

Anthology : The Research Butterfly Gardening – Aesthetic Value

Abstract

Butterfly garden is an important achievement in the field of nature education. Butterflies are one of the most beautiful and interesting creatures that throng the green space. Practically a large number of butterflies captivate the eyes of the visitors in the background of which they receive elaborative lessons on ecology, environment, biodiversity, food web and biological balance. One may add to the garden any number of aesthetic features, such as water bodies, statues, stones *etc* but it is the presence of these bright winged creatures that actually adds life to a garden. Having a butterfly garden has emerged as a trend of sorts among gardening enthusiasts.

Keywords: Aesthetic, Creatures, Enthusiasts

Introduction

Butterflies generally notice big displays of a single colour from plants they favour. It involves careful selection of plants and proper planning of the way these are planted in pots and flower beds. Thus, planting individual flower species together or placing the pots together will attract more butterflies. To lure different species of butterflies to the garden, an assortment of bright flowers that produce nectar throughout the season are advisable. These include alyssum, butterfly bush, cornflower, cosmos, globe amaranth, larkspur, milkweed, marigold, roses, salvia, sunflower and zinnia. In the natural setting, butterflies flock to water sources.

The study of order Lepidoptera which includes butterflies and moths is important as they are an important component of rich biodiversity. They are a highly diverse group comprising over 250,000 species. Butterflies and moths are part of our natural heritage and have been studied for over 300 years. Butterflies and moths are beautiful. Many are iconic and popular. Butterflies are used by advertisers and illustrators the world over as way of indicating that something is environmentally friendly. Butterflies are often portrayed as the essence of nature or as representing freedom, beauty or peace. Butterflies and moths have fascinating life-cycles, the transformation from egg to caterpillar to chrysalis is one of the wonders of nature. Other educational aspects include the intricate wing patterns and iridescence, and as examples of insect migration. Butterflies are an extremely important group of 'model' organisms used, for centuries, to investigate many areas of biological research, including such diverse fields as pest control, embryology, mimicry, evolution, genetics, population dynamics and biodiversity conservation. Butterflies and moths are indicators of a healthy environment and healthy ecosystems. Moths and butterflies are an important element of the food chain and are prey for birds, bats and other insectivorous animals. Butterflies and moths support a range of other predators and parasites, many of which are specific to individual species, or groups of species. Butterflies have been widely used by ecologists as model organisms to study the impact of habitat loss and fragmentation, and climate change.

Aim of the Study

Butterflies are at risk population. They are at the bottom of the food chain! It is estimated that one out of every 500 butterfly eggs ever makes it to a butterfly. They are vulnerable to the elements of nature--freezing cold, heavy rains. They also have many predators, including other insects, such as ladybugs, praying mantids, birds and even ants. So, it is important to save butterflies.

History

Insecta is the largest class of Animal Kingdom and the most successful invertebrates and the only major competitor with humans for dominance in world. Class insecta includes 30 orders and the order Lepidoptera is the second largest next only to Coleoptera. The order is divided into two suborders, Rhopalocera including butterflies and

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Heterocera having moths (Romoser and Stoffolano, 1994) with about 170,000 recognised species (Demirsoy, 1992). They contain the charismatic day flying butterflies, many serious pests of agriculture (both growing plants as well as grain stores) and stored animal products (such as wool). Yet their evolutionary history is still shrouded in mystery. There is little idea how, when and where any of the major groups within Lepidoptera have arisen. This lack of knowledge reflects the lack of robust phylogenetic hypothesis, we will not be able to understand the evolution of host plant use, the historical biogeography or the other factors that have led to Lepidoptera being one of the most successful groups of insects on this planet.

Almost all Lepidoptera species are dependent on angiosperm plants as larval food plants. This association has long been known to be evolutionary conserved, but fossil based age estimates suggest that Lepidoptera diversified long after their host plants diversified. Butterflies and moths figure as ecologically important and aesthetically appealing components of biodiversity and conservation projects worldwide (Source: Scientific Report on Lepidoptera Evolution, Taxonomy and Systematics by European Science Foundation at Stockholm, Sweden, 2006).

Lepidoptera can serve as model systems for studying the action of natural selection in the wild since we know much about their ecology, natural history, physiology, and behaviour. They are large enough to study in the field yet small enough to grow easily in laboratory colonies.

Discussion

Butterflies are beautiful. Everyone enjoys watching a graceful butterfly drift through the air. Butterflies are also beneficial in the pollination of flowers. The seeds and fruits from their pollinations will create food for other wildlife and for mankind. Like bees and flies, butterflies are excellent pollinators, fertilizing trees, flowers, and shrubs. The pollination of a plant is necessary for it to reproduce, contributing to the production of flowers and berries. Butterflies also play an important role in the food-chain. Some birds live solely on the nutrients from insects, primarily moths, caterpillars, and butterflies. Butterflies help create ecosystem and spins a web of diversity.

To ensure a good population of butterflies around the garden, there are a few things to consider. First of all, it is best to fill your garden with native plants. If you wish to repel pests, plant a natural repellent, like rosemary, instead. Pesticides don't just threaten the lives of butterflies, they are dangerous to other creatures and humans as well. In addition, butterflies avoid agricultural land because it lacks plant diversity, as fields may be dedicated to one type of crop, leaving butterflies nowhere to feed or lay eggs. This is why gardens should have an abundance of nectar producing flowers to provide them with plenty of nutrients. Finally, when choosing plants go for flowers with bold colors. Butterflies see more colors than humans do and prefer bright, varied palettes to perch upon. They

seem particularly keen to orange, red, yellow, purple, and dark pink.

Plants to be stocked while creating a butterfly garden :

1. *Lantana* is a colourful shrub that flowers almost round the year. It is ideal choice to invite butterflies.
2. Milkweed, is an evergreen perennial shrub that is easy to maintain. Butterflies cannot resist the milkweed.
3. *Buddleja asiatica*, a nectar plant, is a beautiful fast growing shrub. The flowers are white, occasionally pale and are sweetly scented.
4. *Hamelia patens* is another easy to grow shrub, which survives in shade. The plant's erect, woody stem bears simple copper-toned leaves with copper, orange, red flowers bunched towards the tip.

About Plants

1. Most flowers that attract butterflies require at least 6-7 hours of sunlight each day.
2. Ensure that the place is sheltered from strong winds.
3. The height of the plants has to be maintained with regular pruning.
4. Red, orange and yellow flowers attract winged beauties. A lot also depends on the quality and quantity of nectar in these flowers.
5. It is must to avoid the use of pesticides.
6. Host plants should not be directly visible or in short distance from butterfly nectar plants.

Conclusion

The creation of butterfly gardens is a way of "giving back" to nature. And they make a place where butterflies can live, reproduce and continue to pollinate and bring us pleasure. As sensitive indicators, the very presence of butterflies may be enough to detect the health and vitality of the surrounding area. However, they are more than a by-product of healthy landscapes. Butterflies in themselves can prove essential to the overall health of plant life and an ecosystem in general.

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