



**Domus Mellifera Project** 

Italy

**World Biodiversity Association** 

## **BIG Biodiversity Challenge Award Category: International Biodiversity Project Award**

**Project overview:** The Domus mellifera Project aims to be an opportunity to create a new awareness of respect and protection of Biodiversity. Concrete actions, such as the installation and monitoring of the Domus mellifera, are actions that can be summarized as being "**Keeper of the bees**", a synergistic expression of all people, nature and actions. The Domus mellifera Project does not only consist in positioning a refuge nest, but requires you to be aware that your actions, if carried out with passion and scientific correctness, can contribute to real positive change.

What were the biodiversity conditions on site prior to the enhancement? All Apoidea are undergoing a serious reduction in populations over the years. Apoidea are the most efficient pollinators and their survival is closely linked to the survival of most of the plants on which our very life depends, both in terms of agricultural production, oxygen production and the effects of all plants in preventing hydrogeological instability. Since nowadays the presence of natural cavities (often large decayed trees or natural cracks in rocks) is very scarce in environments, bees are often forced to choose cavities present in man-made artefacts and buildings.

What were the reasons behind this project? The project aims to promote the protection of wild bee colonies. Although it was long believed that natural colonies of Apis mellifera had practically disappeared, in recent years reports have increased and to study this phenomenon a specific mobile app called BeeWild (https://bit.ly/3fsX8bz) has been created. Placing a Domus mellifera nest in natural areas can be a solution to give simple and natural help to these organisms.



Domus Mellifera



Bumblebee collecting pollen





## What were the biodiversity measures taken?

The domus mellifera should simply be placed at a height equal to or greater than 2-3 m from the ground and facing south, avoiding areas where solar radiation is present all day (especially in hot areas). Population is not automatic but must not be artificially populated. Once the nests have been positioned, they do not involve **any** "beekeeping" management.

To favour the population it is possible to rub the interior of the Domus mellifera with essences and aromatic herbs, such as Melissa, Rosemary or Cedronella, as well as natural wax on the mooring rods, in order to make the Domus mellifera more hospitable. Once established by a swarm, the colony should be reported with the BeeWild app and monitored at regular intervals (about every one to two months) to assess its viability.

The lower opening of the nest should be opened only for any winter cleaning and only when a colony has not settled there. The bees must never be disturbed and one must never proceed with the collection of honey, combs or brood; furthermore, it is not necessary to feed it or carry out other management actions:

"When a colony has settled in the Domus mellifera we will have to consider it as if it were inside the hollow of a tree or a wall, we must leave it to its total naturalness".

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This is why, even before being able to physically install the Domus mellifera, the Domus mellifera Project asks for the signing of the certificate of "Keeper of the bees", a document that on the one hand qualifies the commitment, on the other hand allows the creation of a new community of aware people, committed together with WBA onlus in **the protection of Biodiversity**.



Domus mellifera positioning



Certificate of "Keeper of the bees"





## **Further information**

The project is dedicated to:

- individuals (primarily beekeepers and farmers);
- associations, organized groups, communities, biodistricts, cooperatives, etc.;
- research institutions:
- charities:
- public bodies with the function of protecting and governing the territory and biodiversity, such as national, regional and municipal parks, public oases, municipalities, provinces, regions, etc.

The use of artificial nests for birds is a well-established practice as is becoming the use of beehotel to encourage reproduction of solitary bees. As far as honey bees are concerned, however, there are very few experiences worldwide. The Domus Mellifera refuge offers suitable nesting sites for honey bees.



- WBA: World Biodiversity Association is a no-profit Association formed by naturalists, botanists, zoologists and simple nature lovers involved in studying and conserving the biodiversity hot-spots all over the world.
- CTSTAA: The Technical Scientific Committee for the Protection of Native Bees is a technical-scientific body, a direct expression of WBA onlus, established on 25 April 2018, which operates with the criteria of full autonomy and independence, according to the principles of the Declaration of San Michele all'Adige.

## What was the motivation for carrying out the enhancement?

We decided to create this project in order to pursue the following objectives:

- protect the genetic integrity of native populations in the Italian territory, including wild pollinators;
- spread the culture of the well-being of bees involved in breeding activities, research and teaching, through the dissemination of scientific knowledge on the biological and behavioral characteristics of bees;-
- encourage local, national and European institutions towards actions toprotect native bees, as well as wild pollinators;-
- promote education and information initiatives



Wild bee colonies



Apis Mellifera on Peonia Officinalis