

# Wild Honey Bees Declared Endangered in Europe

Last October, in the European Union, wild honeybee populations have been officially categorised as endangered, in the red list of IUCN – the International Union for Conservation of Nature (<https://www.iucnredlist.org/species/42463639/277757621>)



*A wild colony of western honey bee into a tree. (Photo by Bernie - Wikipedia)*

But what does it mean “wild”, and what “endangered”?

## *Wild*

For thousands of years, the western honeybee has lived alongside humans, that have fundamentally changed its relationship with the natural world. As a result, the western honeybee now exists in two very different forms: managed colonies kept by beekeepers, and wild colonies that live entirely on their own, both belonging to the same species, *Apis mellifera*.

Managed honeybees have been at the center of public attention since the early 2000s, when beekeepers began reporting severe colony losses. These declines triggered extensive scientific researches and active management aimed at keeping hives alive.

But this view implicates a critical distinction. While managed colonies receive constant human care, wild honeybees do not. For decades, especially in Europe, these free-living populations remained largely unstudied and overlooked.

In recent years, wild honeybee colonies have been documented across Europe, from Ireland and the UK to forests in France, Germany, Switzerland and Poland, as well as throughout Italy and even inside the urban areas. These findings raised a key question: can honeybees survive as truly wild populations, without human intervention?

To answer it, scientists launched the global initiative Honey Bee Watch in 2020. Working with the International Union for the Conservation of Nature, researchers reassessed the conservation status of wild honeybees using a new approach, and a new definition of what “wild” actually means.

Honeybees are not fully domesticated. They freely interbreed, making it nearly impossible to separate wild and managed bees genetically. Instead of focusing on DNA, researchers adopted an ecological definition. Under this framework, a wild honeybee population is one that lives without management and can sustain itself over time, without relying on escaped or newly introduced colonies.

This shift proved crucial. It revealed that Europe has the lowest density of wild honeybee colonies worldwide. Worse, new data show that wild populations are declining, under pressure from habitat loss, parasites, diseases and human-driven hybridisation.

### *Endangered*

For that, wild honeybees are now classified as “endangered” within the European Union, although a lack of data keeps their wider European status uncertain.

This new assessment recognizes wild honeybees as native wildlife, not escaped livestock. Protecting them means preserving a vital genetic resource – one shaped by natural selection to survive without human help – and securing the resilience of ecosystems and food systems for the future.

According to Arrigo Moro – of Honey Bee Watch – for EU policymakers, this assessment indicates the need to strengthen and prioritise measures for the protection of natural habitats and local honey bee subspecies, alongside effective disease prevention and control in managed colonies. These actions are critical for addressing the threats facing endangered wild honey bee populations and should proceed in parallel with increased investment in their research.

In addition, about the relationship between wild honey bees and beekeeping, protecting wild self-sustaining populations surviving through natural selection, becomes essential; since they represent a valuable native genetic heritage, from which adaptive traits could emerge, offering resources for the resilience of future managed colonies. Therefore, this assessment is an invitation for beekeepers to recognize how their practices can affect wild populations and how important their role is in this endeavor.