

# Wild bee research in Estonia

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ESTONIA

ORBIT WORKSHOP 2021

# Revision of Estonian bee fauna

- Last published list of Estonian bees from 1882
- Published literature revised
- Majority of collection specimens verified (~33 000 specimens)
- Fieldworks in 2018-2021 to fill gaps (added 5280 records of bees)
- 279 bee species found from Estonia
- Few cases remain unresolved
- Manuscript in prep.



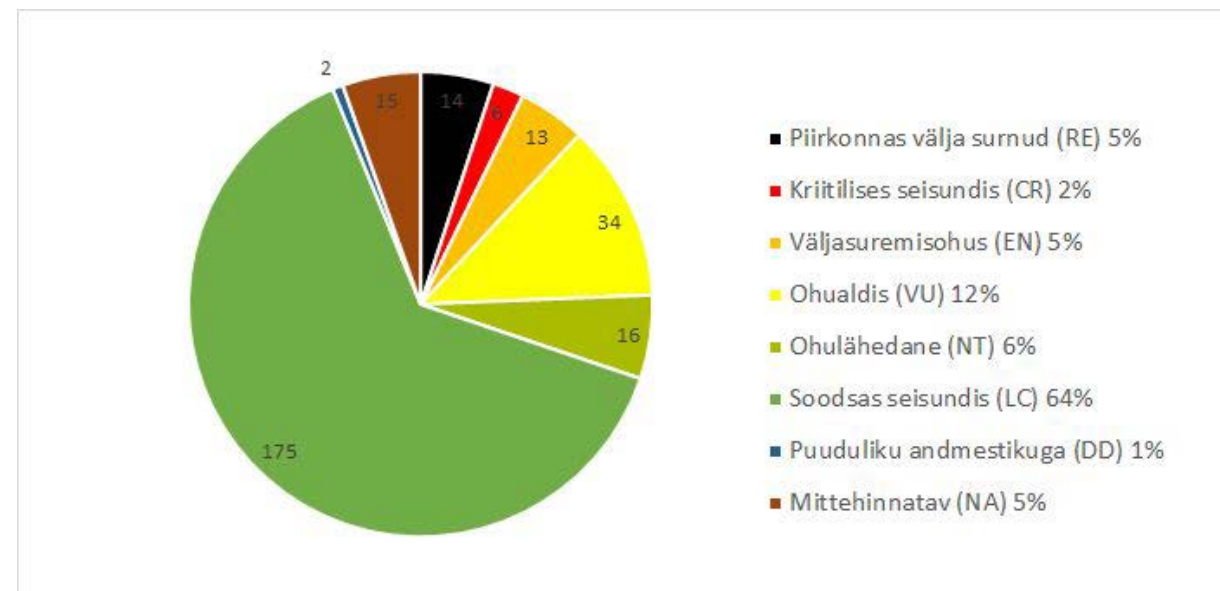
# Regional red list assessment of Estonian bees

- In Estonia only few selected bees assessed before
- 18 bumblebee species protected by law in Estonia
- Data from previous step (revision of Estonian bee fauna)
  - Added ~9 000 reliable field observation records (bumblebees mostly)
- IUCN guidelines for regional red list assessments



# Regional red list assessment of Estonian bees

- Maps compiled for each species
  - AOO and EOO calculated using GeoCAT
- Maps and results published only on governmental database with restricted access (EELIS)
- Assessments of all species completed and forwarded to Estonian institutions in order to be implemented in protecting bees



# Bumblebee monitoring in Estonia

- National bumblebee monitoring since 2007
  - Agricultural Research Centre
- Focused on agricultural habitats
- Transect counting
- Field observations
- Methods are now being revised and remodeled
  - Including seminatural habitats
  - Specimens being collected for later ID if needed
  - Areas are not fixed but habitats are



# Databases used in Estonia for biodiversity data

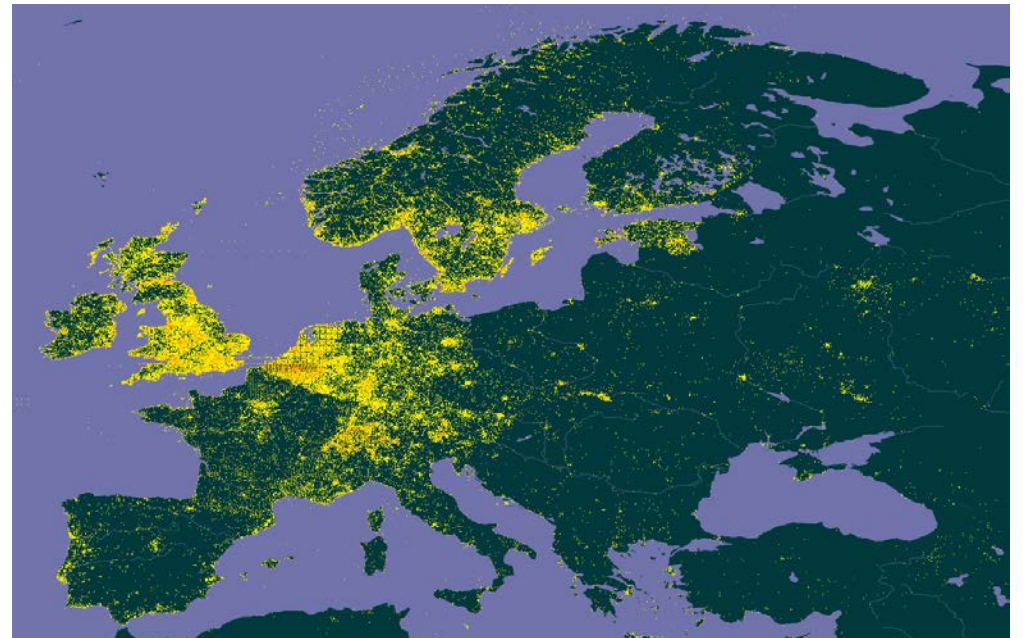
- Estonian public insect collections use PlutoF
  - Web platform of complex biodiversity database for all sorts of occurrence data and more
- Roughly 95 % of bee specimens from Estonian public collections databased
  - Basic occurrence data, photos at least for each Estonian species
- Field observation data in the same system
  - Some of the observation data must be treated with caution





# Databases used in Estonia for biodiversity data

- Alternative local database for field observations is LVA
  - Field observations only
- Public portal for Estonian biodiversity data is eBiodiversity
  - Based on Atlas of Living Australia software
  - Combines data from PlutoF and LVA
- Both databases contribute to GBIF



Thaks for listening!

Acknowledgements:

Peeter Tarlap

Jelle Devalez

Juho Paukkunen

Virve Sõber

Jaan Luig

