Bees and biodiversity across environmental monitoring: the Italian BeeNet project

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mipaaf ministero delle politiche agricole alimentari e forestali
crea Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria
FEASR Fondo europeo agricolo per lo sviluppo rurale: L'Europa investe nelle zone rurali
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Overview

A current bottleneck in addressing the decline of insect pollinators in the EU regards monitoring data on **pollinators status, diversity and trend**.

- the remarkable **spatio-temporal fluctuations** of populations
- the **lack of homogeneity** in monitoring techniques
- the **scarcity of expert** taxonomists for wild bees

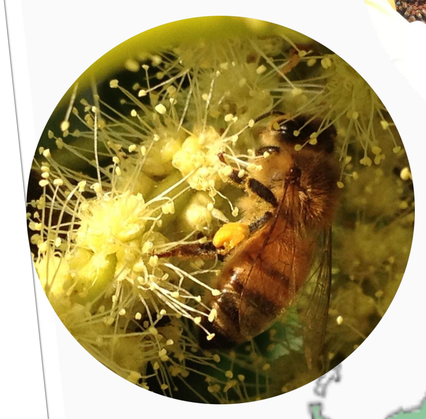
are especially **critical.**

Aims

BeeNet is a **national monitoring project with ambitious aims**, both for regional and environmental coverage, and with large stakeholders' involvement.

applying a **branch approach** to differently tackle
a) the managed honey bee
b) the wild bees

ITALIAN AGRI-ENVIRONMENT



HONEY BEE

monitoring intra-colony variability through high-tech hives

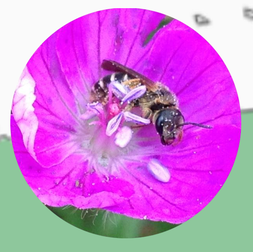
monitoring agro-chemical influence on honeybee unpredicted mortality

monitoring pathogen (Nosema, Varroa, DWB etc.) influence on colony health

WILD BEES

monitoring wild bees through fixed sites and permanent walking transects

identifying wild bees at species-level through a dedicated task force for taxonomy and barcoding



correlating wild bee biodiversity with flowering species through visual records and pollen analyses

An environmental common denominator: **geographical proximity** to **farmed landscapes** and **protected areas.**

Expected Outcomes

- strengthening **national and European commitment** to rural development
- implementing and facilitating **information exchange** and cooperation among stakeholders
- ensuring the **sustainable management** of agriculture and natural resource
- **capacity building** to foster national pollinator initiatives

Stakeholders

beekeepers and their associations
regional policy makers
managers of national protected areas
farmers and farming advisors

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