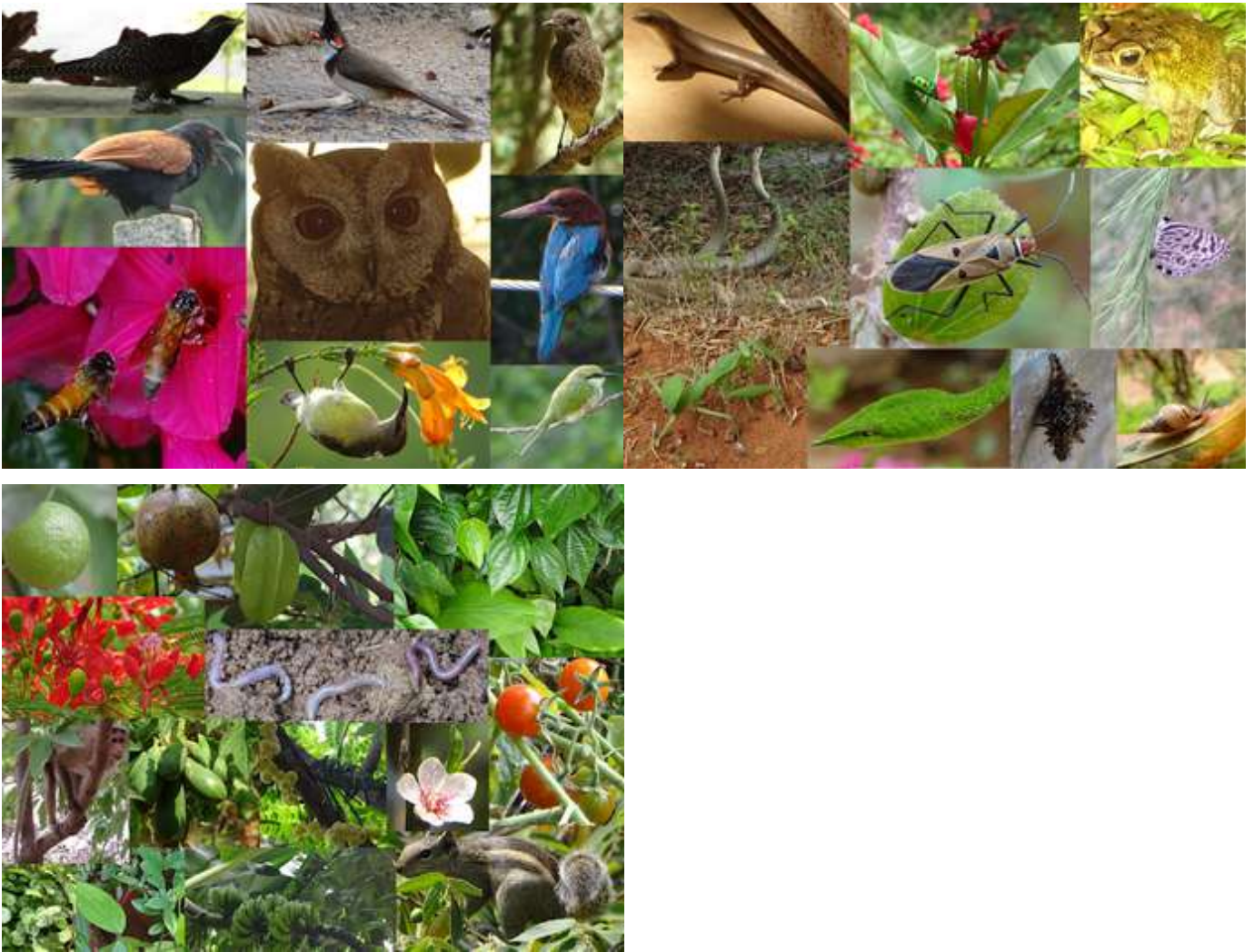
row 1 - Lime, Pomegranate, Starfruit, Betel leaves creeper & Turmeric shrub

row 2 - Gulmohar tree, Earthworms

row 3 - monkey, papaya, gooseberry, apricot bloom, cherry tomato vine

row 4 - Holy basil - Tulsi & Brahmi, pepper vine around a sweet lime tree & chilly bush, Banana tree next to a jackfruit tree, squirrel

The guava, star fruits, star gooseberries attract many animals from the smallest of insects and birds to monkeys that disperse its seeds. The betel leaves vine and the turmeric herb flourish in close proximity. The gulmohar and apricot trees attract a variety of birds apart from bulbuls and rose-ringed parakeets aplenty enhancing the biodiversity. A quick dig of the soil reveals plump and wiggling earthworms. These slimy critters generate fertilizer while loosening up the soil so the nutrients can seep in and the roots can spread. A playful monkey visits occasionally to feast on the papaya, cherry tomato and other fruits and helps propagate the seeds. Honey bees are attracted to a variety of flowers helping with the pollination. Basil, Brahmi, Holy Basil - Tulsi and other herbs form nature's apothecary while also attracting butterflies. A pepper vine grows supported by a sweet lime tree and a chilly bush flourishes nearby. To top it off there have been enchanting light displays by fireflies in our backyard since the past few nights, apart from growing sightings of fruit bats which seem to be attracted to the bananas and the jackfruit tree. This is what a co-existence of diverse life forms promotes: a strong and robust food web, natural pest control, composting and fertilizer generation, seed dispersal and pollination, healthy harvest of fruits and vegetables, a sustainable environment



Additional Comments

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