



# Progress report on activities

**Agnès Rortais**  
PLANTS Unit, Monitoring Team

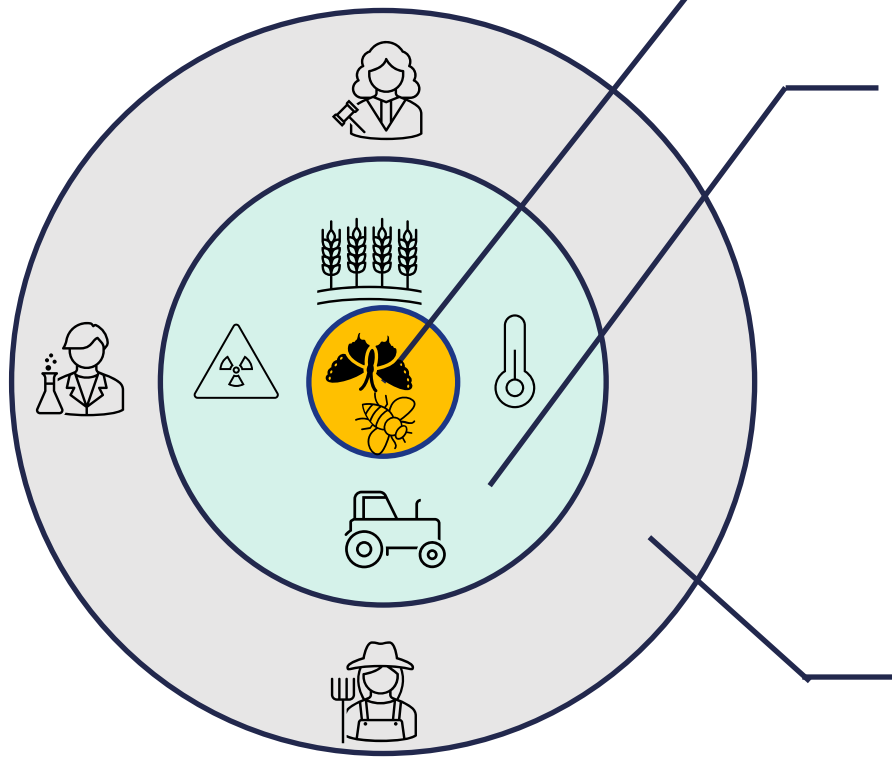
# CONTEXT

**Large scales of bees & insect pollinators losses**

**Multiple causes from the environment**

see Dicks et al, 2021: <https://www.nature.com/articles/s41559-021-01534-9>

**Multiple stakeholders' interplay**



Protecting bees & insect pollinators relies on **cooperation** among institutional agents, researchers and all other involved stakeholders



# TRIGGER FOR EU POLLINATOR HUB

2017  
EP-EFSA  
Conference

2018  
EU Bee  
Partnership

2024  
EU Pollinator  
Platform



**EVENT REPORT**

APPROVED: 20 September 2017  
doi:10.2903/sp.efsa.2017.EN-1299

**Collecting and sharing data on bee health: towards a European Bee Partnership**

<https://efsa.onlinelibrary.wiley.com/doi/pdf/10.2903/sp.efsa.2017.EN-1299>



Home

**World Bee Day: EU data partnership set to launch**

Published: 18 May 2018 | 2 minutes read

Share:   

<https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/sp.efsa.2018.EN-1423>



# EVOLUTION OF THE EU POLLINATOR HUB



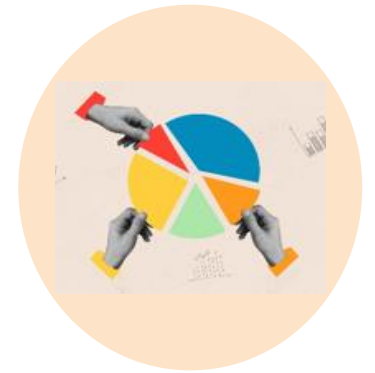
2019  
PROOF OF  
CONCEPT



2021  
PROTOTYPE  
PLATFORM



2024  
OPERATIONAL PLATFORM



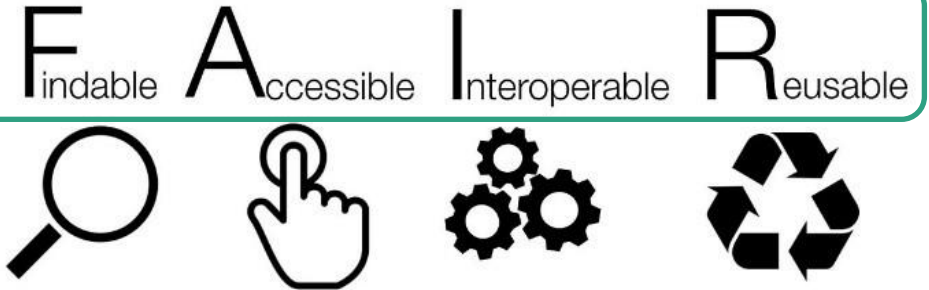
**BEYOND 2024**  
**PLATFORM for use by MS?**



# OPPORTUNITIES & SERVICES OFFERED BY THE HUB

## Currently available

- **open access** to research data
- **data models & standards** with terminologies
- **data quality & interoperability**
- **good practices** with data providers
- **reports/analysis** with a fine resolution visualisation on a user-friendly interface
- **risk communication** to risk assessors/manager



## In the future

- **awareness & understanding** on pollinator data / trends / mitigation options
- **integrated & holistic assessments** (large aggregated datasets, epi studies)
- **research needs** by highlighting missing information & data gaps



# DATA PROVIDERS & END USERS



Creating a Community  
for  
Insect Pollinator Data

<https://pollinatorhub.eu/about-us/>



# EU POLLINATOR HUB RELEVANCE for MS

The hub can strengthen MS ability to protect bees/pollinators by:

- Offering **harmonised protocols for monitoring** bee health and insect pollinator populations at local/national levels
- **Collecting and gathering standardised data** on environmentally-bee friendly practices, insect population trends for further use by MS community at large (field practitioners and regional/national associations, local business enterprises, RA/RM from national authorities, national universities and research centres, etc.)
- Raising **public awareness and communicating** on state of bees/pollinators at national level





# Concrete examples of the platform's uses





# MONITORING POPULATION: e.g. Honey bees

Slovenian hive scales

Warning : this is a prototype working on a temporary uncleaned version of the dataset.

Chose the measure ?

Net weight (kg) ▾

Chose the year

2014 ▾

EU POLLINATOR HUB

Maximum value per scale

This table displays the maximum weight value (column Max) for each scale/beehive and the date at which this maximum was reached. You can filter the table to chose a subset of data to show on the graph and on the map.

Show 10 entries Search:

| ScaleID | Max  | Date       | Region               | Locality         | Area            |
|---------|------|------------|----------------------|------------------|-----------------|
| All     | All  | All        | All                  | All              | All             |
| SC247   | 55.7 | 2014-10-06 | Osrednjeslovenska    | KRIM             | KUREŠČEK        |
| SC239   | 43.5 | 2014-07-07 | Savinjska            | GORNJI GRAD      |                 |
| SC241   | 40.1 | 2014-10-17 | Osrednjeslovenska    | IŠKA VAS         | KRIM            |
| SC283   | 34.6 | 2014-07-20 | Primorsko-notranjska | ZAHOD            | GOTENIŠKA GORA  |
| SC250   | 31.4 | 2014-07-08 | Osrednjeslovenska    | KUNČ             | KOČEVSKI ROG    |
| SC269   | 27.9 | 2014-09-12 | Podravska            | RUŠKO POHORJE    | VZNOŽJE         |
| SC257   | 27.8 | 2014-07-08 | Goriška              | MENIŠIJA         | LOGAŠKA PLANOTA |
| SC254   | 25.4 | 2014-09-29 | Pomurska             | MALI BAKOVCI     | PREKMURJE       |
| SC265   | 25.1 | 2014-10-04 | Savinjska            | PREBOLD          | VRANSKO         |
| SC275   | 25   | 2014-06-23 | Podravska            | SLOVENSKE GORICE | LENART          |

Showing 1 to 10 of 66 entries Previous 1 2 3 4 5 6 7 Next

Graph

NB : double click on the graph to reset.

Map

NB : the positions on the map are approximate.



# COMBATTING PESTS: e.g. VARROA

EU Pollinator Hub > Data Catalogue > Varroa monitoring Austria

## Varroa monitoring Austria

Results from a Varroa monitoring program in various apiaries in Austria

Provided by: Biene Österreich – Imkereidachverband

Contributors: Michael Rubinigg

An eight-year survey of Varroa destructor infestation rates of western honey bee (*Apis mellifera*) colonies across Austria and the spatial dimension, temporal dimension and weather factors that impact these infestation rates.

### Reference

Rubinigg Michael, MacDonald Megan, Davenport Veronika, Hassler Ed, Hassan Awad, Shala-Mayrhofer Vitore, Cazier Joseph 2023 Aug. *Predicting Varroa: Longitudinal Data, Micro Climate, and Proximity Closeness Useful for Predicting Varroa Infestations (I1.A1)*. (English) [ 2023-11-04 ] [External link](#)

### Download

Licence CC BY-SA 4.0



Download Everything

Download metadata

Download Data

| Table                            | Description   | Formatted Downloads |
|----------------------------------|---|---------------------|
| hive<br>[UID:VRRMN16.HIVEA141.0] | The table maps the relationship between beekeepers (anonymised users of the web application which is used by beekeepers to provide Varroa infestation data in their bee yards) and the hives for which t... | Download            |

### Management

You are able to edit this model because of sufficient administrative privileges.

View in Management

Edit

### Properties

Peer review status No peer review was requested.

Unique Identifier [VRRMN16.0.0]

URI <https://app.pollinatorhub.eu/dataset-discovery/VRRMN16.0.0>

Published 13 December 2023 00:00:00

### Keywords

Austria, Varroa destructor, monitoring

### Data collection years

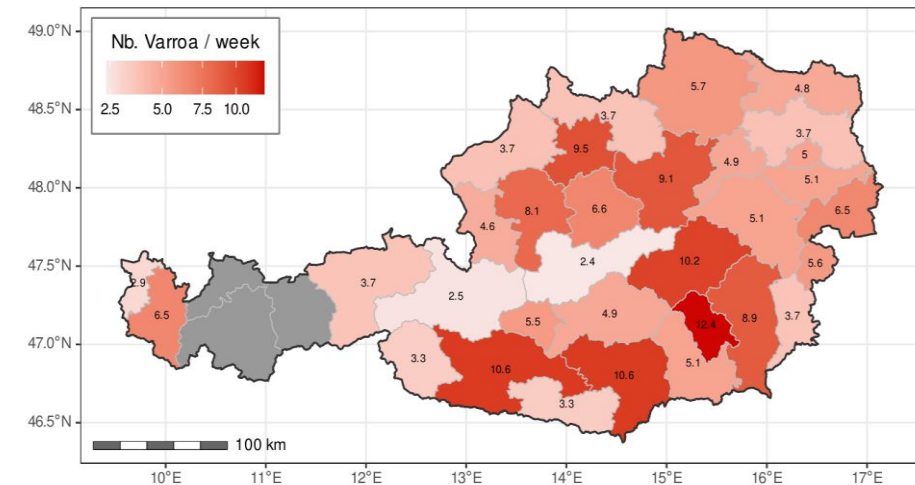
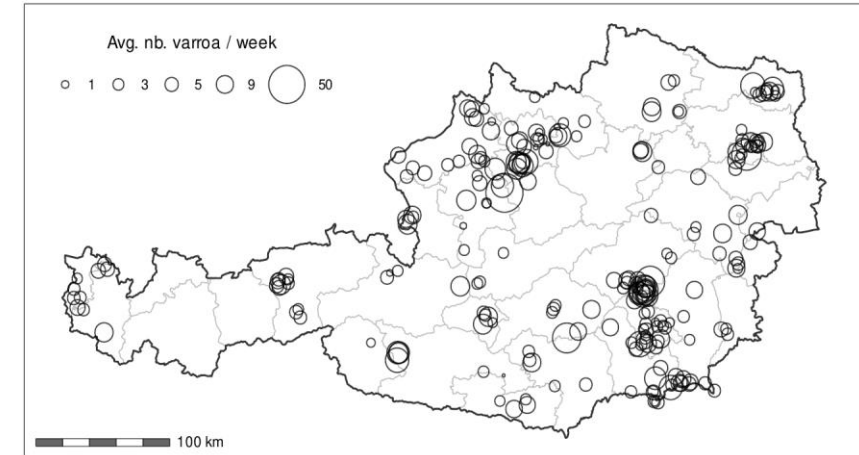
2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020

### Regions, the data was collected in

Österreich

### Citation

Michael Rubinigg 2023. Results from a Varroa monitoring program in various apiaries in Austria Ed. Biene Österreich – Imkereidachverband [2024-04-20] <https://app.pollinatorhub.eu/dataset-discovery/VRRMN16.0.0>



# ADVISORY SERVICES

Distribution of notifiable diseases, landscape information on apiaries, etc.

## Analyse the environment around a location

1) Click on the map to chose a location in Europe

Coordinates of the chosen point :

- Latitude : 49.2283601
- Longitude : 4.6432026

2) Chose a radius size in meters  
(min = 500m, max = 5000m)

2000

3) Click on the "Submit" button

Submit

Land cover 1
Land cover 2
Crops
Export

## Analysis of the environment around a location

Land Cover 1 Land Cover 2 Crops

This report has been generated from an [online app](#). It gives you the results for one unique location and one circle radius size. You can interact with these results but you can't change the location or the radius size from the present document. To do that, you must go back to the [online app](#).

**Chosen parameters :**

- Longitude : 4.2916979 °
- Latitude : 49.3716433 °
- Radius size : 1000 m

**Country :** France

**Crop areas from the EU Land Parcel Information System**

**NB : For the moment : only available for France (year : 2021).**

Based only on the crop covers declared by farmers to receive EU CAP subsidies. This means that in rare cases, some agricultural parcels will not be taken into account because they have not been declared for subsidies.

NB : when the circle covers several countries, the % is computed only relative to the area within the country of the chosen location.

**Total area**

| Crop Category     | Total area in % |
|-------------------|-----------------|
| Cereals grains    | 20              |
| Sugar beet        | 10              |
| Oilseed rape      | 10              |
| Potatoes          | 10              |
| Vegetables        | 10              |
| Leguminous plants | 10              |
| Miscellaneous     | 10              |
| Fibre crops       | 10              |
| Flax              | 10              |
| Fodder            | 10              |
| Fruits            | 10              |
| Glasshouses       | 10              |
| Grapes            | 10              |
| Grasslands        | 10              |
| Maize             | 10              |
| Nurseries         | 10              |
| Olives            | 10              |
| Rough grazings    | 10              |
| Soya              | 10              |
| Sunflower         | 10              |

| EU_Group   | Leguminous plants                    |
|------------|--------------------------------------|
| Orig_Group | Fourrage                             |
| Orig_Crop  | Luzerne déshydratée                  |
| EN         | Leguminous plants harvested green    |
| FR         | Plantes légumineuses portées en vert |
| DE         | Leguminosen zur Ganzjahresente       |
| ES         | Leguminosas cosechadas en verde      |
| IT         | Leguminose raccolte allo stato verde |
| area_ha    | 3.4064                               |

## FOR DISCUSSION

- ***Is there any interest in using the platform and for which purpose?***
- ***Which specific services to be delivered by the platform would you be interested in (whether currently available or to be implemented)?***
- ***What would be your suggestions to ensure the continuation of the platform and its maintenance over time?***



# STAY CONNECTED

## SUBSCRIBE TO

[efsa.europa.eu/en/news/newsletters](https://efsa.europa.eu/en/news/newsletters)  
[efsa.europa.eu/en/rss](https://efsa.europa.eu/en/rss)  
[Careers.efsa.europa.eu](https://careers.efsa.europa.eu) – job alerts



## FOLLOW US ON TWITTER

[@efsa\\_eu](https://twitter.com/efsa_eu)                      [@methods\\_efsa](https://twitter.com/methods_efsa)  
[@plants\\_efsa](https://twitter.com/plants_efsa)                      [@animals\\_efsa](https://twitter.com/animals_efsa)



## FOLLOW US ON INSTAGRAM

[@one\\_healthenv\\_eu](https://www.instagram.com/one_healthenv_eu)



## LISTEN TO OUR PODCAST

Science on the Menu – Spotify, Apple Podcast and YouTube



## FOLLOW US ON LINKEDIN

[Linkedin.com/company/efsa](https://www.linkedin.com/company/efsa)



## CONTACT US

[efsa.europa.eu/en/contact/askefsa](https://efsa.europa.eu/en/contact/askefsa)

