

ABSTRACT

The fifteenth-century myth of the ideal city sought to combine functional needs and aesthetic sensibility. Following the massive urbanization of the last centuries, a new need has emerged: the presence of nature around our homes. A hypothetical ideal city today has to contemplate large natural spaces that, together with balconies, terraces, gardens and also traffic island with flower-beds, create ecological corridors with scalar flowering plants that are not treated with pesticides or mown during flowering. A place where bees can find natural shelters and artificial nests positioned all around the city; where the spontaneous flowers pollinated by the bees can bring beauty to the grayest areas, and where urban vegetable gardens become more productive thanks to the free pollination service carried out by the bees. A city that respects the fundamental role of wild and managed bees in the protection of biodiversity and food safety , and that promotes teaching and supports initiatives in their favor with concrete actions, such as the creation of didactic apiaries and bee-friendly gardens, with an additional artistic and educational value, available to schools and citizens.



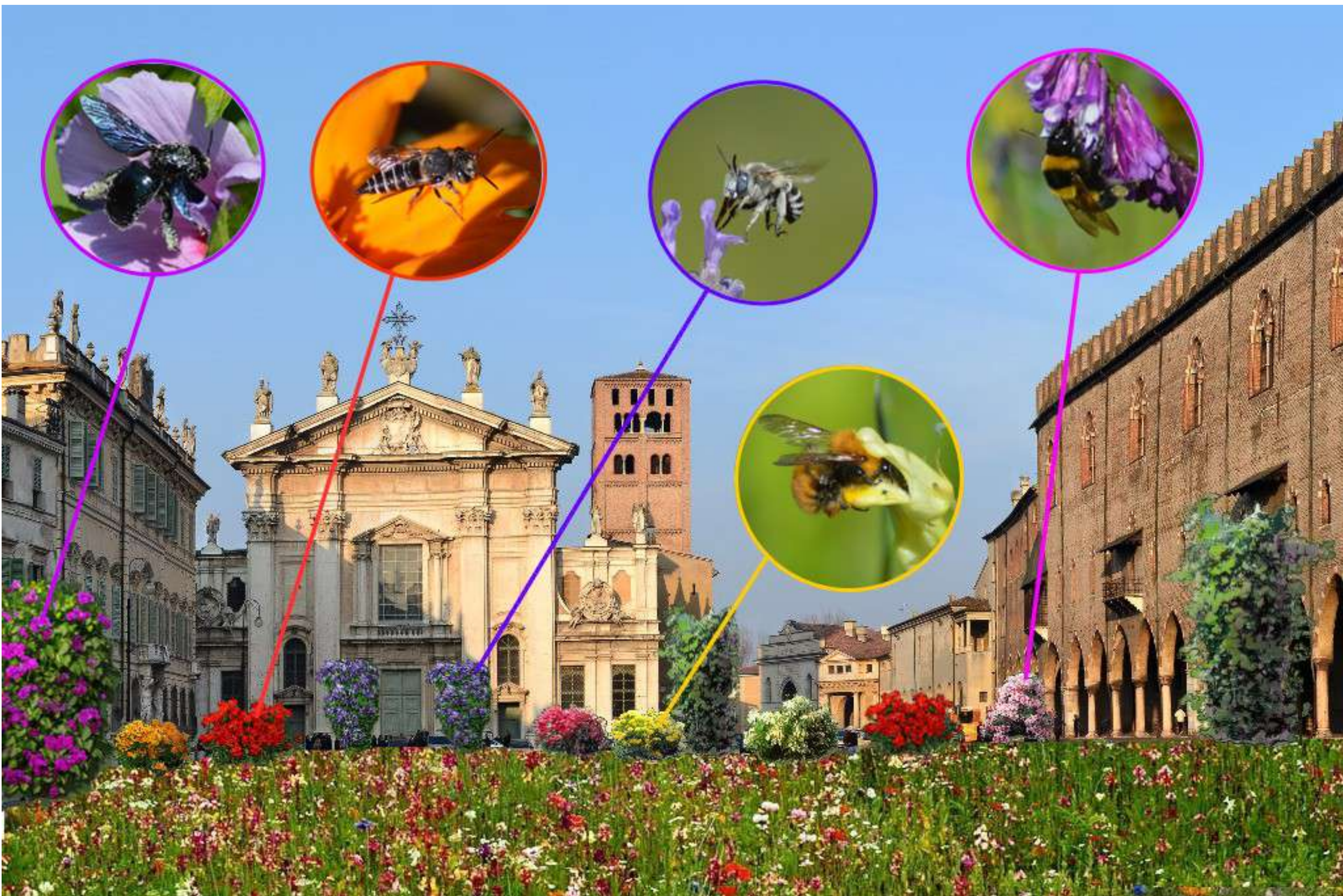
BEE FRIENDLY GARDEN

The urban environment is a suitable refuge for bees, while the agricultural environment does not offer them the ideal conditions to survive due to the scarcity of nectar and pollen resources and the wide use of pesticides. In cities bees can find higher average temperatures, nesting sites and spontaneous and cultivated flora in parks, private gardens and vegetable gardens. Even a small garden can be an ideal habitat for many species of bees; a “bee friendly” garden should include different nectariferous and polliniferous plants with sequential flowering, thus providing food to bee species with different flight period and supporting the entire cycle of social bees. The spontaneous weeds commonly found in meadows and at the edges of the fields or roads can usefully perform this function, but also official or aromatic plants grown for domestic use are very appreciated by bees. The management of green areas is also important to support bees: cutting should be selective in order to respect the flowering of nectariferous plants. To favor the nesting of “miners” bees, that dig tunnel in the ground, it is good to maintain patch of bare soil and to pay attention to the presence of bee nests and protect them from destruction. Often wild bee nests in the ground are intentionally removed, because they are confused with wasps’ nests or considered erroneously dangerous.



URBAN BEEKEEPING

Urban beekeeping is a cultural trend based on a positive idea of freedom, respect for environment and animal wellbeing. It promotes and defends wild and farmed honeybees in the cities and it tries to help environmental safeguard. It suggest a new way of watching the world, reevaluating nature and relationships between citizens and towards animals. It promotes respect of everybody's time and biological rhythm, biodiversity, the value of the differences, the pleasure of discovery, of knowledge and of education. It offers a creative outlet for disable people, for prisoners and for migrants. Urban beekeeping can lead to art expressions, can involve citizens and students to discover natural life's rhythms and expressions. It can also promote local food productions and be useful to monitor air pollution. A citizen can also be a beekeeper without having hives! It is enough for him to cultivate small yards or balconies for bees or other apoidea.



Taking us by hand as he already did with his disciple Dante before, Virgil leads us through the discovery of his hometown (*Mantua me genuit*) which, since the very first writing of the Georgiche's fourth book, he dreamed could become a wonderful place thanks... to the bees!

At the very beginning, the ideal city fifteenth-century myth aspired to combine functionality with beauty. Later on, the original idea of the perfect city was widened with the need for more natural elements. Strengthened by his guide role, Virgil asks to follow him, riding a bicycle through a path he calls “The bees’ way”. Venturing through the city’s cobblestones roads, he highlights a bank beehive shaped logo, explaining that signals some real beehives have been placed on the rooftop of that building. Our first stop is an apiary placed in a corner of the city’s biggest park. Over there, while young students are dipping their fingers into honeycombs, some beekeepers explain them the big role played by the bees in a natural ecosystem. Some hives have strange stuffs similar to jails that, as Virgilio says, trasform bees into environmental bioindicators that maeasure air pollution of the city. After that we move to a close building, where having access to an exhibition we can learn both about history of the bees evolution (both bred and wild) and, by seeing the everyday working instruments, the beekeeper’s job. Then, always close to the park, our guide leads us towards a wonderful beekeeping garden, where plants favored by the bees through all the four seasons, have been planted everywhere. At the end of the garden visit, Virgil leads us to a restaurant close to the principal square of the city for a break. There he offered us a honey, bread and fruit snack. We were all astonished when he told us that the honey used by the chef came from beehives placed on the rooftop of the restaurant!

After resting a little, our visit continues at the principal museum of the city. There, bees-linked works have been placed everywhere. The atmosphere of the exhibition is glorified by a gentle voice-over citing masterpieces written by poets through the centuries as a tribute to this wonderful insect. Leaving the museum behind, we head towards Mantua’s lakes. There we board on a boat, sailing along the coasts of the city. Suddenly, pointing to the land, Virgil shows us where the first beekeeping hotel for solitary bees have been placed. “This is a huge accomplishment” he explains “as solitary bees are as important as honeybees for boosting and preserving biodiversity on which we rely as well”. At the end of our journey, Virgil disappears from our view, leaving us with a latin farewell: *Trahit sua quemque voluptas* (everyone is attracted by what he likes). We were all astonished from the happening. Our guide had suddenly vanished, leaving us wandering... Was it real, or was it a dream?



BEEHOTELS

Beehotels are artificial structures built with the aim of both promoting the reproduction of some bees species (i.e. Megachile sp., Osmia sp. ...) and other pollinators, and informing the citizens about the importance of these insects for the pollinating process. During 2017 a Beehotel was placed in Mantua by the local beekeeping association (Associazione Apicoltori Mantovani) which, one year later launched a program with many Mantua municipalities for placing beehotels within urban centers. The project, which has now already been adopted by 10 municipalities, consists in placing 4 beehotels close to public/school gardens and bike lanes, with attached bilingual panels (English and Italian) informing about goals and purposes of the initiative.

