

A hotel for solo traveler..... visit the Bee hotel

By pronouncing “Bee” we imagine those tiny powerful creatures in a group with whom you cannot mess up, hexagonal bee hives with honey and wax, bee-keepers with their astronaut-like attires, and so on. However, there is more for your attention. Like, we know that they are pollinators responsible for the crop and fruit production, and they are also under threat due to multiple reasons. Well, what does the hotel do here?

The “Bee Hotel” is meant for those who are lonely with great foraging habits and are under the threat of a declining population. This is a temporary shelter for the bees to lay their eggs and nurture the young. The customers are mostly mason bees (*Osmia* spp.) famous for using masonry products (e.g. mud) for building their nests in naturally occurring gaps or tunnels. The hotel is providing them places like artificial holes or tunnels (made up of woods, papers, reeds, etc.) for completing their life cycle. A fairly common practice in the northern hemisphere, in early spring, queen bees come out from hibernation and active in mating and nest selection. After mating, it goes for nest modification like, making mud walls, collecting pollen and nectar for feed, laying egg over the stored food, and blocking the entrance for unwanted members. Gradually 2larvae come out from the egg, feed on the stored items, make cocoons, and finally turn into adult bees. These adult bees leaving the hole, again start the life cycle as soon as possible due to their short life span. Bee hotel facilitates this reproductive phase, especially where nest building habitats are at risk or not available.



Given the current threat to pollinators and its impact on agriculture, the bee hotel offers an alternative means of conservation for native pollinator bees. Mason bees are a suitable candidate in this regard. Neither social nor in the honey production but, they are important for their pollination performance. Compare to honey bees mason bees have higher pollination capacity like 250-300 female bees can pollinate an entire acre of a fruit orchard.

On the flip side, however attractive and popular they are, bee hotels have drawbacks that need to be considered. They have unwanted guests like wasps, ants, parasites, and birds who come for shelter and food sources (both the stored food and young larvae). A recent study shows that; bee hotel facilitates native wasp populations more than native bees. Moreover, the study concerns that the facility may act as a sink for the bee population due to the higher chance of parasite at-

tack and disease spread among the densely packed bee rooms. It is also found that near-natural hotel sites are more favorable for native bees than sites in parks, rooftops, or community gardens. Therefore, cleanliness and locality are two important factors for our buzzing neighbors. Let's see what more we can offer to nature's solo travelers.

Image: Jacquelyn Fitzgerald

Collector: Rajasri Ray