

Break-out groups

Three break-out groups:

- Terrestrial
- Marine
- Freshwater

Focus on an EBV in your expertise

- Choose one (or more) EBVs from the EBV list

Fill templates with details and specifics:

- Describe current initiatives and emerging tools and projects for EBV workflow (filling Google sheets)

Google sheets (day 1 & day 2)

Species abundances of terrestrial birds (more info)			
Contributors information (add more rows if necessary)			
Name	Email	Institution	Would you like to participate in a future publication? (yes/no)
Workflow components			

Google sheets (day 1 & day 2)

Key	Value
ID	45a
Realm	Terrestrial
EBV class	Species Populations
EBV name	Species abundances of terrestrial birds
Step in identification process	User & Policy Needs Assessment
Definition	The estimated count of individuals of European rare, priority, and common bird species within contiguous spatial units (grid cells) across the EU over time.
Metric	<ul style="list-style-type: none">• Estimated count of individuals in spring and winter• Modeled relative abundance in spring and winter
Spatial resolution unit	1 × 1 km – 10 × 10 km
Temporal resolution unit	1 year
Taxonomic/ ecosystem focus group	<ul style="list-style-type: none">• Taxonomy based on the Handbook of the Birds of the World and the BirdLife Taxonomic Checklist• Rare bird species as included in the Annex 1 of the Birds Directive (i.e. species with small populations or restricted local distribution)• Priority bird species as included in Annex 1 of the Birds Directive (i.e. in danger of extinction, vulnerable to specific changes in their habitat or requiring particular attention for reasons of the specific nature of the habitat)• Common bird species as included in the Pan-European Common Bird Monitoring Scheme (PECBMS)

Google sheets (day 1 & day 2)

Workflow components			
	Current initiatives	Emerging tools and projects	Future needs
Data collection and sampling Data collection method Sampling design (EU-wide monitoring) Type of raw data Novel monitoring methods Capacity building			
Data integration Standardization & harmonization Preprocessing Protocols & metadata forms Way of data aggregation Integration nodes (national or EU) Automated data streams			
Modelling Types of models Predictors Estimation & uncertainty Software			
Interoperability aspects (e.g. access to and sharing of primary data, metadata standards, open access licenses, APIs, machine readability): Metadata standards are defined (Darwin Core)			
IT infrastructure needs (e.g. data portals, use of European Research Infrastructures, data storage, central repositories, scalable computing, cloud services):			
References and sources (e.g. name and institution of expert who provided information for this template, literature, online sources, web pages of EU project):			

Google sheets (day 1 & day 2)

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Workflow steps

Google sheets (day 1 & day 2)

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Which data collection and sampling, data integration, and modelling is currently done in the context of a specific EBV, e.g. by existing and ongoing (national or EU-wide) monitoring initiatives?

Google sheets (day 1 & day 2)

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Which data collection and sampling, data integration, and modelling is emerging but not yet fully operational, e.g. in the context of new EU (pilot) projects?

Google sheets (day 1 & day 2)

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Which data collection and sampling, data integration, and modelling is additionally needed to establish operational workflows that facilitate EBV generation at a European level?

Google sheets (day 1 & day 2)

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Other aspects

Google sheets (day 1 & day 2)

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Google sheets (day 1 & day 2)

Essential Biodiversity Variable workflows

Designing the freshwater, marine and terrestrial EBV workflows from data collection to modeling

The full EBV list with detailed descriptions and definitions of all EBVs is available here:

<https://github.com/EuropaBON/EBV-Descriptions>

EBV workflow input document:

<https://preprints.arphahub.com/article/101949/>

General comments, suggestions and thoughts:

<https://docs.google.com/document/d/1AXe3heRUldQBNNymJFlo5Ey9wWEznRgT6-fr-eCFQRc/edit>

EBVs workflow templates to fill in:

Completeness of the templates:

(♦) empty (✦) some preliminary information (◆) needs review and further details


Freshwater EBV

- [Genetic diversity of selected freshwater taxa](#) (♦)
- [Species abundances of wetland birds](#)(✦)
- [Species distributions of freshwater fishes](#) (✦)
- [Species distributions of amphibians and freshwater reptiles](#) (✦)
- [Species distributions of freshwater mammals](#) (✦)
- [Species distributions of freshwater invertebrates](#) (✦)
- [Species distributions of freshwater macrophytes](#) (✦)
- [Species distributions of invasive alien freshwater taxa of European concern](#) (✦)
- [Phenology of migration of wetland birds](#) (✦)

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Google sheets (day 1 & day 2)

Document to collect general comments on Essential Biodiversity Variable workflows

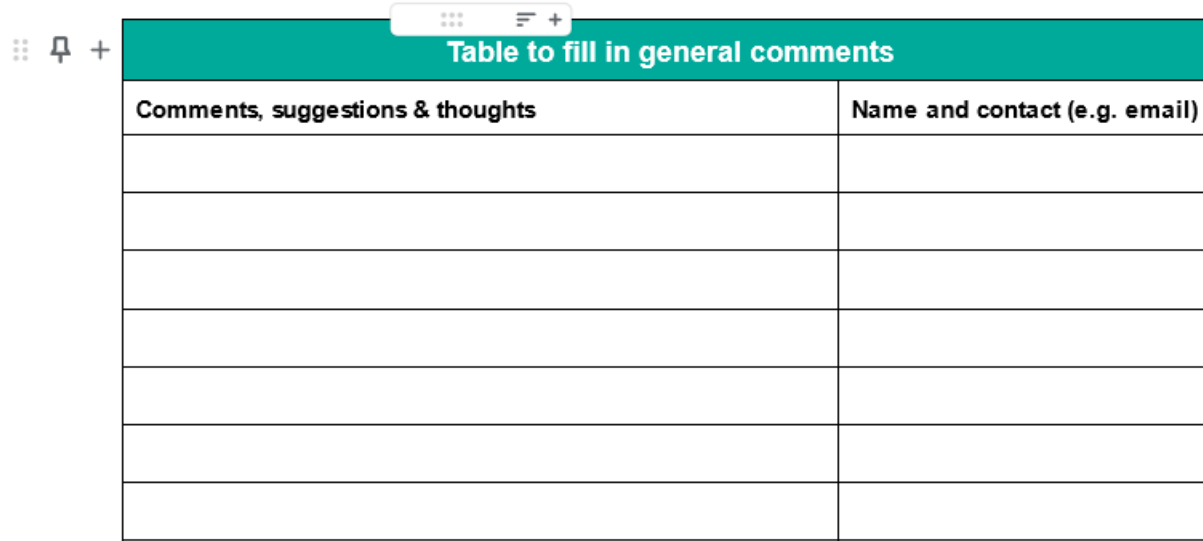


Table to fill in general comments

Comments, suggestions & thoughts	Name and contact (e.g. email)

Google sheets (day 1 & day 2)

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Google sheets (day 1 & day 2)

→ Error in the document?

Add a comment

→ Many people on a Google sheet?

Be patient

Consider moving to another Google sheet

Don't hesitate to ask for help from the facilitators

→ Not enough time?

The templates will remain open for an additional week until (6/3)

EUROPABON

VIRTUAL WORKSHOP

Essential Biodiversity Variable workflows

*Designing the freshwater, marine and terrestrial
EBV workflows from data collection to modeling*

22–24 February 2023

In-situ & remote
sensing data collection



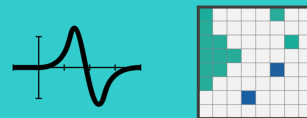
Sampling

Data harmonization &
processing



Integration

Estimation and
extrapolation



Modeling