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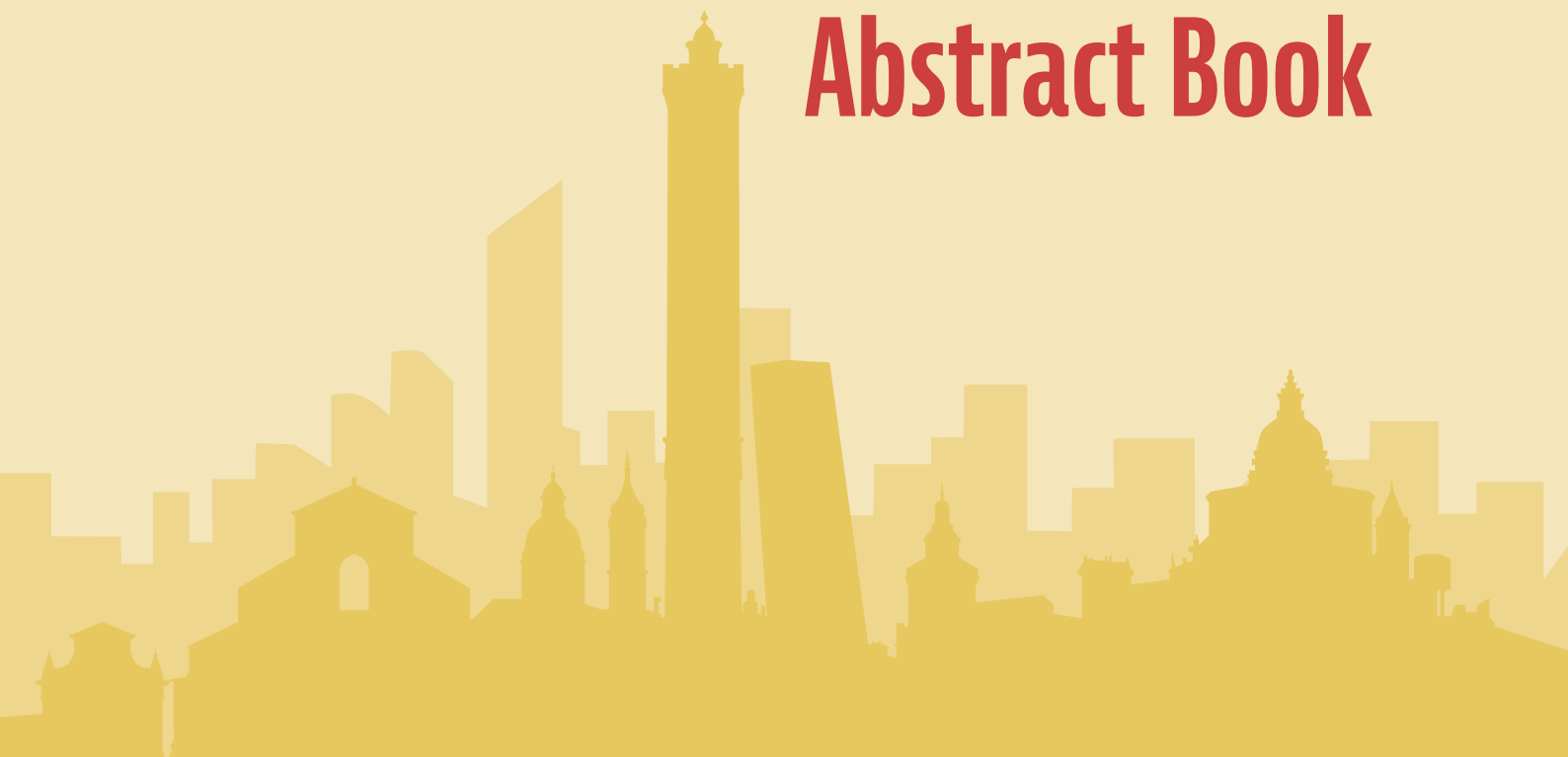
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Like foraging bees

We seek novelty, we need cooperation
and we profit from diversity

Abstract Book



WILD *APIS MELLIFERA* ENDANGERED IN THE EU: HOW DID WE GET HERE AND WHAT'S NEXT?

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Abstract

It was widely assumed that wild populations of the Western honey bee (*Apis mellifera*) had disappeared from Europe due to habitat loss and other stressors, such as the spread of *Varroa destructor*, whose severe effects on managed colonies led many to believe that wild cohorts had been even more detrimentally affected. However, over the past decade, several studies have documented the existence of free-living colonies (FLCs) throughout Europe and beyond.

During a three-year process, a consortium of experts coordinated through Honey Bee Watch reassessed the IUCN Red List status of wild *A. mellifera* in Europe, which had previously been classified as Data Deficient in 2014. Based on demographic evidence compiled from free-living colonies across multiple countries, wild *A. mellifera* met the criteria for the Endangered category within the European Union's 27 Member States. An important unresolved issue concerns the conservation significance of locally adapted subspecies, a dimension of diversity not directly captured by the current species-level IUCN assessment criteria.

At the broader, pan-European scale, significant knowledge gaps remain, particularly in underrepresented regions such as the Balkans, the Baltic region, Scandinavia, and Western Russia, where available data are scarce, fragmented, or completely lacking. These gaps highlight the need for coordinated data collection, further monitoring, and additional research resources and capacity.

This latest reassessment underscores several conceptual and practical challenges, including debates over the definition of "wild" and "managed" colonies, and how to account for the conservation significance of local genetic lineages. It also identifies priorities for future research and policy: improving the documentation and monitoring of FLCs beyond the EU-27, increasing awareness among stakeholders about the presence and importance of FLCs, and developing conservation strategies and policy frameworks that recognize wild honey bees as a native component of European biodiversity and that support the protection of their habitats and survival.