

# Summary of different data types

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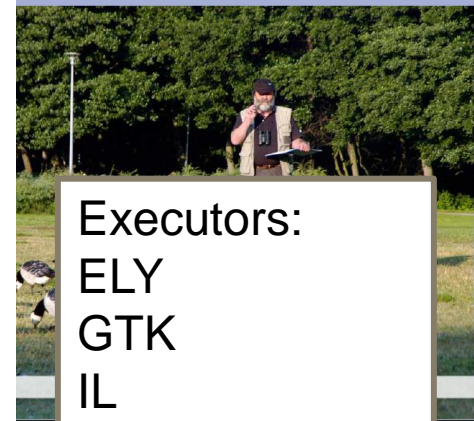
National workshop on integrating species data with environmental data

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# Environmental monitoring in Finland

- Hydrological monitoring
- Inland waters, ground waters
- Baltic Sea
- Meteorology, air quality and pollution, climate change
- Soil quality
- Harmful substances
- Urban environments
- Waste monitoring
- Nutrient loading from agriculture and forestry to water bodies
- Biodiversity
- Invasive species
- Genetically modified organisms (GMO)

S



Executors:

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# Intro to FinBIF's Species Data - Summary

- FinBIF collects and shares many kinds of species data ("lajitieto"), e.g.
  - Taxon descriptions and images – 43.000 species
  - Observations ("occurrence records") - 44 M records from 100's of datasets
  - Metadata of datasets
  - Taxon traits – WP1.3
- Observation data is very diverse, including habitat data
- Mapping and monitoring schemes have quite different needs for data models and habitat data
- Data is needed by many parties (researchers, amateurs ...), preferably in a harmonized format
- Generation of new habitat data by combining occurrences & habitats?

# Introduction to national habitat type classifications

Need for common terminology and understanding of the nature of the subject

Constant change (succession)

Numerous possible ways to draw the borders



Need for well defined and accurate positioning of the data – always remember the difference between species' habitats and habitat types

Data should be useable even if the classification changes or if there is a true change in the habitat

Several systems are nationally in use – none of them will fit everybody's needs

A strictly hierarchical or heuristic system?



# Earth Observation at SYKE

## **Aquatic:** Water quality from the Baltic Sea, lakes and estuaries

- integrated to support EU reporting (WFD, MSFD), monitoring of events/pressures

## **Terrestrial:** Land cover/use, habitats and ecosystems, phenology

- support for endangered ecosystem & habitats monitoring, ecosystem accounting, carbon neutral land use
- Even individual tree species

## **Cryospheric:** Snow Covered Area, lake ice, long term changes

- Data provider for EU Copernicus Land services,
- integrated to hydrological modelling

