

Delhi's outskirts abuzz with efforts to bolster Capital's bee population

Jasjeev Gandhiok

letters@hindustantimes.com

NEW DELHI: The dwindling bee population over the last decade has slowly become a matter of concern, prompting conservation efforts across different cities around the world, even in Delhi.

As part of these efforts, apiaries have sprung up on the outskirts of the Capital over the last few years and weekly workshops on how to develop and protect bee habitats are also being held at Sunder Nursery every Sunday.

Experts said that Delhi's seven biodiversity parks and green spaces like Lodhi Garden — filled with flowering plants, water bodies and certain tree species that provide an ideal habitat for bees to build hives — too have turned into refuges for bees.

To push apiculture as a livelihood option, in 2018, Qutubgarh in northwest Delhi, a quaint village covered in fields of mustard, was adopted by the Khadi Village Industries Commission (KVIC) along with Union minister Meenakshi Lekhi, springing a honey revolution of sorts after villagers were gifted over 100 bee boxes and provided training on bee-keeping.

Four years on, the neighbouring villages of Jatkhore, Jaunti, Katewara and Daryapur Kalan are also bee-keeping hubs now, with the next generation being taught the art of producing honey from

bee boxes. Locals said the number of boxes has risen to over 250 (each holding up to 50,000 bees) in the five villages.

At Sunder Nursery, the Aga Khan Trust for Culture (AKTC) has set up 12 bee boxes along with Golden Hive Foundation.

Ratish Nanda, CEO of AKTC said the idea arose from the need to not only protect these bees, but to spread awareness on their significance to the ecosystem around us.

"Bees play a crucial role in pollination and eventually food creation. The idea is to educate people on how to develop habitats for bees and to protect them, for which workshops are held frequently. The plan is to eventually create a dedicated space for bees with signages and display centres where the bee boxes will be kept in the centre. It will be in an exhibition format and people can visually learn more about the different types of bees and also see them up close," said Nanda, adding that at least seven-eight large hives have come up naturally in the area.

Experts said the bee conservation programme at Sunder Nursery, which began in 2019, is not only limited to the protection of honey bees, but solitary bees too.

Rakesh Gupta from the Golden Hive Foundation, which holds the weekly workshops, said they have also set up "bee hotels" — to facilitate nesting by solitary bees — are

Beekeeping in Delhi

WHAT IS AN APIARY?

An area surrounded by flowers where honey bees are reared, either for hobby or commercial purposes, using bee boxes. Delhi has apiaries in the villages of Qutubgarh, Jatkhore, Jaunti, Katewara and Daryapur Kalan — all located in northwest Delhi. Bee boxes are also spread out across the Sunder Nursery in central Delhi.

TYPES OF BEES IN DELHI

The Rock bee
(*Apis dorsata*)

The Indian hive bee
(*Apis cerana indica*)

The Little bee (*Apis florea*)

The European or Italian bee
(*Apis mellifera*)

Stingless bees (*Tetragonula iridipennis*)

WHAT MAKES A GOOD HABITAT FOR BEES?

Bees forage for nectar within a 2km radius of their nest and require a water source (muddy or swampy pools) along with flower or nectar bearing plants within this radius. In addition to flowering plants, fruit trees such as jamun and guava, herbs such as tulsi and cereals such as bajra can attract bees.

also present at the Sunder Nursery to educate the general public about the different species of bees. "These hotels are ideal for solitary bees, which have several species. There are bees that do not produce honey, and there are stingless bees as well. People are made aware about all of these species and why each is important," he said.

At present, four known species of honey bees are found in Delhi, which includes the rock bee (*Apis dorsata*), the Indian hive bee (*Apis*

cerana indica), the little bee (*Apis florea*) and the European or Italian bee (*Apis mellifera*). While the rock bee is a winter visitor from the Himalayas, the other three are found throughout the year, thriving in wooden habitats and, at times, tall buildings and the monuments of Delhi.

Faiyaz Khudsar, scientist in-charge at the Yamuna Biodiversity Park (YBP) in north Delhi, said excessive use of pesticides, loss of natural habitats due to urbanisa-

tion and the climate crisis has led to a decline in the global bee population. However, he said, the Delhi's seven biodiversity parks — Aravalli, Yamuna, Neela Hauz, Tilpath Valley, Kalindi Kunj, Kamla Nehru Ridge and Tughlakabad biodiversity park — with over 1,000 plant species and trees such as siras, mahua, palash, khirni, amal-tas, khejri, rohida bel, sehjan, ronj and peelu providing flowers throughout the year, are emerging as a safe haven for bees.

"While *Apis cerana indica* and *Apis florea* are native bees, *Apis mellifera* is an exotic one introduced in 1983 from Italy for the purpose of commercial apiculture... All three resident honey bee species generally forage daily up to two kilometres from their nest colony and require muddy or swampy water pools, along with flowering or nectar bearing plants in the vicinity. While such habitats have shrunk across Delhi, there are 2,500 acres of ideal space across the seven Delhi biodiversity parks now and all four honey bee species have been recorded here," said Khudsar.

A similar strategy is in place across other green spaces in Delhi, with the New Delhi Municipal Council (NDMC) also planting flowering species which can sustain bees throughout the year. "Most NDMC locations have flowering plants which ensure pollination can take place throughout the

year, while also providing adequate nectar for bees. Flowers such as the sweet pea have been particularly found to be useful in attracting bees," said a senior NDMC official from the horticulture department, stating that Lodhi Garden is among the best locations to spot bee species.

Industrialisation a threat

Back in southwest Delhi's Qutubgarh village, which has turned into a centre of apiculture, a looming threat of industrialisation now stands across the border in the form of the IMT Kharkhoda industrial area in Haryana.

"We have certainly seen a revolution of sorts in the area and the next generation is now learning the art of beekeeping. So far, over 1,500kg of honey has been produced by these villages and the bee count has multiplied many fold, but with development and industrialisation comes a reduction in the farm area where these bees can fetch nectar. The pollution from these industries may also significantly impact bee population once again in the coming years," said Dinesh Rana, a local beekeeper, urging for more such bee havens to be created across Delhi.

A Haryana State Pollution Control Board (HSPCB) official, on the condition of anonymity, said industries operating in Kharkhoda will be regularly checked for pollution-related norms.